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Availability and Disparity Study

California Department of Transportation

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Availability and Disparity Study

Prepared for
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CHAPTER ES.
Executive Summary

The federal government requires state and local governments to implement the Federal Disadvantaged Business Enterprise (DBE) Program if they receive U.S. Department of Transportation (USDOT) funds for transportation projects, including Federal Highway Administration (FHWA) funds. The California Department of Transportation (Caltrans) receives USDOT funds through FHWA and other USDOT agencies and therefore must implement the Federal DBE Program. Caltrans' implementation of the federally-required DBE Program is guided by regulations in 49 Code of Federal Regulations (CFR) Part 26, USDOT guidance and court decisions.

This Availability and Disparity Study is intended to assist Caltrans in its implementation of the Federal DBE Program by examining the availability and utilization of minority- and women-owned business enterprises (MBEs and WBEs) in California's transportation contracting industry. The study examined whether there are disparities between utilization of MBE/WBEs and what might be expected based on their availability for transportation contracts. Utilization and availability results reported for MBE/WBEs combine (a) firms certified as DBEs, (b) businesses potentially certified as DBEs and (c) minority- and women-owned firms that have graduated from the DBE program or are otherwise too large to be certified as DBEs.[1]

Caltrans' implementation of the Federal DBE Program includes the following:

- Caltrans must set an overall annual goal for DBE participation in Caltrans' FHWA-funded contracts and examine whether or not the overall DBE goal can be attained solely through neutral measures or whether race- or gender-based measures are needed. (Caltrans must project the portion to be met through neutral means.)
- If it chooses to implement race- and gender-conscious measures, such as DBE contract goals, Caltrans must determine the share of the overall annual DBE goal that will be met through race- and gender-based measures and the specific race, ethnic and gender groups that will be eligible for these elements. Caltrans' proposed implementation of the Federal DBE Program must then be reviewed and approved by USDOT.

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[1] In this study, "certified DBEs" means those firms certified as disadvantaged business enterprises pursuant to federal regulations.

The term "potential DBEs" refers to certified DBEs plus those MBE/WBEs that appear that they could be DBE-certified based on revenue requirements described in 49 CFR Part 26 (regardless of actual certification). The study team did not count as potential DBEs those businesses that have been decertified or appear that they will soon graduate from the DBE Program.

"MBE/WBEs" include all minority- and women-owned firms regardless of whether they are eligible to be, or actually are, certified as DBEs. Some MBE/WBEs in the California transportation contracting industry exceed the size standards for DBE certification.

In 2011, Caltrans retained BBC Research & Consulting (BBC) to conduct a disparity study that would provide information to help it implement the Federal DBE Program for its FHWA-funded contracts. Disparity studies examine the utilization and availability of minority- and women-owned business enterprises (MBEs and WBEs) in an agency's contracting to determine whether there are disparities between actual utilization and what might be expected from the availability of MBEs, WBEs and other firms for agency work. Disparity studies also examine quantitative and qualitative information related to local marketplace conditions.

This Executive Summary reviews:

- The history of Caltrans' implementation of the Federal DBE Program;
- Analyses provided in the 2012 Disparity Study;
- An analysis assisting Caltrans regarding an overall annual DBE goal for Caltrans' FHWA-funded contracts;
- Information concerning whether or not the annual goal can be achieved through neutral means;
- Disparity results for individual DBE groups;
- Measures to implement the program; and
- Next steps.

History of Caltrans' Implementation of the Federal DBE Program

Caltrans has been implementing variations of the Federal DBE Program and the regulations that preceded it since the 1980s.[2] After enactment of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, the U.S. Department of Transportation established a new Federal DBE Program to be implemented by state and local agencies receiving USDOT funds.

***Western States Paving* decision in 2005.** A public agency implementing race-conscious measures is subject to the "strict scrutiny" analysis as applied by the courts. In 2005, the Ninth Circuit Court of Appeals in *Western States Paving v. Washington State DOT* held that the Federal DBE Program enacted by Congress was facially constitutional, but ruled that Washington State DOT's implementation of the Program was unconstitutional. The court held that in order to satisfy requirements of strict scrutiny, a public entity implementing race-conscious measures must have evidence of discrimination in its transportation contracting industry.

In response to the *Western States Paving* decision, state and local agencies affected by the decision, including Caltrans, discontinued use of race- and gender-conscious elements of the Federal DBE Program. The USDOT recommended that agencies implementing the Federal DBE Program should consider conducting disparity studies.

[2] Caltrans once implemented a race- and gender-conscious program for certain state-funded contracts. Proposition 209, passed by California voters in 1996, precludes the State from implementing race- and gender-conscious programs related to non-federally-funded contracts.

2007 Disparity Study. Caltrans retained BBC to conduct its first disparity study, which BBC completed in 2007. At the time of the 2007 Disparity Study, Caltrans was implementing the Federal DBE Program on a solely race- and gender-neutral basis.

2009 Implementation of race- and gender-conscious contract goals. In April 2009, Caltrans resumed setting race- and gender-conscious goals on certain FHWA-funded contracts.[3] Firms certified as DBEs that were owned by women, African Americans, Asian-Pacific Americans or Native Americans were eligible to meet contract goals. DBEs owned by Subcontinent Asian American men and Hispanic American men could participate in other parts of the program but were not eligible to meet race- and gender-conscious contract goals. Caltrans' implementation of the program was based in part on information in the 2007 Disparity Study.

Legal challenge and 2011 court review of Caltrans' implementation of the Federal DBE Program. After Caltrans made these changes to its implementation of the Federal DBE Program, Associated General Contractors of America, San Diego Chapter challenged Caltrans' implementation of the Federal DBE Program in federal district court.

The United States District Court for the Eastern District of California in *AGC, San Diego Chapter, Inc. v. California DOT, et al.* held in April 2011 that Caltrans' implementation of the Federal DBE Program was constitutional.[4] The District Court held that the "Caltrans DBE Program is based on substantial statistical and anecdotal evidence of discrimination in the California contracting industry," satisfied the strict scrutiny standard, and is "clearly constitutional" and "narrowly tailored" under *Western States Paving* and the Supreme Court cases.[5] AGC San Diego appealed the decision and it is currently pending before the Ninth Circuit.

Analyses in the 2012 Disparity Study

Below is a brief description of the analyses performed by the study team for the 2012 Disparity Study.

- BBC examined the transportation contracting industry in California and related contracts awarded by Caltrans or with funds administered by Caltrans. BBC examined data for more than 15,000 construction and engineering-related contracts and subcontracts from 2007 through 2010. BBC collected and analyzed information for FHWA- and state-funded contracts that Caltrans awarded and that local agencies awarded through the Local Assistance Program.

- To analyze relative availability of minority- and women-owned firms (MBE/WBEs) for this work, more than 15,000 California business establishments were successfully contacted by the study team.

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[3] Local agencies that awarded FHWA-funded contracts through the Local Assistance Program also implement the Federal DBE Program, and they resumed setting race- and gender-conscious goals for contracts awarded in June 2009.

[4] *Associated General Contractors of America, San Diego Chapter, Inc. v. California DOT*, U.S.D.C. E.D. Cal., Civil Action No. 2:09-cv-01622, Slip Opinion (E.D. Cal April 20, 2011) *appeal pending*, Appeal No. 11-16228, United States Court of Appeals for the Ninth Circuit.

[5] *Id.*, Slip Opinion Transcript at 42-56.

- BBC examined quantitative information concerning local marketplace conditions using data from federal agencies, information collected as part of the 2012 availability interviews with local businesses, and other sources.

- The study also included qualitative information from more than 200 individuals who participated in in-depth interviews, provided oral or written testimony as part of public hearings, or attended stakeholder meetings as part of this study or other recent disparity studies in California. These individuals include business owners and managers, representatives and trade associations and other people knowledgeable about the transportation contracting industry in California. This information was collected from individuals throughout the state.

Overall Annual DBE Goal

Caltrans must prepare and submit an overall annual DBE goal for the next three fiscal years, supported by information about the steps used to develop the overall goal. When developing an overall annual goal for DBE participation in federally-funded contracts, federal regulations require that Caltrans first establish a base figure and then consider "step 2" adjustments.

Analysis of MBE/WBE availability. About one-third of firms identified as available as prime contractors and subcontractors on Caltrans construction and engineering-related transportation contracts were owned by minorities or women, similar to the result in the 2007 Disparity Study. In the availability analysis, BBC examined type, contract role, location and size of work involved in each FHWA-funded prime contract and subcontract, and determined the relative availability of minority-, women- and majority-owned firms to perform that specific work. BBC dollar-weighted results for each prime contract and subcontract to determine overall availability.

Base figure. Establishing a base figure is the first step in calculating an overall annual goal for DBE participation in Caltrans' FHWA-funded transportation contracts. BBC calculated the base figure using the same availability database and approach described above, focusing on potential DBEs (including currently-certified DBEs). BBC's approach to calculating Caltrans' base figure is consistent with relevant court decisions, federal regulations and USDOT guidance.

BBC's analysis indicates that the availability of potential DBEs for Caltrans FHWA-funded transportation contracts is 12.5 percent. Caltrans might consider 12.5 percent as the base figure for its overall annual goal for DBE participation.[6]

[6] Caltrans should also consider whether the types of FHWA-funded contracts examined in the study are representative of the types of FHWA-funded contracts that the agency will awarded for the period covered by the overall annual DBE goal.

Marketplace conditions and adjustments to the overall DBE goal. The Federal DBE Program requires that agencies consider step 2 adjustments to the base figure as part of determining an overall annual DBE goal. Caltrans is not required to make any step 2 adjustments as long as it considers appropriate factors and explains its decision in its Goal and Methodology document. Factors that agencies should assess in determining whether to make any step 2 adjustments to a base figure include:

- Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
- Information related to employment, self-employment, education, training, and unions;
- Any disparities in the ability of DBEs to get financing, bonding, and insurance; and
- Other relevant data.[7]

BBC analyzed each of the above step 2 factors and was able to quantify the effect of certain factors on the base figure.

Approach 1 – make a downward adjustment. Caltrans might consider an overall annual DBE goal that is adjusted to reflect recent DBE participation in FHWA-funded contracts.

- Caltrans utilization reports for FY 2007 through FY 2011 indicated median annual DBE participation of 6.6 percent for those years, which is lower than the 12.5 percent base figure.
- USDOT guidance suggests that an agency can make a step 2 adjustment by averaging the base figure with median past DBE participation.

Approach 2 – make an upward adjustment. There are several reasons why Caltrans might consider a higher overall annual DBE goal than the 12.5 percent base figure:

- Caltrans might consider adjusting its base figure upward to account for barriers that minorities and women face in owning businesses in the California transportation contracting industry. Such an adjustment would correspond to a "determination of the level of DBE participation you would expect absent the effects of discrimination" that Caltrans might make.[8]
- An upward adjustment is also supported by the evidence of barriers that affect minorities, women, and MBE/WBEs in obtaining financing, bonding, and insurance and to account for evidence that certain groups of MBE/WBEs are less successful than comparable majority-owned businesses. The cumulative impact of these factors on the current availability of minority- and women-owned firms cannot be quantified, but could be important when considering whether or not to make an upward step 2 adjustment.

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[7] 49 CFR Section 26.45.

[8] 49 CFR Section 26.45 (b).

Approach 3 – making no step 2 adjustment. Caltrans is not required to make any adjustments as long as it can explain what factors it considered and can explain its decision in its Goal and Methodology document.

Whether or Not the Annual Goal Can be Achieved Through Neutral Means

The Federal DBE Program requires Caltrans to assess the percentage of its overall annual DBE goal that can be achieved through neutral means, and if necessary, the percentage to be achieved through race- and gender-conscious measures. USDOT offers guidance concerning how transportation agencies should project the portions of their overall annual DBE goals that will be met through race- and gender-neutral and race- and gender-conscious measures. This information suggested examining the four general questions below:

1. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?

2. What has been the agency's past experience in meeting its overall DBE goal?

3. What has DBE participation been when the agency did not use race- or gender-conscious measures?

4. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?

1. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups? As discussed in greater detail in Chapter 3, BBC examined conditions in the California marketplace, including:

- Entry and advancement;
- Business ownership;
- Access to capital, bonding and insurance; and
- Success of businesses.

There was quantitative evidence of disparities for minority- and women-owned firms as a whole, and for specific groups, concerning the above issues. Qualitative information indicated some evidence of discrimination affecting the local marketplace, although some minority and female business owners interviewed in this and other recent disparity studies did not think they had been affected by any race or gender discrimination.

2. What has been Caltrans' past experience in meeting its overall DBE goal? Caltrans' reported certified DBE participation in recent years is summarized in Figure ES-1. Caltrans has not met its DBE goal in recent years based on these reports concerning commitments and awards.

Figure ES-1.
Caltrans reported past certified DBE participation on FHWA-funded contracts, fiscal years 2007-2011

Federal fiscal year	DBE attainment	Annual DBE goal	Difference
2007	6.6 %	10.5 %	-3.9 %
2008	4.1	13.5	-9.4
2009	3.4	13.5	-10.1
2010	7.4	13.5	-6.1
2011	7.2	13.5	-6.3

Source: Commitments/Awards reported on Caltrans Uniform Reports of DBE Awards/Commitments and Payments.

3. What has DBE participation been when Caltrans has not applied contract goals? BBC analyzed a broad range of information to examine certified DBE participation when Caltrans has not applied contract goals.

Caltrans' reported DBE participation in years in which no race- or gender-conscious program applied. Caltrans reported certified DBE participation for two entire fiscal years when it did not apply race- or gender-conscious program elements — FFY 2007 and FFY 2008 — and one fiscal year when it implemented race- and gender-conscious elements for a portion of the year — FFY 2009. Figure ES-1 shows a range of certified DBE participation from 3.4 percent to 6.6 percent for those years.

BBC calculation of DBE participation for non-goals contracts for 2007-2010. BBC calculated 3.9 percent utilization of certified DBEs from 2007 through 2010 for Caltrans and Local Assistance contracts for which no race- and gender-conscious program applied.[9]

[9] As explained in Chapter 5, these "non-goals" contracts included state-funded contracts and those FHWA-funded contracts outside the time period when Caltrans and local agencies applied race- and gender-conscious goals. "Goals contracts" are those FHWA-funded contracts during the time period when Caltrans and local agencies applied DBE contract goals (Caltrans and local agencies set DBE contract goals for many but not all "goals-period" contracts.)

BBC also measured certified DBE participation for FHWA-funded contracts when race- and gender-conscious contract goals program applied (in parts of 2009 and all of 2010). As presented in Figure ES-2, certified DBE participation with the race- and gender-conscious program in place was 4.8 percent during this time period. Figure ES-2 also shows that overall utilization of minority- and women-owned firms was higher when goals did not apply than on goals contracts (13.2% versus 11.5%).

Figure ES-2.
MBE/WBE and certified DBE utilization on Caltrans and Local Assistance goals and non-goals transportation contracts, 2007-2010

Note:

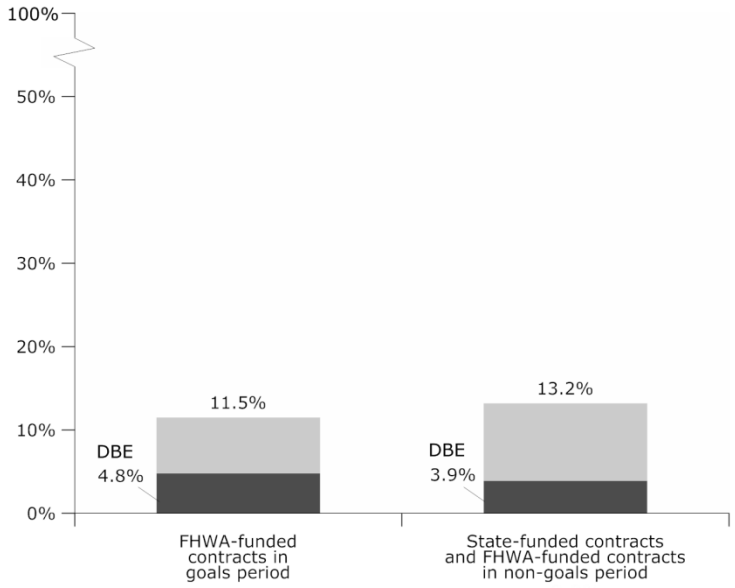
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 4,864 for FHWA-funded contracts in the goals period, 10,582 for state-funded contracts and FHWA-funded contracts in the non-goals period.

See Figures K-5 and K-8 and in Appendix K for detailed results.

Source:

BBC Research & Consulting from data on Caltrans and local agency contracts.



Results of disparity analyses. There was a substantial disparity between overall MBE/WBE utilization on non-goals contracts from 2007 through 2010 and what might be expected from the availability analysis.[10]

Analysis of goals contracts indicated substantial disparities for MBE/WBEs overall (see Chapter 6 for detailed results).

Participation of potential DBEs in Caltrans contracts. BBC examined utilization of potential DBE firms (firms that are currently certified or appear to meet the revenue requirements for DBE certification) on FHWA-funded contracts. Potential DBEs obtained 7.9 percent of the contract dollars awarded on FHWA-funded contracts that were issued under Caltrans' race-neutral implementation of the Federal DBE program.

Caltrans might consider this 7.9 percent level of attainment as a minimum level of its overall annual DBE goal that can be reached through neutral means if Caltrans were highly successful in encouraging firms to apply for DBE certification.

[10] MBE/WBEs received 13.2 percent of Caltrans contract dollars for non-goals contracts, substantially below the 17.9 percent that might be expected based on the availability analysis for those contracts. The disparity index, which divides utilization by availability and multiplies the results by 100, was 74. Based on certain court decisions, any disparity index less than 80 indicates a "substantial disparity" in this disparity study.

4. What is the extent and effectiveness of race- and gender-neutral measures that Caltrans could have in place for the next fiscal year? Caltrans will need to review the race- and gender-neutral measures that it and other organizations already have in place, and those Caltrans has planned or could be considered for future implementation, when determining the extent to which Caltrans could meet its overall annual DBE goal through the use of such measures.

The Final Rule effective February 28, 2011 added a requirement for transportation agencies to foster small business participation in their contracting. When implementing the Federal DBE Program, Caltrans must include an element to structure contracting requirements to facilitate competition by small business concerns, "taking all reasonable steps to eliminate obstacles to their participation, including unnecessary and unjustified bundling of contract requirements that may preclude small business participation in procurements as prime contractors or subcontractors."[11]

The disparity study reviewed many of Caltrans current and planned measures as well as those for other organizations in California. The neutral measures Caltrans currently has in place are extensive, as are the technical assistance, outreach and other types of neutral programs operated by other organizations. Caltrans plans on continuing the use of those measures in the future as well as implementing additional programs (see Chapter 9 of the report). There were also a number of recommendations for expansion or improvements to these programs made by business owners and managers who participated in in-depth interviews, stakeholder meetings and public hearings performed during this study and other recent disparity studies (see Appendices J and L for detailed results).

Summary. The highest level of certified DBE participation identified for Caltrans contracts solely applying race- and gender-neutral measures was 6.6 percent, the level of participation Caltrans reported for federal fiscal year 2007).

Including firms that appear to be potentially DBE-certified, participation was 7.9 percent on non-goals contracts. Even if these firms had been DBE-certified, Caltrans would not have met its overall goal for DBE participation.

BBC also identified substantial disparities in the overall utilization of MBE/WBEs in its contracts for 2007 through 2010, with or without including race- and gender-conscious contract goals in the program. There were substantial neutral measures in operation during this time period.

Caltrans should review these summary results, as well as the complete disparity study report, when projecting whether or not it can achieve its overall annual DBE goal solely through neutral means, and if not, its projections of the portion it can meet through neutral means and the portion to be met through race- and gender-conscious means.

[11] 49 CFR 26.39(a).

Disparity Results for Individual DBE Groups

If Caltrans determines that it needs to continue the use of race- or gender-conscious measures, then it should also evaluate which DBE groups should be considered eligible to participate in any goals that may apply to FHWA-funded contracts (or other USDOT-funded contracts). If Caltrans determines to include specific DBE groups (e.g., groups classified as underutilized DBEs) but not other groups in a contract goals program, it must submit a waiver request to FHWA.

Results of the disparity analyses for Caltrans contracts may be relevant to Caltrans' determination of DBE groups that could be eligible for race- or gender-conscious measures. BBC examined whether there were disparities between the utilization and availability of individual racial, ethnic and gender groups, and presents results in Chapters 6 and 7 as well as Appendix K of the report. Two key results are summarized here.

Caltrans and Local Assistance contracts from 2007-2010. When examining all Caltrans and Local Assistance contracts from 2007 through 2010, there were substantial disparities in the utilization of firms owned by the following groups:

- African Americans;
- Asian-Pacific Americans;
- Hispanic Americans; and
- Native Americans.

Utilization of white women-owned firms and Subcontinent Asian American-owned firms was also less than what might be expected from the availability analysis, but the disparities did not reach the level of "substantial."[12]

Caltrans and Local Assistance contracts from 2009-2010. Information gathered from the qualitative research (summarized in Chapter 3) suggested that the recent economic downturn had a substantial impact on the transportation contracting industry, and that market conditions substantially worsened between the beginning of the study period and the end of 2010. The qualitative evidence indicated that these conditions may have had a negative impact on small businesses, particularly minority- and women-owned firms.

Utilization results for 2007-2008 and for 2009-2010 are consistent with deteriorating conditions for MBE/WBEs. Figure ES-3 compares MBE/WBE and DBE utilization on Caltrans and local agency contracts awarded in the 2007-2008 period versus the 2009-2010 period. Overall MBE/WBE utilization dropped from 13.2 percent in 2007-2008 to 11.8 percent in 2009-2010. This deterioration occurred while Caltrans and local agencies used race- and gender-conscious measures on its FHWA-funded contracts after early to mid-2009 (UDBE contract goals). Although the UDBE contract goals appeared to increase the utilization of certified DBEs during the 2009-2010 period, overall marketplace conditions resulted in an overall decrease in the utilization of minority- and women-owned firms.

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[12] Disparity indices were 93 for white women-owned firms and 84 for Subcontinent Asian American-owned firms for all contracts from 2007-2010.

Figure ES-3.
MBE/WBE and certified DBE share of prime/subcontract dollars for Caltrans and Local Assistance transportation contracts, 2007-2008 vs. 2009-2010

Note:

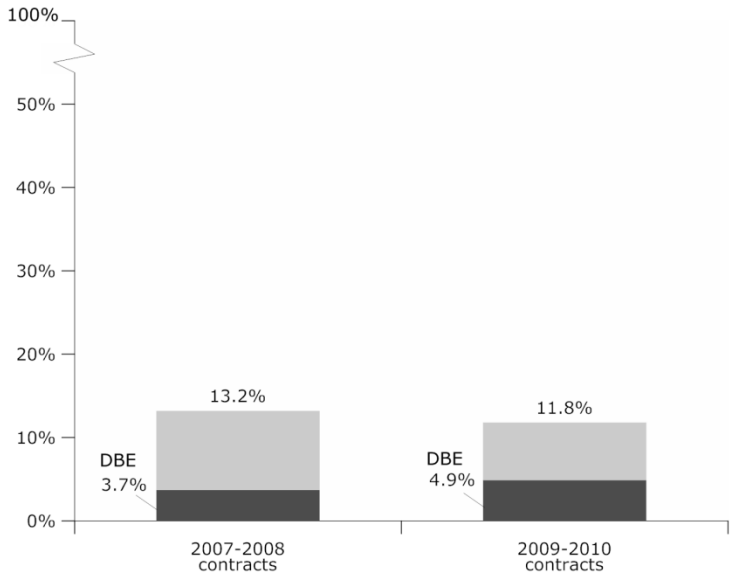
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 7,785 for the 2007-2008 period, 7,661 for the 2009-2010 periods.

See Figures K-17 and K-18 in Appendix K for detailed results.

Source:

BBC Research & Consulting from data on Caltrans and local agency contracts.



Therefore, the study team compared disparity results for contracts awarded during 2007 and 2008 with contracts awarded during 2009 and 2010, which are provided in Figure ES-4. It appears that overall disparities for MBE/WBEs were more severe in 2009-2010 than in the first half of the study period. There were no MBE/WBE groups for which utilization matched availability during 2009-2010.

Disparities for 2009-2010 contracts were substantial for firms owned by:

- White women;
- African Americans;
- Asian-Pacific Americans;
- Hispanic Americans;
- Native Americans.

The disparity for Subcontinent Asian American-owned firms in 2009-2010 was not at the level to be identified as substantial.

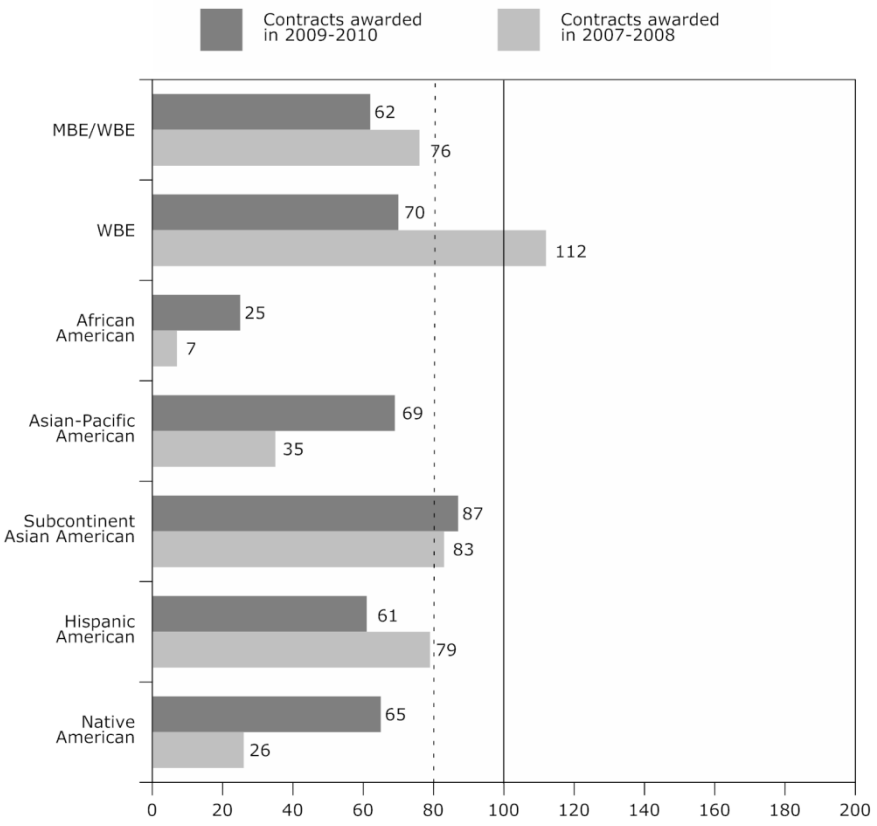
Figure ES-4. Disparity indices on Caltrans and Local Assistance FHWA- and state-funded transportation contracts awarded during 2007-2008 and 2009-2010 for all MBE/WBEs considered together and separately by group

Note:

See Figures K-5 and K-8 for corresponding disparity results tables.

Source:

BBC Research & Consulting utilization analysis.



Other information. Information concerning the local marketplace, including results by group, is also examined in this disparity study. Caltrans should review the full disparity study report, as well other information it may have, in determining whether it proposes to include any race- or gender-conscious measures, and if so, in determining the racial, ethnic and gender groups that may be included.

Measures to Implement the Program

Chapter 10 of the report reviews USDOT requirements for implementation of the Federal DBE Program and points out areas for further Caltrans improvements. Three such areas are highlighted in this Executive Summary.

Encouraging firms to become certified as DBEs. Many firms participating in in-depth interviews or public hearings commented on the DBE certification process.

- It appears that many firms and local agencies are confused about the multiple SBE, MBE and DBE programs operated by agencies in California.
- Many minority- and women-owned firms reported that they were not DBE-certified because they thought the process would be difficult and that there would be little benefit from certification.
- Although some business owners gave favorable comments about the Caltrans certification process, a number of firm owners were highly critical about the difficulty and time requirements for certification.

Caltrans might consider additional efforts to encourage eligible firms to apply for DBE certification. Although Caltrans appears to follow federal regulations concerning DBE certification, which requires collection and review of considerable information from program applicants, it might research other ways to make the certification process easier for potential DBEs.

Need for separate accounting for participation of firms potentially certified as DBEs. Based on guidance in the Federal DBE Program, BBC's analysis of the overall annual DBE goal in this study is based on DBEs that are currently certified and that could *potentially* be certified.

One of the reasons that Caltrans has not met its overall DBE goal in past years is that its measurement of DBE participation only includes those firms that are DBE-certified, in accordance with Federal regulations. Firms performing Caltrans work that have not been DBE certified are:

- Counted in the setting of an overall annual DBE goal; and
- Not counted (in accordance with the federal regulations) in the participation reports used to measure whether the overall annual DBE goal has been attained.

Based on instructions from USDOT staff at the 2011 National Civil Right Symposium held at USDOT offices in Washington, D.C. on December 8, 2011, agencies such as Caltrans can explore whether one reason they have not met their overall DBE goal is because of participation of firms that could potentially be DBE-certified but are not. USDOT then might expect an agency to explore methods to further encourage potential DBEs to become DBE certified as one way of closing the gap between reported DBE participation and its overall annual DBE goal.

The gap between currently certified DBEs and firms that are potentially certified as DBEs is documented in this report (see Chapter 9), as are some of the reasons for this gap according to business owners and managers and others in the industry (see Appendices J and L). Caltrans may want to consider developing the tools to continue to track participation of firms that are potentially certified as DBEs, as explained in Chapter 10. It might also explore how to increase the number of minority- and women-owned firms that apply for DBE certification.

Exploration of alternative approaches to current DBE contract goals program. Some individuals participating in in-depth interviews, public hearings and stakeholder meetings conducted in the study suggested that Caltrans explore new ways of implementing the Federal DBE Program that better achieved the objective of further developing minority- and women-owned businesses.

They reported that the DBE contract goals encourage extensive efforts on the part of prime contractors to document that they have contacted DBEs about subcontracting opportunities (the good faith efforts process) but that the nature of the bidding process makes it difficult to ensure meaningful and substantial participation of DBEs on those contracts. Issues raised by these participants include:

- The challenge of unbundling subcontract elements ahead of time into sizes suitable for DBEs, especially on complex projects with tight bidding schedules;
- Difficulty of fitting DBEs into a bid submission in the final minutes before a bid deadline, especially if the DBE has not bid a complete subcontracting package;
- Tendency of prime contractors to look to DBEs only for portions of the project that are easily separated in an overall bid package (e.g., trucking);
- Insufficient responsibility on first-tier subcontractors on large projects to look for ways to include DBEs as second-tier subcontractors in their project components;
- Insufficient incentives to develop work opportunities on projects that would encourage DBE subcontractors to become prime contractors on future projects; and
- In a highly price-competitive environment, the challenge of choosing any subcontractor for a portion of the project that is not the low bid when the prime contractor is putting together the total bid.

A number of interviewees indicated that DBE contract goals produce an incentive for prime contractors to use highly-automated good faith efforts processes to comply with the program rather than to seek meaningful participation of DBEs in a project. Many interviewees were highly critical of programs that relied on good faith efforts submissions.

A number of participants suggested approaches they thought were superior to the current version of the DBE contract goals/good faith efforts measures in place for FHWA-funded contracts. In general, these ideas focus on:

- Streamlining processes for prime contractor-subcontractor communication about specific bid opportunities (building on what Caltrans has recently implemented); and
- Providing incentives for prime contractors to increase DBE participation on FHWA-funded projects in ways that would further develop those DBEs.

Caltrans might further explore these and other types of opportunities for improving its current implementation of the Federal DBE Program. This may include reviewing legal issues, including state contracting law and whether alternative measures would meet USDOT regulations. Caltrans should also review what it has learned in its more-flexible application of the DBE Program to its design-build contracts. Chapter 10 of the disparity study report discusses these concepts in detail, with supporting information in Appendices J and L.

Next Steps

The disparity study report presents an independent analysis of information related to Caltrans' implementation of the Federal DBE Program. Caltrans should review report results and other relevant information when making decisions concerning its implementation of the Federal DBE Program. Caltrans will need to submit a Goal and Methodology for a three-year period beginning Federal Fiscal Year 2013. Chapter 10 of the report provides additional information concerning program components for Caltrans' consideration.

USDOT periodically revises components of the Federal DBE Program and issues guidance concerning implementation of the Program. In addition, new court decisions provide insights as to proper implementation of the Federal DBE Program. Caltrans should closely follow such developments.

Caltrans should also examine staffing, training and information systems necessary to improve its implementation of the Federal DBE Program.

CHAPTER 1.
Introduction

The California Department of Transportation (Caltrans) is responsible for managing more than 50,000 miles of California's federal and state highways. Because Caltrans receives funds from the United States Department of Transportation (USDOT), it must implement the Federal Disadvantaged Business Enterprise (DBE) Program. The Federal DBE Program is designed to address potential discrimination against DBEs in the award and administration of USDOT-funded contracts.[1]

Caltrans retained BBC Research & Consulting (BBC) to conduct a "disparity study" that would provide information to help it implement the Federal DBE Program. A "disparity study" primarily examines whether there are any disparities between:

- The percentage of contract dollars (including subcontract dollars) that an agency and its subrecipients awarded to minority- and women-owned business enterprises (MBE/WBEs) during a particular time period (i.e., utilization)[2]; and
- The percentage of contract dollars that MBE/WBEs might be expected to receive based on their availability to perform on specific types, sizes and locations of the agency's prime contracts and subcontracts (i.e., availability).

Disparity studies also examine other qualitative and quantitative information related to: local marketplace conditions for DBE/MBE/WBEs and for other small businesses; contracting practices and business assistance programs that the agency currently has in place; and potential program measures for consideration as part of the agency's implementation of the Federal DBE Program.

USDOT recommends that agencies implementing the Federal DBE Program should consider conducting disparity for several reasons.

- The types of research that are conducted as part of a disparity study provide information that is useful for setting overall annual aspirational DBE goals and for fine-tuning implementation of the Federal DBE Program.
- State and local agencies that have successfully defended their implementations of the Federal DBE Program in court have typically relied on the types of information collected as part of a disparity study.
- A disparity study often provides insights into how to improve contract opportunities for local small businesses.

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[1] BBC considers contracts that include at least $1 of USDOT funding as "USDOT-funded."

[2] Percentage of dollars has been accepted in courts as an appropriate way of examining utilization.

- An independent, objective review of MBE/WBE participation in an agency's contracting is valuable to both agency leadership and to external groups that may be monitoring the agency's practices.

In this chapter, BBC introduces Caltrans' disparity study in three parts:

A. Background

B. Study scope; and

C. BBC study team.

A. Background

As a recipient of USDOT funds, Caltrans must comply with federal regulations and implement the Federal DBE Program. After enactment of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, USDOT established a new Federal DBE Program for fund recipients to implement.[3] Federal regulations in 49 CFR Part 26 guide how state and local governments should implement the Federal DBE Program.[4] According to those regulations, agencies are required to develop and submit three-year overall aspirational percentage goals for DBE participation, which may be met using race and gender-neutral means or, if necessary, race- and gender-conscious means (or a combination of both types of measures).[5]

Setting an overall goal for DBE participation. Caltrans must develop a three-year overall goal for DBE participation in its USDOT-funded contracts. Caltrans' overall goal for DBE participation is aspirational — it does not have to meet the goal and failure to do so does not automatically lead to any penalties. The Federal DBE Program describes the steps an agency must follow in establishing its goal. To begin the goal-setting process, an agency must develop a base figure based on the availability of firms that are DBEs or could be certified as DBEs and on other information. Then, after considering various, related factors, the agency can make upward, downward, or no adjustments to its base figure as it determines its overall aspirational DBE goal (i.e., consideration of "step 2" adjustments).

Projecting the portion of the overall DBE goal to be met through neutral means. According to program regulations 49 CFR Part 26, an agency must meet the maximum feasible portion of its overall goal for DBE participation through race- and gender-neutral means.[6] Neutral program measures are measures designed to remove potential barriers for all businesses attempting to do work with the agency or measures designed to specifically increase the participation of small or emerging businesses in general (for other examples of race- and gender-neutral program measures, see 49 CFR Section 26.51(b)). If an agency can meet its goal solely through race- and gender-neutral means, it cannot implement race- or gender-conscious

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[3] USDOT most recently revised the Federal DBE Program in early 2011.

[4] http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?region=DIV1;type=boolean;c=ecfr;cc=ecfr;sid=14e071f96d5d61cb9d2410ed56c59d3d;q1=dbe;rgn1=Section%20Heading;op2=and;rgn2=Section;op3=and;rgn3=Section;view=text;idno=49;node=49%3A1.0.1.1.20;rgn=div5

[5] 49 CFR Sections 26.45, 26.51.

[6] 49 CFR Section 26.51.

measures as part of its program (i.e., measures specifically designed to increase the participation of DBE/WBE/WBEs, such as DBE/MBE/WBE contracting goals).

Every three years, the Federal DBE Program requires agencies to project the portions of their overall DBE goals that they will meet through neutral measures and the portions that they will meet through any race-or gender-conscious measures. USDOT has outlined a number of factors for an agency to consider when making such determinations.[7]

Determining whether all groups will be eligible for race- or gender-conscious program measures. If an agency determines that race- or gender-conscious program measures are appropriate for its implementation of the Federal DBE Program, then, based on relevant analyses, it must also determine which racial/ethnic or gender groups are eligible for those measures. USDOT provides a waiver provision if an agency determines that its implementation of the Federal DBE Program does not need to include certain racial/ethnic or gender groups in the race- or gender-conscious program measures that it implements. For example, in recent years Caltrans set contracting goals for "underutilized DBEs" (UDBEs), which did not include all DBE groups. Caltrans counts the participation of all DBEs toward its overall DBE goal, but only UDBEs count toward meeting individual contracting goals. Caltrans determined which DBE groups were UDBEs in part by examining results of disparity analyses for individual racial/ethnic and gender groups.

Promoting DBE participation as prime contractors. The Federal DBE Program calls for agencies to remove any barriers to DBE participation as prime contractors but does not require agencies to implement programs that give preference to DBE prime contractors. Quotas are prohibited, but under extreme circumstances, an agency can request USDOT approval to use preference programs related to DBE prime contracting. Small business preference programs, including reserving contracts on which only small businesses prime contractors can bid, are allowable under the Federal DBE Program. USDOT recently began requiring agencies to include small business programs as part of their implementation of the Federal DBE Program.

Legal challenges. Although agencies are required to implement the Federal DBE Program in order to receive USDOT funds, different groups have challenged those implementations in court. In addition to Caltrans, state transportation departments in Illinois, Minnesota, and Nebraska have successfully defended their implementations of the Federal DBE Program, as has a local transportation agency in New Jersey. The Washington State Department of Transportation was not able to successfully defend its implementation of the Federal DBE Program.

[7] See http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc

B. Study Scope

The disparity study provides information that will help Caltrans continue its implementation of the Federal DBE Program, including:

- Establishing a three-year overall aspirational goal for DBE participation in its USDOT-funded contracts;
- Potentially projecting the portion of its overall aspirational DBE goal to be met through race- and gender-neutral means and any portion to be met through race- or gender-conscious means;
- Identifying specific racial/ethnic or gender groups that are eligible for any race-or gender-conscious program measures (if applicable); and
- Choosing specific program measures as part of its implementation of the Federal DBE Program.

The information will also be useful to Caltrans as it continues to seek fairness in its contracting and procurement processes, including for non USDOT-funded contracts.

Racial/ethnic and gender groups examined in the study. A DBE is defined in 49 Code of Federal Regulations (CFR) Part 26 as a for-profit small business that is owned and operated by one or more individuals who are both socially and economically disadvantaged.[8] There is also an annual gross receipts limit (not more than $22,410,000 average over three years and lower limits for certain lines of business) and a personal net worth limit ($1.32 million not including equity in the business and in primary personal residence) that businesses and business owners must fall below to be able to be certified as a DBE.

The Federal DBE Program specifies that the following racial/ethnic and gender groups are presumed to be disadvantaged:

- Black Americans (or "African Americans" in this study);
- Hispanic Americans;
- Native Americans;
- Asian-Pacific Americans;
- Subcontinent Asian Americans;
- Women of any race or ethnicity; and
- Any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration (SBA).

[8] 49 CFR Section 26.5.

In addition, agencies can consider individuals to be socially and economically disadvantaged on a case-by-case basis.[9] As long as those businesses and business owners do not exceed revenue and personal net worth limits, they are eligible for DBE certification.

MBE/WBEs, DBEs, and Potential DBEs. BBC includes MBEs and WBEs — regardless of DBE certification — in utilization, availability, disparity, and marketplace analyses. As a result, those analyses pertain to any potential barriers related specifically to the race, ethnicity, or gender of business owners.[10]

- The study team uses the terms "MBEs" and "WBEs" to refer to businesses that are owned and controlled by minorities or women (according to the race/ethnicity definitions listed above), regardless of whether they are certified or meet the revenue and net worth requirements for DBE certification.[11]
- The study team uses the term "DBE" to refer specifically to businesses certified as such, according to the definitions in 49 CFR Part 26.
- The study team uses the term "potential DBE" to refer to MBE/WBEs that are DBE-certified or appear that they could be DBE-certified based on the revenue requirements specified as part of the Federal DBE Program, regardless of actual DBE certification.

Analyses in the disparity study. The disparity study focuses on Caltrans "transportation-related contracts" — contracts that involved the planning, design, construction, maintenance, or repair of transportation infrastructure. It includes analyses of whether there is a disparity between the utilization and availability of MBE/WBEs on those contracts. In addition, it includes analyses related to local marketplace conditions for DBE/MBE/WBEs and for other small businesses; Caltrans' three-year overall aspirational DBE goal; Caltrans' contracting practices and business assistance programs; and potential program measures for consideration as part of Caltrans' implementation of the Federal DBE Program.

Data collection and analysis. BBC relied on multiple Caltrans data sources — including both electronic and hardcopy data files — to complete the utilization and availability analyses. In addition, the study team conducted telephone interviews with thousands of businesses throughout California. The scope of the study team's data collection and analysis as it pertains to the utilization and availability analyses is presented in **Chapter 2**.

Marketplace conditions. BBC conducted quantitative analyses of the relative success of minorities and women and MBE/WBEs throughout California's transportation contracting industry. BBC compared business outcomes for minorities, women, and MBE/WBEs to outcomes for white males and white male-owned firms. In addition, the study team collected qualitative information about potential barriers that small businesses and MBE/WBEs face in the California

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[9] White male-owned businesses can also meet the federal certification requirements and be certified as DBEs. However, relatively few DBEs are white male-owned businesses.

[10] If the disparity analysis were conducted based only on currently certified DBEs, the study team would be unable to draw conclusions about the effectiveness or need for programs to assist MBE/WBEs.

[11] For this study, a WBE is a firm with at least 51 percent ownership and control by non-minority women. Firms owned and controlled by minority women are counted as minority-owned firms.

construction and engineering industries through in-depth anecdotal interviews, focus groups, and public hearings. Information about marketplace conditions is presented in **Chapter 3 and Appendices E, F, G, H, I and J.**

Availability analysis. BBC analyzed the percentage of MBE/WBEs that are "ready, willing, and able" to perform on Caltrans transportation-related construction and engineering contracts. That analysis was based on telephone interviews with thousands of California businesses that work in industries related to the types of transportation contracting dollars that Caltrans awards. BBC analyzed availability for specific MBE/WBE groups, types of contracts, and federal fiscal years. Results from the availability analysis are presented in **Chapter 4 and Appendix C**.

Utilization analysis. BBC analyzed contract dollars that Caltrans awarded to MBE/WBEs on transportation-related construction and engineering contracts that Caltrans awarded between January 1, 2007 and December 31, 2010. Those data included information about associated subcontracts. BBC analyzed contracts that were USDOT-funded and those that were solely funded through non-federal sources. Results from the utilization analysis are presented in **Chapter 5 and Appendix D**.

Disparity analysis. BBC examined whether there were any disparities between the utilization and availability of MBE/WBEs for construction and engineering contracts that Caltrans awarded during the study period. BBC analyzed disparities for specific MBE/WBE groups, types of contracts, contract roles, and contract sizes. The study team also analyzed disparities for contracts to which DBE contracting goals applied and for contracts to which such goals did not apply (e.g., non-federally-funded contracts).The study team also assessed whether any observed disparities were statistically significant. Results from the disparity analysis are presented in **Chapter 6 and Appendix K.**

Explorations of possible causes of any disparities. BBC examined potential causes of any disparities between utilization and availability of MBE/WBEs for Caltrans and Local Assistance contracts awarded during the study period. This included analysis of available data on the bid and proposal process for a sample of contracts, comparison of results for subsets of Caltrans contracts and review of any indications of overconcentration. The review of potential explanations of any disparities is presented in **Chapter 7**.

Caltrans' overall annual aspirational DBE goal. Based on information from the availability and other analyses, BBC provided Caltrans with information that will help with setting its three-year overall annual aspirational goal, including the base figure and consideration of any "step 2" adjustments. Information about Caltrans' overall annual DBE goal is presented in **Chapter 8**.

Projecting portion of goal to be met through neutral means. BBC reviewed information regarding evidence of discrimination in the California contracting marketplace, analyzed Caltrans' experience with meeting its overall DBE goal and provided information about Caltrans' past performance in meeting its overall DBE goal using race- and gender-neutral measures. Information related to these investigations is presented in **Chapter 9**.

Caltrans' implementation of the Federal DBE program. BBC reviewed Caltrans' current contracting practices and current Federal DBE Program measures. For different types of program elements, BBC presents items for Caltrans to consider. The study team's review is presented in **Chapter 10**.

C. Study Team

The BBC study team was comprised of six firms with decades of collective experience related to conducting disparity studies in connection with the Federal DBE Program. Key personnel from four firms on the study team — BBC, Keen Independent Research, Holland & Knight and GCAP Services — were part of the BBC-led study team that conducted the 2007 Caltrans disparity study.

BBC Research & Consulting (BBC) — prime consultant. BBC is a Denver-based economic and policy research firm. BBC had overall responsibility for the study and performed most of the required quantitative analyses.

Keen Independent Research (Keen Independent). Keen Independent is a Denver-based economic and market research firm that specializes in disparity studies. Keen Independent advised on the study and co-authored the final report.

Holland & Knight. Holland & Knight is a national law firm with offices throughout the country, including in California. Holland & Knight conducted the legal analysis that provides the basis for this study.

GCAP Services (GCAP). GCAP is a minority-owned research firm with offices in Costa Mesa and Citrus Heights, California. GCAP helped to compile hard copy contract data at Caltrans offices and helped to review current contracting practices and business assistance programs.

Faro Consulting and Solutions (Faro). Faro is a disabled-veteran owned professional services firm located in Sacramento, California. Faro conducted in-depth anecdotal interviews as part of qualitative analyses of marketplace conditions.

WSC Consulting (WSC). WSC is a disabled-veteran owned professional services firm located in Sacramento, California. WSC conducted in-depth anecdotal interviews as part of qualitative analyses of marketplace conditions.

CHAPTER 2.
Collection and Analysis of Contract Data

Chapter 2 provides an overview of the Caltrans transportation contracts included in the study and describes the process that the study team used to collect information on prime contracts and subcontracts.

Chapter 2 is organized into five parts:

A. Overview of Caltrans transportation contracts;

B. Collection and analysis of Caltrans contract data;

C. Collection of information on vendors utilized on Caltrans contracts;

D. Types of work involved in Caltrans contracts; and

E. Location of businesses performing Caltrans work.

Appendix D provides additional details about the methods BBC used to collect and analyze the contract data.

A. Overview of Caltrans Transportation Contracts

Caltrans uses Federal Highway Administration (FHWA) funding and state resources to fund highway and related construction and engineering projects throughout California. Examples of such projects include constructing new highways, resurfacing roads, and improving bridges. Construction contracts typically involve a prime contractor and several subcontractors. Caltrans' Office Engineer (OE) awards construction contracts. For projects that require an engineering or design phase, Caltrans sometimes retains an engineering prime consultant. Engineering prime consultants may retain subconsultants to perform specialized work on design projects such as surveying or mapping. Caltrans' Division of Procurements and Contracts (DPAC) awards engineering contracts.

Caltrans also administers the Local Assistance Program using FHWA and state funds. Through this program, Caltrans' Division of Local Assistance oversees funding to more than 600 cities, counties, and regional agencies for the purpose of improving their transportation infrastructure and providing transportation services. Local agencies that receive the funding are responsible for awarding and administering the resulting contracts.

Caltrans also administers some FHWA and state funds through other divisions including the Division of Transportation Planning (DTP) and the Division of Mass Transportation (DMT).

B. Collection and Analysis of Caltrans Contract Data

The study team worked with Caltrans staff to collect data on Caltrans FHWA- and state-funded transportation construction and engineering prime contracts and subcontracts. As a part of this effort, the study team collected information on a sample of contracts administered by local agencies as a part of Caltrans' Local Assistance Program.

Study period. BBC examined Caltrans contracts awarded between January 1, 2007 and December 31, 2010. BBC determined the time period for each contract based on the date of contract award.

Data sources. BBC used several information sources to compile prime contract and subcontract information, as described in detail in Appendix D.

- Caltrans staff provided the study team with electronic records on prime contracts that Caltrans awarded during the study period.
- The study team worked with Caltrans staff to review a number of possible data sources for construction subcontracts and concluded that the form CEM-1201 Subcontracting Request was the most comprehensive source of information. Prime contractors are required to submit CEM-1201 to Caltrans prior to using a subcontractor. The study team worked with Caltrans district offices to collect available copies of form CEM-1201.
- Information about Caltrans engineering contracts came from a combination of electronic records and hard copy invoices related to each contract. BBC collected information for both FHWA- and state-funded contracts.
- The study team collected data on a sample of contracts that were awarded as part of the Local Assistance Program during the study period. Appendix D describes the sample methodology that the study team used. After selecting the sample, the study team conducted a mail survey of the local agencies that awarded the selected contracts to collect information on the prime contractors and subcontractors that performed the work.
- For DMT contracts, Caltrans staff provided a spreadsheet of contracts with information on the prime contractors and subcontractors that performed the work.
- The study team worked with DTP staff to collect available data from the largest recipients of DTP funding. A large portion of DTP funding during the study period was used for operations by local agencies and was not included in the study.

Caltrans also provided information on whether each construction and engineering contract was FHWA-funded.[1]

[1] Caltrans considers a contract to be FHWA-funded if FHWA funded $1 or more of the contract.

Total number of Caltrans contracts. The study team identified more than 1,900 Caltrans-awarded construction contracts, more than 170 Caltrans-awarded engineering contracts, and more than 1,000 Local Assistance Program contracts administered during the study period. These contracts accounted for approximately $12.5 billion of Caltrans spending. Most of these contracts were suitable for inclusion in the study team's analyses.

Contracts included in the study team's analyses. The study team included transportation-construction and engineering contracts that Caltrans awarded between January 1, 2007 and December 31, 2010 in its analyses. For each prime contract and subcontract, the study team determined whether the utilized vendor was a for-profit business and identified the industry and "subindustry" that characterized the vendor's primary line of business (e.g., the subindustry of "Water, sewer, and utility lines"). BBC identified subindustries based on Caltrans contract data and the reported primary line of work of the contractor. The study team only considered those contracts on which a for-profit business performed the work.

Based on the above criteria, the study team examined 2,940 construction and engineering contracts that Caltrans awarded during the study period, totaling $11.4 billion. Figure 2-1 presents the number of contracts and contract dollars that the study team included in its analyses by funding source. Approximately 75 percent of the dollars on these contracts, $8.5 billion, were for contracts involving FHWA funds. That amount includes contracts that were only partially funded through FHWA funds.

The study team collected data on 12,506 subcontracts associated with Caltrans contracts awarded during the study period. When considering both prime contracts and subcontracts, the study team examined 15,446 contract elements.

Figure 2-1.
Number of Caltrans transportation-related contracts, 2009-June 2011

Source:
BBC Research & Consulting from Caltrans contract data.

Caltrans contracts	Number	Dollars (millions)
Caltrans construction contracts		
FHWA-funded	652	$5,966
State-funded	1301	2,691
Total	1953	$8,657
Caltrans Engineering-related contracts		
FHWA-funded contracts	137	$244
State-funded	40	150
Total	177	$394
Local assistance contracts		
FHWA-funded contracts	792	$2,333
State-funded	18	13
Total	810	$2,346
Total contracts		
FHWA-funded	1581	$8,543
State-funded	1359	2,854
Total	2,940	$11,397

Contracts not included in the study team's analyses. The study team did not include contracts in the utilization analysis that were awarded before and after the study period dates and contracts where the primary industry was not directly related to transportation contracting (such as financial services).

Prime contract and subcontract amounts. For each construction and engineering contract, BBC examined dollars that the prime contractor and any subcontractors received.

- If a contract did not include any subcontracts, the study team attributed the entire award amount (including any amendments or change orders) to the prime contractor.

- If a contract included subcontracts, the study team calculated subcontract amounts as the total contract amount (at the time of award) committed or budgeted to each subcontractor. BBC then calculated prime contractor amount as the total award amount less the sum of dollars committed to all subcontractors. When contract award information was not available, BBC used information on payments to prime contractors and subcontractors.

C. Collection of Information on Utilized Firms

The study team collected information on firms utilized on Caltrans contracts during the study period from a variety of sources, including:

- Caltrans contract data;
- The California Unified Certification Program (CUCP);
- Dun & Bradstreet (D&B) business listings and other business information sources;
- Telephone interviews with firm owners and managers; and
- Caltrans staff review.

The study team compiled the following information about each utilized vendor:

- Firm location;
- Ownership status (MBE/WBE/DBE);
- Primary line of work;
- Year of establishment; and
- Firm size (in terms of number of employees and revenue).

Appendix D presents additional information about the data that the study team collected on utilized firms.

D. Types of Work Involved in Caltrans Contracts

The study team determined the subindustries, or work types, that were involved in each prime contract and subcontract based on Caltrans contract data, and, as a supplement, on information about each utilized prime contractor and subcontractor's primary line of business. BBC developed the subindustries based in part on D&B 8-digit classification codes. Figure 2-2 presents the dollars that the study team examined in each subindustry as part of its analyses.

Figure 2-2.
Dollars of Caltrans prime contracts and subcontracts by subindustry, 2009-June 2011

Industry	Total (in thousands)
Construction	
Highway and street construction	$8,206,625
Electrical work	427,881
Asphalt and concrete supply	420,308
Rebar and reinforcing steel	314,417
Fencing, guardrails and signs	216,548
Land site prep	153,399
Landscape services	149,238
Wrecking and demolition	112,100
Painting and striping	105,671
Water, sewer and utility lines	84,126
Excavation and drilling	81,345
Trucking	41,326
Flagging services	31,474
Heavy construction equipment rental	11,070
Construction sand and gravel	5,724
Other construction	75,293
Other construction supplies	62,772
Total construction	**$10,499,315**
Engineering-related	
Engineering	$620,201
Construction management	163,177
Environmental research and consulting	84,712
Testing services	10,726
Surveying and mapmaking	5,880
Archeological expeditions	4,919
Landscape architecture	4,782
Transportation consulting	3,317
Total engineering-related	**$897,714**
Total	**$11,397,030**

Source: BBC Research & Consulting from Caltrans contract data.

When types of work accounted for a relatively small portion of total dollars that the study team examined, they were combined. For example, the contracting dollars that Caltrans awarded to contractors to install fences, guardrails and signs totaled less than 1 percent of the total contract dollars that the study team examined in the study. As a result, BBC combined these types of work. Other types of work that were small or did not fit into other categories were included in "other construction."

E. Location of Businesses Performing Caltrans Work

The Federal DBE program requires agencies to implement the DBE program based on information from the relevant geographic market area — the area in which the agency spends the substantial majority of its contracting dollars. The study team used Caltrans contracting data to help determine the "relevant geographic market area" for the study.

- The study team summed the dollars going to each prime contractor and subcontractor involved in Caltrans contracts during the study period.
- For each prime contractor and subcontractor, BBC determined whether the company had a business establishment in California based on Caltrans vendor data and additional research.
- BBC then added the dollars for firms with Caltrans locations and compared the total with that for companies with no establishments within the state.

Based on this analysis, 98 percent of Caltrans transportation contract dollars during the study period went to firms with locations in California. This information indicated that California should be selected as the relevant geographic market area for the study. BBC's analyses, including the availability analysis and quantitative analyses of marketplace conditions, focused on California.

CHAPTER 3.
Marketplace Conditions

Federal courts have found that Congress "spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses and of barriers to entry."[1] Congress found that discrimination has impeded the formation and expansion of qualified MBE/WBEs. BBC conducted quantitative and qualitative analyses of conditions in the California marketplace to examine whether barriers for MBE/WBEs that Congress found on a national level also appear in California. BBC analyzed whether barriers exist in the California construction and engineering industries for minorities, women, and for MBE/WBEs, and whether such barriers affect the utilization and availability of MBE/WBEs for Caltrans contracting.

BBC examined conditions in the California marketplace in four primary areas:

A. Entry and advancement;

B. Business ownership;

C. Access to capital; and

D. Success of businesses.

Appendices E through I present quantitative information concerning conditions in the California marketplace. Appendix J presents qualitative information that the study team collected through 40 in-depth personal interviews with business owners and others throughout the state; four focus groups that BBC conducted with Caltrans stakeholders; and 12 public hearings that Caltrans conducted throughout the state.

Appendix L reviews qualitative information that BBC study teams collected as part of a 2012 Burbank-Glendale-Pasadena Airport Authority draft disparity study,[2] a 2009 San Diego County Regional Airport Authority disparity study and a 2010 disparity study for the Southern California Transportation Consortium.[3] Appendix L summarizes information from interviews with more than 130 business owners, managers and others knowledgeable about the industry.

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[1] *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d, 970 (8th Cir. 2003) (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983, 992 (9th Cir. 2005).

[2] At the time of this disparity study for Caltrans, the Burbank-Glendale-Pasadena Airport Authority study was in the form of a draft report that had been distributed for public comment.

[3] The Consortium study included a consortium of five Southern California transportation agencies: Los Angeles County Metropolitan Transportation Authority (Metro), the Southern California Regional Rail Authority (Metrolink), the Orange County Transportation Authority (OCTA), the San Diego Association of Governments (SANDAG), and the San Diego Metropolitan Transit System (MTS).

A. Entry and Advancement

Individuals interviewed as part of the current Caltrans disparity study as well as past studies in the state explain that the people who form construction and engineering firms work in the industry before starting these businesses (see, for example, discussion in Appendix K). Any barriers to entry into the construction and engineering industries may lower the number of minorities and women who start construction and engineering businesses in the state.

As discussed in Appendix E, a number of studies throughout the United States have concluded that race and gender discrimination has affected the employment and advancement of certain groups in the construction and engineering industry. The BBC study team examined the representation of minorities and women in the California construction and engineering industries. For the construction industry, the study team examined the advancement of minorities and women into supervisory and managerial roles.

Quantitative information about entry and advancement in construction. Quantitative analyses of the California marketplace — based primarily on data from the 2000 U.S. Census and the 2007-2009 American Community Survey (ACS) — showed that, in general, certain minority groups and women appear to be underrepresented in the California construction industry compared to all industries considered together.[4] In addition, minorities and women appeared to face barriers regarding advancement to supervisory or managerial positions. Analyses of entry and advancement in the California construction industry revealed patterns that were similar to those found for the United States as a whole.

Overall representation. African Americans, Asian-Pacific Americans, Subcontinent Asian Americans and women accounted for a smaller percentage of workers in the California construction industry than in all California industries in 2007-2009.

- Three percent of California construction workers were African American compared with 6 percent of workers in all California industries.
- Asian-Pacific Americans (5%) and Subcontinent Asian Americans (less than 1%) were also underrepresented in the construction industry relative to all industries.

Nearly one-half of California construction workers were Hispanic American (48%) compared with 34 percent of workers in all California industries.

Nine percent of California construction workers were women, approximately one-fifth of the representation of women in all California industries (45%). Many of the women working in the construction industry hold jobs outside the construction trades. In most construction trades in California, women were less than 3 percent of workers. Appendix E describes these results in more detail.

[4] Data from the 2000 Census were the most current decennial Census data available at the time of this study.

Advancement. Minority and women workers in the California construction industry were less likely than non-Hispanic whites and males to advance to the level of first-line supervisor based on data for 2007-2009. In addition, minorities and women were generally less likely than non-Hispanic whites and males to advance to the level of construction manager. Appendix E provides detailed results.

Formal education beyond high school is not a prerequisite for most construction jobs. Because the average educational attainment of minorities and women was generally consistent with educational requirements for construction jobs, factors other than formal education may explain the relatively low representation of minorities and women in the California construction industry and the relatively low representation of minorities and women working in supervisory and managerial roles (see Appendix E).

Quantitative information about entry into the engineering industry. BBC also used 2000 U.S. Census data and 2007-2009 ACS data to examine employment and advancement for minorities and women in the California engineering industry. As with construction, in general, minorities appear to be underrepresented in the California engineering industry. The study team observed similar patterns for the United States as a whole.

Overall representation. In general, minorities and women accounted for a smaller percentage of workers in the California engineering industry than in all California industries in 2007-2009, even when limiting the analyses to only those individuals with college degrees.

- Three percent of workers in the California engineering industry were African American compared with 6 percent of workers with college degrees in all California industries.

- Similar to that result, 14 percent of workers in the California engineering industry were Hispanic American compared with 34 percent of workers with college degrees in all California industries.

African Americans, Hispanic Americans and Native Americans represented a smaller share of civil engineers than of all workers 25 and older with a college degree in 2007-2009. In contrast, Asian-Pacific Americans were 16 percent of engineering workers were compared with only 12 percent of workers with college degrees in all California industries. Asian-Pacific Americans were 21 percent of civil engineers in California in 2007-2009.

Twenty-seven percent of workers in the California engineering industry were women compared with 45 percent of workers with college degrees in all California industries. Only 13 percent of civil engineers in California were women in 2007-2009.

Appendix E presents comprehensive information concerning related education and employment in the engineering industry.

Qualitative information about entry and advancement. BBC collected qualitative information about entry and advancement in the California construction and engineering industries through in-depth interviews, focus groups and public hearings.

Several interviewees indicated difficulties associated with entry and advancement in the California construction and engineering industries for minorities and women. They indicated that such difficulties exist in many forms including unfavorable work environments, stereotypical attitudes, and offensive comments or behavior. (Some minority and female interviewees indicated that they had not experienced difficulties associated with entry and advancement.)

A number of interviewees reported a discriminatory work environment for minorities and women:

- Some interviewees reported that they were made to feel unwelcome in the local industry. For example, one interviewee representing a white woman-owned firm reported that she started her own construction firm because the firm that she worked for previously made clear to her its stance that "a woman should [not] be in management."

- Other interviewees reported instances of racial slurs, sexist comments and sexual harassment, race-related graffiti on work sites, and other incidents affecting women and minorities. For example, an interviewee representing a white male-owned firm stated that he is aware of rampant, race-related graffiti being present on some of his work sites. He referred to the construction industry as a "jungle environment." A Hispanic female construction business owner said that unfavorable environments for women are a huge problem in her business. "Men make offensive comments all the time when there is a woman on the job. Sometimes they won't even talk to me about jobs." There were also examples indicating that some non-minorities and men did not want to work with minorities or women or would not respect a minority or woman in a supervisory position.

- Some women in the engineering industry said that some men have an expectation that women do not perform certain types of work. For example, the Asian-Pacific American female owner a construction services company said that she experienced this with a male Caltrans staff member who was skeptical of her ability to perform specific types of work. She attributed this to gender discrimination.

- Some interviewees reported that their race or gender had once prevented them from being a part of industry-related groups such as unions and trade associations. One interviewee said that, many years ago, trade unions in his region of California were organized around ethnic groups, and there simply wasn't a Local for Hispanic Americans or African Americans. The female owner of a construction firm, said, "There's been discrimination in the unions. Some of our … members that have come up through the trades have the most horrendous stories to tell of the things that they have had to put up with. And if you'll look at the union membership now, you'll see that there are very few women in there still."

- It is important to note, however, that recent national research suggests that the relationship between minorities and unions has been changing. As a result, historical observations may not be indicative of current dynamics in construction unions.

- Some minority and female interviewees as well as some white men indicated that there probably was discrimination but could not identify specific examples. Many interviewees, including some white men, concluded that conditions in the industry were more difficult for women and minorities.

Some business owners reported that discrimination was more pervasive in the past:

- An interviewee representing a Hispanic American male-owned firm said that when his father started the firm 30 years ago he experienced discrimination. He went on to say that there are such a large number of Hispanic Americans in the industry today that discriminating against them would be akin to discriminating against the entire industry — it would be too impractical.

- Some interviewees reported that society has overcome discrimination based on race and gender, leading to increased opportunity for MBE/WBE firms. For example, an interviewee representing a local trade association indicated that racism and sexism are not as problematic as they were in the past. With regard to racism, she said, "We've come a long way." With regard to sexism, she commented, "Twenty years ago … there was a different pay scale [for men and women], but I believe those days are gone."

Some minority and female interviewees said that they did not think they had been affected by any race or gender discrimination.

Effects of entry and advancement. The barriers that minorities and women appear to face entering and advancing within the California construction and engineering industries may have substantial effects on business outcomes for MBE/WBEs.

- Typically, employment and advancement are preconditions to business ownership in the construction and engineering industries. Because certain minority groups and women are underrepresented in the California construction and engineering industries, in general and as supervisors and managers, it follows that such underrepresentation may prevent some minorities and women from ever starting businesses, reducing overall MBE/WBE availability in the California transportation contracting industry.

- Underrepresentation of certain minority groups and women in the California construction and engineering industries — particularly in supervisory and managerial roles — may perpetuate beliefs and stereotypical attitudes that MBE/WBEs may not be as qualified as majority-owned businesses. Those beliefs may make it more difficult for MBE/WBEs to win work in California, including work with Caltrans.

B. Business Ownership

National research and studies in other states have found that race/ethnicity and gender also affect opportunities for business ownership, even after accounting for race and gender-neutral factors. Figure 3-1 summarizes how courts have used information from such studies — particularly from regression analyses — when considering the validity of implementations of the Federal DBE Program in other states.

BBC used regression analyses and similar sources of data as other studies to analyze business ownership in the California transportation contracting industry. BBC used 2007-2009 ACS data to examine whether there are differences in business ownership rates between minorities and women and non-Hispanic whites and males in the California construction and engineering industries.

The regression models that the study team developed showed that certain minority groups and women are less likely to own businesses than non-Hispanic whites and males, even after accounting for various personal characteristics including education, age, and ability to speak English. For those groups that were significantly less likely to own businesses, BBC compared their actual business ownership rates with simulated rates if those groups owned businesses at the same rate as non-Hispanic whites or non-Hispanic white males (in the case of non-Hispanic white women) who share the same personal characteristics. Appendix F provides details about BBC's quantitative analyses of business ownership rates.

Figure 3-1.
Use of regression analyses of business ownership in defense of the Federal DBE Program

State and federal courts have considered differences in business ownership rates between minorities and women and non-Hispanic whites and males when reviewing implementations of the Federal DBE Program, particularly when considering DBE goals. For example, disparity studies in Minnesota and Illinois used regression analyses to examine the impact of race/ethnicity and gender on business ownership in the construction and engineering industries. Results from those analyses helped determine whether differences in business ownership exist between minorities and women and non-Hispanic white males after statistically controlling for race- and gender-neutral characteristics. Those analyses, which were based on 2000 Census data, were included in materials submitted to the courts in subsequent litigation concerning the implementation of the Federal DBE Program.

Quantitative information about business ownership in construction. Regression analyses of the California construction industry revealed that certain groups were significantly less likely than non-Hispanic whites and males to own construction businesses, even after accounting for various race- and gender-neutral personal characteristics such as education, age, personal net worth, and ability to speak English. Those groups were:

- African Americans;
- Hispanic Americans; and
- Women.

For each of those groups, Figure 3-2 presents actual business ownership rates and simulated business ownership rates (i.e., "benchmark") if those groups owned construction businesses at the same rate as non-Hispanics whites or non-Hispanic white males (in the case of non-Hispanic white women) who share the same personal characteristics. The study team calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the benchmark business ownership rate and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to own businesses than what would be expected for non-Hispanic whites or non-Hispanic white males who share the same personal characteristics.

Figure 3-2.
Comparison of actual business ownership rates to simulated rates for California construction workers, 2007-2009

Group	Self employment rate		Disparity index
	Actual	Benchmark	(100 parity)
African American	19.1%	26.2%	73
Hispanic American	15.3%	21.9%	70
White female	17.2%	32.9%	52

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-1.

Source: BBC Research & Consulting from statistical models of 2007-2009 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

As shown in Figure 3-2, African Americans and Hispanic Americans both own construction businesses at rates that are substantially lower than those of non-Hispanic whites who share the same personal characteristics.[5] African Americans own construction businesses at approximately 73 percent of the rate that would be expected for non-Hispanic whites who share the same personal characteristics. Hispanic Americans own construction businesses at approximately 70 percent of the rate that would be expected for non-Hispanic whites who share the same personal characteristics. Results were similar for non-Hispanic white women. Non-Hispanic white women own construction businesses at about half the rate (disparity index of 52) that would be expected based on the simulated business ownership rates of non-Hispanic white males who share the same personal characteristics.

[5] Personal characteristics that BBC was able to include in the regression analysis are discussed in Appendix F.

Quantitative information about business ownership in engineering. As with construction, BBC examined differences in business ownership rates between minorities and women and non-Hispanic whites and males in the California engineering industry. After accounting for various personal characteristics, BBC found that several groups were significantly less likely to own engineering businesses than non-Hispanic whites and males. Those groups were:

- Asian-Pacific Americans;
- Subcontinent Asian Americans;
- Hispanic Americans; and
- Women.

For each of those groups, Figure 3-3 presents actual business ownership rates and simulated business ownership rates if those groups owned engineering businesses at the same rate as non-Hispanics whites or non-Hispanic white males (in the case of non-Hispanic white women) who share the same personal characteristics.

Figure 3-3.
Comparison of actual business ownership rates to simulated rates for California workers in the engineering industry, 2007-2009

Group	Self employment rate		Disparity index
	Actual	Benchmark	(100 parity)
Asian-Pacific American	11.6%	16.8%	69
Subcontinent Asian American	5.1%	16.4%	31
Hispanic American	8.4%	11.9%	71
White female	11.5%	17.7%	65

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-2.

Source: BBC Research & Consulting from statistical models of 2007-2009 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

As shown in Figure 3-3, Asian-Pacific Americans (disparity index of 69), Subcontinent Asian Americans (disparity index of 31), and Hispanic Americans (disparity index of 71) own engineering businesses at rates that are substantially lower than those of non-Hispanic whites who share the same personal characteristics. Similar to those results, non-Hispanic white women own engineering businesses at about two-thirds the rate (disparity index of 65) that would be expected based on the simulated business ownership rates of non-Hispanic white males who share the same personal characteristics.

Qualitative information about business ownership. BBC collected qualitative information about business ownership in the California construction and engineering industries through in-depth interviews, focus groups, and public hearings.

According to most interviewees, the transportation contracting industry in California is dynamic and highly competitive, especially in recent years. It is difficult to start and successfully operate a business within this market. Potential and current business owners who are minority, female or

white male face many of the same challenges. Many representatives of large majority-owned firms also reported difficulties remaining profitable in the current market.

Some interviewees indicated additional disadvantages for minorities and women starting or operating businesses in the California transportation contracting industry. They cited difficulties associated with the preconditions of starting and maintaining a business such as issues with experience and expertise, attracting qualified personnel, and being excluded from industry networks. Barriers accessing capital to start a business can depress business ownership rates. Any disadvantages in operating a business can also reduce the relative number of minority- and women-owned firms.

Appendix J and Appendix L provide much more detailed analysis of the qualitative information examined in this study.

Effects of business ownership. The barriers that certain minority groups and women appear to face regarding business ownership may have substantial effects on the current composition of the transportation contracting industry.

- Quantitative and qualitative evidence indicates that certain minority groups and women are less likely than non-Hispanic whites and males to own construction and engineering businesses in California. There is evidence that some MBE/WBEs may have never formed as a result of different barriers related to race, ethnicity and gender in California.
- MBE/WBEs as a percentage of all California businesses available for transportation contracts changed very little between 2007 and 2012 (as measured in the availability analysis for the 2007 and 2012 Availability and Disparity Studies). Minority and female ownership of firms in the California transportation contracting industry has not "caught up" with business ownership for non-minorities and men.
- Chapter 8 provides quantitative analyses of the potential effects of race/ethnicity and gender disparities in business ownership on the availability of MBE/WBEs for transportation contracting work with Caltrans.

C. Access to Capital

Access to capital represents one of the key factors that researchers have examined when studying business formation and success. If race- or gender-based discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand a business. BBC examined whether MBE/WBEs have access to capital — both for their homes and for their businesses — that is comparable to that of majority-owned businesses. In addition, the study team examined information about whether minorities and women face any barriers in obtaining bonding and insurance. Appendix G provides details about BBC's quantitative analyses of access to capital, bonding and insurance.

Quantitative information about homeownership and mortgage lending. Wealth created through homeownership can be an important source of funds to start or expand a business. Barriers to homeownership or home equity can affect business opportunities by limiting the availability of funds for new or expanding businesses. BBC analyzed the potential

effects of race/ethnicity on homeownership and mortgage lending in California based on 2007-2009 ACS data and 2010 Home Mortgage Disclosure Act (HMDA) data, respectively.

Homeownership rates. Many studies have documented past discrimination in the national housing market. BBC relied on 2007-2009 ACS data to examine homeownership rates in California. Every minority group that the study team examined — African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Native Americans, and "other" minorities — owned homes in California at a lower rate than non-Hispanic whites (65% own homes). Although those differences were all statistically significant, the differences between non-Hispanic whites and African Americans (38% own homes) and Hispanic Americans (46% own homes) were the most pronounced.

BBC also examined median home values among California homeowners and found that African American, Hispanic American, and Native American homeowners tend to have lower home values than non-Hispanic white homeowners.

Mortgage lending. Minorities may be denied opportunities to own homes, to purchase more expensive homes, or to access equity in their homes if they are discriminated against when applying for home mortgages. The study team explored market conditions for mortgage lending in California using 2010 HMDA data. The data indicated that African Americans (15%), Hispanic Americans (15%), and Native Americans (19%) are denied mortgages at higher rates than non-Hispanic whites (10%). There is also evidence suggesting that minorities are generally more likely to have subprime loans than non-Hispanic whites.

Quantitative information about business credit. Business credit is also an important source of funds for small businesses. Any race- or gender-based barriers in the application or approval processes of business loans could affect the formation and success of MBE/WBEs. To examine the effect of race/ethnicity and gender in business capital markets, the study team analyzed data from the Federal Reserve Board's 1998 and 2003 Survey of Small Business Finances (SSBF).[6] Because SSBF records the geographic location of firms by Census Division, not by state, BBC examined data for the Pacific Census Division, which includes California, Alaska, Washington, Oregon, and Hawaii.

Business loan approval rates. BBC developed regression models of business loan approvals based on SSBF data to examine outcomes for MBEs and female-owned businesses after statistically controlling for race-and gender-neutral factors.

- The results from the model indicated that African American- and Hispanic American-owned businesses in the Pacific Census Division were significantly less likely than non-Hispanic white-owned businesses to be approved for business loans.
- Female-owned businesses were no less likely than male-owned businesses to be approved for business loans, regardless of race/ethnicity.

[6] Data from the 2003 SSBF were the most current SSBF data available at the time of this study.

For African American- and Hispanic-owned business, Figure 3-4 presents actual business loan approval rates and simulated loan approval rates (i.e., "benchmark") if those groups were approved for business loans at the same rate as non-Hispanics white male-owned businesses who share the same business characteristics. The study team calculated a loan approval disparity index for each group by dividing the observed loan approval rate by the benchmark loan approval rate and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to be approved for a business loan than what would be expected for non-Hispanic white male-owned businesses that share the same business characteristics.

Figure 3-4.
Comparison of actual loan approval rates to simulated rates ("benchmark") in California, 1998

Group	Loan approval rates		Disparity index
	Actual	Benchmark	(100 parity)
African American	46.4%	76.8%	60
Hispanic American	53.7%	75.9%	71

Source: BBC Research & Consulting analysis of 1998 NSSBF data.

As shown in Figure 3-4, African American- and Hispanic-owned businesses in the Pacific Census Division are approved for business loans at rates that are substantially lower than those of non-Hispanic white male-owned businesses that share the same business characteristics. African American-owned businesses are approved for loans at 60 percent of the rate that would be expected for non-Hispanic white-owned businesses that share the same characteristics. Similar to that result, Hispanic American-owned businesses are approved for loans at approximately 70 percent of the rate that would be expected for non-Hispanic white male-owned businesses that share the same characteristics.

Loan values and interest rates. BBC also examined the average business loan values for businesses that received loans. Data from the 2003 SSBF indicated that MBEs and female-owned businesses in the Pacific Census Division received business loans that were worth, on average, less than two-thirds of the loans that majority-owned businesses received ($289,000 versus $456,000). In addition, MBEs and female-owned businesses in the Pacific Census Division received business loans that had, on average, higher interest rates than loans that majority-owned businesses received (8.5% versus 6.9%).

Experiences of MBEs, WBEs and majority-owned firms obtaining lines of credit and business loans. At the close of the availability interviews conducted as part of the Caltrans disparity study, BBC asked, "Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences in California within the past five years as we ask you these questions."

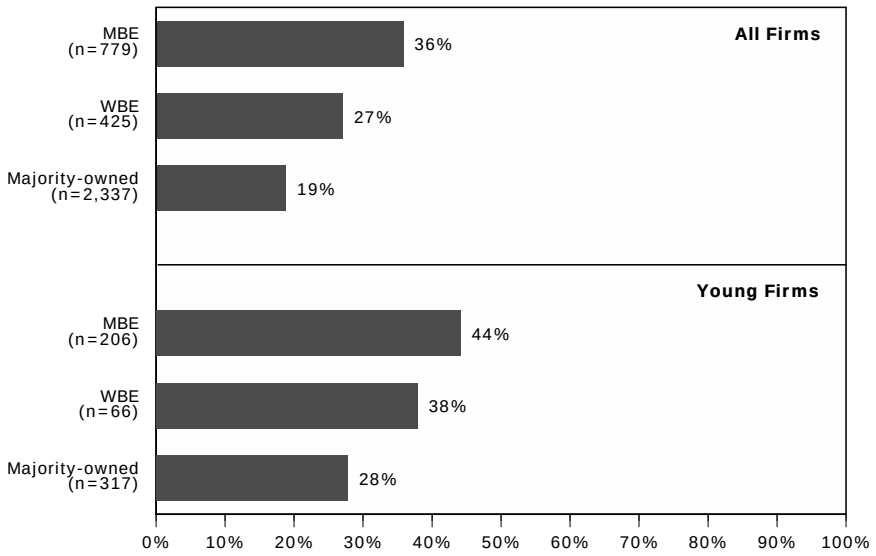
For each potential barrier, the study team examined whether the share of firms that indicated that they had experienced that specific barrier or difficulty differed between MBEs, WBEs and majority-owned firms. The study team also examined if affirmative responses differed for younger firms (those that were seven years old or younger).[7]

The first question was, "Has your company experienced any difficulties in obtaining lines of credit or loans?" As shown in Figure 3-5, of all firms, 36 percent of MBEs and 27 percent of WBEs reported difficulties obtaining lines of credit or loans. Fewer majority-owned firms (19%) reported that they had experienced difficulties obtaining lines of credit or loans.

A larger share of young firms reported that they had experienced difficulties obtaining lines of credit or loans compared to all firms. Among young firms, a larger percentage of minority- and women-owned businesses reported this difficultly compared with majority-owned firms.

Figure 3-5. Has your company experienced any difficulties in obtaining lines of credit or loans?

Source:
BBC Research & Consulting from 2012 Availability Interviews.



At the end of the availability interviews, respondents were offered the opportunity to give further insights on starting and expanding a business in their industry or winning work in California. A number of firm owners responded by describing their difficulties obtaining needed capital.

Quantitative information about bonding and insurance. To research whether bonding represented a barrier for California businesses, BBC asked firms completing availability interviews:

- Has your company obtained or tried to obtain a bond for a project?
- [and if so] Has your company had any difficulties obtaining bonds needed for a project?

[7] Firms in business seven years or less comprise about one-fifth of all companies in the 2012 availability survey database for the California transportation contracting industry; results are noted as "young firms" in the associated graphs.

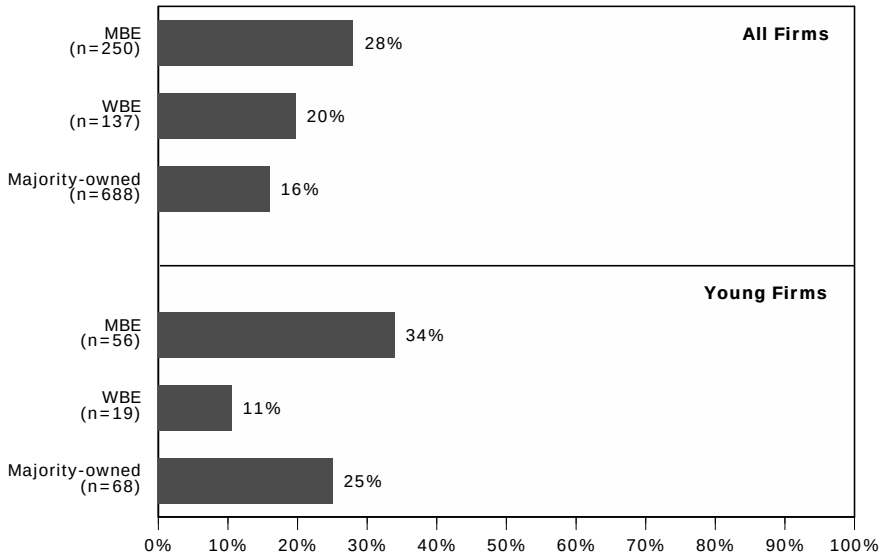
Figure 3-6 presents these results from the availability interviews. Among firms reporting that they had obtained or tried to obtain a bond, 28 percent of MBEs indicated difficulties obtaining bonds needed for a project. A smaller share of WBEs (20%) and majority-owned firms (16%) reported difficulties obtaining the bonding needed for a project.

Among young firms, a larger share of MBEs than majority-owned firms reported difficulties obtaining the bonding needed for a project. This was not found for young firms that were white women-owned, although the number of young-firm WBE respondents limits interpretation of results for this group.

Figure 3-6. Has your company had any difficulties obtaining bonds needed for a project?

Source:

BBC Research & Consulting from 2011 Availability Interviews.



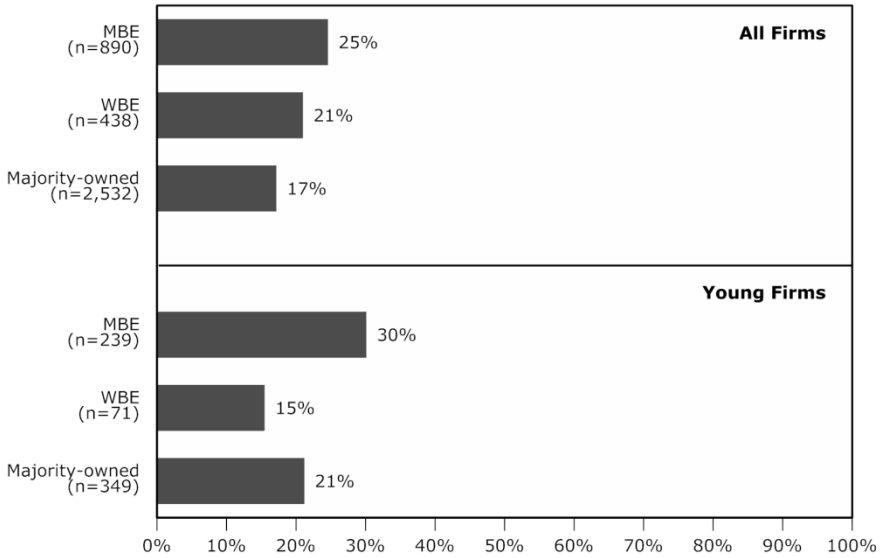
BBC also examined whether minority- and women-owned firms were more likely than majority-owned firms within the study area to report that insurance requirements represented a barrier to bidding. Figure 3-7 presents these results. One-quarter of MBEs interviewed reported such difficulties. Fewer WBEs (21%) and majority-owned firms (17%) indicated that insurance requirements presented a barrier to bidding on projects.

Young MBEs were more likely than other young firms to indicate that insurance requirements on a project presented a barrier to bidding. Young WBEs were less likely to identify insurance requirements as a barrier.

Figure 3-7.
Have any insurance requirements on projects presented a barrier to bidding?

Source:

BBC Research & Consulting from 2011 Availability Interviews.



Qualitative information about access to capital. BBC collected qualitative information about access to capital for firms in the California transportation contracting industry through in-depth interviews, availability interviews conducted by telephone, stakeholder group discussions and public hearings.

- Many of the firms interviewed indicated that access to financing was a barrier for small businesses in general, especially when starting and first growing. A number of business owners and managers observed that barriers to financing had worsened in the recent economic downturn.
    - The white female owner of an engineering company said that capital affects the ability of a business to be successful. "Available capital does affect businesses, because as you start to grow, as you start to get contracts, it requires more resources to be able to deliver that work," she said.
    - The co-owner of a construction firm said, "The banks are really tough right now. I've been talking to my banker … and he said most of the contractors he works with have lost their line of credit."
    - The technical director of a white woman-owned engineering firm said, "I think right now the barrier [associated with financing] is universal. In the current economy … they've raised the bar on qualifications. It's almost like you have to 'have the money' in order for them to approve you. It's very difficult. … We've actually not been able to get any funding in the last year. We've had to do our funding through credit cards."

Interviewees had different opinions on whether race or gender affected access to financing.

- Many interviewees indicated that financing is a barrier for all small businesses, regardless of race or gender. For example, one interviewee, representing an Asian American male-owned firm, explained that credit is extremely tight in the current market and particularly so for small firms that are not well established. Regarding credit for small firms, he asked rhetorically, "If I am a bank, would I loan money to [someone] with no experience?"

- Some interviewees identified financing as a particular problem for minorities and women in the past but that access had improved, sometimes through government programs.

    - For example, the Hispanic American owner of a highway contracting DBE said that he was aware of a history of discrimination against minorities regarding banking. "I saw that with my Dad's business in the late 70s, but I haven't seen it since I've been in business …"
    - An interviewee representing an African American male-owned firm stated that his race affected his firm's ability to get financing and bonding "a long time ago," but that now it has "opened up" so that he does not have any problems. He feels that the change occurred gradually over time.
    - A few minority and women interviewees reported that their MBE/WBE status helped them obtain loans or qualify for bonds. For example, one interviewee, representing a Hispanic male-owned firm, stated that his firm "wouldn't have been able to get credit at all without the DBE program."

- Some interviewees reported that race or gender discrimination affected access to capital.

    - As an example, a Hispanic American contractor representing the Hispanic Contractors and Suppliers Association said that minorities don't have the same wealth as non-minorities, which has lasting impacts on who is able to start a business and the success of those businesses. He also said that banking decisions might take into account race and ethnicity, and that minorities could suffer because of discrimination in lending decisions.
    - An interviewee representing a female-owned construction business stated, "I think minorities and women have a much harder time getting capital, getting bonding and getting insurance … women are still asked to have their husbands sign at the bank, which floors me after 33 years [in business]."
    - The Hispanic female partner in a non-certified consulting firm reported that minorities and women are adversely affected when attempting to obtain financing. She said that she could not have obtained financing if her partner was not white. She stated that when she attempted to obtain financing for her firm she was unsuccessful while her white partner was able to access financing.

Qualitative information about access to bonding and insurance. BBC also collected qualitative information about access to bonding and insurance in the California construction and engineering industries. Many participants indicated difficulties accessing bonding and insurance.

Bonding and insurance requirements at Caltrans and other public agencies can present a barrier to firms potentially bidding on contracts.

- Some interviewees reported that bonding and insurance requirements in the public sector dissuade some firms from pursuing public sector work — at least as prime contractors. For example, an interviewee representing a white male-owned firm stated that all public sector work requires bonds — contractors cannot work on public projects without obtaining a significant bond. He went on to say that if prime contractors do not carry MBE/WBE subcontractors under their bonds, it becomes a major issue for those subcontractors.

- One construction firm owner said that he prefers working in the private sector because "bonding has become very stringent right now, and there's not as big of [a] bonding requirement in the private sector."

Some interviewees perceived race and gender discrimination related to bonding.

- A project manager of a WBE-certified construction firm stated that there is discrimination in obtaining financing, bonding, materials and supplies and other products or services. He said, "It's all a perceived risk thing. They don't really look at the business. They see MBE or WBE, and there's some preconceived thing that they're small and ineffective, that they're only there to satisfy someone's check box."

- The female owner of a striping firm said, "There is discrimination in bonding, because they don't think, because you're a woman, that you can do the work, or they make you step through extra hoops for that."

- A representative of a DBE-certified firm said about bonding, "It's a subtlest form of discrimination that I've ever run into. The task orders could be only $25,000, $30,000, and we provided performance and payments funds for those things, and the contractors over a two- or three-year period, but guess what they ask us to bond? They ask us to bid the line items. We don't have that kind of bonding capacity. So we are excluded from bidding the project. It's the subtlest form of discrimination, but it's there, and this [Caltrans] department here this DBE department hasn't gotten any control over the contracts department."

Some individuals explained the linkage between access to capital and the ability to obtain a bond. Even if there were no overt discrimination by bonding companies, bonding requirements could still have a disproportionate negative effect on minority- and women-owned business because of the link between possible initial undercapitalization of MBE/WBEs and barriers in accessing business capital with the ability of MBE/WBEs to obtain bonds.

- When talking about getting bonding, the Hispanic American owner of a DBE-certified highway contracting firm, said that "the discrimination [by bonding companies] is based on how credit worthy you are. The non-credit worthy don't get bonding, the credit worthy get bonding. I don't think they look at all at what you are … race or gender."

- However, another interviewee said that access to bonding is affected by firm capitalization, which may be lower for minority- and women-owned firms. When asked if capitalization of the firm was important in the construction industry, a female business owner and representative of the Southern California Contractors Association, said, "It is, no doubt … and especially because of the bonding requirements. That's one of the hurdles any company has to face." She added, "Capitalization, especially for company that is just starting out, is key. There's no getting around it." She continued that "whether or not you qualify for bonding is all based on those numbers."

- A representative of Associated Professionals and Contractors of California explained the linkage between equity in a home, capital in a business, and the business assets that a bonding company would consider. He said that bonding companies do not look at equity in a home, but that business owners can borrow based on home equity and put that cash in the business, which is examined by a bonding company. (As discussed previously in this Chapter, BBC identified evidence of disparities in home equity and home lending in California for certain MBE/WBE groups.)

Some construction business owners who primarily work as subcontractors said that primes often require them to provide bonding for public sector projects. Some subcontractors said that certain primes will let them work without providing bonds. The Hispanic American owner of a DBE-certified highway contracting firm said it depends on the relationship with the prime contractor. "They either feel comfortable with that or they don't. They require it from us or they don't."

A number of engineering-related firms and some construction firms said that insurance requirements are barriers to doing business, especially on public sector work. For example, the white female owner of an engineering business said, "Insurance for a small firm is expensive. If there are issues, big firms have a big advantage." To the extent that minority- and women-owned firms tend to be small firms, insurance requirements may have a disproportionate negative effect on MBE/WBEs.

Effects of access to capital, bonding, and insurance. The disadvantages for certain groups associated with access to capital, bonding, and insurance may affect various business outcomes for MBE/WBEs.

- There is some quantitative and qualitative evidence indicating that it is more difficult for minorities, women, and MBE/WBEs than it is for non-Hispanic whites, males, and majority-owned businesses to obtain capital, bonding, and insurance, or that barriers to access capital, bonding and insurance disproportionately affect MBEs and WBEs. Such difficulties may reduce the relative number of MBE/WBEs that form, survive and grow, which would reduce overall MBE/WBE availability in the California transportation contracting industry.
- In addition, access to capital, bonding, and insurance are often required for businesses to pursue certain types of public sector contracts, limiting access to Caltrans and local agency transportation contracts.

D. Success of Businesses

BBC completed quantitative and qualitative analyses that assessed whether the success of MBE/WBEs differs from that of majority-owned businesses in the California transportation contracting industry. The study team examined business success in terms of participation in public and private sector, relative bid capacity, business closure, expansion, and contraction; and business receipts and earnings. Appendix H provides details about BBC's quantitative analyses of success of businesses. BBC also collected and analyzed information from interviews with business owners, managers and others knowledgeable about the industry.

Quantitative analysis of participation in public and private sectors. BBC drew on information that the study team collected in the 2012 availability interviews completed with firms in the California transportation contracting industry to examine any patterns of MBE/WBE and majority-owned firm participation in the industry.

There was some indication from these data that minority-owned construction firms were less likely to have bid on public sector contracts (as a prime contractor or a subcontractor) than majority-owned firms. These results suggest that barriers to public sector work may have a greater impact on minority-owned construction firms than other firms. Appendix H provides detailed results from this analysis.

Quantitative analysis of bid capacity. In this disparity study, "bid capacity" for a firm refers to the largest contract or subcontract the firm bid on or performed in California within the five years preceding the time when BBC interviewed the firm. BBC collected bid capacity information from firms as part of the 2012 availability interviews with business owners and managers.

Availability interview data show that MBEs and WBEs, in general, have lower bid capacity than majority-owned businesses in the transportation contracting industry. Further analyses indicated that firm specialization within the industry and length of time in business explained these differences. In other words, there was no indication that MBEs or WBEs have lower bid capacity than majority-owned firms in the same industry specialization with the same length of time in business. (See Appendix H for detailed analyses.)

Quantitative analysis of business closures, expansions, and contractions. A 2010 SBA report investigated business dynamics and whether minority-owned companies were more likely to close than other firms. This report included analysis of business closures, contractions, and expansions in California between 2002 and 2006.[8] Data were available for African American-owned businesses, Hispanic American-owned businesses, Asian American-owned businesses, and non-Hispanic white-owned businesses.

One key result from analysis of these data is that African American-owned businesses in California closed at a higher rate (42%) than non-Hispanic white-owned businesses (31%) between 2002 and 2006 (see Appendix H).

BBC also analyzed the relative number of MBE/WBEs in the California contracting industry in based on the 2012 availability interviews and the availability interviewed conducted as part of the 2007 Caltrans disparity study. There was very little change in the percentage of firms that were MBE/WBEs (see Chapter 4).

Quantitative analysis of business receipts and earnings. BBC examined several sources to analyze business receipts and earnings for firms in California. Results are summarized below. (Appendix H provides detailed results.)

Business receipts. Analysis of the 2007 Survey of Business Owners, part of the U.S. Census Bureau's 2007 Economic Census, indicate that average receipts for minority- and women-owned firms were lower than average receipts for all firms in California. These differences in business receipts are evident in the construction industry and in the professional, scientific, and technical services industry (which includes engineering).

BBC also analyzed revenue data for firms in the California transportation contracting industry collected as part of the disparity study's 2012 availability interviews. Key results include:

- A greater share of MBEs and WBEs have annual revenue of only $1 million or less compared with majority-owned firms.
- Few minority- and women-owned firms relative to majority-owned firms reach high revenue levels based on availability interview results.

These and other data demonstrate that minority- and women-owned firms are more likely to be small businesses than majority-owned companies.

Business owner earnings. The 2000 U.S. Census of Population and 2007-2009 American Community Survey provide data on the earnings of incorporated and unincorporated business owners age 16 and over who reported positive business earnings. BBC analyzed these data for the construction and engineering industries in California for 1999 (the time period reported in the 2000 Census) and between 2006 and 2009 (the time period reported in the ACS data).

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[8] Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C. These data were the most recent business closure, contractions, and expansion data available for California at the time of the disparity study.

In the California construction industry, minority and female owners of construction businesses tended to earn less than non-minorities and men.

In the California engineering industry:

- Asian American business owners had earnings equal to or greater than non-Hispanic white business owners;
- Business owners for other minority groups combined had lower earnings than non-Hispanic white business owners of engineering firms; and
- Female business owners had lower earnings than male business owners.

BBC performed regression analyses using 2007-2009 ACS data to examine whether there were differences in 2006-2009 business earnings between minorities and non-Hispanic whites and between women and men after statistically controlling for certain race- and gender-neutral factors.

- Being African American and Hispanic American was associated with lower business earnings in the California construction industry in 2006-2009; and
- Being female was associated with lower business earnings in the California construction and engineering industries in 2006-2009.

Appendix H provides detailed results.

Availability interview results concerning barriers to doing business. When conducting the 2012 availability interviews with firms in the transportation contracting industry, BBC asked firm owners and managers whether or not they had experienced certain types of barriers to doing business.

- MBEs and WBEs were more likely than majority-owned firms to report that size of contracts was a barrier for their firm. When restricting the analysis to companies that had been in business seven years or less, MBEs were more likely than majority- and women-owned firms to indicate that size of contracts was a barrier.
- MBEs and WBEs were also more likely than majority-owned firms to indicate that learning of contract opportunities was a barrier for their firm. These differences were evident across all firms and when examining young firms.

Qualitative information about success of businesses. BBC also collected qualitative information about success of businesses in the California construction and engineering industries.

Disadvantages for small businesses. Many interviewees indicated that small businesses are at a disadvantage pursuing public sector contracts, including Caltrans contracts. Firm owners and managers identified a number of factors working against small businesses, including the size of Caltrans and other public sector contracts, bonding and insurance requirements, complex bidding documents, certain contract specifications, selection criteria for professional services contracts and slow payment. Appendices J and L review this information in considerable detail.

When availability interview respondents were asked an open-ended question about difficulties starting and expanding a business in their industry or winning work in California, many noted difficult regulations, large contracts, excessive paperwork and difficult bid processes that made it harder for small businesses to be successful in the marketplace.

Impact of recent economic downturn. Many owners and managers of large and small businesses, as well as others in the industry, reported that the recent economic downturn has had a negative effect on all businesses, but especially small businesses.

- Many interviewees indicated that competition has increased for public sector work as firms that previously relied on private sector contracts were now concentrating on public projects.
- A number of business owners and managers said that price competition was very intense, putting pressure on businesses that were not the lowest-cost.
- Interviewees reported that large firms were competing for smaller contracts, which negatively affected small businesses that had relied on this type of work.
- Interviewees also indicated that prime contractors were subcontracting less work and keeping more in-house as a way of maintaining utilization of their staff and equipment. A number of subcontractors reported that primes were retaining types of work that they would have subcontracted before the economic downturn.
- Some interviewees indicated that it was very difficult to stay in business in the recent economic environment, especially for small businesses.

These types of responses came from in-depth personal interviews, telephone interviews with business owners and managers, stakeholder meetings and public hearings. For example, when given the opportunity to provide open-ended comments about starting and expanding a business in their industry or winning work in California, more than 200 firm owners and managers participating in the availability interviews made comments related to the difficult business climate at present.

Impact of disadvantages for small businesses on MBE/WBEs. As minority- and women-owned firms are more likely than majority-owned firms to be small businesses, any barriers for small business may have a disproportionate negative effect on MBEs and WBEs. A number of minority and female business owners indicated that the major barriers they face are due to the size of their business.

Stereotyping, "good ol' boy network" and other factors potentially affecting minority- and women-owned firms. In the interviews and the public testimony analyzed as part of this study, some interviewees indicated difficulties for minorities and women beyond those associated with being a small business. Two of the most frequently mentioned types of barriers related to race and gender were negative stereotypes and presence of a "good ol' boy" network in the local industry.

- Some interviewees indicated that prime contractors or customers had discriminated against firms based on race, ethnicity or gender. There was some evidence that some prime contractors or customers automatically perceived minority- and women-owned firms as inferior.

- Some interviewees reported that they had specific experiences in which they believed they were treated differently than non-Hispanic whites or men.

- Some minority interviewees and a number of female interviewees said that working conditions in the industry are sometimes hostile for minorities and women. Harassment of women by people in the industry is one example.

- A few interviewees explained instances of what they believed to be discrimination by Caltrans staff.

The presence of a "good ol' boy network" affecting the construction and engineering industries in California was widely reported across interviewees. Some of the interviewees discussing the "good ol' boy network" said that it made it more difficult for anyone to break into the business, not just minorities and women. Some of the minority and female business owners interviewed said that they personally had difficulty developing relationships with larger prime contractors, but if they received an opportunity to perform work, those contractors were pleased to use them on other projects. However, some other interviewees made it clear that the "good ol' boy network" had a discriminatory impact on minority- and women-owned firms. Some said that it directly affected their businesses.

Views as to whether or not race and gender discrimination affected minority- and women-owned firms did not clearly align according to the race, ethnicity and gender of the interviewee. Not all minority and female interviewees indicated that discrimination affected the local marketplace today, and some white men said that race and gender discrimination affected MBEs and WBEs. Appendices J and L, which combined exceed 400 pages in length, present views from a broad range of business owners and managers and well as others knowledgeable about the California transportation contracting industry.

Effects of success of businesses. The differences that the study team observed between MBE/WBEs and majority-owned businesses regarding business success may affect business outcomes for MBE/WBEs in the California transportation contracting industry.

- A number of different data sources indicate that a disproportionate number of MBE and WBE construction and engineering firms in California are small businesses compared with majority-owned firms. Whether or not this is in part due to one or more forms of race or gender discrimination, small businesses have additional barriers to success. The current economic downturn appears to have made it more difficult for small businesses to thrive or even survive. In addition, opportunities for subcontractors appear to be diminishing as prime contractors retain more of the work that they would have subcontracted in a more favorable economic climate.

- Statistical models indicate lower revenue for firms owned by certain minority groups and by women in California after controlling for other factors. There is also some qualitative information indicating race and gender discrimination against minority- and women-owned firms that would impede their ability to succeed in business.

Combined with the information on entry and advancement, business ownership, and access to capital, bonding and insurance, these factors may reduce the existing availability of MBEs and WBEs for Caltrans and local agency transportation contracts from what it might be given a level playing field for minorities and women in this industry.

CHAPTER 4.
Availability Analysis

BBC analyzed the availability of MBE/WBEs that are ready, willing, and able to perform on Caltrans prime contracts and subcontracts. Chapter 4 describes BBC's availability analysis in eight parts:

A. Purpose of the availability analysis;

B. Definitions of MBE, WBEs, certified DBEs, potential DBEs, and majority-owned businesses;

C. Information collected about potentially available businesses;

D. Businesses included in the availability database;

E. Calculating MBE/WBE availability on a contract-by-contract basis;

F. Availability results;

G. Caltrans' base figure for its overall DBE goal; and

H. Implications for any DBE contract goals.

Appendix C provides supporting information.

A. Purpose of the Availability Analysis

BBC examined the availability of MBE/WBEs for Caltrans and Local Assistance prime contracts and subcontracts for two primary reasons:

- To use as an input in the disparity analysis; and
- To help develop Caltrans' base figure for its overall DBE goal.

Input in the disparity analysis. BBC's analysis of the availability of MBE/WBEs for Caltrans work provided a benchmark against which to compare MBE/WBE utilization in the disparity analysis. In the disparity analysis, BBC compared the percentage of Caltrans contract dollars that went to MBE/WBEs during the study period (i.e., utilization) to the percentage of dollars that might be expected to go to those businesses based on their availability for specific types and sizes of Caltrans contracts (i.e., availability). Comparisons between utilization and availability allowed the study team to determine whether any MBE/WBE groups were underutilized during the study period relative to their availability for Caltrans or subrecipient local agency work.

Caltrans' base figure for its overall DBE goal. Caltrans implements the Federal DBE Program, and, as part of the program, it must establish an overall annual aspirational goal for DBE participation in its USDOT-funded contracts. Caltrans must begin the goal-setting process by calculating a base figure for the availability of DBEs, which can be similar to determining MBE/WBE availability in a disparity analysis.[1] However, unlike measuring availability, in which the study team counted all available MBE/WBEs, only those MBE/WBEs that appear that they would qualify for DBE certification (i.e., potential DBEs) are counted in the base figure calculation. The Final Rule effective February 28, 2011 and USDOT "Tips for Goal-Setting" explain that MBE/WBEs that are not currently certified as DBEs but that could be DBE-certified based on revenue and personal net worth requirements should be counted as DBEs in the base figure. However, businesses that have been denied certification, have been decertified, or appear that they will soon graduate from the DBE Program should not be counted as DBEs in the base figure.

B. Definitions of MBE, WBEs, Certified DBEs, Potential DBEs, and Majority-owned Businesses

To interpret the availability analysis, as well as other analyses presented in the disparity study, it is useful to understand the differences between MBE/WBEs and businesses that are certified, or could be certified, as DBEs. In addition, it is important to understand how BBC treated businesses owned by minority women.

MBE/WBEs. The definitions that the study team uses for MBE/WBE groups in this study are consistent with the definitions specified in 49 CFR Part 26. The study team examined utilization, availability and disparities separately for African American-, Asian-Pacific American-, Subcontinent Asian American-, Hispanic American-, Native American- and women-owned businesses.

All MBE/WBEs, not only certified DBEs. The study team counted businesses as minority- or women-owned regardless of whether they were, or could be, certified as DBEs. The study team's analyses indicated that most MBE/WBEs doing business in California are not currently certified. The study team analyzed the possibility that race- or gender-based discrimination affected the participation of MBE/WBEs in Caltrans work through analyses of availability and utilization based on the race/ethnicity and gender of business ownership and not on DBE certification status. Analyzing the availability and utilization of MBE/WBEs regardless of DBE certification allows one to assess whether there are disparities affecting all MBE/WBEs and not just businesses that are DBE-certified. Businesses may be discriminated against because of the race or gender of their owners regardless of whether they have successfully applied for DBE certification.

Moreover, the study team's analyses of whether MBE/WBEs face disadvantages include the most successful, highest-revenue MBE/WBEs. A disparity study that focuses only on MBE/WBEs that are, or could be, DBE-certified would improperly compare outcomes for "economically disadvantaged" businesses with all other businesses, including both white male-owned

[1] 49 CFR Section 26.45 (c).

businesses and relatively successful MBE/WBEs.[2] Limiting the analyses to a group of businesses that only includes low-revenue businesses would have inappropriately made it more likely for the study team to observe disparities for MBE/WBE groups.[3] The courts that have reviewed disparity studies have accepted analyses based on race/ethnicity and gender of ownership and not on DBE certification status.

Certified DBEs. Certified DBEs are businesses that are certified as such in California, which means that they are small businesses that:

- Are owned and controlled by one or more individuals who are presumed to be both socially and economically disadvantaged according to 49 CFR Part 26;[4] and
- Meet the gross revenue and personal net worth requirements described in 49 CFR Part 26.

Because implementation of the Federal DBE Program requires Caltrans to track DBE utilization, BBC reports certain utilization data separately for MBE/WBEs that are DBE-certified. However, BBC does not report availability or disparity results separately for MBE/WBEs that are DBE-certified.

Businesses owned by minority women. Businesses owned by minority women presented a data coding challenge in the availability analysis as well as in the utilization analysis. BBC considered four options for coding businesses owned by minority women:

- Coding those businesses as both minority-owned and women-owned;
- Creating unique groups of minority women-owned businesses;
- Grouping minority women-owned businesses with all other women-owned businesses; and
- Grouping minority women-owned businesses with their corresponding minority groups.

BBC chose not to code businesses as both women-owned and minority-owned to avoid potential double-counting when reporting total MBE/WBE utilization and availability. Creating groups of minority women-owned businesses that were distinct from minority male-owned business (e.g., African American women-owned businesses versus African American male-owned businesses) was also unworkable because some minority groups had utilization and availability so low that further disaggregation by gender made it even more difficult to interpret the results.

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[2] In addition, 49 CFR Part 26 allows certification of white male-owned businesses as DBEs. Thus, disparity analyses based on certified DBEs would not purely be an analysis of disparities based on race/ethnicity and gender.

[3] An analogous situation concerns analysis of possible wage discrimination. A disparity analysis that would compare wages of minority employees to wages of all employees should include both low- and high-wage minorities in the statistics for minority employees. If the analysis removed high-wage minorities from the analyses, any comparison of wages between minorities and non-minorities would more likely show disparities in wage levels.

[4] The Federal DBE Program specifies that African Americans; Hispanic Americans; Native Americans; Asian-Pacific Americans; Subcontinent Asian Americans; women of any race or ethnicity; and any additional groups whose members are designated as socially and economically disadvantaged by the SBA are presumed to be disadvantaged.

After rejecting the first two options, BBC then considered whether to group minority women-owned businesses with all other women-owned businesses or with their corresponding minority groups. BBC chose the latter (e.g., grouping African American women-owned businesses with all African American-owned businesses). Thus, "WBE" in this report refers to a white women-owned business. Evidence of discrimination against white women-owned businesses should be considered as evidence of discrimination against women of any race/ethnicity. The study team's definition of WBE also gives Caltrans information to answer questions that often arise pertaining to utilization of white women-owned businesses, such as questions about whether the work that goes to MBE/WBEs disproportionately goes to businesses owned by white women.

Potential DBEs. Potential DBEs are MBE/WBEs that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 CFR Part 26 (regardless of actual certification). The study team did not count businesses that have been decertified or appear that they will soon graduate from the DBE Program as potential DBEs in this study. BBC examined the availability of potential DBEs as part of helping Caltrans calculate the base figure of its overall DBE goal. Figure 4-1 provides further explanation of BBC's definition of potential DBEs.

Majority-owned businesses. Majority-owned businesses are businesses that are not owned by minorities or women (i.e., businesses owned by white males). In the utilization analysis and availability analysis, the study team coded each business as minority-, women-, or majority-owned. Majority-owned businesses included any white male-owned businesses certified as DBEs.[5]

Figure 4-1.
Definition of potential DBEs

To help Caltrans calculate its overall DBE goal, BBC did not include the following types of non-DBE certified MBE/WBEs in its definition of potential DBEs:

- MBE/WBEs that had graduated from the DBE Program and not been recertified;
- MBE/WBEs that are not currently DBE-certified that had applied for certification with the State of California and had been denied; and
- MBE/WBEs that are not currently DBE-certified that appeared to have average annual revenues over the most recent three years so high as to preclude them from becoming DBE-certified.

At the time of this study, the overall revenue limit for DBE certification was $22,410,000 based on a three-year average of gross receipts. There were also lower revenue limits for specific subindustries according to SBA small business size standards. Only a few MBE/WBEs appeared to have exceeded those revenue limits based on information that they provided as part of availability interviews. The revenue categories used to classify firms were finer than those used in the 2007 Availability and Disparity Study for Caltrans and reflect recent changes to the Table of Small Business Size Standards published by the U.S. Small Business Administration (SBA).

Business owners must also meet USDOT personal net worth limits for their businesses to qualify for DBE certification. The personal net worth of business owners was not available as part of this study and thus was not considered when determining potential DBE status.

[5] There were no DBE-certified white male-owned businesses that were utilized on or potentially available for Caltrans transportation contracts.

All other businesses. The study team categorized all businesses that were not "potential DBEs" as "all other businesses" in the base figure analysis. All other businesses included all MBE/WBEs that were not currently DBE-certified and that:

- Had graduated from the DBE Program.
- Had been denied DBE certification; or
- Appeared to be too large for DBE certification based on revenue size standards in 2012.

All other businesses also included majority-owned businesses that were not DBE certified, which was all majority-owned businesses.

C. Information Collected about Potentially Available Businesses

BBC's availability analysis focused on specific areas of work (i.e., subindustries) related to the types of transportation-related construction and engineering contracts that Caltrans awarded during the study period. BBC identified specific subindustries for inclusion in the availability analysis and identified the geographic market areas in which Caltrans awarded most of the corresponding contract dollars (i.e., the relevant geographic market area). BBC considered the state of California as the relevant geographic market area for the study. The study team then developed a database of potentially available businesses through interviews with local business establishments within relevant subindustries. This method of examining availability is sometimes referred to as a "custom census," and has been accepted in federal court. Figure 4-2 summarizes characteristics of BBC's custom census approach to examining availability.

Figure 4-2.
Summary of the strengths of BBC's "custom census" approach

Federal courts have reviewed and upheld "custom census" approaches to examining availability. Compared with some other previous court-reviewed custom census approaches, BBC added several layers of screening to determine which businesses are potentially available for work in the transportation contracting industry.

For example, the BBC analysis included discussions with businesses about interest in state and local government work, contract role, and geographic locations of their work — items not included in some of the previous court-reviewed custom census approaches. BBC also analyzed the sizes of contracts and subcontracts on which businesses have bid or performed in the past.

Overview of availability interviews. BBC conducted telephone interviews with business owners and managers to identify businesses that are potentially available for Caltrans and local agency transportation-related construction and engineering prime contracts and subcontracts.[6] BBC began the interview process by collecting information about business establishments from D&B Marketplace listings.[7] BBC collected information about all business establishments listed under 8-digit subindustry specialization codes (as developed by D&B) that were most related to the transportation-related construction and engineering contracts that Caltrans awarded during the study period. D&B provided 46,196 business listings related to those work specialization codes.

Information collected in availability interviews. BBC worked with Customer Research International (CRI) to conduct telephone interviews with the owners or managers of the identified business establishments. Interview questions covered many topics about each organization, including:

- Status as a private business (as opposed to a public agency or not-for-profit organization);
- Status as a subsidiary or branch of another company;
- Primary line of work;
- Qualifications and interest in performing transportation-related work for state and local government agencies;
- Qualifications and interest in performing transportation-related work as a prime contractor or as a subcontractor;
- Ability to work in specific geographic regions of California;
- Largest prime contract or subcontract bid on or performed in the previous five years;
- Year of establishment; and
- Race/ethnicity and gender of ownership.

Appendix C provides an example of the availability interview instrument and details about specific interview questions.

[6] The study team also offered business representatives the option of answering interview questions via fax or e-mail if they preferred not to complete interviews via telephone.

[7] D&B Marketplace is accepted as the most comprehensive and complete source of business listings in the nation.

Considering businesses as potentially available. CRI asked businesses that they successfully contacted several questions concerning the types of work that they performed, their past bidding history, and their qualifications and interest in contracts for state and local government agencies, among other information. BBC considered businesses to be potentially available for Caltrans construction or engineering prime contracts or subcontracts if they reported possessing all of the following characteristics:

a. Being a private business (as opposed to a nonprofit organization);

b. Having performed work relevant to Caltrans transportation contracting;

c. Having bid on or performed transportation-related public or private sector prime contracts or subcontracts in California in the past five years; and

d. Being qualified for and interested in work for state or local governments.[8]

BBC also considered the following information to determine if businesses were potentially available for specific contracts that Caltrans awarded during the study period:

e. The ability to work in specific regions of California;

f. The largest contract bid on or performed in the past; and

g. The year the business was established.

D. Businesses Included in the Availability Database

After conducting availability interviews with thousands of California businesses, the study team developed a database of information about businesses that are potentially available for Caltrans transportation contracting work. The study team used the availability database to produce availability benchmarks for:

- Determining whether there were any disparities in Caltrans' utilization of MBE/WBEs during the study period; and
- Helping Caltrans calculate a base figure for its overall DBE goal.

Data from the availability interviews allowed BBC to develop a representative depiction of businesses that are qualified and interested in Caltrans work, but it should not be considered an exhaustive list of every MBE/WBE and majority-owned business that could possible participate in Caltrans construction and engineering prime contracts or subcontracts. Appendix C provides a detailed discussion about why the database should not be considered as an exhaustive list of potentially available businesses.

Figure 4-3 presents the number of businesses that the study team included in the availability database as well as information about the race/ethnicity and gender of those businesses' ownerships. The information in Figure 4-3 solely reflects a simple count of firms with no analysis of availability for specific Caltrans contracts. Thus, it represents only a first step toward analyzing the availability of MBE/WBEs in performing on Caltrans work.

[8] That information was gathered separately for prime contract and subcontract work.

Figure 4-3.
Number of businesses included in the availability database

Source:
BBC Research & Consulting availability analysis.

Race/ethnicity and gender	Number of firms	Percent of firms
African American-owned	74	2.2 %
Asian-Pacific American-owned	142	4.2
Subcontinent Asian American-owned	46	1.4
Hispanic American-owned	384	11.4
Native American-owned	55	1.6
Total MBE	701	20.8 %
WBE (white women-owned)	416	12.3
Total MBE/WBE	1,117	33.1 %
Total majority-owned firms	2,260	66.9
Total firms	3,377	100.0 %

As shown in Figure 4-3, the study team considered 3,377 businesses to be potentially available for specific construction and engineering contracts that Caltrans awarded during the study period. Of those businesses, 1,117 (33%) were MBEs or WBEs. The proportion of MBEs and WBEs is very similar to the proportion of MBEs and WBEs reported in the 2007 Availability and Disparity Study (32%).

E. Calculating MBE/WBE Availability on a Contract-by-Contract Basis

BBC analyzed information from the availability database to develop dollar-weighted availability estimates for use in the disparity analysis and in helping Caltrans set its overall DBE goal. Dollar-weighted availability estimates represent the percentage of Caltrans transportation contracting dollars that might go to MBE/WBEs based on their availability for specific types and sizes of Caltrans and Local Assistance construction and engineering prime contracts and subcontracts. BBC's approach to calculating availability was a bottom up, contract-by-contract "matching" approach that measured availability overall and separately for particular sets of prime contracts and subcontracts.

Steps to calculating availability. Only a subset of the businesses in the availability database was considered potentially available for any given Caltrans or Local Assistance construction or engineering prime contract or subcontract (referred to more generally as a "contract element"). BBC first examined the characteristics of the specific contract element, including type of work, location of work, contract size, and contract date. BBC then identified businesses in the availability database that perform work of that type, in that location, of that size, and in that role (i.e., prime contractor or subcontractor), and that were in business in the year that Caltrans or the associated local agency awarded the contract element.[9]

BBC determined the specific characteristics of each of the 15,446 Caltrans and Local Assistance prime contracts and subcontracts that the study team examined as part of the disparity study and then took the following steps to calculate availability for each contract element:

[9] Note that *prime contractors*, not Caltrans or local agencies, "award" subcontracts to subcontractors. To simplify the discussion, Caltrans and local agency "award" of contract elements is used here and throughout the report.

1. For each contract element, the study team identified businesses in the availability database that reported that they:

    - Are qualified and interested in performing transportation-related contracts in that particular role for that specific type of work, for local governments;
    - Are able to serve customers in that geographic location;
    - Have bid on or performed work of that size; and
    - Were in business in the year that Caltrans awarded the contract element.

2. The study team then counted the number of MBEs (by race/ethnicity), WBEs, and majority-owned businesses among all businesses in the availability database that met the criteria specified in Step 1.

3. The study team translated the numeric availability of businesses for the contract element into percentage availability.

BBC repeated those steps for each contract element that the study team examined as part of the disparity study. BBC multiplied the percentage availability for each contract element by the dollars associated with the contract element, added results across all contract elements, and divided by the total dollars for all contract elements. The result was a dollar-weighted estimate of overall availability of MBE/WBEs and estimates of availability for each MBE/WBE group. Figure 4-4 provides an example of how BBC calculated availability for a specific subcontract associated with a construction prime contract that Caltrans awarded during the study period.

Figure 4-4.
Example of an availability calculation for a Caltrans subcontract

On a contract that Caltrans awarded in 2007 for work in District 4, the prime contractor awarded a subcontract worth $177,800 for highway and street construction work. To determine the overall availability of MBE/WBEs for that subcontract, the study team identified businesses in the availability database that:

a. Were in business in 2007;
b. Indicated that they performed highway and street construction work;
c. Reported bidding on work of similar or greater size in the past;
d. Reported ability to perform work in District 4; and
d. Reported qualifications and interest in working as a subcontractor on local government agency transportation-related projects.

The study team found 161 businesses in the availability database that met those criteria. Of those businesses, 49 were MBEs or WBEs. Thus, MBE/WBE availability for the subcontract was 30.4 percent (i.e., 49/161 X 100 = 30.4).

That process was completed for all prime contracts and subcontracts that the study team examined as part of the disparity study. The results for each prime contract and subcontract were weighted by the dollars associated with each contract element.

Improvements on a simple "head count" of businesses. BBC used a custom census approach to calculating availability estimates for Caltrans and Local Assistance prime contracts and subcontracts rather than using a simple "head count" of MBE/WBEs (i.e., simply calculating the percentage of all California transportation contracting businesses that are minority- or women-owned). Using a custom census approach rather than using a headcount approach to availability typically results in lower availability estimates for MBEs and WBEs, due in large part to BBC's consideration of relative capacity in measuring availability and to dollar-weighting availability results. Because MBE/WBEs tend to be smaller than other businesses and tend to have smaller bid capacity, those businesses are less likely to be identified as available for the largest prime contracts and subcontracts.

There are several important ways in which BBC's custom census approach to measuring availability was more precise than completing a simple head count.

BBC's approach accounted for type of work. USDOT suggests calculating availability based on businesses' abilities to perform specific types of work. USDOT gives the following example in "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program:"

> *If 90 percent of an agency's contracting dollars is spent on heavy construction and 10 percent on trucking, the agency would calculate the percentage of heavy construction businesses that are MBEs or WBEs and the percentage of trucking businesses that are MBEs or WBEs, and weight the first figure by 90 percent and the second figure by 10 percent when calculating overall MBE/WBE availability.*[10]

The study team took type of work into account by examining 25 different subindustries related to construction and engineering as part of estimating availability for Caltrans and Local Assistance work.

BBC's approach accounted for qualifications and interest in transportation-related prime contract and subcontract work. The study team collected information on whether businesses are qualified and interested in working as prime contractors, subcontractors, or both on transportation-related work for Caltrans and on work for subrecipient local agencies. In addition to the consideration of several other factors related to Caltrans and Local Assistance prime contracts and subcontracts (e.g., contract types, sizes, and locations):

- Only businesses that reported being qualified for and interested in working as prime contractors were counted as available for prime contracts;
- Only businesses that reported being qualified for and interested in working as subcontractors were counted as available for subcontracts; and
- Businesses that reported being qualified for and interested in working as both prime contractors and subcontractors were counted as available for both prime contracts and subcontracts.

[10] Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, http://www.osdbu.dot.gov/dbeprogram/tips.cfm.

BBC's approach accounted for the size of prime contracts and subcontracts. BBC considered the size — in terms of dollar value — of prime contracts and subcontracts that a business bid on or received in the previous five years (i.e., "relative capacity") when determining whether to count that business as available for a particular contract element. When counting available businesses for a particular prime contract or subcontract, BBC considered whether businesses had previously bid on or received at least one contract of an equivalent or greater dollar value. That approach is consistent with guidance from the U.S. Court of Appeals for the Federal Circuit regarding the consideration of the capacity of businesses to perform on contracts of different sizes (e.g., see *Rothe Development Corp. v. Department of Defense*).[11]

BBC's approach accounted for the geographic location of the work. Caltrans provided information on the district in which each contract was performed. The study team collected information on whether businesses indicated that they could perform work in specific regions of the state. The definitions of regions are as follows:

- **North Coast (Caltrans District 1).** This area includes Del Norte, Humboldt, Lake, and Mendocino counties.
- **Shasta-Redding (Caltrans District 2).** This region extends from the Red Bluff area through Redding to the Oregon Border.
- **Sacramento-Tahoe (Caltrans District 3).** This includes Butte, Colusa, El Dorado, Glenn, Nevada, Place, Sacramento, Sierra, Sutter, Yolo, and Yuba counties.
- **San Francisco Bay Area (Caltrans District 4).** This region extends from San Jose to Santa Rosa.
- **Central Coast (Caltrans District 5).** This region extends from the Santa Barbara area to Salinas.
- **Central Valley (Caltrans District 6 and 10).** This area extends from Bakersfield to Stockton.
- **Los Angeles Basin (Caltrans Districts 7 and 12).** This includes Los Angeles, Ventura, and Orange counties.
- **San Bernardino-Riverside (Caltrans District 8).** This includes San Bernardino and Riverside counties.
- **Bishop (Caltrans District 9).** This includes Inyo and Mono counties.
- **San Diego Area (Caltrans District 11).** This includes San Diego and Imperial counties.

Note that when BBC combined several regions to report disparity results, the combined results were still based on the geographic detail for the availability analysis described above.

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[11] *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

BBC's approach generated dollar-weights results. BBC examined availability on a contract-by-contract basis and then dollar-weighted the results for different sets of contract elements. Consequently, the results of relatively large contract elements contributed more to overall availability estimates than those of relatively small contract elements. That approach is consistent with USDOT's "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program," which suggests a dollar-weighted approach to calculating availability.

F. Availability Results

BBC used a custom census approach to estimate the availability of MBE/WBEs and majority-owned businesses for the 15,446 construction and engineering prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period. Figure 4-5 presents overall dollar-weighted availability estimates by group and by industry for those contracts.

Figure 4-5.
Overall dollar-weighted availability estimates by MBE/WBE group and industry

Note:

See Figure K-2 in Appendix K for corresponding disparity results tables.

Source:

BBC Research & Consulting availability analysis.

Race/ethnicity and gender	Utilization benchmark (availability %)
African American-owned	0.9 %
Asian-Pacific American-owned	1.8
Subcontinent Asian American-owned	0.3
Hispanic American-owned	9.8
Native American-owned	1.0
Total MBE	13.8 %
WBE (white women-owned)	4.3
Total MBE/WBE	18.1 %

Overall, MBE/WBE availability for Caltrans and Local Assistance transportation contracts is 18.1 percent. Hispanic American-owned businesses (9.8%) and WBEs (4.3%) account for the largest proportions of overall MBE/WBE availability. In the 2007 Availability and Disparity Study the availability for Caltrans and Local Assistance contracts was similar (17.6%). The slight difference between the results for the two study periods may be due to a variety of factors including the types, sizes, and locations of the specific prime contracts and subcontracts included in each analysis.

G. Caltrans' Base Figure for its Overall DBE Goal

Establishing a base figure is the first step in calculating an overall annual goal for DBE participation in Caltrans' FHWA-funded transportation contracts. BBC calculated the base figure using the same availability database and approach described above except that calculations only included potential DBEs (including currently certified DBEs) and only included FHWA-funded prime contracts and subcontracts. BBC's approach to calculating Caltrans' base figure is consistent with:

- Court-reviewed methodologies in several states, including California, Illinois, and Minnesota;
- Instructions in The Final Rule effective February 28, 2011 that outline revisions to the Federal DBE Program; and
- USDOT's "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program."

BBC's availability analysis indicates that the availability of potential DBEs for Caltrans FHWA-funded transportation contracts is 12.5 percent. Caltrans might consider 12.5 percent as the base figure for its overall annual goal for DBE participation, assuming that the types of FHWA-funded contracts that the agency awards in the time period that the goal will cover are similar to the types of FHWA-funded contracts that the agency awarded during the study period.

The base figure suggested in the 2007 Availability and Disparity Study was 13.5 percent. The difference between the results from the two studies may be due to differences in the types, sizes and locations of FHWA-funded contracts examined in the 2007 Study and the relative number of MBE/WBE firms that had graduated or otherwise appeared to not be eligible for DBE certification.

Differences from overall MBE/WBE availability. The availability of potential DBEs is lower than the overall MBE/WBE availability presented in Figure 4-5. BBC's calculation of overall MBE/WBE availability includes three groups of MBE/WBEs that the study team did not count as potential DBEs for purposes of calculating the base figure:

- MBE/WBEs that graduated from the DBE Program (that were not recertified);
- MBE/WBEs that are not currently DBE-certified that had applied for DBE certification with the State of California and had been denied; and
- MBE/WBEs that are not currently DBE-certified that reported annual revenues over the most recent three years so high as to appear to preclude them from becoming DBE-certified.

In addition, the study team's analyses for calculating the base figure only included FHWA-funded prime contracts and subcontracts, whereas the analyses for calculating overall MBE/WBE availability included all transportation-related prime contracts and subcontracts, regardless of funding source.

Additional steps before Caltrans determines its overall annual DBE goal. Caltrans must consider whether to make any "step 2" adjustments to the base figure as part of determining its overall DBE goal. Step 2 adjustments can be upward or downward, but there is no requirement for Caltrans to make any step 2 adjustments as long as the agency can explain what factors it considered and why no adjustment was warranted. Chapter 8 discusses factors that Caltrans could consider in deciding whether to make any step 2 adjustments to the base figure.

H. Implications for Any DBE Contract Goals

If Caltrans chooses to use DBE contract goals in the future, it might use information from the availability analysis to inform the use of any such goals. It may also use information from a current DBE directory, a current bidders list, or other sources that could provide information about the availability of MBE/WBEs to participate in particular contracts.

The Federal DBE Program provides agencies that use DBE contract goals with some flexibility in how they set DBE contract goals. DBE goals on some contracts might be higher than the overall annual DBE goal. DBE goals on other contracts might be lower than the overall DBE goal. In addition, there may be some federally-funded contracts for which setting DBE contract goals would not be appropriate.

CHAPTER 5.
Utilization Analysis

Chapter 5 presents information about MBE/WBE participation on Caltrans and Caltrans Local Assistance Program transportation prime contracts and subcontracts awarded in the study period. The disparity analyses that follow in Chapter 6 compare utilization results with the availability benchmarks introduced in Chapter 4. Chapter 2 and Appendix D provide additional information on utilization data collection and methodology.

Figure 5-1.
Defining and measuring "utilization"

"Utilization" of MBE/WBEs refers to the share of prime contract and subcontract dollars that an agency awarded to MBE/WBEs during a particular time period. BBC measures the utilization of all MBE/WBEs, regardless of certification, and separately of MBE/WBEs that are DBE-certified. BBC examines utilization separately by race/ethnicity and gender.

BBC measures MBE/WBE utilization as percentage of total prime contract and subcontract dollars. For example, if 5 percent of prime contract and subcontract dollars went to WBEs during the study period, WBE utilization would be 5 percent.

Information about MBE/WBE utilization is instructive on its own, but it is even more instructive when it is compared with the utilization that might be expected based on the availability of MBE/WBEs for Caltrans work. BBC presents such comparisons as part of the "disparity analysis" in Chapter 6.

Chapter 5 is organized in five parts:

A. Overview of the utilization analysis;

B. Overall MBE/WBE and certified DBE utilization on Caltrans and Local Assistance transportation contracts;

C. MBE/WBE and certified DBE utilization on Caltrans and Local Assistance contracts with and without race- and gender-conscious goals; and

D. Changes in MBE/WBE and certified DBE utilization on Caltrans and Local Assistance contracts during the study period.

A. Overview of the Utilization Analysis

BBC analyzed both FHWA-funded and state-funded Caltrans transportation contracts awarded during the January 1, 2007 through December 31, 2010 study period. Caltrans, through its Local Assistance Program, also administers FHWA and state funds to local agencies for transportation work. The local agencies independently award these contracts. Although Caltrans does not collect information on the individual subcontractors involved in local agency contracts, as part of this disparity study BBC and Caltrans were able to obtain such data for many of the contracts in the study period.

Definition of utilization. The study team measured MBE/WBE participation in terms of "utilization" — the percentage of prime contract and subcontract dollars that Caltrans and subrecipient local agencies awarded to MBE/WBEs during the study period.[1] Figure 5-1 presents more information about BBC's definition of utilization and how the study team measured it.

[1] Note that prime contractors, not Caltrans or local agencies, "award" subcontracts to subcontractors. To simplify the discussion, Caltrans and local agency "award" of contract elements is used here and throughout the report.

Differences between BBC's analysis and Caltrans Uniform Reports of DBE Commitments/Awards and Payments. USDOT requires Caltrans to submit reports about its DBE utilization on its FHWA-funded transportation contracts twice each year (typically in April and October). BBC's analysis of MBE/WBE utilization goes beyond what Caltrans currently reports to FHWA, as explained below.

All MBE/WBEs, not only certified DBEs. Per USDOT regulations, Caltrans' utilization reports for FHWA-funded contracts focus exclusively on certified DBEs. Caltrans does not track the utilization of MBE/WBEs that are not DBE-certified. BBC's utilization analyses included the utilization of *all* MBE/WBEs on Caltrans transportation contracts — not just the utilization of certified DBEs. BBC's analyses included the utilization of MBE/WBEs that may have once been DBE-certified and graduated (or let their certifications lapse) and the utilization of MBE/WBEs that have never been DBE-certified.

BBC reports utilization for all MBE/WBEs and separately for MBE/WBEs that were DBE-certified during the study period.[2]

State-funded contracts, not only FHWA-funded contracts. FHWA requires Caltrans to prepare DBE utilization reports only on its FHWA-funded transportation contracts. Thus, Caltrans tracks certified DBE utilization only for those contracts. BBC analyzed MBE/WBE utilization on both FHWA- and state-funded Caltrans transportation contracts. Utilization information for state-funded contracts is instructive, because Caltrans does not apply any DBE contract goals — or any other race- or gender-conscious programs — to those contracts.[3] USDOT suggests that agencies should examine MBE/WBE utilization on contracts to which DBE contract goals do not apply when designing future implementations of the Federal DBE Program.[4]

Caltrans did not apply DBE contracting goals to FHWA-funded transportation contracts that it awarded between January 1, 2007 and March 31, 2009. Similarly, subrecipient local agencies did not apply DBE contracting goals to FHWA-funded transportation contracts that they awarded through the Local Assistance Program between January 1, 2007 and June 2, 2009. Examining those contracts, in addition to the state-funded contracts, is also informative when implementing the Federal DBE Program. (Note that some "FHWA-funded" contracts also included state and/or local funds and that some "state-funded" contracts included local government funds.)

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[2] Although businesses that are owned and operated by socially- and economically-disadvantaged white men can become certified as DBEs, BBC identified no DBE-certified white male-owned businesses that Caltrans utilized during the study period. In other words, all DBEs that Caltrans utilized during the study period were MBE/WBEs. Thus, utilization results for certified DBEs are a subset of the utilization results for all MBE/WBEs.

[3] Caltrans actively pursues small business (SB) and disabled veteran business enterprise (DVBE) participation on all projects and, as of July 2012, is committed to a SB participation goal of 25 percent and a DVBE goal of 5 percent of state-funded contracts and procurement opportunities. A portion of the state-funded contracts awarded during the study did have DVBE contract goals.

[4] http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc.

B. Overall MBE/WBE Utilization on Caltrans and Local Assistance Transportation Contracts

Figure 5-2 presents overall MBE/WBE utilization (as a percentage of total dollars) on construction and engineering contracts that Caltrans and subrecipient local agencies awarded during the study period, including both FHWA- and state-funded prime contracts and subcontracts. The darker portion of the bar presents Caltrans' utilization of MBE/WBEs that were DBE-certified.

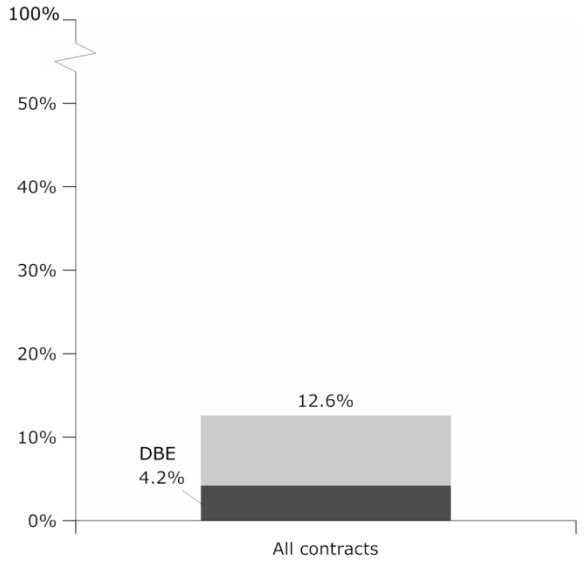
Figure 5-2.
MBE/WBE and DBE share of prime contract/subcontract dollars for Caltrans and Local Assistance transportation-related construction and engineering contracts, 2007-2010

Note:

Certified DBE utilization.
Number of contracts/subcontracts analyzed is 15,446.
For more detail and results by group, see Figure K-2 in Appendix K.

Source:

BBC Research & Consulting from data on Caltrans and local agency contracts.



As shown in Figure 5-2, overall, MBE/WBEs received 12.6 percent of Caltrans and Local Assistance transportation prime contract and subcontract dollars during the study period. Only 4.2 percent of the examined Caltrans and Local Assistance contract dollars went to MBE/WBEs that were DBE-certified.

Figure 5-3 on the following page presents Caltrans and Local Assistance utilization of each MBE/WBE group that is presumed to be disadvantaged in 49 CFR Part 26. As shown in Figure 5-3, Hispanic American-owned businesses (6.9%) and WBEs (3.9%) received a higher percentage of Caltrans and Local Assistance transportation contract dollars during the study period than other MBE/WBE groups. African American- (0.2%) and Subcontinent Asian-owned businesses (0.2%) were utilized less than other MBE/WBE groups.

Figure 5-3.
MBE/WBE and DBE share of prime contract and subcontract dollars for Caltrans and Local Assistance contracts, by race/ethnicity/gender, 2007-2010

	Total	
	$ in thousands	Percent
MBE/WBEs		
African American-owned	$20,315	0.2 %
Asian-Pacific American-owned	115,316	0.9
Subcontinent Asian American-owned	30,988	0.2
Hispanic American-owned	924,753	6.9
Native American-owned	63,174	0.5
WBE (white women-owned)	525,843	3.9
Total MBE/WBE	**$1,680,388**	**12.6 %**
Majority-owned	11,650,470	87.4
Total	**$13,330,858**	**100.0 %**
DBEs		
African American-owned	$13,396	0.1 %
Asian-Pacific American-owned	98,775	0.7
Subcontinent Asian American-owned	8,922	0.1
Hispanic American-owned	317,226	2.4
Native American-owned	22,403	0.2
Unknown minority DBE	511	0.0
WBE (white women-owned)	98,569	0.7
White male-owned DBE	0	0.0
Total DBE	**$559,802**	**4.2 %**
Non-DBE	12,771,056	95.8
Total	**$13,330,858**	**100.0 %**

Note: Certified DBE utilization.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.
Number of contracts/subcontracts analyzed is 15,446.
See Figure K-2 in Appendix K for corresponding disparity results table.

Source: BBC Research & Consulting from data on Caltrans and local agency contracts.

C. MBE/WBE Utilization on Caltrans and Local Assistance Transportation Contracts with and without Race- and Gender-conscious Goals

There were three sets of transportation contracts awarded during the study period to which the UDBE contracting goals program did not apply:

- State-funded contracts that Caltrans and local agencies awarded during the study period;
- FHWA-funded contracts that Caltrans awarded between January 1, 2007 and March 31, 2009; and
- FHWA-funded contracts that subrecipient local agencies awarded through the Local Assistance Program between January 1, 2007 and June 3, 2009.

Together, these contracts are noted as "non-goals" contracts. All other contracts are combined as "goals contracts," including individual FHWA-funded contracts on which Caltrans or local agencies decided not to set a DBE contract goal.

Figure 5-4 compares MBE/WBE and certified DBE utilization on Caltrans and Local Assistance non-goals and goals contracts during the study period.

Figure 5-4.
MBE/WBE and DBE utilization on Caltrans and Local Assistance goals and non-goals transportation contracts, 2007-2010

Note:

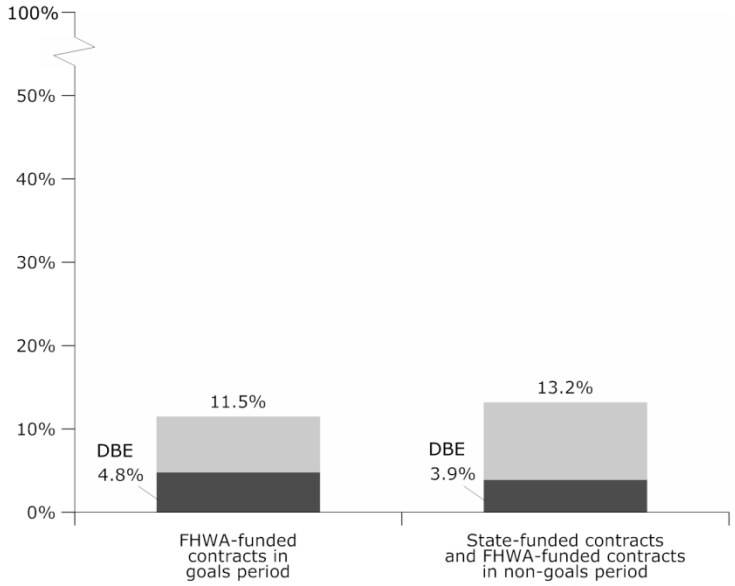
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 4,864 for FHWA-funded contracts in the goals period, 10,582 for state-funded contracts and FHWA-funded contracts in the non-goals period.

See Figures K-5 and K-8 and in Appendix K for detailed results.

Source:

BBC Research & Consulting from data on Caltrans and local agency contracts.



As shown in Figure 5-4, overall MBE/WBE utilization was higher on non-goals contracts (13.2%) than on goals contracts (11.5%) during the study period. As shown in Figure 5-5, that difference was due to the higher utilization of three groups on non-goals contracts — Hispanic American-owned businesses, Subcontinent Asian American-owned businesses and WBEs.

Figure 5-5.
MBE/WBE and DBE utilization on Caltrans and Local Assistance goals and non-goals transportation contracts by group, 2007-2010

	FHWA funded contracts in goals period		State funded contracts and FHWA funded contracts in non goals period	
	$ in thousands	Percent	$ in thousands	Percent
MBE/WBEs				
African American-owned	$14,545	0.3 %	$5,898	0.1 %
Asian-Pacific American-owned	42,752	0.9	72,665	0.8
Subcontinent Asian American-owned	7,185	0.2	23,763	0.3
Hispanic American-owned	258,113	5.7	666,127	7.6
Native American-owned	40,554	0.9	22,943	0.3
WBE (white women-owned)	156,319	3.5	369,524	4.2
Total MBE/WBE	**$519,468**	**11.5 %**	**$1,160,920**	**13.2 %**
Majority-owned	3,999,081	88.5	7,651,389	86.8
Total	**$4,518,549**	**100.0 %**	**$8,812,309**	**100.0 %**
DBEs				
African American-owned	$10,919	0.2 %	$2,477	0.0 %
Asian-Pacific American-owned	40,967	0.9	57,808	0.7
Subcontinent Asian American-owned	2,504	0.1	6,418	0.1
Hispanic American-owned	110,251	2.4	206,975	2.3
Native American-owned	13,253	0.3	9,151	0.1
Unknown minority DBE	0	0.0	511	0.0
WBE (white women-owned)	39,964	0.9	58,605	0.7
White male-owned DBE	0	0.0	0	0.0
Total DBE	**$217,858**	**4.8 %**	**$341,944**	**3.9 %**
Non-DBE	4,300,691	95.2	8,470,365	96.1
Total	**$4,518,549**	**100.0 %**	**$8,812,309**	**100.0 %**

Note: Certified DBE utilization.
Number of contracts/subcontracts analyzed is 4,864 for FHWA-funded contracts in the goals period and 10,582 for state-funded contracts and FHWA-funded contracts in the non-goals period.
See Figures K-5 and K-8 in Appendix K for corresponding disparity results tables.

Source: BBC Research & Consulting from data on Caltrans and local agency contracts.

Hispanic American- and Subcontinent Asian American-owned businesses. As shown in Figure 5-5, utilization of Hispanic American-owned businesses was higher on non-goals contracts (7.6%) than on goals contracts (5.7%). Utilization of Subcontinent Asian American-owned businesses was also slightly higher on non-goals contracts (0.3%) than on goals contracts (0.2%). It is important to note that both Hispanic American- and Subcontinent Asian American-owned businesses were not included in Caltrans' UDBE contracting goals program that the Department and subrecipient local agencies applied to FHWA-funded transportation contracts beginning on April 1, 2009 and on June 3, 2009, respectively.

BBC explored whether one reason why Hispanic American-owned businesses and Subcontinent Asian American-owned businesses showed lower utilization on goals contracts is that prime contractors made more effort to include on those contracts MBE groups that were eligible to meet UDBE contract goals — women-, African American-, Asian-Pacific American-, and Native American-owned DBEs. The difference in utilization for Hispanic American- and Subcontinent

Asian American-owned firms between goals and non-goals contracts (2 percentage points) was much greater than the increase in utilization of MBE groups eligible to meet UDBE contract goals (0.9 percentage points).[5] There appear to be factors other than DBE contract goals that contribute to lower utilization of Hispanic American- and Subcontinent Asian American-owned firms for goals contracts.

WBEs. Women-owned firms were also eligible to meet UDBE contract goals, but WBE utilization was lower on goals contracts (3.5%) than on non-goals contracts (4.2%). This result is further explored below.

D. Changes in MBE/WBE and Certified DBE Utilization on Caltrans and Local Assistance Contracts During the Study Period

As discussed in Chapter 3, the recent economic downturn had a substantial impact on construction and engineering work in California, including the transportation contracting industry. There are indications that changing marketplace conditions may have had more of a negative impact on small businesses, especially women- and minority-owned firms. Business owners and others also reported that market conditions grew worse over the course of the downturn (see Chapter 3, Appendix J and Appendix L). For these reasons, the study team examined MBE/WBE utilization for contracts awarded during 2007 and 2008 compared with contracts awarded during 2009 and 2010.

Figure 5-6 compares MBE/WBE and certified DBE utilization on Caltrans and local agency contracts awarded in the 2007-2008 period versus the 2009-2010 period.

Figure 5-6. MBE/WBE and DBE share of prime/subcontract dollars for Caltrans and Local Assistance transportation contracts, 2007-2008 vs. 2009-2010

Note:

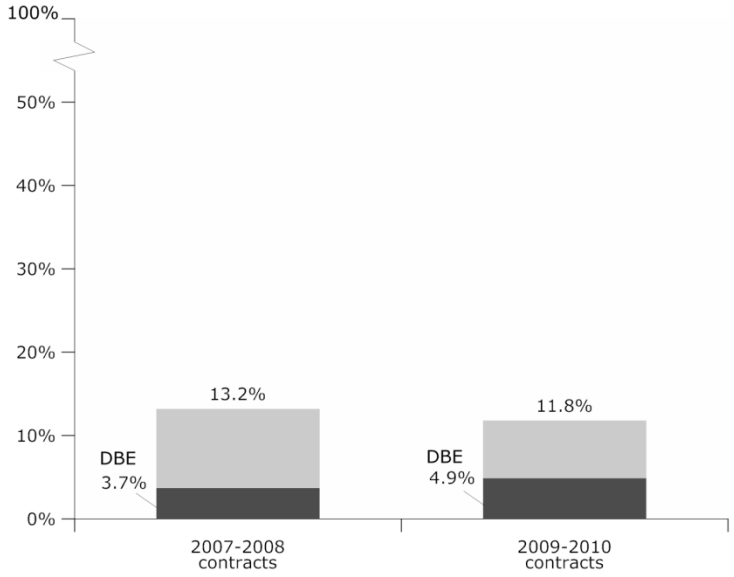
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 7,785 for the 2007-2008 period, 7,661 for the 2009-2010 periods.

See Figures K-17 and K-18 in Appendix K for detailed results.

Source:

BBC Research & Consulting from data on Caltrans and local agency contracts.



As shown in Figure 5-6, overall MBE/WBE utilization was lower in the 2009-2010 period (11.8%) than in the 2007-2008 period (13.2%), suggesting that changing marketplace conditions may have had more of a negative effect on MBE/WBEs than for majority-owned firms.

[5] Hispanic American and Subcontinent Asian American women-owned DBEs were eligible to meet UDBE contract goals.

This deterioration occurred despite Caltrans and local agencies using a race- and gender-conscious goals program on its FHWA-funded contracts after early to mid-2009 (UDBE contract goals). Although the UDBE contract goals appeared to increase the utilization of certified DBEs during the 2009-2010 period, overall marketplace conditions resulted in an overall decrease in the utilization of minority- and women-owned firms..

Figure 5-7 presents MBE/WBE and certified DBE participation in each period by racial/ethnic/gender group. As noted previously, certified DBE utilization is a subset of total MBE/WBE utilization.

Figure 5-7.
MBE/WBE and DBE share of prime/subcontract dollars for Caltrans and local agency contracts, 2007-2008 vs. 2009-2010, by race/ethnicity/gender

	2007 2008 period		2009 2010 period	
	$ in thousands	Percent	$ in thousands	Percent
MBE/WBEs				
African American-owned	$4,059	0.1 %	$16,339	0.3 %
Asian-Pacific American-owned	52,793	0.7	62,672	1.1
Subcontinent Asian American-owned	19,053	0.3	11,922	0.2
Hispanic American-owned	571,122	7.5	353,221	6.2
Native American-owned	18,949	0.2	44,415	0.8
WBE (white women-owned)	339,466	4.5	186,377	3.3
Total MBE/WBE	**$1,005,443**	**13.2 %**	**$674,945**	**11.8 %**
Majority-owned	6,601,269	86.8	5,049,201	88.2
Total	**$7,606,712**	**100.0 %**	**$5,724,146**	**100.0 %**
DBEs				
African American-owned	$1,788	0.0 %	$11,608	0.2 %
Asian-Pacific American-owned	42,864	0.6	55,911	1.0
Subcontinent Asian American-owned	2,695	0.0	6,227	0.1
Hispanic American-owned	174,410	2.3	142,816	2.5
Native American-owned	7,163	0.1	15,240	0.3
Unknown minority DBE	102	0.0	410	0.0
WBE (white women-owned)	50,308	0.7	48,261	0.8
White male-owned DBE	0	0.0	0	0.0
Total DBE	**$279,329**	**3.7 %**	**$280,473**	**4.9 %**
Non-DBE	7,327,383	96.3	5,443,673	95.1
Total	**$7,606,712**	**100.0 %**	**$5,724,146**	**100.0 %**

Note: Certified DBE utilization.
Number of contracts/subcontracts analyzed is 7,785 for the 2007-2008 period and 7,661 for the 2009-2010 period.
See Figures K-17 and K-18 in Appendix K.

Source: BBC Research & Consulting from data on Caltrans and local agency contracts.

Between the 2007-2008 and 2009-2010 periods, utilization decreased for Subcontinent Asian American-owned firms (0.3% to 0.2%), Hispanic American-owned firms (7.5% to 6.2%), and white women-owned firms (4.5% to 3.3%). The decrease in combined utilization of these three groups more than offsets small increases in the utilization of the other MBEs. Even though Caltrans included women-owned DBEs as UDBEs in the race-conscious goals program, utilization still declined for all white women-owned firms.

CHAPTER 6.
Disparity Analysis

The disparity analysis compares the utilization of MBE/WBEs on transportation construction and engineering contracts that Caltrans and subrecipient local agencies awarded during the study period to what might be expected based on the availability of MBE/WBEs for that work. Chapter 6 presents the disparity analysis in six parts:

A. Overview of disparity analysis methodology;

B. Overall disparity analysis results for Caltrans and Local Assistance transportation contracts;

C. Disparity analysis results for contracts included in Caltrans race-conscious DBE goals program and contracts not included in the race-conscious goals program;

D. Disparity analysis results for Caltrans contracts by time period; and

E. Statistical significance of disparity analysis results.

A. Overview of Disparity Analysis Methodology

As part of the disparity analysis, BBC compared the actual utilization of MBE/WBEs on Caltrans transportation prime contracts and subcontracts with the percentage of contract dollars that MBE/WBEs might be expected to receive based on their availability for that work (availability is also referred to as the "utilization benchmark"). BBC made those comparisons for each individual MBE/WBE group. BBC also made those comparisons for all Caltrans transportation contracts considered together and separately for different sets of contracts (e.g., goals and non-goals contracts as well as 2007-2008 contracts and 2009-2010 contracts).

BBC expressed both actual utilization and availability as percentages of the total dollars associated with a particular set of contracts, making them directly comparable (e.g., 5% actual utilization compared with 4% availability). BBC then calculated a "disparity index" to help compare utilization and availability results among MBE/WBE groups and across different sets of contracts. Figure 6-1, on the next page, describes how BBC calculated disparity indices.

A disparity index of 100 indicates an exact match between actual utilization and what might be expected based on MBE/WBE availability for a specific set of contracts (often referred to as "parity"). A disparity index of less than 100 may indicate a disparity between utilization and availability, and disparities of less than 80 in this report are described as "substantial."[1]

[1] Some courts deem a disparity index below 80 as being "substantial" and have accepted it as evidence of adverse impacts against MBE/WBEs. For example, see *Rothe Development Corp v. U.S. Dept of Defense*, 545 F.3d 1023, 1041; *Eng'g Contractors Ass'n of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d at 914, 923 (11th Circuit 1997); *Concrete Works of Colo., Inc. v. City and County of Denver*, 36 F.3d 1513, 1524 (10th Cir. 1994). Also see Appendix B for additional discussion.

The disparity analysis results that BBC presents in Chapter 6 are based on detailed disparity analysis tables provided in Appendix K. Each table in Appendix K reports disparity analysis results for a different set of Caltrans and Local Assistance transportation contracts. For example, Figure K-2 in Appendix K reports disparity analysis results for *all* Caltrans and Local Assistance transportation contracts that the study team examined as part of the disparity study — that is, FHWA- and state-funded transportation-related construction and engineering prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period. Appendix K includes additional similar tables for different sets of contracts, including those that present results separately for FHWA- and state-funded contracts, prime contracts and subcontracts, construction and engineering-related contracts, contracts in different regions, and large and small contracts. The heading of each table in Appendix K provides a detailed description of the set of contracts that the study team analyzed for that particular disparity analysis table.

Figure 6-1.
Calculation of disparity indices

The disparity index provides a straightforward way of assessing how closely actual utilization of an MBE/WBE group matches the percentage of contract dollars that the group might be expected to receive based on its availability for a specific set of contracts. One advantage of the disparity index is that one can directly compare a disparity index for one group to that of another group and compare disparity indices across different sets of contracts. BBC calculates disparity indices using the following formula:

$$\frac{\text{\% actual utilization x 100}}{\text{\% availability}}$$

For example, if actual utilization of WBEs on a set of Caltrans contracts was 2 percent and the availability of WBEs for those contracts was 10 percent, then the disparity index would be 2 percent divided by 10 percent, which would then multiplied by 100 to equal 20. In this example, WBEs would have actually received 20 cents of every dollar that they might be expected to receive based on their availability for the work.

Figure K-2 from Appendix K is presented as Figure 6-2 on the following page. A review of Figure 6-2 helps to introduce the calculations and format of all of the disparity analysis tables in Appendix K. As illustrated in Figure 6-2, the disparity analysis tables present information about each MBE/WBE group (as well as about all businesses) in separate rows:

- "All firms" in row (1) pertains to information about all majority-owned businesses and MBE/WBEs considered together.
- Row (2) provides results for all MBE/WBEs, regardless of whether they were certified as DBEs.

Figure 6-2.
Example of a disparity analysis table from Appendix K (same as Figure K-2 in Appendix K)

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	15,446	$11,397,030	$13,330,858				
(2) MBE/WBE	4,509	$1,434,119	$1,680,388	12.6	18.1	5.5	69.7
(3) WBE	1,431	$455,493	$525,843	3.9	4.3	0.3	92.6
(4) MBE	3,078	$978,626	$1,154,545	8.7	13.8	-5.2	62.6
(5) African American-owned	110	$14,407	$20,315	0.2	0.9	-0.8	16.5
(6) Asian-Pacific American-owned	542	$82,340	$115,316	0.9	1.8	-1.0	47.3
(7) Subcontinent Asian American-owned	287	$27,471	$30,988	0.2	0.3	-0.0	84.3
(8) Hispanic American-owned	1,661	$791,296	$924,753	6.9	9.8	-2.8	71.1
(9) Native American-owned	343	$50,819	$63,174	0.5	1.0	-0.6	45.2
(10) Unknown MBE	135	$12,292					
(11) DBE-certified	2,770	$449,206	$559,802	4.2			
(12) Woman-owned DBE	858	$79,720	$98,569	0.7			
(13) Minority-owned DBE	1,908	$368,975	$460,721	3.5			
(14) African American-owned DBE	89	$9,163	$13,396	0.1			
(15) Asian-Pacific American-owned DBE	497	$71,691	$98,775	0.7			
(16) Subcontinent Asian American-owned DBE	47	$8,205	$8,922	0.1			
(17) Hispanic American-owned DBE	967	$262,817	$317,226	2.4			
(18) Native American-owned DBE	308	$17,099	$22,403	0.2			
(19) Unknown DBE-MBE	4	$511	$511	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Notes: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis

- Row (3) provides results for all WBEs, regardless of whether they were certified as DBEs.
- Row (4) provides results for all MBEs, regardless of whether they were certified as DBEs.
- Rows (5) through (10) provide results for businesses of each individual minority group, regardless of whether they were certified as DBEs.

The bottom half of Figure 6-2 reports analogous results for businesses that were certified as DBEs as of July 6, 2012. BBC included a row for white male-owned DBEs, although the analysis did not identify any white male-owned DBEs utilized on Caltrans transportation prime contracts or subcontracts during the study period.

Utilization. Each of the disparity tables includes the same columns and rows:

- Column (a) presents the number of prime contracts and subcontracts (i.e., contract elements) that the study team analyzed for that particular set of contracts. As shown in row (1) of column (a) of Figure 6-2, the study team analyzed 15,446 total contract elements. The value presented in column (a) for each individual MBE/WBE group represents the number of contract elements on which businesses of that particular MBE/WBE group were utilized (e.g., as shown in row (5) of column (a), African American-owned businesses received 110 contract elements).
- Column (b) presents the dollars (in thousands) that were associated with the set of contract elements. As shown in row (1) of column (b) of Figure 6-2, the study team examined about $11 billion for the set of contract elements. The dollar totals include both prime contract and subcontract dollars.
- Column (c) presents the contract dollars (in thousands) for which each MBE/WBE group was utilized on the set of contracts after adjusting total dollars by the following two factors:
  - **Local Assistance contracts.** Because BBC collected data on a sample of contracts that sub-recipient agencies awarded through the Local Assistance Program, the study team weighted the data to be representative of the entire set of those contracts. Appendix D describes the sampling and weighting procedures.
  - **Unidentified race/ethnicity.** BBC pro-rated the dollars that went to businesses that the study team identified as MBEs but for which specific race/ethnicity information was not available. As shown in row (10) of column (b) of Figure 6-2, across all transportation contracts that Caltrans awarded during the study period, there was approximately $12 million that went to businesses that the study team identified as MBEs for which no specific race/ethnicity information was available.

  As shown in row (1) of column (c) of Figure 6-2, the study team examined about $13 billion for the set of contract elements after adjusting total dollars by the two factors described above.

- Column (d) presents the percentage of total dollars associated with the set of contract elements for which each MBE/WBE group was utilized. The study team calculated each percentage in column (d) by dividing the dollars going to a particular group in column (c) by the total dollars associated with the set of contract elements shown in row (1) of column (c), and then expressing the result as a percentage (e.g., for African American-owned businesses, the study team divided $20.3 million by $13.3 billion and multiplied by 100 for a result of 0.2%, as shown in row (5) of column (d)).

Availability (utilization benchmark). Column (e) of Figure 6-2 reports the availability of each MBE/WBE group for all transportation prime contracts and subcontracts that Caltrans awarded during the study period. Availability estimates, which are represented as a percentage of the total contracting dollars associated with the set of contracts, serve as a benchmark against which to compare utilization for a specific group for a particular set of contracts (e.g., as shown in row (5) of column (e), availability of African American-owned businesses is 0.9%, compared with 0.2% utilization for those businesses). In the disparity tables, BBC did not separately calculate availability figures for businesses that were DBE-certified.

Differences between utilization and availability. The next step in analyzing whether there was a disparity between the utilization and availability of a particular MBE/WBE group is to subtract the utilization result from the availability result. Column (f) of Figure 6-2 presents the percentage point difference between utilization and availability for each MBE/WBE group. For example, as reported in row (2) of column (f) of Figure 6-2, MBE/WBE utilization was 5.5 percentage points below MBE/WBE availability.

Disparity indices. It is sometimes difficult to interpret absolute percentage differences between utilization and availability, especially when the percentages are relatively small. Therefore, BBC also calculated a disparity index for each MBE/WBE group, which measured utilization relative to availability and served as a metric to compare any disparities across different MBE/WBE groups and across different sets of contracts. BBC calculated disparity indices by dividing percent utilization for each group by percent availability and multiplying the result by 100. Thus, smaller values for the disparity indices indicated greater disparities (i.e., a greater degree of underutilization).

Column (g) of Figure 6-2 presents the disparity index for each MBE/WBE group. For example, as reported in row (2) of column (g), the disparity index for all MBE/WBEs considered together was about 70, indicating that MBE/WBEs actually received approximately 70 cents of every dollar that they might be expected to receive based on their availability for all transportation prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period. (BBC did not calculate disparity indices separately for businesses that were DBE-certified.)

Results when disparity indices were very large or when availability was zero. BBC applied the following rules when disparity indices were exceedingly large or could not be calculated because the availability database contained no businesses of a particular group identified as available for a particular set of contract elements:

- When BBC's calculations showed a disparity index exceeding 200, BBC reported an index of "200+." A disparity index of 200+ means that utilization was more than twice as much as might be expected based on the availability analysis.
- When there was no utilization and 0 percent availability for a particular group for a particular set of contracts, BBC reported "parity" between utilization and availability (indicated by a disparity index of "100").
- When utilization for a particular group for a particular set of contracts was greater than 0 percent but availability was 0 percent, BBC reported a disparity index of "200+." [2]

B. Overall Disparity Analysis Results for Caltrans Transportation Contracts

BBC used the disparity results from Figure 6-2 (corresponding to Figure K-2 in Appendix K) to examine any disparities between MBE/WBE utilization and availability on all transportation-related construction and engineering prime contracts and subcontracts that Caltrans and subrecipient local agencies awarded during the study period. Figure 6-3 presents disparity indices for all MBE/WBEs considered together and separately for each MBE/WBE group. The line down the center of the graph shows a disparity index level of 100, which indicates "parity" between utilization and availability for a particular group. Disparity indices less than100 indicate disparities between utilization and availability (i.e., underutilization). For reference, a line is also drawn at an index level of 80, because some courts use 80 as a threshold for what indicates a substantial disparity.

[2] A particular MBE/WBE group could show a utilization percentage greater than 0 percent but an availability percentage of 0 percent for many reasons, including the fact that one or more utilized businesses were out of business by the time of BBC's availability survey.

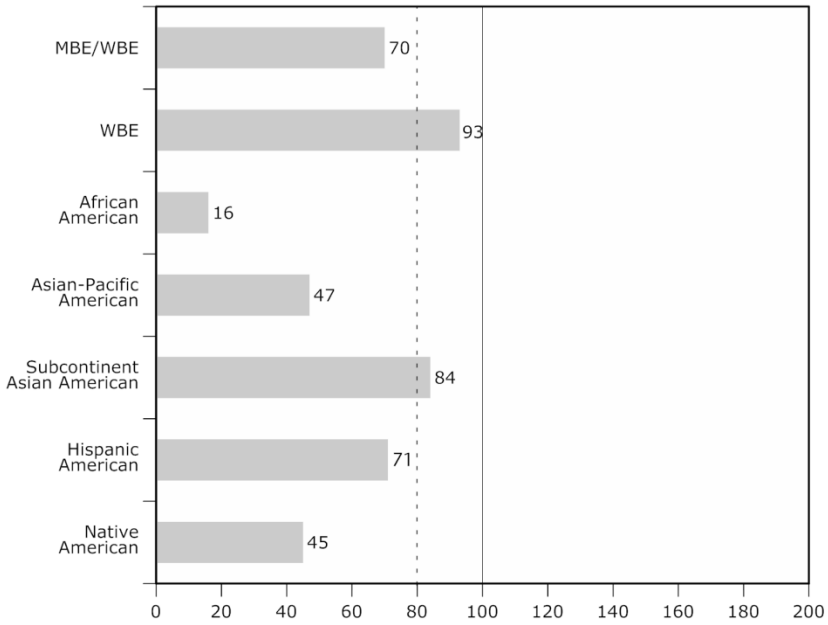
Figure 6-3. Disparity indices for FHWA- and state-funded Caltrans and Local Assistance transportation contracts for all MBE/WBEs considered together and separately by group, 2007-2010

Note:

See Figure K-2 for detailed results.

Source:

BBC Research & Consulting.



As shown in Figure 6-3, overall, utilization of MBE/WBEs on Caltrans and Local Assistance transportation contracts during the study period was substantially below what might be expected based on the availability analysis for those contracts. The disparity index of 70 indicates that all MBE/WBEs considered together received about 70 percent of the contract dollars that they might be expected to receive based on their availability for those contracts.

Only two MBE/WBE groups — WBEs (disparity index of 93) and Subcontinent Asian American-owned businesses (disparity index of 84) — did not show substantial disparities (although both groups were nonetheless underutilized). Figure 6-3 shows substantial disparities in the utilization of a number of MBE groups, including firms owned by African Americans (disparity index of 17), Asian-Pacific Americans (disparity index of 47), Hispanic Americans (disparity index of 71) and Native Americans (disparity index of 45). Utilization of white women-owned firms for Caltrans and Local Assistance contracts for 2007-2010 was below what might be expected from the availability analysis. The disparity index for WBEs for these contracts — 93 — indicates that the disparity was not substantial. Utilization of Subcontinent Asian American-owned firms was also below what might be expected from the availability analysis. Because the disparity index for Subcontinent Asian American-owned firms was above 80, it does not rise to the level of a "substantial disparity" as defined by some courts.

C. Disparity Analysis Results for Contracts Included in the Race-Conscious Goals Program and Contracts Not Included in the Goals Program

BBC also examined whether there were disparities between MBE/WBE utilization and availability on contracts included in the race-conscious DBE goals program and contracts not included in this program that Caltrans and subrecipient local agencies awarded during the study period. As explained in Chapter 5, there were three sets of transportation contracts awarded during the study period to which the UDBE contracting goals program did not apply:

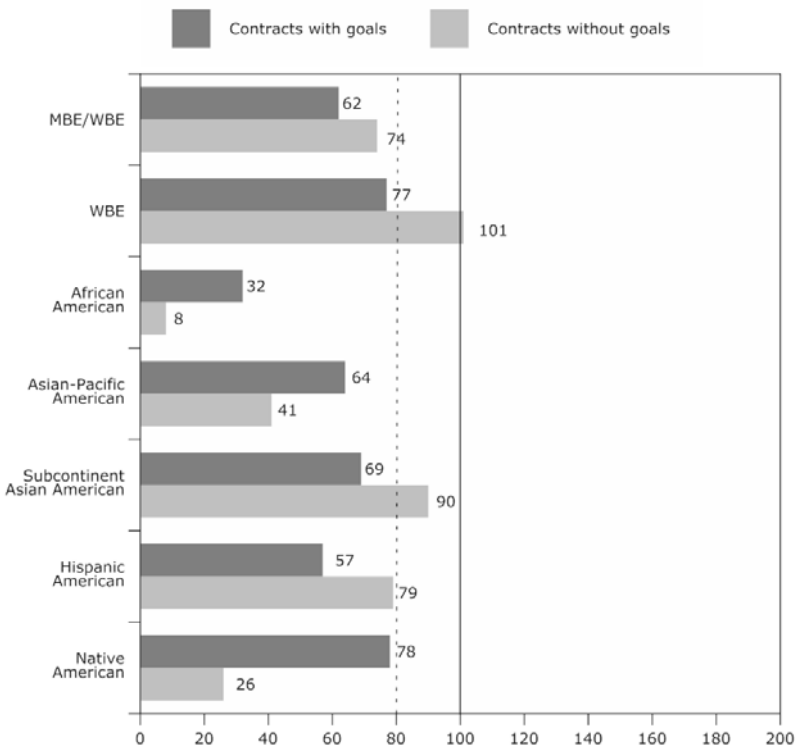
- State-funded contracts that Caltrans and local agencies awarded during the study period;
- FHWA-funded contracts that Caltrans awarded between January 1, 2007 and March 31, 2009; and
- FHWA-funded contracts that subrecipient local agencies awarded through the Local Assistance Program between January 1, 2007 and June 3, 2009

Together, these contracts are noted as "non-goals" contracts.

Caltrans included FHWA-funded construction and engineering contracts that it awarded between April 1, 2009 and December 31, 2010 in its race-conscious DBE goals program. Subrecipient local agencies included FHWA-funded construction and engineering contracts that they awarded between June 3, 2009 and December 31, 2010 in Caltrans race-conscious goals programs. Together, these two sets of contracts are referred to as "goals" contracts. Only firms that were DBE-certified that were African American-, Asian-Pacific American-, Native American- or women-owned were eligible to meet contract goals. These four groups were referred to as Underutilized Disadvantaged Business Enterprises (UDBEs). During the goals period, Caltrans reviewed individual FHWA-funded contracts and determined whether to apply a contract-specific race-conscious goal for a contract based on the subcontracting opportunities on that contract and the availability of UDBEs to participate in the contract. Hispanic American- and Subcontinent Asian American-owned DBEs were not eligible to meet UDBE goals.

Figure 6-4 presents disparity indices for MBE/WBEs and for individual MBE/WBE groups on goals and non-goals contracts that Caltrans and subrecipient local agencies awarded during the study period. As shown in Figure 6-4, overall, MBE/WBEs were substantially underutilized on both goals contracts (disparity index of 62) and on non-goals contracts (disparity index of 74).

Figure 6-4. Disparity indices for goals and non-goals Caltrans and Local Assistance transportation contracts for all MBE/WBEs considered together and separately by group, 2007-2010



Note:

See Figures K-5 and K-8 for corresponding disparity results tables.

Source:

BBC Research & Consulting utilization analysis.

Contracts not included in the race-conscious goals program. MBE/WBE utilization on non-goals contracts (13.2%) was substantially less than what might be expected based on the availability analysis for non-goals contracts (17.9%). The disparity index for MBE/WBEs is 74. There were substantial disparities in the utilization of African American-, Asian-Pacific American-, Hispanic American- and Native American owned firms.

Utilization of women-owned firms on non-goals contracts was at the level that might be expected based on the availability analysis (disparity index of 101). Utilization of Subcontinent Asian American-owned firms was below what might be expected based upon availability of those firms. The resulting disparity index of 90 did not indicate a substantial disparity for non-goals contracts. Figure K-5 in Appendix K provides detailed results.

Contracts included in the race-conscious goals program. MBE/WBE utilization on contracts for which the race-conscious goals program applied was 11.5 percent, which was substantially below what might be expected given the availability analysis (18.5%). The resulting disparity index was 62.

Disparity results for contracts under the race-conscious program indicate substantial disparities for WBEs and each MBE group. Additional information on the results for contracts awarded under the race-conscious goals program can be found in Appendix K, Figure K-8.

Application of UDBE contract goals by Caltrans and local agencies did not remedy the disparities identified for certain MBE groups when no race-conscious program applied. As examined below, there may be reasons other than application of the race-conscious program contributing to the lower MBE/WBE utilization and the disparities found for Caltrans and local agency goals contracts.

D. Contracts Awarded During 2007 and 2008 and Contracts Awarded During 2009 and 2010

Information gathered from the qualitative research (summarized in Chapter 3) suggested that recent economic downturn had a substantial impact on the transportation contracting industry, and that market conditions substantially worsened between the beginning of the study period and the end of 2010. Therefore, the study team compared results for contracts awarded during 2007 and 2008 with contracts awarded during 2009 and 2010.

Figure 6-5 presents disparity analysis results for Caltrans and Local Assistance contracts awarded during the first half of the study period (calendar years 2007 and 2008) and the second half of the study period (calendar years 2009 and 2010). It appears that overall disparities for MBE/WBEs were more severe in 2009-2010 than in the first half of the study period. There were no MBE/WBE groups for which utilization matched availability during 2009-2010.

Disparities for 2009-2010 contracts were substantial for white women-owned firms and African American-, Asian-Pacific American-, Hispanic American- and Native American-owned. The disparities for Subcontinent Asian American-owned firms in 2009-2010 were not at the level to be identified as substantial.

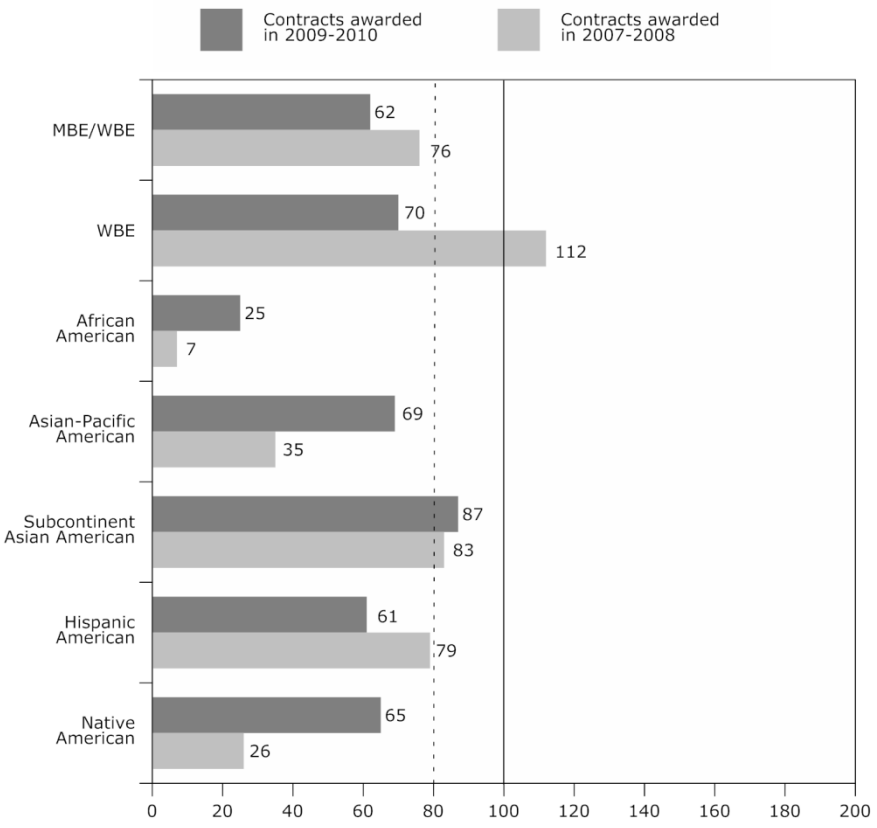
Figure 6-5. Disparity indices on Caltrans and Local Assistance FHWA- and state-funded transportation contracts awarded during 2007-2008 and 2009-2010 for all MBE/WBEs considered together and separately by group

Note:

See Figures K-17 and K-18 for corresponding disparity results tables.

Source:

BBC Research & Consulting utilization analysis.



E. Statistical Significance of Disparity Analysis Results

Testing for statistical significance relates to testing the degree to which a researcher can reject "random chance" as an explanation for any observed differences. Random chance in data sampling is the factor that researchers consider most in determining the statistical significance of results. However, BBC attempted to contact every firm in the relevant geographic market area that D & B identified as doing business within relevant subindustries (as described in Chapter 4), mitigating many of the concerns associated with random chance in data sampling as they may relate to BBC's availability analysis. Much of the utilization analysis also approaches a "population" of contracts. Therefore, one might consider any disparity identified when comparing overall utilization with availability to be "statistically significant." Figure 6-6 explains the high level of statistical confidence in the utilization and availability results. As outlined below, BBC also used a sophisticated statistical simulation tool to further examine statistical significance of disparity results.

Figure 6-6.
Confidence intervals for availability and utilization measures

BBC conducted telephone interviews with more than 15,000 business establishments —a number of completed interviews that is generally considered large enough to be treated as a "population," not a sample. BBC's analysis of the confidence interval around the estimate of MBE/WBE representation among all firms available for Caltrans transportation work, 33.1 percent, is accurate within about +/-0.8 percentage points at the 95 percent confidence level (BBC applied the finite population correction factor when determining confidence intervals). At this level of accuracy in the availability analysis, a disparity index of 97 would technically be "statistically significant." (By comparison, many survey results for proportions reported in the popular press are +/- 5 percentage points.)

BBC attempted to collect all Caltrans construction and engineering contracts. By necessity, BBC drew a sample of Local Assistance contracts to be reported on by local agencies. Even with the sample, BBC obtained contracts that comprised an estimated 55 percent of Local Assistance construction and engineering dollars. Therefore, the overall MBE/WBE utilization figure of 12.6 percent for all contracts is accurate within +/- 0.8 percentage points at the 95 percent confidence level).

Monte Carlo analysis. There were many opportunities in the sets of prime contracts and subcontracts that BBC analyzed as part of the disparity study for MBE/WBEs to be awarded work. Some contract elements involved large dollar amounts and others involved only a few thousand dollars.

Monte Carlo analysis was a useful tool for the study team to use for statistical significance testing in the disparity study, because there were many individual chances at winning Caltrans and local agency transportation prime contracts and subcontracts between January 1, 2007 and December 31, 2010, each with a different payoff. Figure 6-7 describes BBC's use of Monte Carlo analysis.

Figure 6-7.
Monte Carlo Analysis

The study team began the Monte Carlo analysis by examining individual contract elements. For each contract element, BBC's availability database provided information on individual businesses that were available for that contract element, based on type of work, contractor role, contract size, and location of the work.

The study team assumed that each available firm had an equal chance of "receiving" that contract element. For example, the odds of a WBE receiving that contract element were equal to the number of WBEs available for the contract element divided by the total number of firms available for the work. The Monte Carlo simulation then randomly chose a business from the pool of available businesses to "receive" that contract element.

The Monte Carlo simulation repeated the above process for all other elements in a particular set of contracts. The output of a single Monte Carlo simulation for all contract elements in the set represented simulated utilization of MBE/WBEs, by group, for that set of contract elements.

The entire Monte Carlo simulation was then repeated 1 million times for each set of contracts. The combined output from all 1 million simulations represented a probability distribution of the overall utilization of MBE/WBEs if contracts were awarded randomly based on the availability of businesses working in the California transportation contracting industry.

The output of the Monte Carlo simulations represents the number of runs out of 1 million that produced a simulated utilization result that was equal or below the observed utilization in the actual data for each MBE/WBE group and for each set of contracts. If that number was less than or equal to 25,000 (i.e., 2.5% of the total number of runs), then the disparity index is considered to be statistically significant.

Results. Figure 6-8 presents the results from the Monte Carlo analysis as they relate to the statistical significance of disparities that the study team observed for MBE/WBEs.

BBC identified disparities for MBEs overall for all contracts, and for MBEs and WBEs for contracts awarded in 2009 and 2010 — the Monte Carlo simulation focused on these results.

Due to the large number of contract elements analyzed for all contracts during the study period, BBC also examined statistical significance for individual MBE groups. The results allow one to reject chance as a cause for the disparities for each MBE group with the exception of Subcontinent Asian Americans.

It is important to note that this test may not be necessary to establish statistical significance of results (see discussion in Figure 6-6 and elsewhere in this Chapter), and it may not be appropriate for very small populations of firms (including Subcontinent Asian American-owned firms in the California transportation contracting industry).[3]

[3] Even if there were zero utilization of a particular group, Monte Carlo simulation might not reject chance in contract awards as an explanation for that result if there were a small number of firms in that group or a small number of contract elements included in the analysis. Results can also be affected by the size distribution of contract elements.

Figure 6-8.
Monte Carlo results for all contracts and contracts awarded in 2009 and 2010

MBE/WBE Group	Disparity index	Number of simulation runs out of one million that replicated observed utilization	Probability of observed disparity occurring due to chance"	Reject chance in awards of contracts as a cause of disparity?
All contracts				
MBE	63	0	< 0.1 %	Yes
WBE	93	153,556	15.4	No
Contracts in 2009 and 2010				
MBE	60	21	< 0.1 %	Yes
WBE	70	0	< 0.1	Yes

Note: Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Source: BBC Research & Consulting from data on Caltrans and local agency contracts.

CHAPTER 7.
Further Exploration of Any Disparities

Five areas of questions emerge from the disparities observed in MBE/WBE utilization on Caltrans contracts:

A. Are disparities found in some regions of the state and not in others?

B. Are there disparities for Caltrans contracts and for Local Assistance contracts?

C. Are there disparities for Caltrans and Local Assistance construction contracts?

D. Are there disparities for Caltrans and Local Assistance engineering-related contracts?

E. Is there any evidence of "overconcentration" of DBEs in certain types of work?

Answers to the above questions may be relevant as Caltrans considers whether all or how much of its overall annual DBE goal can be met through race- and gender-neutral means and what measures may be needed in implementing the federal regulations. In accordance with the Federal DBE Program, results may also help the Department, if necessary, identify the specific racial/ethnic/gender groups that might be included in any future race- or gender-conscious programs.

Because Chapters 5 and 6 did not find that application of a race-conscious program increased overall MBE/WBE participation in Caltrans and Local Assistance contracts, the additional analyses in Chapter 7 combined FHWA- and state-funded contracts regardless of application of DBE contract goals.

A. Are disparities found in some regions of the state and not in others?

The study team examined utilization and disparity analysis results individually for four regions of California:

- North (Districts 1,2 and 3);
- San Francisco Bay Area (District 4);
- Central (Districts 5, 6, 9 and 10); and
- Southern California (Districts 7, 8, 11 and 12).

Overall MBE/WBE utilization in FHWA- and state-funded Caltrans and Local Assistance contracts for 2007 through 2010 varied from 8.4 percent in Central California to 15.3 percent in Southern California.[1] Utilization was below availability in each of the four regions. There were substantial disparities for MBEs overall in each region. For WBEs, there were substantial

[1] Certified DBE participation from 2007 through 2010 varied from 3.9 percent in Central California to 4.4 percent in Southern California.

disparities in overall utilization in the San Francisco Bay Area (disparity index of 76) and Central California (disparity index of 39).

In sum, it does not appear that disparities in the utilization of MBEs in Caltrans contracts are found in some regions of the state and not in others. Overall results by region differed for WBEs. Appendix K provides detailed utilization and disparity results for each region, beginning with Figure K-42.

B. Are there disparities for Caltrans and Local Assistance construction contracts?

Some of the FHWA- and state-funded contracts BBC examined were awarded by cities, counties and other local agencies using funds administered through Caltrans. These Local Assistance contracts were about $4 billion of the $13 billion in total contracts examined in the disparity study.[2]

BBC examined utilization and availability results for Local Assistance contracts compared with contracts awarded by Caltrans.

- Utilization of MBE/WBEs for 2007 through 2010 was very similar for Local Assistance contracts (12.7%) and for Caltrans contracts (12.6%).
- There were substantial disparities in MBE/WBE utilization for both sets of contracts (disparity index of 63 for Local Assistance contracts and 74 for Caltrans contracts).
- There were substantial disparities for MBEs for both sets of contracts and for WBEs for Local Assistance contracts.

Figures K-20 and K-23 in Appendix K provide detailed utilization and disparity results for Caltrans-awarded contracts and Local Assistance contracts.

C. Are there disparities for Caltrans and Local Assistance construction contracts?

BBC examined several questions concerning disparity results for Caltrans construction contracts:

1. Are there disparities for MBEs and WBEs on Caltrans and Local Assistance construction contracts?
2. Do results differ for construction prime contracts and subcontracts?
3. Are there disparities in the use of MBE/WBE prime contractors for small construction contracts?

[2] The $4 billion figure refers to the estimated total of Local Assistance transportation contracts using funds administered through Caltrans. BBC based the analyses of Local Assistance contracts on a statistically-reliable sample of those contracts; the sample totaled about $2 billion in contract dollars.

4. Does analysis of MBE/WBE bids on construction prime contracts help to explain disparity results?

1. Are there disparities for MBEs and WBEs on Caltrans and Local Assistance construction contracts? Of the $13 billion in contract dollars for 2007 through 2010 examined in the disparity study, all but $0.5 billion were for construction contracts. Therefore, utilization and disparity results focusing solely on construction contracts closely match results for all contracts presented in Chapters 5 and 6.

- MBE/WBE utilization for Caltrans and Local Assistance construction contracts was 12.7 percent for 2007 through 2010, about the same result as for all contracts (12.6%). About 7 percent of construction contract dollars went to Hispanic American-owned firms and 4 percent went to WBEs (see Figure K-3 in Appendix K).

- The overall disparity index of Caltrans and Local Assistance construction contracts was 73, about the same as for all contracts (70).

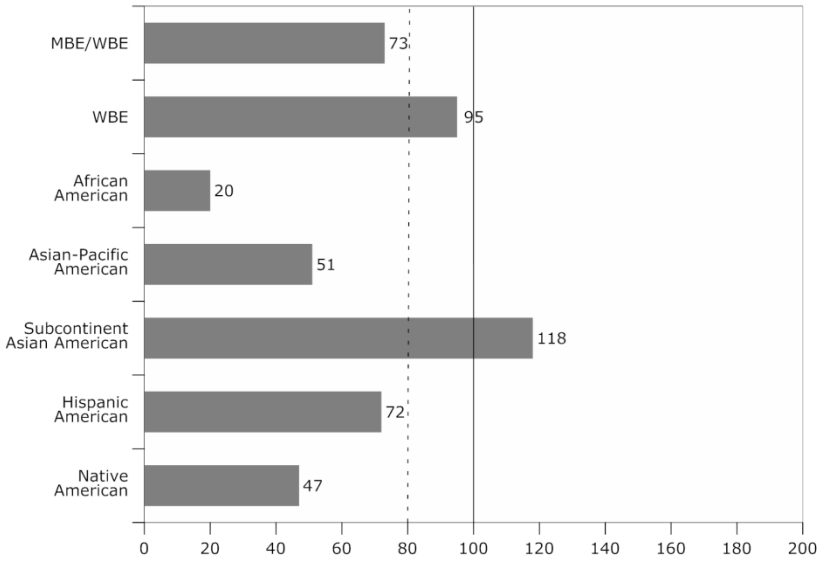
Figure 7-1 presents disparity indices by group for Caltrans and Local Assistance construction contracts for 2007 through 2010.

- There were substantial disparities for each MBE group except for Subcontinent Asian Americans.

- For 2007 through 2010, utilization of WBEs on construction contracts (4.0%) was only slightly below what might be expected from the availability analysis (4.2%), with a resulting disparity index of 95 for WBEs in construction.

Figure K-3 in Appendix K presents detailed results.

Figure 7-1. Disparity indices for MBE/WBE utilization as prime contractors and subcontractors on Caltrans and Local Assistance FHWA- and state-funded construction contracts, 2007–2010



Note:

Number of contracts/subcontracts analyzed is 14,636.

For more detail, see Figure K-3 in Appendix K.

Source:

BBC Research & Consulting.

BBC also examined utilization and disparity results for construction contracts for:

- Combined state-funded contracts and FHWA-funded contracts for which no race-conscious program applied (see Figure K-6); and
- FHWA-funded contracts during the time period when DBE contract goals applied to some of these contracts (see Figure K-9).

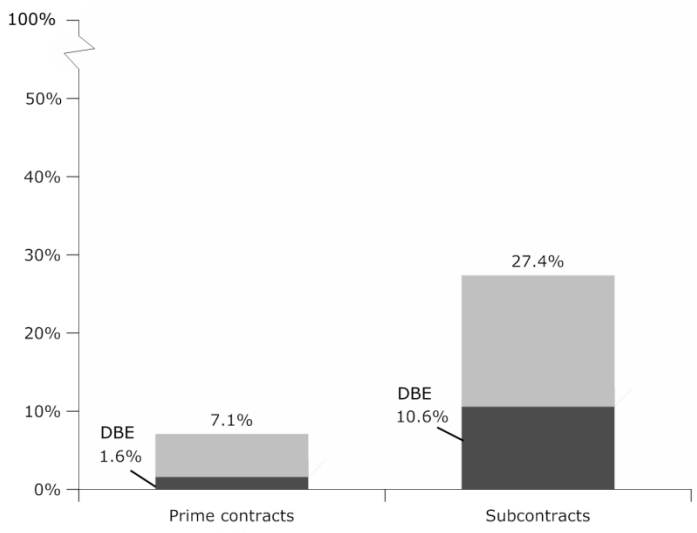
Results were again very similar to the same analysis for all contracts (see Figures K-5 and K-8). MBE/WBE utilization on construction contracts for which no race-conscious program applied was higher (13.3%) than when the DBE contract goals program did apply (11.6%), even though DBE participation was somewhat higher on construction contracts under the DBE contract goals program.

2. Do results differ for construction prime contracts and subcontracts? BBC explored differences in MBE/WBE utilization for construction prime contracts and subcontracts.

Utilization. Minority- and women-owned firms received $0.7 billion of the $9.3 billion in prime contract dollars for Caltrans and Local Assistance construction from 2007 through 2010. MBE/WBE utilization was 7.1 percent of total prime contract dollars. Certified DBEs accounted for 1.6 percentage points of the utilization as prime contractors, as shown in the left side of Figure 7-2.

Subcontract dollars on Caltrans and Local Assistance construction contracts totaled about $3.5 billion from 2007 through 2010, and minority- and women-owned firms received about $1 billion of this total. As shown on the right side of Figure 7-2, MBE/WBEs accounted for 27.4 percent of subcontract dollars on Caltrans and Local Assistance construction contracts (Certified DBEs represented 10.6 percentage points of this utilization).

Figure 7-2.
MBE/WBE and DBE share of FHWA- and state-funded prime contract and subcontract dollars on Caltrans and Local Assistance construction contracts, 2007–2010



Note:

Certified DBE utilization.

Number of contracts/subcontracts analyzed is 2,695 for prime contracts and 11,941 for subcontracts.

For more detail and results by group see Figures K-27 and K-30 in Appendix K.

Source:

BBC Research & Consulting from Caltrans and local agency contract data.

Disparity analysis. Figure 7-3 shows disparity indices for construction prime contracts (darker bars) and subcontracts (lighter bars) for each racial/ethnic/gender group. Results pertain to Caltrans and Local Assistance construction contracts for 2007 through 2010.

- Overall, there were substantial disparities for MBE/WBEs for construction prime contracts (disparity index of 56) when examining combined FHWA- and state-funded construction contracts.

- Utilization of MBE/WBE as subcontractors on construction contracts was below what might be expected from the availability analysis, but much closer to parity (disparity index of 92).

Figures K-27 and K-30 in Appendix K present detailed results.

Figure 7-3. Disparity indices for MBE/WBE utilization on Caltrans and Local Assistance FHWA-and state-funded construction prime contracts and subcontracts, 2007—2010

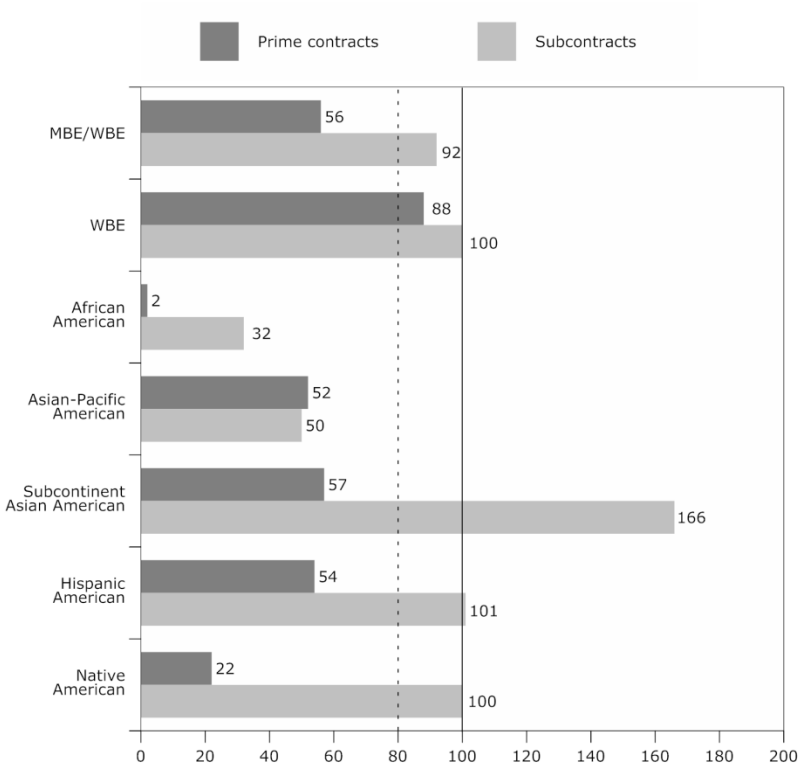
Note:

Number of contracts/subcontracts analyzed is 2,695 for prime contracts and 11.941 for subcontracts.

For more detail and results by group see Figures K-27 and K-30 in Appendix K.

Source:

BBC Research & Consulting.



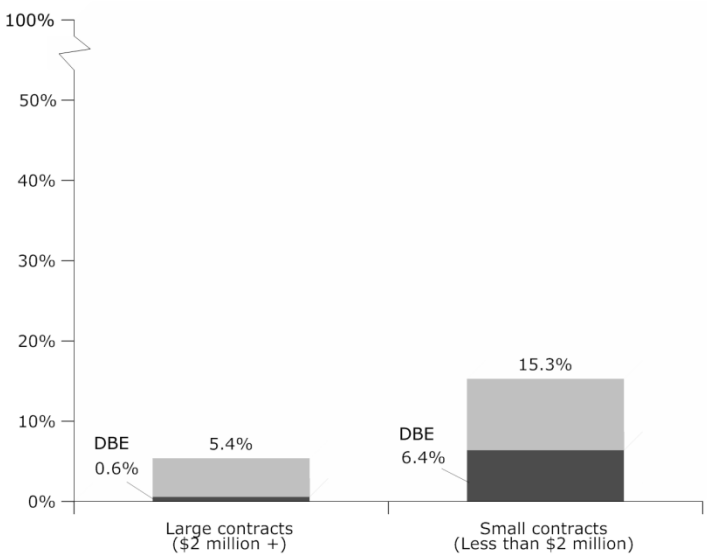
3. Are there disparities in the use of MBE/WBE prime contractors for small construction contracts? The size of Caltrans and local agency construction prime contracts may present a barrier for certain MBE/WBE groups. A number of contractors interviewed by the study team indicated that size of contracts was a barrier to bidding (see Appendices J and L).

To explore this issue, BBC examined MBE/WBE utilization and availability as prime contractors for 2,034 construction contracts of less than $2 million. (Construction contracts less than $2 million account for three-quarters of all construction contracts examined.) BBC compared results for small construction contracts with contracts that were $2 million and larger.

Utilization. Figure 7-4 presents utilization results for prime contractors for small construction contracts with larger construction contracts ($2 million and above). Results pertain to Caltrans and Local Assistance construction contracts for 2007 through 2010.

As illustrated in Figure 7-4, utilization of MBE/WBEs as prime contractors was higher for small construction contracts (15.3%) than large contracts (5.4%).

Figure 7-4.
MBE/WBE and DBE share of FHWA- and state-funded construction prime contract dollars on Caltrans and Local Assistance construction contracts, by contract size, 2007—2010



Note:

Certified DBE utilization.

Small contracts are those less than $2 million. Number of contracts analyzed is 2,034 for small contracts and 661 for large contracts.

For more detail and results by group see Figures K-46 and K-48 in Appendix K.

Source:

BBC Research & Consulting from Caltrans contract data.

Disparity analysis. Relatively more firms available for small construction prime contracts are MBE/WBEs compared with large construction prime contracts. The level of MBE/WBE utilization that might be expected for small construction prime contracts was 28.5 percent (see Figure K-46 in Appendix K) compared with 9.6 percent for large construction prime contracts (see Figure K-48). Overall, there were disparities in the utilization of MBE/WBEs for both sets of construction prime contracts.

Figure 7-5 shows disparity indices by racial/ethnic/gender group for construction prime contracts. The darker bars provide results for small construction contracts and the lighter bars present results for large construction contracts.

- There were substantial disparities for WBEs and for each MBE group when examining results for prime contractors for small construction contracts.
- There were substantial disparities for each MBE group when examining results for prime contractors for large construction contracts.

Utilization of WBEs as prime contractors on large construction contracts (1.6%) exceeded what might be expected from the availability analysis (0.8%). The disparity index for WBEs as prime contractors was 184 for large construction contracts.

Figure 7-5. Disparity indices for MBE/WBE utilization as prime contractors on FHWA-and state-funded Caltrans and Local Assistance construction contracts, by contract size, 2007—2010

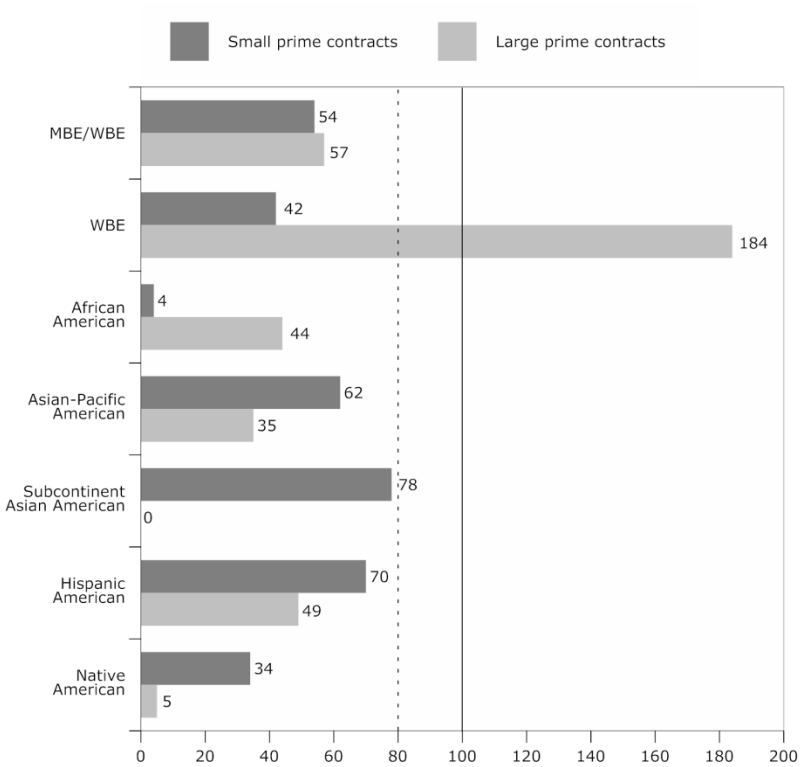
Note:

Small contracts are those less than $2 million. Number of contracts analyzed is 2,034 for small contracts and 661 for large contracts.

For more detail and results by group see Figures K-46 and K-48 in Appendix K.

Source:

BBC Research & Consulting.



The results for WBEs as prime contractors on large construction contracts explains much of the overall disparity results for WBEs on Caltrans and Local Assistance construction contracts shown in Figure 7-1. Furthermore, many of the WBEs that were prime contractors on large construction contracts might exceed the revenue size standard for DBE certification. One very large WBE general contractor accounts for nearly one-half of the WBE prime contractor utilization for large construction contracts.

4. Does analysis of MBE/WBE bids on construction prime contracts help to explain disparity results? BBC analyzed bid information for a random sample of 200 Caltrans construction contracts for 2007 through 2010. In total, 1,539 bids were submitted for these 200 contracts.[3]

Relative number of bids from MBE/WBEs. MBE/WBEs submitted 186 (12.1%) of the 1,539 bids:

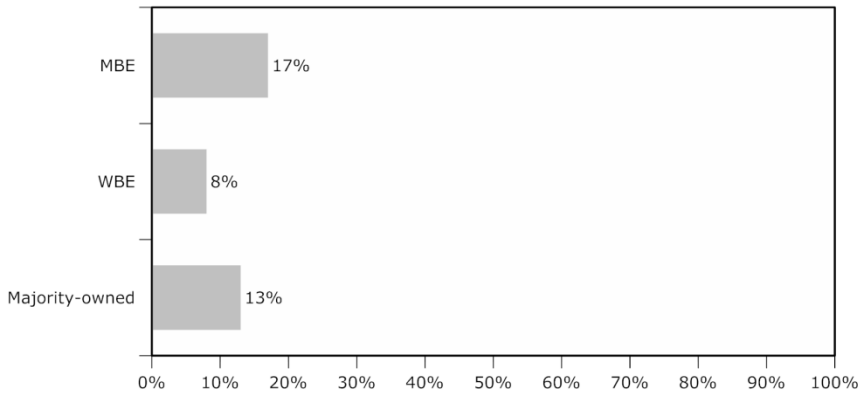
- A total of 126 bids on these prime contracts (8.2% of all bids) came from minority-owned firms (45 different firms); and
- 60 bids (3.9% of all bids) came from WBEs (18 different firms).

BBC compared these results to data on MBE/WBE and majority-owned transportation contracting firms in California bidding as prime contractors on public sector construction projects. Based on information collected in the availability interviews, MBEs account for 20 percent and WBEs are 13 percent of those prime contractors. Appendix H (especially Figure H-2) provides more information on availability interview results.

Success of bids. As shown in Figure 7-6, 17 percent of the bids submitted by MBEs resulted in contract awards, above the 13 percent success rate found for majority-owned firms and 8 percent success rate for WBEs.

On six contracts, low bids from MBEs did not result in contract awards. For two of the six contracts, a majority-owned contractor claimed small business preference and was awarded the contract as a result. In three cases, the bid prioritized a shorter time frame for completion of the work, and majority-owned contractors with shorter performance periods in their bids were awarded the contracts.

Figure 7-6. Proportion of bids on Caltrans construction contracts that were winning bids, 2007–2010



Note:

Based on analysis of 1,539 bids on 200 contracts.

Source:

BBC Research & Consulting from Caltrans contract records.

[3] The random sample of 200 contracts account for nearly $4 billion worth of construction contracts examined as part of this study.

D. Are there disparities for Caltrans and Local Assistance engineering-related contracts?

As with construction contracts, BBC further analyzed Caltrans and Local Assistance engineering-related contracts. Questions examined in this Chapter include:

1. Are there disparities for Caltrans and Local Assistance engineering-related contracts?

2. Do results differ for engineering prime contracts and subcontracts?

3. Are there different results for small engineering prime contracts?

4. Does Caltrans' consultant selection process explain any of the disparities?

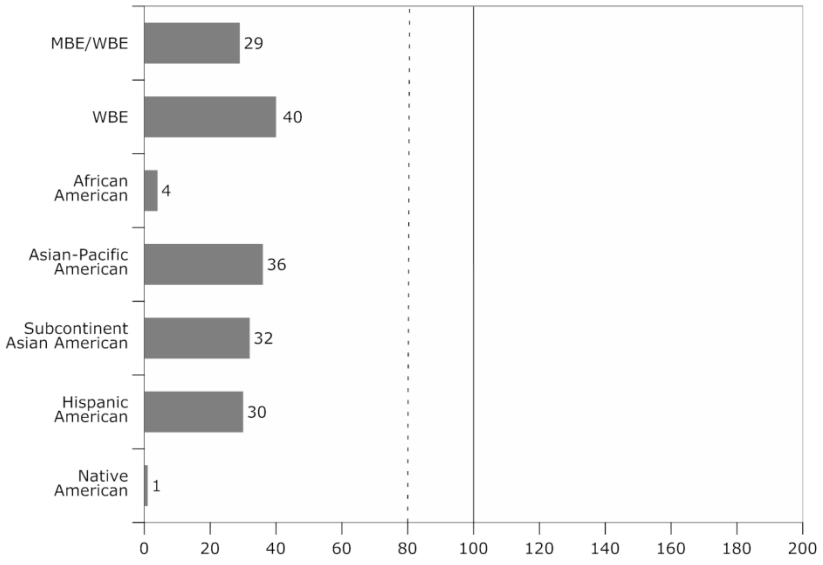
1. Are there disparities for MBEs and WBEs on Caltrans and Local Assistance engineering-related contracts? BBC examined MBE/WBE utilization for $0.5 billion in engineering-related contracts for Caltrans and local agencies from 2007 through 2010.

- MBE/WBE utilization for Caltrans and Local Assistance engineering-related contracts was 9.7 percent for 2007 through 2010, lower than for construction contracts (12.7%).

- The disparity index for MBE/WBEs overall for Caltrans and Local Assistance engineering-related contracts was 29, more severe than for construction contracts (73).

Figure K-4 in Appendix K presents detailed results of the utilization, availability and disparity analyses for engineering-related contracts for 2007 through 2010. Figure 7-7 summarizes the disparity results for MBE/WBE group. As shown in Figure 7-7, there were substantial disparities for WBEs and each MBE group.

Figure 7-7. Disparity indices for MBE/WBE utilization as prime contractors and subcontractors on Caltrans and Local Assistance FHWA- and state-funded engineering contracts, 2007–2010



Note:

Number of contracts/subcontracts analyzed is 810.

For more detail, see Figure K-4 in Appendix K.

Source:

BBC Research & Consulting.

BBC also examined utilization and disparity results for engineering-related contracts outside any race-conscious program (Figure K-7 in Appendix K). These results combine state-funded contracts and the FHWA-funded contracts during the time when no race-conscious program was in place. BBC compared those results with MBE/WBE participation in FHWA-funded contracts when a race-conscious program was in operation (see Figure K-10 in Appendix K). MBE/WBE utilization was higher for engineering-related contracts without any race-conscious program than with the race-conscious program:

- MBE/WBE utilization on engineering contracts for which no race-conscious program applied was 10.1 percent; and

- For FHWA-funded contracts during the time period when race-conscious elements such as DBE contract goals could be applied, MBE/WBE utilization was 7.7 percent.

There were substantial disparities in the utilization of WBEs and each MBE group for both sets of engineering-related contracts. Consistent with BBC's analysis of construction contracts, it does not appear that application of the race-conscious program increased the utilization of MBE/WBEs in Caltrans and Local Assistance engineering-related contracts.

BBC separately examined MBE/WBE participation on engineering-related contracts awarded by Caltrans and by local agencies. There was little difference in MBE/WBE participation for these two sets of engineering-related contracts:

- MBE/WBE utilization on Caltrans-awarded contracts was 9.5 percent (see Figure K-22 in Appendix K); and

- For Local Assistance contracts, MBE/WBE utilization was 10.2 percent (see Figure K-25 in Appendix K).

There were substantial disparities in the utilization of MBE/WBEs for Caltrans and for local agency engineering-related contracts for 2007 through 2010.

2. Do results differ for engineering prime contracts and subcontracts? BBC analyzed MBE/WBE participation as prime consultants and as subconsultants on Caltrans and Local Assistance engineering-related contracts.

Utilization. MBEs and WBEs received $20 million of the $401 million in prime contract dollars for Caltrans and Local Assistance engineering-related contracts from 2007 through 2010. MBE/WBE utilization as prime consultants was 5.0 percent, less than MBE/WBE utilization on construction prime contracts (7.1%). Figure 7-8 presents these results.

Subconsultant dollars on Caltrans and Local Assistance engineering-related contracts totaled $109 million from 2007 through 2010. About $29 million of the subcontract dollars went to minority- and women-owned firms. MBE/WBEs utilization as subconsultants was 26.7 percent, about the same share as for construction subcontracts. Unlike MBE/WBE utilization in construction subcontracts, Asian-Pacific Americans represented a large share of the utilization on engineering-related contracts.

Compared with Caltrans and Local Assistance construction contracts, certified DBEs represented a larger share of total MBE/WBE participation on engineering-related contracts. Certified DBEs accounted for two-thirds of the overall MBE/WBE utilization as prime consultants and an even larger portion of the subconsultant utilization).

Figure 7-8.
MBE/WBE and DBE share of FHWA-and state-funded prime contract and subcontract dollars on Caltrans and Local Assistance engineering contracts, 2007–2010

Note:

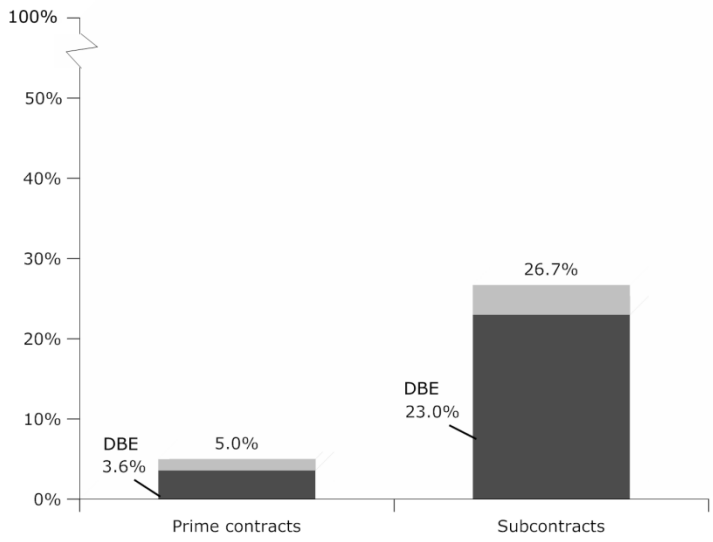
Certified DBE utilization.

Number of contracts/subcontracts analyzed is 245 for prime contracts and 565 for subcontracts.

For more detail and results by group see Figures K-28 and K-31 in Appendix K.

Source:

BBC Research & Consulting from Caltrans and local agency contract data.



Disparity analysis. Figure 7-9 examines disparity analysis results for prime consultants (darker bars) and as subconsultants (lighter bars) on Caltrans and Local Assistance engineering-related contracts for 2007 through 2010.

- There were substantial disparities for MBE/WBEs for engineering-related prime contracts. BBC identified substantial disparities for WBEs and each MBE group.

- Utilization of MBE/WBE as subconsultants on engineering-related contracts was below what might be expected from the availability analysis (disparity index for MBE/WBEs of 77). There were substantial disparities for WBEs and most MBE groups.

Figures K-27 and K-30 in Appendix K present detailed results.

Figure 7-9. Disparity indices for MBE/WBE utilization on Caltrans and Local Assistance FHWA-and state-funded engineering-related prime contracts and subcontracts, 2007—2010

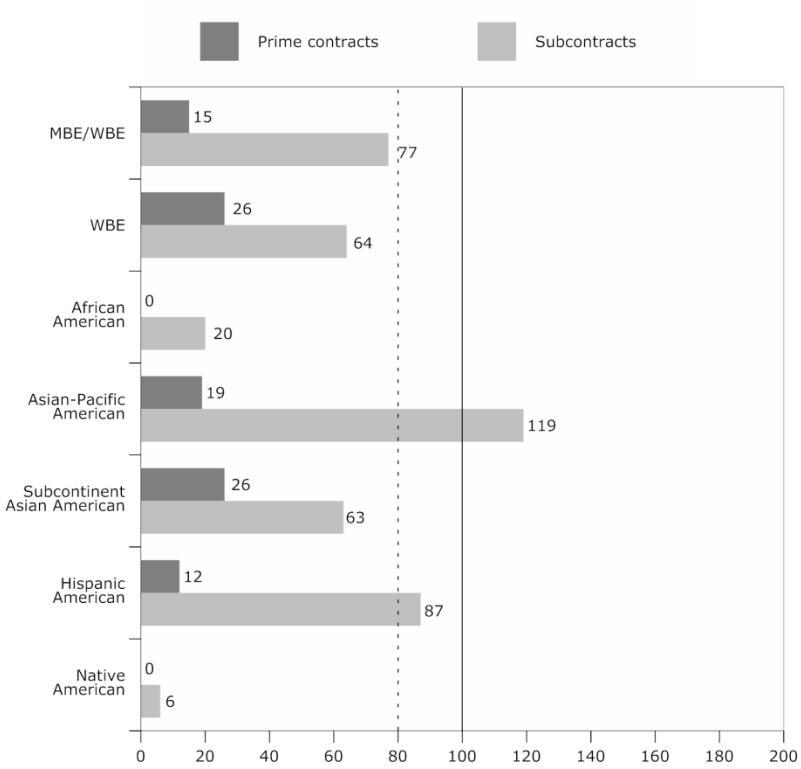
Note:

Number of contracts/subcontracts analyzed is 245 for prime contracts and 565 for subcontracts.

For more detail and results by group see Figures K-28 and K-31 in Appendix K.

Source:

BBC Research & Consulting from Caltrans and local agency contract data.



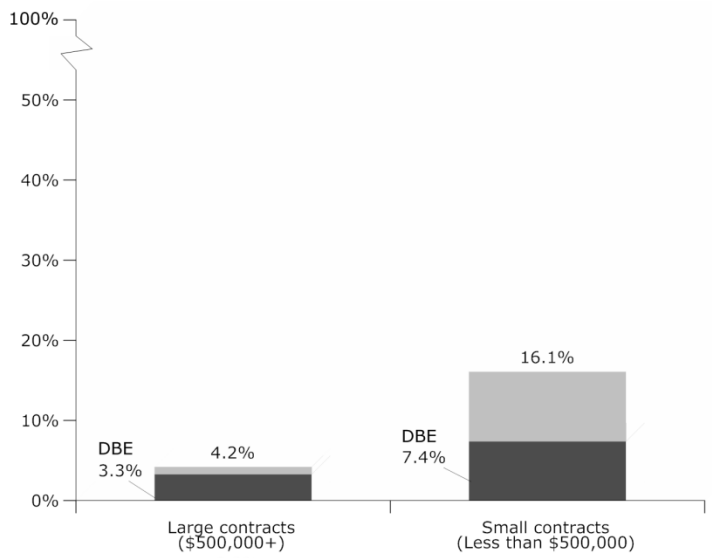
3. Are there disparities in the use of MBE/WBE prime consultants for small engineering-related contracts? As with construction contracts, the size of Caltrans and Local Assistance engineering-related contracts may present a barrier to MBE/WBE participation as prime consultants. Some of the engineering firms interviewed by the study team indicated that size of contracts was a barrier to bidding (see Appendices J and L).

To explore this issue, BBC examined MBE/WBE utilization and availability as prime contractors for 120 engineering-related contracts of less than $500,000. (About one-half of all engineering-related contracts examined were less than $500,000). BBC compared results for small engineering-related contracts with contracts that were $500,000 and larger.

Utilization. Figure 7-10 compares utilization of MBE/WBE prime consultants on small engineering-related contracts with larger contracts. Results pertain to Caltrans and Local Assistance construction contracts for 2007 through 2010.

Utilization of MBE/WBEs as prime consultants was higher for small contracts (16.1%) than large contracts (4.2%).

Figure 7-10.
MBE/WBE and DBE share of FHWA- and state-funded construction prime contract dollars on Caltrans and Local Assistance engineering-related contracts, by contract size, 2007—2010



Note:

Certified DBE utilization.

Small contracts are those less than $500,000. Number of contracts analyzed is 120 for small contracts and 125 for large contracts.

For more detail and results by group see Figures K-47 and K-49 in Appendix K.

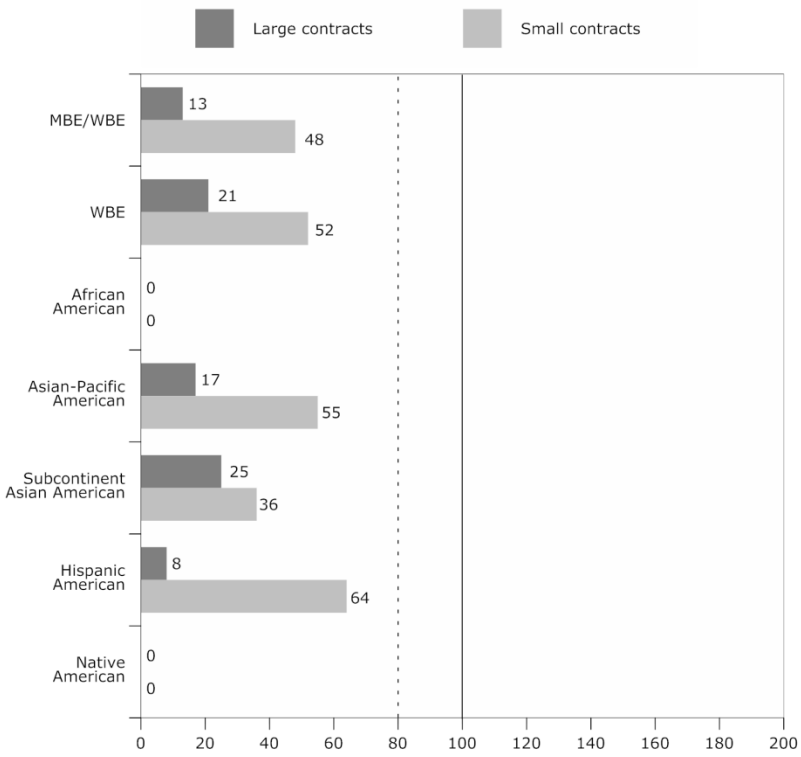
Source:

BBC Research & Consulting from Caltrans and local agency contract data.

Disparity analysis. BBC identified disparities in the utilization of MBE/WBEs as prime consultants for both large and small engineering-related contracts. Even with the higher utilization of MBE/WBEs as prime consultants for small contracts, the disparity index of 48 indicates substantial disparities in the utilization of those firms. The disparity index was 13 for MBE/WBE prime consultants on large engineering-related contracts.

Figure 7-11 shows disparity indices by racial/ethnic/gender group for Caltrans and Local Assistance engineering-related prime contracts. There were substantial disparities for WBEs and each MBE group for both large and small contracts.

Figure 7-11. Disparity indices for MBE/WBE utilization as prime contractors on FHWA-and state-funded Caltrans and Local Assistance engineering-related contracts, by contract size, 2007—2010



Note:

Small contracts are those less than $500,000. Number of contracts analyzed is 120 for small contracts and 125 for large contracts.

For more detail and results by group see Figures K-47 and K-49 in Appendix K.

Source:

BBC Research & Consulting from Caltrans and local agency contract data.

4. Does Caltrans' consultant selection process explain any of the disparities? Caltrans typically begins the consultant selection process for a specific engineering-related contract by requesting that consultants respond to requests for qualifications, which are evaluated by a committee within Caltrans. (Responses to RFQs are referred to as "proposals" in this report.) The Caltrans committee typically evaluates consultants based on the following criteria:

- Professional excellence, demonstrated competence in the service to be provided, and specialized experience of the prime and subconsultants.
- Education and experience of the Project Manager and other key personnel to be assigned.
- Staffing capability, workload, and record of meeting schedules on similar projects, including an assessment of the firm's ability to handle additional work, in view of the firm's current workload.
- The nature, quality, and relevance of recently completed work.
- Feasibility of oversight, ability, willingness to respond to Department requirements, and accessibility to Department reviewers.[4]

[4] Language taken from Caltrans Standard 215 Agreement Attachment.

From the list of consultants that submit proposals, the Caltrans committee selects a "short list" of consultants to be asked to an interview. Caltrans typically includes at least the three highest-ranking consultants in the interview process. The committee then determines the award based on an evaluation of the interview, with evaluation criteria based on the project team, the firm's capabilities, their project understanding and approach, the feasibility of oversight from Caltrans and references. In accordance with regulations regarding qualifications-based procurement, Caltrans negotiates price after the consultant is selected.

BBC analyzed MBE and WBE success when competing for engineering-related contracts. The study team was able to collect proposal evaluation data for 60 Caltrans engineering-related projects for contracts executed during the study period. BBC analyzed 52 contracts with complete evaluation data. Of the 360 proposals submitted on the 52 contracts analyzed, 65 (18%) were submitted by MBEs and 27 (8%) were submitted by WBEs.

The proportion of proposals from WBEs was low compared with the share of WBE firms competing as prime consultants on public sector engineering projects based on responses from the availability interviews (11% for WBEs — see Figure H-3). For MBEs, the proportion of proposals submitted was similar to the share of MBE firms competing as prime consultants on public sector engineering projects based on responses from the availability interviews (19% for MBEs — see Figure H-3).

There were disparities in percentage of proposals that were short-listed by Caltrans. The top portion of Figure 7-12 illustrates that:

- Twenty-three of the proposals from MBEs (35% of MBE proposals) resulted in short-listing;
- Seven (26%) of proposals from WBEs were short-listed; and
- About 53 percent of majority-owned firms' proposals were placed on the short list.

As shown in the lower portion of Figure 7-12, BBC also calculated the percentage of proposal submissions that resulted in contract awards:

- Seven of the 23 proposals from MBEs resulted in a contract award (30% success).
- One proposal from WBEs resulted in an award, a success rate of 14 percent.
- Forty-four of the analyzed contract awards went to majority-owned firms (44 awards from 268 proposal submissions for a success rate of 16%).

MBEs were somewhat more successful than WBE and majority firms on these projects. WBEs experienced a similar success rate to majority firms.

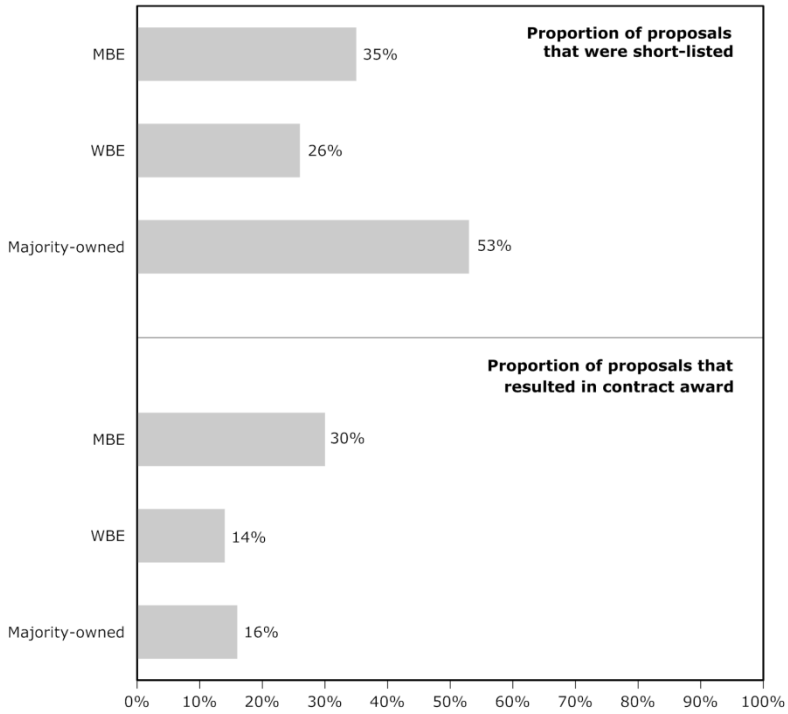
Figure 7-12.
Proportion of proposals for Caltrans engineering-related contracts that were short-listed and that resulted in contract awards, 2007-2010

Note:

Based on 52 awards (360 proposals).

Source:

BBC Research & Consulting from Caltrans contract records.



For the 360 proposal submissions received on 52 engineering-related projects, BBC compared the proposal evaluation scores received by majority-owned firms with those received by MBEs and WBEs. On average, MBE proposals received lower scores than scores Caltrans assigned to majority-owned firms in four of the five evaluation categories:

- Professional excellence, competence, and specialized experience;
- Education and experience of the Project Manager and other key personnel;
- Staffing capability, workload, and record for completing work on time; and
- Nature, quality, and relevance of recently completed work.

WBEs also scored lower, on average, in each of the categories above in addition to the category for the feasibility of project completion and oversight. The differences in average scores were larger when comparing scores for WBEs to scores for majority firms.

Overall, based on this subset of engineering-related contracts, it appears that Caltrans received fewer proposals from WBEs and about the same amount of proposals from MBEs as what might be expected given MBE/WBE representation among engineering-related prime consultants competing for public sector work. Average evaluation scores Caltrans awarded for MBEs and for WBEs appeared to be lower than majority-owned firms. Even so, relatively more proposals from MBEs resulted in contract awards than for other groups.

E. Is there any evidence of "overconcentration" of DBEs in certain types of work?

The Federal DBE Program requires agencies implementing the program to take certain steps if they determine that "DBE firms are so overconcentrated in a certain type of work as to unduly burden the opportunity of non-DBE firms to participate in this type of work" (see 49 CFR Section 26.33(a)).

The Federal DBE Program does not specifically define "overconcentration." For purposes of examining this issue, BBC examined whether DBEs obtained more than one-half of the subcontract dollars in any construction or engineering-related subindustry.

BBC focused on subcontract dollars awarded to DBEs and all firms by subindustry. All subcontract dollars for which BBC had data were examined, including FHWA- and state-funded contracts for Caltrans and local agencies.

There were two subindustries for which DBEs obtained more than one-half of subcontract dollars based upon Caltrans and local contract information:

- DBEs accounted for 54 percent of subcontract dollars related to trucking; and
- DBEs obtained 50 percent of the subcontract dollars going to testing services.

Based on these results, Caltrans might closely monitor any evidence of overconcentration of DBEs in trucking and testing services for future contracts (see Chapter 10).

CHAPTER 8.
Caltrans' Overall Annual Aspirational DBE Goal

As part of its implementation of the Federal DBE Program, Caltrans is required to set an overall annual goal for DBE participation in its FHWA-funded transportation contracts. The Final Rule effective February 28, 2011 revised requirements for goal-setting so that agencies that implement the Federal DBE Program only need to develop and submit overall annual DBE goals every three years. Caltrans last submitted its overall annual DBE goal (a goal of 13.5%) in fiscal year 2009 and is required to submit a new goal in 2012 for fiscal years 2013 through 2015.

Caltrans must prepare and submit a Goal and Methodology document to FHWA that presents its overall annual DBE goal for the next three fiscal years, supported by information about the steps used to develop the overall goal. Chapter 8 provides information that Caltrans might consider as part of setting its overall annual DBE goal. Chapter 8 is organized in two parts, based on the two-step process that 49 CFR Part 26.45 outlines for Caltrans to set its overall goal:

A. Establishing a base figure; and

B. Consideration of a step-2 adjustment.

A. Establishing a Base Figure

Establishing a base figure is the first step in calculating an overall annual goal for DBE participation in Caltrans' FHWA-funded transportation contracts. As presented in Chapter 4, potential DBEs — that is, MBE/WBEs that are DBE-certified or appear that they could be DBE-certified based on annual revenue limits described in 49 CFR Part 26 — are available for 12.5 percent of Caltrans' FHWA-funded construction and engineering prime contract and subcontract dollars. Caltrans might consider 12.5 percent as the base figure for its overall annual DBE goal if it anticipates that the types of FHWA-funded contracts that the agency will award in fiscal years 2013 through 2015 are, on balance, reasonably similar to the types of FHWA-funded contracts that the agency awarded during the 2007-2010 study period.

Figure 8-1 presents the availability components of the base figure for Caltrans' overall annual DBE goal by MBE/WBE group and by industry. The availability estimates presented in Figure 8-1 are based on the availability of potential DBEs for FHWA-funded prime contracts and subcontracts. The overall base figure reflects a weight of 97 percent for construction and 3 percent for engineering-related contracts, based on the dollars of FHWA-funded Caltrans and Local Assistance contracts awarded during the study period. If the relative distribution of FHWA-funded contract dollars between construction and engineering-related contracts is expected to substantially change in the future, Caltrans might consider applying different weights to the corresponding availability components when calculating its base figure. In addition, Caltrans might evaluate whether the types of FHWA-funded construction or engineering contracts that it awards will substantially change in the future.

Figure 8-1.
Availability components of Caltrans' base figure
(based on availability of potential DBEs for FHWA-funded transportation contracts)

Potential DBEs	Availability percentage		
	Construction	Engineering	Total
African American-owned	0.6 %	5.3 %	0.8 %
Asian-Pacific American-owned	0.9	7.0	1.1
Subcontinent Asian American-owned	0.2	3.7	0.3
Hispanic American-owned	5.2	8.5	5.4
Native American-owned	1.0	1.1	1.0
WBE (white women-owned)	3.9	6.1	4.0
Total potential DBEs	**11.8 %**	**31.7 %**	**12.5**
Sector weight	**97 %**	**3 %**	

Note: See Figures K-50, K-51, and K-52 in Appendix K for corresponding disparity results tables.

Source: BBC Research & Consulting availability analysis.

B. Consideration of a Step-2 Adjustment

Per the Federal DBE Program, Caltrans must consider potential step 2 adjustments to the base figure as part of determining its overall annual DBE goal. Caltrans is not required to make any step 2 adjustments as long as it considers appropriate factors and explains its decision in its Goal and Methodology document. The Federal DBE Program outlines factors that an agency must consider when assessing whether to make any step 2 adjustments to its base figure:

1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
2. Information related to employment, self-employment, education, training, and unions;
3. Any disparities in the ability of DBEs to get financing, bonding, and insurance; and
4. Other relevant data.[1]

BBC completed an analysis of each of the above step 2 factors and was able to quantify the effect of certain factors on the base figure. Other information that BBC examined was not as easily quantifiable but is still relevant to Caltrans as it determines whether to make any step 2 adjustments.

[1] 49 CFR Section 26.45.

1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years. USDOT's "Tips for Goal-Setting" suggests that agencies should examine data on past DBE participation on their USDOT-funded contracts in recent years. USDOT further suggests that agencies should choose the median level of annual DBE participation for those years as the measure of past participation: "Your goal setting process will be more accurate if you use the median (instead of the average or mean) of your past participation to make your adjustment because the process of determining the median excludes all outlier (abnormally high or abnormally low) past participation percentages."[2]

Figure 8-2 presents past DBE participation based on Caltrans Uniform Reports of DBE Awards or Commitments and Payments, as reported to the FHWA. According to Caltrans Uniform Reports, median DBE participation on the agency's FHWA-funded contracts from federal fiscal years 2007 to 2011 was 6.6 percent.[3]

Figure 8-2.
Caltrans reported past DBE participation on FHWA-funded contracts, fiscal years 2007-2011

Federal fiscal year	DBE attainment	Annual DBE goal	Difference
2007	6.6 %	10.5 %	-3.9 %
2008	4.1	13.5	-9.4
2009	3.4	13.5	-10.1
2010	7.4	13.5	-6.1
2011	7.2	13.5	-6.3

Source: Commitments/Awards reported on Caltrans Uniform Reports of DBE Awards/Commitments and Payments.

The information about past DBE participation supports a downward adjustment to the overall annual DBE goal. If Caltrans were to use the approach that USDOT outlined in "Tips for Goals Setting," the overall annual goal would be the average of the 12.5 percent base figure and the 6.6 percent median past DBE participation, yielding a potential overall DBE goal of 9.6 percent.

2. Information related to employment, self-employment, education, training, and unions. Chapter 3 summarizes information about conditions in the California transportation contracting industry for minorities, women, and MBE/WBEs. Detailed quantitative analyses of marketplace conditions in California are presented in Appendices E through H. BBC's analyses indicate that there are barriers that certain minority groups and women face related to entry and advancement and business ownership in the California construction and engineering industries. Such barriers may affect the availability of MBE/WBEs to obtain and perform Caltrans and local agency transportation contracts.

Although it may not be possible to quantify the cumulative effect that barriers in employment, education, and training may have depressed the availability of minority- and women-owned

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[2] Section III (A)(5)(c) in USDOT. Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program. http://www.osdbu.dot.gov/DBEProgram/tips.cfm.

[3] BBC's analysis of "mean" DBE participation for FHWA-funded contracts from 2007 through 2010 was 4.2 percent.

firms in the California transportation contracting industry, the effects of barriers in business ownership can be quantified, as explained below.

BBC used regression analyses to investigate whether race, ethnicity and gender affected rates of business ownership among workers in the California construction and engineering industries. The regression analyses allowed BBC to examine those effects while statistically controlling for various personal characteristics including education and age (Appendix F provides detailed results of BBC's business ownership regression analyses).[4] Those analyses revealed that African Americans, Hispanic Americans and women were less likely than non-Hispanic whites and males to own construction businesses, even after accounting for various race- and gender-neutral personal characteristics. Similarly, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and women were less likely than non-Hispanic white males to own engineering businesses. Each of these disparities was statistically significant.

BBC analyzed the impact that barriers in business ownership would have on the base figure if the groups of minorities and women exhibiting statistically significantly disparities in the rates of business ownership owned businesses at the same rate as similarly-situated non-minorities and men. The results of that analysis — sometimes referred to as a "but for" analysis because it estimates the availability of MBE/WBEs *but for* the effects of race- and gender-based discrimination — are presented in Figure 8-3.

[4] BBC examined U.S. Census data on business ownership rates using methods similar to analyses examined in court cases involving state departments of transportation in California, Illinois, and Minnesota.

Figure 8-3.
Potential step 2 adjustment considering disparities in the rates of business ownership

Industry and group	a. Current availability	b. Disparity index for business ownership	c. Availability after initial adjustment*	d. Availability after scaling to 100%	e. Components of base figure**
Construction					
African American	0.6 %	73	0.8 %	0.8 %	
Asian-Pacific American	0.9	n/a	0.9	0.8	
Subcontinent Asian American	0.2	n/a	0.2	0.2	
Hispanic American	5.2	70	7.4	7.0	
Native American	1.0	n/a	1.0	0.9	
WBE	3.9	52	7.5	7.1	
Potential DBEs	11.8 %	n/a	17.9 %	16.8 %	16.3 %
All other businesses ***	88.2	n/a	88.2	83.2	
Total firms	**100.0** %	n/a	**106.1** %	**100.0** %	
Engineering					
African American	5.3 %	n/a	5.3 %	4.5 %	
Asian-Pacific American	7.0	69	10.1	8.6	
Subcontinent Asian American	3.7	31	11.9	10.1	
Hispanic American	8.5	71	12.0	10.1	
Native American	1.1	n/a	1.1	0.9	
White women	6.1	65	9.4	7.9	
Potential DBEs	31.7 %	n/a	49.8 %	42.2 %	1.3 %
All other businesses	68.3	n/a	68.3	57.8	
Total firms	**100.0** %	n/a	**118.1** %	**100.0** %	
Total	**12.5** %	n/a	n/a		**17.6 %**

Note: * Initial adjustment is calculated as current availability divided by the disparity index.
** Components of the base figure were calculated as the value after adjustment and scaling to 100 percent, multiplied by the percentage of total FWHA-funded contract dollars in each industry (construction = 97%, engineering = 3%).
*** All other businesses included majority-owned businesses and MBE/WBEs that were not potential DBEs.

Source: BBC Research & Consulting.

The analysis included the same contracts that the study team analyzed to determine the base figure (i.e., FHWA-funded construction and engineering prime contracts and subcontracts that Caltrans awarded during the study period). BBC completed "but for" analyses separately for construction and engineering contracts and then weighted the results based on the proportion of FHWA-funded contract dollars that Caltrans awarded in each industry during the study period (i.e., a 97% weight for construction and a 3% weight for engineering). In that way, BBC determined an overall base figure that adjusted for barriers in business ownership.

The rows and columns of Figure 8-3 present the following information from BBC's "but for" analyses:

a. **Current availability.** Column (a) presents the current availability of potential DBEs by MBE/WBE group and by industry, as presented in Chapter 4. Each row presents the percentage availability for each MBE/WBE group. Combined, the current availability of potential DBEs for Caltrans FHWA-funded construction and engineering contracts is 12.5 percent, as shown in bottom row of column (a).

b. **Disparity indices for business ownership.** For each group that is significantly less likely than similarly-situated non-Hispanic white males to own construction and engineering businesses, BBC calculated simulated business ownership rates if those groups owned businesses at the same rate as non-Hispanic white males who share the same personal characteristics. The study team then calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the benchmark business ownership rate and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to own businesses than what would be expected for non-Hispanic white males who share the same personal characteristics.

   Column (b) presents disparity indices related to business ownership for the different racial/ethnic and gender groups. For example, as shown in row (1) of column (b), African Americans own construction businesses at 73 percent of the rate that would be expected based on the simulated business ownership rates of non-Hispanic white males who share the same personal characteristics.

c. **Availability after initial adjustment.** Column (c) presents availability estimates by MBE/WBE group and by industry after initially adjusting for statistically significant disparities in business ownership rates. BBC calculated those estimates by dividing the current availability in column (a) by the disparity index for business ownership in column (b) and then multiplying by 100. Note that BBC only made adjustments for those groups that are significantly less likely than similarly-situated non-Hispanic white males to own businesses.

d. **Availability after scaling to 100%.** Column (d) shows adjusted availability estimates that were re-scaled so that the sum of the availability estimates equals 100 percent for each industry. BBC re-scaled the adjusted availability estimates by taking each group's adjusted availability estimate in column (c) and dividing it by the sum of availability estimates shown under "Total firms" in column (c) — in row (9) for construction and in row (18) for engineering — and multiplying by 100. For example, the scaled availability estimate for Hispanic Americans shown in row (4) of column (d) was calculated in the following way: (7.4% ÷ 106.1%) x 100 = 7.0%.

e. **Components of goal.** Column (e) shows the component of the total base figure attributed to the adjusted MBE/WBE availability for each industry. BBC calculated each component by taking the total availability estimate shown under "Potential DBEs" in column (d) — in row (7) for construction and in row (16) for engineering — and multiplying it by the proportion of total FHWA-funded contract dollars for which each industry accounts (i.e., 97% for construction and 3% for engineering). For example, BBC used the 16.8 percent shown in row (7) of column (d) for construction and multiplied it by 97 percent for a result of 16.3 percent (see row (7) of column (e)).

   The values in column (e) were then summed to equal the overall base figure adjusted for barriers in business ownership — 17.6%, as shown in the bottom row of column (e).

Based on information related to business ownership, Caltrans might consider an upward adjustment to its overall DBE goal (in a range up to 17.6 percent).

3. Any disparities in the ability of DBEs to get financing, bonding, and insurance. BBC's analysis of access to financing, bonding, and insurance revealed quantitative and qualitative evidence that minorities, women, and MBE/WBEs do not have the same access to those business inputs as white males and majority-owned businesses in California. Any barriers to obtaining financing, bonding, and insurance might affect opportunities for minorities and women to successfully form and operate construction and engineering businesses in the California marketplace.

Any barriers that MBE/WBEs face in obtaining financing, bonding, or insurance would also place those businesses at a disadvantage in obtaining Caltrans and local agency construction and engineering prime contracts and subcontracts.

The information about financing, bonding, and insurance supports an upward step 2 adjustment in Caltrans' overall annual goal for DBE participation in FHWA-funded contracts.

4. Other factors. The Federal DBE Program suggests that federal aid recipients also examine "other factors" when determining whether to make any step 2 adjustments to their base figures.[5]

Among the "other factors" examined in this disparity study was the success of MBE/WBEs relative to majority-owned businesses in the California marketplace. There is quantitative evidence that certain groups of MBE/WBEs are less successful than majority-owned firms, and face greater barriers in the marketplace, even after considering neutral factors. Chapter 3 summarizes that evidence and Appendix H presents supporting quantitative analyses.

There is also qualitative evidence of barriers to the success of minority- and women-owned businesses, as summarized in Chapter 3 and further explored in Appendices J and L. Some of this qualitative information suggests that discrimination on the basis of race, ethnicity and gender affects minority- and women-owned firms in the California transportation contracting industry.

[5] 49 CFR Section 26.45.

In sum, there is evidence that the existing availability of MBEs and WBEs for Caltrans and local agency transportation contracts is reduced from what it might be given a level playing field for minorities and women in this industry. Combined, this quantitative and qualitative evidence supports an upward step 2 adjustment as Caltrans considers an overall annual DBE goal.

Approaches for making step 2 adjustments. As noted in USDOT "Tips for Goal-Setting," "If the evidence suggests that an adjustment is warranted, it is critically important to ensure that there is a rational relationship between the data you are using to make the adjustment and the actual numerical adjustment made."[6] BBC's analysis of each factor outlined in the Federal DBE Program suggests that Caltrans might consider one of the following approaches concerning any step 2 adjustments.

Approach 1 – make a downward adjustment. Caltrans might consider an overall annual DBE goal that is adjusted to reflect recent DBE participation in FHWA-funded contracts.

- Caltrans must consider the volume of work DBEs have performed in recent years when determining whether to make any step 2 adjustments to its base figure. Caltrans utilization reports for FY 2007 through FY 2011 indicated median annual DBE participation of 6.6 percent for those years, which is lower than the 12.5 percent base figure.

- USDOT "Tips for Goal-Setting" suggests that an agency can make a step 2 adjustment by averaging the base figure with median past DBE participation.

- If Caltrans chose that approach, the 12.5 percent base figure would be averaged with the 6.6 percent median past DBE participation for an overall annual DBE goal of 9.6 percent.

Approach 2 – make an upward adjustment. There also are reasons why Caltrans might consider a higher overall annual DBE goal than the 12.5 percent base figure:

- Caltrans might an upward adjustment to its base figure (in a range up to 17.6 percent) to account for barriers that minorities and women face in owning businesses in the California transportation contracting industry. Such an adjustment would correspond to a "determination of the level of DBE participation you would expect absent the effects of discrimination" that Caltrans might make.[7]

- An upward adjustment is also supported by the evidence of barriers that affect minorities, women, and MBE/WBEs in obtaining financing, bonding, and insurance and to account for evidence that certain groups of MBE/WBEs are less successful than comparable majority-owned businesses.

- If Caltrans chose to average its base figure of 12.5 percent and the 17.6 figure described above, it would yield a result of 15 percent as an overall annual goal (such an averaging is consistent with certain approaches outlined in "Tips for Goal-Setting").

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[6] USDOT. Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program. http://www.osdbu.dot.gov/DBEProgram/tips.cfm.

[7] 49 CFR Section 26.45 (b).

Approach 3 – making no step 2 adjustment. USDOT regulations clearly state that an agency such as Caltrans is required to review a broad range of information when considering whether it is necessary to make any step 2 adjustments. However, USDOT "Tips for Goal-Setting" states that an agency such as Caltrans is not required to make any adjustments as long as it can explain what factors it considered and can explain its decision in its Goal and Methodology document.

CHAPTER 9.
Portion of DBE Goal to be Met through Neutral Means

The Federal DBE Program requires state and local transportation agencies to meet the maximum feasible portion of their overall annual DBE goals using race- and gender-neutral measures.[1] Race- and gender-neutral measures are initiatives that encourage the participation of all businesses, or all small businesses, and are not specifically limited to MBE/WBE/DBEs. Agencies must determine whether they can meet their overall annual DBE goals solely through neutral means or whether race- and gender-conscious measures — such as DBE contract goals — are also needed. As part of doing so, agencies must project the portion of their overall annual DBE goals that they expect to meet through race- and gender-neutral means and what portion they expect to meet through race- and gender-conscious programs.

- If an agency determines that it can meet its overall annual DBE goal solely through race- and gender-neutral means, then the agency would propose using only neutral measures as part of its program. The agency would project that 100 percent of its overall annual DBE goal would be met through neutral means and that 0 percent would be met through race- and gender-conscious means.
- If an agency determines that a combination of race- and gender-neutral and race- and gender-conscious measures are needed to meet its overall annual DBE goal, then the agency would propose using a combination of neutral and conscious measures as part of its program. The agency would project that some percent of its overall annual DBE goal would be met through neutral means and that the remainder would be met through race- and gender-conscious means.

USDOT offers guidance concerning how transportation agencies should project the portions of their overall annual DBE goals that will be met through race- and gender-neutral and race- and gender-conscious measures, including the following:

- USDOT Questions and Answers about 49 CFR Part 26 addresses factors for federal aid recipients to consider when projecting the portion of their overall DBE goals that they will meet through race- and gender-neutral means.[2]

[1] 49 CFR Section 26.51.

[2] See http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc.

- USDOT "Tips for Goal-Setting" also suggests factors for federal aid recipients to consider when making such projections.[3]
- An FHWA template for how it considers approving DBE goal and methodology submissions includes a section on projecting the percentage of overall DBE goals to be met through neutral and conscious means. An excerpt from that template is provided in Figure 9-1.

Based on 49 CFR Part 26 and the resources above, general areas of questions that transportation agencies might ask related to making any projections include:

A. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?

B. What has been the agency's past experience in meeting its overall DBE goal?

C. What has DBE participation been when the agency did not use race- or gender-conscious measures?[4]

D. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?

Chapter 9 is organized around each of those general areas of questions.

Figure 9-1.
Excerpt from Explanation of Approval of [State] DBE Goal Setting Process for FY [Year]

You must also explain the basis for the State's race-neutral/race-conscious division and why it is the State's best estimate of the maximum amount of participation that can be achieved through race-neutral means. There are a variety of types of information that can be relied upon when determining a recipient's race-neutral/race-conscious division. Appropriate information should give a sound analysis of the recipient's market, the race-neutral measures it employs and information on contracting in the recipient's contracting area. Information that could be relied on includes: the extent of participation of DBEs in the recipient's contracts that do not have contract goals; past prime contractors' achievements; excess DBE achievements over past goals; how many DBE primes have participated in the state's programs in the past; or information about state, local or private contracting in similar areas that do not use contracting goals and how many minority and women's businesses participate in programs without goals.

Source: FHWA, Explanation for Approval of [State] DBE Program Goal Setting Process for FY [Year]. http://www.fhwa.dot.gov/civilrights/dbe_memo_a4.htm

[3] http://www.osdbu.dot.gov/DBEProgram/tips.cfm.

[4] USDOT guidance suggests evaluating (a) certain DBE participation as prime contractors if the DBE contract goals did not affect utilization, (b) DBE participation as prime contractors and subcontractors for agency contracts without DBE goals, and (c) overall utilization for other state, local or private contracting where contract goals are not used.

A. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?

As discussed in Chapter 3, BBC examined conditions in the California marketplace, including:

- Entry and advancement;
- Business ownership;
- Access to capital, bonding and insurance; and
- Success of businesses.

There was quantitative evidence of disparities for minority- and women-owned firms as a whole, and for specific groups, concerning the above issues. Qualitative information indicated some evidence of discrimination affecting the local marketplace, although some minority and female business owners interviewed in this and other recent disparity studies did not think they had been affected by any race or gender discrimination.

Caltrans should review the information about marketplace conditions presented in this report, as well as other information it may have, when considering the extent to it can meet its overall DBE goal through neutral measures.

B. What has been the agency's past experience in meeting its overall DBE goal?

Caltrans' reported certified DBE participation in recent years is summarized in Figure 8-2 in Chapter 8. This information is reported below. Caltrans has not met its DBE goal in recent years. In federal fiscal years 2010 and 2011, DBE participation on FHWA-funded contracts was 6 percentage points below Caltrans' overall DBE goal. Caltrans applied a race- and gender-conscious contract goals program for FHWA-funded contracts for all of FFY 2011.

Figure 9-2.
Caltrans reported past certified DBE participation on FHWA-funded contracts, fiscal years 2007-2011

Federal fiscal year	DBE attainment	Annual DBE goal	Difference
2007	6.6 %	10.5 %	-3.9 %
2008	4.1	13.5	-9.4
2009	3.4	13.5	-10.1
2010	7.4	13.5	-6.1
2011	7.2	13.5	-6.3

Source: Commitments/Awards reported on Caltrans Uniform Reports of DBE Awards/Commitments and Payments.

C. What has DBE participation been when Caltrans has not applied contract goals (or other race-conscious remedies)?

BBC analyzed a broad range of information to examine certified DBE participation when Caltrans has not applied contract goals.

Caltrans DBE participation reports. Figure 9-2 presents Caltrans' reporting of certified DBE participation for three entire fiscal years when it did not apply race- or gender-conscious program elements: FFY 2007, FFY 2008 and FFY 2009. Annual certified DBE utilization ranged from 3.4 to 6.6 percent in those years (and a median participation for those three years of 4.1 percent).

BBC calculation of certified DBE participation for 2007-2010. BBC calculated 3.9 percent utilization of certified DBEs from 2007 through 2010 for Caltrans and Local Assistance contracts for which no race- and gender-conscious program applied. As explained in Chapter 5, these "non-goals" contracts included state-funded contracts and those FHWA-funded contracts outside the time period when Caltrans and local agencies applied race- and gender-conscious goals. Figure K-5 presents these results.

Results of the disparity analyses. The disparity index for MBE/WBEs overall for non-goals contracts from 2007 through 2010 was 74. Chapters 6 and 7, and Appendix K, explore disparity analysis results in detail.

Participation of potential DBEs in Caltrans contracts. Participation of certified DBEs would be higher if more of the minority- and women-owned firms receiving Caltrans and local agency contracts and subcontracts would apply for DBE certification. Although not all of the presently non-DBE-certified MBEs and WBEs performing these contracts would qualify for DBE certification, and some of these firms have graduated from the program or have been denied certification, a large number of MBEs and WBEs appear to be eligible for DBE certification, at least based on their revenues over the most recent three years. For example, only 21 percent of MBE/WBEs considered in the availability analysis for this disparity study are certified as DBEs (as of July 2012).[5]

For these reasons, BBC examined utilization of potential DBE firms (firms that are currently certified or appear to meet the revenue requirements for DBE certification) on FHWA-funded contracts. Potential DBEs obtained 7.9 percent of the contract dollars awarded on FHWA-funded contracts that were issued under Caltrans' race-neutral implementation of the Federal DBE program.

Caltrans might consider this 7.9 percent level of attainment as a minimum level of its overall annual DBE goal that can be reached through neutral means if Caltrans were successful in encouraging firms to apply for DBE certification.

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[5] There are many reasons why most minority- and women-owned firms in California do not seek DBE certification, including perceptions that the process is lengthy and difficult, that certification has limited value, and that DBE certification might carry a negative stereotype. Appendices J and L provide further insights about DBE certification from non-certified and certified firms.

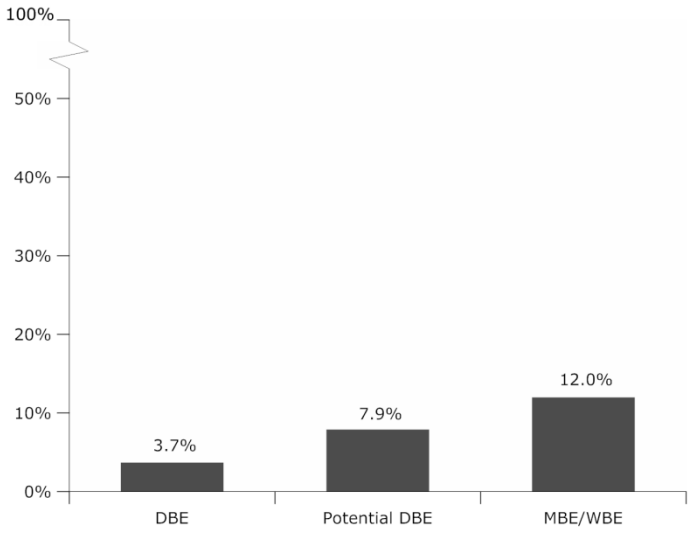
Figure 9-3.
Certified DBE, potential DBE and MBE/WBE utilization on Caltrans and Local Assistance FHWA-funded contracts in the non-goals period

Note:

For more detail and results by group see Figure K-14.

Source:

BBC Research & Consulting from Caltrans contract data.



Participation when race- and gender-conscious programs applied. As discussed in Chapters 5 and 6, BBC also measured certified DBE participation for FHWA-funded contracts when race- and gender-conscious contract goals program applied (in parts of 2009 and all of 2010). Certified DBE participation with the race- and gender-conscious program in place was 4.8 percent during this time period. The disparity index for these contracts was 62.

As previously discussed, the results of the utilization and disparity analyses for these goals contracts indicate that, even with race- and gender-conscious efforts, certified DBE participation was considerably below Caltrans' overall annual DBE goal and that there were large disparities in the overall utilization of MBE/WBEs.

D. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?

Caltrans will need to review the race- and gender-neutral measures that it and other organizations already have in place, and those Caltrans has planned or could be considered for future implementation, when determining the extent to which Caltrans could meet its overall annual DBE goal through the use of such measures. The following provides a general overview of these measures.

Current race-and gender-neutral measures. Caltrans currently has a broad range of neutral measures in place to encourage the participation of all small businesses — including DBEs — in its transportation contracts. The agency plans on continuing the use of those measures in the future. Caltrans' race- and gender-neutral efforts can be classified into four categories:

- Business outreach and communication;
- Technical assistance;
- Improved contracting processes; and
- Data collection, monitoring, and reporting.

Figure 9-4 summarizes current neutral programs at Caltrans.

Figure 9-4.
Current Caltrans race-neutral measures

California Department of Transportation Race Neutral Measures EXAMPLES OF CURRENT MEASURES	
Maintain One-Stop Disadvantaged Business Enterprise (DBE) certification with the California Department of Transportation (Caltrans) and 10 other certifying agencies.	Provide Caltrans plans and specification for small businesses, including DBEs statewide. The plans are available at no cost on the Caltrans Web site.
Continue paid advertisement in newspapers and trade and focus papers to increase participations, in addition to the Caltrans website.	Market Caltrans opportunities, including working with banks, surety, and insurance companies in their districts.
Maintain flowchart of Caltrans advertising, bid opening, awards, and approval on Caltrans program Web sites.	Utilize a standard "Outreach Marketing Kit" for all Districts to include a procurement fair guide, a mandatory pre-bid guide, a project specific guide, and an outreach guide.
Continue Statewide Small Business Council and subcommittee meetings.	Continue to standardize/improve HQ/District Web sites, connect to one another, consolidate all contract-type information on one Web site, and redesign Caltrans main Web page to highlight contracting opportunities.
Host District Procurement Fairs.	
Ensure District Small Business Liaisons (DSBLs) continue to conduct business communication, outreach events, and training on "How to do Business with Caltrans."	Cross-train internal staff on functional contract requirements and process.
Host focused outreach events for small businesses, including DBEs.	Improve access to bid openings by teleconference, Web-based video or Internet, in addition to electronic bid submittal.
Host project-specific outreach events for small businesses, including DBEs.	Expand the use of mandatory pre-bid meetings in construction contracts.
Market SBA Surety Bond Guarantee Program statewide through the DSBLs and industry partnership agreements.	Implement Mentor-Protégé Program statewide for construction and A&E.
Outreach and market DBEs for participation in Caltrans emergency contracts.	Hold quarterly "Look Ahead" meetings for prime contractors and subcontractors, including DBEs and any interested parties.
Meet routinely with construction and Architectural & Engineering (A&E) prime contractors.	
Increase number of DBE certifications listed in CUCP.	Produce a "How to do Business with Caltrans" brochure make it available online to include certification packages and marketing kits.
Provide "Look Ahead" information to small businesses, including DBEs, for proposed construction and A&E contracting opportunities.	Maintain Director's Policy on Race-Neutral Measures to include and ensure District training and implementation.
Improve communication channels between Caltrans Headquarters (HQ) and Districts for real-time information and decision making.	Make more use of the Caltrans Emergency Contractor Interest Registry and remove barriers for registration.
Implement the SBA Surety Bond Guarantee Program.	Continue administrative enforcement of prompt payment between prime contractors and subcontractors.
Provide an "Opt-In" feature to the Caltrans Web site to allow subcontractors or suppliers to be considered for bids without ordering a plan set.	Provide consistent and accurate data collection of DBE utilization.
	Track and circulate DBE usage by District and discuss monthly at Directorate level.

Figure 9-4, Continued.
Current Caltrans race-neutral measures

California Department of Transportation Race Neutral Measures	
EXAMPLES OF CURRENT MEASURES	
Spread project advertising and bid openings throughout the year to prevent overloading of prime contractors and subcontractors.	Report monthly small businesses, including DBE participation, on State and federal-funded contracts, including local agencies, directly into a data management system.
Breakdown A&E contracts into smaller units, including dollars and items of work.	Centralize tracking of all race-neutral activities District wide via OBEO.
Recognize prime contractors for hiring small businesses, including DBEs statewide.	Appoint staff for data collection, verification, measurement, oversight, technical assistance, and reporting.
Continue enforcement of prime contractors who use small businesses, including DBEs statewide, as pass-through companies.	Continue utilization data reporting of all small businesses, including DBEs, on all State and federal-aid contracts.
Institute performance measurement standards for all race-neutral measures.	Collaborate with associations, such as Associated General Contractors and Engineering & Utility Contractors Association, to increase DBE participation.
Continue to maintain Bidder's List.	Update business preference information in the California Unified Certification Program database of those entities that are "ready, willing, and able" to perform Caltrans work.
Improve DBE/Small Business Enterprise cross-registration with other State agencies and departments.	Assign all bidders an identification number for capturing all businesses that bid Caltrans work.

Source: California Department of Transportation Office of Business & Economic Opportunity, 2012.

Business outreach and communication. Caltrans conducts several outreach and communication efforts across the state of California to encourage the utilization and growth of small businesses and MBE/WBEs. District office small business liaisons are primarily responsible for facilitating those efforts, which include:

- Rebranding the DBE office;
- DBE and small business liaisons;
- Meetings and relationship building;
- Website and communications;
- Advertisements of contract opportunities; and
- Other outreach events and workshops.

Rebranding the DBE office. In 2009, Caltrans renamed the office of Civil Rights to the Office of Business and Economic Opportunity (OBEO). The change effectively re-branded the office to align more closely with its dedication to "increasing the participation of small business, disadvantaged business enterprise, and disabled veteran business enterprise" on Caltrans contracts. OBEO will continue to "ensure non-discrimination" in contract execution and in the Caltrans workplace environment in addition to its dedication to the development of small businesses, including DBEs and many MBE/WBEs and disabled veteran-owned businesses.

DBE and small business liaisons. Beginning in 2009, Caltrans successfully appointed small business liaisons in each of the 12 district offices. The small business liaisons act as points of contact for small businesses, including DBEs and many other MBE/WBEs, and the liaisons assist prime contractors identify potential subcontractors. The liaisons also lead more focused outreach such as local procurement fairs, workshops, and small business events. In 2011, Caltrans liaisons conducted and attended 176 different events throughout the state of California, serving more than 17,000 individuals.

Meetings and relationship building. In an effort to engage its stakeholders, Caltrans meets regularly with a wide range of interest groups including construction and engineering trade associations as well as with small business and DBE representatives.

Trade association meetings. Each quarter, Caltrans hosts stakeholder meetings with major construction and engineering trade associations including the Association of General Contractors (AGC), the American Council of Engineering Companies (ACEC), United Contractors, and the Infrastructure Delivery Council (IDC). Caltrans hosts those meetings at Caltrans Headquarters and facilitates them in partnership with a representative from each organization. The quarterly meetings center around construction and engineering contracting and address various topics, including project advertisement and schedule, DBE updates, safety topics, project specifications, and new business opportunities. The Director of Caltrans is present at these meetings to speak on behalf of the agency and to provide the opportunity to ask questions. Between 10 and 25 members of each organization typically attend the meetings.[6]

Small Business Council meetings. Caltrans hosts Small Business Council meetings with associations representing small businesses and small businesses themselves. Associations must be a small business trade association representing at least 35 members, organized under the laws of California and having a small business interest in Caltrans contracts and projects (specifically, construction, commodities, architecture and engineering). The location for Small Business Council meetings alternate between Caltrans headquarters in Sacramento and various district offices throughout California. Caltrans uses the meetings to provide information on future contract opportunities and to engage small businesses and MBE/WBEs in the Caltrans contracting process. In addition, the Small Business Council holds committee meetings that cover more detailed topics including construction, professional services and commodities. The committees are responsible for discussing those issues and presenting recommendations to the main membership body.

OBEO manages invitations to the Caltrans Small Business Council meetings. Caltrans Small Business Council meetings are not exclusive to members – non-members who are interested in the meetings may attend. In addition to the statewide Small Business Council meetings, other Caltrans districts organize their own Small Business Council meetings to focus on local issues. Currently, Districts 4, 6, 7, 10 and 11 convene their own Small Business Council meetings.

SBA and 8(a) Business Development Program meetings. Caltrans representatives attend SBA and 8(a) Business Development Program outreach events several times per year to encourage small

[6] Individuals must be members of the AGC, ACEC, United Contractors, or IDC in order to attend the quarterly meetings.

businesses, including many MBE/WBEs, to participate on public contracting in the State of California. Small businesses attend those meetings to network and partner with other businesses. Recent outreach events have drawn between 75 and 300 individuals, depending on the location of the event.

Website and communications. The OBEO website is revised and updated often. The website currently provides access to resources including links to relevant information, including:

- DBE certification database (CUCP);
- Certification instructions and application;
- Supportive services programs and resources;
- Technical assistance programs and resources; and
- Links to each of the 12 district offices' websites and to contact information for each DBE liaison.

Caltrans also maintains a centralized calendar of events to highlight outreach opportunities throughout the state. District small business liaisons are responsible for entering information about events into the calendar.

Advertisements of contract opportunities. In addition to attending quarterly meetings or accessing the OBEO website, there are several other ways for small businesses, including many MBE/WBEs, to find out about contract opportunities with Caltrans.

Weekly advertisements. Each week, Caltrans provides a complete list of all projects currently out for bid as well as a list of upcoming projects that will be out for bid on the Office Engineer website. Advertisements are organized into several groups including all advertised projects and upcoming projects. All advertisements are refreshed every Monday morning at 9 am. Caltrans also provides useful links for contractors that want to see contract documents, order bid books, place a prime contractor advertisement, opt-in on particular contracts, or see planholders lists.

Project look ahead. Caltrans also provides a "project look ahead" database for information on upcoming projects statewide. Contractors can create an account with Caltrans to receive automated emails when projects are added or modified and to get customized views of projects in specific areas. Small business liaisons in each of the district offices provide "look ahead" information at local workshops and events.

Caltrans Connect. Caltrans Connect is a special feature on the Office of Engineer website that lets contractors manage the projects in which they are interested and on which they are advertising subcontracting opportunities. Caltrans Connect allows contractors to input basic firm qualifications and contact information. Contractors can modify that information and can also download bid documents for Caltrans e-advertised projects. Contractors are also able to "opt in" using the Caltrans Connect feature to communicate that they are interested in subcontracting or supplying materials to prime contractors. Registration and use of Caltrans Connect is free to all contractors.

Planholders search. Planholders lists are composed of contractors who have ordered bid books for a particular project. Planholders lists are updated immediately when a bidder places its order for a bid book online. Caltrans provides a planholders search that offers an up-to-the-minute view of who is bidding on all currently-advertised projects. The planholders search provides options for searching by DBE or small business status to help meet any contract goals.

BidSync. Contract opportunities are posted online and are distributed to contractors that are registered through BidSync.

Other outreach events and workshops. Caltrans participates in a number of outreach events and workshops, some of which are organized by Caltrans Headquarters and others by Caltrans local district offices. The most notable workshops and outreach events that Caltrans hosts include:

- *Certification workshops.* Caltrans provides certification workshops for DBEs and potential DBEs across the state. The two-hour workshops are typically hosted by Caltrans headquarters and cover topics including certification requirements and guidelines for completing the certification application. In 2011, Caltrans headquarters hosted approximately 19 certification workshops. Small business liaisons also provide certification workshops in conjunction with local "mock contract" workshops in each of their districts. Caltrans is also currently exploring the idea of providing one-on-one certification application assistance.
- *Procurement fairs.* Previously known as the business exchange program, Caltrans hosted two procurement fairs in 2011 for local districts 10 and 11. For each half-day fair, purchasers from each state department were invited to have face- to-face discussions with small business owners. In addition, the procurement fairs allowed purchasing to be done onsite. Approximately 100 small business owners attended each procurement fair.
- *Mock contract workshops.* Using guidance from a Caltrans uniform presentation, small business liaisons from local districts host "mock contract workshops" to educate local contractors on how to do business with Caltrans. Among many topics, mock contract workshops teach contractors how to bid, how to estimate, how to surf the Caltrans website, and how to execute contract work once a contract is awarded. In 2011, each workshop lasted about a half of a day and served more than 100 people. In addition to mock contract workshops, some district offices offer certification "boot camps" to teach potential DBEs about the opportunities of DBE certification and how to complete the certification application.
- *Mandatory Pre-bid conferences.* For all Caltrans construction contracts worth more than $250,000, prime contractors are required to be present at mandatory "pre-bid" conferences in order to be eligible to bid on contracts. Pre-bid conferences provide an opportunity for small businesses, including DBEs and many other MBE/WBEs, to network with prime contractors and to express their interest in performing work as a subcontractor.

Technical assistance. Caltrans is currently in the process of coordinating three contracts to provide technical assistance and outreach to small businesses, including many MBE/WBEs in the north, south, and central regions of California. Previously, Caltrans provided technical assistance and outreach through a contract with the California Community College Chancellor's Office and ten Small Business Development Center's (SBDC) from 2006 to 2009. In 2010, Caltrans

contracted with Los Rios Community College in Sacramento to provide online technical assistance training and outreach.

One-on-one consultations. Caltrans headquarters and local district offices offer one-on-one technical assistance over the telephone and in person to small businesses, including many MBE/WBEs. Caltrans provides assistance related to navigating contracting documents, the DBE-certification process, and the opt-in process to match subcontractors with appropriate bidding opportunities.

Mentor-protégé program. Caltrans offers the "Calmentor" program for small engineering businesses and the "mentor-protégé" program for small construction businesses. Those programs provide DBEs with the opportunity to participate in a mentor-protégé-type relationship with larger, more successful businesses working in similar industries. In 2011, Caltrans hosted six events in different districts throughout California to encourage prime contractor participation in the "Calmentor" and "mentor-protégé" programs. Caltrans has initiated about 350 mentor pairings since the programs' inceptions.

Improved contracting practices. Consistent with other public agencies in California, Caltrans uses a competitive, low-bid system for selecting construction contractors and a qualifications-based system for awarding most engineering-related contracts. Many business owners and managers interviewed as part of the disparity study noted that public sector procurement processes were overly cumbersome and complex, and recommended simplification. Many interviewees also commented that the typical size of a Caltrans contract precludes many small businesses, including minority- and women-owned firms, from bidding on that work.

As discussed in Appendix J, some interviewees had favorable comments concerning Caltrans' efforts to simplify bid processes, add outreach opportunities, and effectively explain processes to potential bidders.

Some interviewees were unaware of these efforts or did not find them to be useful. Caltrans should review these comments, and other information it may have, when determining further improvements to its bid processes. Caltrans may also need to expand avenues to communicate its bid processes to potential prime contractors and subcontractors. For example, many firms participating in the interviews were not aware of the Caltrans Connect feature on Caltrans' website. It appears from the in-depth interviews and stakeholder meetings conducted in the disparity study that many businesses do not know about this feature.

Data collection, monitoring, and reporting. Caltrans is currently considering an alternative database system to better track subcontractors and the payments that they receive from prime contractors. Although this initiative has been an ongoing priority for Caltrans for several years, there is a renewed focus on upgrading the current data systems and processes.

Potential race-and gender-neutral measures. In addition to the race- and gender-neutral measures that Caltrans currently has in place, there are several race- and gender-neutral measures that Caltrans is planning or has in development. Figure 9-5 presents some of those measures.

Figure 9-5.
Race- and gender-neutral measures that Caltrans is planning or has in development

California Department of Transportation Race Neutral Measures	
MEASURES IN PLANNING OR DEVELOPMENT	
Continue efforts to provide free supportive services and technical assistance to DBEs statewide through ten Small Business Development Centers (SBDCs).	Explore ways to model certification queries on the Web site after Department of General Services' Web site.
Consider small business contract goals and good faith efforts on federal contracts.	Explore Performance-Based Accountability to contracting practices.
Continue contract administration training through the DBE Supportive Services Consultant.	Explore use of construction management system for data collection.
Develop a Data Management System to capture all business contracting activities.	Explore a partnership with Contractor's State License Board to provide an exchange of contractor information, Caltrans DBE certification, and transportation construction opportunities to licensed contractors.

Source: California Department of Transportation Office of Business & Economic Opportunity, 2012.

There are also several organizations throughout California that are implementing similar efforts to encourage the participation of small businesses — including DBEs — in local contracting. Caltrans might consider adopting some of those measures to encourage small business and DBE participation in its transportation contracts.

Figure 9-6 provides examples of race- and gender-neutral programs that other organizations in California have in place. There may be several reasons why certain measures are not practicable for Caltrans, and there may also be measures in addition to those presented in Figure 9-5 that Caltrans might consider using.

Figure 9-6.
Examples of race- and gender-neutral programs that organizations in California have in place

Neutral remedies	
Technical assistance	Technical assistance including small business training is widely available throughout Southern California. Programs primarily provide general information and assistance for business start-ups and growing businesses but also include industry-specific training. Examples range from general support providers such as SCORE to industry-specific training opportunities such as the California Construction Contracting Program located within existing SBD centers across the region. Other programs focus on market development assistance and use of electronic media and technology. These assistance programs are available through organizations such as the Pace Business Development Center and Procurement Technical Assistance Centers throughout the state. More locally focused programs offered include free opportunities provided by Pasadena City College small business entrepreneurial service and training academy (BEST) and the City of Pasadena, Foothill workforce investment board and the Pasadena Chamber of Commerce, Art of Small Business seminar.
Small business finance	Small business financing is available through several local agencies within Southern California. For example, the Pace Business Development Center in Los Angeles supports start-ups with loan package preparation and capital acquisition through financial institutions guaranteed by the SBA. The Southern California Small Business Development Corporation also offers financing assistance with the support of the State of California with offices locally located in Glendale and Los Angeles. Other local organizations including minority and regional chambers provide training and support on how to obtain financing and prepare funding documents.
Bonding programs	Bonding programs offering bonding and finance assistance and training have become more popular. Programs such as the SBA Bond Guarantee Program provide bid, performance and payment bond guarantees for individual contracts. The USDOT Bonding Assistance Program also provides bonding assistance in the form of bonding fee cost reimbursements for DBEs performing transportation work. Local agency's also have bonding programs including the City of Los Angeles Bonding Assistance Program and the Los Angeles World Airports (LAWA) bonding program. These programs offer individual counseling and training in addition to bid, performance and bond guarantees. Training on how to obtain a bond is also provided by a number of different agencies including the Los Angeles Unified School District Small Business Bootcamp and Bond Works Program. The school district's program, prepares contractors to manage cash flow and taxes and provides training on credit worthiness criteria in the bond approval process.
Mentor-protégé programs	The Associated General Contractors (AGC) of California with the Small Business Council and Caltrans have created a joint mentor-protégé program in an effort to increase diversity and develop new and emerging businesses in the construction industry. Calmentor supports mentor-protégé relationships in the architecture and engineering industry. SBA 8(a) Business Development Mentor-Protégé Program is an example of a mentor-protégé program that pairs subcontractors with prime contractors to assist in management, financial and technical assistance and the exploration of joint venture and subcontractor opportunities for federal contracts. The University of Southern California is starting a mentor-protégé program to assist small businesses develop the capacity to perform as subcontractors and suppliers.

Source: BBC Research & Consulting.

CHAPTER 10.
Caltrans' Implementation of the Federal DBE Program

Chapter 10 reviews information relevant to Caltrans' implementation of specific components of the Federal DBE Program for FHWA-funded contracts, as well as a brief discussion of programs for state-funded contracts. Chapter 10 is organized in three parts:

A. Federal Requirements of Implementing the Federal DBE Program;

B. Monitoring Changes to the Federal DBE Program; and

C. Caltrans' State-funded Contracts.

A. Federal Requirements of Implementing the Federal DBE Program

Regulations presented in 49 CFR Part 26 and associated documents offer state and local agencies guidance on implementing the Federal DBE Program. Key requirements of the Program are described below in the order that they are presented in 49 CFR Part 26.[1]

Reporting to DOT — 49 CFR 26.11 (b). Caltrans must periodically report DBE participation on its transportation-related construction and engineering contracts to FHWA. BBC's review of Caltrans' transportation contracting data indicated that the agency requires prime contractors to submit information detailing the utilization of DBEs at the end of each FHWA-funded project. Caltrans should continue to do so and modify its reporting process to ensure that all DBE utilization is captured regardless of whether a prime is using the utilization to satisfy a specific DBE or UDBE contract goal. In addition, Caltrans should make more effort to capture complete information about DBE participation on FHWA-funded contracts that subrecipient local agencies award through the Local Assistance Program.

Bidders list — 49 CFR Section 26.11 (c). As part of its implementation of the Federal DBE Program, Caltrans must develop a bidders list of businesses that are available for its transportation contracts. The bidders list must include the following information about each available business:

- Name;
- Address;
- DBE status;
- Age of business; and
- Annual gross receipts.

[1] Because only certain portions of the Federal DBE Program are discussed below, Caltrans should refer to the complete federal regulations when considering its implementation of the program.

Use of 2012 availability interview information. BBC's 2012 availability interviews collected all of the required information about local businesses that are potentially available for different types of Caltrans construction and engineering prime contracts and subcontracts. Caltrans should consider use of the 2012 availability interview database to assist in building a comprehensive, current bidders list.

Further development and communication of Caltrans Connect. Caltrans offers a special feature on the Office of Engineering website — Caltrans Connect — that allows contractors to enter basic information about their qualifications and contacts. Caltrans Connect is a feature that allows contractors to "opt in" to identify that they are interested in subcontracting or supplying materials to prime contract bidders. Registration and use of Caltrans Connect is free to all businesses.

It appears from the in-depth interviews and stakeholder meetings conducted in the disparity study that many businesses do not know about this feature. Caltrans should consider further developing web-based opportunities for communication between prime contractors and subcontractors, and further invest in publicizing this feature.

Further dissemination of information concerning bid and proposal awards. In addition, Caltrans might consider more efforts to publicize post-award bidder/proposer information available on its website.

Maintaining comprehensive vendor data. In order to effectively track the utilization of minority- and women-owned businesses on transportation prime contracts and subcontracts, Caltrans should continue to improve the information it collects on the ownership status of utilized businesses, including both prime contractors and subcontractors. Not only should Caltrans collect information about DBE status, but it should also obtain information on the race/ethnicity and gender of business owners. Caltrans can use business information that BBC collected as part of the 2012 disparity study to update and improve its vendor data.

Prompt payment mechanisms — 49 CFR Section 26.29. Caltrans' prompt payment requirements for construction and engineering contracts appear to comply with California state law and with federal regulations in 49 CFR Section 26.29. Caltrans is required to make progress payments to prime contractors within 30 days of receipt of their requests for payment. Prime contractors are then required to pay subcontractors no later than 10 days after receipt of each progress payment, unless otherwise agreed to in writing.

Caltrans might consider implementing broader compliance review to ensure that the prompt payment policy is followed by Caltrans, local agencies and prime contractors. Several business owners and managers that BBC interviewed as part of the study identified delayed payments on public sector projects in general, and Caltrans projects specifically, as a barrier to business success, particularly for small businesses (see Appendix J). Other business owners had favorable comments about timely payment on Caltrans projects. There also may be an incorrect assumption by some businesses that Caltrans work is slow-pay. More compliance review and more communication about Caltrans' policies to the contracting community may be beneficial.

DBE Directory — 49 CFR Section 26.31. Caltrans currently maintains a Directory of DBEs certified in California on its website at http://www.dot.ca.gov/hq/bep/find_certified.htm. The agency should continue to do so.

Overconcentration — 49 CFR Section 26.33. Agencies implementing the Federal DBE Program are required to report and take corrective measures if it finds that DBEs are so over concentrated in certain work areas as to unduly burden non-DBEs in those work areas.

In conducting the disparity analysis, BBC investigated the potential overconcentration on Caltrans contracts. There were two subindustries in which DBEs accounted for 50 percent or more of total subcontract dollars for 2007-2010, based on the contract records received from Caltrans and local agencies:

- Trucking (54%); and
- Testing (50%).

Caltrans should review this information and continue to monitor these and other subindustries for overconcentration in the future.

Business development programs — 49 CFR Section 26.35; Mentor-protégé program – 49 CFR Appendix D to Part 26. Business development programs (BDPs) are programs that are designed to assist DBE-certified businesses in developing the capabilities to compete for work independent of the DBE Program. As part of a BDP, or separately, agencies may establish a mentor-protégé program, in which a non-DBE or another DBE serves as a mentor and principal source of business development assistance to a protégé DBE.

Caltrans offers the Calmentor program for small engineering businesses and the "mentor-protégé" program for small construction businesses. Those programs provide DBEs with the opportunity to participate in a mentor-protégé-type relationship with larger, more successful businesses working in similar industries. To be eligible for the Calmentor program, a firm must be certified as a Small Business Enterprise, a DBE or a Disabled Veteran Business Enterprise, or it must demonstrate that it could qualify to be certified as a Small Business under the State of California process.

Some of the business owners interviewed in the disparity study indicated that they had participated in the program and that it was helpful. Some business owners did not find the program helpful because no mentor was provided or the mentor was non-responsive. Further expansion and improvement of the mentor-protégé programs appear to be warranted from the qualitative information collected in the disparity study.

In addition, Caltrans might explore additional partnerships to implement other BDPs. Such programs would provide specialized assistance that would be tailored to the needs of developing businesses.

Responsibilities for monitoring the performance of other program participants — 49 CFR Section 26.37. The Final Rule effective February 28, 2011 revised requirements for monitoring and enforcing that work prime contractors committed to DBEs at contract award (or through contract modifications) is actually performed by those DBEs. The original requirements are described in 49 CFR Section 26.37(b). The Final Rule states that DBEs can only be terminated for "good cause" and with written consent from the awarding agency. Caltrans should carefully review the requirements set forth in 49 CFR Section 26.37(b) and in the Final Rule to ensure that its monitoring and enforcement mechanisms are consistent with federal regulations.

Fostering small business participation — 49 CFR Section 26.39. The Final Rule effective February 28, 2011 added a requirement for transportation agencies to foster small business participation in their contracting. It required agencies to submit a plan for fostering small business participation to USDOT in early 2012. USDOT has been reviewing these submitted programs.

When implementing the Federal DBE Program, Caltrans must include an element to structure contracting requirements to facilitate competition by small business concerns, "taking all reasonable steps to eliminate obstacles to their participation, including unnecessary and unjustified bundling of contract requirements that may preclude small business participation in procurements as prime contractors or subcontractors."[2] As discussed in Appendices J and L, size of contracts is reported to be a barrier to small business participation in public sector contracts.

The following strategies are listed in the Federal DBE Program:

- Establishing a race-neutral small business set-aside for prime contracts under a stated amount (e.g., $1 million).
- In multi-year design-build contracts or other large contracts (e.g., for "megaprojects") requiring bidders on the prime contract to specify elements of the contract or specific subcontracts that are of a size that small businesses, including DBEs, can reasonably perform.
- On prime contracts not having DBE contract goals, requiring the prime contractor to provide subcontracting opportunities of a size that small businesses, including DBEs, can reasonably perform, rather than self-performing all the work involved.
- Identifying alternative acquisition strategies and structuring procurements to facilitate the ability of consortia or joint ventures consisting of small businesses, including DBEs, to compete for and perform prime contracts.
- Ensuring that a reasonable number of prime contracts are of a size that small businesses, including DBEs, can reasonably perform.

Chapter 9 of the report outlines many of Caltrans' current and planned neutral measures, as well as examples of the range of neutral programs implemented by other organizations in California.

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[2] 49 CFR 26.39(a).

Prohibition of DBE quotas and prohibition of set-asides for DBEs unless in limited and extreme circumstances — 49 CFR Section 26.43. DBE quotas are prohibited under the Federal DBE Program. DBE set-asides are only to be used in extreme circumstances. The Federal DBE Program does allow for the implementation of a small business program for small businesses that are bidding or proposing as prime contractors. The State of California operates a program that limits bidding on certain contracts to certified small business enterprises. Caltrans states that it currently does not use quotas in any way in the administration of the Federal DBE Program.

Setting overall annual DBE goals — 49 CFR Section 26.45. In the Final Rule effective February 28, 2011, USDOT changed how often agencies that implement the Federal DBE Program are required to submit overall annual DBE goals. As discussed in Chapter 4, agencies such as Caltrans now only need to develop and submit overall annual DBE goals every three years. That change was effective as of March 5, 2010.

Chapter 8 uses data and analytical techniques from the disparity study to provide Caltrans information useful in developing its overall annual DBE goal for the next three fiscal years.

Analysis of the reasons for not meeting an overall DBE goal — 49 CFR Section 26.47(c). One addition to the Federal DBE Program made under the Final Rule effective February 28, 2011 requires agencies to do the following if its DBE participation for a particular fiscal year are less than the overall goal for that year:

- Analyze in detail the reasons for the difference; and
- Establish specific steps and milestones to address the difference and to enable the agency to fully meet the goal for the next fiscal year.

Need for separate accounting for participation of firms potentially certified as DBEs. In accordance with guidance in the Federal DBE Program, BBC's analysis of the overall DBE goal in this study (and in the 2007 Study) is based on DBEs that are currently certified and on business that could *potentially* be certified.

One of the reasons that Caltrans has not met its overall DBE goal in past years, and might not meet it in the future, is that its measurement of DBE participation only includes firms that are DBE-certified. Firms performing Caltrans work that have not been DBE certified are:

- Counted in the overall DBE goal; and
- Not counted in the participation reports used to measure whether the overall DBE goal has been attained.

Based on verbal communication with USDOT in Washington, D.C. in 2011, agencies such as Caltrans can explore whether one reason they have not met their overall DBE goal is because of participation of firms that could potentially be DBE-certified but are not. USDOT then might expect an agency to explore ways to further encourage potential DBE to become DBE certified as one way of closing the gap between reported DBE participation and its overall DBE goal.

In order to have the information to explore that possibility, Caltrans should:

- Develop a system to collect information on the race/ethnicity and gender of the owners of all businesses — not just certified DBEs — participating in Caltrans and Local Assistance contracts as prime contractors and subcontractors;

- Also collect and maintain information about the annual revenue for these businesses (already a requirement under the Federal DBE Program regarding development of a bidders list);

- Develop internal participation reports for MBEs and WBEs (by race, ethnicity and gender) and for firms currently and potentially DBE-certified (based on race/ethnicity/gender ownership, annual revenue and other factors such as whether the firm has been denied DBE certification in the past), for both Caltrans and Local Assistance contracts; and

- Continue to track participation of certified DBEs on FHWA-funded Caltrans and Local Assistance contracts, per USDOT reporting requirements.

Other steps to evaluate how it might better meet the overall annual goal. Analysis of the utilization of potential DBEs is one step among many that Caltrans should take when examining any differences between DBE utilization indicated in its DBE participation reports submitted to FHWA and its overall annual DBE goal.

Based on its comprehensive review, Caltrans must establish specific steps and milestones to correct the problems it identified in its analysis and to enable it to better meet its overall DBE goal in the future, per 49 CFR Section 26.47(c)(2).

Maximum feasible portion of goal met through neutral programs — 49 CFR Section 26.51(a). As discussed in Chapter 9, Caltrans must meet the maximum feasible portion of its overall annual DBE goal through the use of race- and gender-neutral means of facilitating DBE participation. Caltrans must project the portion of its overall annual DBE goal that could be achieved through such means. The agency should consider the information and analytical approaches presented in Chapter 9 when making such projections.

Use of DBE contract goals— 49 CFR Section 26.51(d). The Federal DBE Program requires agencies to establish contract goals to meet any portion of their overall DBE goals that they do not project being able to meet using race- and gender-neutral means, as noted in 49 CFR 26.51(d). Caltrans should assess whether the use of DBE contract goals is necessary to meet any portion of its overall annual DBE goal, based on information from the 2012 Disparity Study and other available information.

USDOT guidance on DBE contract goals. USDOT guidelines on the use of DBE contract goals, which are presented in 49 CFR 26.51(e), include the following:

- Contract goals may only be used on contracts that have subcontracting possibilities.
- Agencies are not required to set a contract goal on every FHWA-funded contract.

- Over the period covered by the overall DBE goal, an agency must set contract goals so that they will cumulatively result in meeting the portion of the overall goal that agency projects being unable to meet through neutral means.
- An agency's contract goals must provide for participation by all DBE groups eligible for race- and gender-conscious measures and must not be subdivided into group-specific goals.
- An agency must maintain and report data on DBE utilization separately for contracts that include and that do not include DBE goals.

If Caltrans determines that it needs to continue the use of DBE contract goals, then it should also evaluate which DBE groups should be considered eligible to participate in any goals that may apply to FHWA-funded contracts (or other USDOT-funded contracts). If Caltrans determines to include specific DBE groups (e.g., groups classified as underutilized DBEs or "UDBEs") but not other groups in a contract goals program, it must submit a waiver request to FHWA.

Use of good faith efforts. BBC was able to analyze Office Engineer Award Tracker Reports pertaining to FHWA-funded construction contracts from April 2009 through September 2010. For about one-third of the contracts for which Caltrans set DBE contract goals, the winning contractor used good faith efforts to comply with the program. Caltrans also rejected good faith efforts submissions of some apparent low bidders. These rejections represented about 4 percent of construction contracts where Caltrans set DBE contract goals.

Exploration of alternative approaches to current DBE contract goals program. Some individuals participating in in-depth interviews, public hearings and stakeholder meetings suggested that Caltrans explore new ways of implementing the Federal DBE Program that better achieved the objective of further developing minority- and women-owned businesses.

They reported that the DBE contract goals encourage extensive efforts on the part of prime contractors to document that they have contacted DBEs about subcontracting opportunities (the good faith efforts process) but that the nature of the bidding process makes it difficult to ensure meaningful and substantial participation of DBEs on those contracts. Issues include:

- The challenge of unbundling subcontract elements ahead of time into sizes suitable for DBEs, especially on complex projects with tight bidding schedules;
- Difficulty of fitting DBEs into a bid submission in the final minutes before a bid deadline, especially if the DBE has not bid a complete subcontracting package;
- Tendency of prime contractors to look to DBEs for portions of the project that are easily separated in an overall bid package (e.g., trucking);
- Insufficient responsibility on first-tier subcontractors on large projects to look for ways to include DBEs as second-tier subcontractors in their project components;
- Insufficient incentives to develop work opportunities on projects that would encourage DBE subcontractors to become prime contractors on future projects; and

- In a highly price-competitive environment, the challenge of choosing any subcontractor for a portion of the project that is not the low bid when the prime contractor is putting together the total bid.

A number of interviewees indicated that the current DBE contract goals program produces an incentive for prime contractors to use highly-automated good faith efforts processes to comply with the program rather than to seek meaningful participation of DBEs in a project. Some small prime contractors, including MBE/WBEs, indicated that they are not set up to perform good faith efforts using the automated methods of DBE subcontractor outreach, which puts them at a disadvantage when competing for FHWA-funded contracts. Some interviewees also reported that non-winning prime contractor challenges of apparent low-bidders' good faith efforts processes is now a typical part of the bid process for many public projects, creating difficulties for many state and local agencies. In sum, many interviewees were highly critical of a program that relied on good faith efforts submissions.

Businesses participating in interviews, stakeholder meetings and public hearings were encouraged to provide suggestions about how Caltrans could improve its implementation of the Federal DBE Program. A number of participants suggested ways that they thought were superior to the DBE contract goals/good faith efforts process Caltrans currently in place. (Caltrans reports that many of these ideas have been raised as part of ongoing communications with the industry.)

Without subscribing to any one point of view, and without reviewing legal issues or compliance issues with the Federal DBE Program that might arise, BBC provides the following perspectives:

- One view is captured by the statement, "Why don't we just have a set-aside program and just knock [out] all this other nonsense." In this view, each prime contractor submitting a bid on a FHWA-funded contract would need to find a way to have DBE participation on the contract, and no bidder would be advantaged by simply submitting good faith efforts with no DBE participation.

- Another approach is to monitor each prime contractor's cumulative efforts to encourage utilization of DBE subcontractors across a number of contracts. Caltrans would need to establish criteria to assess the adequacy of these efforts, which might include factors such as the roles of DBEs on those projects in addition to percentage DBE participation.

- Another view is for Caltrans to expand its use of Caltrans Connect on its website to electronically link prime contractors and subcontractors interested in each Caltrans contract. If properly structured, this system might be able to automate the good faith efforts process for all contractors. Caltrans might also require prime contractors to provide feedback to all subcontractors that submitted price quotes.

- Creation of a bid depository would be an extension of Caltrans-operated subcontractor outreach. At several stakeholder meetings, participants discussed the concept of a Caltrans-operated bid depository for certain subcontracting trades on each Caltrans project. Subcontractor bids, including those from DBEs, would be collected in advance of the deadline for prime contractor bids. Each subcontractor bid would be available to all prime contractors. Caltrans would be responsible for unbundling subcontracted work and soliciting bids, essentially shifting the good faith efforts program component from prime

contractors to Caltrans staff. (Participants saw advantages and potential problems in this approach, as discussed in Appendix J.)

- Additional incentives to use joint ventures between majority-owned firms and DBEs might be a method to further develop DBE prime contractors.

- One approach would be for Caltrans and local agencies to provide an allowance in each FHWA-funded contract that prime contractors would use for DBE participation. The allowances would give prime contractors more flexibility to create portions of the contract that DBEs would perform after bid submission.

- A similar approach would be for Caltrans to include a level of DBE participation as a contract option that prime contractors could choose to submit a bid for in addition to their "base bid" on a contract. Caltrans could then choose to select the contractor submitting the low base bid or the contractor submitting the low bid with the DBE participation option. Under this alternative, Caltrans could specify not only the level of DBE participation but also the types of participation (e.g., meaningful portions of the contract) that would be required under the contract option. This approach would eliminate the need for a good faith efforts component to the program.

Caltrans might further explore these and other types of opportunities for improving its current implementation of the Federal DBE Program. It should review legal issues, including state contracting law and whether a program option would meet USDOT regulations. Caltrans should also review what it has learned in its more-flexible application of the DBE Program to its design-build contracts.

Certain of the above approaches are race- and gender-neutral or could be modified to be implemented on a neutral basis (e.g., for all certified small businesses). Caltrans should consider the issue of race- and gender-conscious versus neutral implementation of certain program options as well.

Flexible use of any race- and gender-conscious measures — 49 CFR Section 26.51(f). State and local agencies must exercise flexibility in any use of race- and gender-conscious measures such as DBE contract goals. For example, if Caltrans determines that its DBE utilization is exceeding its overall DBE goal in a particular fiscal year, it must reduce or eliminate any use of DBE contract goals to the extent necessary. If it determines that it will fall short of the overall DBE goal in a particular fiscal year, then it must make appropriate modifications in the use of race- and gender-neutral and conscious measures to allow it to meet the overall goal. If, after implementation of any additional neutral measures, Caltrans observes improvements in its utilization of certain racial/ethnic and gender groups on locally-funded contracts (in comparison to the availability of those groups on such contracts), it might consider changing its projection of how much of its overall annual DBE goal it can achieve through neutral means in future years.

Good faith effort procedures — 49 CFR Section 26.53. USDOT has provided guidance for agencies to review good faith efforts, including materials in Appendix A of 49 CFR Part 26. Caltrans' current implementation of the Federal DBE Program outlines the good faith efforts process that it uses for DBE contract goals. The Final Rule effective February 28, 2011 updated

requirements for good faith efforts when agencies use DBE contract goals. Caltrans should review 49 CFR Section 26.53 and the Final Rule.

Caltrans might consider enhancing its good faith efforts process by providing specific feedback to non-winning bidders that submitted good faith efforts documentation. Currently, Caltrans focuses on whether or not the apparent low bidder has met good faith efforts (if the bidder meets a DBE contract goal through good faith efforts).

Counting DBE and MBE/WBE participation — 49 CFR Section 26.55. Section 26.55 of the Federal DBE Program describes how agencies should count DBE participation and evaluate whether bidders have met DBE contract goals. The Program also gives specific guidance for counting the participation of different types of DBE suppliers and trucking companies. Section 26.11 discusses the Uniform Report of DBE Awards or Commitments and Payments.

As previously discussed in this Chapter, BBC recommends that Caltrans develop procedures and databases to consistently track participation of MBE/WBEs and potential DBEs in FHWA- and state-funded contracts awarded by Caltrans and local agencies. Such measures will help Caltrans track the effectiveness of race- and gender-neutral programs in encouraging MBE/WBE/DBE participation. If applicable, Caltrans should also provide important information regarding any shortfalls in annual DBE participation, including preparing utilization reports for all MBE/WBEs (and not just those that are DBE-certified).[3] Caltrans should collect and use the following information:

- Caltrans should use the databases that BBC developed as part of the study as a starting point for tracking MBE/WBE utilization.
- Businesses working with Caltrans as prime contractors or subcontractors should be required to complete contractor/consultant registration documents, which should include information about the race/ethnicity and gender of their owners.
- Caltrans should collect and report information for prime contractor and subcontractor utilization on both FHWA- and locally-funded contracts.
- Caltrans should also continue to prepare reports on the participation of certified DBEs in FHWA-funded contracts, as required under the Federal DBE Program.
- Caltrans should consider improving its subcontract data collection and tracking. As part of that process, the agency should:
  - Collect subcontractor utilization data (for all tiers and suppliers) for all businesses regardless of race, gender, or certification status;
  - Collect invoices for prime contractors and subcontractors;
  - Establish a training process for all staff that is responsible for managing and entering contract data. Training should convey data entry rules and standards, and ensure consistency in the data entry process; and

[3] Including self-identified MBE/WBEs.

- Require businesses to report their subcontractors' contact information and committed dollar amounts at the time of contract award.

DBE certification — 49 CFR Part 26 Subpart D. Caltrans is a certifying member of the CUCP. Businesses interested in working with Caltrans that are seeking DBE certification can be certified through Caltrans or through another certifying member of the CUCP. The CUCP is designed to comply with Subpart D of 49 CFR Part 26. As it continues to certify businesses, Caltrans should make the following considerations:

- If Caltrans determines that contract goals are appropriate for specific DBE groups for certain contracts, it should nonetheless continue to certify all groups that the Federal DBE Program presumes to be socially and economically disadvantaged.
- Although the analyses in the disparity study focused on marketplace conditions in California, and the study team collected availability information on California businesses, Caltrans still needs to allow firms located outside of the state to be certified as DBEs.

Many firms participating in in-depth interviews or public hearings commented on the DBE certification process.

- It appears that many firms and local agencies are confused about the multiple SBE, MBE and DBE programs operated by agencies in California.
- Many minority- and women-owned firms reported that they were not DBE-certified because they thought the process would be difficult and that there would be little benefit from certification.
- Although some business owners gave favorable comments about the Caltrans certification process, a number of firm owners were highly critical about the difficulty and time requirements for certification.

Caltrans might do more to effectively communicate information about the Federal DBE Program and certification as a DBE, especially the benefits of DBE certification. It might do more to coordinate with local agencies that operate similar small business programs, and with the State of California SBE Program.

Although Caltrans appears to follow federal regulations concerning DBE certification, which requires collection and review of considerable information from program applicants, it might research other ways to make the certification process easier for potential DBEs. Appendices J and L provide perceptions of firms that have considered DBE certification or have successfully, or unsuccessfully, gone through the certification process.

Caltrans should maintain historic data on DBE certification. This could allow Caltrans to analyze trends in certification and learn more about DBE turnover. A simple method for maintaining historic DBE certification data would be to periodically preserve a list of certified DBEs in an electronic format.

Caltrans should also examine staffing, training and information systems necessary to improve its implementation the DBE certification process as well as other aspects of the Federal DBE Program.

B. Monitoring Changes to the Federal DBE Program

Federal regulations related to the Federal DBE Program regulations change periodically, and USDOT also issues new guidance concerning implementation of the Program. Caltrans should continue to monitor such developments. Other transportation agencies' implementations of the Federal DBE Program are under review in federal district courts. Caltrans should also continue to monitor relevant court decisions in those and other cases.

C. Caltrans' State-funded Contracts

Certain improvements to Caltrans' implementation of the Federal DBE Program, especially concerning contract goals and tracking of MBE/WBE participation, might also be implemented on a race- and gender-neutral basis for Caltrans and local agency contracts that are state-funded. Caltrans should review the opportunities on its state-funded contracts to further encourage participation of small businesses, including minority- and women-owned firms, as allowable under state law.

APPENDIX A.
Definitions of Terms

Appendix A provides explanations and definitions useful to understanding the Caltrans disparity study report. The following definitions are only relevant in the context of this report.

Anecdotal evidence. Anecdotal evidence includes personal accounts and perceptions of incidents — including incidents of discrimination — told from each individual interviewee's or participant's perspective.

Availability analysis. The availability analysis in this disparity study examines the relative number of minority- and women-owned firms ready, willing, and able to perform transportation-related construction and engineering work for Caltrans or subrecipient local agencies.

Business. A business is a for-profit company, including all of its establishments (equivalent to "firm").

Business listing. A business listing is a record in the Dun & Bradstreet database (or other database) of business information. A Dun & Bradstreet record is just a "listing" until the study team determines it to actually be a business establishment with a working phone number.

Business establishment. A business establishment (or simply, "establishment") is a place of business with an address and working phone number. One business can have many business establishments.

California Department of Transportation (Caltrans). Caltrans, a part of the State of California's Business, Transportation and Housing Agency, is the owner/operator of California's federal and state highway system. The agency provides intercity rail services, assistance to local airports and heliports, and provides other programs such as transportation safety.

California Unified Certification Program (CUCP) database. The statewide electronic directory of firms certified as Disadvantaged Business Enterprises (DBEs) in California under the guidelines in 49 CFR Part 26.

Certified small business. A certified small business is a business certified by the State of California that, together with affiliates, has employment of 100 or fewer workers and average annual gross receipts of $14 million or less over the previous three years (or, if a manufacturer, simply has 100 or fewer employees). To be certified as a small business by the State of California, the firm must also have its principal office in California and have its owners domiciled in California. The firm must be independently owned and operated. It cannot be dominant in its field of operation. For more on this definition, see http://www.dgs.ca.gov/pd/Programs/OSDS/SBEligibilityBenefits.aspx.

Contract. A contract is a legally binding relationship between the seller of goods or services and a buyer.

Contractor. A contractor is a firm performing a construction contract.

Controlled. Control means exercising management and executive authority for a company, per federal regulations, including 49 CFR Section 26.71.

Disadvantaged Business Enterprise (DBE). A small business owned and controlled by one or more individuals who are both socially and economically disadvantaged according to the guidelines in the Federal DBE Program (49 CFR Part 26), regardless of actual DBE certification. Membership in certain race and ethnic groups identified under "minority-owned business enterprise" in this appendix may meet the presumption of socially and economically disadvantaged. Women are also presumed to be socially and economically disadvantaged. Examination of economic disadvantage also includes investigating the gross revenues and the business owner's personal net worth (maximum of $1.32 million excluding equity in a home and in the business). Some minority- and women-owned firms do not qualify as DBEs because of the gross revenue or the net worth requirements. A business owned by a non-minority male can be certified as a DBE if the enterprise meets the requirements in 49 CFR Part 26.

Disparity. A disparity is a difference or gap between an actual outcome and a reference point. For example, a difference between an outcome for one race/ethnic group and an outcome for non-Hispanic whites may constitute a disparity.

Disparity analysis. A disparity analysis compares actual outcomes with what might be expected based on other data. Analysis of whether there is a "disparity" between the utilization and availability of minority- and women-owned businesses is one tool in examining whether there is evidence consistent with discrimination against such businesses.

Disparity index. A disparity index is computed by dividing percent utilization by percent availability and then multiplying the result by 100. A disparity index of 100 indicates "parity." Smaller disparity indices indicate larger disparities.

Dun & Bradstreet (D&B). D&B is the leading global provider of lists of business establishments and other business information (see www.dnb.com).

Employer firms. Employer firms are firms with paid employees other than the business owner and family members.

Enterprise. An enterprise is an economic unit that could be a for-profit business or business establishment; not-for-profit organization; or public sector organization.

Establishment. See "business establishment."

Federal Aviation Administration (FAA). The FAA is an agency of the USDOT that administers federal funding to support all aspects of civil aviation in the United States including airports and air traffic control centers.

Federal DBE Program. Federal DBE Program refers to the Disadvantaged Business Enterprise program established by the U.S. Department of Transportation (USDOT) after enactment of the Transportation Equity Act for the 21st Century (TEA-21) as amended in 1998. The regulations promulgated for the Federal DBE Program are set forth in 49 CFR Part 26.

Federal Highway Administration (FHWA). The FHWA is an agency of the USDOT that works with state and local governments to construct, preserve, and improve the National Highway System, other roads eligible for federal aid, and certain roads on federal and tribal lands.

Federal Transit Administration (FTA). The FTA is an agency of the USDOT that administers federal funding to support local public transportation systems including buses, subways, light rail, passenger ferry boats, and other forms of transportation.

Firm. See "business."

Federally-funded contract. For purposes of this study, a federally-funded contract (or, "federally-assisted contract") is any contract or project funded in whole or in part with FHWA or FTA financial assistance, including loans. As used in this study, it is synonymous with "federally-assisted contract."

Goals contracts. "Goals contracts" are those FHWA-funded contracts during the time period when Caltrans and local agencies applied DBE contract goals (Caltrans and local agencies set DBE contract goals for many but not all "goals-period" contracts.)

Industry. An industry is a broad classification for businesses providing related goods or services.

Local agency. A local agency is a local government in California. Many local agencies receive money through the Caltrans Local Assistance Program. More than 600 municipalities, counties, and regional agencies receive federal and state transportation funding through the Caltrans Local Assistance Program.

Local Assistance Program. The Caltrans Local Assistance Program provides financial support for local agency transportation-related construction and engineering contracts. Local agencies award such contracts using funds from the program. Caltrans retains certain oversight in the use of the funds, which may also involve federal funds. Contracts that are funded through the Local Assistance Program are referred to as "local assistance contracts."

Majority-owned business. A majority-owned business is a for-profit business that is not owned and controlled by minorities or women (see definition of "minorities" below).

Microbusiness. A microbusiness is a business that, together with affiliates, has average annual gross receipts of $3,500,000 or less (or, if a manufacturer, simply has 25 or fewer employees). For more on this definition, see http://www.dgs.ca.gov/pd/Programs/OSDS/SBEligibilityBenefits.aspx.

Minorities. Minorities are individuals who belong to one of the racial or ethnic groups identified in the federal regulations in 49 CFR Part 26:

- Black Americans (or "African Americans" in this study), who include persons having origins in any of the black racial groups of Africa;
- Hispanic Americans, who include persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- Native Americans, who include persons who are American Indians, Eskimos, Aleuts or Native Hawaiians;
- Asian-Pacific Americans, who include persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, Hong Kong, and other countries and territories in the Pacific set forth in 49 CFR Section 26.5; and
- Subcontinent Asian Americans, who include persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka.

Minority-owned business (MBE). A MBE is a firm with at least 51 percent ownership and control by minorities. Minority groups are defined according to federal regulations, as outlined in 49 CFR Section 26.5. For purposes of this study, a firm need not be certified to be counted as a minority-owned firm. Firms owned by minority women are also counted as MBEs in this study (where that information is available).

North American Industry Classification System (NAICS) codes. NAICS codes identify the primary line of business of a business enterprise. For details, see http://www.census.gov/epcd/www/naics.html.

Non-DBEs. Non-DBEs are firms that are not certified as DBEs, regardless of the race/ethnicity or gender of the owner.

Non-goals contracts. "Non-goals" contracts included state-funded contracts and those FHWA-funded contracts outside the time period when Caltrans and local agencies applied race- and gender-conscious goals.

Non-response bias. Non-response bias occurs when the observed responses to a survey question differ from what would have been obtained if non-respondents had also answered the question.

Owned. Owned indicates at least 51 percent ownership of a company. For example, a "minority-owned" business is at least 51 percent owned by one or more minorities.

Potential DBE. A potential DBE is minority- or women-owned business that is DBE-certified or appears that it could be DBE-certified (regardless of actual DBE certification) based on revenue requirements specified as part of the Federal DBE Program and other factors such as whether the firm had been denied DBE certification in the past.

Prime consultant. A prime consultant is a professional services firm that performed a prime contract for an end user, such as Caltrans.

Prime contract. A prime contract is a contract between a prime contractor or a prime consultant and the end user, such as Caltrans.

Prime contractor. A prime contractor is a construction firm that performed a prime contract for an end user, such as Caltrans.

Project. A project refers to a construction or engineering endeavor that Caltrans bid out during the study period. A project could include one or multiple prime contracts and corresponding subcontracts.

Race-and gender-conscious measures. Race-and gender-conscious measures are contracting measures that apply to businesses owned by some racial/ethnic groups but not others, or that apply to businesses owned by women but not men. A DBE contract goal is one example of a race- and gender-conscious measure. Note this term is more accurately "race-, ethnicity-, and gender-conscious measures." However, for ease of communication, the study team has shortened this term to "race- and gender-conscious measures."

Race- and gender-neutral measures. Race and gender-neutral measures apply to businesses, regardless of the race/ethnicity or gender of ownership. Race- and gender-neutral measures may include assistance in overcoming bonding and financing obstacles, simplifying bidding procedures, providing technical assistance, establishing programs to assist start-up firms, and other methods open to all firms or any disadvantaged business regardless of race or gender of ownership. (A broader list of examples can be found in 49 CFR Section 26.51(b).) Note that this term is more accurately "race, ethnicity, and gender-neutral measures. However, for ease of communication, the study team has shortened this term to "race- and gender-neutral measures."

Relevant geographic market area. The relevant geographic market area is the geographic area in the businesses working on Caltrans contracts are located (based on dollars of prime contract and subcontract awards). The relevant geographic market area is also referred to as the "local marketplace." Case law related to MBE/WBE programs requires disparity analyses to focus on the "relevant geographic market area." [1]

Remedy. A remedy is a contracting program measure that is designed to address barriers to full participation of a particular group of firms.

Small business. A small business is a business with low revenues or size (based on revenue or number of employees) relative to other firms in the industry. "Small business" does not necessarily mean that the firm is certified as such.

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[1] *See*, e.g., *Croson*, 448 U.S. at 509; 49 C.F.R. § 26.35; *Rothe*, 545 F.3d at 1041-1042; *N. Contracting*, 473 F.3d at 718, 722-23; *Western States Paving*, 407 F.3d at 995.

Small Business Administration (SBA). The Small Business Administration refers to the United States Small Business Administration, which is an independent agency of the United States government.

State-funded contract. A state-funded contract is any contract or project that is funded in whole or in part with State of California funds and is administered through Caltrans. Those contracts do not include federal funds.

Statistically significant difference. A statistically significant difference refers to a quantitative difference for which there is a relatively high probability that chance can be correctly rejected as a reasonable explanation for the difference. A standard probability that is commonly used as a benchmark in statistical significance testing is 0.95 (meaning that a difference is considered statistically significant if there is a less than 0.05 probability that random chance could correctly account for the difference).

Subconsultant. A subconsultant is a professional services firm that performed services for a prime consultant as part of a larger contract.

Subcontract. A subcontract is a contract between a prime contractor or prime consultant and another firm selling goods or services to the prime contractor or prime consultant as part of a larger contract.

Subcontractor. A subcontractor is a construction firm that performed services for a prime contractor as part of a larger project.

Subrecipient. A subrecipient is a local agency receiving USDOT financial assistance directly from Caltrans.

Supplier. A supplier is a firm that sold supplies to a prime contractor as part of a larger project.

USDOT. USDOT refers to the United States Department of Transportation, which includes the Federal Highway Administration, the Federal Transit Administration, and the Federal Aviation Administration.

Utilization. Utilization refers to the percentage of total contracting dollars of a type of work going to a group of firms (e.g., MBE/WBEs or DBEs).

White women-owned business (WBE). A WBE is a business with at least 51 percent ownership and control by non-minority women. For this study, businesses owned and controlled by minority women are counted as minority-owned businesses. A business need not be certified as a WBE or DBE to be considered a WBE.

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APPENDIX B

CALTRANS 2011-2012

LEGAL ENVIRONMENT FOR CALTRANS DBE PROGRAM

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APPENDIX B.
Legal Environment for Caltrans DBE Program

The Federal Disadvantaged Business Enterprise ("DBE") Program ("Federal DBE Program") is implemented via regulations[1] promulgated by the United States Department of Transportation ("USDOT") as authorized by the Transportation Equity Act for the 21st Century (TEA-21) as amended and reauthorized ("MAP-21" and "SAFETEA" and "SAFETEA-LU").[2] This section briefly outlines recent cases regarding the Federal DBE Program applicable to implementation of this program in California. As a recipient of certain types of federal funds, the California Department of Transportation ("Caltrans") is required to comply with federal regulations (49 CFR Part 26) and implement the Federal DBE Program. Caltrans is required to develop and submit for approval to the USDOT its DBE program, including an overall statewide annual goal for DBE participation on federally-funded contracts and a projection of what percentage of that overall annual goal it expects to meet through race- and gender-neutral means or, if necessary, race- and gender-conscious means, in accordance with the federal regulations.[3] The annual overall DBE goal, depending on the evidence available to Caltrans, will be achieved through the use of race- and gender-neutral means, and, where appropriate, through the use of race- and gender-conscious means, or a combination of these measures, by meeting the maximum feasible portion of the overall goal using race- and gender-neutral means.[4]

In the 2012 Moving Ahead for Progress in the 21st Century Act ("MAP-21"), Congress provides findings that "discrimination and related barriers" "merit the continuation of the" Federal DBE Program.[5] In a new rule amending the Federal DBE Program effective February 28, 2011,[6] the USDOT stated there is a continuing compelling need for the DBE program.[7] The USDOT concludes that, as court decisions have noted, the USDOT's DBE regulations and the statutes authorizing them "are supported by a compelling need to address discrimination and its effects."[8] The USDOT says that the "basis for the program has been established by Congress and applies on a nationwide basis…", notes that both the House and Senate FAA Reauthorization Bills contained findings reaffirming the compelling need for the program, and references additional information presented to the House of Representatives in a March 26, 2009 hearing before the Transportation and Infrastructure Committee, and a Department of Justice document

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[1] These regulations are found at 49 CFR Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs ("Federal DBE Program").

[2] Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, ___ Stat. __, preceded by Pub L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1156; preceded by Pub L. 105-178, Title I, § 1101(b), June 9, 1998, 112 Stat. 107.

[3] 49 CFR Section 26.45.

[4] 49 CFR Sections 26.45, 26.51.

[5] Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, ___ Stat ___.

[6] 76 Fed. Reg. 5083 (January 28, 2011) amending the Federal DBE Program at 49 C.F.R. Part 26.

[7] 76 F.R. at 5095.

[8] 76 F.R. at 5095.

entitled, "The Compelling Interest for Race- and Gender-Conscious Federal Contracting Programs: A Decade Later An Update to the May 23, 1996 Review of Barriers for Minority- and Women-Owned Businesses."[9] This information, the USDOT states, "confirms the continuing compelling need for race- and gender-conscious programs such as the DOT DBE program.[10]

In implementing its Federal DBE Program, Caltrans is responsible for serious, good faith consideration of workable race-, ethnic-, and gender-neutral means, including those identified in 49 CFR Section 26.51(b), that can be implemented.[11] The USDOT has advised that recipients should take affirmative steps to use as many race-neutral means of achieving DBE participation identified at 49 CFR Section 26.51(b) as possible.[12] The Ninth Circuit Court of Appeals in *Western States Paving Co. v. Washington State DOT* found that "the regulations require a state to 'meet the maximum feasible portion of [its] overall goal by using race-neutral means.'"[13] The courts have held that while a state is not required to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does "require serious, good faith consideration of workable race-neutral alternatives.[14] In formulating its implementation of the Federal DBE Program, Caltrans must assess how much of the annual DBE goal can be met through neutral means and what percentage, if any, should be met through race- and gender-conscious means.

Race- or gender-conscious measures are not appropriate unless they are to remedy identified discrimination or its effects in the state transportation contracting industry.[15] If Caltrans implements race- and gender-conscious measures, it is subject to the "strict scrutiny" analysis as applied by the courts.[16] The first prong of the strict scrutiny analysis requires a governmental entity to have a "compelling governmental interest" in remedying past identified discrimination. The Ninth Circuit and other federal courts have held that, with respect to the Federal DBE Program, state departments of transportation ("DOTs") do not need to independently satisfy this prong because Congress has satisfied the compelling interest test of the strict scrutiny analysis.[17]

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[9] *Id*.

[10] *Id*.

[11] *Western States Paving Company v. Washington State Department of Transportation*, 407 F.3d 983, 993 (9th Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006) (citing 49 CFR Section 26.51(a)).

[12] Questions and Answers Concerning Response to *Western States Paving Company v. Washington State Department of Transportation* [hereinafter DOT Guidance], available at http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm. See 49 CFR Section 26.9 (January 2006).

[13] 407 F.3d at 993; 49 CFR Section 26.51.

[14] *Western States Paving*, 407 F.3d at 993.

[15] 49 CFR Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs ("Federal DBE Program").

[16] See *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Pena*, 515 U.S. 200 (1995); *Western States Paving*, 407 F.3d 983. The Ninth Circuit Court of Appeals and other courts have applied "intermediate scrutiny" to gender-conscious programs. The Ninth Circuit has interpreted this standard to require that gender-based classifications be: (1) Supported by both an exceedingly persuasive justification; and (2) Substantially related to the achievement of that underlying objective. See *Western States Paving*, 407 F.3d at 990 n.6; *Coral Constr. Co. v. King County*, 941 F.2d 910, 931 (9th Cir. 1991); *Equal. Found. v. City of Cincinnat*i, 128 F.3d 289 (6th Cir. 1997).

[17] *Northern Contracting, Inc. v. Illinois DOT*, 473 F.3d 715, 721 (7th Cir. 2007), *reh'g and reh'g en banc denied* (7th Cir. 2007); *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf, Inc. v. Minnesota DOT and Gross Seed Co. v. Nebraska Dep't of Road*, 345 F.3d 964, 969 (8th Cir. 2003); *Adarand Constructors, Inc. v. Slater* (*Adarand VII*), 228 F.3d 1147, 1176 (10th Cir. 2000).

The second prong of the strict scrutiny analysis requires that a state DOT's implementation of the Federal DBE Program be "narrowly tailored" to remedy identified discrimination in a particular state's transportation contracting and procurement market.[18]

The narrow tailoring requirement has several components. According to the Ninth Circuit in *Western States Paving*, a state must have sufficient evidence of discrimination within the state's own transportation contracting marketplace in order to determine whether or not there is the need for race- or gender-conscious remedial action.[19] Thus, the Ninth Circuit ruled that mere compliance with federal regulations implementing the Federal DBE Program alone is not enough to satisfy strict scrutiny.[20] Second, the Court found that even where evidence of discrimination is present in a state, a narrowly tailored program should apply only to those minority groups who have actually suffered discrimination. For a specific minority group to be included in any race-conscious measures in a state's implementation of the Federal DBE Program, there must be evidence that the group suffered discrimination or its effects within the local marketplace.[21]

Federal courts have held that additional factors may also be pertinent in determining whether a state DOT's implementation of the Federal DBE Program is narrowly tailored: flexibility and limited duration of race-conscious measures, including the availability of waiver provisions; the relationship of the numerical DBE goals to the relevant market; the effectiveness of alternative race- and gender-neutral remedies; and the impact of a race-conscious remedy on the rights of third parties.[22]

In *Western States Paving*, the United States intervened to defend the Federal DBE Program's facial constitutionality, and, according to the Court, stated "that [the Federal DBE Program's] race conscious measures can be constitutionally applied only in those states where the effects of discrimination are present."[23] Accordingly, the USDOT has advised federal aid recipients that any use of race-conscious measures must be predicated on evidence that the recipient has concerning discrimination or its effects within the local transportation contracting marketplace.[24]

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[18] *Western States Paving*, 407 F3d at 995-998; *Sherbrooke Turf*, 345 F.3d at 970-71.

[19] *Western States Paving*, 407 F.3d at 997-98, 1002-03.

[20] *Id*. at 995-1003. In the *Northern Contracting* decision (January 8, 2007), the Seventh Circuit held "that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state exceeded its federal authority. IDOT here is acting as an instrument of federal policy and Northern Contracting (NCI) cannot collaterally attack the federal regulations through a challenge to IDOT's program." 473 F.3d at 722. The Seventh Circuit distinguished both the Ninth Circuit decision in *Western States Paving* and the Eighth Circuit decision in *Sherbrooke Turf*, relating to an as-applied narrow tailoring analysis. The court held that IDOT's application of a federally mandated program is limited to the question of whether the state exceeded its grant of federal authority under the Federal DBE Program. Id. at 722. The court affirmed the district court upholding the validity of IDOT's DBE program; *see*, *e.g.*, *Geod Corp. v. New Jersey Transit Corp.*, *et al.*, 746 F.Supp.2d 642 (D.N.J. 2010); *South Florida Chapter of the Associated General Contractors v. Broward County, Florida*, 544 F.Supp.2d 1336 (S.D. Fla. 2008).

[21] *Western States Paving*, 407 F.3d at 996-1000.

[22] *See, e.g.*, *id*. at 993-995; *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181.

[23] *Western States Paving*, 407 F.3d at 996; *see also* Br. for the United States, at 28 (April 19, 2004).

[24] *DOT Guidance, available at* http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm (January 2006).

Following *Western States Paving*, the USDOT recommended the use of disparity studies by state DOTs to examine whether or not there is evidence of discrimination or its effects, and how remedies might be narrowly tailored in developing their DBE Program to comply with the Federal DBE Program.[25] The USDOT suggests consideration of both statistical and anecdotal evidence, and that evidence of discrimination and its effects should be examined separately for each group presumed to be disadvantaged in 49 CFR Part 26.[26]

Therefore, Caltrans in 2006-2007 conducted a disparity study and implemented its DBE Program in 2009 as approved by the Federal Highway Administration. Caltrans is now engaging in a new disparity study to comply with the federal regulations and the Federal DBE Program, based on the most recent authority regarding the Federal DBE Program.[27]

Ongoing Review. The above represents a brief summary of the legal framework pertinent to implementation of a Federal DBE Program by Caltrans in California. Because this is a dynamic area of the law, the framework is subject to ongoing review as the law continues to evolve.

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[25] *Id.; see also* 42 CFR Section 26.45.

[26] *DOT Guidance, available at* http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm (January 2006).

[27] *See Northern Contracting*, 473 F.3d 715; *Western States Paving*, 407 F.3d 983; *Sherbrooke Turf*, 345 F.3d 964; *Adarand VII*, 228 F.3d 1147; *Geod Corp.*, 746 F.Supp.2d 642; *South Florida Chapter of AGC*, 544 F.Supp.2d 1336. *See also H.B. Rowe Co., Inc. v. Tippett*, 615 F.3d 233 (4th Cir. 2010)(Court upheld North Carolina DOT MBE program on its face and as applied to African and Native American subcontractors and struck down program as applied to WBEs and Asian and Hispanic American subcontractors); *Rothe Development Corp. v. U.S. Department of Defense,* 545 F.3d 1023 (Fed. Cir. 2008)(Court held unconstitutional Department of Defense social and economic disadvantaged businesses ("SDBs") program).

APPENDIX C.
Collection of Availability Information

The study team analyzed MBE/WBE availability for transportation-related construction and engineering prime contracts and subcontracts that Caltrans awarded between January 1, 2007 and December 31, 2010. Appendix C expands on the analysis presented in Chapter 4 by describing the study team's:

A. General approach to collecting availability information;

B. Development of the business establishments list;

C. Development of the interview instrument;

D. Interview execution and performance; and

E. Additional considerations related to measuring availability.

A. General Approach to Collecting Availability Information

BBC contracted with CRI to conduct telephone interviews with thousands of business establishments in California. Business establishments that CRI interviewed were businesses with locations in California that the study team identified as doing work in fields closely related to the types of transportation-related construction and engineering contracts that Caltrans awarded during the study period. The study team began the interview process by determining relevant subindustries for each relevant Caltrans contract element and identifying 8-digit D&B work specialization codes that best corresponded to those subindustries.[1] The study team then collected information about California business establishments that D&B listed as having their primary lines of business within those work specializations. Rather than drawing a sample of business listings from D&B, the study team attempted to contact every business establishment listed under relevant work specialization codes.[2]

CRI attempted to reach 46,196 business establishments and were able to successfully contact 15,496 business establishments, about one-half of the establishments with valid phone listings. Of business establishments that CRI successfully contacted, 10,172 establishments completed availability interviews. This total included 7,431 construction establishments and 2,741 engineering establishments.

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[1] D&B has developed 8-digit industry codes that provide more precise definitions of firm specializations than the 4-digit SIC codes or the NAICS codes that the federal government has prepared.

[2] Because D&B organizes its database by "business establishment" and not by "business" or "firm," BBC purchased business listings in that fashion. Therefore, in many cases, the study team purchased information about multiple California locations of a single business and called all of those locations. BBC's method for consolidating information for different establishments that were related to the same business is described later in this appendix.

B. Development of the Business Establishments List

The study team did not expect every business establishment that it contacted to be potentially available for Caltrans work. The study team's goal was to develop, with a high degree of precision, unbiased estimates of the relative availability of MBE/WBEs for the types of transportation-related construction and engineering contracts that Caltrans awarded during the study period. In fact, for some work specializations, BBC anticipated that relatively few businesses would be available to perform that type of work for Caltrans.

In the same vein, BBC did not design the research effort so that the study team would contact every California business possibly performing construction or engineering work. To do so would have required including work specializations that are only marginally related to the types of transportation-related construction and engineering contracts that Caltrans awarded during the study period. In addition, some business establishments working in relevant subindustries may have been missing from corresponding D&B listings.

BBC determined the types of work involved in Caltrans contract elements by reviewing prime contract and subcontract dollars that went to different types of businesses during the study period. Figure C-1 lists the 8-digit work specialization codes within construction and engineering that the study team determined were most related to the contract dollars that Caltrans awarded during the study period. BBC included those work specializations as part of the availability, utilization, and disparity analyses. The study team grouped those specializations into distinct subindustries, which are also presented in Figure C-1.

Figure C-1.
Construction and engineering-related work specializations and subindustries included in the availability, utilization, and disparity analyses

Industry code	Industry description
Construction	
Highway and street construction	
1611-0000	Highway and street construction
1611-0200	Surfacing and paving
1611-0202	Concrete construction; roads, highways, sidewalks, etc.
1611-0204	Highway and street paving contractor
1611-0205	Resurfacing contractor
1611-0207	Gravel or dirt road construction
1611-9901	General contractor, highway and street construction
1611-9902	Highway and street maintenance
1622-0000	Bridge, tunnel, and elevated highway construction
1622-9901	Bridge construction
1622-9902	Highway construction, elevated
1622-9903	Tunnel construction
1622-9904	Viaduct construction
1629-0105	Drainage system construction
1629-0108	Irrigation system construction
1629-9904	Pile driving contractor
1771-0000	Concrete work
1771-0102	Grouting work
1771-0103	Gunite contractor
1771-0201	Curb construction
1771-0202	Sidewalk contractor
1771-0300	Driveway, parking lot, and blacktop contractors
1771-0301	Blacktop (asphalt) work
1771-0303	Parking lot construction
1771-9901	Concrete pumping
1771-9902	Concrete repair
1799-9929	Sign installation and maintenance
Fences, guardrails and signs	
1611-0100	Highway signs and guardrails
1611-0101	Guardrail construction, highways
1611-0102	Highway and street sign installation
1799-9912	Fence construction
Excavation and drilling	
1611-0203	Grading
1794-0000	Excavation work
1799-9906	Core drilling and cutting
Land site prep	
1629-0400	Land preparation construction
1629-9902	Earthmoving contractor
1629-9903	Land cleariing contractor
1741-0100	Foundation and retaining wall construction
1799-0900	Building site preparation
Water, sewer, and utility lines	
1623-0000	Water, sewer, and utility lines
1623-0101	Gas main construction
1623-0203	Telephone and communication line construction
1623-0300	Water and sewer line construction
1623-0303	Water main construction
1623-9903	Pipe laying construction
1623-9904	Pipeline construction, nsk
1623-9906	Underground utilities contractor
1731-0302	Fiber optic cable installation
Asphalt and concrete supply	
2951-0000	Asphalt paving mixtures and blocks
2951-0200	Paving mixtures
2951-0201	Asphalt and asphaltic paving mixtures
2951-0203	Concrete, asphaltic
3272-0303	Concrete products, precast, nec
3273-0000	Ready-mixed concrete
5032-0100	Paving materials
5032-0502	Concrete and cinder block
5211-0502	Cement
Wrecking and demolition	
1629-9901	Blasting contractor, except building demolition
1795-0000	Wrecking and demolition work
1795-9901	Concrete breaking for streets and highways
1795-9902	Demolition, buildings and other structures
Electrical work	
1731-0000	Electrical work
1731-0100	Electric power systems contractors
1731-0103	Standby or emergency power specialization
1731-0300	Communications specialization
1731-9903	General electric contractor
1731-9904	Lighting contractor
Construction sand and gravel	
1442-0000	Construction sand and gravel
1442-0201	Gravel mining
Painting and striping	
1721-0303	Pavement marking contractor
1721-0300	Industrial painting

Figure C-1 (continued).
Construction and engineering-related work specializations and subindustries included in the availability, utilization, and disparity analyses

Construction (continued)

Trucking

4212-0000	Local trucking, without storage
4212-9905	Dump truck haulage
4212-9908	Heavy machinery transport, local
4212-9912	Steel hauling, local
4213-9905	Heavy machinery transport

Flagging services

7359-9912	Work zone traffic equipment (flags, cones, barrels, etc.)
7389-9921	Flagging services (traffic control)

Other construction supplies

3441-0201	Bridge sections, prefabricated, highway
3669-0200	Transportation signaling devices
5039-9912	Soil erosion control fabrics

Rebar and reinforcing steel

3449-0101	Bars, concrete reinforcing: fabricated steel
1791-9902	Concrete reinforcement, placing of

Other concrete supplies

5051-0209	Forms, concrete construction (steel)

Heavy construction equipment and rental

7353-0000	Heavy construction equipment rental

Landscape services

0782-0000	Lawn and garden services
0782-9903	Landscape contractors

Other

1791-0000	Structural steel erection
1791-9907	Precast concrete structural framing or panels, placing of

Engineering

Engineering

8711-0000	Engineering services
8711-0400	Construction and civil engineering
8711-0402	Civil engineering

Transportation consulting

8742-0410	Transportation consultant
8748-0204	Traffic consultant

Surveying and mapping

7389-0800	Mapmaking services
7389-0801	Mapmaking or drafting, including aerial
7389-0802	Photogrammetric mapping
8713-0000	Surveying services

Landscape architecture

0781-0000	Landscape counseling and planning

Archeological expeditions

8733-0201	Archeological expeditions

Construction management

8741-9902	Construction management

Environmental research, consulting and testing

8748-9905	Environmental consultant

Testing services

7389-0200	Inspection and testing services
8734-0300	Pollution testing
8734-0301	Hazardous waste testing
8734-9909	Soil analysis

Source: BBC Research & Consulting from D&B information and Caltrans and local agency contracts.

C. Development of the Interview Instrument

BBC drafted an availability interview instrument to collect business information from construction and engineering-related business establishments.[3] Caltrans staff reviewed the interview instrument before the study team used it in the field. The interview instrument that the study team used with construction establishments is presented as the end of Appendix C. The study team modified the construction interview instrument slightly for use with engineering-related establishments in order to reflect terms more commonly used in the latter industry (e.g., the study team substituted the words "prime consultant" and "subconsultant" for "prime contractor" and "subcontractor" when interviewing engineering establishments).

BBC also developed a fax and email version of the interview instrument for business establishments that the study team initially contacted by telephone but that reported a preference to complete the interview in fax or email format. Those establishments returned completed interviews to the study team via fax or e-mail.

Interview structure. The availability interview included 15 sections, and CRI covered all sections with each business establishment that they successfully contacted and that was willing to complete an interview. Interviewers did not know the race/ethnicity or gender of business owners when calling business establishments.

1. Identification of purpose. The interviews began by identifying Caltrans as the survey sponsor and describing the purpose of the study (i.e., "developing a list of companies involved in construction, maintenance, or design work on a wide range of highway and other state or local government transportation-related projects").

2. Verification of correct business name. The interviewer verified that he or she had reached the correct business, and if not, inquired about the correct contact information for the correct business. When the business name was not correct, interviewers asked if the respondent knew how to contact the business. CRI followed up with the desired company based on the new contact information (see areas "X" and "Y" of the Availability Interview Instrument at the end of Appendix C).

3. Verification of work related to transportation-related projects. The interviewer asked whether the organization does work or provides materials related to construction, maintenance, or design on transportation-related projects (Question A1). Interviewers continued the interview with businesses that responded "yes" to that question.

4. Verification of for-profit business status. The interviewer asked whether the organization was a for-profit business as opposed to a government or not-for-profit entity (Question A2). Interviewers continued the interview with businesses that responded "yes" to that question.

5. Confirmation of main line of business. Businesses confirmed their main lines of business according to D&B (Question A3). If D&B's work specialization codes were incorrect, businesses described their main lines of business (Question A4). After the interview was complete, BBC

[3] BBC used similar interview instruments in previous availability analyses, including as part of Caltrans' 2007 disparity study.

coded new information on main lines of business into appropriate 8-digit D&B work specialization codes.

6. Sole location or multiple locations. Because the study team interviewed business establishments and not businesses or firms, the interviewer asked business owners or managers if their businesses had other locations (Question A5), and whether their establishments were affiliates or subsidiaries of other firms (Questions A8 and A9).

7. Past bids or work with government agencies and private sector organizations. The interviewer asked about bids and work on past government and private sector contracts. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B1 through B8).

8. Qualifications and interest in future transportation work. The interviewer asked about businesses' qualifications and interest in future work with Caltrans and other government agencies. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B9 through B12).

9. Geographic areas. The interviewer asked a series of questions about the geographic regions California in which businesses serve customers (Questions C1a through C1j).

10. Year established. The interviewer asked businesses to identify the approximate year in which they were established (Question D1).

11. Largest contracts. The study team asked businesses to identify the value of the largest contract on which they had bid on or had been awarded in California during the past five years. CRI asked those questions for both prime contracts and subcontracts (Questions D2 through D4).

12. Ownership. The interviewer asked whether businesses were at least 51 percent owned and controlled by women and/or minorities. If businesses indicated that they were minority-owned, they were also asked about the race/ethnicity of ownership (Questions E1 through E3). The study team confirmed that information through several other data sources, including California Unified Certification Program lists an agency review.

When information about race/ethnicity or gender of ownership conflicted between sources, the study team reconciled that information through follow-up telephone calls with the businesses.

13. Business size. The interviewer asked several questions about the size of businesses in terms of their revenues and number of employees. For businesses with multiple locations, this section also asked about their revenues and number of employees across all locations (Questions F1 through F6).

14. Potential barriers in the marketplace. The interviewer asked a series of questions concerning general insights on the marketplace and Caltrans contracting practices (Questions G1a through G1j). The interview also included an open-ended question about the local marketplace (Question G2).

15. Contact information. The interview concluded by collecting complete contact information for the establishment and the individual who completed the interview (Questions H1 through H6).

D. Interview Execution and Responses

BBC held planning and training sessions both in person and via telephone with CRI executives and interviewers prior to conducting the availability interviews. CRI conducted the interviews in late 2011 and early 2012. CRI programmed the interviews and conducted them via telephone. CRI provided BBC with daily and weekly data reports.

To minimize non-response, CRI made at least five attempts to successfully reach each business establishment. CRI identified and attempted to interview an available company representative such as the owner, manager, chief financial officer, or other key official who could provide accurate and detailed responses to the questions included in the interview.

Figure C-2. Disposition of attempts to interview business establishments

Note:

After up to five attempts to complete an interview with each establishment.

Source:

BBC Research & Consulting from 2011-12 availability Interviews.

	Number of firms	Percent of business listings
Beginning list	**46,196**	
Less duplicate numbers	882	
Less non-working phone numbers	10,012	
Less wrong number/business	2,545	
Unique business listings with working phone numbers	**32,757**	**100.0** %
Less no answer	9,362	28.6
Less could not reach responsible staff member	6,427	19.6
Less language barrier	331	1.0
Less unreturned fax/email	1,138	3.5
Establishments successfully contacted	**15,499**	**47.3** %

Establishments that the study team successfully contacted. Figure D-2 presents the disposition of 46,196 business establishments that the study team attempted to contact for availability interviews and how that number resulted in the 15,499 establishments that the study team was able to successfully contact.

Non-working or wrong phone numbers. Some of the business listings that the study team purchased from D&B and that CRI attempted to contact were:

- Duplicate phone numbers (882 listings); or
- Non-working phone numbers (10,012 listings); or
- Wrong numbers for the desired businesses (2,545 listings).

Some non-working phone numbers and wrong numbers reflected businesses going out of business or changing their names and phone numbers between the time that D&B listed them and the time that the study team attempted to contact them.

Working phone numbers. As shown in Figure D-2, there were 32,757 business establishments with working phone numbers that CRI attempted to contact. CRI was unsuccessful in contacting many of those businesses for various reasons:

- CRI could not reach anyone after five attempts at different times of the day and on different days of the week for 9,362 establishments.
- CRI could not reach a responsible staff member after five attempts at different times of the day on different days of the week for 6,427 establishments.
- CRI could not conduct availability interviews due to language barriers for 331 establishments.
- CRI sent hardcopy fax or email availability interviews upon request but did not ultimately receive completed interviews for 1,138 establishments.

After taking into account those unsuccessful attempts, CRI was able to successfully contact 15,499 business establishments, or 47 percent of business establishments with valid phone listings.

Establishments included in the availability database. Figure C-3 presents the disposition of the 15,499 business establishments that CRI successfully contacted and how that number resulted in the 3,377 that the study team included in the availability database.

Figure C-3.
Disposition of successfully contacted business establishments

	Number of firms
Establishments successfully contacted	**15,499**
Less establishments not interested in discussing availability for Caltrans work	5,324
Establishments that completed interviews about firm characteristics	**10,175**
Less no road and highway related work	5,764
Less not a for-profit business	158
Less multiple establishments	319
Less line of work outside scope	117
Less no past bid/award	387
Less no interest in future work	34
Less established after the study period (2011)	19
Firms available for Caltrans work	**3,377**

Note: Eight hundred and nine establishments were not included in the availability marketplace analysis (Appendix H) because they did not respond to question D2 or D4 on the availability survey.

Source: BBC Research & Consulting from 2011-2012 availability Interviews.

Establishments not interested in discussing availability for Caltrans work. Of the 15,499 business establishments that the study team successfully contacted, 5,324 establishments were not interested in discussing availability for Caltrans work. Thus, about two-thirds of successfully-contacted business establishments (66%) completed availability interviews (10,175 establishments).

Establishments available for Caltrans work. The study team only deemed a portion of the business establishments that completed availability interviews as potentially available for the transportation-related construction or engineering prime contracts and subcontracts that Caltrans awarded during the study period. The study team excluded some of the businesses that completed interviews from the availability database for various reasons:

- BBC excluded 5,764 establishments that indicated that their businesses were not involved in construction or engineering work.
- Of the establishments that completed availability interviews, 158 indicated that they were not a for-profit business. The interview ended when respondents reported that their establishments were not for-profit businesses.
- Three hundred and nineteen establishments were actually different locations of the same businesses. Prior to analyzing results, BBC combined responses from multiple locations of the same business into a single data record.
- BBC excluded 117 establishments that indicated that their businesses were involved in construction or engineering work but reported that their main lines of business were outside of the study scope.
- BBC excluded 387 firms that reported not having bid on or been awarded contracts in California within the past five years.
- BBC excluded 34 firms that reported not being qualified or interested in either prime contracting or subcontracting opportunities with Caltrans.
- BBC excluded 19 firms that reported being established in 2011 or later. These firms would not have been available for contract and subcontract pieces awarded during the Caltrans study period of January 1, 2007 through December 31, 2010.

After those exclusions, the interview effort produced a database of 3,377 businesses potentially available for Caltrans work.

Coding responses from multi-location firms. Responses from different locations of the same business were combined into a single, summary data record according to several rules:

- If any of the establishments reported bidding or working on a contract within a particular subindustry, the study team considered the business to have bid or worked on a contract in that subindustry.
- The study team combined the roles of work that establishments reported (i.e., prime contractor or subcontractor) into a single response, again corresponding to the appropriate subindustry. For example, if one establishment reported that it works as a prime contractor and another establishment reported that it works as a subcontractor, then the study team considered the business as available for both prime contracts and subcontracts within the relevant subindustry.

- If any establishment reported serving customers within any of the 10 regions of California (see Questions Ca- Cj of the Availability Interview Instrument), then the study team considered the firm to be available for work in the specified regions.

- Except when there was a large discrepancy among individual responses regarding establishment dates, BBC used the median founding date that the establishments provided. In cases of large discrepancies, BBC followed up with the business establishments to verify establishment date information.

- BBC considered the largest contract that any establishment reported having bid or worked on as the largest contract for which the business could be considered available.

- BBC considered the largest revenue total that any establishment reported as the revenue cap for the business (for purposes of determining status as Potential DBEs).

- BBC determined the number of employees for businesses by calculating the mode or the mean of responses from its establishments.

- BBC coded businesses as women- or minority-owned if most of its establishments indicated such status.

E. Additional Considerations Related to Measuring Availability

The study team made several additional considerations related to its approach to measuring availability, particularly as they related to Caltrans' implementation of the Federal DBE program.

Not providing a count of all businesses available for Caltrans work. The purpose of the availability interviews was to provide precise and representative estimates of the percentage of MBE/WBEs available for Caltrans work. The availability analysis did not provide a comprehensive listing of every business that could be available for Caltrans work and should not be used in that way. Federal courts have approved the custom census approach to measuring availability that BBC used in this study. USDOT's Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program also recommends a similar approach to measuring availability for implementation of the Federal DBE Program.[4]

Not using MBE/WBE or DBE directories, prequalification lists, or bidders lists. USDOT guidance for determining MBE/WBE availability recommends dividing the number of firms in an agency's DBE directory by the total number of firms in the marketplace, as reported in U.S. Census data. As another option, the USDOT suggests using a list of prequalified firms or a bidders list to estimate the availability of MBE/WBEs for an agency's prime contracts and subcontracts.

[4] USDOT. *Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program,* http://osdbu.dot.gov/?TabId=133.

The primary reason why the study team rejected such approaches when measuring MBE/WBE availability for Caltrans is that dividing a simple count of certified DBEs by total firms does not provide the data on business characteristics that the study team desired for the disparity study. For example, the interviews provide data on businesses' qualifications, bid capacities, and interests in Caltrans work, which allowed the study team to take a more refined approach to measuring availability.

The methodology applied in this study takes a custom census approach and adds several layers of refinement to precisely measure MBE/WBE availability. Court cases involving state implementation of the Federal DBE Program have approved the use of a custom census approach to measuring availability.

Using D&B lists as the sample frame. BBC began its custom census approach to measuring availability with D&B business lists. D&B does not require firms to pay a fee to be included in its listings — it is completely free to listed firms. D&B provides the most comprehensive private database of business listings in the United States. Even so, the database does not include all establishments operating in California:

- There can be a lag between formation of a new business and inclusion in D&B, meaning that the newest businesses may be underrepresented in the sample frame. Based on information from BBC's interview effort, newly formed businesses are more likely to be minority- or women-owned, suggesting that MBE/WBEs might be slightly underrepresented in the final availability database.

- Although D&B includes home-based businesses, those businesses are more difficult to identify and are thus somewhat less likely than other businesses to be included in D&B listings. Small, home-based businesses are more likely than large firms to be minority- or women-owned, which again suggests that MBE/WBEs might be slightly underrepresented in the final availability database.

BBC is not able to quantify how much, if any, underrepresentation of MBE/WBEs exists in the final availability database. However, BBC concludes that any such underrepresentation would be minor and would not have a meaningful effect on the availability and disparity analyses presented in this report. In addition, there are no substitute business listings that would better address such issues.

Selection of specific subindustries. Defining subindustries based on specific work specialization codes (e.g., NAICS, SIC, or D&B codes) is a standard step in analyzing an economic sector. Government and private sector economic data are typically organized according to such codes. As with any such research, there are limitations when choosing specific D&B work specialization codes to define sets of establishments to be interviewed. For example, it was not possible for BBC to include all firms possibly doing work related to transportation construction and engineering contracts without conducting interviews with nearly every firm in California.

In addition, some D&B codes are imprecise and overlap with other business specialties, and D&B does not maintain an 8-digit level of detail for each firm in its database. Some businesses span several types of work, even at the 4-digit level of specificity. That overlap can make classifying firms into single main lines of business difficult and imprecise. When the study team asked business owners and managers to identify main lines of business, they often gave broad answers. For those and other reasons, BBC combined many of the work specialization codes into broader subindustries to more accurately classify firms in the availability database.

Non-response bias. An analysis of non-response bias considers whether businesses that were not successfully interviewed are systematically different from those that were successfully interviewed and included in the final data set. There are opportunities for non-response bias in any survey effort. The study team considered the potential for non-response bias due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

Research sponsorship. Interviewers introduced themselves by identifying Caltrans as the interview sponsor because firms may be less likely to answer somewhat sensitive business questions if the interviewer was unable to identify the sponsor. In past interview efforts — particularly those related to availability studies — BBC has found that identifying the sponsor substantially increases businesses' willingness to participate.

Work specializations. Businesses in highly-mobile fields, such as trucking, may be more difficult to reach for availability interviews than businesses more likely to work out of a fixed office (e.g., engineering firms). This factor suggests that response rates may differ by work specialization. Simply counting all interviewed firms across work specializations to determine overall MBE/WBE availability would lead to estimates that were biased in favor of types of businesses that could be easily contacted by telephone.

Work specialization as a potential source of non-response bias in the BBC availability analysis is minimal because the availability analysis compares firms within particular work fields before determining an MBE/WBE availability figure. In other words, the potential for trucking firms in particular to be less likely to complete an interview is less important, because MBE/WBE trucking firms completing interviews are compared with other trucking firms and not to all firms across all specializations. In this example, work specialization would be a source of non-response bias only if particular subsets of trucking firms were less likely than other subsets to be easily contacted by telephone.

Language barriers. Caltrans contracting documents are in English and are not in other languages. The study team made the decision to only include businesses able to complete the interview in English in the availability analysis to eliminate language barriers as a potential explanation for any differences in outcomes observed between MBE/WBEs and majority-owned firms. BBC attempted to overcome any language barriers by making extra efforts to reach a firm representative who could conduct the interview in English. Firms unable to complete the interviews due to language barriers represented 1 percent of the valid business list.

Response reliability. Business owners and managers were asked questions that may be difficult to answer, including questions about revenues and employment. For that reason, the study team collected related D&B information for their establishment and asked respondents to confirm that information or provide more accurate estimates. Further, respondents were typically not asked to give absolute figures for difficult questions such as revenue and number of employees. Rather, they were given ranges of dollar figures and employment levels.

BBC explored reliability of interview responses in a number of ways. For example:

- BBC also reviewed data from the availability interviews in light of information from other sources such as the CUCP database and information about firms collected from Caltrans and Local Assistance contracts. For example, the CUCP includes data on the race/ethnicity and gender of the owners of DBE-certified businesses. The study team compared interview responses concerning firm ownership with the CUCP data.

- Caltrans reviewed certain firm-level data developed from the availability interviews.

- BBC also examined Caltrans and local agency contract data for 2007 through 2010 to explore the largest contracts and subcontracts awarded to companies participating in the availability interviews. BBC was able to compare interview responses concerning largest contracts received since 2007 with actual Caltrans and local agency contract data.

Caltrans Disparity Study — Availability Survey Instrument [Construction]

Hello. My name is [*interviewer name*] from Customer Research International. We are calling on behalf of the California Department of Transportation (Caltrans).

This is not a sales call. Caltrans is developing a list of companies involved in construction, maintenance, or design on a wide range of highway and other state or local government transportation-related projects. Who can I speak with to get the information we need from your firm?

[AFTER REACHING AN APPROPRIATELY SENIOR STAFF MEMBER, THE INTERVIEWER SHOULD RE-INTRODUCE THE PURPOSE OF THE SURVEY AND BEGIN WITH QUESTIONS]

[IF ASKED, THE INFORMATION DEVELOPED IN THESE INTERVIEWS WILL ADD TO CALTRANS' EXISTING DATA ON COMPANIES INTERESTED IN WORKING WITH THE DEPARTMENT]

X1. I have a few basic questions about your company and the type of work you do. Can you confirm that this is [*firm name*]?

1=RIGHT COMPANY – SKIP TO A1

2=NOT RIGHT COMPANY

99=REFUSE TO GIVE INFORMATION – TERMINATE

Y1. Can you give me any information about [*firm name*]?

1=Yes, same owner doing business under a different name – SKIP TO Y4

2=Yes, can give information about named company

3=Company bought/sold/changed ownership – SKIP TO Y4

98=No, does not have information – TERMINATE

99=Refused to give information – TERMINATE

Y3. Can you give me the complete address or city for [*firm name*]? – SKIP TO Y5

(NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT:

. STREET ADDRESS

. CITY

. STATE

. ZIP

1=VERBATIM

Y4. And what is the new name of the business that used to be [*firm name*]?

(ENTER UPDATED NAME)

1=VERBATIM

Y5. Can you give me the name of the owner or manager of the new business?

(ENTER UPDATED NAME)

1=VERBATIM

Y6. Can I have a telephone number for him/her?

(ENTER UPDATED PHONE)

1=VERBATIM

Y7. Can you give me the complete address or city for [*new firm name*]?

1=VERBATIM

Y8. Do you work for this new company?

1=YES

2=NO – TERMINATE

A1. First, I want to confirm that your firm does work or provides materials related to construction, maintenance, or design on transportation-related projects. Is this correct?

(NOTE TO INTERVIEWER – INCLUDES ANY WORK RELATED TO CONSTRUCTION, MAINTENENCE OR DESIGN SUCH AS BUILDING AND PARKING FACILITIES, PAVING AND CONCRETE, TUNNELS, BRIDGES AND ROADS AND OTHER TRANSPORTATION-RELATED PROJECTS. IT ALSO INCLUDES TRUCKING AND HAULING)

(NOTE TO INTERVIEWER - INCLUDES HAVING DONE WORK, TRYING TO SELL THIS WORK, OR PROVIDING MATERIALS)

1=Yes

2=No - TERMINATE

A2. Let me confirm that [*firm name / new firm name*] is a business, as opposed to a non-profit organization, a foundation, or a government office. Is that correct?

1=Yes, a business

2=No, other - TERMINATE

A3. Let me also confirm what kind of business this is. The information we have from Dun & Bradstreet indicates that your main line of business is [*SIC Code description*]. Is this correct?

(NOTE TO INTERVIEWER - IF ASKED, DUN & BRADSTREET OR D&B, IS A COMPANY THAT COMPILES BUSINESS INFORMATION THROUGHOUT THE COUNTRY)

1=Yes – SKIP TO A5

2=No

98=(DON'T KNOW)

99=(REFUSED)

A4. What would you say is the main line of business at [*firm name / new firm name*]?

(NOTE TO INTERVIEWER: IF RESPONDENT INDICATES THAT FIRM'S MAIN LINE OF BUSINESS IS "GENERAL CONSTRUCTION" OR GENERAL CONTRACTOR," PROBE TO FIND OUT IF MAIN LINE OF BUSINESS IS CLOSER TO INDUSTRIAL BUILDING CONSTRUCTION OR HIGHWAY AND ROAD CONSTRUCTION.)

(ENTER VERBATIM RESPONSE)

1=VERBATIM

A5. Is this the sole location for your business, or do you have offices in other locations?

1=Sole location

2=Have other locations

98=(DON'T KNOW)

99=(REFUSED)

A8. Is your company a subsidiary or affiliate of another firm?

1=Independent – SKIP TO B1

2=Subsidiary or affiliate of another firm

98=(DON'T KNOW) – SKIP TO B1

99=(REFUSED) – SKIP TO B1

A9. What is the name of your parent company?

1=ENTER NAME

98=(DON'T KNOW)

99=(REFUSED)

A9. ENTER NAME OF PARENT COMPANY

1=VERBATIM

B1. Next, I have a few questions about your company's role in transportation-related construction, maintenance or design. During the past five years, has your company submitted a bid or a price quote for any part of a contract for a state or local government agency in California?

1=Yes

2=No – SKIP TO B3

98=(DON'T KNOW) – SKIP TO B3

99=(REFUSED) – SKIP TO B3

B2. Were those bids or price quotes to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

1=Prime contractor

2=Subcontractor

3=Trucker/hauler

4=Supplier (or manufacturer)

98=(DON'T KNOW)

99=(REFUSED)

B3. During the past five years, has your company received an award for work on any part of a contract for a state or local government agency in California?

1=Yes

2=No – SKIP TO B5

98=(DON'T KNOW) – SKIP TO B5

99=(REFUSED) – SKIP TO B5

B4. Were those awards to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

1=Prime contractor

2=Subcontractor

3=Trucker/hauler

4=Supplier (or manufacturer)

98=(DON'T KNOW)

99=(REFUSED)

B5. During the past five years, has your company submitted a bid or a price quote for any part of a contract for a private sector organization in California?

1=Yes

2=No – SKIP TO B7

98=(DON'T KNOW) – SKIP TO B7

99=(REFUSED) – SKIP TO B7

B6. Were those bids or price quotes to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

1=Prime contractor

2=Subcontractor

3=Trucker/hauler

4=Supplier (or manufacturer)

98=(DON'T KNOW)

99=(REFUSED)

B7. During the past five years, has your company received an award for work on any part of a contract for a private sector organization in California?

1=Yes

2=No – SKIP TO B9

98=(DON'T KNOW) – SKIP TO B9

99=(REFUSED) – SKIP TO B9

B8. Were those awards to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

1=Prime contractor
2=Subcontractor
3=Trucker/hauler
4=Supplier (or manufacturer)
98=(DON'T KNOW)
99=(REFUSED)

B9. Please think about future transportation-related work as you answer the following few questions. Is your company qualified and interested in working with Caltrans as a prime contractor?

1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)

B10. Is your company qualified and interested in working with cities, counties, or other local transportation agencies in California as a prime contractor?

1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)

B11. Is your company qualified and interested in working with Caltrans as a subcontractor, trucker/hauler, or supplier?

1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)

B12. Is your company qualified and interested in working with cities, counties, or other local transportation agencies in California as a subcontractor, trucker/hauler, or supplier?

1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)

Now I want to ask you about the geographic areas your company serves within California. As you answer, think about whether your company could be involved in potential transportation-related projects in that region.

C1a. Could your company do work in the North Coast Region, extending from Mendocino through Eureka to the Oregon border?

[NOTE TO INTERVIEWER: IF ASKED, THE NORTH COAST AREA IS CALTRANS DISTRICT 1, WHICH INCLUDES DEL NORTE, HUMBOLDT, LAKE, AND MENDOCINO COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1b. Could your company do work in the Shasta-Redding Area, extending from Red Bluff through Redding to the Oregon border?

[NOTE TO INTERVIEWER: IF ASKED, THE SHASTA-REDDING AREA IS CALTRANS DISTRICT 2, WHICH INCLUDES LASSEN, MODOC, PLUMAS, SHASTA, SISKIYOU, TEHAMA, AND TRINITY COUNTIES]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1c. Could your company do work in the Sacramento-Tahoe Region, extending through the Sacramento Valley to Lake Tahoe and up to Chico?

[NOTE TO INTERVIEWER: IF ASKED, THE SACRAMENTO-TAHOE AREA IS CALTRANS DISTRICT 3, WHICH INCLUDES BUTTE, COLUSA, EL DORADO, GLENN, NEVADA, PLACER, SACRAMENTO, SIERRA, SUTTER, YOLO, AND YUBA COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1d. Could your company do work in the San Francisco Bay Area, extending from San Jose to Santa Rosa?

[NOTE TO INTERVIEWER: IF ASKED, THE SAN FRANCISCO BAY AREA IS CALTRANS DISTRICT 4, WHICH INCLUDES ALAMEDA, CONTRA COSTA, SONOMA, MARIN, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SOLANO, AND NAPA COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1e. Could your company do work in the Central Coast Region, extending from Santa Barbara to Salinas?

[NOTE TO INTERVIEWER: IF ASKED, THE CENTRAL COAST AREA IS CALTRANS DISTRICT 5, WHICH INCLUDES MONTEREY, SAN BENITO, SAN LUIS OBISPO, SANTA BARBARA, AND SANTA CRUZ COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1f. Could your company do work in the Central Valley, extending from Bakersfield to Stockton?

[NOTE TO INTERVIEWER: IF ASKED, THE CENTRAL VALLEY IS CALTRANS DISTRICTS 6 AND 10, WHICH INCLUDE ALPINE, AMADOR, CALAVERAS, FRESNO, KERN, KINGS, MADERA, MARIPOSA, MERCED, SAN JOAQUIN, STANISLAUS, TUOLUMNE, AND TULARE COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1g. Could your company do work in the Bishop Region, extending from Bishop to Mono Lake along the Nevada border?

[NOTE TO INTERVIEWER: IF ASKED, THE BISHOP AREA IS CALTRANS DISTRICT 9, WHICH INCLUDES INYO AND MONO COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1h. Could your company do work in the San Bernardino-Riverside Region, including San Bernardino and Riverside and extending east to Arizona?

[NOTE TO INTERVIEWER: IF ASKED, THE SAN BERNARDINO-RIVERSIDE AREA IS CALTRANS DISTRICT 8, WHICH INCLUDES RIVERSIDE AND SAN BERNARDINO COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1i. Could your company do work in the Los Angeles Basin, extending from San Clemente to Ventura and east to Pomona?

[NOTE TO INTERVIEWER: IF ASKED, THE LOS ANGELES BASIN IS CALTRANS DISTRICTS 7 AND 12, WHICH INCLUDE LOS ANGELES, VENTURA, AND ORANGE COUNTIES.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1j. Could your company do work in the San Diego Region, extending from San Diego and Oceanside east to the Arizona border?

(NOTE TO INTERVIEWER: IF ASKED THE SAN DIEGO AREA IS CALTRANS DISTRICT 11, WHICH INCLUDES SAN DIEGO AND IMPERIAL COUNTIES.)

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

D1. About what year was your firm established?

(RECORD FOUR-DIGIT YEAR, e.g., '1977')

9998 = (DON'T KNOW)

9999 = (REFUSED)

1=NUMERIC (1600-2008)

D2. In rough dollar terms, what was the largest transportation-related contract or subcontract your company was awarded in California during the past five years?

(NOTE TO INTERVIEWER – IF ASKED, INCLUDES EITHER PRIVATE SECTOR OR PUBLIC SECTOR)

(NOTE TO INTERVIEWER - INCLUDES CONTRACTS NOT YET COMPLETE)

(NOTE TO INTERVIEWER - READ CATEGORIES IF NECESSARY)

1=$100,000 or less

2=More than $100,000 to $500,000

3=More than $500,000 to $1 million

4=More than $1 million to $2 million

5=More than $2 million to $5 million

6=More than $5 million to $10 million

7=More than $10 million to $20 million

8=More than $20 million to $50 million

9=More than $50 million to $100 million

10= More than $100 million to $200 million

11=$200 million or greater

97=(NONE)

98=(DON'T KNOW)

99=(REFUSED)

D3. Was that the largest transportation-related contract or subcontract that your company bid on or submitted quotes for in California during the past five years?

1=Yes – SKIP TO E1

2=No

98=(DON'T KNOW) – SKIP TO E1

99=(REFUSED) – SKIP TO E1

D4. What was the largest transportation-related contract or subcontract that your company bid on or submitted quotes for in California during the past five years?

(NOTE TO INTERVIEWER – IF ASKED, INCLUDES EITHER PRIVATE SECTOR OR PUBLIC SECTOR)

(NOTE TO INTERVIEWER – READ CATEGORIES IF NECESSARY)

1=$100,000 or less

2=More than $100,000 to $500,000

3=More than $500,000 to $1 million

4=More than $1 million to $2 million

5=More than $2 million to $5 million

6=More than $5 million to $10 million

7=More than $10 million to $20 million

8=More than $20 million to $50 million

9=More than $50 million to $100 million

10= More than $100 million to $200 million

11=$200 million or greater

97=(NONE)

98=(DON'T KNOW)

99=(REFUSED)

E1. My next questions are about the ownership of the business. A business is defined as woman-owned if more than half — that is, 51 percent or more — of the ownership and control is by women. By this definition, is [*firm name / new firm name*] a woman-owned business?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

E2. A business is defined as minority-owned if more than half — that is, 51 percent or more — of the ownership and control is African American, Asian, Hispanic, Native American or another minority group. By this definition, is [*firm name* || *new firm name*] a minority-owned business?

1=Yes

2=No – SKIP TO F1

3=(OTHER GROUP - SPECIFY)

98=(DON'T KNOW) – SKIP TO F1

99=(REFUSED) – SKIP TO F1

E2. OTHER GROUP - SPECIFY

1=VERBATIM

E3. Would you say that the minority group ownership of your company is mostly African American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?

1=African-American

2=Asian Pacific American (persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia(Kampuchea),Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Common-wealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong)

3=Hispanic American (persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race)

4=Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians)

5=Subcontinent Asian American (persons whose Origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka)

6=(OTHER - SPECIFY)

98=(DON'T KNOW)

99=(REFUSED)

E3. OTHER - SPECIFY

1=VERBATIM

F1. Dun & Bradstreet indicates that your company has about [*number*] employees working out of just your location. Is that an accurate estimate of your company's average employees from 2009 through 2011?

(NOTE TO INTERVIEWER - INCLUDES EMPLOYEES WHO WORK AT THAT LOCATION AND THOSE WHO WORK FROM THAT LOCATION)

1=Yes – SKIP TO F3

2=No

98=(DON'T KNOW) – SKIP TO F3

99=(REFUSED) – SKIP TO F3

F2. About how many employees did you have working out of just your location, on average, from 2009 through 2011?

(RECORD NUMBER OF EMPLOYEES)

1=NUMERIC (1-999999999)

F3. Dun & Bradstreet lists the average annual gross revenue of your company, just considering your location, to be [*dollar amount*]. Is that an accurate estimate for your company's average annual gross revenue from 2009 through 2011?

1=Yes – SKIP TO F5

2=No

98=(DON'T KNOW) – SKIP TO F5

99=(REFUSED) – SKIP TO F5

F4. Roughly, what was the average annual gross revenue of your company, just considering your location, from 2009 through 2011? Would you say . . . (READ LIST)

1=Less than $1 Million

2=$1 Million - $4.5 Million

3=$4.6 Million - $7 Million

4=$7.1 Million - $12 Million

5=$12.1 Million - $16.5 Million

6=$16.6 Million - $18.5 Million

7=$18.6 Million - $22.4 Million

8=$22.5 Million or more

98= (DON'T KNOW)

99= (REFUSED)

F5. About how many employees did you have, on average, for all of your locations from 2009 through 2011?

1=(ENTER RESPONSE)

98=(DON'T KNOW)

99=(REFUSED)

F5. RECORD NUMBER OF EMPLOYEES

1=VERBATIM

F6. Roughly, what was the average annual gross revenue of your company, for all of your locations from 2009 through 2011? Would you say . . . (READ LIST)

1=Less than $1 Million

2=$1 Million - $4.5 Million

3=$4.6 Million - $7 Million

4=$7.1 Million - $12 Million

5=$12.1 Million - $16.5 Million

6=$16.6 Million - $18.5 Million

7=$18.6 Million - $22.4 Million

8=$22.5 Million or more

98= (DON'T KNOW)

99= (REFUSED)

Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences in California within the past five years as we ask you these questions.

G1a. Has your company experienced any difficulties in obtaining lines of credit or loans?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1b. Has your company obtained or tried to obtain a bond for a project?

1=Yes

2=No - SKIP TO G1d

98=(Don't know) - SKIP TO G1d

99=(Does not apply) - SKIP TO G1d

G1c. Has your company experienced any difficulties obtaining bonds needed for a project?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1d. Have any insurance requirements on projects presented a barrier to bidding?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1e. Has the size of projects presented a barrier to bidding?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1f. Has your company experienced any difficulties learning about bid opportunities with Caltrans?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1g. Has your company experienced any difficulties learning about bid opportunities with other state or local government agencies in California?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1h. Has your company experienced any difficulties with learning about bid opportunities in the private sector in California?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1i. Has your company experienced any difficulties learning about subcontracting opportunities in California?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1j. Has your company experienced any difficulties receiving payment in a timely manner?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G2. Finally, we're asking for general insights on starting and expanding a business in your industry or winning work in California. Do you have any thoughts to offer on these topics?

1=VERBATIM (PROBE FOR COMPLETE THOUGHTS)

97=(NOTHING/NONE/NO COMMENTS)

98=(DON'T KNOW)

99=(REFUSED)

G3. Would you be willing to participate in a follow-up interview about any of these issues?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

H1. Just a few last questions. What is your name?

(RECORD FULL NAME)

1=VERBATIM

H2. What is your position at [*firm name / new firm name*]?

1=Receptionist

2=Owner

3=Manager

4=CFO

5=CEO

6=Assistant to Owner/CEO

7=Sales manager

8=Office manager

9=President

9=(OTHER - SPECIFY)

99=(REFUSED)

H2. OTHER - SPECIFY

1=VERBATIM

H3. For purposes of receiving information from Caltrans, is your mailing address [*firm address*]:

1=Yes – SKIP TO H5

2=No

98=(DON'T KNOW)

99=(REFUSED)

H4. What mailing address should they use to get any materials to you?

1=VERBATIM

H5. What fax number could Caltrans use to fax any materials to you?

1=NUMERIC (1000000000-9999999999)

H6. What e-mail address could Caltrans use to get any materials to you?

1=ENTER E-MAIL

97=(NO EMAIL ADDRESS)

98=(DON'T KNOW)

99=(REFUSED)

H6. (RECORD EMAIL ADDRESS) (VERIFY ADDRESS LETTER BY LETTER: EXAMPLE: 'John@CRI-RESEARCH.COM' SHOULD BE VERIFIED AS: J-O-H-N-at-C-R-I-hyphen-R-E-S-E-A-R-C-H-dot-com)

1=VERBATIM

Thank you very much for your participation. If you have any questions, please contact Robert Padilla at Caltrans. His phone number is (916) 324-8384. If you would like to contact him via email, his email address is Robert.padilla@dot.ca.gov.

APPENDIX D.
General Approach to Utilization Analysis

The utilization analysis examined the percentage of contract dollars that went to minority- and women-owned firms on transportation construction and engineering contracts that Caltrans awarded between January 1, 2007 and December 31, 2010. The study team counted DBE-certified as well as non DBE-certified minority- and women-owned businesses in calculating MBE/WBE utilization and also calculated the utilization of non-Hispanic white male-owned businesses ("majority-owned businesses"). Therefore, BBC sought sources of Caltrans contract data that consistently included information about prime contractors and subcontractors, regardless of ownership status or DBE certification status.[1] The study team analyzed both federally-funded and state-funded construction and engineering contracts as part of the utilization analysis.

Appendix D describes the study team's utilization data collection and review processes in four parts:

A. Collection of Caltrans contract data;

B. Collection of vendor information;

C. Collection of Caltrans bid and proposal data; and

D. Caltrans review.

A. Collection of Caltrans Contract Data

The study team collected contract data related to Caltrans construction and engineering contracts. The study team also collected data related to contracts that local agencies awarded through the Local Assistance Program.

Construction contracts. BBC collected data on construction contracts that Caltrans awarded during the period of January 1, 2007 through December 31, 2010. BBC collected these data from the following sources:

- Prime contract data from the Office Engineer (OE);
- Subcontracting Request forms (Form CEM-1201); and
- Substitution of subcontractor information (also on Form CEM-1201).

[1] Caltrans DBE utilization reports alone were not sufficient for this analysis as information about non-DBE subcontractors are not recorded in those reports.

After extensive review of these and other potential data sources, the study team determined that the CEM 1201 Subcontracting Request (CEM-1201) forms provided the most reliable and comprehensive information about Caltrans construction contracts. A CEM-1201 form includes information about the prime contractor and all of the subcontractors the prime contract plans to use that will receive payments in excess of one-half of one percent of the total contract amount. The prime contractor also lists estimates of the dollar amount budgeted or committed for each subcontractor. Caltrans uses CEM-1201 to ensure that prime contractors perform at least 50 percent of the work, as state law requires.[2] Because all subcontractors need to be listed on CEM-1201, regardless of DBE status, this form is suitable for identifying the dollar value of prime contracts and related subcontracts at time of award.

Caltrans does not maintain a database of information from CEM-1201s. Although some information is present at Caltrans headquarters, CEM-1201s are typically kept in hard copy form in the contract files for each construction contract. These files are typically found at each Caltrans district office. Certain districts that serve as regional headquarters sometimes consolidate information from other districts in their region.

The BBC study team and Caltrans staff went to Caltrans district offices to attempt to locate CEM-1201s for each construction contract that Caltrans awarded between January 1, 2007 and December 31, 2010. Once the study team located a CEM-1201 for a contract, it made photocopies or an electronic scan of the form. Caltrans staff provided a master list of construction contracts to aid the study team in locating the appropriate contract files and CEM-1201s. Caltrans staff assisted in locating contract files as needed. The study team collected all available CEM-1201s and, as necessary, worked with district staff to attempt to locate CEM-1201s that were not found in district offices.

According to state law, any prime contractor wishing to substitute a subcontractor or make substantial changes to the work that the subcontractor will perform must obtain Caltrans' approval prior to making such changes. If the prime contractor wishes to substitute a subcontractor, the prime contractor must submit a separate CEM-1201 for the new subcontractor in order to comply with state law. The study team collected CEM-1201s pertaining to substitution of subcontractors and changes to subcontractor work at the same time and in the same fashion as other CEM-1201s.

Following the collection of CEM-1201s from all districts, the study team entered information directly from these forms into an electronic database. The study team recorded contract number, funding source, and location of work, as well as each prime contractor and subcontractor's name, address, DBE status, and contract amount.

[2] Certain specialty subcontracting is not counted against the subcontracting limit but is still reported on Form 1201s.

Engineering contracts. The study team also collected information on prime consultants and subconsultants that performed engineering contracts that Caltrans awarded during the study period. The Caltrans Division of Procurement and Contracts (DPAC) maintains prime contract data on engineering contracts that Caltrans awarded during the study period, but does not maintain complete information on related subcontracts. As a result, the study team used DPAC data only as a master list of engineering contracts that Caltrans awarded during the study period.

Caltrans does not document information for both minority- and women-owned subconsultants and majority-owned subconsultants working on its engineering contracts within any single form comparable to the CEM-1201 used for data collection on construction contracts. Some districts maintain information on prime consultants and subconsultants using a database or spreadsheet containing data from invoices that prime consultants submit to district contract administrators. Because the source data come from invoices, the information pertains to prime consultants and to both minority- and women-owned subconsultants and majority-owned subconsultants. Whereas some districts maintain those data electronically, other districts maintain those data in hard copy form. Because of the differences in how districts maintain subcontract data, the study team worked with each district office to collect that information in the most appropriate manner.

Hardcopy data collection. For each district that did not maintain subcontract data for engineering contracts in electronic format (or that did not make electronic data available), the study team collected payment information about prime contracts and related subcontracts from available task order invoices. The study team conducted this data collection at district offices during spring 2012. The data collection effort involved entering payment information about prime consultants and subconsultants from every task order invoice that prime consultants submitted for each contract.

Electronic data collection. Several districts maintain prime contract and subcontract data for engineering contracts in spreadsheets or databases that track firm-specific payment information that they obtain from task order invoices. The organization and the format of these spreadsheets vary slightly across districts, but BBC determined that the data required for the utilization analysis were available for nearly all contracts from these districts.

Centralized administration. Engineering contracts that districts in the North and Central regions awarded during the study period are administered by centralized regional offices. As a result, for engineering contracts from the North and Central regions it was not possible for the study team to determine the exact districts from which each contract originated.

Local Assistance Program contracts. Caltrans uses a portion of its funds to support local government transportation projects. Cities, counties, and other local agencies award construction and engineering contracts and those contracting dollars are reimbursed by Caltrans using federal and state funds. When Caltrans uses federal funds, the Federal DBE Program requires subrecipients to comply with Caltrans' USDOT-approved implementation of the program.

Caltrans does not currently maintain comprehensive data on the federally-funded construction and engineering contracts that local agencies award as part of the Local Assistance Program. In addition, firms available for these contracts may not be known to Caltrans, because local agencies award and administer those contracts.

The study team generated a sample of construction and engineering contracts that local agencies awarded through the Local Assistance Program during the study period. The study team worked with Caltrans to contact each local agency directly and request data about those contracts and related subcontracts through a mail survey effort.

Sampling methodology. Using an electronic database of grants that Caltrans awarded to local agencies for transportation construction and engineering work during the study period, the BBC study team drew a sample of Local Assistance Program contracts for analysis. For each grant, the database lists listed the agency, project information, project-specific phases that were supported through the grant (i.e., design, construction, or right of way), and the source of the funds (federal or state). For some of the grants, the database also provided dollar amounts, project dates, award dates, and project locations.

Based on information from the database, BBC excluded from the sample projects with start dates prior to the study period and grants that did not specify financial support for a construction or design phase. Finally, the study team split the projects into two sample strata depending on whether the total dollar amounts of project-specific grants were $1 million or more or were less than $1 million. The sample included all projects where the grants were $ 1million or more and a random selection of one-third of projects where the grants were less than $1 million.

Figure D-1 presents the number of project phases in each strata and the number of these that were included in the sample.

Figure D-1. Sampling and sample weights for local assistance projects

Source:
BBC Research and Consulting.

	Total Phases	Sampled Phases	Responses Received	Weight
Contracts for more than $1 million	809	809	548	1.48
Contracts for less than $1 million	2,576	936	655	3.93

Data collection. The study team and Caltrans Local Assistance Program staff developed a letter of introduction and an individualized data request form for delivery to every agency that awarded any of the contracts that were included in the sample of Local Assistance Program contracts. The data request form asked local agency staff to indicate if the local agency in fact contracted out construction and engineering services for the project, and if so, the award amount or actual payment amounts to all prime contractors and subcontractors involved in the relevant project phases. The form also asked staff to provide contact information for all prime contractors and subcontractors involved with the project. The study team manually entered information from the request forms into a database of Local Assistance Program contract data.

With follow-up and assistance from Caltrans, BBC received valid information for 1,203 of the 1745 contracts that the study team included in the original sample. The number of complete responses for each stratum is presented in Figure D-1. The information that BBC received about Local Assistance Program contracts represented approximately 55 percent of the total dollars that local agencies awarded through the program during the study period.

Sample weights. Figure D-1 presents the sample weights that the study team applied to the data, based on the sample stratum from which the study team drew each Local Assistance Program contract. For example, dollar information for a contract that a local agency awarded for $3 million received a weight of 1.48, whereas dollar information for a contract that a local agency awarded for $300,000 received a weight of 3.93.

DMT contracts. The study team also worked with Caltrans staff to identify transportation construction and engineering contracts that DMT administered. DMT staff provided spreadsheets containing information on prime contract and related subcontracts that DMT awarded during the study period.

DTP contracts. DTP provides grants to local agencies for a variety of purposes, but primarily for staffing and operations. A few agencies use DTP grants to contract for transportation construction or engineering services. DTP staff identified the local agencies that used the largest amount of DTP grants to contract for construction and engineering services during the study period. The study team and DTP staff participated in conference calls with the staff of each of these agencies and asked them to provide information on prime contractors, subcontractors, prime contract amounts, and subcontract amounts for contracts that they awarded using DTP grant funding. Some of the agencies were not able to provide complete subcontractor information. The study team only included in its analyses information on contracts for which agency staff were able to provide complete information on all utilized prime contractors and subcontractors.

B. Collection of Vendor Information

Caltrans and local agencies provided contact and other information on firms utilized as prime contractors and subcontractors on transportation construction and engineering contracts during the study period. These data were included in the electronic data provided by Caltrans as well as the hard copy data that Caltrans and local agencies collected during the study period. The study team also used information from the CUCP to identify DBE-certified firms. The CUCP includes data on the race/ethnicity and gender of the owners of DBE-certified businesses. DBE utilization reported in the tables in Appendix K and the graphs in Chapters 5 and 7 was calculated using CUCP certification data as of July 6, 2012.

Caltrans and local agencies provided the following information about utilized firms:

- Firm name;
- Address and phone number; and
- DBE certification status.

BBC obtained additional information about utilized firms from business lists that the study team purchased from D&B and from telephone interviews that the study team conducted with prime contractors and subcontractors. BBC obtained the following additional information about utilized firms:

- Primary line of work;
- Firm size;
- Year in which firm was established; and
- Additional contact information.

BBC relied on several sources of information to determine whether firms were owned by minorities or women and whether MBE/WBEs were DBE-certified, including:

- Telephone interviews with firm owners and managers;
- CUCP data;
- Caltrans vendor data;
- Caltrans staff review; and
- Information from D&B and other sources.

For the purposes of the study, BBC relied on definitions used in the Federal DBE Program to specify minority groups that are presumed to be disadvantaged:

- African American;
- Asian-Pacific American;
- Subcontinent Asian American;
- Hispanic American; and
- Native American.

C. Collection of Caltrans Bid and Proposal Data

BBC conducted a case study analysis of bids and proposals for a sample of transportation construction and engineering contracts that Caltrans awarded during the study period. Caltrans provided bid, proposal, and other related information to the BBC study team. For details about the case study analysis, see Chapter 7.

Construction contracts. Caltrans maintains electronic bid tabulations for the construction contracts that it awards. BBC analyzed bid data for a sample of 200 contracts that Caltrans awarded during the study period for which electronic data were available.

Engineering contracts. The study team collected proposal information for a sample of 60 engineering contracts that Caltrans awarded during the study period and analyzed that information as part of the case study analysis. The information that BBC collected about engineering proposals represented all available proposal information that Caltrans maintained on engineering contracts during the study period.

D. Caltrans Review

Caltrans reviewed BBC's utilization data during several stages of the study process. The BBC study team met with Caltrans staff to review the data collection process, information that the study team gathered, and summary results. Caltrans staff also reviewed contract and firm-level information. In addition, the study team worked with Caltrans district staff to review contract information. BBC incorporated feedback from Caltrans staff in the final contract and firm data used in the disparity study.

In sum, the disparity study compiled and analyzed the most comprehensive set of data that were available on prime contracts and subcontracts that Caltrans awarded during the study period.

APPENDIX E.
Entry and Advancement in the California Construction and Engineering Industries

Federal courts have found that Congress "spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry."[1] Congress found that discrimination had impeded the formation of qualified minority-owned businesses.

In the 2007 Caltrans disparity study, BBC examined whether some of the barriers to business formation that Congress found for MBE/WBEs also appear to occur in California. One potential source of barriers to formation is barriers associated with entry and advancement in the construction and engineering industries. Appendix E examines recent data on education, employment, and workplace advancement that may ultimately influence business formation in the California construction and engineering industries.[2,3]

Appendix E examines entry and advancement of different race/ethnic and gender groups in the California construction and engineering industries. Several other report appendices analyze other aspects of local marketplace conditions. Appendix F explores business ownership and Appendix H considers the success of businesses. Related to both of those topics, Appendix G presents an examination of access to capital. Together, those appendices present quantitative information concerning marketplace conditions in the California transportation contracting industry, including the construction and engineering industries. Appendix I presents the data sources that the study team used in those appendices.

Introduction

BBC examined whether there were barriers to the formation of minority- and women-owned businesses in California. Business ownership often results from individuals entering an industry as an employee and then advancing within that industry. Within the entry and advancement process, there may be some barriers that limit opportunities for minorities and women. Appendix E uses 1980 and 2000 Census data and 2007-2009ACS data[4] to analyze education, employment, and workplace advancement — all factors that may influence whether individuals

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[1] *Sherbrooke Turf, Inc.*, 345 F.3d at 970, (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005) at 992.

[2] Note that this Appendix also includes materials from Appendix F of the 2007 Study for which more recent data were not available.

[3] In Appendix F and other appendices that present information about local marketplace conditions, information for "engineering" refers to architectural, engineering and related services. Each reference to "engineering" work pertains to those types of services. In the 1980 and 2000 Census industrial classification system, "Architectural, engineering and related services" was coded as 882 and 729. In the 2007-2009 ACS, the same industry was coded as 7290.

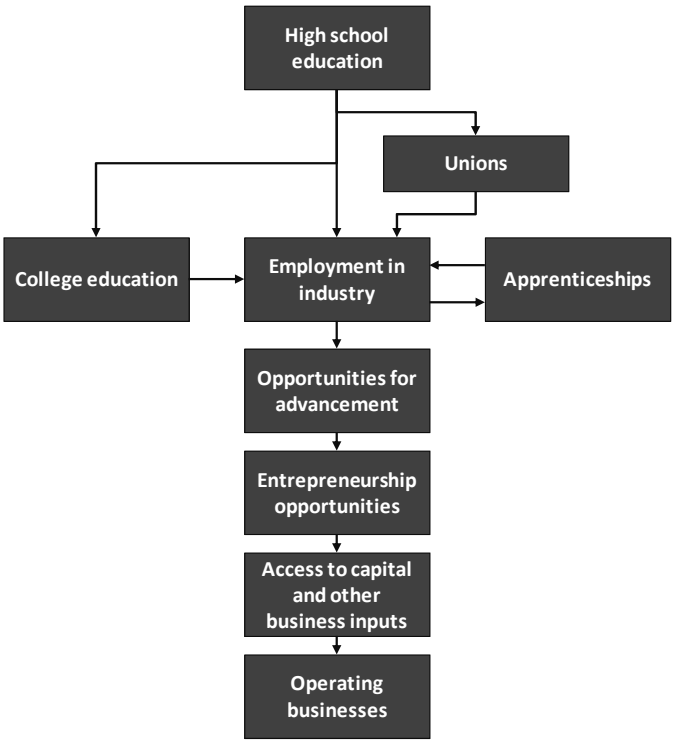
[4] It should be noted that the 2007-2009 ACS data were collected during the economic recession which began in late 2007.

form construction or engineering businesses. Figure E-1 presents a model of entry and advancement in the construction and engineering industries).

BBC separately studied barriers to entry for construction and for engineering, as entrance requirements and opportunities for advancement differ for those industries.

Figure E-1.
Model for studying entry into the construction and engineering industries

Source:
BBC Research & Consulting.



Overall representation of minorities among workers and business owners in California. As a starting point, the study team examined how business owners in California and the United States differed from the entire labor force with respect to the representation of racial and ethnic minorities. Based on 2000 and 2007-2009 data, Figure E-2 shows demographics of the labor force, business owners in all California industries, and business owners in the California construction and engineering industries. Results for California in 2007-2009 indicate the following:

- African Americans accounted for about 6 percent of workers, 4 percent of all business owners, and 2 percent of business owners in construction and engineering;
- Hispanic Americans accounted for 34 percent of workers, 25 percent of all business owners, and 30 percent of business owners in construction and engineering;
- Asian-Pacific Americans accounted for about 12 percent of all workers and 11 percent of business owners but only 7 percent of construction and engineering business owners;
- Native Americans accounted for approximately 1 percent of all workers, business owners, and business owners in construction and engineering;

- Subcontinent Asian Americans and other minority groups combined accounted for about 2 percent of workers and business owners in all industries and 1 percent of business owners in construction and engineering; and
- Non-Hispanic whites accounted for about 45 percent of California workers and 58 percent of all California business owners. Non-Hispanic whites accounted for 59 percent of construction and engineering business owners (59%).

Patterns that the study team observed in California related to the racial/ethnic composition of workers and business owners were similar to those observed in the United States, with the following exceptions:

- Hispanic and Asian Americans accounted for a larger share of the overall workforce and of business owners in California than in the United States; and
- African Americans made up a smaller share of the overall workforce and of business owners in California than in the United States.

Representation of women among workers and business owners in California. Figure E-2 also presents the percentage of workers and business owners that were made up of women in 2007-2009, both in California and the United States. In 2007-2009, women accounted for about 45 percent of the California labor force and 37 percent of all business owners. However, women only accounted for 7 percent of business owners in the construction and engineering industries during those years.

Figure E-2.
Demographic distribution of the workforce and business owners, 2000 and 2007-2009

California	Workforce in all industries		Business owners in all industries		Business owners in construction and engineering	
	2000 (n 788,333)	2007 09 (n=519,307)	2000 (n=86,080)	2007 09 (n=63,241)	2000 (n=11,664)	2007 09 (n 9,694)
Race/ethnicity						
African American	6.3 %	6.1 %	3.2 % **	3.5 % **	2.2 % **	2.2 % **
Asian-Pacific American	11.1	12.3	9.9 **	10.7 **	5.5 **	6.5 **
Subcontinent Asian American	1.1	1.5	1.1	1.5	0.3 **	0.3 **
Hispanic American	27.6	34.0	17.9 **	25.1 **	18.3 **	30.5 **
Native American	1.2	1.0	1.0	0.9 **	1.6	1.2
Other minority group	0.9	0.4	1.2 **	0.4	1.2	0.4
Total minority	48.2 %	55.2 %	34.4 %	42.1 %	29.2 %	41.0 %
Non-Hispanic white	51.8	44.8	65.6 **	57.9 **	70.8 **	59.0 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	45.1 %	45.0 %	36.1 % **	36.7 % **	7.5 % **	6.9 % **
Male	54.9	55.0	63.9 **	63.3 **	92.5 **	93.1 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

United States	Workforce in all industries		Business owners in all industries		Business owners in construction and engineering	
	2000 (n 6,832,970)	2007 09 (n=1,513,063)	2000 (n=676,804)	2007 09 (n 159,643)	2000 (n 119,227)	2007 09 (n=29,627)
Race/ethnicity						
African American	10.9 %	11.7 %	4.9 % **	5.7 % **	4.0 % **	4.3 % **
Asian-Pacific American	3.4	4.0	3.3	4.1 **	1.3 **	1.6 **
Subcontinent Asian American	0.7	1.0	0.7	1.0	0.2 **	0.2 **
Hispanic American	10.7	14.3	7.3 **	12.0 **	7.7 **	14.9 **
Native American	1.2	1.1	1.0 **	0.9 **	1.3	1.1
Other minority group	0.4	0.2	0.5	0.2	0.5	0.2
Total minority	27.3 %	32.3 %	17.7 %	23.9 %	14.9 %	22.3 %
Non-Hispanic white	72.7	67.7	82.3 **	76.1 **	85.1 **	77.6 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	99.9 %
Gender						
Female	46.5 %	46.7 %	33.6 % **	34.2 % **	7.9 % **	7.4 % **
Male	53.5	53.3	66.4 **	65.8 **	92.1 **	92.6 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: ** Denotes that the difference in proportions between all workers and business owners (or business owners in study industries) for the given race/ethnicity/gender group is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2007-2009 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Construction Industry

BBC first examined the construction industry and how education, training, employment, and advancement may affect the number of businesses that individuals of different races/ethnicities and genders owned in California in 2000 and 2007-2009.

Education. Formal education beyond high school is not a prerequisite for most construction jobs. For that reason, the construction industry often attracts individuals who have lower levels of educational attainment. Most construction industry employees in California do not have a four-year college degree. Based on the 2000 Census, 26 percent of workers in the California construction industry were high school graduates with no post-secondary education and 36 percent had not finished high school. Only 7 percent of those working in the California construction industry had a four-year college degree or higher, compared to nearly 30 percent of all workers.

Race/ethnicity. Hispanic Americans represented an especially large pool of California workers with no post-secondary education. In 2000, only 10 percent of all Hispanic American workers 25 and older who worked in California held at least a four-year degree. That figure rose to 12 percent in 2007-2009, but was still far below non-Hispanic whites working in the region (45%). The percentage of African American (28%) and Native American (26%) workers in California with a four-year college degree was also substantially lower than that of non-Hispanic whites in 2007-2009.

Based on educational requirements of entry-level jobs and the limited education beyond high school for many African Americans, Native Americans, and Hispanic Americans in California, one would expect a relatively high representation of those groups in the California construction industry, especially in entry-level positions.

In contrast to African, Hispanic, and Native Americans, a majority of Asian-Pacific American workers 25 and older in California (51%) and Subcontinent Asian American workers 25 and older in California (74%) had four-year college degrees in 2007-2009. Given the high levels of education for Asian-Pacific and Subcontinent Asian Americans in California, the representation of those groups in the California construction industry might be low relative to non-Hispanic whites.

Females. In California, female workers age 25 or over have more education, on average, than men. Based on 2007-2009 data, 36 percent of female workers age 25 and over had at least a four-year degree, compared to 33 percent of males in California.

Apprenticeship and training. Training in the construction industry is largely on-the-job and through trade schools and apprenticeship programs. Entry-level jobs for workers out of high school are often for laborers, helpers, or apprentices. More skilled positions in the construction industry may require additional training through a technical or trade school or through an apprenticeship or other employer-provided training program. Apprenticeship programs can be developed by employers, trade associations, trade unions, and other groups.

Workers can enter apprenticeship programs from high school or trade school. Apprenticeships have traditionally been three- to five-year programs that combine on-the-job training with classroom instruction.[5] Opportunities for those programs across race/ethnicity are discussed later in Appendix E.

Employment. With educational attainment for minorities and women as context, the study team examined employment in the construction industry in California. Figure E-3 presents data from 1980, 2000, and 2007-2009 to compare the demographic composition of the construction industry with the total workforce in California and in the United States.

Race/ethnicity. Based on 2007-2009 ACS data, 57 percent of people working in the California construction industry were minority, up from 45 percent in 2000. Almost all the increase in minority construction workers between 2000 and 2007-2009 was due to growth in the number of Hispanic American construction workers. Of the people working in construction in California in 2007-2009:

- 48 percent were Hispanic Americans;
- 3 percent were African Americans;
- 5 percent were Asian-Pacific Americans;
- 1 percent were Native Americans; and
- Less than 1 percent were Subcontinent Asian Americans.

In California, Hispanic Americans made up a much greater share of workers in construction than in the economy as a whole, representing nearly 50 percent of construction workers compared with 34 percent of workers in all industries. In contrast, African Americans, Asian-Pacific Americans, and Subcontinent Asian Americans working in California were less likely to work in construction than in other industries.

- The percentage of California construction workers who were African American declined from 2000 to 2007-2009. Average educational attainment of African Americans is consistent with requirements for construction jobs, so education does not explain the relatively low number of African American workers in the construction industry. Several studies throughout the United States have argued that race discrimination by construction unions has held down employment of African Americans in construction trades.[6] Some of the evidence for and against that position is discussed later in this section.

- Asian-Pacific Americans were 5 percent of the construction workforce and 12 percent of all workers in California in 2007-2009. The fact that Asian-Pacific Americans were more likely than other groups to go to college in 2007-2009 may explain part of that difference.

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[5] Bureau of Labor Statistics, U.S. Department of Labor. 2006-07. "Construction." C*areer Guide to Industries.* http://www.bls.gov/oco/cg/cgs003.htm (accessed February 15, 2007).

[6] Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

- Under-representation of Subcontinent Asian Americans in the construction workforce is evident in both 2000 and 2007-2009 in California.[7] Relatively high educational achievement for Subcontinent Asian Americans may explain part of that difference.
- The number of Native Americans and non-Hispanic whites working in the California construction industry in 2007-2009 was about what one might anticipate given their representation in the overall workforce.

Therefore, in California, the low representation of African Americans, Asian-Pacific Americans, and Subcontinent Asian Americans cannot be entirely explained by the high representation of Hispanic Americans.

Gender. There were also large differences between the percentage of all workers who were women and the representation of women in the California construction industry in 2007-2009. During those years, women represented 45 percent of workers in all California industries but only 9 percent of California construction workers. That difference was similar for the United States as a whole. The share of construction workers who were women declined between 2000 and 2007-2009 down to levels observed in 1980.

[7] Note that Census definitions of race and ethnicity have changed over time, which affects comparability of statistics from one census year to the next. Appendix I discusses how BBC coded data concerning race and ethnicity for each Census and for the 2007-2009 ACS.

Figure E-3.
Demographics of workers in construction and all industries, 1980, 2000 and 2007-2009

California	All industries			Construction		
	1980 (n= 580,104)	2000 (n=788,333)	2007-2009 (n=519,307)	1980 (n=33,756)	2000 (n=48,798)	2007-2009 (n=35,228)
Race/ethnicity						
African American	6.8 %	6.3 %	6.1 %	3.6 % **	3.3 % **	2.6 % **
Asian-Pacific American	5.1	11.1	12.3	2.0 **	4.0 **	4.6 **
Subcontinent Asian American	0.2	1.1	1.5	0.2 **	0.2 **	0.3 **
Hispanic American	17.0	27.6	34.0	16.1 **	35.0 **	47.9 **
Native American	0.9	1.2	1.0	1.2 **	1.5 **	1.1
Other minority group	0.2	0.9	0.4	0.1	1.0	0.3 **
Total minority	30.1 %	48.2 %	55.2 %	23.2 %	45.1 %	56.7 %
Non-Hispanic white	69.8	51.8	44.8	76.8 **	54.9 **	43.3 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	42.1 %	45.1 %	45.0 %	9.2 % **	9.8 % **	9.0 % **
Male	57.9	54.9	55.0	90.8 **	90.2 **	91.0 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

United States	All industries			Construction		
	1980 (n=5,287,471)	2000 (n=6,832,970)	2007-2009 (n=1,513,063)	1980 (n=330,464)	2000 (n=480,280)	2007-2009 (n=106,823)
Race/ethnicity						
African American	10.1 %	10.9 %	11.7 %	7.4 % **	6.2 % **	5.8 % **
Asian-Pacific American	1.4	3.4	4.0	0.6 **	1.2 **	1.4 **
Subcontinent Asian American	0.2	0.7	1.0	0.1 **	0.2 **	0.2 **
Hispanic American	5.7	10.7	14.3	5.9 **	15.0 **	23.9 **
Native American	0.6	1.2	1.1	0.9 **	1.6 **	1.3 **
Other minority group	0.1	0.4	0.2	0.1	0.4	0.3
Total minority	18.1 %	27.3 %	32.3 %	14.9 %	24.5 %	33.0 %
Non-Hispanic white	81.9	72.7	67.7	85.1 **	75.5 **	67.0 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	42.2 %	46.5 %	46.7 %	0.8 % **	9.9 % **	9.2 % **
Male	57.8	53.5	53.3	92.1 **	90.1 **	90.8 **
Total	100.0 %	100.0 %	100.0 %	92.9 %	100.0 %	100.0 %

Note: ** Denotes that the difference in proportions between workers in the construction industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2007-2009 ACS Public Use Microdata samples. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Academic research concerning the affect of race and gender discrimination on entry into the construction industry. There is a substantial academic literature that has examined whether race and gender discrimination affects opportunities of minorities and women to enter construction trades in the United States. Many studies indicate that race and gender discrimination affects opportunities for minorities and women in the construction industry. The literature concerning women in construction trades has identified substantial barriers to entry and advancement due to gender discrimination and sexual harassment.[8] Research concerning highway construction projects in Los Angeles and Oakland identified evidence of prevailing attitudes that women do not belong in construction, and that such discrimination was worse for women of color than for white women.[9]

Importance of unions in entering the construction industry. Labor researchers characterize construction as a historically volatile industry that is sensitive to business cycles, making the presence of labor unions important for stability and job security within the industry.[10] The temporary nature of construction work results in uncertain job prospects, and the relatively high turnover of laborers presents a disincentive for construction firms to invest in training. Some researchers have claimed that constant turnover has lent itself to informal recruitment practices and nepotism, compelling laborers to tap social networks for training and work. They credit the importance of social networks with the high degree of ethnic segmentation in the construction industry.[11] Unable to integrate themselves into traditionally white social networks, African Americans and other minorities faced long-standing historical barriers to entering the industry.[12]

Construction unions aim to provide a reliable source of labor for employers and preserve job opportunities for workers by formalizing the recruitment process, coordinating training and apprenticeships, enforcing standards of work, and mitigating wage competition. The unionized sector of construction would seemingly be the best road for African Americans and other underrepresented groups into the industry. However, some researchers have identified discrimination by trade unions that has historically prevented minorities from obtaining employment in skilled trades.[13] Some researchers argue that union discrimination takes place in a variety of forms including the following:

- Unions have used admissions criteria that adversely affect minorities. In the 1970s, federal courts ruled that standardized testing requirements for unions unfairly disadvantaged minority applicants who had less exposure to testing. In addition, the policies that required

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[8] See, for example, Erickson, Julia A and Donna E. Palladino. 2009. "Women Pursuing Careers in Trades and Construction." *Journal of Career Development*. 36(1): 68-89.

[9] Note that interviews with women took place between 1996 and 1999. Price, Vivian, 2002. "Race, Affirmative Action and Women's Participation in U.S. Highway Construction." *Feminist Economics*. 8(2), 87-113.

[10] Applebaum, Herbert. 1999. Construction Workers, U.S.A. Westport: Greenwood Press.

[11] Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

[12] Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." Social Problems. 41(4): 562-584.

[13] U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042.

new union members to have relatives who were already in the union perpetuated the effects of past discrimination.[14] Some disparity studies in California in the 1990s revealed that those practices had persisted — for example, unions were still using admissions testing requirements that adversely affected minorities.[15] Moreover, applicants who were relatives of existing union members were often waived from admissions requirements.[16]

- Of those minority individuals who are admitted to unions, a disproportionately low number are admitted into union-coordinated apprenticeship programs. Apprenticeship programs are an important means of producing skilled construction laborers, and the reported exclusion of African Americans from those programs has severely limited their access to skilled occupations in the construction industry.[17]
- Although formal training and apprenticeship programs exist within unions, most training of union members takes place informally through social networking. Nepotism characterizes the unionized sector of construction as it does the non-unionized sector, and that practice favors a white-dominated status quo.[18]
- Traditionally, white unions have been successful in resisting policies designed to increase African American participation in training programs. The political strength of unions in resisting affirmative action in construction has hindered the advancement of African Americans in the industry.[19]
- Discriminatory practices in employee referral procedures, including apportioning work based on seniority, have precluded minority union members from having the same access to construction work as their white counterparts.[20]
- According to testimony from African American union members, even when unions implement meritocratic mechanisms of apportioning employment to laborers, white workers are often allowed to circumvent procedures and receive preference for construction jobs.[21]

However, more recent research suggests that the relationship between minorities and unions has been changing. As a result, historical observations may not be indicative of current dynamics

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[14] *Ibid*. See United States v. Iron Workers Local 86 (1971), Sims v. Sheet Metal Workers International Association (1973), and United States v. International Association of Bridge, Structural and Ornamental Iron Workers (1971).

[15] National Economic Research Association, Inc. 1992. The Utilization of Minority and Woman-Owned Business Enterprises by Contra Costa County. 185-186.

[16] BPA Economics, Mason Tillman Associates, and Boasberg and Norton. 1990. MBE-WBE Disparity Study of the City of San Jose.

[17] Applebaum. 1999. Construction Workers, U.S.A.

[18] *Ibid*. 299. A high percentage of skilled workers reported having a father or relative in the same trade. However, the author suggests this may not be indicative of current trends.

[19] Waldinger and Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction."

[20] U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042. See *United Steelworkers of America v. Weber* (1979) and *Taylor v. United States Department of Labor* (1982).

[21] Feagin and Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 41(4): 562-584.

in construction unions. Recent studies focusing on the role of unions in apprenticeship programs have compared minority and female participation and graduation rates for apprenticeships in joint programs (that unions and employers organize together) with rates in employer-only programs. Many of those studies conclude that the impact of union involvement is generally positive or neutral for minorities and women, compared to non-Hispanic white males:

- Glover and Bilginsoy (2005) analyzed apprenticeship programs in the U.S. construction industry during the period 1996 through 2003. Their dataset covered about 65 percent of apprenticeships during that time. The authors found that joint programs had "much higher enrollments and participation of women and ethnic/racial minorities" and exhibited "markedly better performance for all groups on rates of attrition and completion" compared to employer-run programs.[22]
- In a similar analysis focusing on female apprentices, Bilginsoy and Berik (2006) found that women were most likely to work in highly-skilled construction professions as a result of enrollment in joint programs as opposed to employer-run programs. Moreover, the effect of union involvement in apprenticeship training was higher for African American women than for white women.[23]
- A recent study on the presence of African Americans and Hispanic Americans in apprenticeship programs found that African Americans were 8 percent more likely to be enrolled in a joint program than in an employer-run program. However, Hispanic Americans were less likely to be in a joint program than in an employer-run program.[24] Those data suggest that Hispanic Americans may be more likely than African Americans to enter the construction industry without the support of a union.

Other data also indicate a more positive relationship between construction unions and minority workers than that which may have prevailed in the past. For example, 2007 Current Population Survey (CPS) data indicate that union membership rates for African Americans are similar to those of non-Hispanic whites.[25] The CPS asked participants, "Are you a member of a labor union or of an employee association similar to a union?" CPS data showed union membership for African Americans in construction to be 11 percent and for non-Hispanic whites to be 12 percent — not a statistically significant difference. In contrast, the CPS showed that only 7 percent of Hispanic Americans are union members.

Another study, which used U.S. Department of Labor data in combination with data from the California Apprenticeship Agency from 1995-2003, found that apprenticeship program attrition rates and the occupations for which students were training were different for non-Hispanic

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[22] Glover, Robert and Bilginsoy, Cihan. 2005. "Registered Apprenticeship Training in the U.S. Construction Industry." *Education & Training,* Vol. 47, 4/5, p 337.

[23] Günseli Berik, Cihan Bilginsoy. 2006. "Still a wedge in the door: women training for the construction trades in the USA", *International Journal of Manpower*, Vol. 27 Iss: 4, pp.321 - 341

[24] Bilginsoy, Cihan. 2005. "How Unions Affect Minority Representation in Building Trades Apprenticeship Programs." *Journal of Labor Research, 57(1).*

[25] 2007 Current Population Survey (CPS), U.S. Census Bureau and Bureau of Labor Statistics.

whites, African Americans, and Hispanic Americans.[26] Non-Hispanics had the lowest attrition rate at 47 percent, followed by Hispanic Americans (63%), and African Americans (70%). In addition, both African Americans and Hispanic Americans were more likely to enroll in training programs for occupations with lower levels of pay and prestige. The study did not explore causal factors for any of the observed differences between non-Hispanic whites and minorities. However, those differences could be explained by a variety of factors:

- Students in apprenticeship programs may drop out due to dissatisfaction with the program, training, or occupation.[27]
- The expected benefits of staying in the apprenticeship program may be less for lower paying occupations.[28] Thus, there may be less incentive for apprentices in occupations with lower pay levels to complete long, arduous programs (most programs require between 6,000 and 8,000 hours and last several years).[29]
- Unobserved characteristics of the apprentices, such as financial status, previous education, English proficiency, age, and a variety of other socioeconomic factors may limit the ability of an individual to complete the program.

Although union membership and union program participation varies based on race/ethnicity, the causes of those differences and their effects on construction industry employment are unresolved. Research is especially limited on the impact of unions on Asian-Pacific American employment. It is unclear from past studies whether unions presently help or hinder equal opportunity in construction and whether effects in California are different from other parts of the country. In addition, the current research indicates that the effects of unions on entry into the construction industry may be different for different minority groups.

Advancement. To research opportunities for advancement in the California construction industry, the study team examined the representation of minorities and women in construction occupations defined by the U.S. Bureau of Labor Statistics.[30] Appendix I provides full descriptions of construction trades with a large enough sample size for analysis in the 2000 Census and 2007-2009 ACS.

Racial/ethnic composition of construction occupations. Figures E-4 and E-5 summarize the race/ethnicity of workers in select construction-related occupations in California, including low-skill occupations, higher-skill construction trades, and supervisory roles. Figure E-4 and E-5 present those data for 2000 and 2007-2009, respectively.

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[26] Bilginsoy, Cihan. 2003. "The Hazards of Training: Attrition and Retention in the Construction Industry Apprenticeship Programs." *Industrial & Labor Relations Review,* 57(1) 54-67.

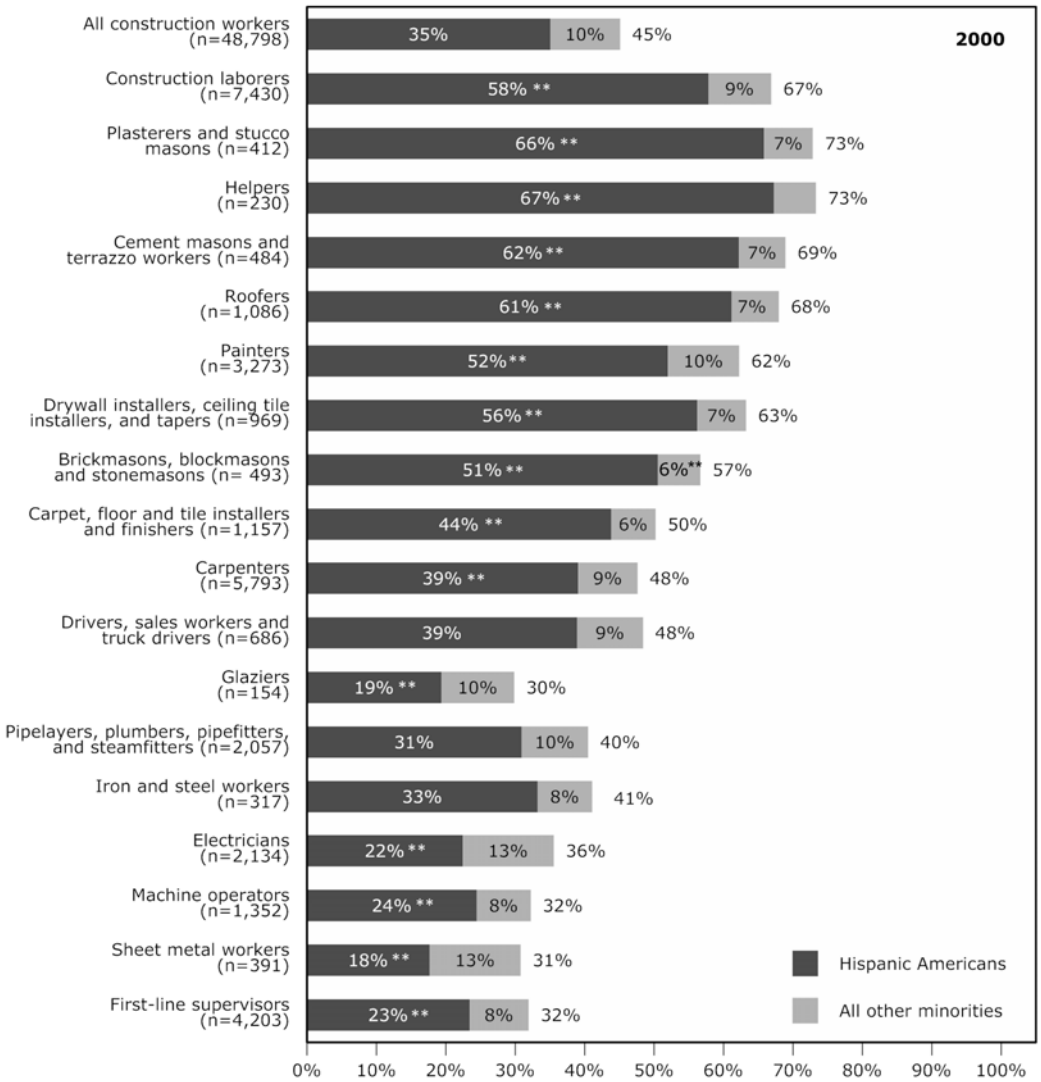
[27] Bilginsoy. 2003. "The Hazards of Training: Attrition and Retention in the Construction Industry Apprenticeship Programs." *Industrial & Labor Relations Review,* 57(1) 54-67.

[28] Bilginsoy, Cihan. 2007. "Delivering Skills: Apprenticeship Program Sponsorship and Transition from Training." Industrial Relations, 46(4): 738-765

[29] Bilginsoy. 2003. "The Hazards of Training: Attrition and Retention in the Construction Industry Apprenticeship Programs." *Industrial & Labor Relations Review,* 57(1) 54-67.

[30] Bureau of Labor Statistics, U.S. Department of Labor. 2001. "Standard Occupational Classification Major Groups." http://www.bls.gov/soc/soc_majo.htm (accessed February 15, 2007).

Figure E-4.
Minorities as a percentage of selected construction occupations in California, 2000

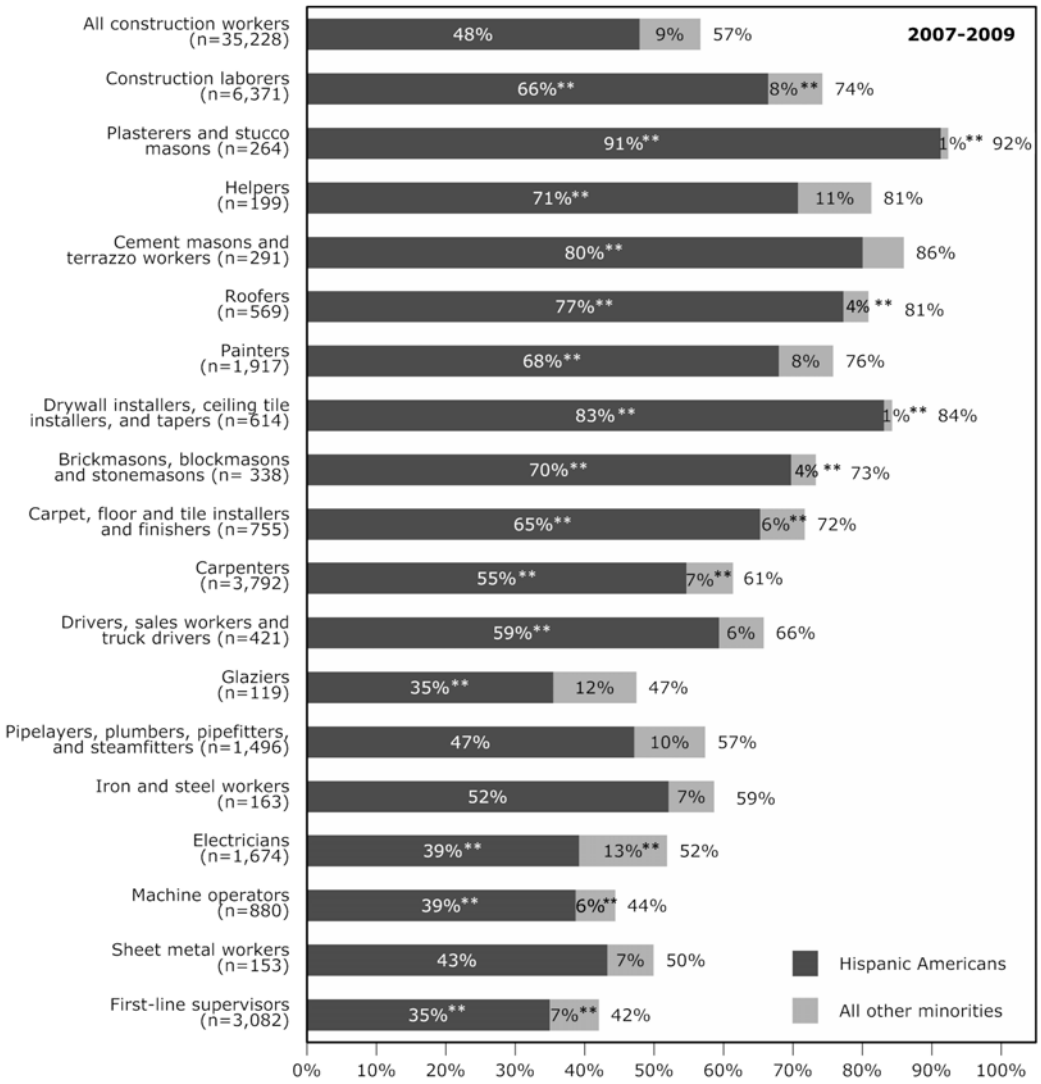


Note: ** Denotes that the difference in proportions between the minority group and non-Hispanic whites is statistically significant at the 95% confidence level.

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Figure E-5.
Minorities as a percentage of selected construction occupations in California, 2007-2009



Note: ** Denotes that the difference in proportions between the minority group and non-Hispanic whites is statistically significant at the 95% confidence level.

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source: BBC Research & Consulting from 2007-2009 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Based on 2000 Census and 2007-2009 ACS data, there are large differences in the racial/ ethnic makeup of workers in various trades related to construction in California. Overall, minorities comprised 45 percent of the construction workforce in 2000 and 57 percent in 2007-2009. Minorities comprised a relatively large share of the local construction workforce for:

- Construction laborers (67% in 2000 and 74% in 2007-2009);
- Plasterers and stucco masons (73% in 2000 and 92% in 2007-2009);
- Helpers (73% in 2000 and 81% in 2007-2009);

- Cement masons and terrazzo workers (69% in 2000 and 86% in 2007-2009);
- Roofers (68% in 2000 and 81% in 2007-2009);
- Painters (62% in 2000 and 76% in 2007-2009); and
- Drywall, ceiling tile installers, and tapers (63% in 2000 and 84% in 2007-2009).

Some occupations had a relatively low representation of minorities:

- Glaziers (30% in 2000 and 47% in 2007-2009);
- Electricians (36% in 2000 and 52% in 2007-2009);
- Machine operators (32% in 2000 and 44% in 2007-2009); and
- Sheet metal workers (31% in 2000 and 50% in 2007-2009).

About 32 percent of first-line supervisors of construction workers were minorities in 2000, less than the total percentage of California construction workers who were minorities. Minorities made up a greater share of first-line supervisors (42%) in 2007-2009, but that percentage was still less than the total percentage of construction workers who were minorities during those years.

Most of the overall differences for minorities were driven by differences in the representation of Hispanic Americans in those occupations. The percentage of non-Hispanic minorities decreased or remained the same in each construction occupation between 2000 and 2007-2009 except for construction helpers and glaziers.

Gender composition of construction occupations. The study team also analyzed the proportion of women in construction-related occupations. Overall, less than 10 percent of workers in the California construction industry were women in 2000 and 2007-2009. Representation of women in the California construction workforce declined from 2000 to 2007-2009 down to about the same level observed in 1980.

Figures E-6 and E-7 summarize the gender of workers in select construction-related occupations. Figure E-6 and E-7 present those data for 2000 and 2007-2009, respectively. In both 2000 and 2007-2009, less than 2 percent of workers were women in the following trades:

- Plasterers and stucco masons;
- Brickmasons, blockmasons, and stonemasons;
- Cement masons and terrazzo workers;
- Roofers;
- Sheet metal workers;
- Carpet, floor and tile installers and finishers;
- Carpenters;
- Drywall installers, ceiling tile installers, and tapers;

- Pipelayers, plumbers, pipefitters, and streamfitters; and
- Iron and steel workers.

Figure E-6. Women as a percentage of construction workers in selected occupations in California, 2000

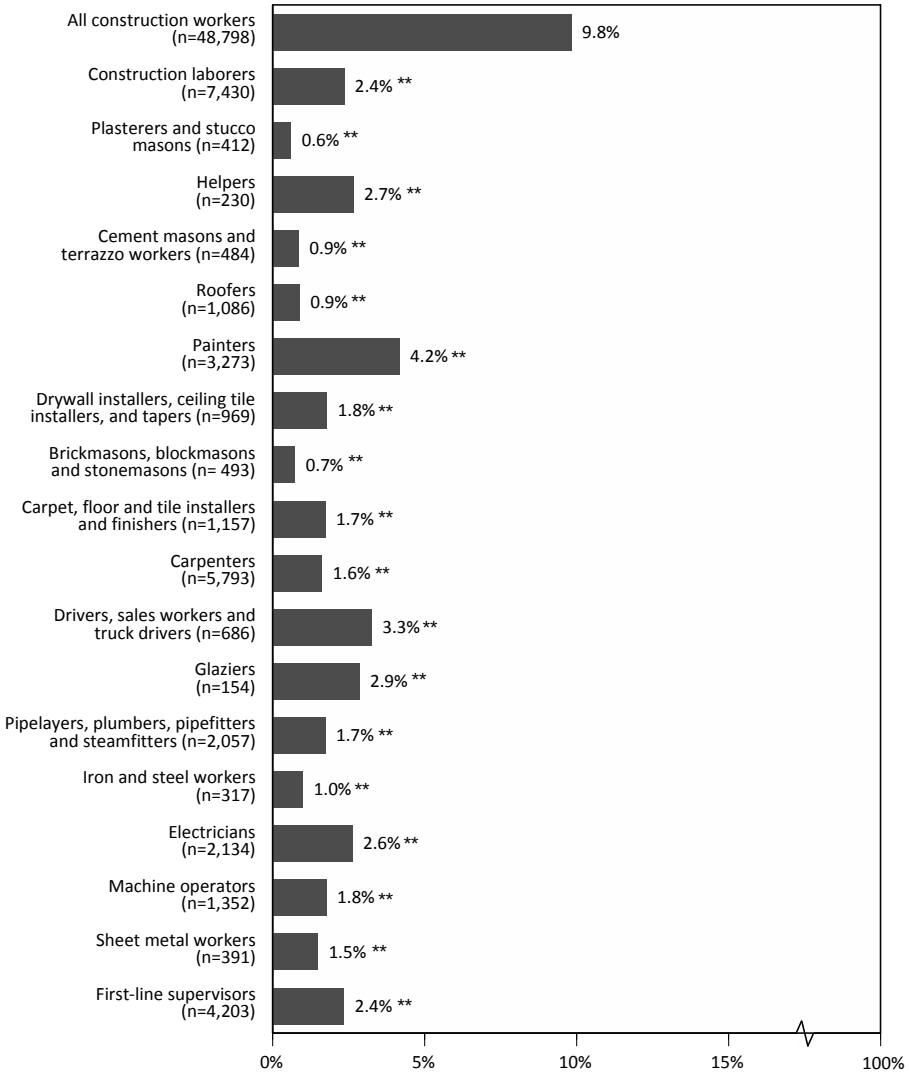
Note:

** Denotes that the difference in proportions between females and males is statistically significant at the 95% confidence level.

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.



Among all the individual occupations listed in Figures E-6 and E-7, the following occupations showed an increase in the representation of women between 2000 and 2007-2009:

- First-line supervisors;
- Plasterers and stucco masons;
- Helpers;
- Brickmasons, blockmasons and stonemasons;
- Iron and steel workers;
- Sheet metal workers; and
- Machine operators.

Figure E-7. Women as a percentage of construction workers in selected occupations in California, 2007-2009

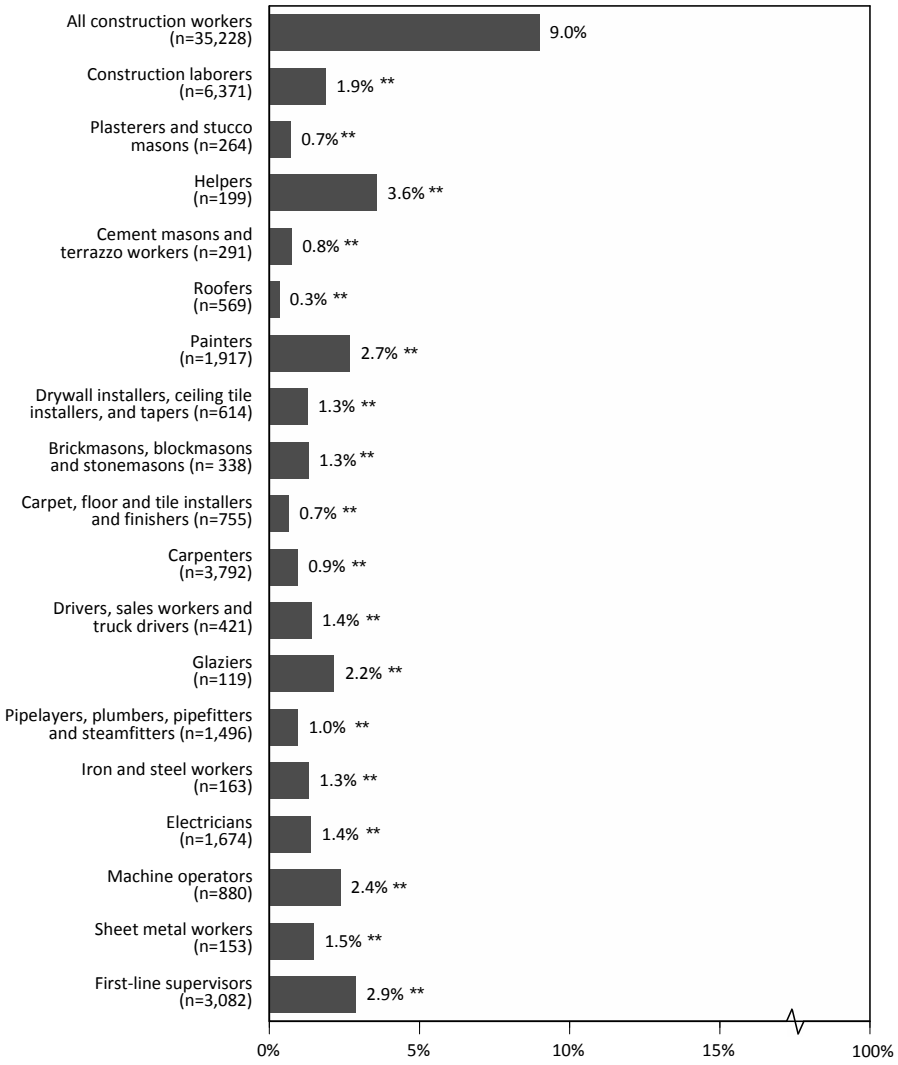
Note:

** Denotes that the difference in proportions between females and males is statistically significant at the 95% confidence level.

Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source:

BBC Research & Consulting from 2007-2009 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.



Percentage of minorities and women who are managers. To further assess advancement opportunities for minorities and women in the California construction industry, the study team examined differences between demographic groups in the proportion of construction workers who were managers. Figure E-8 presents the percentage of construction workers who reported being construction managers in 2000 and 2007-2009 for California and the nation.

Figure E-8. Percentage of construction workers who worked as a manager, 1980, 2000 and 2007-2009

Note:

** Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between females and males) for the given Census/ACS year is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from the 2000 U.S. Census 5% sample and 2007-2009 ACS Public Use Microdata samples. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

California	1980	2000	2007 2009
Race/ethnicity			
African American	1.6 % **	4.9 % **	6.0 % **
Asian-Pacific American	3.8 **	9.3	10.6 **
Subcontinent Asian American	3.9	11.1	16.1 **
Hispanic American	2.1 **	2.4 **	3.4 **
Native American	5.3	8.3	10.8 **
Other minority	6.0	8.9	7.9 **
Non-Hispanic white	5.9	11.0	14.1
Gender			
Female	7.4 % **	5.0 % **	7.2 % **
Male	4.8	7.9	8.7
All individuals	5.1 %	7.6 %	8.6 %

United States	1980	2000	2007 2009
Race/ethnicity			
African American	1.5 % **	3.1 % **	4.8 % **
Asian-Pacific American	4.2 **	7.7	8.2 **
Subcontinent Asian American	5.7	11.7 **	9.3
Hispanic American	2.0 **	2.5 **	3.0 **
Native American	2.5 **	4.6 **	5.4 **
Other minority	4.8	6.2 **	2.7 **
Non-Hispanic white	4.9	7.5	10.0
Gender			
Female	5.7 % **	4.1 % **	5.8 % **
Male	4.4	6.7	8.1
All individuals	4.5 %	6.5 %	7.9 %

Racial/ethnic composition of managers. Overall, the proportion of construction workers who were managers increased between 2000 and 2007-2009. In 2007-2009, about 14 percent of non-Hispanic whites in the California construction industry were managers. Compared with non-Hispanic whites, a smaller percentage of all minority groups except Subcontinent Asian Americans were managers in the California construction industry:

- About 6 percent of African Americans working in the California construction industry were managers;
- Less than 4 percent of Hispanic Americans were managers; and
- Eleven percent of Asian-Pacific Americans and Native Americans were managers.

The percentage of workers in the construction industry who were managers was higher in California than the United States for all minority groups.

Gender composition of managers. Female construction workers were less likely than their male counterparts to be managers in both 2000 and 2007-2009. In 2007-2009, 7 percent of female construction workers were managers in California compared to 9 percent of males.

Engineering Industry

BBC next examined how education and employment may influence the number of minority and female entrepreneurs potentially working in the California engineering industry.

Education. In contrast to the construction industry, lack of educational attainment may preclude workers' entry into the engineering industry, because many occupations require at least a four-year college degree and some require licensure. According to the 2007-2009 ACS, 65 percent of individuals working in the California engineering industry had at least a four-year college degree. Eighty-eight percent of civil engineers had at least a four-year college degree. Therefore, barriers to education can restrict employment opportunities, advancement opportunities, and, ultimately, business ownership. Disparities in business ownership rates in engineering-related work may have resulted from lack of sufficient education across race, ethnicity, and gender groups.[31]

Based on 2000 Census data and 2007-2009 ACS data, Figure E-9 presents the percentage of workers age 25 and older with at least a four-year degree in California and the United States. The level of education necessary to work in the engineering industry may partially restrict employment opportunities for African Americans, Hispanic Americans, and Native Americans. For each of those groups, the percentage of workers age 25 or older with a bachelor's degree or higher was substantially lower than that of non-Hispanic whites in California and the United States for 2000 and 2007-2009.

Race/ethnicity. In California, about 45 percent of all non-Hispanic white workers age 25 and older had at least a four-year degree in 2007-2009. For other racial/ethnic groups, 2007-2009 ACS data for California indicated the following:

- About 28 percent of African Americans had at least a four-year college degree;
- Only 12 percent of Hispanic Americans had at least a four-year college degree; and
- About 26 percent of Native Americans had at least a four-year college degree.

Some minority groups in California were more likely than non-Hispanic whites to be college graduates in 2007-2009. About 51 percent of Asian-Pacific Americans and 74 percent of Subcontinent Asian Americans had at least a bachelor's degree. In both California and the United States as a whole, all minority groups showed an increase between 2000 and 2007-2009 in the proportion of workers with a bachelor's degree.

Gender. In California in 2000, about 32 percent of women and 33 percent of men had at least a four-year college degree. In 2007-2009, a larger percentage of women (36%) had a bachelor's degree than men (33%).

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[31] Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 42 (4): 562-584.

Figure E-9.
Percentage of all workers 25 and older with at least a four-year degree, 2000 and 2007-2009

Note:

** Denotes that the difference in proportions between the minority and non-Hispanic white groups (or female and male gender groups) for the given Census/ACS year is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% sample and 2007-2009 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

California	2000	2007 2009
Race/ethnicity		
African American	23.2 % **	27.7 % **
Asian-Pacific American	46.7 **	51.2 **
Subcontinent Asian American	69.2 **	73.6 **
Hispanic American	10.3 **	11.8 **
Native American	21.0 **	25.6 **
Other minority group	33.8 **	36.2 **
Non-Hispanic white	40.2	44.7
Gender		
Female	31.9 %	35.6 % **
Male	32.8	33.0

United States	2000	2007 2009
Race/ethnicity		
African American	19.1 % **	22.3 % **
Asian-Pacific American	45.4 **	49.3 **
Subcontinent Asian American	68.4 **	74.2 **
Hispanic American	13.4 **	14.8 **
Native American	17.3 **	19.0 **
Other minority group	30.0 **	33.5 **
Non-Hispanic white	32.5	36.3
Gender		
Female	29.3 % **	33.4 % **
Male	30.2	31.7

Additional indices of high school educational attainment. Because of the importance of college admission as a step in entering the engineering industry, the study team examined additional information on the educational achievement of minority high school students in California.

California Legislative Black Caucus report. The California Legislative Black Caucus published a report in early 2007 that included indices of high school achievement for African Americans, Asian Americans, Hispanic Americans, and non-Hispanic whites in California. BBC translated the reported statistics into indices where a value of 100 represents the high school achievement rate for non-Hispanic white students. Values less than 100 indicate lower high school achievement rates for minority students, and values greater than 100 indicate higher high school achievement rates for minority students.

For example, only 25.2 percent of African American students in California had completed necessary courses for admission to a University of California (UC) or California State University (CSU) school in 2004-2005. That rate was below the rate for non-Hispanic white students (40.9%). BBC created an index for African American student achievement for completion of necessary courses by dividing 25.2 percent by 40.9 percent, and then multiplying the result by 100, yielding an index value of 62.

As shown in Figure E-10, high school achievement indices ranged from 52 to 95 for African American students in California. The range for Hispanic Americans in California ranged from 59 to 96. Overall, the California Legislative Black Caucus report showed educational outcomes for Asian American students to be similar or better than those of non-Hispanic whites.

Figure E-10.
Indices of high school achievement for African Americans, Asian Americans, Hispanic Americans and non-Hispanic whites in California, 2004-2005 (non-Hispanic white=100)

California	African American	Asian American	Hispanic American
Completed courses for UC/CSU entrance	62	144	59
CAT/6 reading scores (11th Grade)	95	100	96
High school exit exam passing rate: English	52	108	64
High school exit exam passing rate: math	62	86	62
SAT average score	80	98	83
High school dropouts: 1 year rate	275	70	200
High school dropouts: 4 year rate	276	70	210

Note: Data for completed courses for UC/CSU entrance were for 2004-2005. Dates not provided in source for other educational statistics.

Source: BBC Research & Consulting from California Legislative Black Caucus. 2007. The State of Black California, Full Report, Sacramento.

Notable indices for African Americans included:

- Passing the high school exit exam for English at a rate roughly half that of non-Hispanic white students;
- Passing the high school exit exam for math at less than two-thirds the rate of non-Hispanic white students; and
- Having a high school dropout rate more than twice that that of non-Hispanic white students in California.

The achievement index with the least disparity between African Americans and non-Hispanic whites (and Hispanic Americans and non-Hispanic whites) in California was reading scores from the Standardized Achievement Test (SAT) administered to students in the 11th grade.

Hispanic American students, on average, exhibited similar disparities in achievement as found for African American students. Hispanic American students were closer to non-Hispanic white students in the rate of passing the high school exit exam for math, but had a lower index than African Americans on completed courses for UC or CSU entrance. High school dropout rates were lower for Hispanic Americans than for African Americans, but still double that of non-Hispanic whites.

American College Testing (ACT) scores. The study team also analyzed more recent high school achievement data from the ACT assessment. Universities evaluate prospective students based on a number of factors, including high school achievement and standardized test scores, such as the ACT, which measures educational attainment in English, mathematics, reading, and science. The same organization that administers the ACT also measures "college readiness" using a benchmark score — the minimum score in each subject area that indicate a 50 percent chance of obtaining a "B" or higher or a 75 percent chance of obtaining a "C" or higher in corresponding

college-level courses. Each year, ACT publishes its findings in state-specific reports, which include the percent of students that met the college readiness benchmark score by race/ethnicity.

Using data from the 2009 and 2011 reports, BBC created an attainment index (similar to the one that the study team created for the California Legislative Black Caucus report) for minority students by measuring college readiness rates for each group against those of non-Hispanic white students. As with the index for the California Legislative Black Caucus report, a value of 100 represents the college readiness benchmark for non-Hispanic white students. Values less than 100 indicate lower college readiness benchmarks for minority students, and values greater than 100 indicate higher college readiness benchmarks for minority student.

As shown in Figure E-11, 2011 college readiness indices in different subject areas ranged from 17 to 54 for African American students in California. Indices for Hispanic American students ranged from 26 to 56. Using the same indexing method, Figure E-11 also presents average freshman graduation rates for different racial/ethnic groups among high school students in California in 2009.[32]

Figure E-11.
Indices of college readiness and college freshman graduation rates for African Americans, Asian Americans, Hispanic Americans and non-Hispanic whites in California, 2010-2011 (non-Hispanic white=100)

California, 2008 2009	African American	Asian American	Hispanic American	Native American
ACT college readiness benchmark index for:				
English	54	91	57	78
Math	33	104	44	70
Reading	43	86	48	74
Science	22	98	28	67
All four	20	98	24	63
ACT composite score	75	98	78	88
Average freshman graduation rate	71	114	76	81
California, 2010 2011				
ACT college readiness benchmark index for:				
English	54	90	56	78
Math	34	104	46	66
Reading	43	88	48	77
Science	20	96	27	55
All four	17	96	26	50
ACT composite score	74	98	77	87

Note: The average freshman graduation rate (AFGR) is an estimate of the percentage of the entering high school freshman class graduating in four years. For a more detailed explanation, visit the United States Department of Education website.

Source: BBC Research & Consulting from ACT. *ACT High School Profile Report*. California, 2009 and 2011 & U.S. Department of Education, Common Core of Data. *Public School Graduates and Dropouts from the Common Core of Data; School Year 2008-2009.*

[32] The average freshman graduation rate (AFGR) is an estimate of the percentage of the entering high school freshman class graduating in four years. For a more detailed explanation, visit the United States Department of Education website.

Notable indices for African Americans students in California in 2011 included:

- Meeting the ACT college readiness benchmark score for science at 20 percent of the rate for non-Hispanic white students;
- Meeting the ACT college readiness benchmark score for math at approximately one-third the rate for non-Hispanic white students;
- Meeting the ACT college readiness benchmark score in all four subject areas at 17 percent of the rate for non-Hispanic white students; and
- Having an average freshman graduation rate that was 71 percent of that found for non-Hispanic white students.

In terms of the college readiness benchmark score, the smallest disparity between African Americans and non-Hispanic whites was in English (index score of 54).

There were also disparities in college readiness and high school achievement for Hispanic American students in California when measuring their scores against those of non-Hispanic white students. Hispanic American students met the college readiness benchmark scores in math and science at about 46 percent and 27 percent of the non-Hispanic white rates, respectively. For those in the graduating class of 2009, Hispanic Americans had an average freshman graduation rate that was 76 percent of that found for non-Hispanic white students.

In general, Native American students in California also met the college readiness benchmark scores at lower rates than non-Hispanic white students but above rates for African American and Hispanic American students. Scores for Asian American students were higher than African American, Hispanic American, and Native American students for each section of the ACT with college readiness indices in different subject areas ranging from 88 to 104. Asian Americans also had an average freshman graduation rate that was 114 percent of that found for non-Hispanic white students.

It appears that disparities in educational achievement in high school or in prior grades are important in explaining the relatively low number of African Americans and Hispanic Americans that have college degrees in California. There are many studies throughout the nation that consider whether the causes of the disparities in educational outcomes for racial/ethnic minorities are affected by discrimination. Those studies are not reviewed in this report.

College engineering programs in California. Historically, college engineering programs in the United States were slow to open doors to minorities such as African Americans.[33] In recent years, California has stood out as having low percentages of African American engineering students. Out of the top 26 engineering schools in the nation in 2002, four were University of California campuses (UC Berkeley, UC Los Angeles (UCLA), UC Santa Barbara (UCSB), and UC San Diego

[33] Unknown Author. 2003. "Blacks Strive to Build a Bridgehead in Academic Engineering." *The Journal of Blacks in Higher Education*. 41 (Autumn): 98-108, 98.

(UCSD)). A 2003 study identified those schools for the lowest percentages of African American engineering students among the top 26:[34]

- In fall 2002, the University of California-Berkeley had 65 African American students among 4,941 full-time engineering students (1.4 percent of engineering students), similar to UCLA.
- There were 23 African Americans among 2,370 total engineering students at UCSB.
- UCSD had no African Americans among its 5,264 engineering students in fall 2002.

Because the enrollment statistics for engineering students were for 2002, most of those students enrolled in college after Proposition 209 had gone into effect. Proposition 209 prohibits California's public colleges from giving preferential treatment to minorities and women in college admissions and financial aid except as part of a federal program. Voters passed that amendment to the California constitution in 1996, and it went into effect in 1998. Many researchers blame Proposition 209 for the relatively low representation of African American and Hispanic American students at more selective colleges in California.[35, 36]

Following the passing of Proposition 209, admission rates of minority applicants dropped dramatically and in the years following have not entirely recovered. One article notes that admission rates for African Americans at more prestigious UC campuses have remained low, but rates at the least selective campuses have grown since Proposition 209.[37] One researcher found that the percentage of African American students at UCLA prior to Proposition 209 were nearly double the percentage in 2007.[38] Another researcher wrote about the effect of Proposition 209 on transfer students and found that African Americans have much lower rates of acceptance whereas Hispanic Americans experience transfer admission rates similar to non-Hispanic whites.[39]

As a group, Asian American applicants were not adversely affected by the amendment. Asian American students accounted for only 11 percent of California high school graduates in 2006, but accounted for 36 percent of all students admitted to the UC system.[40]

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[34] *Ibid.*

[35] Contreras, Frances. 2003. "The Reconstruction of Merit Post-Proposition 209." *Educational Policy*. 19 (2): 371-395.

[36] Karabel, Jerome. 1999. "The Rise and Fall of Affirmative Action at the University of California." *The Journal of Blacks in Higher Education*. 25 (Autumn): 109-112.

[37] Unknown Author. 2006. "Affirmative Action Ban Continues to Inflict Severe Damage on Black Higher Educational Opportunities in California." *The Journal of Blacks in Higher Education*. 51(Spring): 44.

[38] Unknown Author. 2007. "The Ban on Affirmative Action at the University of California is Now 10 Years Old: The Severe Harm to the Educational Opportunities for African Americans Persists" *The Journal of Blacks in Higher Education*. 56 (Summer): 34-35, 34.

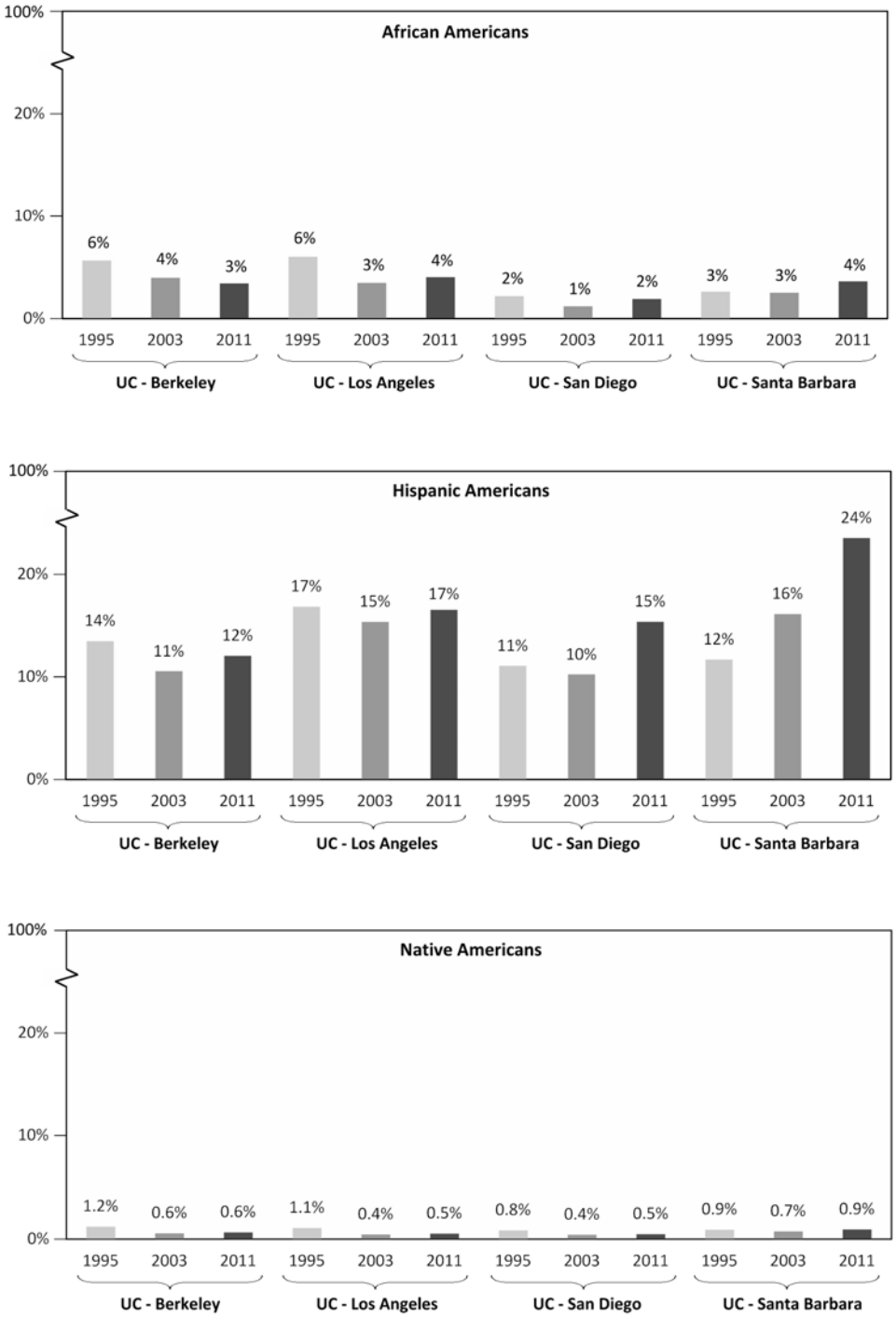
[39] Unknown Author. 2006. "The Devastating Impact of Proposition 209 on Black Higher Education in California." *The Journal of Blacks in Higher Education*. 59(Spring): 14-15, 14.

[40] Unknown Author. 2006. "Affirmative Action Ban Continues to Inflict Severe Damage on Black Higher Educational Opportunities in California. *The Journal of Blacks in Higher Education*. 51(Spring).

To better understand the broader patterns of enrollment by race/ ethnicity in the four UC schools with the highest-rated engineering programs, the study team examined African American, Hispanic American, and Native American enrollment as undergraduates in 1995, 2003, and 2011. Figure E-12 presents those trends.

- Between 1995 and 2003, the proportion of undergraduates who are African American decreased by approximately one-third at UC-Berkeley and by one-half at UCLA and UCSD. The proportion of African American undergraduates continued to decline at UC-Berkeley through 2011 but increased at UCLA, UCSD and UCSB from 2003 to 2011. UCSB is the only campus to have a higher representation of African American undergraduates in 2011 than in 1995.
- The representation of Hispanic Americans among undergraduates also declined at UC-Berkeley, UCLA and UC-San Diego from 1995 to 2003. Enrollment of Hispanic Americans increased on each campus from 2003 to 2011 but remained below the 1995 proportion at UC-Berkeley. The proportion of Hispanic undergraduates doubled at UCSB between 1995 and 2011.
- Enrollment of Native Americans dropped at all four campuses from 1995 to 2003. The proportion of Native American undergraduates increased from 2003 to 2011, but remained below enrollment prior to the passing of Proposition 209, except at UCSB.

Figure E-12.
Enrollment of undergraduates at selected University of California campuses, fall 1995, 2003 and 2011



Source: UC Office of the President, Student Affairs, Admissions, available at http://www.ucop.edu/sas/index.html.

Employment. After consideration of educational opportunities and attainment for minorities and women, the study team examined the race/ethnicity and gender composition of workers in the engineering industry in California. Figure E-13 compares the demographic composition of workers in the California engineering industry to that of all workers in California who are 25 years or older and have a college degree. Results are presented for 1980, 2000, and 2007-2009.

Race/ethnicity. In 2007-2009, about 37 percent of workers in the California engineering industry were minorities. Of those workers:

- 3 percent were African Americans;
- 16 percent were Asian-Pacific Americans;
- 2 percent were Subcontinent Asian American; and
- 14 percent were Hispanic Americans.

Native Americans comprised approximately 1 percent of California engineering workers in 2007-2009.

In 2007-2009, minorities as a single group comprised a smaller share of workers in engineering-related industries (37%) than all workers 25 and older with a four-year college degree (40%). In particular, Asian-Pacific Americans made up 19 percent of workers with a four-year college degree but only 16 percent of workers in the engineering industry. Subcontinent Asian Americans made up nearly 4 percent of workers with a college degree and only 2 percent of engineering workers. African Americans also had a lower representation among engineers (3%) than all workers with a college degree (5%). However, Hispanic Americans comprised a larger share of workers in the engineering industry (14%) than workers with a college degree in all industries (11%).

Gender. Compared to their representation among workers 25 and older with a college degree in all industries, relatively few women work in the engineering industry. In 2007-2009, women represented 27 percent of engineering-related workers in California but about 47 percent of workers with a four-year college degree.

Figure E-13.
Demographic distribution of engineering-related workers and workers age 25 and older with a four-year college degree in all industries, 1980, 2000 and 2007-2009

California	Workers 25+ with college degree 1980 (n=109,611)	2000 (n=212,702)	2007 09 (n=167,342)	Engineering industry workforce 1980 (n 3,965)	2000 (n 7,919)	2007 09 (n=6,419)
Race/ethnicity						
African American	4.0 %	4.5 %	4.8 %	2.4 % **	3.1 % **	3.4 % **
Asian-Pacific American	8.2	16.3	19.3	7.7	14.4 **	16.0 **
Subcontinent Asian American	0.6	2.4	3.5	1.0 **	1.5 **	2.1 **
Hispanic American	5.1	7.9	11.2	6.8 **	11.0 **	14.0 **
Native American	0.5	0.8	0.7	0.4	0.9	1.0
Other minority group	0.2	0.9	0.4	0.2	1.0	0.2 **
Total minority	18.6 %	32.9 %	39.9 %	18.5 %	31.9 %	36.6 %
Non-Hispanic white	81.4	67.1	60.1	81.5	68.1	63.4 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	34.0 %	44.3 %	46.5 %	23.3 % **	27.4 % **	27.3 % **
Male	66.0	55.7	53.5	76.7 **	72.6 **	72.7 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

United States	Workers 25+ with college degree 1980 (n=858,511)	2000 (n 1,631,919)	2007 09 (n=445,915)	Engineering industry workforce 1980 (n=28,869)	2000 (n 58,221)	2007 09 (n=16,737)
Race/ethnicity						
African American	5.3 %	6.8 %	7.7 %	3.1 % **	4.2 % **	5.0 % **
Asian-Pacific American	2.7	5.2	6.2	2.8	4.6 **	4.8 **
Subcontinent Asian American	0.6	1.7	2.5	1.1 **	1.3 **	1.5 **
Hispanic American	2.5	4.4	6.3	3.5 **	5.5 **	6.8 **
Native American	0.3	0.7	0.6	0.3 **	0.7	0.8
Other minority group	0.1	0.4	0.2	0.1	0.4	0.2
Total minority	11.4 %	19.1 %	23.6 %	10.9 %	16.7 %	19.2 %
Non-Hispanic white	88.6	80.9	76.4	88.9	83.3 **	80.8 **
Total	100.0 %	100.0 %	100.0 %	99.8 %	100.0 %	100.0 %
Gender						
Female	34.7 %	45.6 %	47.9 %	21.1 % **	26.0 % **	26.8 % **
Male	65.3	54.4	52.1	78.9 **	74.0 **	73.2 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: ** Denotes that the difference in proportions between engineers and workers in all industry groups for the given Census/ACS year is statistically significant at the 95% confidence level.

The engineering –related industry in 2000 and 2007-2009 is "architectural, engineering, and related services," and in 1980 is "engineering, architectural and surveying services." Though closely related, the groups are not exactly comparable.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2009 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Civil engineers. The study team also examined the number of minorities and women among civil engineers in California in 1980, 2000, and 2007-2009. Figure E-14 presents these results. Overall, in 2007-2009, the percentage of civil engineers who were minorities (39%) was consistent with the percentage of all Californians with college degrees who were minorities (40%). However, African Americans, Hispanic Americans and Native Americans represented a smaller share of civil engineers than of all workers 25 and older with a college degree (the difference for Hispanic Americans was not statistically significant). Asian-Pacific Americans comprised 19 percent of all workers with college degrees and 21 percent of civil engineers (not a statistically significant difference).

Only 13 percent of civil engineers in California were women in 2007-2009, far less than the percentage of all workers with college degrees that were women (47%).

Figure E-14.
Demographics of civil engineers and workers 25 and older with a college degree, 1980, 2000 and 2007-2009

California	Workers 25+ with college degree			Civil engineering workforce		
	1980 (n=109,611)	2000 (n=212,702)	2007 09 (n=167,342)	1980 (n=1,567)	2000 (n 1,952)	2007 09 (n=1,449)
Race/ethnicity						
African American	4.0 %	4.5 %	4.8 %	2.3 % **	3.1 %	3.1 % **
Asian-Pacific American	8.2	16.3	19.3	11.0 **	19.4	21.3
Subcontinent Asian American	0.6	2.4	3.5	2.9 **	2.7	3.8
Hispanic American	5.1	7.9	11.2	5.2	8.2	10.5
Native American	0.5	0.8	0.7	0.1 **	0.9	0.3 **
Other minority group	0.2	0.9	0.4	0.1	0.9	0.2
Total minority	18.6 %	32.9 %	39.9 %	21.6 %	35.3 %	39.2 %
Non-Hispanic white	81.4	67.1	60.1	78.3 **	64.7	60.8
Total	100.0 %	100.0 %	100.0 %	99.9 %	100.0 %	100.0 %
Gender						
Female	34.0 %	44.3 %	46.5 %	3.4 % **	13.1 % **	13.4 % **
Male	66.0	55.7	53.5	96.6 **	86.9 **	86.6 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

United States	Workers 25+ with college degree			Civil engineering workforce		
	1980 (n=858,511)	2000 (n=1,631,919)	2007 09 (n=445,915)	1980 (n 10,088)	2000 (n=12,912)	2007 09 (n=3,405)
Race/ethnicity						
African American	5.3 %	6.8 %	7.7 %	2.5 % **	3.7 % **	5.2 % **
Asian-Pacific American	2.7	5.2	6.2	4.0 **	6.2 **	6.4
Subcontinent Asian American	0.6	1.7	2.5	2.0 **	2.6 **	3.4 **
Hispanic American	2.5	4.4	6.3	2.9 **	4.4	5.9
Native American	0.3	0.7	0.6	0.3	0.8	0.7
Other minority group	0.1	0.4	0.2	0.2 **	0.4	0.3
Total minority	11.4 %	19.1 %	23.6 %	11.8 %	18.2 %	21.9 %
Non-Hispanic white	88.6	80.9	76.4	88.2	81.8	78.1
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender						
Female	34.7 %	45.6 %	47.9 %	3.0 % **	10.3 % **	12.3 % **
Male	65.3	54.4	52.1	97.0 **	89.7 **	87.7 **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: ** Denotes that the difference in proportions between civil engineers and workers 25+ with a college degree for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from the 1980 and 2000 U.S. Census 5% sample s and 2007-2009 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Summary

BBC's analysis suggests that there are barriers to entry for certain minority groups and for women in the construction and engineering industries in California. For the construction industry, there appears to be barriers to advancing within the industry that continue through occupational advancement.

- Fewer African Americans worked in the California construction industry than what might be expected based on their representation in the overall workforce. For engineering, barriers may begin with education for certain minority groups.
- Women accounted for particularly few workers in the California construction industry.
- Lack of education appears to be a barrier to entry into the California engineering industry for African Americans, Hispanic Americans, and Native Americans. Workers in each of those groups were less likely to have a four-year college degree compared to non-Hispanic whites. For African Americans and Hispanic Americans, disparities in educational attainment appear at the high school level, which may affect college opportunities.
- In 2007-2009, there were fewer women than men in the engineering industry in California, despite the fact that more women had attained four-year college degrees.

Barriers to advancement in the construction industry may also be an important reason for the relatively low number of minority and female business owners.

- Representation of minorities and women was much lower in certain construction trades (including first-line supervisors) compared with others.
- Compared to non-Hispanic whites in the construction industry, African Americans and Hispanic Americans were less likely to be managers.

APPENDIX F.
Business Ownership in the California Construction and Engineering Industries

About 22 percent of all workers in the California construction industry were self-employed business owners in 2007-2009. Fifteen percent of workers in the local engineering industry were self-employed business owners. Focusing on those two industries, BBC examined business ownership for different racial, ethnic, and gender groups in California. BBC used Public Use Microdata Samples (PUMS) from the 1980 and 2000 Census and from the 2007-2009 ACS to study business ownership rates in the construction and engineering industries. Note that "self-employment" and "business ownership" are used interchangeably in Appendix F.

Business Ownership Rates

Many studies have explored differences between minority and non-minority business ownership at the national level. Although overall self-employment rates have increased for minorities and women over time, a number of studies indicate that race/ethnicity and gender continue to affect opportunities for business ownership.[1] The extent to which such individual characteristics may limit business ownership opportunities differs across industries and from state to state.

Construction industry. Compared to other industries, construction has a large number of business owners. In 2007-2009, 11 percent of workers across all industries were self-employed in California (in incorporated or unincorporated businesses). Twenty-two percent of workers in the construction industry were self-employed. However, rates of self-employment in the California construction industry vary by race, ethnicity, and gender. Figure F-1 shows the percentage of workers who were self-employed in the construction industry by group for 1980, 2000, and 2007-2009. Figure F-1 also reports corresponding sample sizes for those percentages. Results for California are compared with national statistics.

Business ownership rates in 2000. The 2000 Census provides information on the largest sample of construction workers of any of the data sets examined. In 2000, 26 percent of non-Hispanic whites working in the California construction industry were self-employed. Except for Asian-Pacific Americans, business ownership rates were lower for each minority group.

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[1] See, for example, Waldinger, Roger and Howard E. Aldrich. 1990. *Ethnicity and Entrepreneurship.* Annual Review of Sociology. 111-135.; Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations.* The Journal of Human Resources, Volume 31, Issue 4, 757-793.; Fairlie, Robert W. and Alicia M. Robb. 2007. *Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances and Business Human Capital.* Journal of Labor Economics, 25(2), 289-323.; and Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses.* Russell Sage Foundation.

Figure F-1.
Percentage of workers in the construction industry who were self-employed, 1980, 2000 and 2007-2009

California	1980	2000	2007 2009	Sample size 1980	Sample size 2000	Sample size 2007 2009
Race/ethnicity						
African American	12.0 % **	14.9 % **	19.4 % **	1,219	1,482	776
Asian-Pacific American	15.5 **	25.9	29.2	659	1,961	1,682
Subcontinent Asian American	0.0 **	15.5	22.3	51	115	106
Hispanic American	9.9 **	11.8 **	15.3 **	5,430	17,166	14,891
Native American	13.7 **	22.0	25.3	416	840	418
Other race minority	22.0	25.4	34.1	50	458	86
Non-Hispanic white	21.9	26.5	29.4	25,931	26,786	17,269
Gender						
Female	10.3 % **	13.7 % **	14.7 % **	3,119	4,840	3,676
Male	20.2	21.6	23.1	30,637	43,968	31,552
All individuals	19.3 %	20.8 %	22.3 %	33,756	48,808	35,228

United States	1980	2000	2007 2009	Sample size 1980	Sample size 2000	Sample size 2007 2009
Race/ethnicity						
African American	9.0 % **	15.2 % **	18.2 % **	24,357	26,752	5,044
Asian-Pacific American	11.7 **	21.3 **	23.9 **	2,057	5,297	1,515
Subcontinent Asian American	4.9 **	17.9 **	23.5	244	725	211
Hispanic American	10.6 **	12.2 **	15.5 **	19,590	66,531	19,455
Native American	10.1 **	19.2 **	20.7 **	2,874	8,089	1,677
Other race minority	14.5 **	23.9	16.4 **	248	1,923	243
Non-Hispanic white	19.4	25.4	27.3	281,094	371,152	78,678
Gender						
Female	9.8 % **	16.8 % **	17.4 % **	26,096	46,791	10,794
Male	18.7	23.3	24.4	304,368	433,678	96,029
All individuals	18.0 %	22.6 %	23.8 %	330,464	480,469	106,823

Note: *, ** Denotes that the difference in proportions between the minority and non-Hispanic white groups (or female and male groups) for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2007-2009 ACS Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

- About 12 percent of Hispanic Americans in the construction industry owned their businesses, less than half of the rate of non-Hispanic whites.
- African Americans in the construction industry owned businesses at a rate of only about 15 percent, substantially lower than the rate of non-Hispanic whites.
- In California, 16 percent of Subcontinent Asian Americans working in the construction industry were self-employed, substantially lower than the rate of non-Hispanic whites but not a statistically significant difference.
- The ownership rate of Native Americans in the construction industry was 22 percent, lower than that for non-Hispanic whites but not a statistically significant difference.

Compared with about 22 percent of men, 14 percent of women working in the construction industry in California were self-employed in 2000. That difference was consistent with gender trends observed for the entire nation.

Changes in business ownership rates since 2000. Business ownership rates in the construction industry increased among all groups between 1980 and 2000 and again between 2000 and 2007-2009. Note that this trend covers the recession which began in late 2007. In 2007-2009, 29 percent of non-Hispanic whites working in the California construction industry were self-employed, compared with 26 percent in 2000. Although minority groups also had higher rates of business ownership in 2007-2009 than in 2000, business ownership rates for minorities continued to be lower than that for non-Hispanic white construction workers.

- In 2007-2009, a substantially smaller percentage of Hispanic Americans (15%) than non-Hispanic whites were business owners in the California construction industry.
- The business ownership rate of African Americans was about 19 percent, substantially lower than that for non-Hispanic whites.

Asian-Pacific Americans continued to own businesses at a similar rate to non-Hispanic whites in 2007-2009. Subcontinent Asian American construction workers and Native American construction workers had lower business ownership rates than that for non-Hispanic whites but those differences were not statistically significant.

Substantial differences in business ownership rates persisted between women (15%) and men (23%) in 2007-2009, consistent with national trends.

Engineering industry. BBC also examined business ownership rates in the engineering industry.[2] Figure F-2 presents the percentage (and corresponding sample sizes) of workers who were self-employed in the engineering industry in 1980, 2000, and 2007-2009.

Business ownership rates in 2000. In 2000, about 19 percent of non-Hispanic whites working in the California engineering industry were self-employed. Most minority groups had lower rates of business ownership than non-Hispanic whites.

- Hispanic Americans had a business ownership rate of about 9 percent, approximately half the rate of non-Hispanic whites.
- The business ownership rate of African Americans was about 6 percent, less than one-third the rate of non-Hispanic whites.
- About 11 percent of Asian-Pacific Americans working in the engineering industry were self-employed, lower than the rate of non-Hispanic whites.
- The ownership rate of Subcontinent Asian Americans was 15 percent, lower than the rate of non-Hispanic whites but not a statistically significant difference.

[2] In Appendix F and other marketplace appendices, Census data for the engineering industry refer to architectural, engineering and related services.

Figure F-2.
Percentage of workers in the engineering industry who were self-employed, 1980, 2000 and 2007-2009

California	1980	2000	2007 2009	Sample size 1980	Sample size 2000	Sample size 2007 2009
Race/ethnicity						
African American	7.2 % **	6.4 % **	6.0 % **	97	219	174
Asian-Pacific American	11.6 **	10.5 **	11.4 **	303	1,129	1,044
Subcontinent Asian American	15.0	15.4	4.8 **	40	122	141
Hispanic American	9.3 **	8.6 **	8.3 **	270	863	791
Native American	11.1	21.8	22.2	18	87	57
Other race minority	0.0	22.9	0.0	6	77	16
Non-Hispanic white	20.6	18.5	18.5	3,231	5,422	4,196
Gender						
Female	6.7 % **	9.4 % **	9.2 % **	925	2,187	1,755
Male	22.3	18.4	17.5	3,040	5,732	4,664
All individuals	18.7 %	15.9 %	15.2 %	3,965	7,919	6,419

United States	1980	2000	2007 2009	Sample size 1980	Sample size 2000	Sample size 2007 2009
Race/ethnicity						
African American	5.1 % **	5.2 % **	4.0 % **	906	2,206	657
Asian-Pacific American	8.4 **	8.5 **	9.5 **	807	2,620	838
Subcontinent Asian American	5.8 **	6.2 **	6.0 **	326	736	246
Hispanic American	9.2 **	8.9 **	10.2 **	1,013	3,123	1,019
Native American	10.4 *	11.8	8.9 *	106	474	139
Other race minority	5.3 **	11.6	6.0 **	38	242	37
Non-Hispanic white	15.8	14.2	13.5	25,673	48,823	13,801
Gender						
Female	4.5 % **	7.5 % **	7.6 % **	6,090	15,191	4,497
Male	17.7	15.1	14.2	22,779	43,033	12,240
All individuals	14.9 %	13.2 %	12.5 %	28,869	58,224	16,737

Note: "Minority" includes African Americans, Hispanic Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Native Americans and other minority groups. Sample sizes for these race/ethnicity groups were too small to analyze individually. The data presented in this table include all workers in the engineering industry.

*, ** Denotes that the difference in proportions between the minority and non-Hispanic white groups (or female and male groups) for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2009 ACS Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

The engineering industry business ownership rate for Native Americans (22%) was higher in 2000 than that of non-Hispanic whites, but that difference was not statistically significant.

During the same year, approximately 9 percent of women working in the engineering industry were self-employed compared with 18 percent of men in the local engineering industry.

Changes in business ownership rates since 2000. As shown in Figure F-2, the rate of business ownership rates for African Americans, Hispanic Americans, and Subcontinent Asian Americans working in the California engineering industry fell between 2000 and 2007-2009, whereas the rate for non-Hispanic whites remained the same (19%).

- The business ownership rate for Hispanic Americans fell to 8 percent, lower than the rate of non-Hispanic whites.
- African Americans had a business ownership rate of 6 percent, still less than one-third the rate of non-Hispanic whites.
- About 11 percent of Asian-Pacific Americans working in the engineering industry were self-employed, lower than the rate of non-Hispanic whites.
- The business ownership rate for Subcontinent Asian Americans dropped to 5 percent in 2007-2009, about one-quarter of the rate of non-Hispanic whites.
- The business ownership rate for Native Americans increased between 2000 and 2007-2009 and remained higher than the rate of non-Hispanic whites. However, that difference was not statistically significant.

Both women and men working in the California engineering industry owned businesses at lower rates in 2007-2009 than in 2000, but women (8%) still owned engineering businesses at a lower rate than men (14%).

Potential causes of differences in business ownership rates. Researchers have examined whether there are disparities in business ownership rates after considering personal characteristics such as education and age. Several studies have found that disparities in business ownership still exist when accounting for such race- and gender-neutral factors.

- Some studies have concluded that access to financial capital is a strong determinant of business ownership. Researchers have consistently found a positive relationship between start-up capital and business formation, expansion, and survival.[3] In addition, one study found that housing appreciation measured at the Metropolitan Statistical Area (MSA) level is a positive determinant of becoming self-employed.[4] However, unexplained differences still exist when statistically controlling for those factors.[5]

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[3] See Lofstrom, Magnus and Chunbei Wang. 2006. *Hispanic Self-Employment: A Dynamic Analysis of Business Ownership.* Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).; and Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses.* Russell Sage Foundation.

[4] Fairlie, Robert W. and Harry A. Krashinksy. 2006. Liquidity Constraints, Household Wealth and Entrepreneurship Revisited.

[5] Lofstrom, Magnus and Chunbei Wang. 2006. *Hispanic Self-Employment: A Dynamic Analysis of Business Ownership.* Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).

- Education has a positive effect on the probability of business ownership in most industries. However, findings from multiple studies indicate that minorities are still less likely to own a business than non-minorities with similar levels of education.[6]
- Intergenerational links affect one's likelihood of self-employment. One study found that experience working for a self-employed family member increases the likelihood of business ownership for minorities.[7]
- Time since immigration and assimilation into American society are also important determinants of self-employment, but unexplained differences in business ownership between minorities and non-minorities still exist when accounting for those factors.[8]

Business Ownership Regression Analysis

Race, ethnicity, and gender can affect opportunities for business ownership, even when accounting for other personal characteristics such as education, age, and familial ties. To further examine business ownership, BBC developed multivariate statistical models to explore patterns of business ownership in California. Those models estimate the effect of race/ethnicity and gender on the probability of self-employment while controlling for other potentially influential factors.

An extensive body of literature examines whether race- and gender-neutral factors such as access to financial capital, education, age, and family characteristics (e.g., marital status) help explain differences in business ownership. That subject has also been examined in other disparity analyses. For example, prior studies in Minnesota and Illinois have conducted econometric analyses investigating whether disparities in business ownership for minorities and women working in the combined construction and engineering industry remain after statistically controlling for other personal characteristics.[9, 10] Those studies have incorporated probit econometric models using PUMS data from the 2000 Census and have been among materials submitted to courts in subsequent litigation concerning state implementation of the Federal DBE Program.

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[6] See Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations.* The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. *Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment.* Sociological Perspectives. 79-94.

[7] See Fairlie, Robert W. and Alicia M. Robb. 2006. Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses. Russell Sage Foundation; and Fairlie, Robert W. and Alicia M. Robb. 2007. *Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances and Business Human Capital.* Journal of Labor Economics, 25(2), 289-323.

[8] See Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations.* The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. *Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment.* Sociological Perspectives. 79-94.

[9] National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation.

[10] National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

BBC used similar probit regression models to predict business ownership from multiple independent or "explanatory" variables.[11] Independent variables included:

- Personal characteristics potentially linked to the likelihood of business ownership — age, age-squared, marital status, number of children in the household, number of elderly people in the household, and English-speaking ability;
- Indicators of educational attainment;
- Measures and indicators related to personal financial resources and constraints — home ownership, home value, monthly mortgage payment, dividend and interest income, and additional household income from a spouse or unmarried partner; and
- Variables representing the race/ethnicity and gender of the individual.

BBC developed two models using PUMS data from the 2007-2009 ACS:

- A probit regression model for the California construction industry in 2007-2009 that included 33,250 observations; and
- A probit regression model for the California engineering industry in 2007-2009 that included 6,161 observations.

Results specific to the California construction industry. Figure F-3 presents the coefficients and t-statistics for the probit model for individuals working in the California construction industry in 2007-2009. The model indicates that several neutral factors were important and statistically significant in predicting the probability of business ownership for workers in this industry:

- Older individuals were more likely to be business owners but the marginal effect was lower for the oldest individuals;
- Although home ownership decreased the likelihood of self-employment, the value of the home owned by the worker and higher mortgage payments were associated with a higher probability of business ownership;
- Greater interest and dividend income as well as income from a spouse or partner increased workers' likelihood of owning a business; and
- Attainment of an advanced degree decreased the probability of business ownership.

After controlling for race- and gender-neutral factors, statistically significant disparities in rates of business ownership remained for African Americans, Hispanic Americans, and women working in the California construction industry.

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[11] Probit models estimate the effects of multiple independent or "predictor" variables in terms of a single, dichotomous dependent or "outcome" variable — in this case, business ownership. The dependent variable is binary, coded as "1" for individuals in a particular industry who are self-employed; "0" for individuals who are not self-employed. The model enables estimation of the probability that a worker in a given estimation sample is self-employed. The study team excluded observations where the Census Bureau had imputed values for the dependent variable, business ownership.

Figure F-3.
California construction industry business ownership model, 2007-2009

Variable	Coefficient	t statistic
Constant	-2.3601	-20.55 **
Age	0.0565	10.73 **
Age-squared	-0.0003	-5.73 **
Married	-0.0241	-1.05
Number of children in household	-0.0061	-0.72
Number of people over 65 in household	0.0058	0.22
Owns home	-0.3231	-9.20 **
Home value ($000s)	0.0006	11.20 **
Monthly mortgage payment ($000s)	0.0397	3.73 **
Interest and dividend income ($000s)	0.0026	4.18 **
Income of spouse or partner ($000s)	0.0007	2.43 *
Speaks English well	0.0396	1.28
Less than high school education	-0.0512	-1.93
Some college	0.0345	1.56
Four-year degree	-0.0402	-1.18
Advanced degree	-0.2196	-4.07 **
African American	-0.2775	-3.97 **
Asian-Pacific American	0.0075	0.16
Subcontinent Asian American	-0.1651	-0.71
Hispanic American	-0.2471	-10.22 **
Native American	-0.0709	-0.82
Other race minority	0.2097	1.22
Female	-0.5457	-17.51 **

Note: *,** Denote statistical significance at the 90% and 95% confidence levels, respectively.
The U.S. Census Bureau made a slight change to the disability question on the 2008 ACS and as a result, disability statistics are excluded from the 2007-2009 dataset and from this analysis.

Source: BBC Research & Consulting from 2007-2009 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Simulations of business ownership rates. The probit modeling approach allowed for simulations of business ownership rates for minorities and women as if they had the same probability of self-employment as similarly situated non-Hispanic whites and males, respectively. To conduct those simulations, BBC took the following steps:

1. BBC performed a probit regression analysis predicting business ownership using only non-Hispanic white (or non-Hispanic white male) construction workers in the dataset.[12]

2. The study team then used the coefficients from that model and the mean characteristics of individual minority groups (or women) working in the California construction industry (i.e., personal characteristics, indicators of educational attainment, and indicators of personal financial resources and constraints) to estimate the probability of business ownership of such a group.

[12] That version of the model excluded the race/ethnicity and gender indicator variables, because the value of all of those variables would be the same (i.e., 0).

The results of those simulations yielded estimates of business ownership rates for non-Hispanic whites (or non-Hispanic white males) who shared the same characteristics of minorities (or women) working in the California construction industry. Higher simulated rates indicate that, in reality, race/ethnicity or gender makes it less likely for minority- and women owned firms to own businesses than similarly-situated non-Hispanic whites (or non-Hispanic white males). BBC performed those calculations for only those groups for which race/ethnicity or gender was a statistically significant negative factor in business ownership (i.e., African Americans, Hispanic Americans, and women; see Figure F-3).

Figure F-4 presents simulated business ownership rates (i.e., "benchmark") for African Americans, Hispanic Americans, and non-Hispanic white women, and compares them to the actual, observed mean probability of business ownership for those groups. The disparity index was calculated by taking the actual business ownership rate for each group and dividing it by each group's benchmark, and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to own businesses than what would be expected for similarly-situated non-Hispanic whites (or non-Hispanic white males) — in other words that race/ethnicity (or gender) affects the likelihood of those groups owning businesses in the California construction industry. Similar simulation approaches have been incorporated in other disparity studies that courts have reviewed.

Figure F-4.
Comparison of actual business ownership rates to simulated rates for California construction workers, 2007-2009

Group	Self employment rate		Disparity index
	Actual	Benchmark	(100 parity)
African American	19.1%	26.2%	73
Hispanic American	15.3%	21.9%	70
White female	17.2%	32.9%	52

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-1.

Source: BBC Research & Consulting from statistical models of 2007-2009 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Comparisons of the actual, observed business ownership rate of African Americans in the California construction industry with the benchmark based on simulated business ownership rates of similarly-situated non-Hispanic white construction workers showed that African Americans own businesses at about 73 percent of the rate that would be expected of non-Hispanic white construction workers who share the same personal, financial, and educational characteristics. Hispanic Americans (disparity index of 70) also owned businesses at rates substantially lower than what would be expected based on the simulated business ownership rates of similarly-situated non-Hispanic white construction workers. White women (disparity index of 52) own businesses at about half the rate that would be expected based on the simulated business ownership rates of similarly-situated non-Hispanic white male construction workers.

Results specific to the California engineering industry. BBC developed a separate business ownership model for the California engineering industry that was similar to the model that the study team developed for the construction industry. Figure F-5 presents the coefficients and t-statistics from the probit model predicting business ownership in the California engineering industry in 2007-2009. The following neutral factors were statistically significant predictors of business ownership for the engineering industry in California in 2007-2009:

- Older individuals were more likely to be business owners;
- Home ownership decreased the likelihood of self-employment, but higher home values (for homeowners) were associated with a greater likelihood of business ownership; and
- A larger number of children in the home was associated with a higher likelihood of business ownership in 2007-2009.

When statistically controlling for race- and gender-neutral factors, the regression model for the California engineering industry indicated that Hispanic Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and women working in the industry were less likely than non-Hispanic whites (or men) to own businesses. African Americans had much lower rates of business ownership than non-minorities, but the African American term in the model was not statistically significant, perhaps due to smaller sample sizes for 2007-2009.

Figure F-5.
California engineering industry business ownership model, 2007-2009

Variable	Coefficient	t statistic
Constant	-2.3804	-5.33 **
Age	0.0459	3.15 **
Age-squared	-0.0002	-0.99
Married	-0.0580	-0.81
Number of children in household	0.0542	2.29 *
Number of people over 65 in household	0.0182	0.29
Owns home	-0.3066	-2.80 **
Home value ($000s)	0.0005	3.87 **
Monthly mortgage payment ($000s)	0.0236	1.35
Interest and dividend income ($000s)	0.0023	1.72
Income of spouse or partner ($000s)	0.0005	1.34
Speaks English well	-0.4913	-1.57
Less than high school education	-0.3955	-1.57
Some college	0.1591	1.62
Four-year degree	0.1859	2.07
Advanced degree	0.2181	2.10
African American	-0.4695	-1.96
Asian-Pacific American	-0.2666	-3.41 **
Subcontinent Asian American	-0.7764	-4.13 **
Hispanic American	-0.2323	-2.82 **
Native American	0.1848	0.66
Other race minority	0.0000	0.00 **
Female	-0.2906	-5.25 **

Note: *,** Denote statistical significance at the 90% and 95% confidence levels, respectively.

Source: BBC Research & Consulting from 2007-2009 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Simulations of business ownership rates. The study team also simulated business ownership rates in the California engineering industry using the same approach as it used for the construction industry. Figure F-6 presents actual and simulated ("benchmark") business ownership rates for minorities and white women in the California engineering industry. BBC performed those calculations for which race/ethnicity or gender was a statistically significant negative factor in business ownership (i.e., African Americans, Hispanic Americans, and women; see Figure F-5).

Figure F-6.
Comparison of actual business ownership rates to simulated rates for California workers in the engineering industry, 2007-2009

Group	Self employment rate		Disparity index
	Actual	Benchmark	(100 parity)
Asian-Pacific American	11.6%	16.8%	69
Subcontinent Asian American	5.1%	16.4%	31
Hispanic American	8.4%	11.9%	71
White female	11.5%	17.7%	65

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-2.

Source: BBC Research & Consulting from statistical models of 2007-2009 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Simulated business ownership rates indicated that Hispanic Americans working in the industry own engineering firms at 71 percent of the rate observed for similarly-situated non-Hispanic whites (i.e., non-Hispanic whites who share the same personal, financial, and educational characteristics of Hispanic Americans). There were about 69 percent as many Asian-Pacific American-owned businesses as would be expected based on the simulated business ownership rates of similarly-situated non-Hispanic whites. Subcontinent Asian Americans had an actual business ownership rate of 5 percent, compared to a benchmark of 16 percent — less than one-third the rate of similarly situated non-Hispanic whites.

Approximately 12 percent of non-Hispanic white women in the California engineering industry were business owners in 2007-2009 compared with a benchmark business ownership rate of about 17 percent (a disparity index of 65).

Summary of Business Ownership in the Construction and Engineering Industries

Disparities in business ownership were present in the California construction industry:

- In both 2000 and 2007-2009, business ownership rates for African Americans and Hispanic Americans were substantially lower than that of non-Hispanic whites. Business ownership rates were lower for other minority groups as well, but differences were not statistically significant in part due to smaller sample sizes for those groups.
- After statistically controlling for a number of neutral factors affecting business ownership, substantially fewer African Americans and Hispanic Americans owned firms than would be expected if they owned businesses at the same rate as similarly-situated non-Hispanic whites in 2007-2009.
- In 2000 and in 2007-2009, women working in the local construction industry had substantially lower rates of business ownership than men. After controlling for a number of race- and gender-neutral factors using 2007-2009 data, substantial disparities persisted in business ownership rates for women.

BBC also identified disparities in business ownership rates in the California engineering industry:

- Most minorities working in the California engineering industry were self-employed at substantially lower rates than non-Hispanic whites in both 2000 and 2007-2009, including African Americans, Asian-Pacific Americans, and Hispanic Americans in 2000. Those same groups and Subcontinent Asian Americans had lower rates of business ownership than non-Hispanic whites in 2007-2009.
- In 2000 and in 2007-2009, women working in the engineering industry in California had substantially lower self-employment rates than men.
- BBC used regression models to investigate the presence of race/ethnicity- and gender-based disparities in business ownership rates in 2007-2009 after accounting for the effects of race- and gender-neutral factors. The results indicated substantial disparities for Hispanic Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and women.

APPENDIX G.
Access to Capital for Business Formation and Success

Access to capital is one of the factors researchers have examined when studying business formation and success. If discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start, operate, or expand businesses.[1, 2]

Business ownership is affected by the capital a potential business owner has to start a business, as discussed in Appendix F. Researchers have also found that the amount of business start-up capital can affect long-term success.[3] Minority- and women-owned firms, on average, have less start-up capital than majority-owned firms and male-owned firms:

- In 2007, 30 percent of majority-owned businesses responding to national U.S. Census Bureau survey indicated that they had start-up capital of $25,000 or more.
- Only 17 percent of African American-owned businesses indicated that level of start-up capital and disparities in start-up capital were identified for each other race/ethnic minority group except for Asian Americans.[4]
- Also in 2007, 19 percent of female-owned firms reported start-up capital of $25,000 or more compared with 32 percent of male-owned firms (not including firms that were equally owned by men and women).

Disparities in start-up capital can have long-term consequences, as can any race-, ethnicity- or gender-based discrimination in access to business loans after a firm is started.[5] Appendix G explores access to business capital, which relates closely to matters discussed in Appendix F and Appendix H.

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[1] For example, see: Mitchell, Karlyn and Douglas K. Pearce. 2005. "Availability of Financing to Small Firms Using the Survey of Small Business Finances." U.S. Small Business Administration, Office of Advocacy. 57.

[2] Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

[3] *Ibid.*

[4] Business owners were asked, "What was the total amount of capital used to start or acquire this business? (Capital includes savings, other assets, and borrowed funds of owner(s))." From U.S. Census Bureau, Statistics for All U.S. Firms by Total Amount of Capital Used to Start or Acquire the Business by Industry, Gender, Ethnicity, Race, and Veteran Status for the U.S.: 2007 Survey of Business Owners http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SBO_2007_00CSCB16&prodType=table .

[5] Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

Appendix G first presents information about homeownership and mortgage lending, because home equity can be an important source of capital to start and expand businesses. The appendix then turns to business loans, assessing whether minorities and females experience difficulty acquiring business capital.

Homeownership and Mortgage Lending

BBC analyzed homeownership and the mortgage lending industry to explore differences across race/ethnicity and gender that may lead to disparities in access to capital.

Homeownership. Wealth created through homeownership can be an important source of capital to start or expand a business.[6] Any barriers to homeownership and home equity growth for minorities or women can affect business opportunities by constraining their available funding. Similarly, any barriers to accessing home equity through home mortgages can also affect available capital for new or expanding businesses. In sum:

- A home is a tangible asset that provides borrowing power;[7]
- Wealth that accrues from housing equity and tax savings from homeownership contributes to capital formation;[8]
- Next to business loans, mortgage loans have traditionally been the second largest loan type for small businesses;[9] and
- Homeownership is associated with an estimated 30 percent reduction in the probability of loan denial for small businesses.[10]

Home equity as a source of business capital is especially important in California where, historically, house price appreciation has caused home value to be a substantial portion of many households' wealth.[11]

The study team analyzed homeownership rates and home values before considering loan denial and subprime lending.

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[6] The housing and mortgage crisis beginning in late 2006 has substantially impacted the ability of small businesses to secure loans through home equity. Later in this appendix, BBC discusses the consequences to small businesses and MBE/WBEs.

[7] Nevin, Allen. 2006. "Homeownership in California: A CBIA Economic Treatise." *California Building Industry Association.* 2.

[8] Jackman, Mary R. and Robert W. Jackman 1980. "Racial Inequalities in Home Ownership." *Social Forces.* 58. 1221-1234.

[9] Berger, Allen N. and Gregory F. Udell. 1998. "The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle." *Journal of Banking and Finance.* 22.

[10] Cavalluzzo, Ken and John Wolken. 2005. "Small Business Loan Turndowns, Personal Wealth and Discrimination." *Journal of Business.* 78:2153-2178.

[11] Myers, Dowell and Xin Gao. 2004. "Trajectories of Homeownership in California, 1980 to 2000, and 2000 to 2030." *California Housing Futures research program.* Fannie Mae Foundation.

Homeownership rates. Many studies document past discrimination in the national housing market. The United States has a history of restrictive real estate covenants and property laws that affect the ownership rights of minorities and women.[12] In the past, for example, a woman's participation in homeownership was secondary to that of her husband and parents.[13] BBC used 2000 Census and 2007-2009 ACS data to examine homeownership rates in California and in the United States. Figure G-1 presents rates of homeownership for minority groups and non-Hispanic whites.

As shown in Figure G-1, approximately two-thirds of non-Hispanic white households owned homes in California in 2000, and homeownership rates were much lower for minorities.

- Approximately 39 percent of African American households were homeowners in 2000;
- About 44 percent of Hispanic American households were homeowners in 2000;
- The homeownership rates in 2000 for Subcontinent Asian Americans and Asian-Pacific Americans were 47 percent and 55 percent, respectively; and
- Native American households owned homes at a rate of 51 percent.

Generally, rates of homeownership were lower in California than in the nation as a whole, in part due to the historically high price of homes in the state.[14]

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[12] Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

[13] Card, Emily. 1980. "Women, Housing Access, and Mortgage Credit." *Signs.* 5:215-219.

[14] Quigley, John M. and Steven Raphael. 2004. "Regulation and the High Cost of Housing in California." *University of California, Berkeley.*

Figure G-1. Homeownership rates, 2000 and 2007-2009

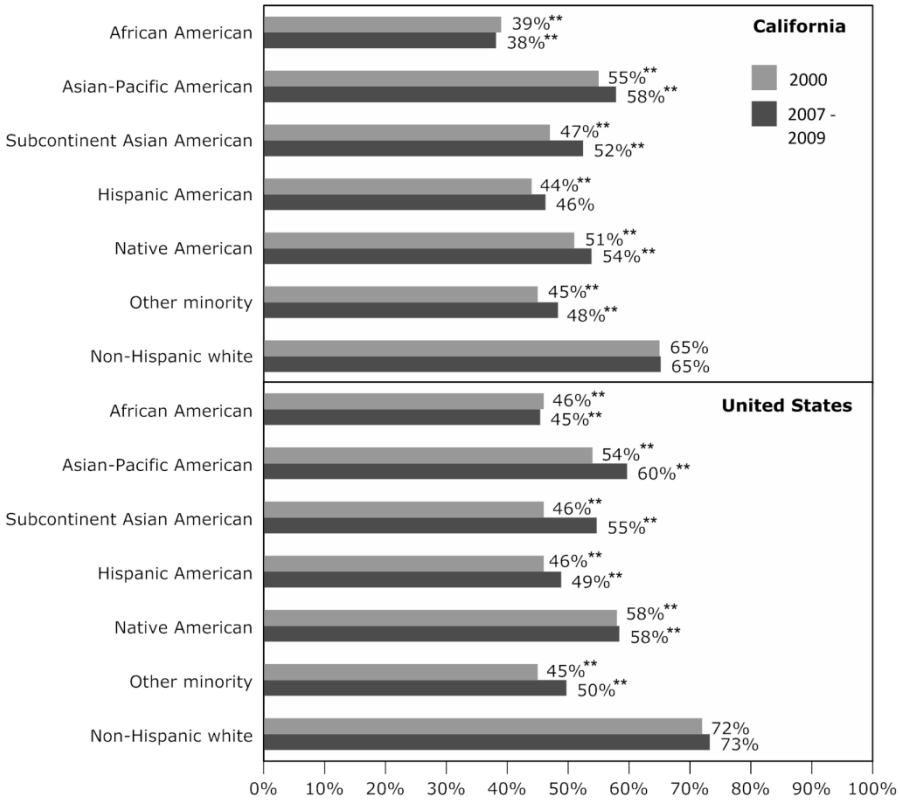
Note:

The sample universe is all households.

** Denotes that the difference in proportions from non-Hispanic white for the given year is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2000 U.S. Census and 2007-2009 ACS data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.



Disparities in homeownership rates between racial/ethnic minorities and non-minorities were also apparent in 2007-2009. Although homeownership rates for most minority groups rose between 2000 and 2007-2009 in California, they were still below that of non-Hispanic whites (65%).[15]Lower rates of homeownership may, to an extent, reflect lower incomes for minorities. That relationship may be self-reinforcing, as low wealth puts individuals at a disadvantage in becoming homeowners, which has historically been a path to building wealth. An older study found statistically significant results indicating that the probability of homeownership is considerably lower for African Americans than it is for comparable non-Hispanic whites throughout the United States.[16] A 2001 study in Los Angeles found different results. Probabilities of homeownership for African American households in south-central Los Angeles and San Bernardino County were found to be identical to non-Hispanic white households after accounting for types of income.[17]

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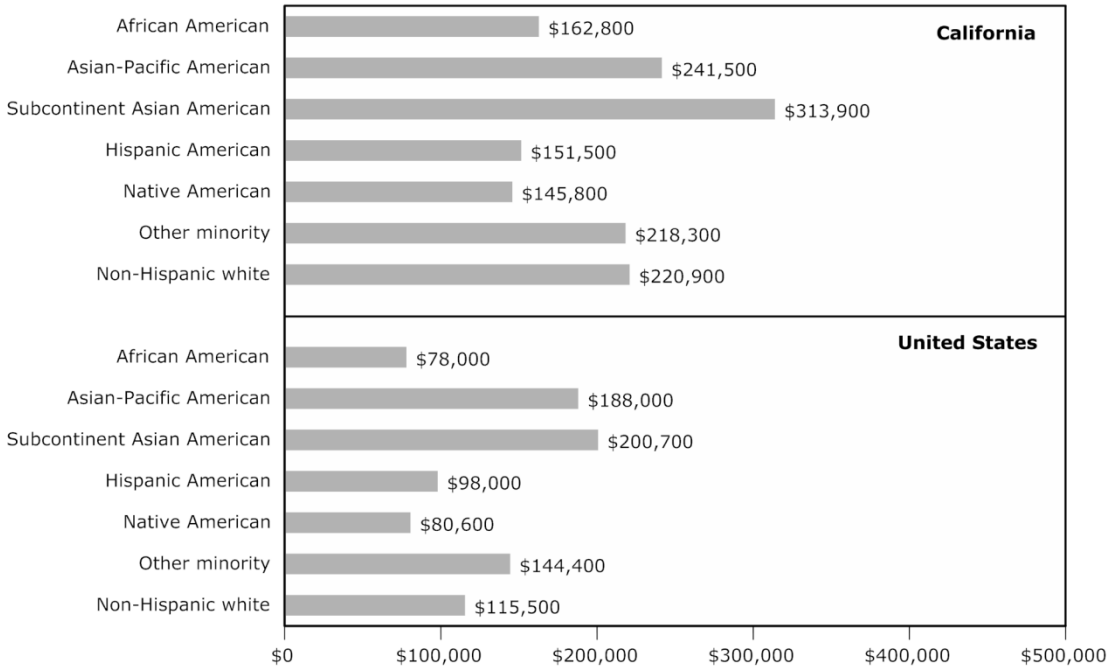
[15] Although not presented in this report, the study team also examined homeownership rates for heads of households working in the construction and engineering industries. Each minority group in the construction industry and each minority group except Asian Americans in the engineering industry had a lower rate of home ownership than non-Hispanic whites in California.

[16] Jackman. 1980. "Racial Inequalities in Home Ownership."

[17] Gabriel, Stuart and Gary Painter. 2001. "Pathways to Homeownership: An Analysis of the Residential Location and Homeownership Choices of Black Households in Los Angeles." *USC Finance & Business Econ*. Working Paper No. 01-22.

Home values. Research has found homeownership and home values to be direct determinants of available capital to form or expand businesses.[18] Using 2000 Census and 2007-2009 ACS data, BBC compared median home values by racial/ethnic group. Figure G-2 presents results for California and the United States in 2000.

Figure G-2.
Median home values, 2000



Note: The sample universe is all owner-occupied housing units.

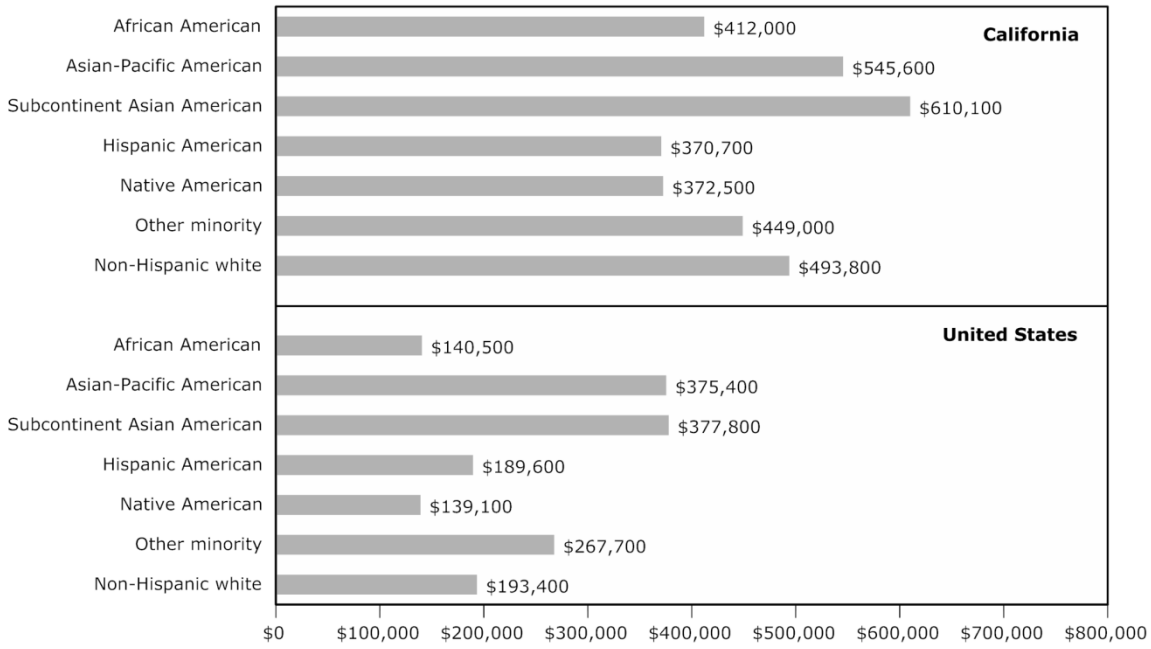
Source: BBC Research & Consulting from 2000 U.S. Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

In 2000, the median home value of homes owned by non-Hispanic whites in California was $220,900, substantially greater than the median value of homes owned by African Americans ($162,800), Hispanic Americans ($151,500), and Native Americans ($145,800). On average, Asian-Pacific Americans and Subcontinent Asian Americans owned homes of greater value than non-Hispanic whites.

[18] Fairlie, Robert W. and Harry A. Krashinky. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited." IZA Discussion Paper. No. 2201.

Figure G-3 presents median home values by racial/ethnic groups in California and in the U.S. based on 2007-2009 ACS data. Similar to 2000 data, African Americans, Hispanic Americans, and Native Americans had substantially lower median home values than non-Hispanic whites in California. Median home values for Asian-Pacific Americans and Subcontinent Asian Americans were higher than non-Hispanic whites in California. The same was true for the United States as a whole.

Figure G-3.
Median home values, 2007-2009



Note: The sample universe is all owner-occupied housing units.

Source: BBC Research & Consulting from 2007-2009 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Mortgage lending. Minorities may be denied opportunities to own homes, to purchase more expensive homes, or to access equity in their homes if they are discriminated against when applying for home mortgages. In a recent lawsuit, Bank of America paid $335 million to settle allegations that its Countrywide Financial unit discriminated against African American and Hispanic American borrowers between 2004 and 2008. The case was brought by the Securities and Exchange Commission after finding evidence of "statistically significant disparities by race and ethnicity" among Countrywide Financial customers.[19]

BBC explored market conditions for mortgage lending in California and in the nation as a whole. The best available source of information concerning mortgage lending comes from HMDA data, which contain information on mortgage loan applications received by financial institutions,

[19] Savage, Charlie. December 22, 2011. "$335 Million Settlement on Countywide Lending Bias." *NYTimes.com*. Available online at http://www.nytimes.com/2011/12/22/business/us-settlement-reported-on-countrywide-lending.html

savings banks, credit unions, and some mortgage companies.[20] Those data include information about the location, dollar amount, and types of loans made, as well as race/ethnicity, income, and credit characteristics of all loan applicants. The data are available for home purchases, loan refinances, and home improvement loans.

BBC examined HMDA statistics provided by the Federal Financial Institutions Examination Council (FFIEC) on conventional loan denial rates for high-income borrowers. Conventional loans are loans not insured by a government program. High-income borrowers are those households with 120 percent or more of the U.S. Department of Housing and Urban Development (HUD) area median family income.[21] Loan denial rates are calculated as the percentage of mortgage loan applications that were denied, excluding applications terminated by the potential borrowers.

BBC examined mortgage denial rates for 2006, 2009, and 2010. Although 2010 was the most recent year for which HMDA data were available, the 2006 data represent a more complete data set from before the recent mortgage crisis. Many of the institutions that originated loans in 2006 were no longer in business by the 2010 reporting date for HMDA data.[22] For example, the 2006 HMDA data include information about nearly 5 million loan applications in California processed by approximately 1,700 lenders. The 2010 HMDA data for California include information about 2 million loan applications processed by about 1,300 lenders. In addition, the percentage of government-insured loans, which were not included in the study team's analysis, increased dramatically between 2006 and 2010, thus decreasing the proportion of total loans that the study team analyzed in the 2010 data.[23]

Figure G-4 presents loan denial results for California and the U.S. in 2006, 2009, and 2010. Those data show higher denial rates for minority high-income households than for non-Hispanic white high-income households. Among African American high-income households applying for mortgages in California 2010, 15 percent had their applications denied, much higher than the 10 percent found for non-Hispanic white high-income households. Loan denial rates in 2010 were

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[20] Financial institutions were required to report 2010 HMDA data if they had assets of more than $39 million ($35 million for 2006), have a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies are required to report HMDA if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, are located in an Metropolitan Statistical Area (or originated five or more home purchase loans in an MSA) and either had more than $10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

[21] The median family income in 2010 was about $61,000 for the United States and $65,000 for California (in 2010 dollars). Median family income for 2006 was about $63,000 for the United States and $70,000 for California (in 2010 dollars). Source: U.S. Census Bureau, 2010 and 2006 American Community Surveys.

[22] According to an article by the Federal Reserve, the volume of reported loan applications and originations fell sharply from 2007 to 2008 after previously falling between 2006 and 2007. See Avery, Brevoort, and Canner, ''The 2008 HMDA Data: The Mortgage Market during a Turbulent Year.'' Available online: http://www.federalreserve.gov/pubs/bulletin/2009/pdf/hmda08draft.pdf.

[23] Loans insured by government programs have surged since 2006. In 2006, about 10 percent of first lien home loans were insured by a government program. More than half of home loans were insured by government in 2009. Source: "The 2009 HMDA Data: The Mortgage Market in a Time of Low Interest Rates and Economic Distress," *Federal Reserve Bulletin*. December 2010, pp A39-A77.

also higher for Native Americans (19%) and Hispanic Americans (15%) compared with non-Hispanic whites.

Data for 2006 show higher denial rates for all groups in California compared with 2010. There were large disparities in loan denial rates for African American, Hispanic American and Native American high-income applicants compared with non-Hispanic white applicants. The loan denial rate for Asian American high-income applicants was also higher than non-Hispanic white high-income households in 2006.

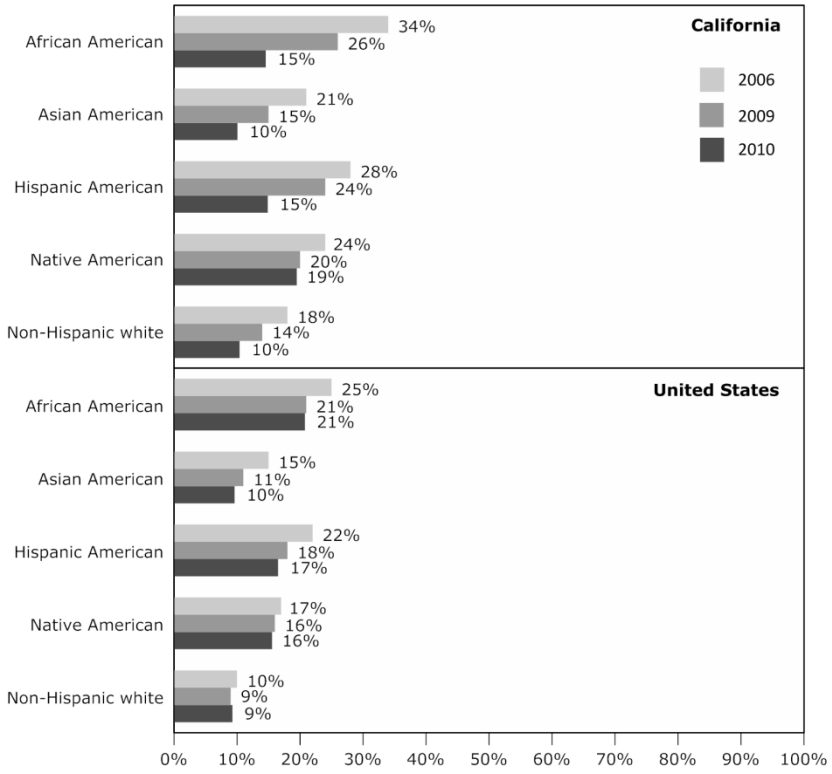
Figure G-4.
Denial rates of conventional purchase loans to high-income households, 2006, 2009 and 2010

Note:

High-income borrowers are those households with 120% or more than the HUD area median family income (MFI).

Source:

FFIEC HMDA data 2006, 2009 and 2010.



Additional research. Several national studies have examined disparities in loan denial rates and loan amounts for minorities in the presence of other influences. Examples include the following:

- A study by the Federal Reserve Bank of Boston is one of the most cited studies of mortgage lending discrimination.[24] It was conducted using the most comprehensive set of credit characteristics ever assembled for a study on mortgage discrimination.[25] The study provided persuasive evidence that lenders in the Boston area discriminated against minorities in 1990.[26]
- Using the Federal Reserve Board's 1983 Survey of Consumer Finances and the 1980 Census of Population and Housing data, logit statistical analysis revealed that minority households were one-third as likely to receive conventional loans as non-Hispanic white households after taking into account financial and demographic variables.[27]
- Findings from a Midwest study indicate a relationship between race and both the number and size of mortgage loans. Data matched on socioeconomic characteristics revealed that African American borrowers across 13 census tracts received significantly fewer loans and of small sizes compared to their white counterparts.[28]

However, other studies have found that differences in preferences for Federal Housing Administration (FHA) loans — mortgage loans that are insured by the government — versus conventional loans among racial and ethnic groups may partly explain disparities found in conventional loan approvals between minorities and non-minorities.[29] Several studies have found that, historically, minority borrowers are far more likely to seek FHA loans than comparable non-Hispanic white borrowers across different income and wealth levels. The insurance on FHA loans protects the lender, but the borrower can be disadvantaged by higher borrowing costs.[30, 31]

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[24] Munnell, Alicia H., Geoffrey Tootell, Lynn Browne and James McEneaney. 1996. "Mortgage Lending in Boston: Interpreting HMDA Data." *The American Economic Review*. 86: 25-53.

[25] Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives*. 12:41-62.

[26] Yinger, John. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. New York: Russell Sage Foundation, 71.

[27] Canner, Glenn B., Stuart A. Gabriel and J. Michael Woolley. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets." *Southern Economic Journal*. 58:249-262.

[28] Leahy, Peter J. 1985. "Are Racial Factors Important for the Allocation of Mortgage Money?: A Quasi-Experimental Approach to an Aspect of Discrimination." *American Journal of Economics and Sociology*. 44:185-196.

[29] Canner. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets."

[30] Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 80.

[31] See definition of subprime loans discussed on the following page.

Studies on mortgage loan discrimination specific to California are more limited.

- HMDA data for California revealed disparities in prime and subprime lending for African American, Hispanic American and Native American applicants. Differences extended across all MSAs.[32]
- An older study using HMDA data in Sacramento revealed that lending levels were low in minority concentrated areas but the primary determinant of lending could be explained by socioeconomic status measures such as median household income. In a stepwise regression model that controlled for socioeconomic status measures, ethnicity provided little explanation for varying levels of mortgage lending.[33]
- A paired-testing approach revealed adverse treatment of African Americans and Hispanics in Los Angeles in specific loan application cases. However, the overall pattern of treatment observed offered little evidence of systemic variation in the treatment of African American and Hispanic American borrowers relative to non-Hispanic white borrowers in Los Angeles. The study also found more encouragement of minorities to pursue FHA loans than of non-Hispanic whites.[34]

Subprime lending. Loan denial is only one of several ways minorities might be discriminated against in the home mortgage market. Mortgage lending discrimination can also occur through higher fees and interest rates. The housing market provides a unique environment for such types of discrimination through fees associated with various loan types.

Until recent years, one of the fastest growing segments of the home mortgage industry was subprime lending. From 1994 through 2003, subprime mortgage activity grew by 25 percent per year and accounted for $330 billion of U.S. mortgages in 2003, up from $35 billion a decade earlier. In 2006, subprime loans represented about one-fifth of all mortgages in the United States.[35] With higher interest rates than prime loans, subprime loans were historically marketed to customers with blemished or limited credit histories who would not typically qualify for prime loans. Over time, subprime loans also became available to homeowners who did not want to make a down payment, did not want to provide proof of income and assets, or wanted to purchase a home with a cost above that for which they would qualify from a prime lender.[36] Because of higher interest rates and additional costs, subprime loans affected homeowners' ability to grow home equity while increasing their risk of foreclosure.

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[32] Gee, Peter. 2004. The Price of Credit: Prime and Subprime Lending in California 2004. The Greenlining Institute.

[33] Dingemans, Dennis. 1979. "Redlining and Mortgage Lending in Sacramento." *Annals of the Association of American Geographers.* 69:225-239.

[34] Ross, Stephen, Margery Austin Turner, Erin Godfrey and Robin R. Smith. 2005. "Mortgage Lending in Chicago and Los Angeles: A Paired Testing Study of the Pre-Application Process." *University of Connecticut Department of Economics*. Working Paper Series.

[35] Avery, Brevoort, and Canner, ''The 2006 HMDA Data.'' Federal Reserve Bulletin, December 2007, pp. A73-A109.

[36] Gerardi, Shapiro, and P. Willen. 2008. "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure. *Federal Reserve Bank of Boston*.

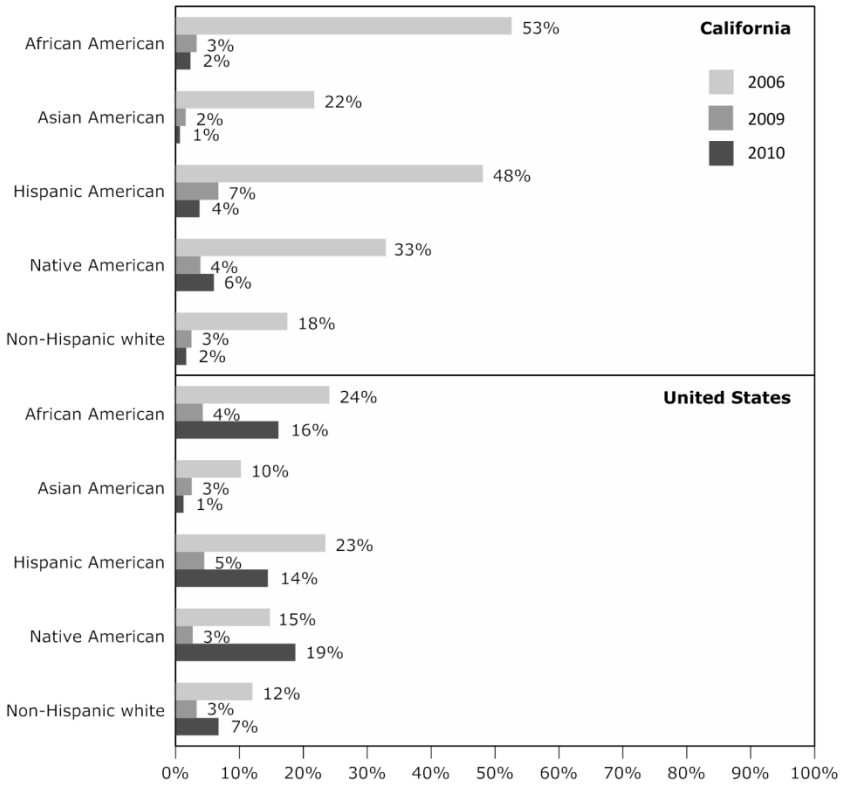
Although there is no standard definition of a subprime loan, there are several commonly-used approaches to examining rates of subprime lending. BBC used a "rate-spread method" — in which subprime loans are identified as those loans with substantially above-average interest rates — to measure rates of subprime lending in 2006, 2009, and 2010.[37] Because lending patterns and borrower motivations differ depending on the type of loan being sought, the study team separately considered home purchase loans and refinance loans. Patterns in subprime lending did not differ substantially between the different types of loans.

Figure G-5 shows the percent of conventional home purchase loans that were subprime in California and the United States, based on 2006, 2009, and 2010 HMDA data. The rates of subprime lending in 2009 and 2010 were dramatically lower overall than in 2006 due to the collapse of the mortgage lending market in the late 2000s.

Figure G-5. Percent of conventional home purchase loans that were subprime, 2006, 2009, and 2010

Source:

FFIEC HMDA data 2006, 2009 and 2010.



[37] Prior to October 2009, first lien loans were identified as subprime if they had an APR 3.0 percentage points or greater than the federal treasury security rate of like maturity. As of October 2009, rate spreads in HMDA data were calculated as the difference between APR and Average Prime Offer Rate, with subprime loans defined as 1.5 percentage points of rate spread or more. BBC identified subprime loans according to these measures in the corresponding time periods.

In California in 2006, 2009, and 2010, African American, Hispanic American, and Native American borrowers were more likely to receive subprime home purchase loans than non-Hispanic whites.

- In 2006, 18 percent of home purchase loans issued to non-Hispanic whites in were subprime
- In contrast, 53 percent of home purchase loans that were issued to African Americans were subprime.
- Similarly, 48 percent of home purchase loans that were issued to Hispanic Americans and 33 percent of home purchase loans issued to Native Americans were subprime.

Those subprime lending patterns were also observed in 2009 and 2010. In 2010, 1.7 percent of home purchase loans issued to non-Hispanic whites were subprime compared to 2.3 percent of home purchase loans issued to African Americans, 3.8 percent of home purchase loans issued to Hispanic Americans, and 6.0 percent of home purchase loans issued to Native Americans.

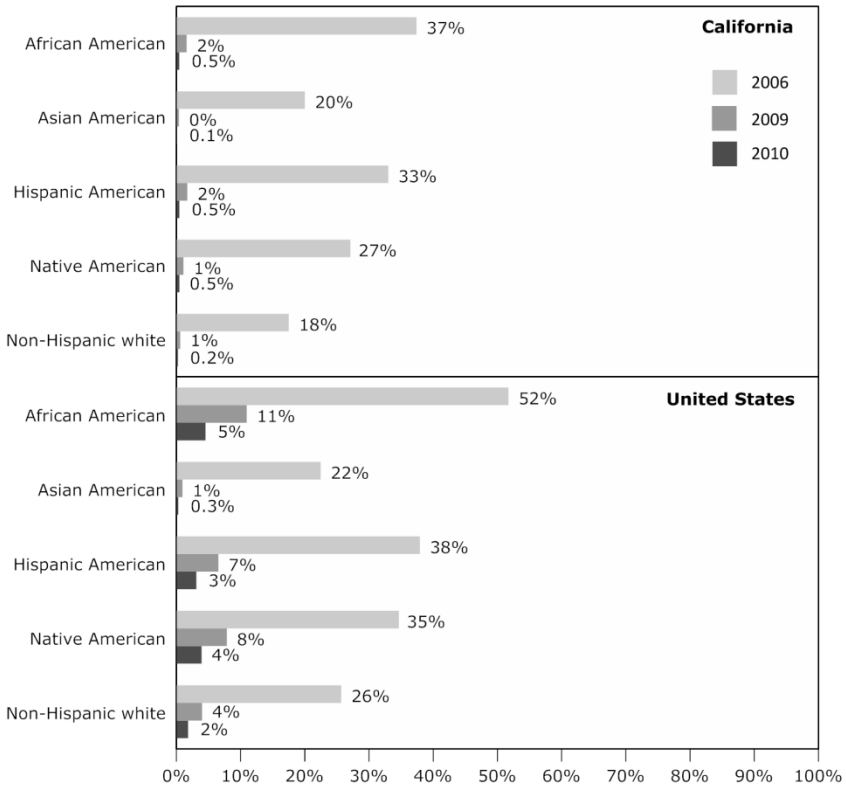
Asian Americans who applied for home purchase loans in California were more likely than non-Hispanic whites to be issued subprime loans in 2006 but less likely to be issued subprime loans in 2009 and 2010.

Figure G-6 presents the percentage of home refinance loans that were subprime in California and the United States. As with home purchase loans, the rates of subprime lending in 2009 and 2010 were dramatically lower for refinance loans than in 2006 due to the collapse of the mortgage lending market in the late 2000s.

Figure G-6. Percent of conventional refinance loans that were subprime, 2006, 2009, and 2010

Source:

FFIEC HMDA data 2006, 2009 and 2010.



Among borrowers receiving refinance loans in California in 2006, 2009, and 2010, African Americans, Hispanic Americans, and Native Americans were more likely to receive subprime refinance loans than non-Hispanic whites. In 2006, about 37 percent of refinance loans issued to African Americans, 33 percent of refinance loans issued to Hispanic Americans, and 27 percent of refinance loans issued to Native Americans were subprime. About 20 percent of refinance loans issued to Asian Americans in 2006 were subprime. In contrast, only 18 percent of refinance loans issued to non-Hispanic whites in 2006 were subprime.

By 2010, subprime loans made up a much smaller proportion of the total conventional home refinance loans issued in that year (in California and the United States). The decrease in subprime refinance loans was evident for all racial and ethnic groups in California. African American, Hispanic American, and Native American households that received refinance loans in 2010 were still somewhat more likely than non-Hispanic whites to be issued a subprime loan.

Additional research. Some evidence suggests that lenders sought out and offered subprime loans to individuals who often would not be able to pay off the loan, a form of "predatory lending.[38]" Furthermore, some research has found that many recipients of subprime loans — including homeowners in California — could have qualified for prime loans.[39] Previous studies of subprime lending suggest that predatory lenders have disproportionately targeted minorities. A 2001 HUD study using 1998 HMDA data found that subprime loans were disproportionately concentrated in African American neighborhoods compared with white neighborhoods, even after controlling for income.[40] For example, borrowers in upper-income African American neighborhoods were six times more likely to refinance with a subprime loan than borrowers in upper-income white neighborhoods.

Implications of the recent mortgage lending crisis. The turmoil in the housing market since late 2006 has been far-reaching, resulting in the loss of home equity, decreased demand for housing, and increased rates of foreclosure.[41] Much of the blame has been placed on risky practices in the mortgage industry including substantial increases in subprime lending. As discussed above, the number of subprime mortgages increased at an extraordinary rate between the mid-1990s and mid-2000s. Those high-cost, high-interest loans increased from 8 percent of originations in 2003 to 20 percent in 2005 and 2006.[42] In 2005, subprime loans represented about 28 percent of all mortgage loans originated in the Riverside MSA and about 21 percent of all mortgage loans originated in the Los Angeles MSA.[43] The preponderance of subprime lending is important, because households that are repaying subprime loans have a higher likelihood of delinquency or foreclosure. A 2008 study released from the Federal Reserve Bank of Boston found that, "homeownerships that begin with a subprime purchase mortgage end up in foreclosure almost 20 percent of the time, or more than six times as often as experiences that begin with prime purchase mortgages."[44]

In California, homeowners with delinquencies of 60 days or greater rose from about 52,500 per month in the first quarter of 2007 to about 171,000 per month in the first quarter of 2008.[45] By

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[38] Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001. HUD-Treasury National Predatory Lending Task Force Report. *HUD*; Carr, J. and L. Kolluri. 2001. Predatory Lending: An Overview. *Fannie Mae Foundation*; and California Reinvestment Coalition, Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition and Woodstock Institute, 2008. "Paying More for the American Dream."

[39] Freddie Mac. 1996, September. "Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America's Families." *Freddie Mac.* (accessed February 5, 2007); and Lanzerotti. 2006. "Homeownership at High Cost: Foreclosure Risk and High Cost Loans in California." *Federal Reserve Bank of San Francisco*.

[40] Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001.

[41] Joint Center for Housing Studies of Harvard University. 2008. "The State of the Nation's Housing."

[42] *Ibid.*

[43] Mayer, Chris and Karen Perce. "Subprime Mortgage: Who, Where and to Whom?" *Division of Research and Statistics and Monetary Affairs.* Available online at: "http://www.federalreserve.gov/Pubs/FEDS/2008/200829/200829abs.html."

[44] Gerardi, Shapiro, and P. Willen. 2008. "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure. *Federal Reserve Bank of Boston*.

[45] Olson, John. 2008. Understanding the Foreclosure Crisis in California. *Federal Reserve Bank of San Francisco*.

the first quarter of 2010, the number of delinquent loans increased to over 536,000 per month.[46] Furthermore, many homeowners lost equity in their homes. In December 2010, the proportion of residential properties in California with negative equity (i.e., a mortgage worth more than the value of the home) was 32 percent, one of the highest rates in the country.[47] In the last quarter of 2008, California led the country with a monthly average of 43,000 borrowers falling into negative equity. In total, California lost more than $1.2 trillion in residential property value in 2008, which accounts for more than half of the national decline in housing values from 2007 to 2008.[48] Due to the higher rate of subprime mortgages among minority homeowners, those homeowners have reportedly been disproportionately affected in terms of foreclosures and loss of home equity.[49]

Such problems substantially impact the ability of homeowners to secure capital through home mortgages to start or expand small businesses. That issue has been highlighted in statements made by members of the Board of Governors of the Federal Reserve System to the U.S. Senate and U.S. House of Representatives:

- On April 16, 2008, Frederic Mishkin informed the U.S. Senate Committee on Small Business and Entrepreneurship that "one of the most important concerns about the future prospects for small business access to credit is that many small businesses use real estate assets to secure their loans. Looking forward, continuing declines in the value of their real estate assets clearly have the potential to substantially affect the ability of those small businesses to borrow. Indeed, anecdotal stories to this effect have already appeared in the press." [50]
- On November 20, 2008, Randall Kroszner told the U.S. House of Representatives Committee on Small Business that "small business and household finances are, in practice, very closely intertwined. [T]he most recent SSBF indicated that about 15 percent of the total value of small business loans in 2003 was collateralized by 'personal' real estate. Because the condition of household balance sheets can be relevant to the ability of some small businesses to obtain credit, the fact that declining house prices have weakened household balance-sheet positions suggests that the housing market crisis has likely had an adverse impact on the volume and price of credit that small businesses are able to raise over and above the effects of the broader credit market turmoil." [51]

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[46] HOPE NOW. 2011. State Loss Mitigation Data (December 2010). Available online: "http://www.hopenow.com/industry-data/State%20Loss%20Mitigation%20Data%20(December)%202-3-2011.pdf"

[47] CoreLogic. March 8, 2011. CoreLogic Negative Equity press release.

[48] First American CoreLogic. 2008. First American CoreLogic and Loan Performance Home Price Index Analytics.

[49] California Reinvestment Coalition, Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition and Woodstock Institute, 2008. "Paying More for the American Dream."

[50] Mishkin, Frederic. 2008. "Statement of Frederic S. Mishkin, Member, Board of Governors of the Federal Reserve System before the Committee on Small Business and Entrepreneurship, U.S. Senate on April 16."

[51] Kroszner, Randall. 2008. "Effects of the financial crisis on small business." *Testimony before the Committee on Small Business, U.S. House of Representative on November 20*.

Federal Reserve Chairman Ben Bernanke recognized the reality of those concerns in a speech titled "Restoring the Flow of Credit to Small Businesses" on July 12, 2010.[52] Bernanke indicated that small businesses have had difficulty accessing credit and pointed to the declining value of real estate as one of the primary obstacles.

Furthermore, the National Federation of Independent Business (NFIB) conducted a national survey of 751 small businesses in late-2009 to investigate how the recession impacted access to capital.[53, 54] NFIB concluded that "falling real estate values (residential and commercial) severely limit small business owner capacity to borrow and strains currently outstanding credit relationships." Survey results indicated that 95 percent of small business employers owned real estate and 13 percent held upside-down property.[55]

Opportunities to obtain business capital through home mortgages appear to be limited especially for homeowners with little home equity. Furthermore, the increasing rates of default and foreclosure, especially for homeowners with subprime loans, reflect shrinking access to capital available through such loans. Those consequences are likely to have a disproportionate impact on minorities in terms of both homeownership and the ability to secure capital for business start-up and growth.

Redlining. Redlining refers to mortgage lending discrimination against geographic areas associated with high lender risk. Those areas are often racially determined, such as African American or mixed-race neighborhoods.[56] That practice can perpetuate problems in already poor neighborhoods.[57] For example, the City of East Palo Alto sued a California lender for redlining and having loan practices that discriminated against people in low-income or minority communities. Evidence included loan officers telling applicants that the bank simply did not lend in East Palo Alto or in specific minority neighborhoods.[58] The bank provided cash and a revolving loan fund in order to settle the lawsuit.

Most quantitative studies have failed to find strong evidence in support of geographic dimensions of lender decisions. Studies in Columbus, Ohio; Boston, Massachusetts; and Houston, Texas found that racial differences in loan denial had little to do with the racial composition of a

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[52] Bernanke, Ben. 2010. Restoring the Flow of Credit to Small Businesses. *Presented at the Federal Reserve Meeting Series: Addressing the Financing Needs of Small Businesses on July 12.*

[53] The study defined a small business as a business employing no less than one individual in addition to the owner(s) and no more than 250 individuals.

[54] National Federation of Independent Business (NFIB). 2010. Small Business Credit in a Deep Recession.

[55] Upside-down is defined as a mortgage that is worth more than the appraised value of the house.

[56] Holloway, Steven R. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio." *Annals of the Association of American Geographers.* 88:252-276.

[57] Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives.* 12:41-62.

[58] "California bank pays $206,000 and establishes $7 million credit line for city to settle redlining suit." *National Fair Housing Advocate Online.* http://www.fairhousing.com/index.cfm?method=page.display&pagename=advocate_october02_page5 (accessed February 8, 2007).

neighborhood but rather with the individual characteristics of the borrower.[59] Some studies found the race of an applicant — but not the racial makeup of the neighborhood — to be a factor in loan denials.

Studies of redlining have primarily focused on the geographic aspect of lender decisions; however, redlining can also include the practice of restricting credit flows to minority neighborhoods through procedures that are not observable in actual loan decisions. Examples include branch placement, advertising, and other pre-application procedures.[60] Such practices can deter minorities from starting businesses. Locations of financial institutions are important to small business start up, because local banking sectors often finance local business.[61] Redlining practices would deny that resource to minorities.

Steering by real estate agents. Historically, differences in the types of loans that are issued to minorities have also been attributed to "steering" by real estate agents, who serve as an information filter.[62] Some studies claim that real estate brokers provide different levels of assistance and different information on loans to minorities than they do to non-minorities.[63] Such steering can affect the perception of minority borrowers about the availability of mortgage loans. Despite the fact that steering has been prohibited by law for many decades, a 2005 study found such practices in Los Angeles and other cities throughout the country.[64]

Gender discrimination in mortgage lending. Relatively little information is available on gender-based discrimination in mortgage lending markets. Historically, lending practices overtly discriminated against women by requiring information on marital and childbearing status. Risk associated with women of childbearing age and unmarried women resulted in "income discounting," limiting the availability of loans to women.[65]

The Equal Credit Opportunity Act (ECOA) in 1973 suspended such discriminatory lending practices. A study in California that used regression analysis explored discrimination against married and single women in 16 metropolitan areas from 1977 to 1978. The study revealed little evidence of sex discrimination in the state. However, certain barriers affecting women have persisted after 1973 in mortgage lending markets. For example, there is some past evidence that lenders under-appraised properties for female borrowers.[66]

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[59] See Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."; Tootell. 1996. "Redlining in Boston: Do Mortgage Lenders Discriminate Against Neighborhoods?"; and Holmes, Andrew and Paul Horvitz. 1994. "Mortgage Redlining: Race, Risk, and Demand." *The Journal of Finance.* 49:81-99.

[60] Yinger, John. 1995. "Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination." Russell Sage Foundation. New York. 78-79.

[61] Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."

[62] Kantor, Amy C. and John D. Nystuen. 1982. "De Facto Redlining a Geographic View." *Economic Geography.* 4:309-328.

[63] Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 78–79.

[64] Galster, George and Erin Godfrey. 2005. "Racial Steering by Real Estate Agents in the U.S. in 2000." *Journal of the American Planning Association.* 71:251-268.

[65] Card. 1980. "Women, Housing Access, and Mortgage Credit."

[66] Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

Access to Business Capital

Barriers to capital markets can have significant impacts on small business formation and expansion. For example, during public hearings that Caltrans held in spring 2006, "discrimination in obtaining loans due to race and gender" was identified as an issue for businesses.[67] In addition, several studies have found evidence that start-up capital is important for business profits, longevity, and other outcomes.

- The amount of start-up capital is positively associated with small business sales and other outcomes;[68]
- Limited access to capital has affected the size of African American-owned businesses;[69] [70] and
- Weak financial capital was identified as a significant reason that more African American-owned firms than non-Hispanic white-owned firms closed over a four-year period.[71]

Bank loans are one of the largest sources of debt capital for small businesses.[72] Discrimination in the application and approval processes of those loans and other credit resources could be detrimental to the success of minority- and women-owned businesses.

Previous studies have addressed race/ethnicity and gender discrimination in capital markets by evaluating:

- Loan denial rates;
- Loan values;
- Interest rates;
- Business owners' fear that loan applications will be rejected;
- Sources of capital; and
- Relationships between start-up capital and business survival.

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[67] Caltrans Public Hearing Testimony and Related Documents. Examined and summarized by GCAP Services.

[68] See Fairlie, Robert W. and Harry A. Krashinsky. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited"; and Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

[69] Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

[70] Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

[71] Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

[72] Data from the 1998 SSBF indicates that 70 percent of loans to small business are from commercial banks. This result is present across all gender, race and ethnic groups with the exception of African Americans, whose rate of lending from commercial banks is even greater than other minorities. See Blanchard, Lloyd, Bo Zhao and John Yinger. 2005. "Do Credit Market Barriers Exist for Minority and Woman Entrepreneurs." *Center for Policy Research, Syracuse University.*

To examine the role of race/ethnicity and gender in capital markets, the study team analyzed data from the Federal Reserve Board's 1998 and 2003 SSBF — the most comprehensive national source of credit characteristics of small firms (those with fewer than 500 employees). The survey contains information on loan denial and interest rates as well as anecdotal information from firms. Sample weights are applied to provide representative estimates. The samples from 1998 and 2003 contain records for 3,521 and 4,240 firms, respectively.

The SSBF records the geographic location of the firm by Census Division — not by city, county, or state. The Pacific Census Division (referred to below as the Pacific region) contains California, along with Alaska, Washington, Oregon, and Hawaii. The Pacific region is the level of geographic detail of SSBF data most specific to California, and 2003 is the most recent information available from the SSBF because the survey was discontinued after that year.

Loan denial rates. Figure G-7 presents loan denial rates from the 1998 and 2003 SSBFs for the Pacific region and for the United States.[73] National SSBF data for 1998 reveal that African American- and Hispanic American-owned firms had loan denial rates considerably above that of non-Hispanic white male-owned firms. In 2003, the loan denial rate for African American-owned firms (51%) in the United States remained substantially higher than for non-Hispanic white male-owned firms.

As shown in Figure G-7, about 34 percent of minority- and women-owned firms in the Pacific region reported being denied loans in 1998, a larger proportion than the 21 percent of non-Hispanic white male-owned firms that were denied loans. According to 2003 SSBF data, a smaller percentage of minority- and female-owned firms in the Pacific region were denied loans compared to non-Hispanic white male-owned firms, which was inconsistent with national results for that year. (Loan denial statistics on individual minority groups in the Pacific region are not reported in Figure G-7 due to relatively small sample sizes.)

[73] The denial rates represent the proportion of business owners whose loan applications over the previous three years were always denied, compared to business owners whose loan applications were always approved or sometimes approved and sometimes denied.

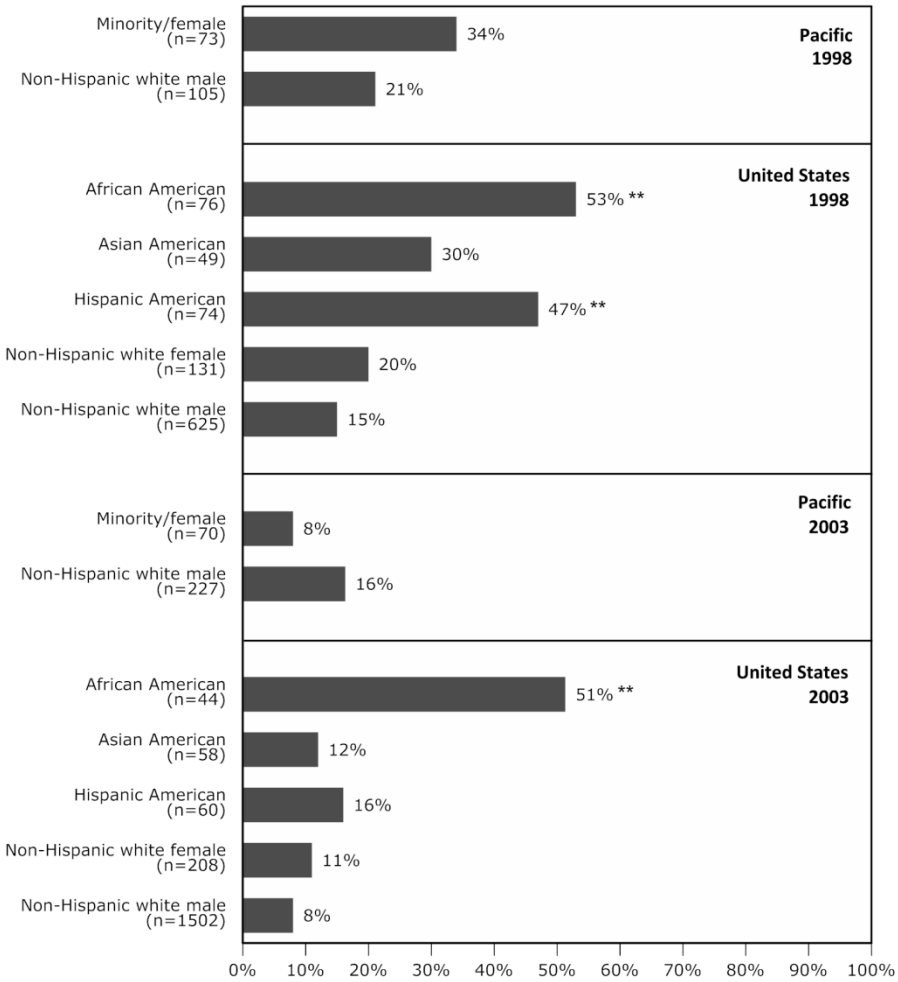
Figure G-7. Business loan denial rates, 1998 and 2003

Note:

** Denotes that the difference in proportion from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Other researchers' regression analyses of loan denial rates. Several studies have investigated whether disparities in loan denial rates for different racial/ethnic and gender groups exist after controlling for other factors that affect loan approvals. Findings from those studies include:

- Commercial banks are less likely to loan to African American-owned firms than to non-Hispanic white-owned firms after statistically controlling for other factors.[74]

- African American, Hispanic American, and Asian American men are more likely to be denied a loan than non-Hispanic white men. However, African American borrowers are more likely to apply for a loan.[75]

[74] Cavalluzzo, Ken, Linda Cavalluzzo and John Wolken. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey." *Journal of Business.* 75: 641-679.

[75] Coleman, Susan. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances." *The Journal of Business and Entrepreneurship.* 151-166.

- Disparities in loan denial rates between African American-owned and non-Hispanic white-owned firms tend to decrease with increasing competitiveness of lender markets. A similar phenomenon is observed when considering differences in loan denial rates between male- and female-owned firms.[76]

- The probability of loan denial decreases with greater personal wealth. However, accounting for personal wealth does not resolve the large differences in denial rates across African American-, Hispanic American-, Asian American-, and non-Hispanic white-owned firms. Specifically, information about personal wealth explained some differences between Hispanic- and Asian American-owned firms and non-Hispanic white-owned firms, but explained almost none of the differences between African American-owned firms and non-Hispanic white-owned firms.[77]

- Loan denial rates are higher for African American-owned firms than for non-Hispanic white-owned firms after accounting for several factors such as creditworthiness and other characteristics. That result is largely insensitive to different model specifications. Consistent evidence on loan denial rates and other indicators of discrimination in credit markets was not found for other minorities or for women.[78]

- Women-owned firms are no less likely to apply for or to be approved for loans in comparison to firms owned by men.[79]

- Charles River Associates (CRA) incorporated the 2003 SSBF in a study prepared for the Santa Clara Valley Transportation Authority (also located in the Pacific region). Combining data from the 1998 and 2003 SSBFs "to increase precision of estimates," the CRA study revealed possible disparities in loan denial rates based on race/ethnicity and gender using a probit econometric model and controlling for other factors. CRA's results indicate that African American- and Hispanic American-owned firms had higher probabilities of loan denial. They also reported that Asian American-owned firms were more likely to be denied loans.[80]

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[76] Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

[77] Cavalluzzo, Ken and John Wolken. 2002. "Small Business Turndowns, Personal Wealth and Discrimination." *FEDS Working Paper No. 2002-35.*

[78] Blanchflower, David G., Phillip B. Levine and David J. Zimmerman. 2003. "Discrimination in the Small Business Credit Market." *The Review of Economics and Statistics.* 85:930-943.

[79] Coleman. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances."

[80] CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization." *Prepared for Santa Clara Valley Transportation Authority.*

BBC regression model for the denial rates in the SSBF. The BBC study team conducted its own analysis of the SSBF by developing a model to explore the relationships between loan denial and the race/ethnicity and gender of firm owners while controlling for other factors. As discussed above, there is extensive literature on business loan denials that provides the theoretical basis for the regression models. Many studies have used probit econometric models to investigate the effects of various owner, firm and loan characteristics on the likelihood of loan denial. The standard model includes three general categories of variables:

- The owner's demographic characteristics (including race and gender), credit, and resources (14 variables);
- The firm's characteristics, credit and financial health (29 variables); and
- The environment in which the firm and lender operate and characteristics of the loan (19 variables).[81]

BBC developed two models, one for the 1998 SSBF and one for the 2003 SSBF, using those standard variables. After excluding a small number of observations where the loan outcome was imputed, the 1998 national sample included 931 firms that had applied for a loan during the three years preceding the 1998 SSBF and the Pacific region included 172 such firms. The 2003 national sample included 1,897 firms that had applied for a loan during the three years preceding the 2003 SSBF and the Pacific region included 298 such firms.

Given the relatively small sample size for the Pacific region and the large number of variables in the model, the study team included all U.S. firms in the model and estimated any Pacific region effects by including regional control variables — an approach commonly used in other studies that analyze SSBF data.[82] The regional variables include an indicator variable for firms located in the Pacific region and interaction variables that represent firms owned by minorities or women that are located in the Pacific region.

1998 SSBF regression results. Figure G-8 presents the marginal effects from the 1998 probit model predicting loan denials. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of loan denial. Those factors include:

- Older business owners are more likely to be denied loans;
- Having a four-year college degree or advanced degree lowers the probability of loan denial;
- Increased equity in the business owner's home — if he or she is a homeowner — reduces the likelihood of loan denial;

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[81] See, for example, Blanchard, Lloyd; Zao, Bo and John Yinger. 2005. "Do Credit Barriers Exist for Minority and Women Entrepreneurs?" *Center for Policy Research, Syracuse University*.

[82] Blanchflower, David G.; Levine, Phillip B. and David J. Zimmerman. 2003. "Discrimination in the Small-Business Credit Market." *The Review of Economics and Statistics*. 85(4): 930-943; NERA Economic Consulting. 2008. "Race, Sex, and Business Enterprise: Evidence from the City of Austin." *Prepared for the City of Austin, Texas*; and CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority.*

- Business owners who filed for bankruptcy in the past seven years or have had a judgment against them are more likely to be denied a loan;
- Family-owned businesses are more likely to be denied loans;
- Businesses with an existing line of credit, an existing mortgage, or existing vehicle or equipment loans are less likely to be denied a loan; however, firms with outstanding loans from stockholders are more likely to be denied loans;
- Firms that have been delinquent in business transactions or that filed for bankruptcy in the past seven years have a higher probability of being denied a loan;
- Being in the construction industry or engineering industry increases the likelihood of being denied loans;
- Firms in highly concentrated industry segments (as measured by the Herfindahl index) are more likely to be denied loans; and
- Business mortgage applications and vehicle and equipment loan applications are less likely to be denied than other types of business loan applications.

After controlling for race- and gender-neutral influences, firms owned by African Americans and Hispanic Americans were more likely to have their loans denied than other firms. The indicator variable for the Pacific region and the interaction terms for Pacific region and minority- and women-ownership were not statistically significant. That result indicates that the probability of loan denials for minority- and women-owned firms within the Pacific region are not significantly different from the U.S. as a whole after controlling for other factors.

Figure G-8.
Likelihood of business loan denial (probit regression) in the U.S. in the 1998 SSBF,
Dependent variable: loan denial

Variable	Marginal Effect		Variable	Marginal Effect		Variable	Marginal Effect	
Race/ethnicity and gender			Firm's characteristics, credit and financial health			Firm and lender environment and loan characteristics		
African American	0.357	**	D&B credit score = moderate risk	0.094		Partnership	0.015	
Asian American	0.015		D&B credit score = average risk	0.110		S corporation	-0.022	
Hispanic American	0.213	**	D&B credit score = significant risk	0.063		C corporation	-0.030	
Female	-0.024		D&B credit score = high risk	0.066		Construction industry	0.098	**
Pacific region	0.012		Total employees	0.000		Manufacturing industry	0.005	
African American in Pacific region	-0.064		Percent of business owned by principal	0.000		Transportation, communications and utilities industry	0.074	
Asian American in Pacific region	0.041		Family-owned business	0.076	**			
Hispanic American in Pacific region	-0.008		Firm purchased	-0.039		Finance, insurance and real estate industries	-0.022	
Female in Pacific region	0.093		Firm inherited	0.022				
			Firm age	-0.002		Engineering industry	0.122	
Owner's characteristics, credit and resources			Firm has checking account	0.030		Other industry	0.035	
Age	0.002	*	Firm has savings account	-0.029		Herfindahl index = .10 to .18	0.390	**
Owner experience	0.001		Firm has line of credit	-0.124	**	Herfindahl index = .18 or above	0.369	**
Less than high school education	0.075		Existing capital leases	-0.008		Located in MSA	0.006	
Some college	-0.017		Existing mortgage for business	-0.045	*	Sales market local only	0.021	
Four-year degree	-0.061	**	Existing vehicle loans	-0.067	**	Loan amount	0.000	
Advanced degree	-0.043		Existing equipment loans	-0.056	**	Capital lease application	-0.024	
Log of Home Equity	-0.010	**	Existing loans from stockholders	0.111	**	Business mortgage application	-0.066	**
Bankruptcy in past 7 years	0.315	**	Other existing loans	-0.010		Vehicle loan application	-0.093	**
Judgement against in past 3 years	0.228	**	Firm used trade credit in past year	-0.038		Equipment loan application	-0.072	**
Log of net worth excluding home	0.001		Log of total sales in prior year	0.000		Loan for other purposes	-0.036	
Owner has negative net worth	-0.025		Negative sales in prior year	0.073				
			Log of cost of doing business in prior year	0.002				
			Log of total assets	0.005				
			Negative total assets	-0.045				
			Log of total equity	0.015				
			Negative total equity	0.241				
			Firm bankruptcy in past 7 years	0.228	*			
			Firm delinquency in business transactions	0.258	**			

Note: * Statistically significant at 90% confidence level.
** Statistically significant at 95% confidence level.

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

"Native American or other minority" and "Mining industry" perfectly predicted loan outcome and dropped out of the regression.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

The study team simulated loan approval rates for those minority groups with statistically significant disparities (i.e., African American- and Hispanic American-owned businesses) by comparing observed approval rates with simulated rates.[83] "Loan approval" means that a business owner always or at least sometimes had his or her business loan applications approved over the previous three years. "Rates" of loan approval mean the percentage of firms receiving loan approvals always or at least sometimes during that time period.

The probit modeling approach allowed for simulations of loan approval rates for those groups as if they had the same probability of loan approval as similarly situated non-Hispanic white male-owned firms. To conduct those simulations, BBC took the following steps:

1. BBC performed a probit regression analysis predicting loan approval using only non-Hispanic white male-owned firms in the dataset.[84]

2. The study team then used the coefficients from that model and the mean characteristics of African American- and Hispanic American-owned firms (including the effects of a business being in the Pacific region) to estimate the probability of loan approval of such groups.

The results of those simulations yielded estimates of loan approval rates for non-Hispanic white-owned firms who shared the same characteristics of African American- and Hispanic American-owned firms. Higher simulated rates indicate that, in reality, African American- and Hispanic American-owned firms are less likely to be approved for loans than similarly-situated non-Hispanic white male-owned firms. Figure G-9 shows these simulated loan approval rates ("benchmark") in comparison to the actual approval rates observed in the 1998 SSBF. The disparity index was calculated by taking the actual loan approval rate for each group and dividing it by each group's benchmark, and then multiplying the result by 100. Values less than 100 indicate that, in reality, the group is less likely to be approved for a loan than what would be expected for similarly-situated non-Hispanic white male-owned firms — in other words that race/ethnicity affects the likelihood of those groups being approved for loans.

Figure G-9.
Comparison of actual loan approval rates to simulated loan approval rates, 1998

Group	Loan approval rates		Disparity index
	Actual	Benchmark	(100 parity)
African American	46.4%	76.8%	60
Hispanic American	53.7%	75.9%	71

Note: Actual approval rates presented here and denial rates in Figure G-7 do not sum to 100% because some observations were dropped in the probit regression.

"Loan approval" means that a business owner always or at least sometimes had his or her business loan applications approved over the previous three years.

Source: BBC Research & Consulting analysis of 1998 NSSBF data.

[83] The approval rate is equal to one minus the denial rate.

[84] That version of the model excluded the race/ethnicity and gender indicator variables, because the value of all of those variables would be the same (i.e., 0).

Based on 1998 SSBF data, the actual loan approval rate for African American-owned firms was 46 percent. Model results showed that African American-owned firms would have an approval rate of about 77 percent if they were approved for loans at the same rate as similarly-situated non-Hispanic white male-owned firms (disparity index of 60). Similarly, Hispanic American-owned firms would have an approval rate of about 76 percent if they were approved for loans at the same rate as similarly-situated non-Hispanic white male-owned firms, compared with the actual loan approval rate of 54 percent (disparity index of 71).

2003 SSBF regression results. BBC also conducted a regression analysis for the 2003 SSBF.[85] As in the 1998 regression analysis, the dependent variable represents whether or not a firm's loan applications over the past three years were always denied. Figure G-10 presents the marginal effects from the 2003 probit model predicting loan denial. In the 2003 model the race- and gender-neutral factors that significantly affected the probability of loan denial include:

- Location in the Pacific region increases the likelihood of loan denial;
- Owner experience increases the likelihood of loan denial;
- Having an advanced degree lowers the probability of loan denial;
- Business owners who filed for bankruptcy in the past seven years are more likely to be denied a loan;
- Businesses with an average or high risk credit score are more likely to be denied loans;
- Inherited businesses and older businesses are less likely to be denied loans;
- Businesses with an existing line of credit, checking account, or savings account are less likely to be denied a loan.
- Firms with existing loans (other than mortgage, vehicle, equipment or stockholder loans) are more likely to be denied loans;
- Higher total sales in the prior year lowers the probability of being denied a loan;
- S or C corporations are more likely to be denied loans;
- Being in the transportation, communications and utilities industry increases the likelihood of being denied loans;
- Firms in metropolitan areas are more likely to be denied loans; and
- Business mortgage applications, vehicle loans and loans for "other" purposes are less likely to be denied.

After controlling for race- and gender-neutral influences, firms owned by African Americans were more likely to have their loans denied than other firms.

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[85] The 2003 SSBF contains multiple implicates (five copies of each record) to better address the issue of with missing values. The values of all reported variables remain constant across the five implicates, but the values of imputed variables may differ. Only 1.8 percent of all values were missing and have been imputed. BBC's regression analysis is performed on the first implicate.

Figure G-10.
Likelihood of business loan denial (probit regression) in the U.S. in the 2003 SSBF,
Dependent variable: loan denial

Variable	Marginal Effect		Variable	Marginal Effect		Variable	Marginal Effect	
Race/ethnicity and gender			Firm's characteristics, credit and financial health			Firm and lender environment and loan characteristics		
African American	0.256	**	D&B credit score = moderate risk	-0.007		Partnership	-0.006	
Asian American	-0.017		D&B credit score = average risk	0.036	*	S corporation	0.030	**
Hispanic American	-0.011		D&B credit score = significant risk	0.017		C corporation	0.040	*
Native American or other minority	0.031		D&B credit score = high risk	0.059	**	Construction industry	0.029	
Female	0.019		Total employees	0.000		Manufacturing industry	0.013	
Pacific region	0.057	**	Percent of business owned by principal	0.000		Transportation, communications and utilities industry	0.177	**
African American in Pacific region	-0.032		Family-owned business	-0.023				
Asian American in Pacific region	0.033		Firm purchased	0.002		Finance, insurance and real estate industries	0.016	
Hispanic American in Pacific region	0.026		Firm inherited	-0.036	**			
Native American or other minority in Pacific region	-0.017		Firm age	-0.001	**	Engineering industry	-0.003	
Female in Pacific region	-0.030	*	Firm has checking account	-0.147	*	Other industry	0.003	
			Firm has savings account	-0.025	**	Herfindahl index = .10 to .18	0.000	
Owner's characteristics, credit and resources			Firm has line of credit	-0.085	**	Herfindahl index = .18 or above	0.028	
Age	-0.001		Existing capital leases	-0.006		Located in MSA	0.023	*
Owner experience	0.002	**	Existing mortgage for business	0.021		Sales market local only	0.014	
Some college	-0.010		Existing vehicle loans	0.018		Loan amount	0.000	
Four-year degree	-0.003		Existing equipment loans	-0.012		Capital lease application	-0.017	
Advanced degree	-0.026	*	Existing loans from stockholders	0.021		Business mortgage application	-0.032	**
Log of home equity	0.001		Other existing loans	0.030	*	Vehicle loan application	-0.051	**
Bankruptcy in past 7 years	0.098	*	Firm used trade credit in past year	0.000		Equipment loan application	-0.019	
Judgement against in past 3 years	0.017		Log of total sales in prior year	-0.012	*	Loan for other purposes	-0.022	*
Log of net worth excluding home	0.000		Log of cost of doing business in prior year	-0.002				
			Log of total assets	0.001				
			Log of total equity	-0.001				
			Negative total equity	0.010				
			Firm bankruptcy in past 7 years	-0.026				
			Firm delinquency in business transactions	0.012				

Note: * Statistically significant at 90% confidence level.
** Statistically significant at 95% confidence level.

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

"Less than high school education," "Negative sales in prior year" and "Mining industry" perfectly predicted loan outcome and dropped out of the regression; "Owner has negative net worth" and "Negative total assets" dropped because of colinearity.

Source: BBC Research & Consulting analysis of 2003 SSBF data.

Figure G-10 also indicates that although there is little or no overall influence of business owner gender on rates of business loan denial, female business owners in the Pacific region appear to have a lower likelihood of loan denial than female business owners nationally.

The study team also simulated approval rates from the 2003 SSBF results using the same approach as it used for the 1998 disparity index. Figure G-11 presents actual and simulated ("benchmark") approval rates for African American-owned businesses, the sole minority group with statistically significant disparities in loan approval in the 2003 data. Simulated approval rates indicated that African American-owned firms are approved at 71 percent of the rate observed for similarly-situated non-Hispanic white male-owned firms (i.e., non-Hispanic white male-owned firms with the same demographic, credit and financial health, lender environment and loan characteristics of African American-owned firms).

Figure G-11.
Comparison of actual loan approval rates to simulated loan approval rates, 2003

Group	Loan approval rates		Disparity index
	Actual	Benchmark	(100 parity)
African American	49.1%	69.0%	71

Note: Actual approval rates presented here and denial rates in Figure G-7 do not sum to 100% because some observations were dropped in the probit regression.

"Loan approval" means that a business owner always or at least sometimes had his or her business loan applications approved over the previous three years.

Source: BBC Research & Consulting analysis of 2003 NSSBF data.

Applying for loans. Fear of loan denial can be a barrier to business credit in the same way that actual loan denial presents a barrier. The SSBF includes a question that gauges whether a business owner did not apply for a loan due to fear of loan denial. Using data from the 1998 and 2003 SSBF, Figure G-12 presents the proportion of firms that reported needing credit but did not apply for loans because of a fear of denial.

In 1998 and 2003, African American- and Hispanic-owned firms were more likely than non-Hispanic white male-owned firms in the nation to forgo applying for loans due to a fear of denial. Non-Hispanic white women-owned firms were also more likely to forgo applying for loans due to a fear of denial. In 2003 Asian American-owned firms were more likely than non-Hispanic white male-owned firms to not apply for loans due to a fear of loan denial. In the Pacific region in both 1998 and 2003, fear of denial was greater for minority- and women-owned firms than for non-Hispanic white male-owned firms but the difference was not statistically significant.

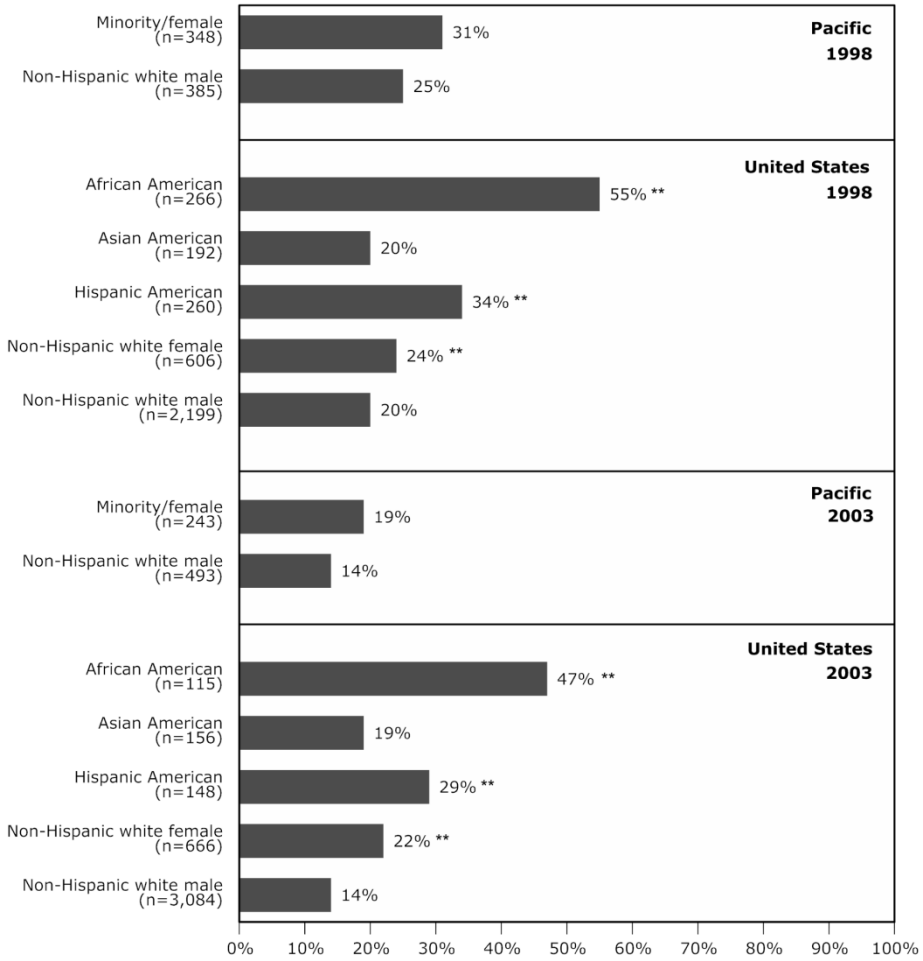
Figure G-12. Firms that needed loans but did not apply due to fear of denial, 1998 and 2003

Note:

** Denotes that the difference in proportions from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Other researchers' regression analyses of fear of denial. Other studies have identified factors that influence the decision to apply for a loan, such as firm size, firm age, owner age, and educational attainment. Accounting for those factors can help in determining whether race, ethnicity or gender of the business owner explain whether the owner did not apply for a loan due to fear of loan denial. Results indicate that:

- African American and Hispanic American business owners are significantly less likely to apply for loans.[86]
- After statistically controlling for educational attainment, there were no differences in loan application rates between non-Hispanic white, African American, Hispanic American, and Asian American male business owners.[87]

[86] Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

[87] Coleman, Susan. 2004. "Access to Debt Capital for Small Women- and Minority-Owned Firms: Does Educational Attainment Have an Impact?" *Journal of Developmental Entrepreneurship*. 9:127-144.

- African American-owned firms were more likely than other firms to report being seriously concerned with credit markets and were less likely to apply for credit in fear of loan denial.[88]

- In its study for the Santa Clara Valley Transportation Authority, CRA used an econometric model to investigate firms that did not apply for loans for fear of denial. The model explored whether differences between race/ethnicity and gender groups exist after statistically controlling for other factors. CRA based its analysis on combined data from the 1998 and 2003 SSBFs. Results from CRA's model indicate that African American- and Hispanic American-owned businesses are more likely to not apply out of fear of being denied. In addition, results for firms located in the Pacific region did not differ significantly from national results.[89]

BBC regression model for fear of denial in the SSBF. The BBC study team conducted its own econometric analysis of fear of denial by developing a model to explore the relationships between fear of denial and the race/ethnicity and gender of firm owners while controlling for other factors. The model was similar to the probit regression for likelihood of denial except that the fear of denial regression includes firm owners who did not apply for a loan and excludes loan characteristics.

After excluding a small number of observations where fear of denial was imputed, the 1998 national sample included 3,457 firms and the Pacific region included 715 firms. The 2003 national sample included 4,231 firms and the Pacific region included 736 such firms. In both 1998 and 2003 Pacific region effects are modeled using regional control variables in the national model.

1998 SSBF regression results. Figure G-13 presents the marginal effects from the probit model predicting the likelihood that a firm needs credit but will not apply due to fear of denial. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of forgoing application for a loan due to fear of denial. Factors that indicate a statistically significant *increase* in the likelihood of not applying for a loan due to fear of loan denial include:

- Filing for bankruptcy in the past seven years or having had a judgment against them;
- Having an average, significant or high risk credit score;
- Having an existing mortgage, existing vehicle loans, existing loans from stockholders or other existing loans;
- Higher total assets; and
- Having the firm be delinquent in business transactions or filing for bankruptcy in the past seven years.

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[88] Blanchflower et al., 2003. Discrimination in the Small Business Credit Market.

[89] CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority.*

Factors that indicate a statistically significant *decrease* in the likelihood of business owners not applying for a loan due to fear of loan denial include:

- More equity in the business owner's home — if he or she is a homeowner — and more business owner net worth;
- If the firm was acquired through a purchase;
- Having an older firm;
- Having a savings account or a line of credit; and
- More sales in the prior year (but also negative sales in the prior year).

After controlling for race- and gender-neutral influences, African American-owned firms were more likely to forgo applying for a loan due to fear of denial. Overall, fear of denial tends to be higher in the Pacific region; however, both African American- and Asian American-owned firms in the Pacific region were less likely to fear denial than African American- and Asian American-owned firms nationwide.

Figure G-13.
Likelihood of forgoing a loan application due to fear of denial (probit regression) in the U.S. in the 1998 SSBF, Dependent variable: needed a loan but did not apply due to fear of denial

Variable	Marginal Effect		Variable	Marginal Effect		Variable	Marginal Effect
Race/ethnicity and gender			Firm's characteristics, credit and financial health			Firm and lender environment and loan characteristics	
African American	0.294	**	D&B credit score = moderate risk	0.079		Partnership	-0.008
Asian American	0.049		D&B credit score = average risk	0.103	**	S corporation	0.001
Hispanic American	0.025		D&B credit score = significant risk	0.163	**	C corporation	0.036
Native American	0.069		D&B credit score = high risk	0.209	**	Mining industry	-0.078
Female	0.006		Total employees	-0.001		Construction industry	-0.034
Pacific region	0.074	**	Percent of business owned by principal	0.000		Manufacturing industry	-0.006
African American in Pacific region	-0.110	*	Family-owned business	0.022		Transportation, communications and utilities industry	0.048
Asian American in Pacific region	-0.099	*	Firm purchased	-0.070	**	Finance, insurance and real estate industries	-0.031
Hispanic American in Pacific region	0.034		Firm inherited	0.003		Engineering industry	-0.001
Native American in Pacific region	-0.025		Firm age	-0.003	**	Other industry	-0.034
Female in Pacific region	0.066		Firm has checking account	0.050		Herfindahl index = .10 to .18	0.000
			Firm has savings account	-0.056	**	Herfindahl index = .18 or above	0.011
Owner's characteristics, credit and resources			Firm has line of credit	-0.062	**	Located in MSA	0.031
Age	-0.001		Existing capital leases	0.037		Sales market local only	-0.017
Owner experience	0.001		Existing mortgage for business	0.105	**		
Less than high school education	0.088		Existing vehicle loans	0.049	**		
Some college	-0.003		Existing equipment loans	0.034			
Four-year degree	-0.014		Existing loans from stockholders	0.097	**		
Advanced degree	-0.029		Other existing loans	0.067	**		
Log of home equity	-0.007	**	Firm used trade credit in past year	0.016			
Bankruptcy in past 7 years	0.324	**	Log of total sales in prior year	-0.022	**		
Judgement against in past 3 years	0.093	**	Negative sales in prior year	-0.167	**		
Log of net worth excluding home	-0.034	**	Log of cost of doing business in prior year	-0.002			
Owner has negative net worth	-0.168		Log of total assets	0.020	**		
			Negative total assets	0.115			
			Log of total equity	-0.009			
			Negative total equity	0.010			
			Firm bankruptcy in past 7 years	0.567	**		
			Firm delinquency in business transactions	0.237	**		

Note: * Statistically significant at 90% confidence level.
** Statistically significant at 95% confidence level.

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

2003 SSBF regression results. Figure G-14 presents the marginal effects from the probit model predicting the likelihood that a firm needs credit but will not apply due to fear of denial. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of forgoing application for a loan due to fear of denial. Factors that indicate a statistically significant *increase* in the likelihood of not applying for a loan due to fear of loan denial include:

- Filing for bankruptcy in the past seven years or having had a judgment against them;
- Having a significant or high risk credit score;
- A larger percentage of business owned by the principal owner;
- Having an existing mortgage, existing vehicle or equipment loans, existing loans from stockholders or other existing loans;
- Higher cost of doing business in the prior year;
- Having been delinquent in business transactions or filing for bankruptcy in the past seven years; and
- Location in a metropolitan area.

Factors that indicate a statistically significant *decrease* in the likelihood of not applying for a loan due to fear of loan denial include:

- Being older and having a four-year college degree;
- More equity in the business owner's home — if he or she is a homeowner — and more business owner net worth;
- Having an older firm;
- More sales in the prior year (but also negative sales in the prior year);
- Having a local (as opposed to regional, national or international) sales market.

After controlling for race- and gender-neutral influences, African American- and Hispanic American-owned firms were more likely to forgo applying for a loan due to fear of denial (similar to CRA's analysis). In addition, BBC's model indicates that women-owned firms were also more likely to need a loan but choose not to apply due to fear of denial. Although not found nationally, in the Pacific region Native American-owned firms were more likely to fear denial than other firms.

Figure G-14.
Likelihood of forgoing a loan application due to fear of denial (probit regression) in the U.S. in the 2003 SSBF, Dependent variable: needed a loan but did not apply due to fear of denial

Variable	Marginal Effect		Variable	Marginal Effect		Variable	Marginal Effect	
Race/ethnicity and gender			Firm's characteristics, credit and financial health			Firm and lender environment and loan characteristics		
African American	0.214	**	D&B credit score = moderate risk	-0.011		Partnership	0.004	
Asian American	0.049		D&B credit score = average risk	0.040		S corporation	0.014	
Hispanic American	0.071	*	D&B credit score = significant risk	0.046	*	C corporation	0.020	
Native American or other minority	-0.026		D&B credit score = high risk	0.104	**	Construction industry	0.033	
Female	0.046	**	Total employees	0.000		Manufacturing industry	-0.012	
Pacific region	0.037		Percent of business owned by principal	0.001	**	Transportation, communications and utilities industry	-0.049	
African American in Pacific region	-0.081		Family-owned business	-0.009		Finance, insurance and real estate industries	0.041	
Asian American in Pacific region	0.000		Firm purchased	-0.010		Engineering industry	-0.028	
Hispanic American in Pacific region	-0.047		Firm inherited	-0.033		Other industry	0.010	
Native American or other minority in Pacific region	0.424	**	Firm age	-0.003	**	Herfindahl index = .10 to .18	0.005	
Female in Pacific region	-0.051		Firm has checking account	0.010		Herfindahl index = .18 or above	0.024	
			Firm has savings account	0.010		Located in MSA	0.047	**
Owner's characteristics, credit and resources			Firm has line of credit	-0.005		Sales market local only	-0.063	**
Age	-0.002	**	Existing capital leases	0.030				
Owner experience	0.002		Existing mortgage for business	0.050	**			
Less than high school education	0.041		Existing vehicle loans	0.031	*			
Some college	0.002		Existing equipment loans	0.043	*			
Four-year degree	-0.036	*	Existing loans from stockholders	0.074	**			
Advanced degree	-0.021		Other existing loans	0.106	**			
Log of home equity	-0.004	**	Firm used trade credit in past year	0.018				
Bankruptcy in past 7 years	0.227	**	Log of total sales in prior year	-0.022	**			
Judgement against in past 3 years	0.256	**	Negative sales in prior year	-0.092	*			
Log of net worth excluding home	-0.025	**	Log of cost of doing business in prior year	0.012	*			
			Log of total assets	0.005				
			Log of total equity	-0.008				
			Negative total equity	-0.033				
			Firm bankruptcy in past 7 years	0.210	**			
			Firm delinquency in business transactions	0.142	**			

Note: * Statistically significant at 90% confidence level.
** Statistically significant at 95% confidence level.

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using t-statistics from the probit coefficients associated with the marginal effects.

"Mining industry" perfectly predicted loan outcome and dropped out of the regression; "Owner has negative net worth" and "Negative total assets" dropped because of colinearity.

Source: BBC Research & Consulting analysis of 2003 SSBF data.

Loan values. The study team also considered average loan values for firms that received loans. Results from the 1998 and 2003 SSBFs for mean loan values issued to different racial/ethnic and gender groups are presented in Figure G-15. Comparisons of loan amounts between non-Hispanic white male-owned firms and minority- and women-owned firms indicated the following:

- In both 1998 and 2003, minority- and women-owned firms in the Pacific region were issued loans worth less on average than loans issued to non-Hispanic white male-owned firms.
- In 2003, national results showed that minority- and women-owned firms were issued loans that were worth on average less than half the loan amount issued to non-Hispanic white male-owned firms. However, national 1998 data suggest that minority- and women-owned firms were issued loans that were worth slightly more on average than loans issued to non-Hispanic white male-owned firms.

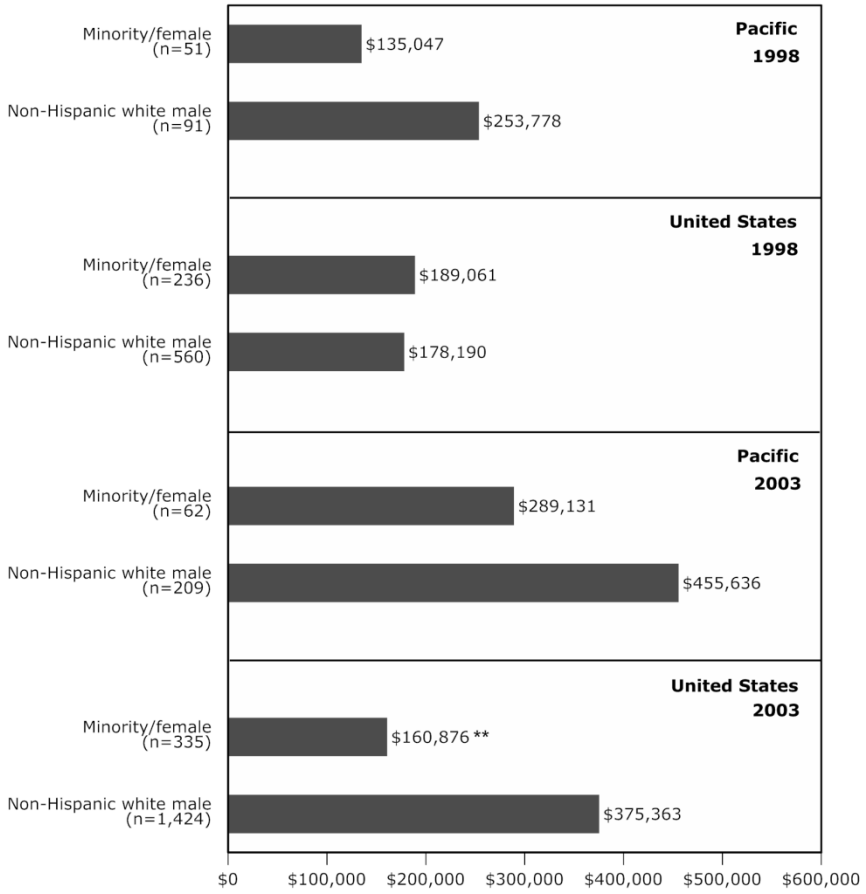
Figure G-15. Mean value of approved business loans, 1998 and 2003

Note:

** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Previous national studies have found that African American-owned firms are issued loans that are worth less than loans issued to non-Hispanic white-owned firms with similar characteristics. Examinations of construction companies in the United States have also revealed that African American-owned firms are issued loans that are worth less than loans issued to firms with otherwise identical characteristics.[90]

The BBC study team conducted its own econometric analysis to explore the relationships between loan amount and the race/ethnicity and gender of firm owners while controlling for other factors. That regression model did not indicate statistically different loan amounts approved for minorities or women than loan amounts for non-Hispanic whites or men.

Interest rates. Based on 1998 and 2003 SSBF data, Figure G-16 presents the average interest rates on commercial loans by the race/ethnicity of firm owners. In 1998, on average, minority- and women-owned firms in the Pacific region were issued loans with similar interest rates to loans issued to non-Hispanic white male-owned firms. However, in 2003, the average interest rate on loans issued to minority- and women-owned firms appeared to be higher (1.6 percentage points higher) than the mean interest rate of loans for non-Hispanic white male-owned firms.

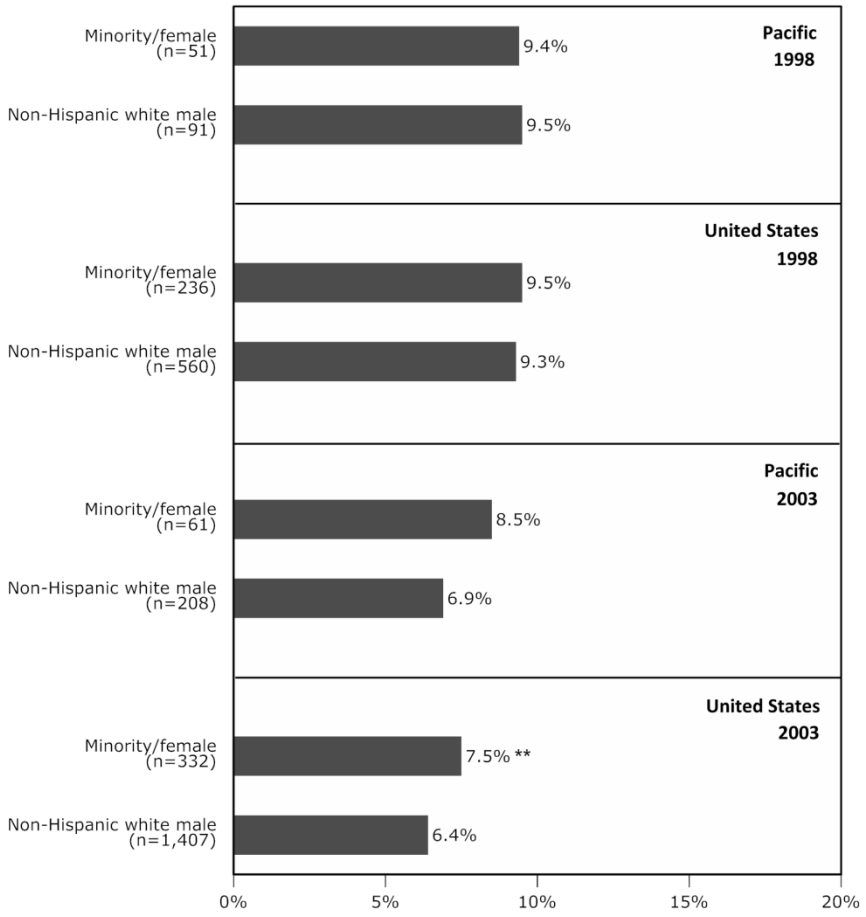
Figure G-16. Mean interest rate for business loans, 1998 and 2003

Note:

** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



[90] Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

The overall pattern in the Pacific region for loan interest rates was similar to that found in the United States in 1998 and 2003.

Other researchers' regression analyses of interest rates. Previous studies have investigated differences in interest rates across race/ethnicity and gender while statistically controlling for factors such as individual credit history, firm credit history, and Dun and Bradstreet credit scores. Findings from those studies include the following:

- Hispanic American-owned firms had significantly higher interest rates for lines of credit in places with less credit market competition. However, this study found no evidence that African American- or female-owned firms received higher rates.[91]
- Among a sample of firms with no past credit problems, African American-owned firms had significantly higher interest rates on approved loans than other groups.[92]
- In its study for the Santa Clara Valley Transportation Authority, CRA also investigated differences in interest rates by race/ethnicity and gender using a linear econometric model that accounted for other factors that may impact interest rates. The CRA study indicated that, on a national level, African American- and Hispanic American-owned firms pay a higher interest rate for loans than non-Hispanic white-owned firms after statistically controlling for other factors. CRA did not find any additional differences between minority- and non-minority-owned firms located in the Pacific region.[93]

BBC regression model for interest rates in the SSBF. The 2003 SSBF data for the Pacific region indicate higher interest rates, on average, for minority- and women-owned firms compared with white male-owned firms. BBC study team conducted a regression analysis of interest rates in both the 1998 and the 2003 SSBF in order to explore the relationships between interest rates and the race/ethnicity and gender of firm owners while controlling for other factors. BBC developed a linear regression model using the same control variables as the likelihood of denial model along with additional characteristics of the loan received, such as whether or not the loan was guaranteed, if collateral was required, the length of the loan and whether the interest rate was fixed or variable.

After excluding a small number of observations where the interest rate was imputed, the 1998 national sample included 719 firms that received a loan in the past three years and the Pacific region included 125 such firms. The 2003 national sample included 1,606 firms that received a loan in the past three years and the Pacific region included 247 such firms. Again, Pacific region effects are modeled using regional control variables.

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[91] Cavalluzzo. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

[92] Blanchflower. 2003. "Discrimination in the Small Business Credit Market."

[93] CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority.*

1998 SSBF regression results. Figure G-17 presents the coefficients from the 1998 linear model. The results from the regression model indicate that a number of race- and gender-neutral factors significantly affect the interest rate received, including:

- Business owners with less than a high school education tend to receive higher interest rates;
- Firms acquired through purchase tend to receive lower interest rates;
- Firms with existing loans (other than vehicle or equipment loans or loans from stockholders) tend to receive higher interest rates;
- More sales in the prior year (but also negative sales in the prior year) are associated with lower interest rates;
- An increase in a firm's total equity decreases interest rates as does having negative equity;
- Capital leases tend to have higher interest rates; and
- A collateral requirement lowers interest rates.

After controlling for race- and gender-neutral influences, the regression analysis using 1998 SBBF data does not indicate that minority- or female-owned firms received loans with significantly different interest rates than non-Hispanic white-owned firms.

Figure G-17.
Interest rate (linear regression) in the U.S. in the 1998 SSBF,
Dependent variable: interest rate on most recent approved loan

Variable	Coefficient	
Race/ethnicity and gender		
Constant	14.625	**
African American	1.464	
Asian American	1.258	
Hispanic American	-0.303	
Native American	0.609	
Female	-0.304	
Pacific region	-0.093	
African American in Pacific region	-2.668	
Asian American in Pacific region	-2.001	
Hispanic American in Pacific region	0.141	
Female in Pacific region	0.515	
Owner's characteristics, credit and resources		
Age	0.001	
Owner experience	-0.014	
Less than high school education	1.192	**
Some college	-0.182	
Four-year degree	0.154	
Advanced degreē	0.059	
Log of home equity	-0.049	
Bankruptcy in past 7 years	0.985	
Judgement against in past 3 years	0.330	
Log of net worth excluding home	-0.049	
Owner has negative net worth	0.058	

Variable	Coefficient	
Firm's characteristics, credit and financial health		
D&B credit score = moderate risk	-0.270	
D&B credit score = average risk	-0.161	
D&B credit score = significant risk	-0.145	
D&B credit score = high risk	0.502	
Total employees	0.002	
Percent of business owned by principal	0.005	
Family-owned business	0.305	
Firm purchased	-0.404	*
Firm inherited	-0.052	
Firm age	-0.001	
Firm has checking account	0.080	
Firm has savings account	0.359	
Firm has line of credit	-0.315	
Existing capital leases	0.112	
Existing mortgage for business	0.044	
Existing vehicle loans	-0.138	
Existing equipment loans	-0.080	
Existing loans from stockholders	0.234	
Other existing loans	0.601	**
Firm used trade credit in past year	-0.200	
Log of total sales in prior year	-0.206	*
Negative sales in prior year	-3.222	**
Log of cost of doing business in prior year	0.019	
Log of total assets	0.027	
Negative total assets	1.990	
Log of total equity	-0.173	**
Negative total equity	-2.236	**
Firm bankruptcy in past 7 years	-0.597	
Firm delinquency in business transactions	0.430	

Variable	Coefficient	
Firm and lender environment and loan characteristics		
Partnership	0.060	
S corporation	0.246	
C corporation	0.225	
Mining industry	-0.079	
Construction industry	-0.064	
Manufacturing industry	-0.020	
Transportation, communications and utilities industry	0.131	
Finance, insurance and real estate industries	-0.528	
Engineering industry	-0.134	
Other industry	-0.423	
Herfindahl index = .10 to .18	0.099	
Herfindahl index = .18 or above	0.229	
Located in MSA	-0.060	
Sales market local only	-0.165	
Approved Loan amount	0.000	
Capital lease application	1.267	**
Business mortgage application	-0.272	
Vehicle loan application	-0.478	
Equipment loan application	-0.068	
Loan for other purposes	-0.452	
Loan guaranteed	0.071	
Collateral required	-0.388	*
Length of loan (months)	-0.002	
Fixed rate	0.037	

Note: * Statistically significant at 90% confidence level.
** Statistically significant at 95% confidence level.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

2003 SSBF regression results. Figure G-18 presents the coefficients from the linear model. The results from the regression model indicate that a number of race- and gender-neutral factors significantly affect the interest rate received, including:

- Firms in the Pacific region tend to receive loans with higher interest rates;
- Business owners with an advanced degree tend to receive lower interest rates;
- Increased equity in the business owner's home — if he or she is a homeowner — reduces the interest rate;
- High risk credit scores increase interest rates by approximately 1 percentage point;
- An increase in a firm's total equity increases interest rates as does having negative equity;
- Being in the construction industry lowers interest rates but being in the transportation, communications and utilities industry increases interest rates;
- Capital leases tend to have higher interest rates and vehicle loans tend to have lower interest rates;
- A collateral requirement lowers interest rates;
- Longer loans tend to have lower interest rates; and
- Fixed rate loans have higher interest rates than variable rate loans.

After controlling for race- and gender-neutral influences, the regression analysis indicates that Hispanic American-owned firms received loans with interest rates higher than non-Hispanic white-owned firms (about 1 percentage point higher). African American-owned firms in the Pacific region received higher interest rates than other firms. It appears that African American-owned firms paid interest rates several percentage points higher than other firms.

Figure G-18.
Interest rate (linear regression) in the U.S. in the 2003 SSBF,
Dependent variable: interest rate on most recent approved loan

Variable	Coefficient	
Race/ethnicity and gender		
Constant	11.993	**
African American	1.787	
Asian American	0.119	
Hispanic American	1.096	*
Native American or other minority	-0.437	
Female	-0.212	
Pacific region	1.224	**
African American in Pacific region	2.906	*
Asian American in Pacific region	0.235	
Hispanic American in Pacific region	-0.139	
Native American or other minority in Pacific region	-0.972	
Female in Pacific region	0.403	
Owner's characteristics, credit and resources		
Age	-0.013	
Owner experience	0.011	
Less than high school education	0.284	
Some college	0.239	
Four-year degree	-0.324	
Advanced degree	-0.572	*
Log of home equity	0.006	
Bankruptcy in past 7 years	0.241	
Judgement against in past 3 years	-0.205	
Log of net worth excluding home	-0.149	**

Variable	Coefficient	
Firm's characteristics, credit and financial health		
D&B credit score = moderate risk	0.241	
D&B credit score = average risk	0.192	
D&B credit score = significant risk	0.279	
D&B credit score = high risk	1.013	**
Total employees	-0.002	
Percent of business owned by principal	-0.001	
Family-owned business	-0.516	
Firm purchased	-0.001	
Firm inherited	0.065	
Firm age	-0.012	
Firm has checking account	-0.354	
Firm has savings account	-0.017	
Firm has line of credit	-0.028	
Existing capital leases	0.132	
Existing mortgage for business	0.028	
Existing vehicle loans	0.344	
Existing equipment loans	0.563	
Existing loans from stockholders	0.191	
Other existing loans	0.380	
Firm used trade credit in past year	0.252	
Log of total sales in prior year	-0.157	
Negative sales in prior year	-2.286	
Log of cost of doing business in prior year	-0.144	
Log of total assets	-0.142	
Log of total equity	0.182	*
Negative total equity	2.132	*
Firm bankruptcy in past 7 years	-0.206	
Firm delinquency in business transactions	-0.179	

Variable	Coefficient	
Firm and lender environment and loan characteristics		
Partnership	-0.510	
S corporation	-0.142	
C corporation	-0.113	
Mining industry	0.228	
Construction industry	-0.555	*
Manufacturing industry	-0.235	
Transportation, communications and utilities industry	1.367	**
Finance, insurance and real estate industries	-0.036	
Engineering industry	0.515	
Other industry	0.372	
Herfindahl index = .10 to .18	0.550	
Herfindahl index = .18 or above	0.876	
Located in MSA	0.111	
Sales market local only	-0.148	
Approved Loan amount	0.000	
Capital lease application	1.221	*
Business mortgage application	0.547	
Vehicle loan application	-1.062	**
Equipment loan application	-0.261	
Loan for other purposes	-0.369	
Loan guaranteed	-0.312	
Collateral required	-0.842	**
Length of loan (months)	-0.004	**
Fixed rate	1.185	**

Note: * Statistically significant at 90% confidence level.
** Statistically significant at 95% confidence level.

"Owner has negative net worth" and "Negative total assets" dropped out of the regression because of colinearity.

Source: BBC Research & Consulting analysis of 2003 SSBF data.

Other factors affecting capital markets. Ethnic banking sectors may also affect the availability of loans to different minority groups. For example, one study found that strength in the ethnic banking sector influences credit accessibility in ethnic communities in Los Angeles. A strong Asian American banking sector helped Asian American communities transition to successful business environments, and a lack of strong banking sectors in African American communities could hinder development of African American businesses.[94] A recent study discounts the importance of rotating credit associations for Asian American-owned firms.[95]

Results from BBC availability interviews. At the close of the 2012 availability interviews conducted as part of the Caltrans disparity study, BBC asked, "Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences in California within the past five years as we ask you these questions."

For each potential barrier, the study team examined whether the share of firms that indicated that they had experienced that specific barrier or difficulty differed between MBEs, WBEs and majority-owned firms. The study team also examined if affirmative responses differed for younger firms, those that were seven years old or younger (corresponding to the youngest one-fifth of respondents across all the completed availability interviews).

Access to lines of credit and loans. The first question was, "Has your company experienced any difficulties in obtaining lines of credit or loans?" As shown in Figure G-19, of all firms, 36 percent of MBEs and 27 percent of WBEs reported difficulties obtaining lines of credit or loans. Fewer majority-owned firms (19%) reported that they had experienced difficulties obtaining lines of credit or loans.

A larger share of young firms reported that they had experienced difficulties obtaining lines of credit or loans compared to all firms. Young minority- and women-owned firms were more likely to report this difficultly than majority-owned firms.

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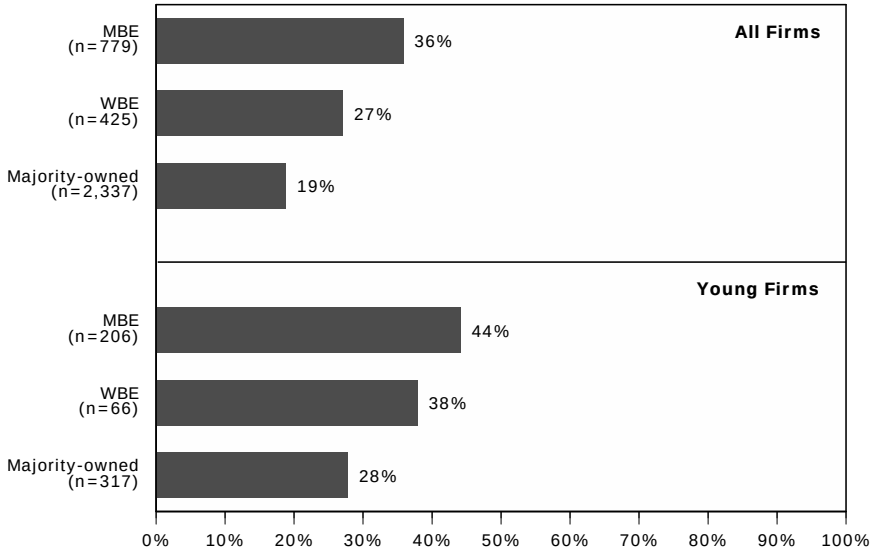
[94] Dymski, Gary and Lisa Mohanty. 1999. "Credit and Banking Structure: Asian and African-American Experience in Los Angeles." *The American Economic Review.* 89:362-366.

[95] Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

Figure G-19.
Has your company experienced any difficulties in obtaining lines of credit or loans?

Source:

BBC Research & Consulting from 2012 Availability Interviews.

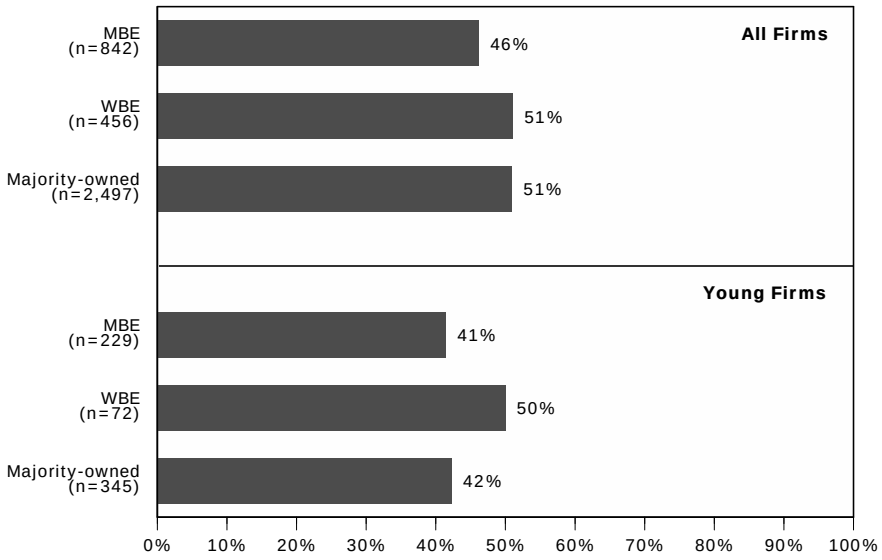


Receiving timely payment. Need for business credit is, in part, linked to whether firms are paid for their work in a timely manner. In the availability interviews, BBC asked, "Has your company had any difficulties receiving payment in a timely manner?" Figure G-20 shows that many minority-, women- and majority-owned firms reported difficulty receiving timely payment. Younger firms were less likely to report this difficulty compared with all respondents, however young firms owned by women were more likely than other young firms to indicate this difficulty.

Figure G-20.
Has your company experienced any difficulties receiving payment in a timely manner?

Source:

BBC Research & Consulting from 2012 Availability Interviews.



Bonding and Insurance

Bonding is closely related to access to capital. Some national studies have identified barriers regarding MBE/WBEs and access to surety bonds for public construction projects.[96] High insurance requirements on public sector projects may also represent a barrier for certain construction and engineering-related firms attempting to do business with government agencies.

Bonding. To research whether bonding represented a barrier for California businesses, BBC asked firms completing availability interviews:

- Has your company obtained or tried to obtain a bond for a project?
- [and if so] Has your company had any difficulties obtaining bonds needed for a project?

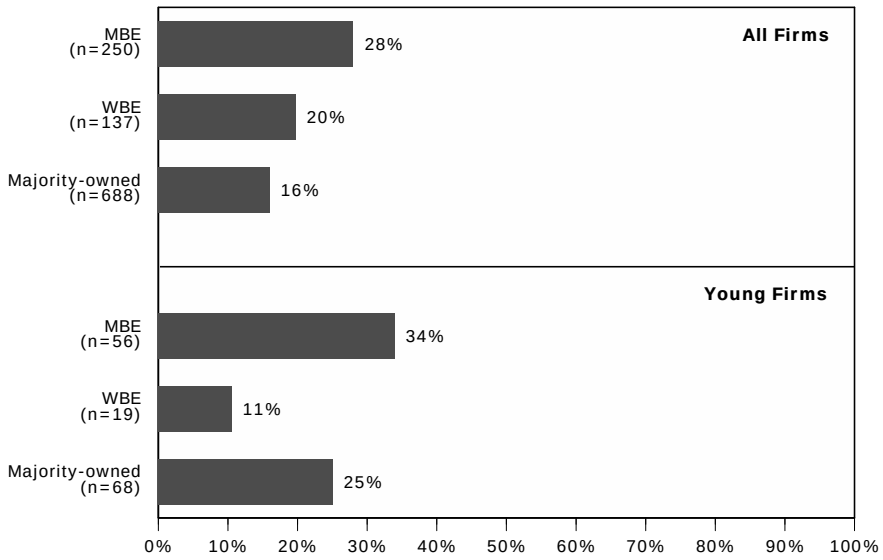
Figure G-21 presents these results from the 2012 availability interviews. Among firms reporting that they had obtained or tried to obtain a bond, 28 percent of MBEs indicated difficulties obtaining bonds needed for a project. A smaller share of WBEs (20%) and majority-owned firms (16%) reported difficulties obtaining the bonding needed for a project.

Among young firms, a larger share of MBEs than majority-owned firms reported difficulties obtaining the bonding needed for a project. This was not found for young firms that were white women-owned, although the number of young-firm WBE respondents limits interpretation of results for this group.

Figure G-21. Has your company had any difficulties obtaining bonds needed for a project?

Source:

BBC Research & Consulting from 2012 Availability Interviews.



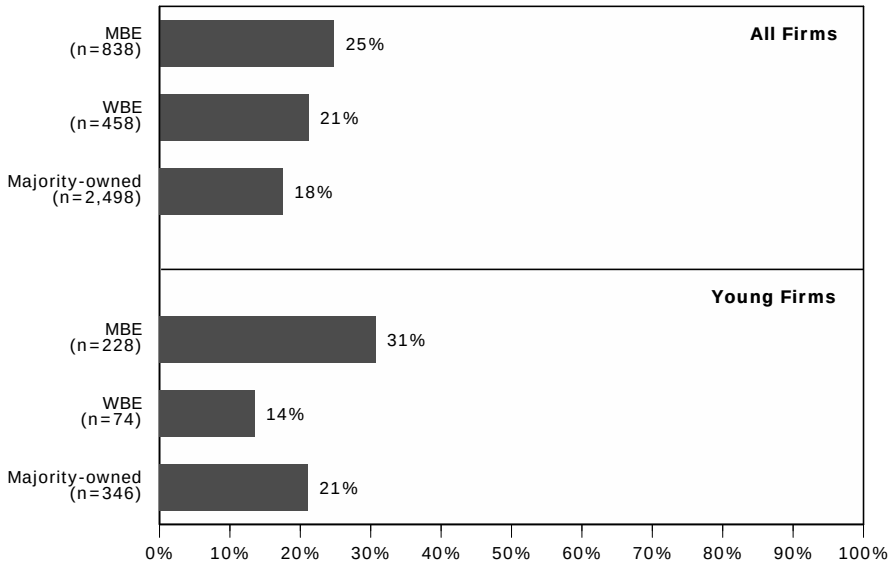
[96] For example, Enchautegui, Maria E. et al. 1997. "Do Minority-Owned Businesses Get a Fair Share of Government Contracts?" *The Urban Institute:* 1-117, p. 56.

Insurance. BBC also examined whether minority- and women-owned firms were more likely than majority-owned firms within the study area to report that insurance requirements represented a barrier to bidding. Figure G-22 presents these results. One-quarter of MBEs interviewed reported such difficulties. Fewer WBEs (21%) and majority-owned firms (18%) indicated that insurance requirements presented a barrier to bidding on projects.

Young MBEs and majority-owned firms were more likely than other young firms to indicate that insurance requirements on a project presented a barrier to bidding. Young WBEs were less likely to identify insurance requirements as a barrier.

Figure G-22.
Have any insurance requirements on projects presented a barrier to bidding?

Source:
BBC Research & Consulting from 2012 Availability Interviews.



Summary

There is evidence that minorities and women continue to face certain disadvantages in accessing capital that is necessary to start, operate and expand businesses based on the information presented in this appendix.

Capital is required to start companies, so barriers accessing capital can affect the number of minorities and women who are able to start businesses. In addition, minorities and women start business with less capital (based on national data). A number of studies have demonstrated that lower start-up capital negatively affects prospects for those businesses.

- Home equity is an important source of funds for business start-up and growth. Fewer African Americans, Hispanic Americans, and Native Americans in California own homes compared with non-Hispanic whites, and those who do own homes tend to have lower home values.
- Asian-Pacific Americans and Subcontinent Asian Americans are also less likely to own homes in California compared with non-Hispanic whites. However, those who do own homes tend to have higher home values.
- African Americans, Hispanic Americans, and Native Americans applying for home mortgages in California have been more likely than non-Hispanic whites to have their applications denied.

- African American, Hispanic American, and Native American mortgage borrowers in California have been more likely than non-Hispanic whites to be issued subprime loans.
- There is evidence that African American and Hispanic American business owners were more likely to have been denied business loan applications than similarly situated non-minorities. Results for the Pacific region appear consistent with national results.
- Among business owners who reported needing business loans, there is evidence that African Americans, Hispanic Americans and women were more likely to forgo applying for loans due to fear of denial than similarly-situated non-minorities and men. Results for the Pacific region appear to be consistent with national results. In the Pacific region in 2003, Native American business owners were also more likely to forgo applying for loans due to fear of denial than other business owners.
- There is evidence for 2003 that Hispanic American business owners receiving business loans paid higher interests rates than similarly-situated non-minorities (with results for the Pacific region consistent with national results). In the Pacific region, it appeared that African American-owned firms also paid higher interest rates than other firms.
- In the 2012 availability interviews with California transportation contracting firms, minority- and women-owned firms were more likely to report difficulties with obtaining lines of credit or loans than majority-owned firms.
- Difficulty receiving timely payment was frequently identified as an issue by MBE, WBE and majority-owned firms in the 2012 availability interviews.
- When asked whether their company had any difficulties obtaining bonds for a project and whether insurance requirements on projects presented a barrier to bidding, relatively more MBEs than majority-owned said that they had these difficulties in the 2012 availability interviews. There was little evidence that more white women-owned firms had these difficulties than majority-owned firms.

APPENDIX H.
Success of Businesses in the California Construction and Engineering Industries

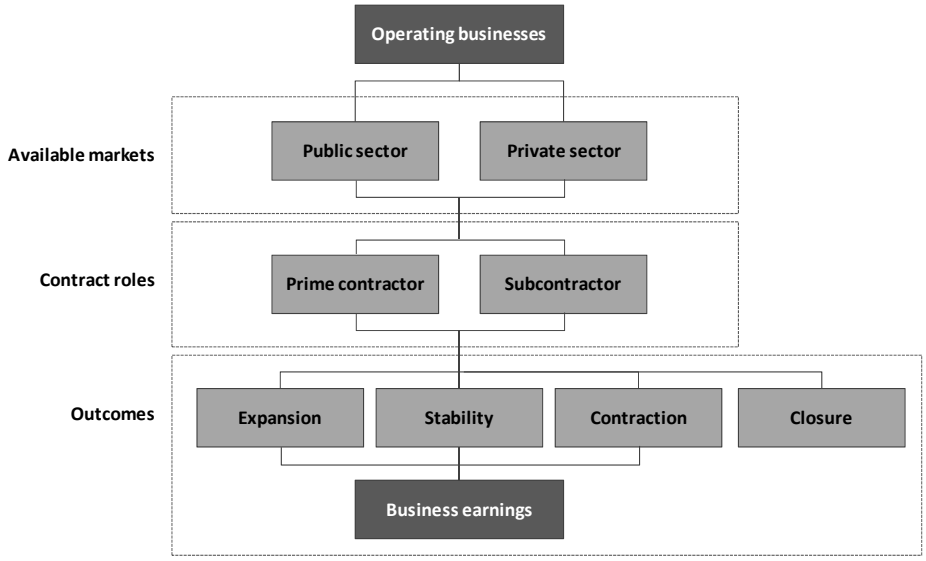
BBC examined the success of MBE/WBEs in the California construction and engineering industries.[1] The study team assessed whether business outcomes for those firms differ from those of non-Hispanic white male-owned firms. BBC researched outcomes for MBE/WBEs and non-Hispanic white male-owned businesses in terms of:

- Participation in public and private sector markets, including contractor roles and size of contracts bid on and performed;
- Business closures;
- Business expansions and contractions;
- Business receipts and earnings; and
- Size distribution of gross revenue.

Figure H-1 provides a framework for the study team's analyses.

Figure H-1. Business outcomes

Source:
BBC Research & Consulting.



[1] In Appendix H and other marketplace appendices, the engineering industry focuses on architectural, engineering and related services.

Participation in Public and Private Sector Markets

BBC drew on information that the study team collected as part of the availability analysis to examine business outcomes for MBE/WBEs and non-Hispanic white male-owned firms in the public and private sectors, including information about:

- Whether firms had bid on and won contracts in study industries and the sizes of those projects; and
- Whether firms had worked as prime contractors, subcontractors, or both.

Public sector versus private sector work. BBC examined whether minority- and women-owned transportation contracting firms were less likely to work in the private sector than the public sector.

The study team separately examined responses for firms in construction and engineering industries. Results indicate whether a firm had pursued public or private sector transportation-related work. [2,3]

Construction firms. The pie charts in Figure H-2 present the distribution of majority-, minority- and women-owned firms competing for government and private sector prime contracts and subcontracts, based on responses from availability interviews.

- Of the 794 construction industry firms that reported bidding on public sector prime contracts in the past five years, 67 percent were majority-owned, 20 percent were MBEs and 13 percent were WBEs.
- The share of MBE/WBE firms bidding as primes (33%) was the same for private sector construction work.
- The share of MBE/WBEs that reported bidding as subcontractors was about the same as those that reported bidding as primes. Among the 1,251 firms that reported competing for public sector subcontracts, 68 percent were majority-owned, 19 percent were MBEs and 13 percent were WBEs. The representation of MBE/WBEs among firms bidding on subcontract work was about the same between public sector and private sector contracts.

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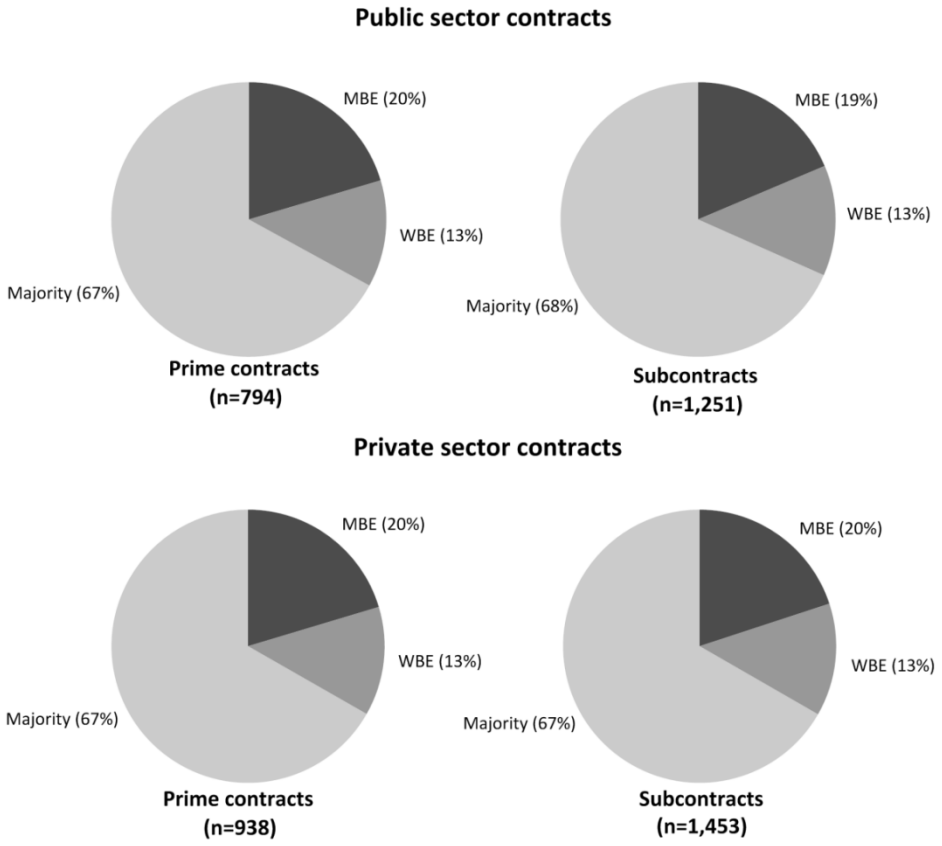
[2] A firm was deemed to have performed or bid on public sector work if it answered "yes" to either of the following questions: (a) "Next, I have a few questions about your company's role in transportation-related construction, maintenance or design. During the past five years, has your company submitted a bid or a price quote for any part of a contract for a state or local government agency in California?"; or (b) "During the past five years, has your company received an award for work on any part of a contract for a state or local government agency in California?"

[3] A firm was deemed to have performed or bid on private sector work if it answered "yes" to either of the following questions: (a) "During the past five years, has your company submitted a bid or a price quote for any part of a contract for a private sector organization in California?"; or (b) "During the past five years, has your company received an award for work on any part of a contract for a private sector organization in California?"

Figure H-2.
MBEs, WBEs and majority-owned construction firms bidding on public sector and private sector work in California in the past five years



Note: "WBE" represents white women-owned firms.
Total may not add to 100 percent due to rounding.

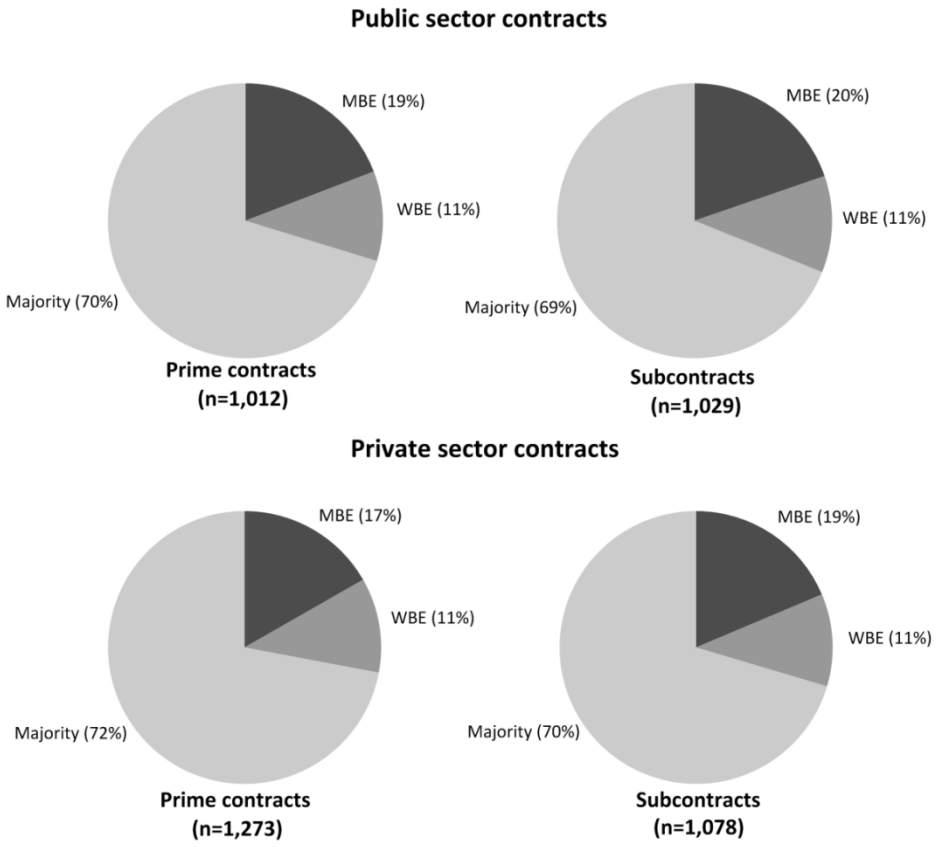
Source: BBC Research & Consulting from 2012 Availability Interviews.

Firms competing for public sector work in California were also asked if they had been awarded any public sector contracts (including both prime contracts and subcontracts). When asked to consider the past five years, about 76 percent of MBEs construction firms reported that they had been successful in obtaining work. Compared to MBEs, a larger share of WBEs (85%) and majority-owned (82%) construction firms bidding on public sector work said that they had been successful in obtaining some work.

About the same share of WBEs (85%) and majority-owned (84%) firms bidding on private sector work indicated that they had received such work. Seventy-eight percent of MBEs competing for private sector prime contracts or subcontracts reported that they had been successful in obtaining work.

Engineering firms. The study team also analyzed the representation of minority- and women-owned engineering firms among businesses competing for government and private sector prime contracts and subcontracts. Figure H-3 presents the distribution of majority-, minority- and women-owned engineering firms competing for government and private sector prime contracts and subcontracts. MBE/WBEs represented about 30 percent of firms competing for public sector prime contracts and private sector prime contracts. MBE/WBEs represented a similar share of firms competing for public and private sector subcontracts.

Figure H-3.
MBEs, WBEs and majority-owned engineering firms bidding on public sector and private sector work in California in the past five years



Note: "WBE" represents white women-owned firms.
Total may not add to 100 percent due to rounding.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Engineering firms competing for public sector and private sector work were also asked if they had received any such work in the past five years. A similar share of MBE and majority-owned firms indicated that they had been successful in obtaining work. A slightly larger share of WBE engineering firms reported obtaining work in the public sector.

Eighty percent of WBE engineering firms reported obtaining public sector work in the past five years. About 77 percent of MBEs and majority-owned indicated receiving public sector work in the past five years.

When asked if they had received private sector work in the past five years, 79 percent of MBE and 78 percent of WBE engineering firms indicated that they had obtained such work. Eighty-two percent of majority-owned firms reported receiving private sector work in the past five years.

Bidding as prime contractors and subcontractors/suppliers. The next four figures examine — for MBEs, WBEs and majority-owned firms — the percentage of firms bidding in different roles (as prime contractors, subcontractors, or both). These results are based on the same availability interview questions discussed earlier in this appendix, and pertain to bidding within the California transportation contracting industry within the past five years.

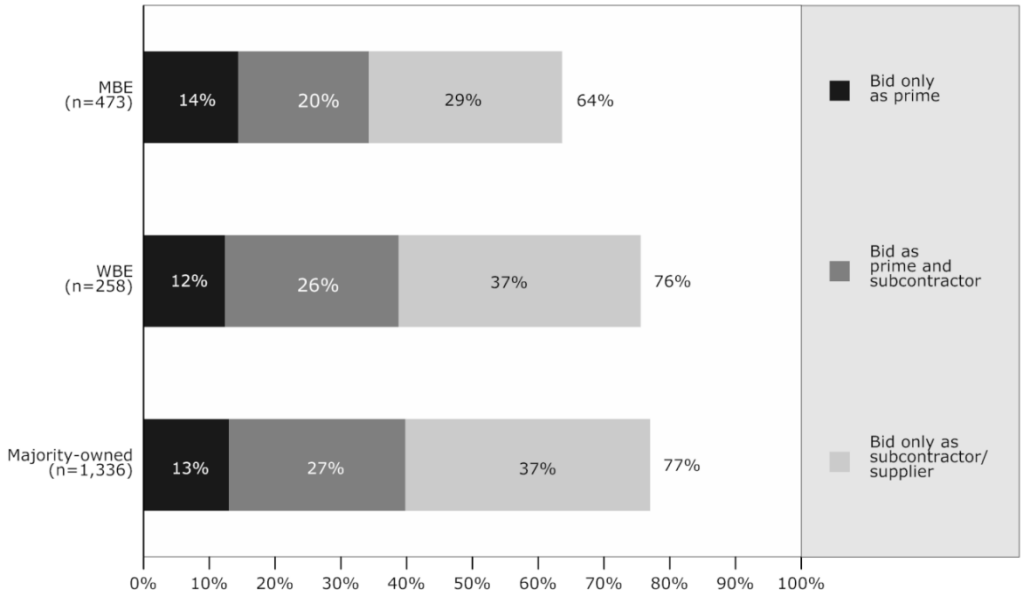
Construction firms. Figure H-4 examines the share of majority-, minority and women-owned California construction firms that reported bidding on public sector work as a prime contractor, a subcontractor, or as both.

- Over three-quarters (77%) of majority-owned construction firms that reported being qualified and interested in future transportation construction work bid on public sector work as a prime contractor or a subcontractor in the past five years (including submitting price quotes). About 13 percent bid only as a prime contractor and 37 percent bid only as a subcontractor.

- A similar percentage (76%) of WBEs reported bidding on public sector work in the past five years. About 12 percent had bid only as a prime contractor, and 37 percent of WBEs bid only as a subcontractor on public sector construction work.

- A smaller share of MBEs reported bidding on public sector work in the past five years (64%). About 14 percent reported bidding only as a prime contractor, and 29 percent had bid only as a subcontractor.

Figure H-4.
Percent of construction firms that reported submitting a bid for any part of a public sector project in California in the past five years



Note: "WBE" represents white women-owned firms.

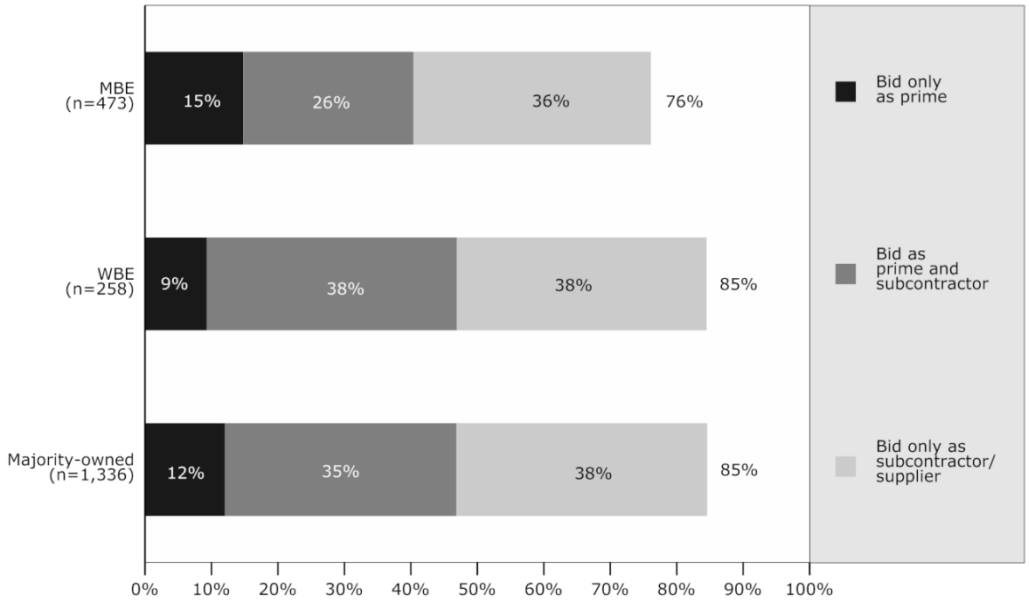
Source: BBC Research & Consulting from 2012 Availability Interviews.

The study team also asked firm owners and managers if the firm had bid on a private sector construction project in the past five years. Figure H-5 presents the share of minority-, women- and majority-owned construction firms that reported bidding on private sector work as a prime contractor, a subcontractor, or as both.

- Like public sector construction firms, a similar share of WBEs and majority-owned firms (85%) reported bidding on private sector construction work in the past five years. Thirty-eight percent of WBEs and majority-owned firms reported bidding as only a subcontractor. Nine percent of WBEs and 12 percent of majority-owned firms had bid as only a prime contractor.

- About three-quarters of MBE construction firms indicated that they had bid on private sector work in the past five years. Compared to WBE and majority-owned firms, a larger share of MBEs (15%) reported bidding only as a prime contractor.

Figure H-5.
Percent of construction firms that reported submitting a bid for any part of a private sector project in California in the past five years



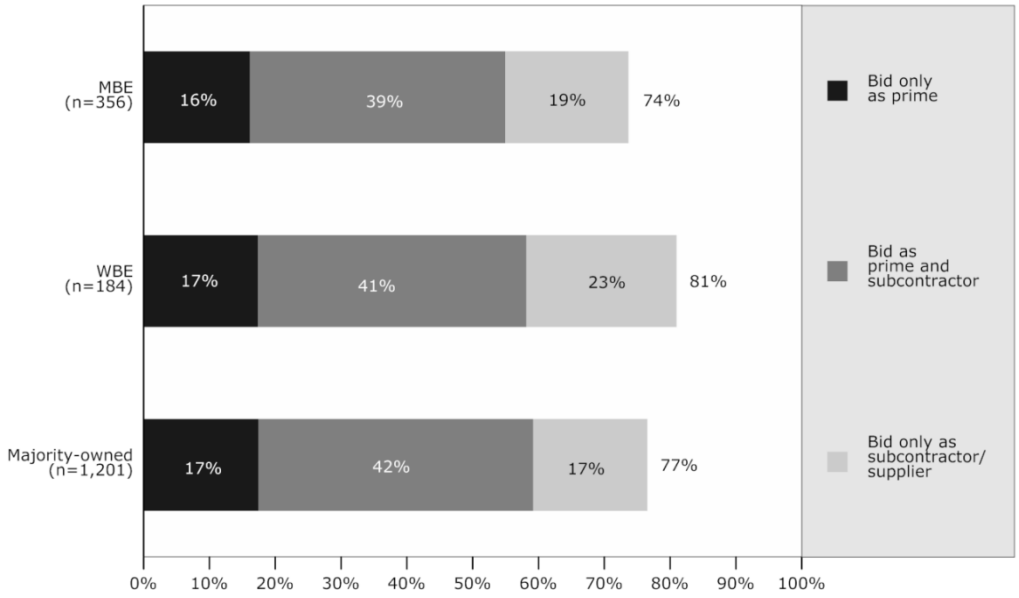
Note: "WBE" represents white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Engineering firms. Figures H-6 and H-7 examine prime contract versus subcontract bidding for engineering firms, based on data from the availability interviews.

Figure H-6 shows that, overall, WBEs firms (81%) were more likely to bid on public sector contracts than MBEs (74%) and majority-owned firms (77%). This difference was due to a larger percentage of WBE firms proposing as subcontractors (64% compared to 58% of MBEs and 59% of majority-owned firms).

Figure H-6.
Percent of engineering industry firms that reported submitting a bid for any part of a public sector project in California in the past five years



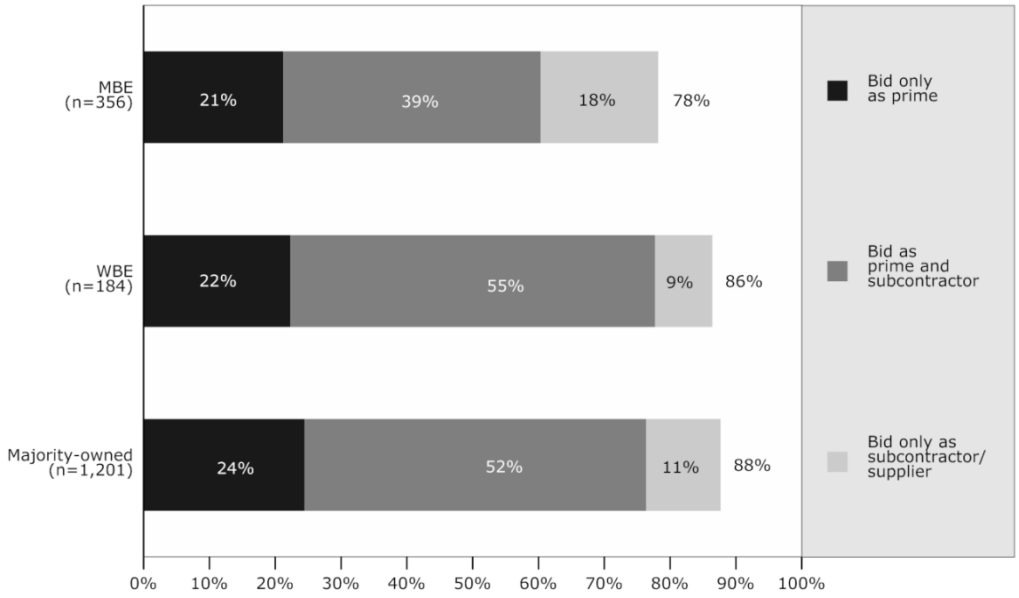
Note: "WBE" represents white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Figure H-7 presents results for engineering-related firms bidding on private sector work in the past five years.

Like public sector work, overall, MBEs (78%) were less likely to bid on private sector work than WBEs (86%) and majority-owned firms (88%) in the past five years. This difference was due to a smaller percentage of MBE firms (57%) proposing as subcontractors than WBEs (64%) and majority-owned (63%) engineering firms.

Figure H-7.
Percent of engineering industry firms that reported submitting a bid for any part of a private sector project in the past five years



Note: "WBE" represents white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

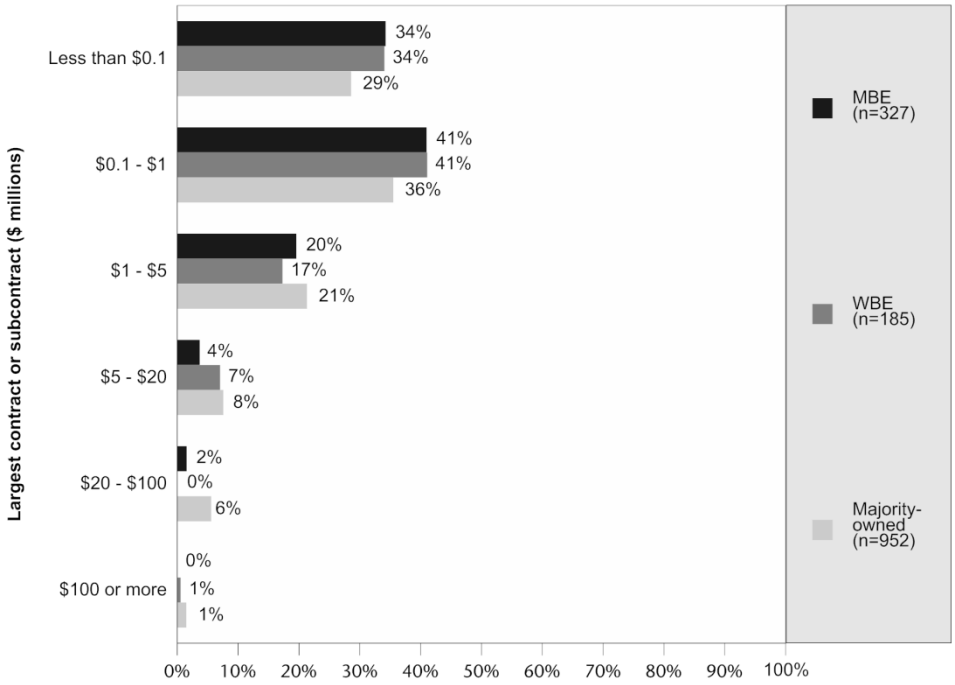
Largest contract in California in the past five years. As part of the availability interviews, the study team asked firms to identify the largest contract each firm was awarded in California in the past five years.

Construction firms. Among construction firms in the availability interviews, 34 percent of MBE/WBEs reported that the largest contract they received was less than $100,000 (compared with 29% of majority-owned firms).

Over one-third of majority-owned firms reported that the largest contract they received was worth $1 million or more. A smaller share of MBEs (26%) and WBEs (25%) reported that they had received a contract of this size.

Compared to MBEs (2%) and WBEs (1%), a larger share of majority-owned firms (7%) reported winning construction work worth $20 million or more in that past five years. No MBEs reported receiving work worth $100 million or more in that past five years.

Figure H-8.
Largest contract or subcontract that the company received in California in the past five years, construction firms



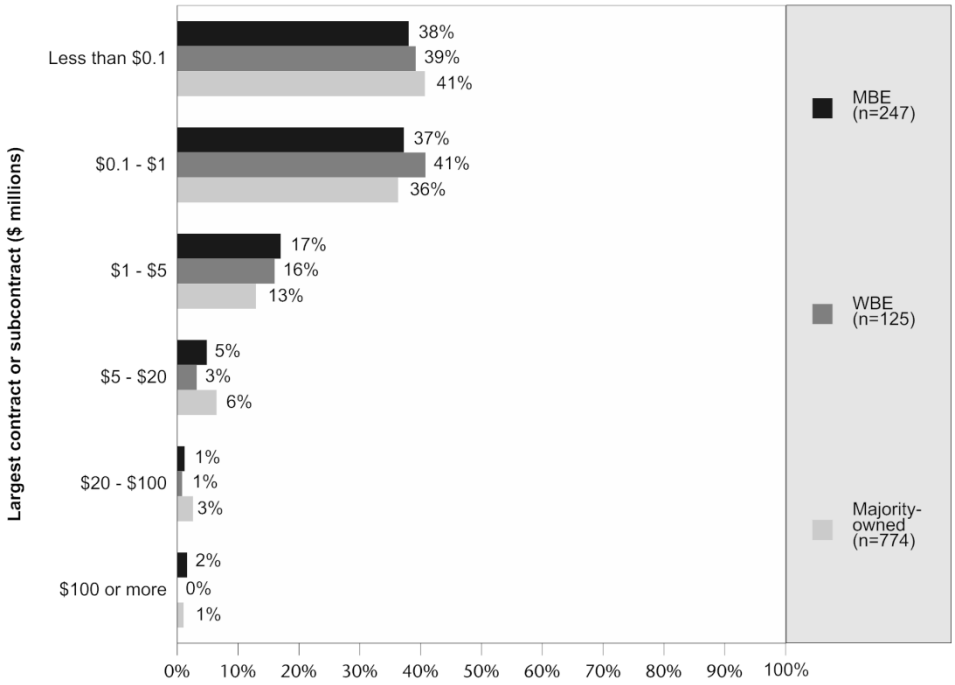
Note: "WBE" represents white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Engineering firms. Among engineering industry firms, a slightly larger share of majority-owned firms (41%) reported that the largest contract they had been awarded in the past five years was worth less than $100,000 compared to MBEs (38%) and WBEs (39%).

A larger share of majority-owned firms (10%) reported that the largest contract they had been awarded was worth $5 million or more than MBEs (8%) and WBEs (4%). However, compared to majority-owned firms (1%), a slightly larger share of MBEs (2%) reported that the largest contract they had been awarded in the past five years was worth $100 million or more. No WBEs reported winning work of this size in the past five years.

Figure H-9.
Largest contract or subcontract that the company received in California in the past five years, engineering firms



Note: "WBE" represents white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Bid capacity. Some recent legal cases regarding race- and gender-conscious contracting programs have considered the issue of the "relative capacity" of firms included in an availability analysis.[4] One approach to accounting for differing capacity between types of firms is to examine relatively small contracts, a technique noted in *Rothe*. In addition to examining small contracts, BBC directly measured bid capacity in its availability analysis.

Measurement of bid capacity. "Bid capacity" for a firm is measured as the largest contract or subcontract the firm bid on or performed in California within the five years preceding when BBC interviewed the firm. BBC uses bid capacity as one factor in determining whether a firm would be available to bid on specific prime contracts and subcontracts.

Assessment of possible disparities in bid capacity of MBE/WBEs and majority-owned firms. The availability analysis produced a database of 3,377 firms potentially available for California work.[5,6] The following analysis of bid capacity relies on the results of availability interviews.

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[4] See, for example, the decision of the United States Court of appeals for the Federal Circuit in *Rothe Development Corp. v. U.S. Department of Defense, 545 F.3d 1023 (Fed. Cir. 2008).*

[5] Eight hundred and thirty-eight of these firms were not included in the availability marketplace analysis reported in this section—Bid capacity, because they did not supply answers to survey question D2 or D4 on the Availability Survey.

[6] See Appendix C for further description of the survey sample and process.

One factor that affects bid capacity is the specializations of firms within the transportation contracting industry. Subindustries such as construction management involve larger projects. Other segments, such as surveying and mapping, typically involve smaller assignments. One way of controlling for variation in bid capacities in different subindustries is to assess whether a firm has a bid capacity above or below the median level of firms in a particular subindustry. BBC can then test whether minority- and women-owned firms bid on larger or smaller contracts or subcontracts compared with other firms in the same subindustry.

Figure H-10 indicates the median bid capacity among California-based firms in each of the 25 industry segments within the construction and engineering-related subindustries included in the availability study. Note that the survey questions regarding the largest project that firms had bid on or been awarded captured data in dollar ranges rather than in specific dollar amounts.

Figure H-10.
Median bid capacity by subindustry

Subindustry	Median Bid Capacity
Construction	
Asphalt and concrete supply	$500,000 to $1 million
Construction sand and gravel	$1 million
Electrical work	$100,000 to $500,000
Excavation and drilling	$100,000 to $500,000
Fencing, guardrails and signs	$2 million
Flagging services	$100,000 to $500,000
Heavy construction equipment and rental	$100,000 to $500,000
Highway and street construction	$500,000 to $1 million
Land site prep	$500,000
Landscap services	$100,000 to $500,000
Other construction	$100,000 to $500,000
Other construction supplies	$100,000 to $500,000
Painting and striping	$500,000 to $1 million
Rebar and reinforcing steel	$2 million to $5 million
Trucking	$100,000 to $500,000
Water, sewer, and utility lines	$1 million to $ 2 million
Wrecking and demolition	$100,000 to $500,000
Engineering-related	
Archeological expeditions	$500,000 to $1 million
Construction management	$1 million to $ 2 million
Engineering	$100,000 to $500,000
Environmental research, consulting and testing	$100,000 to $500,000
Landscape architecture	$500,000 to $1 million
Surveying and mapmaking	$100,000 or less
Testing services	$100,000 to $500,000
Transportation consulting	$500,000

Source: BBC Research & Consulting from 2012 Availability Interviews.

Firms with bid capacities above the median for their industry segments are counted as available for larger projects than most of the firms in their line of business (as well as being counted as available for smaller assignments). Thus, these firms figure more prominently in the availability analysis than firms with smaller bid capacities.

Construction firms. An initial question is whether minority- and women-owned firms are as likely as majority-owned firms to have above-median bid capacity for their industry segment. The results for transportation construction firms shown in Figure H-11 indicate that, in aggregate, fewer MBE/WBEs had an above-median bid capacity compared with majority-owned firms:

- Nearly one-half (45%) of majority-owned construction firms indicated that they had a bid capacity that was higher than the median for their subindustry.
- About forty percent of WBE construction firms had an above median bid capacity.
- Compared to majority-owned firms, a smaller share of minority-owned construction firms (37%) reported bid capacity that was higher than the median for their subindustry. [7]

Engineering firms. Figure H-11 also shows the percentage of engineering-related firms reporting bid capacity that exceeded the median for their subindustry.

- About 39 percent of majority-owned engineering-related firms reported that they had a bid capacity that was higher than the median for their subindustry.
- Compared to majority-owned firms, a similar share of WBE engineering firms (39%) and minority-owned engineering firms (42%) had an above median bid capacity

Figure H-11.
Proportion of firms with above-median bid capacity by ownership

Source:
BBC Research & Consulting from 2012 Availability Interviews.

Firm ownership	Construction	Engineering related
Minority owned	37%	42%
Female	39%	39%
Majority-owned	45%	39%

[7] Other minority includes African American-, Asian Pacific American-, Subcontinent Asian American- and Native American-owned firms. Answers were combined because of a relatively low number of observations for these minority groups.

Further analysis. BBC considered whether neutral factors could account for the disparities in bid capacity identified for MBE and WBE construction. BBC also examined bid capacity for engineering firms.

There are a number of variables from the availability interviews that may be correlated with bid capacity — for example, annual revenue, number of employees, and whether a firm has multiple establishments in California. However, the direction of causation for these factors is unclear. Do firms have greater bid capacity because they have more employees, or do they have more employees because they bid on and win larger projects?

After considering the array of firm characteristics from the availability interviews, the study team determined that the age of firms was the neutral factor that might best explain differences in bid capacity (within a subindustry) while being truly external to that capacity. Theoretically, the longer firms are in business, the larger the contracts or subcontracts they might pursue.

To test this hypothesis, the study team conducted separate logistic regression analyses for the construction and engineering-related industries to determine whether bid capacity could be at least partly explained by the age of the firm and whether minority- and women-owned firms differ from majority-owned firms of similar ages (after controlling for subindustry).

The results for the California construction industry are shown in Figure H-12. The results of the logistic regression indicated the following:

- The age of the firm was a significant predictor of having above-median bid capacity. The older a firm, the more likely it is to have an above-median bid capacity.
- WBE ownership had a negative effect on having above-average bid capacity for firms in the construction industry, but that effect was not statistically significant after controlling for subindustry and firm age.
- Minority ownership had a negative effect on having above-average bid capacity for firms in the construction industry, but that effect was not statistically significant.

Figure H-12.
California transportation construction industry bid capacity model

Variable	Coefficient	Z Statistic
Constant	-0.92	-8.10 **
Age of firm	0.03	7.68 **
Minority	-0.10	-0.71
Female	-0.16	-0.94

Note:
** Denotes statistical significance at the 95% confidence level.

Source:
BBC Research & Consulting from 2012 Availability Interviews.

Results for the California engineering-related industry are shown in Figure H-13. The logistic regression model for the industry indicated:

- Age of the firm was a significant predictor of having above-average bid capacity for engineering-related businesses. The older a firm, the more likely it is to have an above-median bid capacity.

- Minority ownership had statistically significant positive effects on having above-average bid capacity for firms in the engineering-related industry. After controlling for subindustry and firm age, minority-owned firms were more likely to have above-median bid capacity.

- WBE ownership did not have statistically significant effects on above-median bid capacity.

Figure H-13.
California transportation engineering-related industry bid capacity model

Variable	Coefficient	Z Statistic
Constant	-1.16	-9.28 **
Age of firm	0.03	7.07 **
Minority	0.43	2.78 **
Female	0.24	1.21

Note:
** Denotes statistical significance at the 95% confidence level.

Source:
BBC Research & Consulting from 2012 Availability Interviews.

Summary of markets, contracting roles and bid capacity. The telephone interview results show that many MBE/WBEs attempt to work as prime contractors and as subcontractors on both public and private sector contracts:

- The telephone interview results for firms in the transportation construction industry found that MBE/WBEs were no more likely to have pursued work in the private sector than the public sector within the past five years.

- Engineering-related MBE/WBEs were about as likely as construction MBE/WBEs to pursue work in the past five years.

- Overall, MBEs where less likely to bid on public and private sector work than WBEs and majority-owned firms in the past five years.

Data from the availability interviews showed more indices of success for WBEs than for MBEs:

- Overall, WBEs that had bid on public and private sector construction work were more successful in obtaining at least some work compared with MBEs and majority-owned firms.

- WBEs in the engineering industry were also more successful in receiving at least some public sector work than MBEs and majority-owned firms.

Some results indicated certain differences for MBEs:

- For both public and private sector work, MBE construction and engineering firms were less likely to bid as a prime contractor than WBEs and majority-owned firms.
- Overall, MBEs were also less likely to report that they had been successful when pursuing construction and engineering-related work.

There were some differences in the largest transportation-related contract and subcontract that firms had received in California in the past five years. Among construction firms, MBE/WBEs were more likely to report that their largest contract was worth less than $100,000. Compared to MBE/WBEs, a larger share of majority-owned firms received contracts or subcontracts worth at least $1 million. This was also true for engineering-related firms when examining contracts of $5 million or more.

BBC also examined the largest contracts firms had bid on or received in the transportation contracting industry in California in the past five years ("bid capacity").

- Minority- and women-owned construction firms were less likely than majority-owned firms to have bid capacity exceeding the median for their subindustry.
- Overall, MBE/WBE firms in the engineering industry were about as likely to have above-average bid capacity as majority-owned firms with similar specializations.

Business Closures, Expansions, and Contractions

BBC used U.S. Small Business Administration (SBA) data to examine business outcomes — including closures, expansions, and contractions — for MBE/WBEs in California and the nation. The SBA analyses compare business outcomes for minority-owned businesses (by demographic group) to business outcomes for all firms.

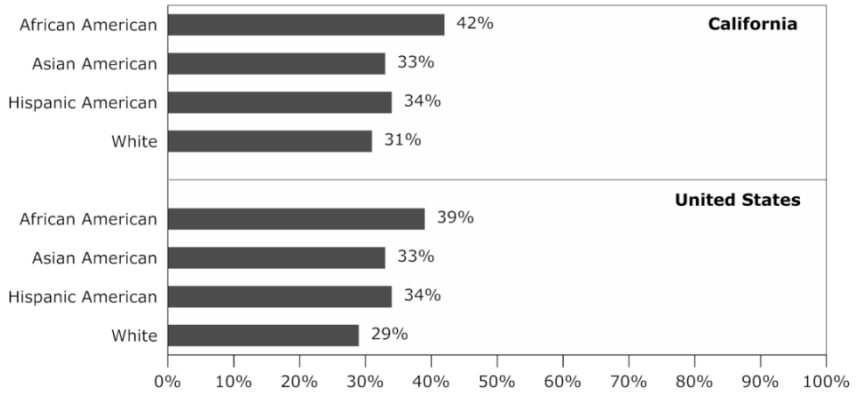
Business closures. High rates of business closures may reflect adverse business conditions for minority business owners.

Overall rates of business closures in California. A 2010 SBA report investigated business dynamics and whether minority-owned companies were more likely to close than other firms. By matching data from business owners who responded to the 2002 U.S. Census Bureau SBO to data from the Census Bureau's 1989-2006 Business Information Tracking Series, the SBA reported on business closure rates between 2002 and 2006 across different sectors of the economy.[8] Figure H-14 presents those data for African American-, Asian American-, and Hispanic American-owned firms as well as for non-Hispanic white-owned firms.

[8] Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

As shown in Figure H-14, 42 percent of African American-owned firms that were operating in California in 2002 had closed by the end of 2006, a higher rate than those of other groups, including non-Hispanic white-owned firms (31%). Hispanic American- (34%) and Asian American-owned firms (33%) also had closure rates that were higher than that of non-Hispanic white-owned firms. Differences in closure rates between minority-owned firms and non-Hispanic white-owned firms were similar in California and in the United States during that time period.

Figure H-14.
Rates of business closure, 2002-2006, California and the U.S.



Note: Data refer only to non-publicly held businesses only. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

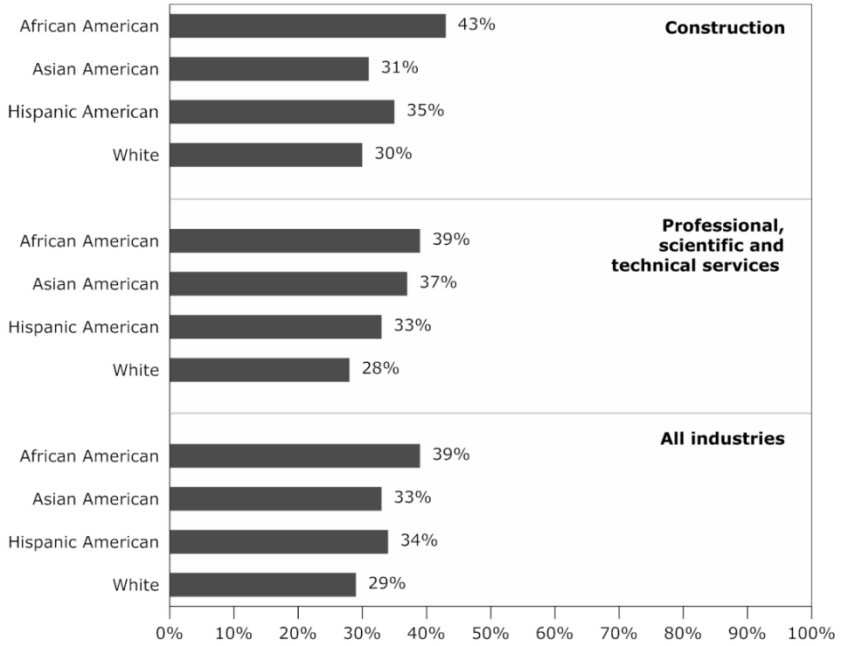
Rates of business closures by industry. The SBA report also examined national firm closure rates by race/ethnicity for 21 different industry classifications. Figure H-15 compares national rates of firm closure for the two industry classifications most related to the transportation contracting industry — construction and professional, scientific, and technical services (which includes engineering). Closure rates for all industries by race/ethnicity are also shown in Figure H-20 for comparison.

African American-owned firms that were operating in the United States in 2002 had the highest rate of closure by 2006 among all the racial/ethnic groups — including non-Hispanic white-owned firms — in construction (43%), professional, scientific, and technical services (39%), and all industries (39%). Hispanic American-owned firms and Asian American-owned firms that were operating in 2002 were both also more likely to have closed by 2006 than non-Hispanic white-owned firms in construction, professional, scientific, and technical services, and all industries. The study team could not examine whether those differences also existed in California, because the SBA analysis by industry was not available for individual states.

Unsuccessful closures. Not all firm closures can be interpreted as "unsuccessful closures." Firms may close when an owner retires or a more profitable business alternative emerges, both of which represent "successful closures." The 1992 Characteristics of Business Owners (CBO) Survey is one of the few Census Bureau sources to classify firm closures into successful and

unsuccessful subsets.[9] The 1996 CBO survey asked owners of businesses that had closed between 1992 and 1995, "Which item below describes the status of this business at the time the decision was made to cease operations?" Only the responses "successful" and "unsuccessful" were permitted. A firm that reported being unsuccessful at the time of closure was understood to have failed.

Figure H-15.
Rates of business closure, 2002-2006, construction; professional, scientific, and technical services; and all industries in the U.S.



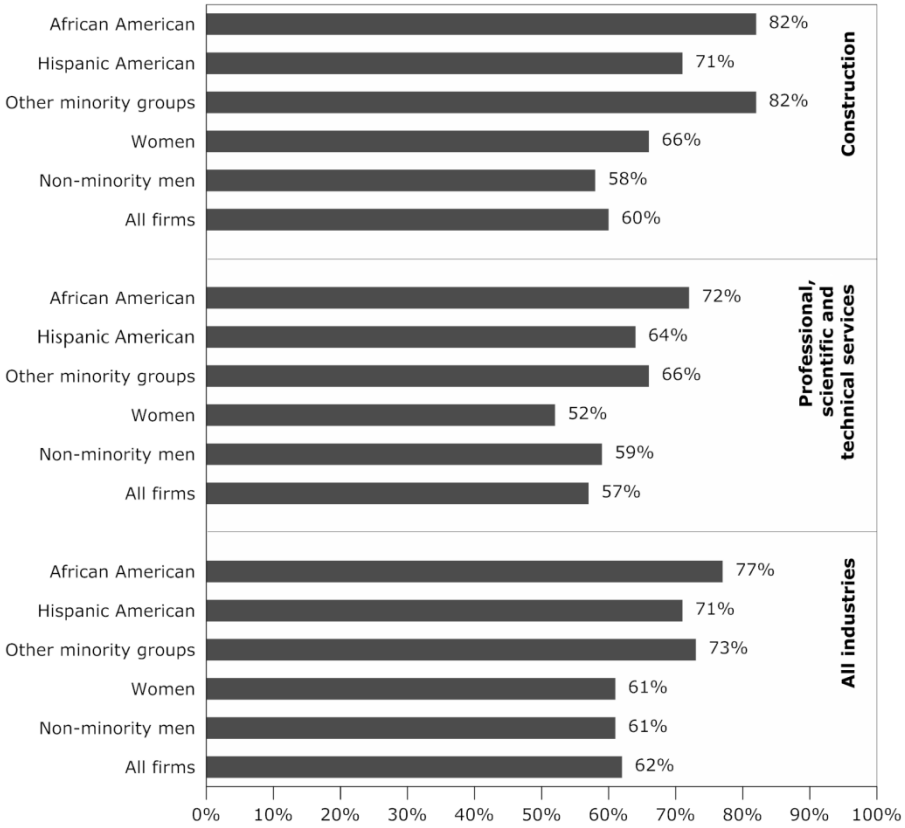
Note: Data refer only to non-publicly held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

[9] CBO data from the 1997 and 2002 Economic Censuses do not include statistics on successful and unsuccessful business closures. To date, the 1992 CBO is the only U.S. Census dataset that includes such statistics.

Figure H-16 presents CBO data on the proportion of firms that closed due to failure between 1992 and 1995 in construction, professional, scientific, and technical services, and all industries.[10,11] According to CBO data, African American-owned firms were the most likely to report being "unsuccessful" at the time at which their businesses closed. About 77 percent of African American-owned firms in all industries reported an unsuccessful business closure in the 1996 CBO, compared with only 61 percent of non-Hispanic white male-owned firms. Unsuccessful closure rates were also relatively high for Hispanic American-owned firms (71%) and for firms owned by "other minority groups" (73%). The rate of unsuccessful closures for women-owned firms (61%) was similar to that of non-Hispanic white male-owned firms.

Figure H-16.
Unsuccessful closure rates for firms that closed between 1992 and 1995 in the U.S.



Source: U.S. Census Bureau, 1996 Characteristics of Business Owners Survey (CBO).

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[10] All CBO data should be interpreted with caution as firms that did not respond to the survey cannot be assumed to have the same characteristics of ones that did. Holmes, Thomas J. and James Schmitz. 1996. "Nonresponse Bias and Business Turnover Rates: The Case of the Characteristics of Business Owners Survey." *Journal of Business & Economic Statistics*. 14(2): 231-241. This report does not include CBO data on overall firm closure rates because firms not responding to the survey were found to be much more likely to have closed than ones that did.

[11] This study includes CBO data on firm success because there is no compelling reason to believe that closed firms responding to the survey would have reported different rates of success/failure than those closed firms that did not respond to the survey. Headd, Brian. U.S. Small Business Administration, Office of Advocacy. 2000. *Business Success: Factors leading to surviving and closing successfully*. Washington D.C.: 12.

In the construction industry, minority- and women-owned firms were more likely to report unsuccessful business closures than non-Hispanic white male-owned firms (58%). Those trends were similar in the professional services industry with one exception — women-owned businesses (52%) were less likely to report unsuccessful closures than non-Hispanic white male-owned firms (59%).

Reasons for differences in unsuccessful closure rates. Several researchers have offered explanations for higher rates of unsuccessful closure rates among minority- and women-owned firms compared with non-Hispanic white-owned firms:

- Unsuccessful business failures of minority-owned firms are largely due to barriers in access to capital. Regression analyses have identified initial capitalization as the most significant factor in determining firm viability. Because minority-owned firms secure smaller amounts of debt equity in the form of loans, they are more liable to fail. Difficulty in accessing capital is found to be particularly acute for minority-owned firms in the construction industry.[12]
- Prior work experience in a family member's business or similar experiences are found to be strong determinants of business viability. Because minority business owners are much less likely to have such experience, their firms are less likely to survive.[13] Similar research has been conducted for women-owned businesses and found similar gender gaps in the likelihood of business survival.[14]
- Level of education is found to be a strong determinant of business survival. Educational attainment explains a significant portion of the gap in firm closure rates between African American-owned and non-minority-owned firms.[15]
- Non-minority business owners have the opportunity to pursue a wider array of business activities, which increases their likelihood of closing successful businesses to pursue more profitable business alternatives. Minority business owners, especially those who do not speak English, have limited employment options and are less likely to close a successful business.[16]
- The possession of greater initial capital and generally higher levels of education among Asian Americans determine the high rate of survival of Asian American-owned firms compared to other minority-owned firms.[17]

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[12] Bates, Timothy and Caren Grown. 1991. "Commercial Lending Practices and the Development of Black-Owned Construction Companies." Center for Economic Studies, U.S. Census Bureau.

[13] Robb, A. and Fairlie, R. 2005. "Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital." University of California, Santa Cruz.

[14] Fairlie, R. and A. Robb. 2009. "Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey." University of California, Santa Cruz.

[15] Ibid. 24.

[16] Bates, Timothy. 2002. "Analysis of Young Small Firms That Have Closed: Delineating Successful from Unsuccessful Closures." Center for Economic Studies, U.S. Census Bureau.

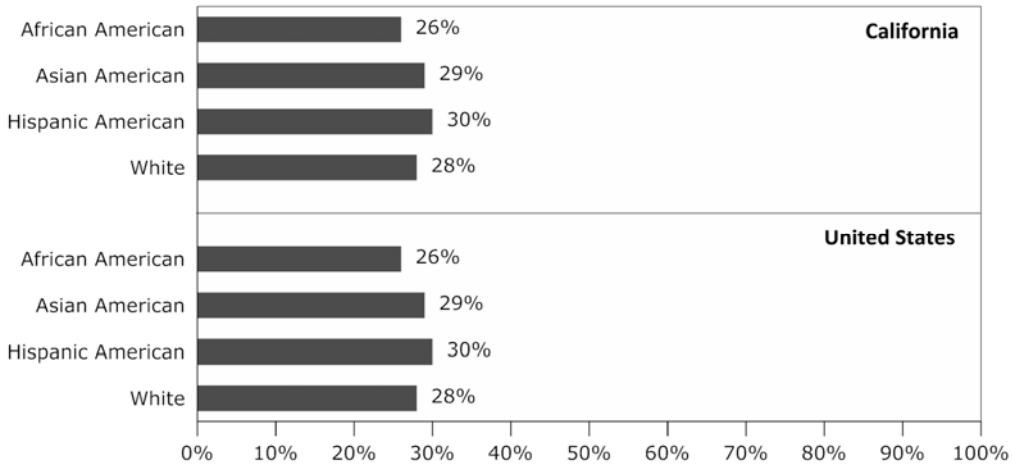
[17] Bates, Timothy. 1993. "Determinants of Survival and Profitability Among Asian Immigrant-Owned Small Businesses." Center for Economic Studies, U.S. Census Bureau.

In sum, data suggest that closure rates for African American- and Hispanic American-owned firms in California are higher than for other firms. Based on national results for the construction and professional, scientific, and technical services industries, African American-owned firms had higher rates of closure in those industries than other firms. National data indicate that African Americans, Hispanic Americans, and other minorities who owned and closed firms are more likely than non-Hispanic white-owned firms to have done so because the firm was unsuccessful. Several studies have examined why business failure rates are higher for firms owned by certain minority groups at the national level.

Expansions and contractions. Comparing rates of expansion and contraction between minority-owned and non-Hispanic white male-owned businesses is also useful in assessing the relative success of minority-owned businesses. As with closure data, only some of the data on expansions and contractions that were available for the nation were are also available at the state level.

Expansions. The 2010 SBA study of minority business dynamics from 2002-2006 examined the number of non publicly-held California businesses that expanded and contracted between 2002 and 2006. Figure H-17 presents the percentage of all businesses, by race/ethnicity of ownership, that increased their total employment between 2002 and 2006. Those data are presented for California and for the nation as a whole. According to the SBA study, approximately 28 percent of non-Hispanic white-owned California businesses expanded between 2002 and 2006, compared to 26 percent of African American-owned businesses, 29 percent of Asian American-owned businesses, and 30 percent of Hispanic American-owned businesses. Expansion results were similar for the nation as a whole.[18]

Figure H-17.
Percentage of firms that expanded, 2002-2006



Note: Data refer only to non-publicly held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

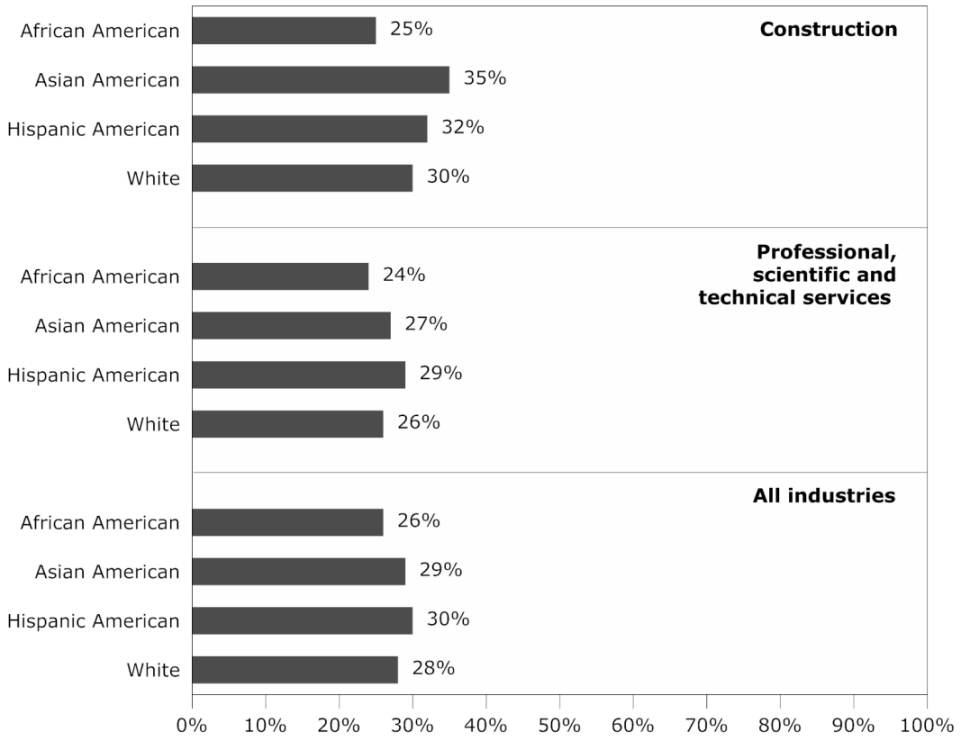
Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

[18] Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Figure H-18 presents the percentage of firms that expanded in construction and professional, scientific, and technical services, and in all industries in the United States. The 2010 SBA study did not report results for firms in individual industries at the state level. At the national level, the patterns evident for construction and professional, scientific, and technical services were similar to those observed for all industries:

- African American-owned construction and professional, scientific, and technical services firms were less likely to have expanded between 2002 and 2006 than non-Hispanic white-owned firms.
- Hispanic American- and Asian American-owned companies in both construction and professional, scientific, and technical services were slightly more likely to have expanded between 2002 and 2006 than non-Hispanic white-owned firms.

Figure H-18.
Percentage of firms expanding, 2002-2006, U.S. construction; professional, scientific, and technical services; and all industries

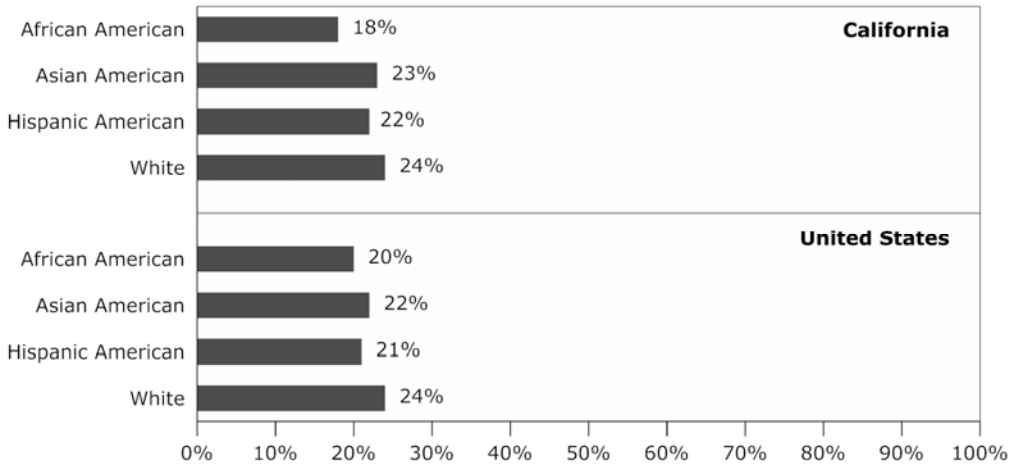


Note: Data refer only to non-publicly held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Contractions. Figure H-19 shows the percentage of non-publicly held businesses operating in 2002 that reduced their employment (contracted) between 2002 and 2006 in California and in the nation as a whole. At both the state level and the national level, African American- (18%), Asian American- (23%), and Hispanic American-owned businesses (22%) were slightly less likely to have contracted between 2002 and 2006 than non-Hispanic white-owned businesses.

Figure H-19.
Percentage of firms contracting, 2002-2006

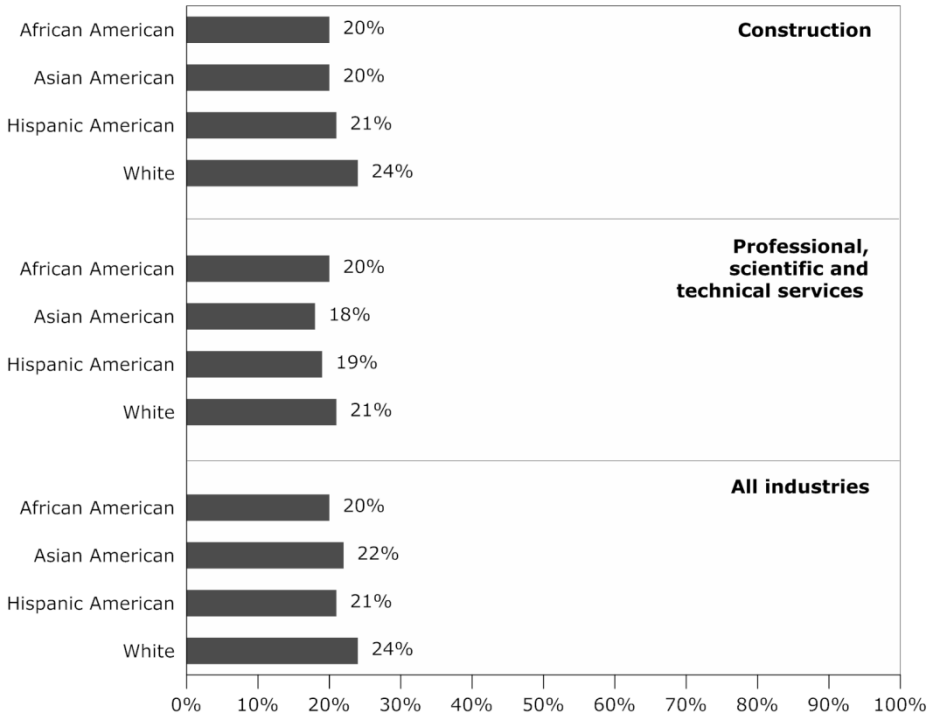


Note: Data refer only to non-publicly held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

The SBA study did not report state-specific results relating to contractions in individual industries. Figure H-20 shows the percentage of businesses that contracted in construction, professional, scientific, and technical services, and all industries at the national level. Compared to non-Hispanic white-owned construction firms in the United States, a slightly smaller percentage of African American-, Hispanic American-, and Asian American-owned construction and professional, scientific, and technical services firms contracted between 2002 and 2006.

Figure H-20.
Rates of business contraction, 2002-2006, U.S. construction; professional, scientific and technical services; and all industries



Note: Data refer only to non-publicly held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Summary. The 2010 SBA study found of minority business dynamics found that, between 2002 and 2006, 29 percent of non-publicly held U.S. businesses had expanded their employment, 24 percent had contracted their employment, and 30 percent had closed. In California:

- African American-owned firms were more likely than non-Hispanic white-owned firms and other firms to close. African American-owned firms were less likely than other firms to expand.
- Hispanic American-owned firms were also more likely than non-Hispanic white-owned firms to close or to contract. However, Hispanic American-owned firms were slightly more likely to expand than non-Hispanic white-owned firms.
- Overall, minority-owned firms were less likely to contract than non-Hispanic white-owned firms.

Business Receipts and Earnings

Annual business receipts and earning for business owners are also indicators of the success of businesses. The study team examined:

- Business receipts data from the 2007 SBO;
- Business earnings data for business owners from the 2000 Census and 2007-2009 ACS[19]; and
- Annual revenue data for California transportation construction and engineering firms that the study team collected as part of availability interviews.

Business receipts. BBC examined receipts for firms in California and the U.S. using data from the 2007 SBO, conducted by the U.S. Census Bureau. BBC also analyzed receipts for firms in individual industries. The SBO reports business receipts separately for employer firms (i.e., those with paid employees other than the business owner and family members) and for all firms.[20]

Receipts for all firms. Figure H-21 presents 2007 mean annual receipts for employer and non-employer firms, by race/ethnicity and gender. The SBO data for firms across all industries in California and in the nation as a whole indicate that average receipts for minority- and women-owned firms were much lower than the average for all firms, with some groups faring worse than others. Average receipts for African American-owned firms ($139,000), Hispanic American-owned firms ($142,000) and Native Hawaiian-owned firms ($151,000) were about one-third that of all firms ($420,000). Average receipts for American Indian and Alaska Native-owned firms ($123,000) were 29 percent of the average for all firms. Asian American-owned firms had higher average receipts ($363,000) than other minority groups in 2007, although they were still below the average for all firms. Average receipts for women-owned firms ($176,000) were about 42 percent of the average for all firms.

As shown in Figure H-21, disparities in business receipts for minority- and women-owned businesses compared to all firms in California are broadly consistent with those seen in the United States as a whole. However, differences in average receipts between African American-owned firms ($70,000) and all firms ($416,000) were larger in the U.S. than California. That pattern was also true for women-owned firms ($154,000) in the U.S.

A 2007 SBA study identified differences similar to those presented in Figure H-21 when examining firms in all industries across the U.S.[21]

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[19] It should be noted that the 2007-2009 ACS data were collected during the economic recession which began in late 2007.

[20] We use "all firms" to denote SBO data used in this analysis; the data include incorporated and unincorporated firms, but not publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

[21] Lowrey, Ying. 2007. *Minorities in Business: A Demographic Review of Minority Business Ownership*. Office of Economic Research, Office of Advocacy, U.S. Small Business Administration.

Figure H-21.
Mean annual receipts (thousands) for all firms, by race/ethnicity and gender of owners, 2007

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2007 Survey of Business Owners, part of the U.S. Census Bureau's 2007 Economic Census.

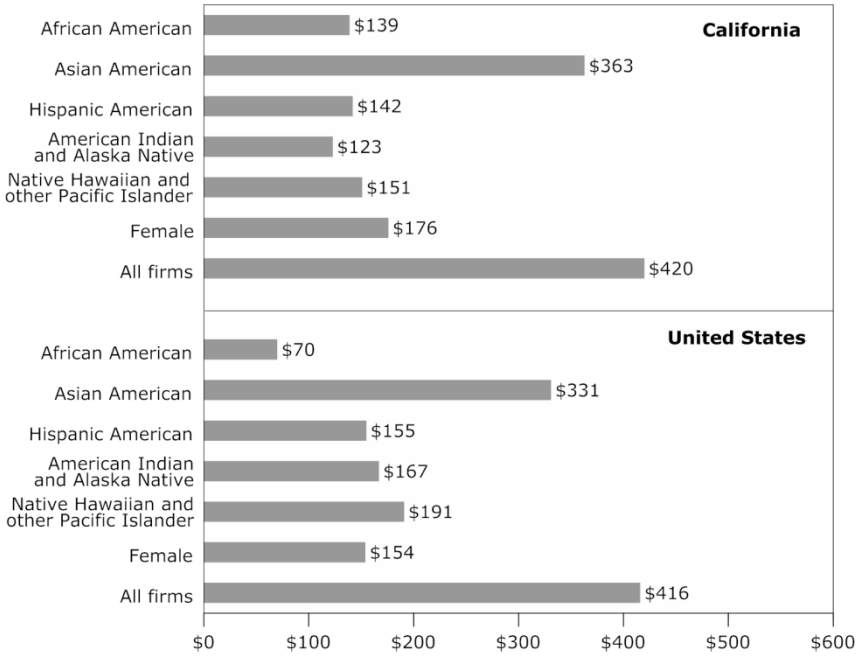


Figure H-22 presents average annual receipts in 2007 for only employer firms in California and in the United States. Minority- and women-owned employer firms had substantially lower average business receipts than all employer firms in California and in the nation as a whole. Average annual receipts for African American- ($1.6 million) and Asian American-owned employer firms ($1.4 million) in California were greater than firms owned by other minority groups but still below the average for all firms ($2.0 million). Average receipts for American Indian and Alaska Native-owned firms ($837,000) were less than half of the average for all firms in California.

Average receipts for women-owned employer firms ($1.3 million) were about two-thirds that of all firms in California.

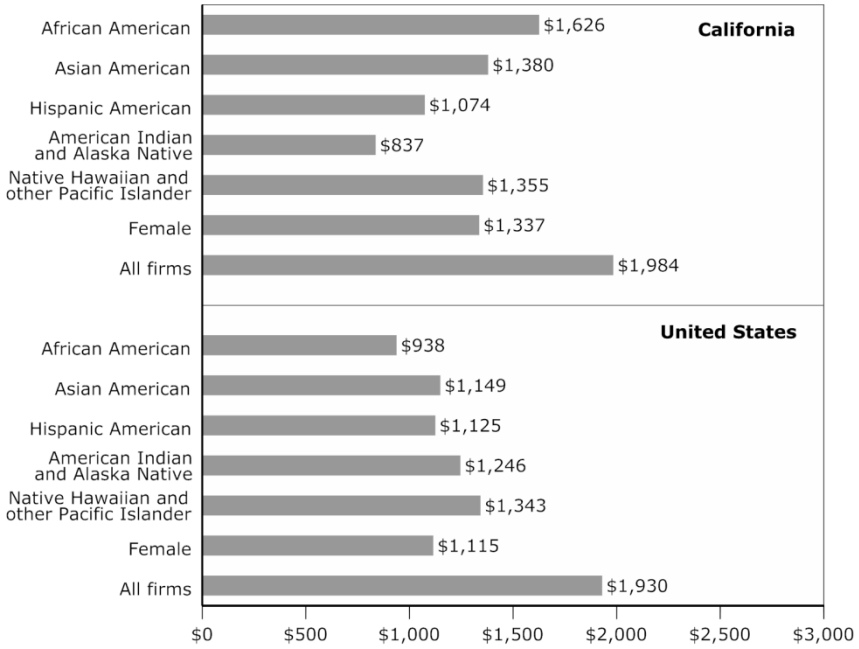
Figure H-22.
Mean annual receipts (thousands) for employer firms, by race/ethnicity and gender of owners, 2007

Note:

Includes only employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2007 Survey of Business Owners, part of the U.S. Census Bureau's 2007 Economic Census.



Receipts by industry. The study team also analyzed SBO receipts data separately for firms in construction and professional, scientific, and technical services. Figure H-23 presents mean annual receipts in 2007 for all (i.e., employer and non-employer firms combined) construction and professional, scientific, and technical services firms and for just employer firms by racial/ethnic and gender group. Results are presented for California and for the nation as a whole.

Figure H-23.
Mean annual receipts (thousands) for firms in the construction and professional, scientific and technical services industries, by race/ethnicity and gender of owners, 2007

	All firms		Employer firms	
	Construction	Professional, scientific & technical services	Construction	Professional, scientific & technical services
California				
African American	NA	$92	NA	$725
Asian American	$323	$149	$1,655	$796
Hispanic American	$202	$108	$1,146	$691
American Indian and Alaska Native	$254	$81	$1,232	$324
Native Hawaiian and other Pacific Islander	$483	$246	$2,378	NA
Female	$485	$106	$2,179	$643
All firms	$600	$205	$2,174	$977
United States				
African American	$107	$78	$1,069	$717
Asian American	$273	$201	$1,533	$950
Hispanic American	$167	$121	$1,083	$693
American Indian and Alaska Native	$262	$116	$1,390	$630
Native Hawaiian and other Pacific Islander	$363	$187	$1,628	$1,148
Female	$361	$98	$1,625	$543
All firms	$447	$201	$1,789	$863

Notes: Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.
"NA" denotes that data were not available at the time of publication and are subject to revision.

Source: 2007 Survey of Business Owners, part of the U.S. Census Bureau's 2007 Economic Census.

Construction. In the California construction industry, average 2007 receipts for minority- and women-owned firms were lower than the average for all firms ($600,000). Results for all firms (i.e., employer and non-employer firms combined) indicate that:

- Average receipts for Hispanic American-owned construction firms ($202,000) were approximately one-third that of all California construction firms.
- Average receipts for American Indian and Alaska Native-owned construction firms ($254,000) were less than half that of all California construction firms.
- Average receipts for Asian American- and Native Hawaiian-owned construction firms were higher than those of all other minority-owned construction firms, but were still substantially below that of all California construction firms.
- Average receipts for women-owned construction firms in California ($485,000) were less than the average for all firms.
- Data were not available for African American-owned construction firms in California.

Although SBO data indicated that average receipts were higher for construction employer firms than for all construction firms (i.e., employer and non-employer firms combined), average receipts for minority- and women-owned construction employer firms were still substantially less than that of all construction employer firms ($2.2 million). That pattern was evident in California and in the nation as a whole.

Professional, scientific, and technical services. In the California professional, scientific, and technical services industry, minority-owned firms had lower average receipts than all firms. Results for all firms (i.e., employer and non-employer firms combined) in the professional, scientific, and technical services industry indicate that:

- Average receipts for African American-owned firms ($92,000) were about 45 percent of that of all firms ($205,000).
- Average receipts for American Indian and Alaska Native-owned firms ($81,000) were approximately 39 percent of that of all firms.
- Average receipts for Asian American-owned businesses ($149,000) were substantially less than that of all firms.
- Average receipts for Hispanic American-owned ($108,000) were about half that of all firms.
- Average receipts for women-owned firms ($106,000) were also about half that of all firms.
- Average receipts for Native Hawaiian-owned firms were higher than that of all firms.

An examination of only employer firms in professional, scientific, and technical services yielded similar results — minority- and women-owned firms had between 33 percent and 82 percent of the average annual receipts of all California employer firms in professional, scientific, and technical services in 2007 ($977,000).

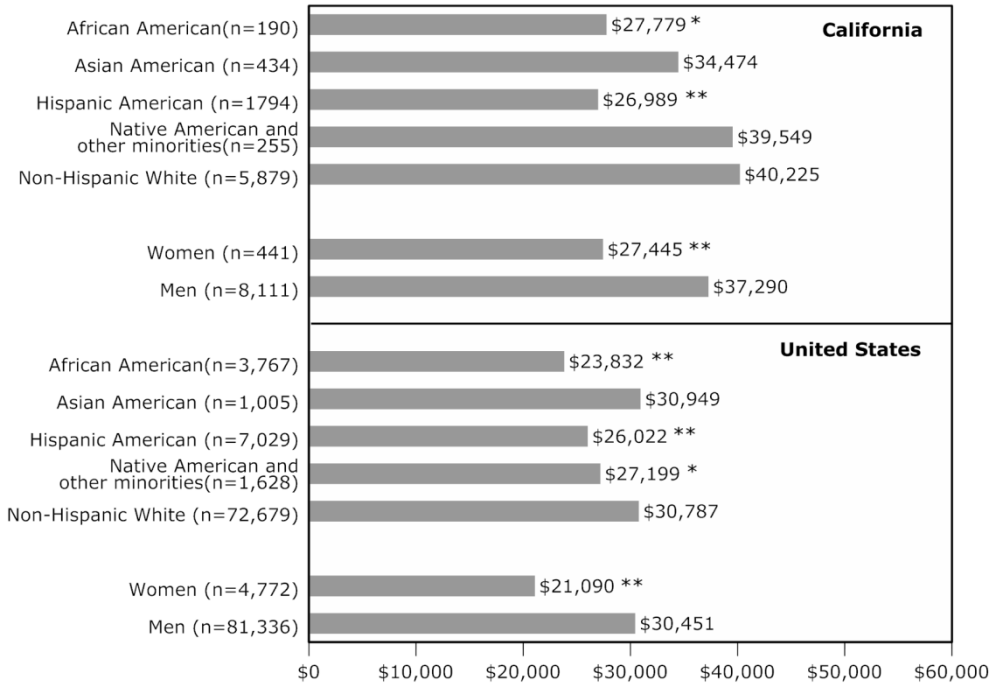
Business earnings. In order to assess the success of self-employed minorities and women in the transportation contracting industry, BBC examined earnings of business owners using PUMS from the 2000 U.S. Census and 2007-2009 ACS. BBC analyzed earnings of incorporated and unincorporated business owners age 16 and over who reported positive business earnings.

Construction business owner earnings, 1999. Figure H-24 shows average earnings in 1999 for business owners in the construction industry in California and in the United States. Business earning results for 1999 were based on the 2000 Census, in which individuals were asked to give their business income for the previous year:

- On average, Hispanic American business owners in California ($26,989) earned substantially less than non-Hispanic white construction business owners ($40,225).
- African American construction business owner ($27,779) also earned substantially less than non-Hispanic white business owners.

- Native American ($39,549) and Asian American ($34,474) California construction business owners also earned less than non-Hispanic white business owners, but those differences were not statistically significant, in part due to small sample sizes. At the national level, differences in earnings between Native American ($27,199) and non-Hispanic white ($30,787) construction business owners were statistically significant.
- Female construction business owners in California ($27,445) earned less, on average, than male construction business owners ($37,290).

Figure H-24.
Mean annual business owner earnings in the construction industry, 1999

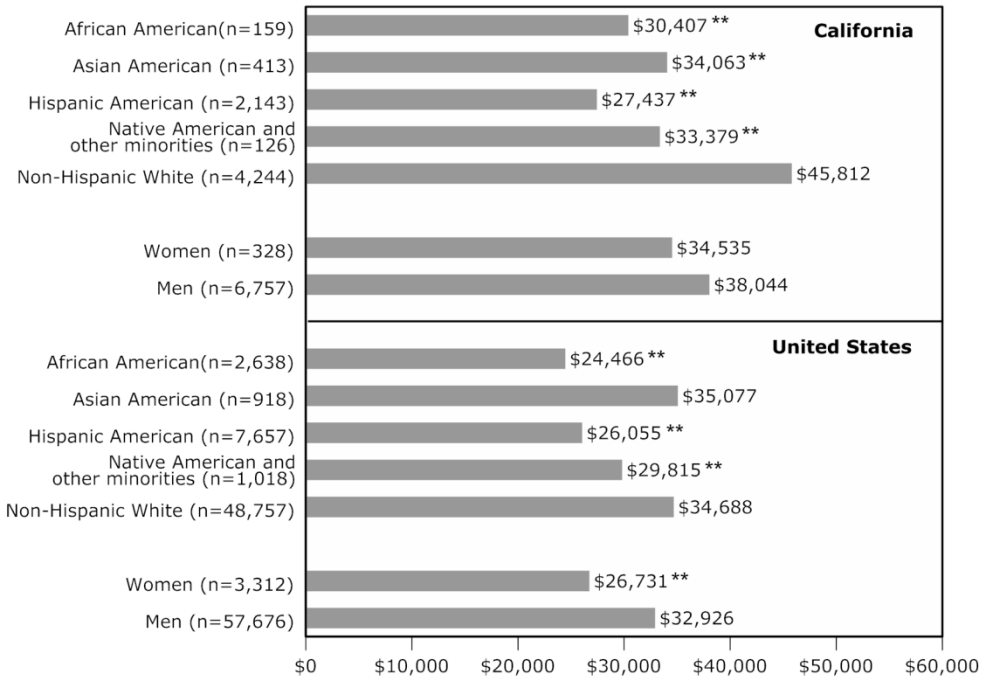


Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 1999 dollars. *,** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Construction business owner earnings, 2006-2009. The 2007-2009 ACS also reports business owner earnings. Because of the way that the U.S. Census Bureau conducts each year's ACS, earnings for business owners reported in the 2007-2009 sample were for the previous 12 months between 2006 and 2009.[22] However, all dollar amounts are presented in 2009 dollars. Figure H-25 shows earnings in 2006-2009 for business owners in the construction industry in California and the nation as a whole.

Figure H-25.
Mean annual business owner earnings in the construction industry, 2006-2009



Note: The sample universe is business owners age 16 and over who reported positive earnings.
All amounts in 2009 dollars.
*,** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2007-2009 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

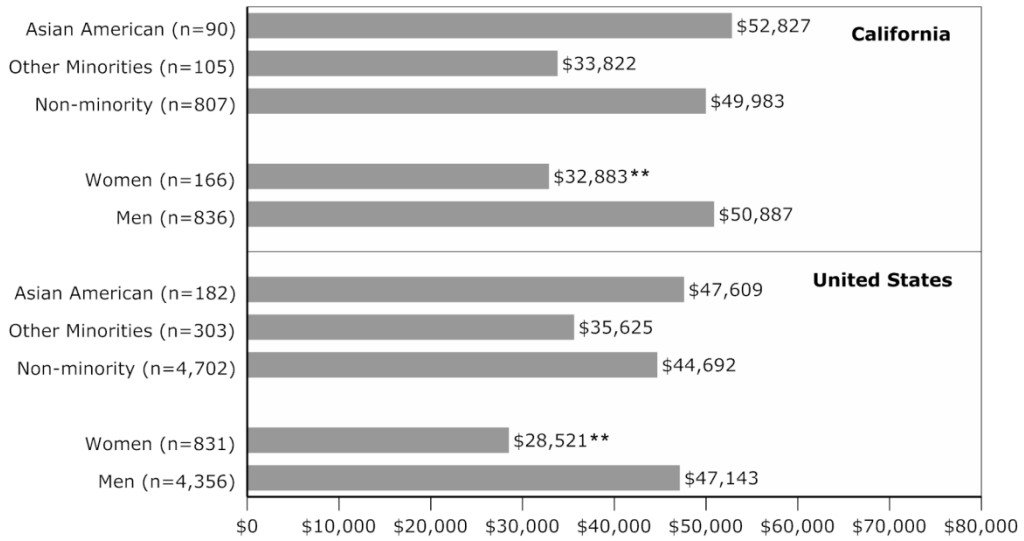
Similar to 2000 earnings data, there were large differences in earnings between minority business owners and non-Hispanic white business owners, both in California and nationally. In California, earnings differences between minority and non-Hispanic white business owners were more pronounced in 2006-2009 than in 2000. In contrast, the earnings difference between female and male business owners was smaller in 2006-2009 than in 2000, and was not statistically significant.

[22] For example, if a business owner completed the survey on January 1, 2007, the figures for the previous 12 months would reference January 1, 2006 to December 31, 2006. Similarly, a business owner completing the survey December 31, 2009 would reference amounts since January 1, 2009.

Engineering business owner earnings, 1999. Figure H-26 presents average earnings in 1999 for business owners in the engineering industry in California and the United States. Those results are based on the 2000 Census. Due to small sample sizes for individual racial/ethnic groups in the engineering industry, BBC grouped all minority business owners except Asian Americans together:

- On average, non-Asian minority engineering business owners in California ($33,822) earned less than non-Hispanic white engineering business owners ($49,983) in 1999, but that difference was not statistically significant.
- Female engineering business owners in California ($32,883) earned less than male business owners ($50,887) in 1999.

Figure H-26.
Mean annual business owner earnings in the engineering industry, 1999



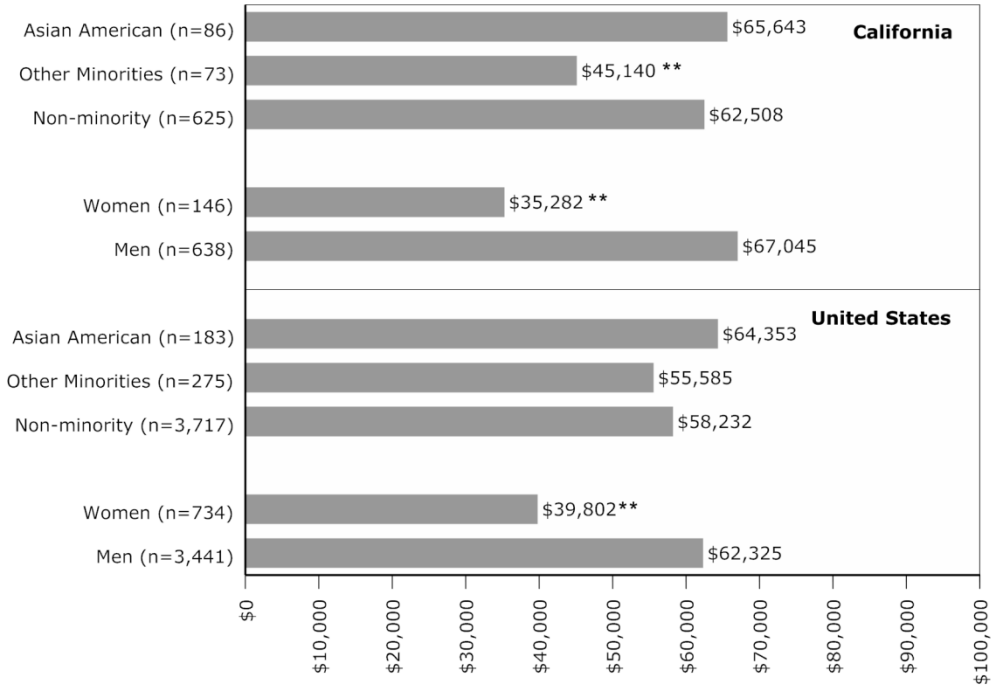
Note: The sample universe is business owners age 16 and over who reported positive earnings. "Minority" includes African Americans, Hispanic Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Native Americans and other minority groups. Sample sizes for these race/ethnicity groups were too small to analyze individually.
All amounts in 1999 dollars.
** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Engineering business owner earnings, 2006-2009. As with earnings data for the construction industry, earnings for engineering business owners that were reported in the 2007-2009 ACS sample were for the time period between 2006 and 2009. Those results are shown in Figure H-27. All dollar amounts are presented in 2009 dollars. Due to small sample sizes for individual racial/ethnic groups in the engineering industry, BBC grouped all minority business owners except Asian Americans together.

As shown in Figure H-27, in 2006-2009, earnings for non-Asian minority ($45,140) and female ($35,282) business owners in the California engineering industry were lower than for non-Hispanic white ($62,508) business owners and male business owners ($67,045), respectively.

Figure H-27.
Mean annual business owner earnings in the engineering industry, 2006-2009



Note: The sample universe is business owners age 16 and over who reported positive earnings. "Minority" includes African Americans, Hispanic Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Native Americans and other minority groups. Sample sizes for these race/ethnicity groups were too small to analyze individually.
All amounts in 2009 dollars.
** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2007-2009 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Regression analyses of business earnings. Differences in business earnings among different racial/ethnic and gender groups may be at least partially attributable to race- and gender-neutral factors such as age, marital status, and educational attainment. BBC performed regression analyses using 2007-2009 ACS data to examine whether there were differences in 2006-2009 business earnings between minorities and non-Hispanic whites and between women and men after statistically controlling for certain race- and gender-neutral factors.

BBC applied an ordinary least squares (OLS) regression model to the data that was very similar to models reviewed by courts after other disparity studies.[23] The dependent variable in the model was the natural logarithm of business earnings. Business owners that reported zero or negative business earnings were excluded, as were observations for which the U.S. Census

[23] For example, National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation; and National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

Bureau had imputed values of business earnings. Along with variables for the race/ethnicity and gender of business owners, the model also included available measures from the data considered likely to affect earnings potential, including age, age-squared, marital status, ability to speak English well, and educational attainment. BBC created separate regression models to examine business earnings in the California construction industry and engineering industries.

Construction industry in California, 2006-2009. Figure H-28 presents the results of the regression model for 2006-2009 business earnings in the California construction industry (5,484 observations). The model indicated that several race- and gender-neutral factors significantly predicted earnings of business owners in the California construction industry:

- Older business owners tended to have greater business earnings than younger business owners (age had less of an effect for the oldest individuals);
- Married business owners tended to have greater business earnings than unmarried business owners;
- Business owners who spoke English well tended to have greater business earnings than business owners who do not; and
- Business owners with greater educational attainment (such as a four-year degree or an advanced degree) tended to have greater business earnings than business owners who do not.

After statistically controlling for race- and gender-neutral factors, there were still statistically significant effects of race and gender. Specifically, being African American, Hispanic American, or female was associated with lower business earnings. Being Asian American or Native American also appeared to be associated with lower business earnings, but those differences were not statistically significant (perhaps because of small sample sizes).

Figure H-28.
California construction business owner earnings model, 2006-2009

Variable	Coefficient	t statistic
Constant	6.966	25.21 **
Age	0.117	9.11 **
Age-squared	-0.001	-9.06 **
Married	0.411	8.39 **
Speaks English well	0.297	5.24 **
Less than high school	-0.126	-1.98
Some college	0.030	0.42
Four-year degree	0.255	3.50 **
Advanced degree	0.349	3.10 **
African American	-0.450	-2.33 *
Asian American	-0.130	-1.48
Hispanic American	-0.169	-2.61 *
Native American or other minority	-0.360	-1.68
Female	-0.434	-3.72 **

Note: *,** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2007-2009 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

Engineering industry in California, 2006-2009. Figure H-29 presents the results of the regression model of business owner earnings specific to the California engineering industry in 2006-2009 (688 observations). Two race- and gender-neutral factors were statistically significant in explaining business earnings in the California engineering industry:

- Older business owners tended to have greater business earnings than younger business owners (age had less of an effect for the oldest individuals); and
- Married business owners tended to have greater business earnings than unmarried business owners;

After accounting for race- and gender neutral factors, the model did not indicate statistically significant effects of race/ethnicity. However, being female was associated with lower business earnings, and the effect of gender was statistically significant.

Figure H-29.
California engineering industry business owner earnings model, 2006-2009

Variable	Coefficient	t statistic
Constant	7.234	7.37 **
Age	0.095	4.34 **
Age-squared	-0.001	-5.25 **
Married	0.325	2.78 *
Speaks English well	1.387	1.71
Less than high school	-0.005	-0.01
Some college	-0.185	-0.86
Four-year degree	-0.006	-0.03
Advanced degree	-0.012	-0.05
Minority	-0.177	-1.09
Female	-0.789	-6.08 **

Note: *,** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2007-2009 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: http://usa.ipums.org/usa/.

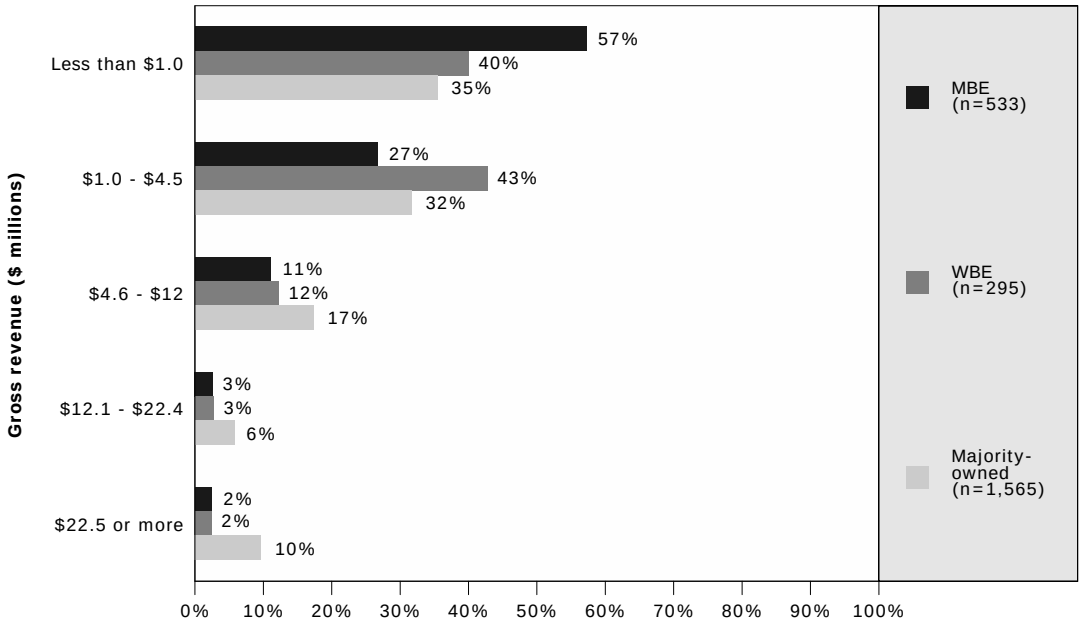
Gross revenue of construction and engineering-related firms from availability interviews. In the availability telephone interviews that BBC conducted for the study, firm owners and managers were asked to identify the size range for their annual gross revenue from 2009 through 2011. A related question asked for gross revenue across all California locations for multi-location firms, which is the result examined here.

Within the California transportation contracting industry, BBC separately examined gross revenue of construction and engineering-related businesses.

Construction firms. Figure H-30 examines the distribution of MBEs, WBEs and majority-owned construction industry firms by revenue class.

- A larger share of MBEs (57%) than WBEs (40%) and majority-owned firms (35%) reported average revenue of less than $1 million per year.
- A disproportionately small proportion of MBEs and WBEs reported average revenue of $4.6 million or more per year (16% of MBEs and 17% of WBEs) compared with results for majority-owned firms (33%).
- A larger share of majority-owned firms (10%) reported average revenue of $22.5 million or more than MBEs (2%) and WBEs (3%).

Figure H-30.
Gross revenue of company for all California locations, construction industry



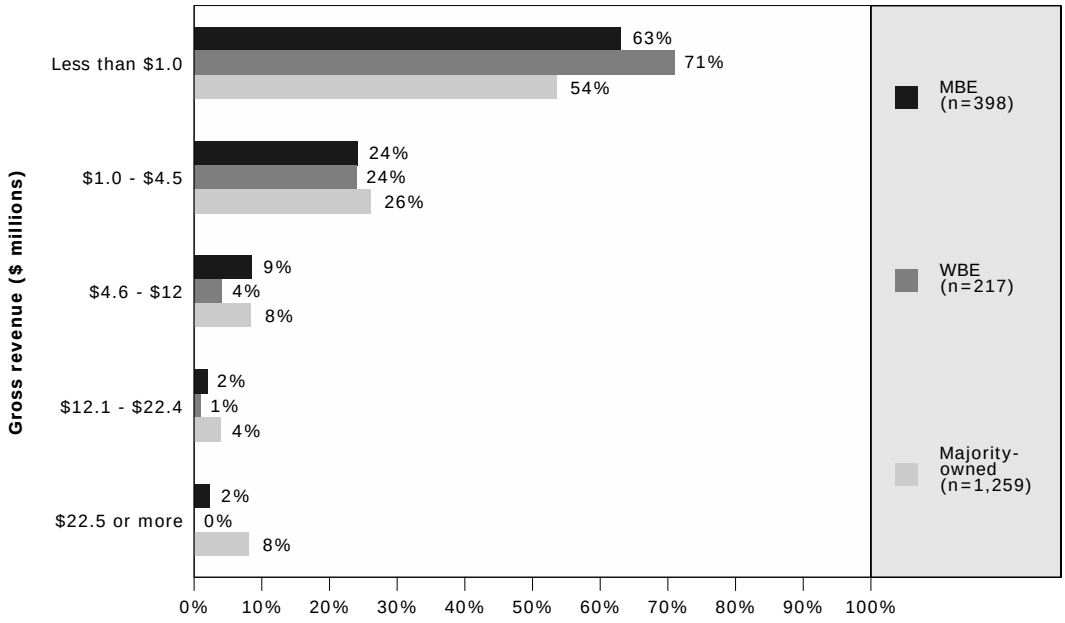
Note: WBE is white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Engineering-related firms. Engineering-related firms were also asked to identify gross revenue across all California locations. Figure H-31 summarizes results.

- A smaller share of majority- owned firms (54%) than MBEs (63%) and WBEs (71%) reported average revenue of less than $1 million per year.
- A very small proportion of MBEs and WBEs reported average revenue of $12.1 million or more per year (4% of MBEs and 1% of WBEs) compared with results for majority-owned firms (12%).
- No WBE engineering-related firms reported annual gross revenue of $12.1 million or more.

Figure H-31.
Gross revenue of company for all California locations, engineering-related industry



Note: WBE is white women-owned firms.

Source: BBC Research & Consulting from 2012 Availability Interviews.

Summary. BBC examined several different datasets to examine business receipts and earnings for firms in California.

- Analysis of 2007 data indicated that, in California, average receipts for minority- and women-owned firms were lower compared to those of all firms in the construction and professional, scientific, and technical services industries.
- Regression analyses using Census data for business owner earnings indicated that there were statistically significant effects of race/ethnicity and gender on business earnings, after statistically controlling for certain race- and gender-neutral factors:
    - Being African American and Hispanic American was associated with lower business earnings in the California construction industry in 2006-2009; and
    - Being female was associated with lower business earnings in the California construction and engineering industries in 2006-2009.
- BBC also analyzed revenue data for firms in the California transportation contracting industry collected as part of the disparity study's availability interviews.
    - Data indicate that a larger share of both construction and engineering-related MBE/WBE businesses report annual revenue of $1 million or less than majority-owned.
    - Few minority- and women-owned firms relative to majority-owned firms reach high revenue levels. This result is evident for both construction and engineering-related firms.

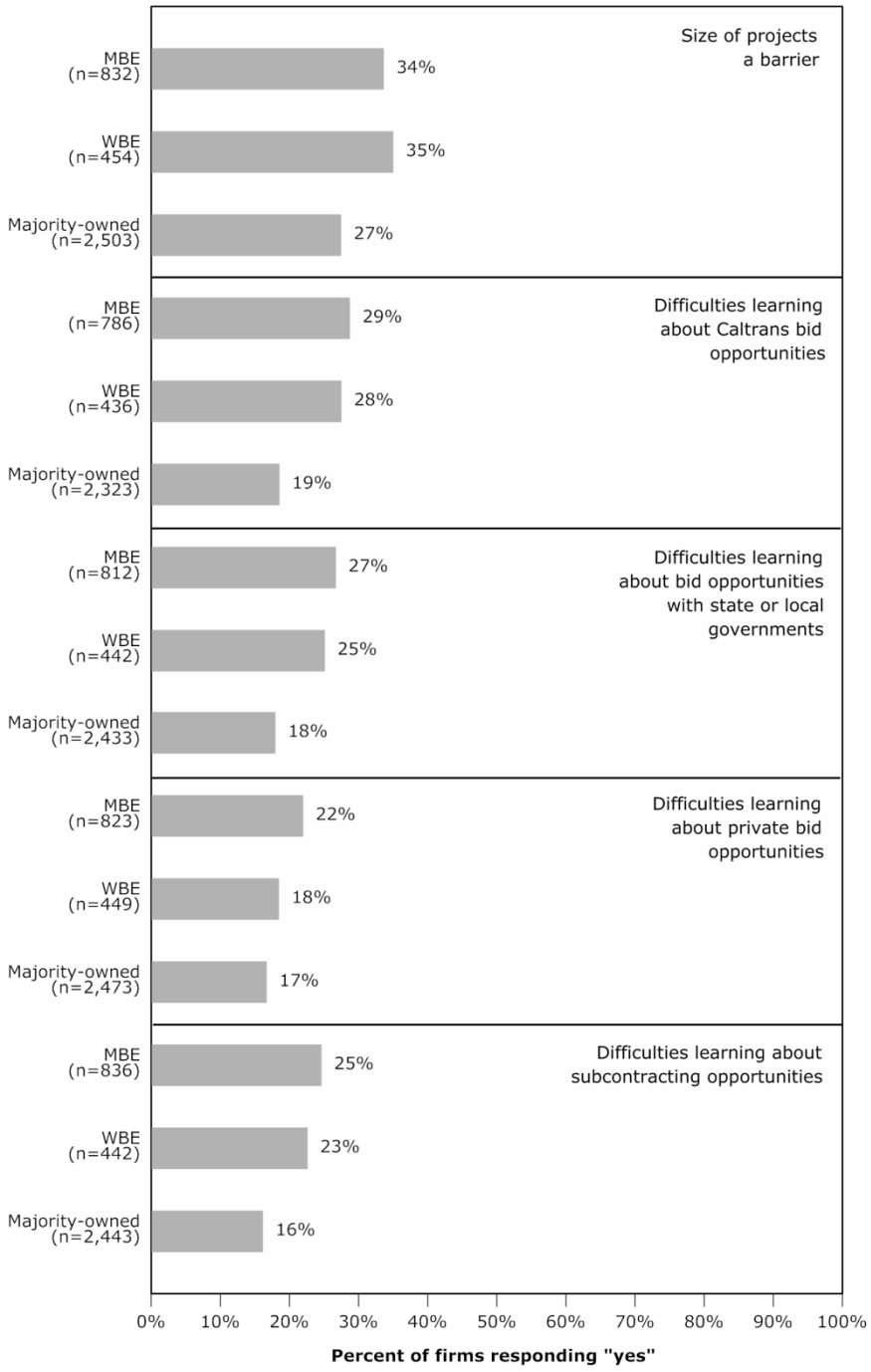
Difficulties and Potential Barriers to Starting or Expanding a Business

As part of the availability interviews with California businesses completed in the disparity study, the study team asked firm owners and managers if they had experienced barriers or difficulties associated with starting or expanding a business. BBC asked if:

- The size of projects had presented a barrier to bidding;
- The firm had experienced difficulties learning about bid opportunities with Caltrans;
- The firm had experienced difficulties learning about bid opportunities with local governments or private companies; and
- The firm had experienced difficulties learning about subcontracting opportunities in Caltrans.

Figure H-32 summarizes responses to these questions. Responses for construction and engineering-related firms have been combined.

Figure H-32.
Responses to 2012 availability interview questions from California MBE, WBE and majority-owned construction and engineering-related firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: BBC Research & Consulting.

- As shown in Figure H-32, MBEs and WBEs were more likely than majority-owned firms to report that the size of projects had been a barrier to bidding.

- MBEs and WBEs were also more likely than majority-owned firms to report difficulties learning about:

  - Caltrans bid opportunities;
  - Local government bid opportunities;
  - Private sector bid opportunities; and
  - Subcontracting opportunities.

BBC also asked questions related to access to capital, timely payment, and bonding and insurance; Appendix G reports those results.

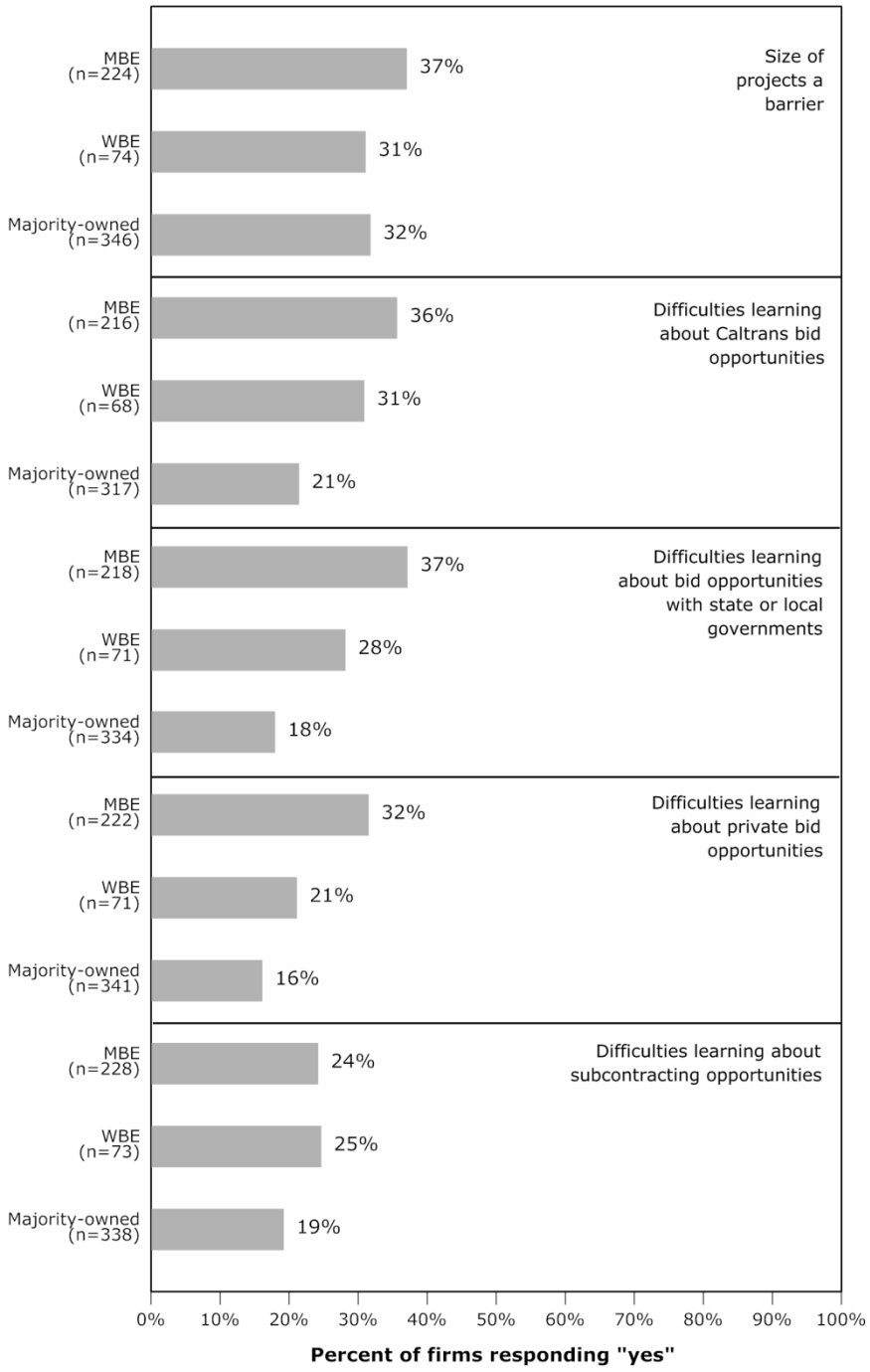
The study team also examined how these barriers and difficulties associated with starting or expanding a business affected younger firms, those that are seven years old or younger.

Figure H-33 shows that a greater share of younger MBEs and majority-owned firms were more likely than older firms to report that the size of projects and difficulties leaning about bid opportunities were barriers to bidding.

- Younger MBE/WBEs were much more likely than older MBE/WBE firms to report difficulties learning about:

  - Caltrans bid opportunities; and
  - Local government bid opportunities; and
  - Private bid opportunities.

Figure H-33.
Responses to 2012 availability interview questions from California MBE, WBE and majority-owned construction and engineering-related firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: BBC Research & Consulting.

APPENDIX I.
Description of Data Sources for Marketplace Analyses

To perform the marketplace analyses presented in Appendices E through H, BBC used data from a range of sources, including:

- U.S. Census Bureau Public Use Microdata Samples (PUMS) from the 1980 and 2000 Census;
- U.S. Census Bureau PUMS data from the 2007-2009 three-year American Community Survey (ACS);
- The Federal Reserve Board's 1998 and 2003 Survey of Small Business Finances (SSBF);
- The 2007 Survey of Business Owners (SBO), conducted by the U.S. Census Bureau; and
- Home Mortgage Disclosure Act (HMDA) data provided by the Federal Financial Institutions Examination Council (FFIEC).

The following sections provide further detail on each data source, including how the study team used it in its quantitative marketplace analyses.

PUMS Data

Focusing on the construction and engineering industries, BBC used PUMS data to analyze:

- Demographic characteristics;
- Measures of financial resources;
- Educational attainment; and
- Self-employment (business ownership).

PUMS data offer several features ideal for the analyses reported in this study, including historical cross-sectional data, stratified national and state-level samples, and large sample sizes that enable many estimates to be made with a high level of statistical confidence, even for subsets of the population (e.g., racial/ethnic and occupational groups).

BBC obtained selected Census and ACS data from the Minnesota Population Center's Integrated Public Use Microdata Series (IPUMS). The IPUMS program provides online access to customized,

accurate datasets.[1] For the analyses contained in this report, BBC used the 1980 and 2000 Census 5 percent samples and the 2007-2009 ACS 1 percent sample.

2000 Census data. The 2000 U.S. Census 5 percent sample contains 14,081,466 observations. When applying the Census person-level population weights, the sample represents 281,421,906 people in the United States. The 2000 California sub-sample contains 1,690,642 individual observations, weighted to represent 33,884,660 people.

Categorizing individual race/ethnicity. To define race/ethnicity for the 2000 Census dataset, BBC used the IPUMS race/ethnicity variables — RACED and HISPAN — to categorize individuals into one of seven groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian-Pacific American;
- Subcontinent Asian American;
- Native American; and
- Other minority (unspecified).

An individual was considered "non-Hispanic white" if they did not report Hispanic ethnicity and indicated being white only — not in combination with any other race group. All self-identified Hispanics (based on the HISPAN variable) were considered Hispanic American, regardless of any other race or ethnicity identification. For the five other racial groups, an individual's race/ethnicity was categorized by the first (or only) race group identified in each possible race-type combination. BBC used a rank ordering methodology similar to that used in the 2000 Census data dictionary. An individual who identified multiple races was placed in the reported race category with the highest ranking in BBC's ordering. African American is first, followed by Native American, Asian-Pacific American, and then Subcontinent Asian American. For example, if an individual identified himself or herself as "Korean," that person was placed in the Asian-Pacific American category. If the individual identified himself or herself as "Korean" in combination with "Black," the individual was considered African American.

- The Asian-Pacific American category included the following race/ethnicity groups: Cambodian, Chamorro, Chinese, Filipino, Guamanian, Hmong, Indonesian, Japanese, Korean, Laotian, Malaysian, Native Hawaiian, Samoan, Taiwanese, Thai, Tongan, and Vietnamese. This category also included other Polynesian, Melanesian, and Micronesian races, as well as individuals identified as Pacific Islanders.

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[1] Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2011.

- The Subcontinent Asian American category included these race groups: Asian Indian (Hindu), Bangladeshi, Pakistani, and Sri Lankan. Individuals who identified themselves as "Asian," but were not clearly categorized as Subcontinent Asian were placed in the Asian-Pacific American group.

- American Indian, Alaska Native, and Latin American Indian groups were considered Native American.

- If an individual was identified with any of the above groups and an "other race" group, the individual was categorized into the known category. Individuals identified as "other race" or "white and other race" were categorized as "other minority."

For some analyses — those in which sample sizes were small — BBC combined minority groups.

Business ownership. BBC used the Census detailed "class of worker" variable (CLASSWKD) to determine self-employment. Individuals were classified into eight categories.

- Self-employed for a non-incorporated business;

- Self-employed for an incorporated business;

- Wage or salary employee for a private firm;

- Wage or salary employee for a non-profit organization;

- Employee of the Federal government;

- Employee of a State government;

- Employee of a local government; or

- Unpaid family worker.

BBC counted individuals who reported being self-employed — either for an incorporated or a non-incorporated business — as business owners.

Study industries. The marketplace analyses focus on two study industries: construction and engineering-related services. BBC used the IND variable to identify individuals as working in one or the other industry. That variable includes several hundred industry and sub-industry categories. Figure I-1 identifies the IND codes used to define each study area for the 2000 Census analyses.

Figure I-1.
2000 Census industry codes used for construction and engineering-related services

Study industry	2000 Census IND codes	Description
Construction	77	Construction industry
Engineering-related services	729	Architectural, engineering and related services

Source: BBC Research & Consulting from the IPUMS program: http://usa.ipums.org/usa/.

Industry occupations. BBC also examined workers by occupation within the construction industry using the PUMS variable OCC. Figure I-2 summarizes the 2000 Census (and 2007-2009 ACS) OCC codes used in the study team's analyses.

Figure I-2.
2000 Census and 2007-2009 ACS occupation codes used to examine workers in construction

Census 2000 and 2007 2009 ACS occupational title and code	Job description
Construction managers 22	Plan, direct, coordinate, or budget, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, and implementation. Include specialized construction fields, such as carpentry or plumbing. Include general superintendents, project managers, and constructors who manage, coordinate, and supervise the construction process.
First-line supervisors/managers of construction trades and extraction workers 620	Directly supervise and coordinate the activities of construction or extraction workers.
Brickmasons, Blockmasons and Stonemasons 622	Lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terra-cotta block, Construct or repair walls, partitions, arches, sewers, and other structures. Build stone structures, such as piers, walls, and abutments and lay walks, curbstones, or special types of masonry for vats, tanks, and floors.
Carpenters 623	Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms, building frameworks, including partitions, joists, studding, rafters, wood stairways, window and door frames, and hardwood floors.
Carpet, floor, and tile installers and finishers 624	Apply shock-absorbing, sound-deadening, or decorative coverings to floors. Lay carpet on floors and install padding and trim flooring materials. Scrape and sand wooden floors to smooth surfaces, apply coats of finish. Apply hard tile, marble, wood tile, walls, floors, ceilings, and roof decks.

Figure I-2 (continued).
2000 Census and 2007-2009 ACS occupation codes used to examine workers in construction

Census 2000 and 2007 2009 ACS occupational title and code	Job description
Cement masons, concrete finishers and terrazzo workers 625	Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs or gutters; patch voids; use saws to cut expansion joints. Terrazzo workers apply a mixture of cement, sand, pigment or marble chips to floors, stairways, and cabinet fixtures.
Construction laborers 626	Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up rubble and debris, and remove asbestos, lead, and other hazardous waste materials. May assist other craft workers. Exclude construction laborers who primarily assist a particular craft worker, and classify them under "Helpers, Construction Trades."
Paving, surfacing and tamping equipment operators 630	Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators.
Miscellaneous construction equipment operators, including pile-driver operators 632	Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. Operate pile drivers mounted on skids, barges, crawler treads, or locomotive cranes to drive pilings for retaining walls, bulkheads, and foundations of structures, such as buildings, bridges, and piers.
Drywall installers, ceiling tile installers and tapers 633	Apply plasterboard or other wallboard to ceilings or interior walls of buildings, mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound.
Electricians 635	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Exclude "Security and Fire Alarm Systems Installers." The 2000 category includes electrician apprentices.

Figure I-2 (continued).
2000 Census and 2007-2009 ACS occupation codes used to examine workers in construction

Census 2000 and 2007 2009 ACS occupational title and code	Job description
Glaziers 636	Install glass in windows, skylights, store fronts, display cases, building fronts, interior walls, ceilings, and tabletops.
Painters, construction and maintenance 642	Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. Remove old paint to prepare surfaces prior to painting and mix colors or oils to obtain desired color or consistency.
Pipelayers, plumbers, pipefitters and steamfitters 644	Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints. Excludes "Welders, Cutters, Solderers, and Brazers." Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Includes sprinklerfitters.
Plasterers and stucco masons 646	Apply interior or exterior plaster, cement, stucco, or similar materials and set ornamental plaster.
Roofers 651	Cover roofs of structures with shingles, slate, asphalt, aluminum, and wood. Spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures
Iron and steel workers, including reinforcing iron and rebar workers 653	*Iron and steel workers* raise, place, and unite iron or steel girders, columns, and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings. *Reinforcing iron and rebar workers* position and secure steel bars or mesh in concrete forms in order to reinforce concrete. Use a variety of fasteners, rod-bending machines, blowtorches, and hand tools. Include rod busters.
Helpers, construction trades 660	All construction trades helpers not listed separately.

Figure I-2 (continued).
2000 Census and 2007-2009 ACS occupation codes used to examine workers in construction

Census 2000 and 2007 2009 ACS occupational title and code	Job description
Driver/sales workers and truck drivers 913	*Driver/sales workers* drive trucks or other vehicles over established routes or within an established territory and sell goods, such as food products, including restaurant take-out items, or pick up and deliver items, such as laundry. May also take orders and collect payments. Include newspaper delivery drivers. *Truck drivers (heavy)* drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license. *Truck drivers (light)* drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck. Exclude "Couriers and Messengers."
Crane and tower operators 951	Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines, or products in many directions. Exclude "Excavating and Loading Machine and Dragline Operators."
Dredge, excavating and loading machine operators 952	*Dredge operators* operate dredge to remove sand, gravel, or other materials from lakes, rivers, or streams; and to excavate and maintain navigable channels in waterways. *Excavating and loading machine and dragline operators* Operate or tend machinery equipped with scoops, shovels, or buckets, to excavate and load loose materials. *Loading machine operators, underground mining*, Operate underground loading machine to load coal, ore, or rock into shuttle or mine car or onto conveyors. Loading equipment may include power shovels, hoisting engines equipped with cable-drawn scraper or scoop, or machines equipped with gathering arms and conveyor.

Source: 2000 Census occupational titles and codes at http://usa.ipums.org/usa/volii/00occup.shtml, 1980, job descriptions from the Bureau of Labor Statistics www.bls.gov.

Education variables. BBC used the variable indicating respondents' highest level of educational attainment (EDUCD) to classify individuals into four categories:[2]

- Less than high school;
- High school diploma;
- Some college or associate's degree; and
- At least a bachelor's degree.

[2] In the 1940-1980 samples, respondents were classified according to the highest year of school completed (HIGRADE). In the years after 1980, that method was used only for individuals who did not complete high school, and all high school graduates were categorized based on the highest degree earned (EDUC99). The EDUCD variable merges two different schemes for measuring educational attainment by assigning to each degree the typical number of years it takes to earn it.

Definition of workers. The universe for the class of worker, industry, and occupation variables includes workers 16 years of age or older who are "gainfully employed" and those who are unemployed but seeking work. "Gainfully employed" means that the worker reported an occupation as defined by the Census code OCC.

1980 Census data. BBC compared 2000 Census data with data for the 1980 Census to analyze changes in worker demographics, educational attainment, and business ownership over time. The 1980 Census five percent sample includes 11,343,120 observations weighted to represent 226,862,400 people. The sample includes 1,186,232 observations in California, weighted to represent 23,724,640 individuals. A number of changes in variables and coding took place between the 1980 and 2000 Censuses.

Changes in race/ethnicity categories between censuses. Figure I-3 lists the seven BBC-defined racial/ethnic categories with the corresponding 1980 and 2000 Census race groups. Combinations of race types are available in the 2000 Census but not in the 1980 Census. The U.S. Census Bureau introduced categories in 2000 representing a combination of race types to allow individuals to select multiple races when responding to the questionnaire.

For example, an individual who is primarily white with Native American ancestry could choose the "white and American Indian/Alaska Native" race group in 2000. However, if the same individual received the 1980 Census questionnaire, she would need to choose a single race group — either "white" or "American Indian/Alaska Native." Such a choice would ultimately depend on unknowable factors including how strongly the individual identifies with her Native American heritage.

In addition, data analysts do not have information about the proportions of individual ancestry in 2000 and can only know that a particular individual has mixed ancestry. The variability introduced by allowing multiple race selection complicates direct comparisons between Census years with respect to race/ethnicity. Despite those issues, 98 percent of survey respondents in 2000 indicated a single race.[3]

Business ownership. BBC uses the Census "class of worker" variable (CLASSWKD) to determine self-employment. That variable was the same for 1980 and 2000 with one exception: the 1980 variable did not include a separate category for individuals who work for a wage or salary at a non-profit organization.

Changes in industry codes between Censuses. The Census definitions of some industries and sub-industries changed between 1980 and 2000. As a result, the 1980 codes for the industry variable (IND) were not the same as the 2000 IND codes in all cases. However, for the construction and engineering-related industries, the 1980 codes corresponded directly to equivalent 2000 codes.

[3] Grieco, Elizabeth M. & Rachel C. Cassidy. "Overview of Race and Hispanic Origin," *Census 2000 Brief*, March 2001, page 3.

Figure I-3.
BBC race/ethnic categories compared with Census race and Hispanic Origin survey questions, 1980 and 2000

BBC defined race/ethnic categories	2000 Census	1980 Census
African American	**Hispanic origin:** no **Race:** Black/Negro alone or in combination with any other non-Hispanic group	**Hispanic origin:** no **Race:** Black/Negro
Asian-Pacific American	**Hispanic origin:** no **Race:** Chinese, Taiwanese, Japanese, Filipino, Korean, Vietnamese, Cambodian, Hmong, Laotian, Thai, Indonesian, Malaysian, Samoan, Tongan, Polynesian, Guamanian/Chamorro, Pacific Islander, Micronesian, Melanesian, or other Asian, either alone or in combination with any non-Hispanic, non-Black, or non-Native American groups	**Hispanic origin:** no **Race:** Chinese, Japanese, Filipino, Korean, Vietnamese, Pacific Islander or other Asian
Subcontinent Asian American	**Hispanic origin:** no **Race:** Asian Indian, Bangladeshi, Pakistani or Sri Lankan, alone or in combination with white or other groups only	**Hispanic origin:** no **Race:** Asian Indian
Hispanic American	**Hispanic origin:** yes **Race:** any race groups, alone or in combination with other groups	**Hispanic origin:** yes **Race:** any or **Hispanic origin:** no **Race:** Spanish
Native American	**Hispanic origin:** no **Race:** American Indian or Alaskan Native tribe or Native Hawaiian, identified alone or in combination with any non-Hispanic, non-Black group	**Hispanic origin:** no **Race:** American Indian/Alaska Native or Native Hawaiian
Other minority group	**Hispanic origin:** no **Race:** other race alone or in combination with white only	**Hispanic origin:** no **Race:** other race
Non-Hispanic white	**Hispanic origin:** no **Race:** white alone	**Hispanic origin:** no **Race:** white

Source: BBC Research & Consulting from the IPUMS program: http://usa.ipums.org/usa/.

Geographic variables. For the analyses presented in the marketplace appendices, there were no substantial changes in geographic variables between then 1980 Census and 2000 Census. BBC used the same variable (STATEFIP) available for 2000 Census data to identify California in the 1980 data.

Changes in educational variables between Censuses. The 1980 Census PUMS data included the same educational variable found in the 2000 Census data, although the questions used for each Census to capture educational attainment differed between the two surveys.[4]

2007-2009 American Community Survey (ACS) data. BBC also examined 2007-2009 ACS data from IPUMS. The U.S. Census Bureau conducts the ACS which uses monthly samples to produce annually updated data for the same small areas as the 2000 Census long-form.[5] Since 2005, the ACS has expanded to a roughly 1 percent sample of the population, based on a random sample of housing units in every county in the U.S. (along with the District of Columbia and Puerto Rico). The 2007-2009 ACS three-year estimates represent the average characteristics over the three-year period of time.

Applying the person-level population weights to the 3,006,322 observations included in the data, the 2007-2009 ACS dataset represents 304,192,356 people in the U.S. For California, the 2007-2009 ACS dataset includes 1,047,182 observations representing 36,589,387 individuals. With the exception of a few minor differences, the variables available for the 2007-2009 ACS dataset are the same as those available for the 2000 Census 5 percent sample.

Changes in race/ethnicity categories between 2000 Census and 2007-2009 ACS data. The 2000 Census 5 percent sample and the 2007-2009 ACS PUMS data use essentially the same numerical categories for the detailed race variable (RACED). However, in both samples, any category representing fewer than 10,000 people was combined with another category. As a result, some PUMS race/ethnicity categories that occur in one sample may not exist in the other, which could lead to inconsistencies between the two samples once the detailed race/ethnicity categories are grouped according to the seven broader categories. That issue is likely to affect only a very small number of observations. PUMS race/ethnicity categories that were available in 2000 but not in 2007-2009 (or vice versa) represented a very small percentage of the 2000 and 2007-2009 populations. Categories for the Hispanic variable (HISPAN) remained consistent between the two datasets.

Other variables. Other variables that BBC used from the 2007-2009 ACS did not change between 2000 and 2007-2009. The variables CLASSWKD, LABFORCE, IND, OCC, PUMA, and EDUCD were consistent between datasets, with variable codes in each case representing the same categories.

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[4] For a more detailed explanation, see footnote 2.

[5] U.S. Census Bureau. *Design and Methodology: American Community Survey*. Washington D.C.: U.S. Government Printing 2009. Available at http://www.census.gov/acs/www/SBasics/desgn_meth.htm

Survey of Small Business Finances (SSBF)

The study team used the SSBF to analyze the availability and characteristics of small business loans. The SSBF, which the Federal Reserve Board conducts every five years, collects financial data from non-governmental for-profit firms with fewer than 500 employees. The survey uses a nationally representative sample, structured to allow for analysis of specific geographic regions, industry sectors, and racial and gender groups. The SSBF is unique as it provides detailed data on both firm and owner financial characteristics. For the purposes of this report, BBC used the surveys from 1998 and 2003, which are available at the Federal Reserve Board website.[6]

Data for 1998. The 1998 SSBF includes information from 3,561 small businesses. The survey oversampled minority-owned businesses, allowing for a more precise analysis of how race and ethnicity may affect loan and financial outcomes.

Categorizing owner race/ethnicity and gender. Definition of race and ethnic groups in the 1998 SSBF are slightly different than the classifications used in the 2000 Census and 2007-2009 ACS. In the SSBF, businesses are classified into the following five groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian American;
- Native American; and
- Other (unspecified).

A business was considered Hispanic American-owned if more than 50 percent of the business was owned by Hispanic Americans, regardless of race. All businesses that reported 50 percent or less Hispanic American ownership were included in the racial group that owned more than half of the company. No firms reported the race/ethnicity of their owners as being "other." Similar to race, firms were classified as female-owned if more than 50 percent of the firm was owned by women. Firms owned half by women and half by men were classified as male-owned.

Defining selected industry sectors. In the 1998 SSBF, each business was classified according to SIC code and placed into one of eight industry categories:

- Construction;
- Mining;
- Transportation, communications, and utilities;

[6] The Federal Reserve Board. *Survey of Small Business Finances, 1998* and *Survey of Small Business Finances, 2003*. Available online at http://www.federalreserve.gov/pubs/.

- Finance, insurance, and real estate;
- Trade;
- Engineering;
- Services (excluding engineering); or
- Agriculture, forestry, and fishing.

Region variables. The SSBF divides the United States into nine Census Divisions. Along with Alaska, Washington, Oregon, and Hawaii, California resides in the Pacific Census Division (referred to in marketplace appendices as the Pacific region).

Loan denial variables. In the 1998 survey, firm owners were asked if they have applied for a loan in the last three years and whether loan applications were always approved, always denied, or sometimes approved and sometimes denied. For the purposes of this study, only firms that were always denied were considered when analyzing loan denial.

Data for 2003. The 2003 SSBF differs from previous SSBFs in terms of the population surveyed, the variables available, and the data reporting methodology.

Population differences. Similar to the 1998 survey, the 2003 survey records data from businesses with 500 or fewer employees. The sample contains data from 4,240 firms, but in 2003, minority-owned firms were not oversampled. In the 1998 data, 7.3 percent of the survey firms were owned by Hispanic Americans, but that number dropped to 4 percent in the 2003 data. Representation in the sample also dropped for African American-owned firms (7.7% to 2.8%) and Asian American-owned firms (5.7% to 4.2%). The smaller sample sizes for minority groups in the 2003 SSBF affects the ability to conduct analyses related to differences in loan application outcomes for specific race/ethnic groups.

Variable differences. In the 2003 SSBF, businesses were able to give responses on owner characteristics for up to three different owners. The data also included a fourth variable that is a weighted average of other answers provided for each question. In order to define race/ethnicity and gender variables consistently for the 1998 to 2003 surveys, BBC used the final weighted average for variables on owner characteristics. Firms were then divided into race, ethnicity, and gender groups according to the same guidelines used for the 1998 data.

Industry, region, and loan denial variables for the 2003 survey were defined by the study team using the same guidelines as the 1998 survey, with one exception — the 2003 survey did not include any firms in the agriculture, forestry, and fishing industry.

Data reporting. Due to missing responses to survey questions in both the 1998 and 2003 datasets, data were imputed to fill in missing values. For the 1998 SSBF data, missing values were imputed using a randomized regression model to estimate values based on responses to other questions in the survey. A single variable includes both reported and imputed values. A separate "shadow variable" can be used to identify where missing values have been imputed. However, the missing values in the 2003 data set were imputed using a different method than in

previous studies. In the 1998 survey data, the number of observations in the data set matches the number of firms surveyed. However, the 2003 data includes five implicates, each with imputed values that have been filled in using a randomized regression model.[7] Thus, there are 21,200 observations in the 2003 data, five for each of the 4,240 firms surveyed. Across the five implicates, all non-missing values are identical, whereas imputed values may differ. In both data sets, therefore, when a firm answered a survey question, the response was not altered. However, the method for filling in missing values differed between surveys.

As discussed in a recent paper about the 2003 imputations by the Finance and Economics Discussion Series, missing survey values can lead to biased estimates and inaccurate variances and confidence intervals.[8] Those problems can be corrected through the use of multiple implicates. In order to provide the most accurate analysis, BBC utilized all five implicates provided with the 2003 data in analysis of the survey.

Multiple implicates were not provided with the 1998 data, making the method of analysis used for the 2003 data inapplicable. To address that issue, the study team performed analysis in two different ways — first, only with observations whose data were not imputed, and second, with all observations. Differences in results were insignificant. For summary statistics using SSBF data, BBC included observations with missing values in the analyses. For the probit regression model presented in Appendix G, the study team did not include observations with imputed values for loan the dependent variable, loan denial.

Survey of Business Owners (SBO)

BBC used data from the 2007 SBO to analyze mean annual firm receipts. The SBO is conducted every five years by the U.S. Census Bureau. Data for the most recent publication of the SBO was collected in 2007. Response to the survey is mandatory, which ensures comprehensive economic and demographic information for business and business owners in the U.S. All tax-filing businesses and nonprofits were eligible to be surveyed, including firms with and without paid employees. In 2007, almost 8 million firms were surveyed. BBC examined SBO data relating to the number of firms, number of firms with paid employees, and total receipts. That information is available by geographic location, industry, gender and race/ethnicity.

The SBO uses the 2002 North American Industry Classification System (NAICS) to classify industries. BBC analyzed data for firms in all industries and for firms in selected industries that corresponded closely to construction and engineering-related services.

To categorize the business ownership of firms reported in the SBO, the Census Bureau uses standard definitions for women-owned and minority-owned businesses. A business is defined as female-owned if more than half of the ownership and control is by women. Firms with joint male-/female-ownership were tabulated as an independent gender category. A business is

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[7] For a more detailed explanation of imputation methods, see the "Technical Codebook" for the *2003 Survey of Small Business Finances.*

[8] Lieu N. Hazelwood, Traci L. Mach and John D. Wolken. *Alternative Methods of Unit Nonresponse Weight Adjustments: An Application from the 2003 Survey of Small Businesses.* Finance and Economics Discussion Series Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board. Washington, D.C., 2007. http://www.federalreserve.gov/pubs/feds/2007/200710/200710pap.pdf

defined as minority-owned if more than half of the ownership and control is by African Americans, Asian Americans, Hispanic Americans, Native Americans, or by another minority group. Respondents had the option of selecting one or more racial groups when reporting business ownership. BBC reported business receipts for the following race/ethnicity and gender groups:

- African Americans;
- Asian Americans;
- Hispanic Americans;
- Native Americans; and
- Women.

BBC also reported business receipts for all firms.

Home Mortgage Disclosure Act (HMDA) Data

BBC analyzed mortgage lending in California and in the nation using HMDA data that the Federal Financial Institutions Examination Council (FFIEC) provides. HMDA data provide information on mortgage loan applications that financial institutions, savings banks, credit unions, and some mortgage companies receive. Those data include information about the location, dollar amount, and types of loans made, as well as race/ethnicity, income, and credit characteristics of loan applicants. Data are available for home purchase, home improvement, and refinance loans.

Financial institutions were required to report 2010 HMDA data if they had assets of more than $39 million ($35 million for 2006), had a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies were required to report HMDA if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, were located in an MSA (or originated five or more home purchase loans in an MSA), and either had more than $10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

BBC used those data to examine loan denial rates and subprime lending rates for different racial and ethnic groups in 2006, 2009, and 2010. Note that the HMDA data represent the entirety of home mortgage loan applications reported by participating financial institutions in each year examined. Those data are not a sample. However, BBC did not report loan denial rates or subprime lending rates in cases where there were fewer than 25 loans in a particular category. Appendix G provides a detailed explanation of the methodology that the study team used for measuring loan denial and subprime lending rates.

APPENDIX J.
Summary of Anecdotal Interviews

Appendix J presents qualitative information collected through a number of different means as part of the disparity study. It is presented in nine parts:

A. Introduction and Background;

B. Transportation Contracting Industry in California;

C. Doing Business with the California Department of Transportation;

D. Potential Barriers to Business Success;

E. Knowledge or Experiences Concerning Any Discrimination Based on Race, Ethnicity or Gender in the Local Marketplace;

F. Insights Regarding Neutral Measures;

G. Insights Regarding Race-, Ethnicity- or Gender-based Measures;

H. Certification; and

I. Other Recommendations to Caltrans Offered by Interviewees.

A. Introduction and Background

Appendix J was prepared by BBC, Keen Independent Research LLC, and Holland & Knight LLP with assistance from Faro Consulting & Solutions and WSC Consulting. It sets forth information from 41 interviews conducted for Caltrans. These interviews include perceptions and anecdotes regarding the DBE Program and the contracting and procurement policies, practices, and procedures of Caltrans. The interviews were conducted by Faro Consulting & Solutions, WSC Consulting, and BBC.

Interview participants included prime contractors, subcontractors, suppliers, architects, engineers, and trade and business associations, having a membership base of many minority, non-minority, male and female business owners.

Interview participants were obtained primarily from a random sampling of businesses generated by BBC and stratified by type of firm, location, the race/ethnicity and gender of business ownership, and the DBE directory. Most of the interviews were conducted with the owner, president, chief executive officer, or other officer of the business or association, and some were conducted with a representative. The interviewees are identified in this report by their random interview number.

Of the businesses interviewed, some work exclusively or primarily as prime contractors or subcontractors, and some work as both. Some businesses were MBEs, some were WBEs, and

some were white male-owned. Some businesses were certified as DBEs or as disabled veteran-owned (DVBEs). All of the businesses were located in California.

The following trade associations and business organizations agreed to be interviewed in connection with the disparity study and report on the experiences, anecdotes, and perceptions of their members:

- Hispanic Chamber of Commerce;
- Young Black Contractors Association; and
- Asian American Architects and Engineers Association.

Appendix J refers to each interviewee based on an interviewee number.

Appendix J also summarizes oral testimony given in public hearings from 30 individuals. These individuals responded to requests for comments about current marketplace conditions in California. Individuals had the opportunity to give verbal testimony in person at a public hearings held in all 12 Caltrans districts.

Individuals had the opportunity to submit written testimony to Caltrans as well. Caltrans received written testimony via mail, electronic mail and fax.

Public hearing participants represented businesses and organizations throughout the state. Their comments are identified by number with the "PH" prefix designating oral testimony and the "WT" prefix designating written testimony. For simplicity, Appendix J refers to both public hearing participants and those providing written testimony as "interviewees" in the same way as individuals interviewed at their businesses.

Finally, Appendix J presents information from four stakeholder discussion groups held with representatives of the California transportation contracting industry. Caltrans held two stakeholder meetings in February and two meetings in June with firm owners, industry leaders and others. Individuals participated in person and via telephone. Keen Independent Research chaired a "focus group" session as part of each meeting. Each session was more than one hour in length. Certain participants provided follow-up comments to the study team as well, which were also reviewed for inclusion in this appendix. Twenty-four individuals from outside Caltrans participated in these stakeholder meetings, sometimes attending more than one meeting.

As with participants in the public hearings, the study team numbered each participant in the stakeholder meetings, using a prefix of "SM."

One additional business owner requested that the BBC study team review written information that he submitted; this is included in the analysis of the RCJ claim made to Caltrans under Part C of the Appendix, which discusses perceptions of Caltrans.

B. Transportation Contracting Industry in California

How Businesses Became Established.

A number of interviewees explained that firm owners in the transportation contracting business come from people working in the industry or for public agencies involved in that work. For example, the white male owner of an engineering company [Interviewee SM#8] explained how engineering firms are formed. "One, is economic downturn, where they have to go make a living … that's usually the field guys. If they get into a management role, they have a better understanding of what it takes to run a business … they see that they have enough clientele in their management role that the clients like them a lot and they [the clients] encourage them to leave. The other thing I see is working back with agencies … if a person comes from that agency."

Marketplace Conditions.

Many interviewees indicated that marketplace conditions have been unfavorable since the downturn in the overall economy. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, reported that since 2008 the market has been tight. It is very hard to stay in business and it is hard to make money on public projects. "You lose money before you even start," he said.

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that the marketplace is very difficult and competitive right now. He mentioned that the public sector work is extremely "cut throat." He stated that it is extremely tough to be competitive and there is incredible competition. He stated that "business is difficult for all businesses right now and many larger firms are low-bidding many contracts."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, indicated that her company has seen a 50 percent drop in revenue from 2003 to present because of market conditions. "We were doing $1.5 million per year in 2003 but now we are only doing half that because of the economy," she said. She added that the key changes in marketplace conditions are primarily related to the price of fuel and associated overhead. "The price of fuel has changed everything. We have fewer employees and the employees we do have are paid less," she said. "We have to go where the work is and change our business to go where there is work," she said. She added that bigger carriers have begun to push out the smaller carriers as a result of the economy.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that his firm's decline in growth has been due to the bad economy. "This is similar to the rest of the industry. Times are tough," he said.

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that marketplace conditions are very difficult right now. She said, "Fuel costs are huge and we are at the mercy of retail fuel costs. All materials are more expensive now and our margins are shrinking as a result."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that due to the economic downturn, they had to shrink their company dramatically. She said, "We used to have 12 full-time employees, now we only have one along with a few part-time employees we use on a contract basis."

Interviewee #13, the African American female owner of a non-certified trucking company mentioned that the growth had been consistent until the last few years. She stated, "This is the worst stretch of work since I have been in the business since 1979." She added, "As the economy got worse, it just went downhill for us and others like us."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that the market is not great right now. He said, "I'm barely keeping my head above water right now but there are opportunities out there. I would like to make all the work I did to get certification worthwhile."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that the current marketplace conditions have been bad. He said, "Our work is greatly impacted by the economy in general. Because the economy has been so bad, we have had to be much leaner and lay some people off."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, mentioned the overall market conditions now are not strong. He stated, "The market is not good now. Profit margins are way down from where they were seven to eight years ago. I had to make the move into the highway market due to the housing bust."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that he has seen changes in the marketplace conditions. He said, "Things seem to be picking up now but since 2008, it has been really lean. The lack of work and rising costs for everything from materials and equipment to gas make it hard."

The Hispanic American owner of a DBE-certified engineering firm reported that his company is one of the bigger DBE companies. He said, "There's more people [DBEs] disappearing than appearing. There's not enough outreach and programs out there that are going to develop [DBE] companies that are going to be viable to survive in this economy."

A number of interviewees reported that larger firms are keeping more work and subcontracting less work out. They also reported that larger firms are competing for smaller jobs and that firms are pursuing highway contracting work that had been in other parts of the construction industry. These trends appear to negatively affect smaller companies.
Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that general marketplace conditions are like the rest of the economy — slow. She said, "For one thing, everything is really slow. Big companies have cut back and are either competing for our work or doing more stuff in-house that they used to sub out to us. Big companies are trying to run us out of business." She added that she has "used almost all of my savings to keep the business running. We can hold on for a while longer but we could go broke if things don't turn around soon."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that his firm's growth has been stagnant. He said, "It is really tough right now to get business but we manage to stay busy." He said that the current environment is very difficult for small businesses. He said, "We can't get any work, it seems like the big firms get everything."

Interviewee #28, the white male president of a certified majority DVBE, said that although all construction firms are facing a weak market, his company has no business at this time and he had to lay off all his employees.

Interviewee #29, the white male owner of a concrete and landscaping company, said that local market conditions were characterized by low demand. He said that he had experienced a decline in revenue every year over the past five years.

The Asian-Pacific American owner of an engineering company and representative of the American Council of Engineering Companies-California [Interviewee SM#2] indicated that the engineering industry is changing. "There's a divergence … no more medium firm, you're either very large or very small."

Interviewee SM#12, the Hispanic American owner of a DBE-certified highway construction business, said, "As the market has gotten horrible in the last three or four years, it's gotten horrible for the prime contractors but for the subs as well. What it's forced people to do, is people come from other markets into the highway construction market … including Caltrans … that used to do, whatever, commercial buildings or residential … they're just trying to figure out a way to make a living, to survive." He also said that, because prime contractors are trying to survive, they are taking on work that, historically, would have been subbed out. This further reduces the amount of work available to subcontractors.

Interviewee SM#1, a Hispanic American contractor and representative of the Hispanic Contractors and Suppliers Association, reported that many members of his organization have gone out of business. "Most of the guys who are contractors grew up in the trades that matriculated into businesses." He went on to say that they need assistance regarding the difficulties of being a contractor today. He reported that being a contractor today is very difficult, with extreme competition. "There's a lot of guys working out there for no profit … just trying to break even and keep people working."

A few interviewees noted that market conditions have been poor but now might be improving. Interviewee #37, the African American male president of a certified electrical company, stated that marketplace conditions have been slow. He said, "It's all been slow the last year. But, now things do seem to be picking up."

Interviewee #38, the white female principal and partner of a WBE-certified environmental consulting firm, said that marketplace conditions were "difficult — depressed." She added she saw some signs of hope.

A few interviewees reported that they have performed well in the slow economy. Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that "generally speaking, the marketplace conditions are good for our company in our local area." She also stated that "things are slowly turning upward for many companies in the area."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that the growth of the company is better than other similar companies. He stated, "We are moving ahead while others are downsizing."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that there is more demand for her company when the economy is weak and larger firms lay off personnel.

Interviewee #2, the white principal of an energy company, stated that marketplace conditions are solid with the sustainable energy market but that conditions are much more difficult elsewhere.

Some interviewees reported that the marketplace conditions in the public sector are better than in the private sector. Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, stated, "The public sector is growing faster than the private sector for our type of work."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "Public is doing all the work. Private is not spending money now."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that marketplace conditions are better in the public sector. He said, "It is the same type of work but there is no private sector work now. I prefer to work in the private sector but it is so competitive and cutthroat now because of how slow it is. The opportunities just aren't there anymore."

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said, "Marketplace conditions are poor and getting worse for the private sector. Marketplace conditions for the public sector are better and improving."

Interviewee #28, the white male president of a certified majority DVBE, said, "Private sector work has dried up. Now everyone is competing for public sector work. People are coming here from out-of-state. I doubt that they meet California licensing and insurance requirements."

Interviewee #29, the white male owner of a concrete and landscaping company, characterized market conditions in the private sector as slow. He reported that there was plenty of work in the public sector, but there was considerable competition for public sector work.

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said, "Private work isn't there. Public work is available, but cumbersome to submit bids."

One interviewee reported that the marketplace conditions are now better in the private sector than in the public sector. Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, said, "[Marketplace conditions are] better in the private sector because the jobs are the right size. There are probably five companies in the area that dominate all that public sector work. They're geared up and sized up for it. You don't see many small public projects."

Some interviewees reported that the marketplace conditions are similar in the private sector and in the public sector. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "The market is fairly similar for the private and public sectors. We don't see much difference when it comes to pavement grinding."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that there are no real differences in the private and public sectors but he said that it is much more price competitive now with larger firms. He said, "Other big companies can out-bid us and come in so low that we can't compete. The big guys who manufacture their own aggregate and sand can bid a lot lower than we can because we are at the mercy of the retail market for the same stuff they manufacture. We can't compete with that."

Interviewee #33, the African American male owner of a certified concrete company, said, "The market is very soft and getting slower. It is the same for both the public and private sectors."

Keys to Success in a Difficult Market.

Many interviewees cited quality and low price as keys to staying in business. Interviewee #3, the white male owner of a concrete and construction company, said that in order to be competitive in his line of business you have to have good quality and competitive pricing. He said, "Quality is huge, but price often wins out. Sometimes people just want the cheapest bid." He added that you have to have a good reputation so that you can even be considered but reiterated that "price is huge."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that to be competitive in this line of business "you have to be rate competitive. Rates have to be where customers want them or you won't get work." She added that, "Quality is key. We try to do the best job we can. If you don't deliver what your customers want when they want it, they'll never call you again."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that to be competitive in this line of business, you have to be price competitive and provide quality services. She said, "Our long-term customers know that we will deliver when they need us to and that we do a good job."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, noted that in order to be competitive, pricing is the most important thing and having solid contacts is essential.

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that to be competitive in this line of business, you have to provide quality work. She said, "We always try to over-deliver. That is the key to success — don't just do the bare minimum."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "We have to lower our rates to stay competitive with the bigger companies. You also have to do your homework."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, stated, "It takes good pricing, versatility and reliability to be competitive in our line of business."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "To be competitive we have to have good chemistry with our primes, work ethic has to be good and overall work has to be good."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "In all honesty, the only way we can compete is to lower our prices and take a lower margin."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that in order to be competitive in his line of business, quality and expertise is the key. He said, "I provide a fairly specialized set of skills and I have to provide quality work at a good price" to be competitive.

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that for his firm to be competitive in this line of business you have to balance quality and price. He said, "We can't compete with huge firms because we don't have the assets they do. We have a good reputation which is huge in this business. Our customers know that we can meet their demands and that is a huge differentiator."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "Right now it is difficult to be competitive in the market. You have to be detail-oriented and willing to lower profit margins."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that to be competitive in his line of business, cost is key. He said, "Cost is the biggest driver and you need financing to stay solvent when customers like Caltrans don't pay fast."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that, in her view, to be competitive in this line of business "you have to hustle." She said, "You have to be sharp and as a woman, you have to be pushy otherwise people will try to take advantage of you." She continued, "We have had to cut costs so that we can compete with the many contractors out there who don't have licenses."

Interviewee #28, the white male president of a certified majority DVBE, said that to be competitive in his line of business it is necessary to perform high quality work and be dependable.

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said to be competitive a business has to be "on-time and on-budget performance."

Other interviewees citied good contacts, good employees and good equipment as keys to success. Interviewee #35, the African American male owner of a certified electrical company, said, "Knowing people in the right position or in the right agency."

Interviewee #37, the African American male president of a certified electrical company, said, "A contractor that takes care of business and has a good crew. That's the only way to become competitive."

Interviewee #13, the African American female owner of a non-certified trucking company mentioned that in her line of business the equipment is the most important factor in being competitive. She stated, "Later model trucks and good maintenance is the key for us."

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said it is hard to say what it takes for a firm to be competitive because of the current market. Business is contracting because of lack of revenue. He is optimistic because he has a good crew and equipment, but it is hard to keep employees with little work. He also stated that "wear and tear on equipment requires credit if you want to buy new equipment," which further exacerbates the problem. "Replacing equipment without credit is hard," he said.

Interviewee SM#16, the white female owner of a DBE-certified engineering firm, said that her prices are competitive with other firms because she has had so much experience.

Some interviewees pointed to flexibility as a key to success. Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said the key to being successful is that "you have to be flexible and wear a lot of hats to make a small business work."

Interviewee #29, the white male owner of a concrete and landscaping company, said that he believes that to be competitive in his line of business, companies must be flexible, malleable, and willing to change with changing conditions.

Interviewee SM#1, a Hispanic American contractor and representative of the Hispanic Contractors and Suppliers Association, reported that small businesses are being selective in what they bid, looking for places where they have a niche.

Experiences in the Private Sector and Public Sector.

Many firms reported flexibility to work on both public and private sector projects. For some, the mix of work was stable. Some firms tended to be increasing their amount of private sector work. The amount of public sector work was growing for others. Changes in the mix of work for these companies were primarily due to stronger or weaker demand for work in the private or public sector.

Some interviewees reported fairly equal work in the public and private sectors. Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, mentioned that his work is the same regardless of public and private sector contracts. He said, "My design work ends up being split fairly evenly, 50/50, between the public and private sector." He stated that there have been ebbs and flows over the last few years between public and private sector work with no specific trend either way. He added, "My mix of work does vary across the years but generally doesn't change much."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "Most years our work is split 50/50 between public and private."

Interviewee #13, the African American female owner of a non-certified trucking company stated, "I would estimate that it is 50/50 when it comes to the split between public and private sector projects."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated that the firm's mix of work is approximately 60 percent public and 40 percent private. She stated, "It is trending away from private, there is not much private money out there."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that the mix of public and private sector work is pretty equal and there is no trend toward or away from private sector work that he has noticed.

Interviewee #20, the white male owner of a demolition and loading company mentioned that his work is split fairly evenly between the public and private sectors. He stated, "More recently I have done more private sector work but overall the split is about even and tends to be that way most years."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company; said that his work is 50 percent public sector and 50 percent private sector.

Some interviewees reported that most of their work is in the private sector. A number of interviewees, including minority-, women- and majority-owned firms, indicated that they are moving more to private sector work. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, stated that most of his work comes from the private sector. He added that the trend in the marketplace has been "more toward private sector because of the tight margins in the public sector."

Interviewee #2, the white principal of an energy company, stated that currently 90 percent of his work comes from the private sector. He said, "Our work is trending towards the private sector as we feel like we are unable to compete for public sector jobs due to the bureaucracy." He stated that "it is easier to work in the private sector and there has been more business there in recent years."

Interviewee #3, the white male owner of a concrete and construction company, said that the trend has been more toward private sector work. He said that in his first year in business, they did 70 percent private sector and 30 percent public sector work. He said that now it is almost all residential, private sector work. He said, "I have bid on some public sector work but my success rate hasn't been too good."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "The largest portion of our work is residential, private sector work."

Interviewee #24, the Hispanic female owner of a non-certified asphalt and construction company, indicated that the trend lately has been more toward private sector work. She said, "I think it is due to the economy and that a lot of private businesses seem to be doing better and need work done now that they put off for the past few years."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American-owned electrical contractor, said that his work is 100 percent private sector, there has been no trend toward or away from private sector work, and the mix of work does not vary year by year.

Some interviewees reported working predominately in the public sector. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that the trend is moving towards the public sector as the private sector work has dried up. He mentioned that three years ago there was a lot of private work but that "developers have no money."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that the trend has been more toward public sector work. She said, "The type of work we do seems more geared to public sector and we don't see that changing."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that 85 to 90 percent of their work is performed in the public sector.

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that most of the company's work comes from public sector. He said, "Commercial work has almost completely dried up and only public sector-related work is available."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, mentioned that he does work solely in the public sector. He stated, "100 percent of our work is in the public sector. We use our DVBE certification as often as possible."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said, "Just about everything we do is public sector-related."

Interviewee #27, the male vice president and treasurer of a non-certified white woman-owned construction company, said "90 percent of our work is public. We've been getting more public work in the last three years."

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that there has been a trend from private sector to public sector work. He said that the company's work was 90 percent private, but is now 90 percent public because of the weak economy.

Some interviewees reported challenges in connection with pursuing or performing work in the public sector. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said public sector work has not been a good experience. He stated that the "bidding process was horrible. Bids and proposals took a lot of time and expense. Poor margins led to losing money on nearly every public sector job."

Interviewee #2, the white principal of an energy company, stated that in his experience attempting to get work in the public sector is lengthier and more work intensive. He stated that "it is easier to get work in the private sector as it is much less cumbersome and has less hurdles to overcome." He stated that his firm is "unable to compete for public sector jobs due to the bureaucracy. The amount of time required for a public sector bid is shocking."

Interviewee #3, the white male owner of a concrete and construction company, said that he knows the process is different between public and private sector. He said, "I'm still trying to understand the public sector. It is harder because the public sector usually just takes the lowest bid which isn't always the best bid. In the private sector we just give them a bid, but in public sector, we have to break out the costs a lot more. These take a lot longer to finish because I have to educate myself [on the process]."

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that it is easier to get private sector work because the "government wants only the cheapest firms."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "We don't look into much public sector work because the awarding authorities don't have a good understanding of actual work being done and what is required from a vendor." He suggested that the public sector should be asking for references and proof of work completed, not just deciding the winning vendor on price.

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said, "The work is all the same but there is more red tape in the public sector, like the requirement to have a site supervisor who has to sign off on everything. You won't normally see a supervisor at a station with private work. It just takes longer."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, indicated that although he has not done work as a subcontractor, his is on several pre-qualified vendor lists that he hopes will lead to subcontracting opportunities. He said, "I'm looking to branch out to the public sector through these lists and using my certification but I haven't had any luck yet."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that she once had a representative from Kodak fly in and they had a contract that afternoon. She continued, "Why would we go through the nonsense of state contracting if we can get a sizable contract like that?"

Interviewee #26, the female majority president of a WBE-certified construction company, said, "It is easier to get work in the private sector. There is less work involved in getting private sector contracts."

Interviewee SM#8, the white male owner of an engineering firm, said that he has spent seven years trying to break into public agency work, without success. "I do all the work anybody else does, but it's hard to break in because I don't talk the same lingo or don't have the same contacts." He added, "Someone coming from the public sector into the private [sector], they seem to have better access back." Interviewee SM#23, a representative of the National Society of Hispanic Professional Engineers, agreed. "If I step out of a Caltrans or county or Metro environment after five to ten years of experience and start up a business, am I going to be disadvantaged? In today's world, in the last 30 years? No, I'm going to have an advantage. Now what does that do to the other populations?"

Perceived Advantages of Private Sector Work and Disadvantages of Public Sector Work.

Some interviewees reported that they were attracted to private sector work because it is more profitable. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said profitability in private sector work is typically better because of the tight budgets and margins in the public sector work. However, he stated that "private sector opportunities have dried up." He said, "Until 2008, business [in the private sector] was good. We began bidding on public sector work but the bidding process was horrible." He added, "We lose money on public sector work."

Interviewee #2, the white principal of an energy company, stated that "there is a difference in profitability; private sector work is more profitable than public sector work."

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that profitability is stronger in the private sector.

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "The private sector is definitely more profitable."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that profitability does differ between the public and private sectors. He said, "Margins in private sector work are much better but it depends on the job, though. If we are close by, it is more profitable. If we have to travel for the job, our margins get eaten up."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that profitability does differ between private and public sectors. He said, "Private work tends to have more money and you can recoup costs because they pay faster. You don't have to carry costs and sweat it out to get paid like you do with public sector work."

Interviewee #28, the white male president of a certified majority DVBE, said the greatest difference between working in the public sector is the need to pay prevailing wages for public sector work. He added, "There is more profit in private sector jobs, because it is not necessary to pay prevailing wages."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said, "The private sector is more profitable. You know what your profit will be. Too much bureaucracy in the public sector lowers profitability. There is less cost efficiency in the public sector."

However, some interviewees reported that profitability in the public sector and the private sector are similar or that public sector work is more profitable. Interviewee #3, the white male owner of a concrete and construction company, said that profitability in the public and private sectors are similar. He said, "The work is the same and the money is similar but it is harder to find out about work in the public sector."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that "in our industry profitability is similar for public and private sector jobs."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that profitability does not differ between the private and public sectors. She said, "Our prices are the same for both public and private sector but we will work on rates for customers" in either sector.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that profitability is the same in either the public or private sector but indicated that he had trouble being paid in the few private sector jobs he worked on.

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that profitability does not differ between private and public sectors. She said, "We know the cost of our materials, our operations and what margins we have to charge. It doesn't matter whether it is public or private sector from that standpoint."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, said, "Profitability does not differ much between the sectors and that any differences I see are purely situational."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that there are no substantial differences between working in the public sector versus the private sector. She said, "We charge the same for our services regardless of the client."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated that their profitability does not differ between the sectors.

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "Profitability is the same for our products regardless of the sector. We price jobs similarly."

Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "Doing the work in the private and public sectors is the same. I have had good experiences in both and the profitability is about the same in both. I charge the same rate to both. "

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that profitability does not really differ between the private and public sectors for her firm. She said, "We will get public sector customers who will tell us what their budget is and how much I can bid but what we will do for a certain amount of money doesn't change just because it is public or private sector. We have customers in both that will ask us 'What can you do for me for $16,000?' for example. But that doesn't impact our profit; it just impacts what they will get."

Interviewee #26, the female majority president of a WBE-certified construction company, said, "There's no difference in profitability."

Interviewee #29, the white male owner of a concrete and landscaping company, reported that profitability is the same in the private sector as it is in the public sector.

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, in response to a question of which sector was more profitable, said that there was no difference in profitability between the public and private sectors.

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, stated, "There is more profit in the public sector. We have worked out a model that makes it more profitable to do public sector work."

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, reported that public sector work had been more profitable, but now it's difficult to determine whether public or private sector work has more profit potential.

Interviewee #35, the African American male owner of a certified electrical company, said, "There's more profit in public work if you can win and get in line."

Many interviewees reported that it is easier to secure work in the private sector. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified traffic engineering company, stated that that work is tougher to get in the public sector.

Interviewee #5, the sales manager of a non-certified concrete paving company, mentioned that getting work in the private sector is much easier than the public sector. He said, "The public sector is extremely cumbersome and most often it isn't worth the time investment."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "It is an easier process getting work in the private sector. There is less paperwork."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that it is easier attempting to get work in private sector compared to public. She said, "They both have the same type of needs and we charge the same whether it's public or private. But, with most public sector work, you have to break down everything in a huge way. You have to itemize everything which is a pain. Public sector work also usually pays more slowly too."

Interviewee #29, the white male owner of a concrete and landscaping company, said that it is tough in the beginning to know what is required to get public sector work, and that getting work in the private sector is easier because it is more straightforward.

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that securing work in the public sector is more difficult. He stated, "Private is easier. They throw a [request for bid] out there, you give them a number, and it's over with. You don't have to go through review boards, this criteria, that criteria. Public makes it a lot harder than it has to be."

Interviewee #33, the African American male owner of a certified concrete company, said, "Online bidding simplifies bidding in the public sector, but attempting to get work in the private sector is easier and we have a higher success rate."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said it is easier to secure work in the private sector "because my friends know me and call me about projects. In the public sector it's all through subcontracts."

Interviewee #38, the white female principal and partner of a WBE-certified environmental consulting firm, said, "Getting work in the private sector is much more simple. They choose based on reputation and quality of work. There's not the elaborate contracts that need to be approved by everybody. You can spend a lot of time and money going after a public sector job and not get it."

Interviewees SM#8 and #21, both white male owners of engineering firms, brought up the frustration small businesses have with the legal language in public sector contracts. They perceive that it is nearly impossible to have unfavorable contract language changed. Interviewee SM#15, a representative of the Southern California Contractors Association, said that public agencies will change contracts. "Don't assume that everything is non-negotiable. Unfortunately, that may have been the case in the past."

Receiving timely payment was an advantage of private sector work for some firms. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, discussed the substantial difference in payment of invoices, stating "public sector agencies average 120 days payment, while private sector pays in approximately 30 days."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported the substantial difference between public and private sector is that the private sector work generally pays quicker.

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that the main difference between working in the private sector versus the public sector is how quickly you get paid. He said, "Private work pays a lot faster. Caltrans doesn't pay timely to primes who pass that along to subs. It's almost like they are trying to run you out of business by not paying you."

Some interviewees identified other advantages to the work in the private sector compared with the public sector. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, said, "The actual work in the private sector is easier to complete because the sign-off is with the customer as opposed to the public sector where the approval process often has multiple approval and sign-off steps." Overall, the work in the private sector is better for business.

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, mentioned that there are some noticeable differences between the public and private sectors. He stated, "In the private sector some of the firms and jobs are less regulated than the similar public sector jobs. Generally speaking the public sector jobs are more formal but that does vary by jurisdiction. Some of the jurisdictions are less regulated than others."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that the biggest difference in working in the private and public sectors is bonding. She said, "Bonding in the public sector is prohibitive for a small business like ours."

Interviewee #29, the white male owner of a concrete and landscaping company, said that public sector work is more structured, and that he has more freedom on private sector projects. He said that performing work in the private sector was easier, because there are more issues to deal with in the highly structured public sector.

Interviewee #30, the white female vice president of a certified micro grading, concrete, and paving business, reported that there were substantial differences between working in the public sector versus the private sector. She said the differences were due to payment, inspectors, and paperwork. She added that the company could get more accomplished when working on private sector jobs, because public sector work involved meaningless regulations.

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, identified several differences in working the public sector versus the private sector. He said, "[In the public sector] prevailing wages are huge, and doing certified payroll. You have to figure on a bit more clerical work."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, noted substantial differences between working in the public sector versus the private sector. He said, "Public work involves prevailing wage, certified payroll, and more paperwork."

Interviewee #33, the African American male owner of a certified concrete company, said, "Public sector work requires certified payroll and owner insurance. Private sector work has lower workers' compensation rates." He also identified differences in securing work in the public and private sector, because the "public sector is done through online bidding: fill in numbers. Getting work in the private sector involves old fashioned networking and marketing."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, noted differences between working in the public sector and the private sector. He said, "Usually there's a contract [in the public sector]. If you're the prime, you have a contract and you're locked into certain things, and if you're working for a consultant who has a contact you're locked into his contract. In the private sector, that's usually just handled over the phone."

Interviewee #35, the African American male owner of a certified electrical company, said, "Paperwork, details, and qualifications in the public sector are more extensive."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said that one difference between public sector work and private sector work is that "meetings and reviews drive up the costs for public sector projects."

Interviewee #37, the African American male president of a certified electrical company, said, "It's easier [to work] in the private sector. I'm having to make some modifications to my company to work in the public sector arena. What I mean by that is I'm having to be a signatory contractor with the unions in order to do primarily public sector work. The unions have a tight grip on everything here."

Greater certainty of being paid at all was an advantage to public sector work for some firms. Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said, "I've done several residential projects in the past few years where we didn't get paid." Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said, "We've had problems getting paid for private sector work, but we know that we'll get paid for public work."

Interviewee #37, the African American male president of a certified electrical company, said, "Private sector work is just tough to get, and harder to force your hand to get paid. Public sector work is easier to get paid and there is more money there."

Some interviewees reported that it is easier to secure work in the public sector. Interviewee #37, the African American male president of a certified electrical company, said, "Private sector work is just tough to get, and harder to force your hand to get paid."

Some interviewees identified other advantages to the work in the public sector. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, stated that the process is different between private and public sector jobs, mainly due to the DBE/MBE/WBE set-asides in the public sector market.

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said, "Doing work in the public sector is easier because there are well-defined requirements."

Other interviewees reported that there are no substantial differences in their experiences pursuing and performing work in the public and private sectors. Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that "there is no substantial difference in the work, that it is all just business and there are challenges in both public and private sector work."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said there are no substantial differences between working in the public sector versus the private sector because they provide fuel hauling services.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said it is hard for small businesses in either sector to find work or primes who have might need subs. He said, "How do you identify the pieces that you might be qualified for? You can't bid on the whole thing [as a small business] so only big firms get the work. "

Interviewee #13, the African American female owner of a non-certified trucking company mentioned that it doesn't differ between private and public sector work. She stated, "The work is just the same for us, doesn't matter if it's for the city or for a private company."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that there are no substantial differences between working in the public sector versus the private sector except that there is no private sector work available in their area now.

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that there is no substantial difference between working in the public sector versus the private sector. He said, "There is not a project we feel we can't handle. We don't see any big differences between public or private sector work in terms of getting the work."

Interviewee #20, the white male owner of a majority-owned demolition and loading company, stated, "The work is always the same due to the nature of my work. It is all the same to me."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that there are no substantial differences between working in the public sector versus the private sector. He said, "No, it is tough in either. Some customers will pay fast but most lag for more than 40 days. That is true of public and private work."

Interviewee #26, the female majority president of a WBE-certified construction company, said, "Doing work in the private sector is about the same as working in the public sector."

Prime Contract and Subcontract Work.

Some of the firms interviewed work as both a prime contractor and as a subcontractor, and some primarily as a subcontractor. The types of work performed by the firm sometimes influenced whether the company worked as a prime contractor, subcontractor, or both.

Some interviewees reported acting equally as a prime and subcontractor. For example, Interviewee #2, the white principal of an energy company, stated his firm works as a subcontractor as well as a prime vendor and that each opportunity dictates the role available.

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that they work both as a prime and subcontractor. He said, "It is a mix, there is a lot of sub work out there and we have different equipment that is needed that a lot of primes don't have."

Interviewee #37, the African American president of a certified electrical company, said that he is a subcontractor about 50 percent of the time and a prime contractor 50 percent of the time. In explaining why his company serves in a particular role, he replied, "Those are just the jobs that become available. I take what comes along."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that although his company primarily works as a prime contractor, "Sometimes the company will focus as a sub so we don't have to pay prevailing wage."

Some of the interviewees who were primarily prime contractors were seeking more subcontract work. Interviewee #1, the Hispanic owner of a non-certified construction business, stated that he is mostly a prime contractor but that he is trying to get away from being solely a prime contractor in order to do more subcontractor work.

Interviewee #3, the white male owner of a construction company, said that he works 90 percent as a prime contractor, but that "I've done some sub work and would like to know about how to find more."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, indicated that he currently works 100 percent as a prime contractor but said, "I want to sub to larger firms, that's why I got certification."

Some interviewees, including minority- and women-owned firms, primarily worked as a prime contractor. A number explained why. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "A large portion of our business is done as a prime contractor in the residential and private sector areas." Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that her company only provides services directly for her customers who need deliveries.

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that her firm works as a prime 90 percent of the time. She said, "The nature of our work is that we are the prime. There is not a lot of subcontractor work available for the specialty services we provide. If you don't have your foot in the door as a prime, you can't get the work."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American-owned electrical contractor, said, "We work 100 percent as a prime contractor. It is easier to work as the prime because we don't have to deal with a general contractor."

Some interviewees reported primarily working as a subcontractor. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, indicated that her company works solely as a subcontractor because they are simply a materials provider for others. She said, "We provide a service based on what our customers are looking for, so we are always a sub."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "We always work as a subcontractor. We sell directly to general contractors."

Interviewee #20, the white male owner of a demolition company mentioned that his company is most often a subcontractor. He stated, "I almost always work as a subcontractor for the 'big brother' company. They supply most of my business and the model works well for me."

Some interviewees noted that their certification status influenced whether they worked as a prime contractor or as a subcontractor. Interviewee #21, the white male owner of a DVBE-certified highway construction company, mentioned that the majority of their work is done as a subcontractor with an occasional job as the prime. He stated, "85 percent of the time we act as a subcontractor. This is purely a niche play because of the DVBE certification."

Interviewee #28, the white male president of a certified majority DVBE, said that his company performs as a subcontractor 80 percent of the time and 20 percent of the time as a prime contractor.

Some interviewees reported acting primarily as a subcontractor due to their size and sometimes due to an inability to secure bonding, insurance, or financing, or due to other barriers. Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated the reason that they act as a sub is that "we can't afford prime insurance requirements or bond requirements. Don't think we can do it as a prime."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that his firm always works as a sub. He said, "We have to be a sub to bigger firms because we can't compete for the big jobs. The way jobs are spec'd makes it impossible for firms our size to be primes."

Interviewee #24, the Hispanic female owner of a non-certified asphalt and construction company, said that they work primarily as a sub because "we can't compete with the big guys for the type of work we usually do so we have to work with them as a sub."

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, explained that they serve more often as a subcontractor because they do not have the necessary working capital to be the prime on larger jobs.

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated they largely work as a subcontractor. She stated the reason for this is that "the projects are usually so large and diverse that it is rare that a project will just a have environmental studies focus."

When asked about prime contract opportunities, Interviewee SM#6, the female owner of a DBE-certified construction firm said, "The prime jobs for [her type of work] that are coming out, they're too big for me. I can't get a bond for $2 million." "I know they say they have bonding help opportunities, but again that's going through small business stuff … there's a lot of paperwork."

The female owner of a construction business and representative of Women Business Owners and Executives [Interviewee SM#11] reported that there are many companies out there that could bid that do not bid. "[These barriers keep] some people from bidding that could bid a lot of work."

Subcontractor Relationships with Prime Contractors.

Many interviewees who act as subcontractors reported that they often secure work with prime contractors through their past relationships with those firms. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that their work with primes is largely based on past experience.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "We got on projects as a subcontractor based on previous contact with prime vendors that need specific concrete paving skills." He stated that "word of mouth is a big deal for us in this business."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that "the company gets on projects based on previous relationships with primes; it's the same for private and public sector work."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that she markets her firm to primes through phone calls or through past experience. She said, "Primes will let us know when they are bidding on a job and ask us for a bid. Not all of them do but we will get a request for a quote for a set amount of volume."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, indicated that they get on projects as a subcontractor by working with previous customers, responding to invitations to bid, and through Caltrans' invitation to bid (ITB) system.

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "We get on projects because of the work we have done with previous customers."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that his company gets on projects as a subcontractor through relationships. He said, "We are usually tracking things pre-bid so that we have an understanding of what's coming up. We try to get in depth information on upcoming bids by being proactive and working with our customers to help them submit the bid."

Interviewee #29, the white male owner of a concrete and landscaping company, said that his company is selected as a subcontractor for both public sector and private sector jobs based on his work performance and business relationships.

Interviewee #33, the African American male owner of a certified concrete company, said his company gets on projects as a subcontractor "through past relationships."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that his firm gets on projects as a subcontractor through past relationships and sometimes because firms know he has an MBE certification. He said, "Primes contact me all the time because they know that we deliver when we say we will. We also get asked for our certification information but I don't know how they use it or if they use it."

The Asian-Pacific American owner of an engineering business and a representative of the American Council of Engineering Companies-California [Interviewee SM#2] reported, "The large firms know what we can do … they use us as a subconsultant. We team fairly easily with [the big firms], they know we can do the work." He said that he does not have issues with primes listing his firm and then not using it. "The difficulty we've had in the past is exclusivity … which has gone away at this point. I would say a year or two ago that was happening. You have a small pool [of primes] to begin with and then we're being asked to be exclusive, and your chances dissipate if you can't be on several teams."

Other interviewees cited word of mouth, networking and prime-initiated contacts as ways they obtain opportunities to bid as subcontractors. Interviewee #22, the Hispanic male owner of a non-certified construction company, said that his company gets on projects as a subcontractor through word of mouth and networking. He said, "A lot of primes know us and will call us when they need us. We also have people call us when they see our trucks on the road or at other job sites. We also drop in on businesses to see if they have work they might need us to do."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that her firm gets on projects as a subcontractor from a variety of sources. She said, "We get a lot of business through word of mouth and the good rapport we have with past clients. We also get a lot of business through the Yellow Book."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, reported that their subcontracting work is obtained almost exclusively through word of mouth.

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said his company gets on projects as a subcontractor through word of mouth. He said, "Word of mouth is standard for private sub work. There is no difference between getting on as subs when there are minority or woman goals."

Interviewee #30, the white female vice president of a certified micro grading, concrete, and paving business, said that they get on projects as a subcontractor when the prime contacts their company.

Interviewee #37, the African American male president of a certified electrical company, said he get on projects as a subcontractor because he is "solicited by general contractors."

Interviewee #3, the white male owner of a concrete and construction company, said that he gets on projects as a subcontractor through Craigslist and word of mouth. He said, "I'll post on Craigslist every week to see if anyone bites."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, discussed that he get on projects as a subcontractor through his professional contacts.

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, stated, "We get on projects as a subcontractor based on our certifications and on our price."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "We get on projects by submitting bids. We do this all the time. The largest part of my days is spent submitting bids. This is the way that it works in the industry."

Interviewee SM#16, the white female owner of a DBE-certified engineering company, said that most of her work comes from word-of-mouth. She said that it's difficult to make connections with large prime contractors.

A number of interviewees, including some certified firms, reported that the same prime contractors solicit them for work in both the public and private sectors. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, mentioned that they have done work with the same primes on public and private sector work.

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that primes use the company for both public sector and private sector work due to their previous work experience and expertise in the environmental consulting field.

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that the same primes use his firm on public and private sector work. He said, "They use us because they know we will deliver when we say we will."

Interviewee #28, the white male president of a certified majority DVBE, said that primes that use his company on public sector work also use his company on private sector work because they are pleased with the quality of his company's work.

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said prime contractors that use their firm on public sector work also use them on private sector work because of their working relationships.

Many minority- and women-owned firms that were not certified as DBEs, MBE/WBEs, or SBEs also reported that the same primes will use them on public and private sector projects. Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that primes that use her company on public sector work also use them on private sector work. She said that the work is all the same as they provide fuel hauling services to customers regardless of whether they are public or private sector.

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, mentioned that the same primes use him on public and private sector work. The type of work that he performs is not impacted by public or private sector contracts.

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, said the primes use them for public sector and private sector work. She stated, "We get more work based on the quality of our product and because of how we work the primes come back to us."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that primes use them on public sector work and will also use them on private sector work. He said, "We have specialty equipment like Tier III equipment that a lot of primes don't. That is the majority of our business."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that primes use her firm on public sector work and private sector work. She said, "The work is the same whether it is public or private sector. They need asphalt and we provide it — there is no difference to us."

Many interviewees, including minority- and women-owned firms, reported that primes are open to receiving bids from their firms. Interviewees #5, 13, 15, 16, each representing minority- or women-owned firms, did not recall any instances when they had been denied the opportunity to submit a bid to a prime contractor.

Interviewee# 1, the Hispanic male owner of a non-certified construction and concrete business, said that he has never been denied the opportunity to submit a bid or a quote. He went on to say that "rates are really tight so there are some things we don't bid on because we know the margins are too tight."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that his firm has never been denied the opportunity to submit a bid or quote to a prime where they are qualified to do the work. He said, "There are times where we might not have the right equipment but that isn't the same as being denied."

One interviewee pointed out that submitting a bid does not mean that the bid would be considered by the prime. Interviewee #37, the African American male president of a certified electrical company, said about prime contractors, "They'll let you send a bid all day long. I don't know if they read it."

Most representatives of majority-owned firms also indicated that they did not know of any instances when they were denied the opportunity to submit a bid to prime contractors. However, Interviewee #19, the white male safety and training manager of a majority owned concrete and construction company, said that they have never been denied the opportunity to submit a bid or quote. He said, "No, we've never been denied by a customer, but if it is a union job, we may not be able to bid. Union issues are difficult."

Some interviewees reported that they have been denied the opportunity to submit a bid or price quote to a prime contractor. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that she has been denied the opportunity to bid or provide a quote for a particular job. She said, "We had a customer who was threatened with sanctions if they used us. It was based on a licensing issue we had with Caltrans so we were denied access and participation by Caltrans. It was based on a lack of communication because Caltrans said we weren't current with our licenses when we were."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported that they have occasionally been denied the opportunity to submit a bid. She said, "This is because we are women-owned."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that his company has been denied the opportunity to submit a bid or price quote to a prime several times. He said, "We have had instances where we wouldn't drop our price to beat someone else's so we weren't allowed to submit a bid."

Interviewee #33, the African American male owner of a certified concrete company, said that his company has been denied the opportunity to submit a bid or price quote to a prime contractor. He said, "They were afraid it would look like as though my company was an MBE front company."

One interviewee indicated that he had been denied an opportunity to submit a bid to a prime because his firm was white male-owned. Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, indicated that his company had been denied an opportunity to submit a bid when the prime contractor needed a woman-owned, or other category, company. He said, "They needed so much woman-owned or other category and they wanted to do the other 80 percent." He indicated that this happened often. He said, "They had to fill their quota."

The Native American owner of an engineering-related company indicated that his firm has encountered teaming challenges. "Unless you're doing $2.5 million or more, they [primes] don't want to talk to you … they don't want you on the team." He added, "So it goes to size of firm again … you're a hobby business if you're $2 million or less."

Interviewee SM#1, a Hispanic contractor representative of Hispanic Contractors and Suppliers Association, said that Kiewit Corporation, a large general contractor, has its own electrical company, Mass. Electric, that it will use as the electrical subcontractor. "They don't farm any of it out … I've tried."

Some interviewees reported that the same prime contractors do not solicit them for work in both the public and private sectors. Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "There are definitely firms that only use us on public works projects. They use us because of the DVBE certification. They need us as much as we need them."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "We have not had a situation where a public sector project prime has asked us to work with them on a private sector project."

Subcontractor Experiences Working with Prime Contractors.

Many interviewees reported that there are certain prime contractors that they prefer to work with due to established relationships or for other reasons. There are prime contractors that interviewees reported trying to avoid. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "There are always people you do not want to do business with for a variety of reasons — usually has to do with slow or late payments, or their overall job management style."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that they have preferred prime vendors that they often work with based on previous work experience. She stated, "There are primes we will not work with based on bad experience and word of mouth."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that there are primes that she prefers to work with or has established a relationship with. She said, "Yes, the ones who pay quickly and on time. We have good one-on-one relationships with many of our long-standing customers."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that "some [primes] do poor work and I won't work with them. I don't want my name attached to shoddy work."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that they have primes they prefer to work with. She said, "We have long standing relationships with a lot of customers who we work with all the time. They know the services we provide and trust us to get the job done." She went on to say, "There are some customers who don't pay quickly so we won't work with them but generally we will work with anyone who needs our services as long as they pay us in a timely fashion."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, said that he has preferred primes he works with and others that he will not work with. He added, "Over the years I have found other professionals that I want to work with because they do business like I do, others I won't work with under any conditions."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "There are primes we prefer to work with based on our solid relationships." She also indicated, "Due to bid shopping and overall competition there are primes we just won't do business with."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, stated, "We have a relationship with a group of primes that we usually work with. The companies do business like we do business and that's why we stick with them." He stated, "We have enough solid relationships that we don't need to work with companies we don't like."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "There are primes we always want to work with — we know each other's styles and the chemistry is good." [This interviewee did say there were no primes the company would never work with.]

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "For the reasons that you'd imagine, we like to work with primes we know and that know us."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that there are primes that his company prefers to work with. He said, "Yes, there are some companies we work with all the time. It can be due to their people, how quickly they pay, or based on the amount of work they give us. It depends." He said, "If someone doesn't pay quickly, we won't work with them. We can't afford to do business with anyone when they expect us to be the bank."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that there are primes that his company prefers to work with or has established a relationship with. He said, "There are some we have worked with over and over and have good rapport with. We naturally work with them."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, mentioned that there are primes that they prefer to work with based on their pay policies.

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that there are primes he prefers to work with. He said, "The ones who pay and who can get us steady work we like to work with again and again."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said, "We always prefer to work with contractors who pay us in a timely manner." She said, "There are other primes who won't pay quickly or want to pay in installments. Why should I get paid in installments when I've done all the work? It isn't fair to a small business."

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, stated that there are prime contractors that his company prefers to work. He said, "They have your back, treat you fairly, and pay timely."

Interviewee #29, the white male owner of a concrete and landscaping company, reported that there are prime contractors that his company prefers to work with because they have experienced a good working relationship.

Interviewee #30, the white female vice president of a certified micro grading, concrete, and paving business, said there are prime contractors they prefer to work with because they pay promptly or pay within a feasible time. The white male president of this company said that there are prime contractors his company would not work with because they do not pay within a reasonable time period. He said, "Everybody right now wants to hold onto their money until the last minute. There are a lot of them I know that get paid and they'll just hold it and hold it to get the last bit of interest off it. They just don't care." He continued, "I can make some work, but not if I'm not going to get paid for 90 — you know — 100 days. By then all my payments to my creditors — you know — the profits are cut in half."

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, indicated that there are certain primes he prefers to work with. He said, "Familiar is nice. Knowing that you're going to get paid is nice."

Interviewee #33, the African American male owner of a certified concrete company, said there are some primes that his company will not work with. He said, "Some won't pay you. Some list you in their bid, and then shop around for a week before they turn in their numbers. They should not be allowed to shop after bid opening."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "I've had to chase people for money a couple of times. I'll never work for those people again."

However, some interviewees said that there were no primes that they would never work with (for example, Interviewees #15, 20, 26, 27 and 28).

Interviewee #39, a representative of the Young Black Contractors Association, said there are no primes that their members won't work with [even if they would prefer not to]. He said, "We don't have that luxury. [Specific company] is one of the most racist, but because they have such a large company, they get away with whatever they can. We don't have the luxury to say we won't work with them because they're going to treat us bad."

Other interviewees reported that there are no primes with whom they would prefer to work. Interviewee #3, the white male owner of a concrete and construction company, said that there are no prime contractors with which he would prefer to work with or with which he would not work. He said, "If the opportunity is good, I'll work with anyone."

Interviewee #26, the female majority president of a WBE-certified construction company, said that there are no primes that her company prefers to work with or has established a relationship with.

Most of the interviewees who had worked with MBE/WBE/DBE prime contractors reported having a positive experience. Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "Our experience with DBE/MBE/WBE primes has been good. I wouldn't say it wasn't any better or worse than working with non-DBE/MBE/WBE primes though."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said about his company's experience working with DBE/MBE/WBE prime contractors that "DBEs are smaller and pay faster. Non-DBEs find excuses to delay payment."

Interviewee #39, a representative of the Young Black Contractors Association, said it is different working for a WBE/MBE prime. He said, "Yes. The difference is that you actually feel like you're wanted. You feel like this is going to be a good job and we can leave that job every day without tension. It all has to do with the leadership. When you have a bunch of rednecks standing around talking about their families, you don't know how to communicate with people that aren't in your community. You have no idea what these people are going through. Larger primes have no idea what it's like to be on our position; they don't even know anyone in our community. [The larger primes] don't have time for you."

Some interviewees reported having a negative experience working with an MBE/WBE/DBE prime contractor. Interviewee #28, the white male president of a certified majority DVBE, said that the poor workmanship and inability to speak English causes him to believe that many MBEs are not qualified and do not hold proper licenses.

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said his company's experience working with DBE/MBE/WBE primes was that some WBEs subcontract out 100 percent of the work and make a huge profit. He said, "I do a lot of work for a woman-owned business. She contracts with me to do her work, and it's amazing; she does good. She does good! I'll bid a job for 50 grand and she gets 100 to do it. Gosh, I'd make 8 percent if I did it." He continued, "The woman-owned, and all of them, it's more like they just get the job and sub it out. Most of them don't even do any of the work at all. They're very good at bidding the job and getting the job. Like they have me bid it to them, double it, and I do it. It's crazy. The ones that are good at it are making very good money with no output, no overhead, and no risk."

Contractor Reported Utilization of DBE and Non-DBE Subcontractors in the Public and Private Sectors.

Many prime contractors reported that they utilize subcontractors and tend to use firms that they know and trust. Although some prime contractors reported that they never use subcontractors, many of those interviewed do use subcontractors. Many indicated that they tend to use subcontractors that they know and trust.

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, stated that his solicitations for bids are mostly relationship based. He added that there is no difference between DBE/MBE/WBE versus non-DBE/MBE/WBEs as he determines who he will work with largely based on past relationships and experience. He said, "It doesn't matter if they are DBE/MBE/WBE or not, we ask for bids and have them provide estimates."

Interviewee #2, the white principal of an energy company, stated that, "we select subcontractors based on past work experiences."

Interviewee #3, the white male owner of a concrete and construction company, said there are some subs he uses all the time. He said he has established relationships with some concrete pump companies, demolition companies, and others.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated that "as infrequently as we use subcontractors, we do try to use the same ones when we can. We know that they do a good job and know what to expect of them."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, said that he uses the same subcontractors over and over. He mentioned, "I use colleagues and professionals that I have trust with, people that I have good working relationships."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that they select subcontractors based on past experience. She said, "We use the same guys again and again when we need them."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that his company selects subcontractors based on past relationships and networking. He said, "If we need a certain type of truck that we don't have, we have a list of subs that we call on." He went on to say that there are subs that his company will not work with. He said, "If the quality of their work isn't good or they don't deliver when they say they will, we won't use them." He said that his company's experience working with DBE/MBE/WBE subs is not significantly different compared with non-DBE/MBE/WBEs. He said, "If they do good work, we will use them." He also reported that his process is the same for private sector jobs compared with public sector projects.

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that her firm does have established relationships with many subs and will use them all the time. She said, "We have subs we know will do good work so we use them all the time." She also reported that this process is the same for private sector jobs compared to public sector work.

Interviewee #26, the female majority president of a WBE-certified construction company, indicated that her company has established relationships with subcontractors they try to use all the time. She said that said that subcontractors are selected by her company for private and public sector jobs in the same manner.

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said, "We select subcontractors based on our prior history with them." He went on to say, "There are some subs we won't work with." He added, "There are some minority subs we won't work with because of poor work performance."

Interviewee #30, the white female vice president of a certified micro grading, concrete, and paving business, said there are subcontractors that they have established relationships with and try to use all the time. The white male president of this business reported no difference in working with DBE/MBE/WBEs and non-DBE/MBE/WBEs. He said, "It's about the same, you know, they're just people."

Some interviewees reported that there are no subcontractors they would not use. Interviewee #3, the white male owner of a concrete and construction company, said there are no subs that he will not work with. He said, "I wouldn't rule anyone out, if they are qualified, I would use them but we typically do everything ourselves."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated that there are no subs that they will not work with.

Interviewee #29, the white male owner of a concrete and landscaping company, said that his company would work with any subcontractors.

One interviewee reported that he looks to different subcontractors on public versus private sector projects. Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that the process [of hiring subcontractors] differs between private and public sector jobs. He said, "You can get the numbers down [in the private sector] because of [the absence of] prevailing wage, and it's more competitive. For prevailing wage, the wage market is double." He added, "On private [jobs] you can get a guy to come in and just bid something. He'll just do it himself and doesn't have to do the paperwork and show the prevailing wage even on himself. It's a lot less headache. Things get just done between him and me with no paper trail."

Some prime contractors report that DBE/MBE/SBE/DVBE goals affect their use of subcontractors for public sector contracts with goals. Interviewee #2, the white principal of an energy company, stated the whole bid process differs from the public and private sector and that his firm prefers to use contractors based on "comfort and previous experience." He stated "We do have a network of DBE/MBE/WBE contacts to include in public sector bid/procurements, if necessary."

Interviewee #29, the white male owner of a concrete and landscaping company, said that he frequently solicits DBE/MBE/WBEs through the Caltrans website. He added that there are no subcontractors that he uses for public sector projects that he would also use for private sector projects. He explained, "Most people that are in public works are geared up to pay a higher rate of pay. Their employees are usually union and they are set up to pay a prevailing wage that the private sector market can't bear."

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, stated that there is a difference between projects with goals and ones without. He said, "Projects with goals encourage the solicitation of minorities."

Interviewee #37, the African American male president of a certified electrical company, identified differences in selecting subcontractors in the private sector versus the public sector jobs. He said, "In the private sector, it's more of a closed loop. In the public arena, because of the goals that they have to meet, they include a lot more contractors that would not ordinarily be included in the process."

Interviewee #30, the white female president of a certified majority micro grading, concrete, and paving business, said that if there were goals, the company would try harder to hire DBE/MBE/WBEs.

Some interviewees said that, for projects without goals, they do not typically make efforts to solicit bids from DBEs. Interviewee PH#27, a representative of an engineering management and environmental company, said, "Whether or not DBE prime contractors fail to solicit bids, the simple answer is we're all very busy. If we don't have to do it, then we don't have to do it, and I think the answer is most likely that outreach is not being done unless there are goals."

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, stated that he "rarely solicits DBE/MBE/WBE subs for bids because they are not required in private sector bids."

Interviewee #2, the white principal of an energy company, stated he infrequently solicits DBE/MBE/WBE bids as the contract requirements for the jobs they pursue often don't require it.

Interviewee #3, the white male owner of a concrete and construction company, said that he has not solicited DBE/MBE/WBE subs for work because he wouldn't know where to find them.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "We don't need DBE/MBE/WBE subs for the type of work we do."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, said that he does not solicit DBE/MBE/WBE for bids. His work does not require that he have these type of resources included in his work.

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that they do not usually solicit DBE/MBE/WBE subs for bids/quotes.

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that they do not solicit DBE/MBE/WBE subs for bids/quotes. She said, "I didn't even know these programs existed so I wouldn't know to specifically seek them out."

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, said he does not intentionally solicit DBE/MBE/WBE bids. He said "I'm sure I have used people in that category but I wasn't specifically targeting them."

Interviewee #38, the white male partner of a certified woman-owned environmental consulting firm, reported that his company rarely solicits DBE/MBE/WBE subconsultants for bids or quotes. He said, "I can think of a case or two where it mattered in terms of the contract goals."

However, Interviewee #26, the white female president of a WBE-certified construction company, stated that there is no difference in soliciting contractors for DBE/MBE/WBE goal projects versus non-goal projects.

Some interviewees reported utilization of minority-owned and female-owned subcontracting firms in both the private and public sector. Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated, "We occasionally solicit DBE/MBE/WBE subcontractors for bids or quotes and will use the previous relationships as well as public lists to find these subcontractors." She also stated that "these subcontractors are used for public sector and private sector opportunities alike."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that they do solicit DBE/MBE/WBE subs for bids and quotes. He added, "We frequently reach out to DBE/MBE/WBE subs for our projects."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company; stated that his firm does use DBE subcontractors. He said, "We gravitate to other DBEs. We solicit them frequently. We solicit firms through referrals or we solicit former employees."

One interviewee reported difficulty finding certified subcontractors to hire. Interviewee PH#5 said about the Caltrans civil rights database, "It's outdated, it's not user friendly, it's not kept current. There is no certification expiration date posted for the firms we do find. That, I think, is a problem because it's left to the prime to verify they're currently certified at the time of bid. I think it is one of the things that should be on the database. I would like to know how often the database is maintained, by whom, and how often, because there is a lot of information that is outdated. Every time we do a search, there is firms that phone numbers are disconnected, e-mails not valid, letters come back. It is hard for us to find firms continually that are actually valid. We spend a lot of time, wasted time, on the firms that we get no response from. I think it could be better spent on firms actually valid in the database we can outreach to."

Some interviewees reported positive experiences working with minority-owned and female-owned subcontracting firms. Interviewee #26, the female majority president of a WBE-certified construction company, stated, "We've had good experience working with minority and woman-owned subs."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said about his experience working with DBEs that "DBEs are very good, better than non-DBEs."

Some interviewees reported mixed or negative experiences working with or attempting to work with minority-owned or female-owned subcontracting firms. Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said, "There are some good woman-owned companies. Some minority companies have poor quality."

Interviewee #29, the white male owner of a concrete and landscaping company, stated, "Usually minority-owned subs are more expensive and my experience is they're not as qualified to do the work." He indicated that his experience with WBEs was the same as working with MBEs.

C. Doing Business with the California Department of Transportation

General Perceptions.

Some interviewees reported a positive overall experience performing work for Caltrans. Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that her company has done work with Caltrans in the past. She stated, "Our experiences have been good and the work done with Caltrans is the same … services we perform for other clients."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, mentioned that overall working with Caltrans is easier than other public works groups. He stated, "It is easier to work with Caltrans. Their plans are more straightforward. They are easier to understand and they are generally standard designs."

Interviewee #29, the white male owner of a concrete and landscaping company, said, "Caltrans is great to work with. They're extremely fair and satisfactory — has been my experience."

Some interviewees reported negative overall experiences performing work for Caltrans. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that Caltrans is very difficult to work with. She said, "Caltrans is adversarial and treats us with suspicion. Why do I have to constantly defend that I am not a front?" She added that "Caltrans is supposed to help level the playing field for companies like mine but they are really just another barrier" to remaining profitable.

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that she believes that Caltrans is so heavily engineering-oriented that their culture is engineer driven. She reported that it is difficult to get through Caltrans' cultural bias against women and minorities.

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, in explaining why it was more difficult to work with Caltrans, said, "Caltrans had more inspectors and it was more stressful."

Interviewee PH#17, the female owner of a DBE-certified materials supplier firm, said, "I stand before you this evening on the verge of going out of business. This isn't because of any contractor, it's not because I don't know what I'm doing, and it isn't because of the economy. I can say with 100 percent certainty that it is because of Caltrans. If I sound hostile, it is because I am. I have been involved in two totally separate situations with Caltrans and have been treated with such disdain that I wonder why I continue in this program. And the answer is: Because I have to. If I quit, I will have to sell my house and go on welfare."

Interviewee WT#11, a representative of a small firm, said, "I run a very small business and we have had nothing but problems with Caltrans projects. So much so that I rarely say yes to primes who want us on their teams. So, needless to say, I would not recommend anyone going after Caltrans projects."

Interviewee WT#16, a representative of a minority-owned construction firm, said, "It all started years prior [my company] would bid and win awards for the field office and the experience was not good. From the office manager to the field inspector, [they] all were very difficult with my company and picked on us during the entire process of performing the project. Most times I did experience verbal abuse along with right cheating from this particular office. Sometime I had to settle for less payment than my company had actually performed. The subtitles were not accepted on the basis of the specifications but rather either accepted or rejected on their personal preference. While having my company perform in a very unfriendly manner the other contractors were allowed to flourish and ways were made easy for the accepted or what they view as elite."

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that relative to other public sector work, Caltrans was more difficult because there were too many inspectors, no one makes decisions, and the specifications and tolerances are too tight. He said, "Caltrans has specs. Our industry is ever changing. I mean yearly it changes big and they hold you to specs from the 70s. You know, I can give them a lot better product today than I could have then, but they're holding them to those specs."

The white male owner of an SBE-certified engineering company reported that he has submitted with Caltrans multiple times. "The individuals of the firm have experience, but the firm itself did not have experience, and that was points against them." He explained that with A/E, licenses go with the individual, not the firm. "Why is that [experience of the firm] even being considered? It should go with the individuals involved."

Interviewee SM#8, the white male owner of an engineering firm, said that he has spent seven years trying to break into public agency work, without success. "I do all the work anybody else does, but it's hard to break in because I don't talk the same lingo or don't have the same contacts." He added, "Someone coming from the public sector into the private [sector], they seem to have better access back." Interviewee SM#23, a representative of the National Society of Hispanic Professional Engineers, agreed. "If I step out of a Caltrans or county or Metro environment after five to ten years of experience and start up a business, am I going to be disadvantaged? In today's world, in the last 30 years? No, I'm going to have an advantage. Now what does that do to the other populations?"

Interviewee SM#21, the white male owner of an engineering company, reported that, going into Caltrans to compete for work, he will be going up against another company owned by a former Caltrans employee. "They're going to feel more comfortable about hiring that person because they've actually seen their work and know them."

Interviewee SM#8, the white male owner of an engineering firm, said that public agencies do not understand the regulations concerning payments in FAR, which he saw as unfair to small businesses. He would like to be able to work on fixed-price contracts rather than rates with

approved overhead under FAR. He reported that many professional services firms do not have the records to be able to justify overhead rates to an agency such as Caltrans.

Some interviewees reported limited to no experience working with Caltrans due to challenges in securing work with Caltrans. When asked if there are prime contracting opportunities for him at Caltrans, Interviewee SM#3, the Native American owner of an engineering-related business, indicated that there were, but that he thought the best approach was to "start Calmentor, then come go in subconsultant, [get experience] … and then go up to prime."

Some interviewees reported having limited to no experience pursuing work with Caltrans. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said he has not specifically worked with Caltrans but other public sector work has not been a good experience. He stated that the "bidding process was horrible. Bids and proposals took a lot of time and expense. Poor margins led to losing money on nearly every public sector job."

Interviewee #3, the white male owner of a concrete and construction company, said that he has no experience in working with or attempting to work with Caltrans but that he would be very interested in learning about opportunities to work with them in the future.

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, mentioned that his company has done no direct work with Caltrans and that "Caltrans isn't in the same hemisphere with regards to pricing." He further mentioned that, in his opinion, current bids are going for well under market value.

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, indicated that her company has no experience with or attempting to work with Caltrans.

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, said, "I don't work with Caltrans, they do all their design work in-house. It makes me sick to my stomach thinking about Caltrans doing all the work in-house. Caltrans would get better quality if they would allow jobs to outside vendors."

According to Interviewee SM#2, an Asian-Pacific American owner of an engineering business and a representative of the American Council of Engineering Companies-California, 90 percent of A/E work at Caltrans is kept in-house and 10 percent contracted out. "Imagine how much more work would be contracted out … if you went to 20 percent instead of just 10 percent. Many years ago, that was actually happening, but all of a sudden it went to 90-10. An incremental increase of 5, 10 percent would stimulate the economy for all of us." He said that he has talked with Caltrans leadership about this issue.

Interviewee SM#2 also suggested that Caltrans unbundle more of his type of engineering work. He reported that he would have more opportunity for work as a prime (which he does for other public agencies) if Caltrans would unbundle that work from larger contracts. Interviewee SM#3, the Native American owner of an engineering-related firm agreed, saying that it was the same thing at Caltrans with his type of work.

Interviewee SM#2, the Asian-Pacific American owner of an engineering firm, further discussed opportunities to work for Caltrans as a prime. "We do a lot of local and city and county work. We've done a lot of Caltrans-like work, but not directly for Caltrans. The only time we've worked directly for Caltrans is as a sub for larger firms." When asked if there was work he could be doing for Caltrans as a prime, he responded, "Yes, but you're [Caltrans is] looking for Caltrans experience, and we don't have Caltrans experience as a prime. That makes it difficult for us to qualify other than as a subconsultant."

The Asian-Pacific American female owner of a construction services business [Interviewee SM#20] reported that she has talked with Caltrans about prime contract opportunities for the types of work she does. Caltrans responded that they have a department that does that type of work. She reported that it might be advantageous to Caltrans to contract this work out. "How do we get them to change the way they think?"

Notification of Work Opportunities.

Some interviewees indicated that Caltrans has good notification procedures in place to notify individuals of opportunities to bid. A number of interviewees said that it was easy to find out about Caltrans bid opportunities, especially through Caltrans' website or other electronic notification services. Other firms indicated that they learned of Caltrans work through primes, and that this system worked well for them.

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "It is always been easy for me to find out about Caltrans work. I use the website and Caltrans updates it regularly. It works very good for me."

Interviewee #38, the white female principal and partner of a WBE-certified environmental consulting firm, said, "It was pretty easy to find out about Caltrans work opportunities, because you know it's Caltrans and you can go to their website."

Interviewee #35, the African American male owner of a certified electrical company, said, "It's easy to find out about Caltrans work. I met Caltrans officials at a meet and greet, and I get BidSync notices."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "[Relative to other public sector work] it's a lot easier to find out about Caltrans' work, we get lots of faxes and emails about the different jobs."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that relative to other public sector work, there is no difference finding out about Caltrans' work opportunities. He said, "Everything is online now. I will visit companies and partners to find out about teaming opportunities for different [public sector] opportunities."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that relative to other public sector work it is "about the same" finding out about Caltrans' work opportunities. He said, "Everything is online and there is usually a fair bit of notice before we have to bid."

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said, "Caltrans is real easy to find out about anything."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated, "It was not any harder to find out about Caltrans work compared to other public sector agencies."

Interviewee #26, the female majority president of a WBE-certified construction company, stated that compared to other public agencies it is easier to find out about Caltrans work opportunities. She said, "Caltrans is easier. All their jobs are made public."

Interviewee #28, the white male president of a certified majority DVBE, said, "It was easier to find out about Caltrans work due to the Internet and because I am known by Caltrans personnel."

Interviewee #29, the white male owner of a concrete and landscaping company, said that it was easier to find out about Caltrans' work opportunities because Caltrans provided a weekly listing of projects that were out to bid.

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that it was easier to learn about work from Caltrans than from other public agencies.

Interviewee #33, the African American male owner of a certified concrete company, said, "It is easier to find out about Caltrans work than for other public agencies. Everyone is aware of available Caltrans jobs. Primes call and ask for bids from MBEs."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said, "It was easy to find out about Caltrans work because the prime contractor called my company based on a referral."

Some interviewees reported challenges learning of opportunities to bid with Caltrans. Some interviewees were not familiar with Caltrans' website or thought that it was still difficult to learn of bid opportunities.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, discussed the difficulty in determining what bids are available. He said, "I imagine that there is an easier way to find out about Caltrans work, but I don't know what that is or how to go about it."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that it is difficult finding out about Caltrans work opportunities. He said, "There should be an interactive website that provides small businesses opportunities. They should make it more clear where we can fit into the bigger picture."

Interviewee PH#23, the female owner of a DBE/SBE/LSBE/CBE/MBE/WBE-certified research firm, said, "It's still really hard to find the bids, to locate them. That's the number one problem, is locating them."

Even with bid opportunities on the website, some interviewees reported difficulty understanding how to pursue Caltrans work. Interviewee #23, the Hispanic male owner of a non-certified construction company, said that relative to other public sector work, it was harder to find out about Caltrans' work opportunities. He said, "It is much harder even though they have a website with the jobs listed on them. You have to network or know someone to get this work it seems."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that relative to other public sector work, it is harder to find out about Caltrans' work opportunities. He said, "Not knowing how to go after the jobs for Caltrans is the real issue. They are usually big projects that are out of our realm."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that relative to other public sector work, it was harder to find out about Caltrans' work opportunities. She said, "Their specifications are too complex, take too much time to decipher, and often don't make sense." She also said, "Who thinks up this stuff? It doesn't make any sense. It is clear that unqualified people are developing these specifications. They need to use experts in the field to help develop common sense specifications."

Some interviewees recommended that Caltrans improve its notification of work opportunities. Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated the bid and notification processes could be improved. She stated, "The BidSync system could be more intuitive and alerts should be built into the system. This would save small businesses time as now we are required to search constantly, as opposed to having opportunities pushed out to us."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "Caltrans could actually notify the registered bidders of opportunities, so that I wouldn't always have to check for new opportunities."

Interviewee #18, the African American male owner of a DBE-certified electronics and telecommunications company, said that his recommendations to Caltrans would be to make opportunities for DBEs like his more transparent. He said, "They should make the bids easier to find or make it easier for me to figure out how to team up with bigger companies who are bidding."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that his recommendations for Caltrans to improve its notification and bid process would be to help small businesses. He said, "We need help in identifying work that we can actually bid on. Would being certified help in that regard?"

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that his recommendations for Caltrans to improve its notification and bid process is to make it more transparent. He said, "Just make the bid process more transparent and make it clear how companies like mine can actually compete. Right now, there is no opportunity for me to work with Caltrans unless I take what some big company is willing to give me. The system is set up against me."

Interviewee #26, the female majority president of a WBE-certified construction company, recommended that "Caltrans should make it easier for existing contractors to bid on emergency work." She added that "Caltrans should find out how to get bid opportunities out faster. Caltrans always uses BidSync and they [BidSync] don't provide enough time to bid."

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, recommended that Caltrans "start doing their own stuff instead of farming it out to BidSync and all these other outfits. If I could just go to a site that just has Caltrans projects and could narrow it down and simplify it. I think it's lousy. They sub it out to a different outfit and you got to pay $500 a year just to view the upcoming schedule. I haven't even tried to get the plans from them."

Bidding Process.

Some interviewees reported positive experiences with Caltrans' bidding process. Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "The bid process for Caltrans is good. I don't have any recommendations for them." He also reported that Caltrans' bid process was easier than at other public agencies.

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, mentioned the Caltrans bid process is easier relative to other public sector work, the requirements are less. She also stated, "The paperwork is much less."

Interviewee #29, the white male owner of a concrete and landscaping company, said that the Caltrans bid process was easier than other public agencies because it was well structured and there was no guesswork involved.

Interviewee #33, the African American male owner of a certified concrete company, said, "Bidding on Caltrans jobs is easier than for other public agencies because there are less bid items to bid on and the process is straightforward."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated, "The bid process was no different than any other public sector project. We were required to provide the necessary paperwork to the prime vendor coordinating the bid."

Some interviewees reported challenges in connection with Caltrans' bidding process. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that the "bidding process was horrible. Bids and proposals took a lot of time and expense."

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, described his past experiences with Caltrans as bad because the bidding process is cumbersome and the pricing is difficult. He stated that he has pursued traffic survey projects with Caltrans but been largely unsuccessful as a prime bidder. He also stated that related to other public sector work, the Caltrans bid process was harder. "[It is] infinitely more difficult. The bid process is the barrier."

Interviewee #38, the white female principal and partner of a WBE-certified environmental consulting firm, said that the Caltrans bid process was extremely difficult. In explanation, she said, "Caltrans has its pool of people it likes to work with and if you're not in that pool — forget it."

Interviewee #39, a representative of the Young Black Contractors Association, mentioned that the bidding process with Caltrans was a barrier to BCA members priming projects. When asked if these issues were unique to Caltrans, he said, "I think it's a lot of the agencies but it's more Caltrans. The policies that Caltrans has put forward, like the race-neutral and race-specific are good programs if every job had those goals. Every job could, but Caltrans allows each contract to say they have performed due diligence (good faith efforts) to find disadvantaged businesses."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that relative to other public sector work, Caltrans' bid process is about the same as others. He said, "They are all the same. They squeeze out the little guy and give all the work to big companies."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that his experience attempting to get work with Caltrans is from his previous company. He said, "We haven't bid on any Caltrans work since I've been here but I know from past experience that there is so much paperwork with pre-qualifications, specifications, and other paperwork. Why does anyone want to do business this way? It is just too complicated and time consuming." When comparing Caltrans to other public agencies, he said, "They are all the same — arduous. Public sector in general has a lot of pre-qualification requirements that take a lot of time to respond to."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that relative to other public sector work, the bidding process for Caltrans' work opportunities is harder. She said, "They make you jump through so many hoops by providing the same information over and over again. Why do we have to provide the same licensing and insurance information over and over again?" She continued, "They make it hard for small businesses to compete because of all the unnecessary and repetitive paperwork." She concluded, "Most cities and counties are much easier to work with because they don't require as much paperwork."

Interviewee #13, the African American female owner of a non-certified trucking company stated, "We have not done work with Caltrans and I don't think we will in the future. We are just never given the opportunity."

He added, "They ask for so much stuff that just doesn't make sense. There is no point to most of it."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that his firm bid on some off-ramp work several years ago. He said, "We bid on the excavation and landscaping portion, but the bonding requirements were a huge barrier for us so we weren't successful."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that he has attempted to work with Caltrans but that he has not been successful as a prime contractor. He said, "It is impossible to get work with Caltrans on my own."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said, "We tried [to win work with Caltrans]. We have not yet been successful."

Interviewee PH#28, the female owner of a DBE/SBE/UDBE/WMBE-certified marketing firm, said, "After all the certifications, all this time, I still don't have a Caltrans contract. I have bid with the transportation department over 15 times this year, and I haven't received one contract. It takes time, and it takes money for SBEs to bid on contracts and hire extra people to help them get to the point that we get to and still we don't get a contract."

Interviewee WT#15, the female CEO of a SBE/SWBE/WBE/DBE-certified environmental firm, said, "We have attended numerous events put on by Caltrans along with SBA, etc., to try to pursue Caltrans work. We have not had any luck."

Interviewee SM#16, the white female owner of a DBE-certified engineering company, reported that creating "electronic forms for all submittals to Caltrans should be the highest priority."

Some interviewees had negative comments about the bidding process at Caltrans because they believed they were competing against "low ball" bids from other firms. Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that relative to other public sector work, Caltrans' bid process was much harder than others. She said, "They take low-ball bids that anyone qualified knows aren't right. There is no way anyone can do what is expected for the bids that are accepted." She said, "We lost the bid to someone who low-balled to win even though they didn't have the right qualifications. Low-ball bids that win like that leads to poor quality."

Interviewee #28, the white male president of a certified majority DVBE, said that there are opportunities to bid, but that he has a problem with "low-ball bidding."

Some interviewees recommended that Caltrans improve its notification of work opportunities, bidding process, and administration of contracts. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that Caltrans' bid process could be improved by protecting businesses like hers who are in compliance. She said, "They should enforce their regulations on illegal out-of-state businesses and businesses from Mexico who don't have to meet the same requirements. They undercut us on cost and make it hard for us to compete."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that his recommendations for Caltrans to improve its bid process would be to make it more straightforward. He said, "Give us enough time to get bids complete if you are going to ask for that much information. Also, provide better documentation and make the existing documentation more user-friendly. There is too much stuff to wade through now."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that he recommends that Caltrans can improve its processes by "removing a lot of the paperwork and bureaucracy."

Interviewee #29, the white male owner of a concrete and landscaping company, said he observed that Caltrans had established a trend toward awarding larger contracts, and that this trend was eliminating about 80 percent of the available contractors. He explained that this trend toward larger contracts made it more costly for the public.

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said, "Caltrans should streamline access to drawings."

Interviewee #33, the African American male owner of a certified concrete company, said, "Caltrans should require primes to turn in subcontractor information on bid day and hold them to it. This will prevent bid shopping." He added that Caltrans should "eliminate the whole certified payroll thing."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, recommended that Caltrans "make their bidding process more public so consultants could easily see what's out there." He also said, "If I wanted to see what Caltrans had to offer — well with what I know from what I've seen working for [the large consulting firm] — I wouldn't even waste my time, because I know if you don't know somebody in there, you're not going to get anything." He elaborated that he had observed — while working as an employee for a large consulting company — that contracts were awarded in a "backdoor, under-the-table, buddy-buddy" manner in which it was understood that "you get all the contracts." He said, "Obviously it's who you know."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said, "Caltrans should list engineering oversight as a bid item."

Interviewee #39, a representative of the Young Black Contractors Association, when asked how Caltrans can start alleviating these problems, said, "I would hope that even when it came to the bidding process, that Caltrans would be more forceful when it came to the participation. Caltrans knows the majority of disadvantaged business. They know who they are, and they can partner them and begin to put them into a cooperative. But Caltrans is extremely slow. They are so slow, it's unbelievable."

Interviewee PH #11, the female owner of a certified web design firm, said, "[An] e-mail option could be added when responding to RFPs. It's 2012. You know, don't make us make, you know, 100-page copies at FedEx and send it you, where on an average, $50, $100, $150, to get it in there on time. So, you know, we can implement more e-mail options where you can make it easier for small businesses. We just don't have the staff."

Interviewee PH #12 said, "What Caltrans and the larger primes don't seem to recognize is, unlike large corporations, where there's a specific estimation staff, most of the small UDBEs, and DBE, and SBE, and MBE, and WBE companies do not have those resources. We cannot afford to bid on huge plan sets and invest the kind of resources without some help. So, you know, it's 2012.

We've got to figure out some ways that will allow really small companies to isolate and specifically identify their work category, and bid efficiently and effectively. Not large plan sets. We've got to break it down. This — there's got to be some kind of way or program put in place that will allow smaller companies to be more effective at bidding. And I don't know how you do that, but I'm sure there are great minds in this room and great minds at Caltrans that can do that, so that you could be more effective and allow people to work here."

Interviewee #3, the white male owner of a concrete and construction company, said that he recommends that Caltrans provide better access to bidding opportunities for small companies. He said, "If Caltrans would make it easier to team up with bigger contractors, it would be easier to work with them."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that Caltrans should have more workshops and bid conferences for small businesses. He said, "They should provide better communication about what is available [by specialty] by area and location."

Payments.

Some interviewees reported a positive or successful experience receiving payment on Caltrans projects. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that getting paid on Caltrans work has not been a particular problem. She said, "We work with customers who we have existing relationships with and they pay us when we provide our service, whether it is on a Caltrans project or not."

Interviewee SM#21, the white male owner of an engineering firm, had favorable comments on being promptly paid by Caltrans when he is the prime. "It's just like clockwork."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said it was no problem getting paid by Caltrans.

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "The prime vendors we work with have told me that the Caltrans payment process is good. This means we usually get paid fairly quickly."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "The best thing about Caltrans projects is that we are usually paid in less than 30 days. This is partly due to the contractors we work with and partly due to Caltrans."

Interviewee #29, the white male owner of a concrete and landscaping company, said, "Caltrans pays their bills on time, and if they don't, they pay you interest."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "I didn't have any problems getting paid."

Some interviewees mentioned that payment on Caltrans projects was about the same as for other public sector contracts. Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, mentioned that the payment for the Caltrans work was typical of public sector projects and that her company was not paid until the prime vendor was paid. Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said there was no difference in getting paid between Caltrans and other public agencies.

Some interviewees reported negative experiences receiving payment on Caltrans projects. Interviewee #23, the Hispanic male owner of a non-certified construction company, said, "Caltrans doesn't pay timely to primes who pass that along to subs. It's almost like they are trying to run you out of business by not paying you."

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said about his company's experiences getting paid that "Caltrans is pretty slow." He added that "they put in that you're a small business and faster payment for small business, you know, but that never happens — ever. We're going to pay the small guy progress payments, you know, that never happens — ever."

Interviewee #39, a representative of the Young Black Contractors Association, mentioned, "Caltrans had Quick Pay. It sounded good, but it still relied on the prime to pay their subs first. Well, they don't do that, and Caltrans doesn't do anything about it."

Interviewee #28, the white male president of a certified majority DVBE, said, "You have to wait longer for Caltrans to pay than other public agencies. The Army Corps of Engineers paid three days after the job was completed."

Interviewee SM#17, representing Associated Professionals and Contractors of California, reported that local agencies around the state recommend against bidding on Caltrans contracts. They say, "Don't bid Caltrans contracts, you won't get paid."

Some interviewees recommended that Caltrans improve its payment process. Interviewee #28, the white male president of a certified majority DVBE, recommended that Caltrans pay contractors when the Caltrans registered engineer signs off on the job. He added that Caltrans pays about 30 days after the job is complete, and recommended that Caltrans pay within 15 days after job completion.

Interviewee #39, a representative of the Young Black Contractors Association, mentioned, "If subs have not been paid, then Caltrans needs to respond, either by holding back pay, or by putting those dollars in the hands of the subs in order for the subs to be able to continue to work or provide mobility or working capital. A lot of subcontractors have a very limited amount of working capital."

RCJ & Associates, Inc. Claim Made to Caltrans.

RCJ & Associates, Inc. (RCJ) made the BBC study team aware of a dispute it had as a subcontractor on a Caltrans project that apparently was not resolved to the satisfaction of RCJ. The following summarizes the dispute, initial Caltrans actions, and a subsequent court decision regarding those actions.

It appears that RCJ, a DBE-certified firm, on January 7, 2011, made a formal request to investigate and audit various bid line items of work for Caltrans' Doyle Drive Project Number N3: CN 04-163734 (Doyle Drive) to find out how the UDBE requirements were achieved for the specific bid line items at work. RCJ complained that C.C. Myers, Inc.'s (CCM) violated their Subcontract Agreement by improperly quantifying the bid line items of work relating to street sweeping for the Doyle Drive Project.

CCM and RCJ entered into a contract that provides for CCM to pay $215,000 to RCJ for street sweeping services on the Caltrans Doyle Drive project. RCJ performed street sweeping services, and on October 31, 2011, RCJ filed with Caltrans a stop notice requesting that Caltrans withhold approximately $173,000 from the funds due to CCM that RCJ claims remain unpaid by CCM to RCJ.[1] Subsequently, Caltrans withheld funds to CCM.

There is a dispute as to the basis of RCJ's claim, but it appears RCJ claims its services were underutilized in that RCJ was not permitted to perform work that it should have been allowed to perform pursuant to the subcontract.[2] CCM filed a complaint in court contending that such a claim is not the proper basis for a stop notice and no funds should be withheld, and demanded that the withheld funds be released, but Caltrans refused to release the funds to CCM.

At a hearing held on March 16, 2012, the court considered the complaint by CCM to order that the stop notice be declared as improper and that Caltrans remove the stop notice and issue the payments to CCM.[3] The court pointed out the subcontract provides a contract price of $215,000 and that there are receipts in the record to RCJ in excess of that amount. The Court stated that it is not addressing whether or not there are reasons why CCM may owe RCJ more money, but from a stop notice standpoint, the court is not provided in this proceeding with a way to determine a breach of contract relative to how much is owed.[4]

The court only addressed whether the stop notice was valid.[5] The court found that CCM has paid over $260,000 to RCJ.[6] The court stated that for purposes of a stop notice, there must be something that the court can trace within the stop notice itself as to labor and services actually

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[1] Complaint for Declaration of Rights to Withheld Funds, filed on February 9, 2012 by Plaintiff CCM.

[2] Complaint by CCM.

[3] Transcript of Proceedings, dated March 16, 2012 in the Superior Court of the State of California for the County of Sacramento, Case No. 34-2012-00118525.

[4] Transcript, March 16, 2012.

[5] *Id.*

[6] *Id.*

performed, not a loss of opportunity, or misrepresentations as to the bidding process.[7] The court held this is more a claim for lost opportunity, underutilization.[8] The court noted that regardless of whether the claim of breach of contract may be meritorious, it is not the proper subject for a stop notice, and on that basis the court ordered the release or removal of the stop notice.[9] The court stated that its finding is not binding on any other aspect of the case and so all remedies, rights, duties, and obligations related to any other issues in the case are still "in play."[10]

The court subsequently issued an order removing the stop notice, and according to Caltrans, there is no further activity in their records relating to the claim filed by RCJ against CCM.

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[7] *Id.*

[8] *Id.*

[9] *Id.*

[10] Transcript March 16, 2012.

D. Potential Barriers to Business Success

The interviewees were asked whether they were aware of or had experienced any barriers to pursuing work in the local marketplace, and, if so, whether they believed that discrimination based on race, ethnicity, or gender had contributed to such a barrier. The interviewees were then asked whether they were aware of or had experienced certain specific barriers, including:

- Financing;
- Bonding;
- Insurance;
- Equipment;
- Labor and personnel;
- Working with unions;
- Being a union or a non-union employer;
- Obtaining inventory or other materials and supplies;
- Prequalification requirements;
- Experience and expertise requirements;
- Licenses and permits,
- Notification of work opportunities/marketing;
- Contract specifications and bidding procedures;
- Factors public agencies and others use to make contract awards;
- Bid shopping;
- Bid manipulation;
- Treatment by prime contractor or customer during performance of work;
- Approval of work by the prime contractor or customer;
- Payment by the prime contractor or customer; and
- Other barriers.

Barriers in General.

Some interviewees identified the existence of barriers in general for minorities and women in pursuing work in the local marketplace. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, discussed that he had no personal experience with any barriers or discrimination based on race, ethnicity, or gender in the public sector but that he had seen it occur occasionally in the private sector. He said, "In the private sector we have seen particular instances where race determined who won the work, but it is not prevalent in our line of work."

Interviewee #37, the African American male president of a certified electrical company, said that "there's discrimination based on race in everything. Sometimes those barriers can be overcome. Once the guys with power — which are normally the white guys — once they get used to you it's a different thing. But, it's just getting in the door and getting an opportunity to prove yourself. Once they get used to you it's fine. But, initially, you get a bad rap."

Interviewee WT#21, a representative of a DBE-certified engineering firm, said, "I am convinced that racial barriers and discrimination still exist and minority firms are in general underutilized in public contracting. A narrowly tailored DBE program will help to mitigate the effects."

Interviewee WT#26, the owner of a DBE-certified engineering and construction management firm, said, "Hispanic owned firms such as [my firm] have faced many difficulties and have experienced discrimination by public agency personnel and large civil engineering contractors when bidding, proposing or seeking a subcontract on public transport projects. The public agency staff prefers the large contractors over small firms and have the erroneous belief that small minority-owned or DBE firms lack resources, experienced personnel, or are otherwise not qualified."

Interviewee WT#17, a representative of a DBE/WBE/SBE-certified firm, said, "We recently were solicited to provide a quotation to a prime contractor for electrical construction materials. Once we received the required Bill of Materials, we proceeded to contact major distribution houses in California for the quotation. We were informed by these organizations that our company was too small for them to quote this large material requirement and that they would only quote directly to the prime contractor. As a small company looking to expand, we found this very disheartening. Our credit references are very strong and we have never encountered such a blatant attempt to remove us from a potential opportunity as this action did."

Other interviewees reported that they were generally unaware of barriers to pursuing work in the local marketplace. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated he is not conscious of barriers and/or discrimination based on race, ethnicity, or gender. He went on to state that he has not had any personal experiences with discrimination.

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that "I have not had any personal experience with any barriers or discrimination based on race, ethnicity or gender."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that she has experienced no issues or discrimination based on race, ethnicity, or gender that she is aware of. "We have never been denied anything. I've never run into any racial issues at all," she said.

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that he is not aware of discrimination based on race/ethnicity/gender that his firm faces in the local marketplace.

Some business owners said there were barriers for any small business. Interviewee #29, the white male owner of a concrete and landscaping company, said that he was not aware of discrimination based on race, ethnicity, or gender that affects minority- or women-owned firms in California. He said "No. We're all pretty sensitive to that, just because, if you're qualified, you're qualified."

Interviewee #3, the white male owner of a concrete and construction company, said that he is not aware of barriers related to discrimination but that there are barriers for small companies. Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, indicated that in general, he is not aware of any discrimination in the marketplace or from personal experience but that there are significant barriers that any business faces.

One female business owner said that she faced barriers because she is white. Interviewee WT#23, the female owner of a trucking firm, said that "since this recession hit in 2008 work has become extremely difficult to get. The private sector has almost come to a standstill. That leaves the public works which has opened many projects to help stimulate the economy. That's all fine and well if you are a minority, but if you are like me, a white Caucasian you are out of luck. I can't get any new work to save my life. If I do, I have to give it to some type of minority and they take 5 to 20 percent of the profit from my business. That profit is what keeps everything going. Business has slowed so bad that I have lost a lot of sub-haulers who pull my trailers. All my life I have committed to honesty and hard work and now I can't get anything cause of the color of my skin."

Financing.

Some interviewees identified obtaining financing as a barrier to pursuing business opportunities. Many thought the barriers were the same for small firms in general. A number of firm owners and managers indicated that financing was important to operating and expanding their businesses, but that it was difficult to obtain credit, particularly for small businesses. Obtaining working capital and equipment purchase financing were two areas of financing often mentioned. Some interviewees said that barriers were the same for all small businesses; others specifically pointed to difficulties for DBEs, MBEs, and WBEs.

Interviewee SM#16, the white female owner of an engineering company, said that capital affects the ability of a business to be successful. "Available capital does affect businesses, because as you start to grow, as you start to get contracts, it requires more resources to be able to deliver that work," she said.

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, reported that he needs about $1 million to keep operations up and running. He said that his company previously had a credit line but getting credit is really hard. He stated, "Rates are high and repayment terms are difficult due to decreased revenues. You have to be able to show three years of profitability and a line of credit will usually only extend for 60 days of operations."

Interviewee #3, the white male owner of a concrete and construction company, said that financing is difficult. He said, "Banks are tight, they have slammed the door on me because I don't have the financial track record needed to obtain financing."

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that obtaining financing is always tough for all small businesses.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated that "obtaining credit is difficult and it's not getting easier."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, mentioned that obtaining financing is difficult for most small businesses.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that financing is a huge barrier and there should be some guidance and support from Caltrans regarding financing. He said, "You know the money is going to be paid and Caltrans could help match up small businesses with financing. We need help with equipment, payroll, and managing receivables."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that obtaining financing is a huge barrier. She said, "Interest rates alone will kill you. It is prohibitive to borrow money in our business."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "Obtaining financing is a barrier, but it's based on the business environment not discrimination. We are all facing challenges getting more money."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that financing is a barrier. He said, "It is only a problem when you need to replace equipment but lean prospects make it hard to make financing decisions. Our credit is good but we're scared to go into debt."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that financing is a huge barrier for him. He said, "It isn't discrimination because I'm an MBE, it's just that as a small business, I can't easily get financing. You need access to good financing terms when your customers sit on your money for long periods of time."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that financing can be a barrier. She said, "Financing is difficult and we don't like to borrow money. Many of our competitors over-bought equipment and went bankrupt as a result because they couldn't make payments."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, reported that minorities and women are adversely affected when attempting to obtain financing. She said that she could not have obtained financing if her partner was not white. Interviewee #25 stated that when she attempted to obtain financing for her firm she was unsuccessful while her white partner was able to access financing.

Interviewee #35, the African American male owner of a certified electrical company, said that "from years of oppression, blacks don't have the ability to obtain financing."

Interviewee #2, the white principal of an energy company, stated that for service industries "the vendors are unable to find financing and that the process has become more difficult recently for SBEs, WBEs, and DBEs."

Interviewee WT#26, the owner of a DBE-certified engineering and construction management firm, said, "Access to financing for DBEs and minority-owned firms is non-existent. For those able to obtain lines of credit or working capital loans, interest rates are high and the terms are strict."

Interviewee SM#8, the white male owner of an engineering firm, said that bank financing is currently very difficult. "No matter if you're even paying your bills on time, if your ratios are not in line, the banks don't care … they're coming on you real fast, real hard."

Other interviewees did not perceive obtaining financing as a barrier to pursuing or obtaining business opportunities. Some interviewees, including minority- and women-owned firms, reported not having any difficulty obtaining financing. For example, Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that obtaining financing is not a barrier. She said, "We've never been denied financing. The bank has been awesome."

Other firms indicated that they have not needed to obtain financing. For example, Interviewee #11, the white female owner of a certified woman-owned engineering business, said, "This isn't a barrier, we manage our money very tightly and don't have to borrow."

One interviewee felt that MBEs and WBEs received preferential treatment when it came to financing. Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that he believed MBE/WBEs got preferences when it came to financing. He said, "They get help more than me."

Bonding.

Some interviewees identified obtaining bonding as a barrier to pursuing business opportunities. Bonding requirements appear to limit bidding opportunities for public sector contracts for some firms according to interviewees. Some interviewees described bonding as a barrier for small businesses; some others indicated additional barriers for minority- and women-owned firms.

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that "bonding requirements are worse than a loan from the bank." He said that bonding companies "look at successful profitability on previous projects and in a down market it is difficult to get bonded," which creates a significant barrier to entry. He said that the market has made it very difficult to get bonded.

Interviewee #2, the white principal of an energy company, stated that "the requirements for bonding are prohibitive and that is the large reason why there is no public sector interest for me."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that bonding is a barrier for small businesses like his. He said, "Bonding is difficult for a small business and very expensive. If Caltrans actually enforced real liquidated damages they wouldn't need bonds." He asked, "How does $100 per day for liquidated damages penalize a big firm for doing shoddy work?"

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that bonding can be a barrier. He said, "We did some projects where we had to bond. Finding a bonding company and having the right collateral was hard."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that bonding can be a barrier. She said, "We've had the same bonding company for years and they are good but it is an added expense."

Interviewee PH#15, the female owner of a striping firm, said, "There is discrimination in bonding, because they don't think, because you're a woman, that you can do the work, or they make you step through extra hoops for that."

Interviewee PH#30, a representative of a DBE-certified firm, said, "Caltrans discrimination and legitimate discrimination protest filings, that's a subject I really want to get into because it's called bonding. It's a subtlest form of discrimination that I've ever run into. The task orders could be only $25,000, $30,000, and we provided performance and payments funds for those things, and the contractors over a two- or three-year period, but guess what they ask us to bond? They ask us to bid the line items. We don't have that kind of bonding capacity. So we are excluded from bidding the project. It's the subtlest form of discrimination, but it's there, and this department here, this DBE department hasn't gotten any control over the contracts department."

Interviewee SM#12, the Hispanic American owner of an engineering company, said, "Primes are having subcontractors that aren't big enough in dollar value supply a bond when their [prime's] bonding company requires that. There's no choice for them, and they have to pass it down. It is true that getting a bond is almost impossible."

The Asian-Pacific American female owner of a DBE-certified construction services business [Interviewee WM#20] reported that certain agencies such as BART require subcontractors to have bonding for their entire portion of the contract, including all options on the contract, whether or not they are exercised. "If you're doing $50,000 worth of work and you can bond for that on the main contract, and there's three additional options, and they're each $50,000, and you can't bond for $200,000, you can't bid." "Work needs to be done to detach these options from one another, especially if they're not concurrent …. That has nothing to do with the primes at all."

Interviewee SM#1, a Hispanic contractor representative of the Hispanic Contractors and Suppliers Association, said that bonding a subcontract limits his ability to compete for that work. "It's not even a matter of not being able to purchase [supplies] economically, or being able to stage the process economically, the problem is that I have a bonding limit … and we can't bid the whole enchilada even if we have the resources."

Interviewee SM#12, the Hispanic American owner of a DBE-certified highway contracting firm, disagreed with that assessment. "We've bid up to $8 or $9 million, that's been subbed out, without bonding and we can have another job for $4 million without bonding. But that's our relationship with the prime contractor … they either feel comfortable with that or they don't. They require it from us or they don't."

When talking about getting bonding, Interviewee SM#12, the Hispanic American owner of a DBE-certified highway contracting firm, said that "the discrimination [by bonding companies] is based on how credit worthy you are. The non-credit worthy don't get bonding, the credit worthy get bonding. It don't think that look at all at what you are … race or gender."

When asked if capitalization of the firm was important in the construction industry, Interviewee SM#15, a female business owner and representative of the Southern California Contractors Association, said, "It is, no doubt … and especially because of the bonding requirements. That's one of the hurdles any company has to face." She added, "Capitalization, especially for company that is just starting out, is key. There's no getting around it." She continued that "whether or not you qualify for bonding is all based on those numbers."

Interviewee SM#17, a representative of Associated Professionals and Contractors of California, explained the linkage between equity in a home, capital in a business, and the business assets that a bonding company would consider. He said that bonding is not based on equity in a home, but "what bonding is based on is what cash is available to get you out of a problem, so if you have equity in a home, and you close your books out on the first of the year … you go to the bank on December 25 and get a loan on your home and put it in your bank account … the bonding company looks at that cash. Your balance sheet is the same, but the bonding company looks at the cash and it will give you bonding accordingly." He added, "After you close your [year-end] statement out, you pay the bank back … so that you have the same equity in the home … that's the way you get bonding."

Other interviewees did not perceive barriers in connection with obtaining bonding. Some companies reported that they do not need to obtain bonding. Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm, mentioned they do not have to bond in their line of work and that he has not heard of this being an issue for other companies in the market.

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that bonding is not an issue for them. He said, "We typically don't have to bond because we are subs. We provide services to the prime who has to be bonded."

Insurance.

Some interviewees identified insurance requirements as a barrier to pursuing business opportunities, especially for small companies. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that "insurance requirements are very disadvantageous for small businesses. Sometimes there are requirements of $5 million umbrella policies which are very expensive. Why would a small business do this? Construction defect lawsuits require expensive insurance. You can get one job policies but that is hard and expensive." He reported that the volume of work is relatively small in comparison to the expense of these policies.

Interviewee #2, the white principal of an energy company, stated that insurance requirements are prohibitive and that he would like to see "seminars on these topics."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated that "premiums are ridiculously high and insurance requirements for public sector work are too high."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that insurance requirements for various public sector agencies can be exorbitantly high and that obtaining insurance to meet these requirements can be a huge barrier for small companies.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that "any highway work is extremely expensive and prohibitive. You have to pay hazard pay for some work but it shouldn't be so prohibitive because we use law enforcement to slow down traffic. That should help us with insurance but it doesn't."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that insurance is a huge barrier. She said, "Insurance costs have gone up along with the cost of materials because they are based on gross revenue. It shouldn't work that way. Increasing costs for materials make it look like we are making more money because our revenues are increasing but that doesn't mean our profit is increasing." She continued, "Our profitability is actually lower because margins are so tight and to top it off, our insurance costs have risen."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that insurance presents a significant barrier. She said, "Insurance for a small firm is expensive. If there are issues, big firms have a big advantage."

Interviewee SM#22, a Hispanic American owner of an engineering company, said that professional liability insurance was a large concern for small engineering businesses.

Interviewee #13, the African American female owner of a non-certified trucking company stated, "Insurance is a barrier, especially because we are required to have $1 million in coverage. There is no discrimination here, it's expensive for everybody."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that insurance can be a barrier. He said, "We have to have drivers with clean driving records and if they don't it can impact our insurance rates and costs."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that insurance requirements and obtaining insurance is a barrier. He said, "Insurance is really expensive for our drivers and trucks."

Interviewee PH #1, the owner of a DBE-certified environmental consulting firm, said, "Next one is about cost of insurance. I am a small company. Then we get a big $77 million project, I need workmen's comp, I need all kinds of coverages. Now because it is a highway project, it skyrockets. That was very difficult. But once again, a small business, take this upon ourselves, you have to get your funding. That is something you can help us with possibly, but I don't know if you can help us over the hurdle. That is a major hurdle."

Interviewee WT #7, the female owner of a DBE-certified research firm, said, "The insurance requirements can also be high. We have purchased required insurance and spend up to $5,000 a year. It would be helpful if there was some way to have a subsidized program or lower requirements for subs."

One interviewee said that there discrimination did affect her ability to obtain insurance at a competitive price. Interviewee PH #15, the female owner of a striping firm, said "In insurance I think there is discrimination. I don't think they want to give you the best price at first. You have to be there and play hardball with them to even get you in the same neighborhood as your competitors that are men."

Other interviewees did not perceive insurance requirements as a barrier to pursuing or obtaining business opportunities. Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, indicated that there is no barrier in obtaining insurance but said that "some customers and their locations are now requiring more insurance which costs more money. We have had to increase insurance over the past two years."

Interviewee #10 stated that design insurance is expensive, but it is not a barrier.

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that obtaining insurance is not a barrier but that "it can be expensive depending on the type of work you are doing."

Interviewee #26, the female majority president of a WBE-certified construction company, said she was not aware of any race/ethnicity/gender-based barriers or discrimination with respect to insurance requirements.

Equipment.

Some interviewees identified access to equipment as a barrier to pursuing business opportunities. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that replacing equipment without credit is difficult because "financing is difficult to get now." He asked, "How do you grow your business when you can't afford to replace your equipment?"

Interviewee #3, the white male owner of a concrete and construction company, said that he has to rent a lot of equipment because of issues with financing. He said, "I can't even get accounts with some of the concrete companies, let alone banks."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated "Getting new equipment is hard without cash. Cash is king, without cash it is difficult to purchase the needed equipment."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that equipment can be a barrier to a small business like hers. "We have to retrofit all of our trucks because of emission laws. We will have to upgrade our trucks. This can be a barrier for small businesses like ours and is pretty costly," she said.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that equipment costs have doubled in cost. He said that "even renting is too expensive. We used to spend $3.5 to $5 million per year on equipment. Now we can't afford to do that since the economy crashed."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that equipment is a huge barrier. She said, "We have to purchase designer diesel fuel, retrofit equipment to meet new air regulations, and purchase materials. All of these are expensive." She asked, "How can we maintain profitability when we have to spend so much money to retrofit our equipment to meet all these regulations? We have to borrow money to make this happen and then pay huge interest rates on top of that."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that equipment can be a significant barrier. He said, "Cash flow can impact your ability to obtain equipment or maintain it."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that equipment can be a barrier. He said, "We have a lot of equipment that we need but you need to invest [in other equipment] to get work. This is a hard balance. If you don't have the right equipment you can't get the work, but there is no guarantee you will get the work to pay for it."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that equipment is a barrier. He said, "We have to retrofit or replace our equipment because of new regulations like AQM. This will likely run us out of business. We can't get financing so we're going to go out of business or not comply with the regulations."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that equipment can be a barrier. She said, "We own our own equipment and can get new equipment if needed but it is expensive. We don't want to go out of business because we timed a big equipment purchase wrong."

Interviewee WT#27, the owner of a UDBE-certified hauling company, said, "Recently I had to pass on a Caltrans bid for hauling special material that requires special trailers. I have extensive experience in this type of haul. We don't own our equipment; it's too expensive for a small business to invest in."

One interviewee indicated that discrimination affected her ability to obtain equipment. Interviewee #26, the female majority president of a WBE-certified construction company, indicted that obtaining equipment can be a barrier. She said "Men like to deal with other men."

Other interviewees indicated that access to equipment is not a barrier to pursuing or obtaining business opportunities. For example, Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that equipment is not a significant barrier. She said, "If we need equipment we buy it only if we have the money to buy it with. We don't lease or finance anything."

Labor and Personnel.

Some interviewees perceived access to labor and personnel, and keeping good employees, as a challenge for their businesses. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that keeping good people is hard with so little work available to keep them busy. He said that there is a "difficult balance of keeping people employed so he can go after the work needed to keep lights on."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that personnel/labor is a barrier for any small business. She said, "In our business, a lot of work is seasonal so it is hard to keep our people busy, pay insurance and provide benefits."

Interviewee #17, the white male estimator at a non-certified woman owned trucking company, said that personnel/labor is always a barrier. He said, "[Personnel] is always a challenge. When we are slow, keeping people busy is hard and keeping good employees when they aren't being paid is difficult."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, indicated that personnel and labor is a barrier. He said, "We have to defend ourselves every time a worker is fired and they file a complaint. It doesn't matter if it has no merit or not, we get disgruntled employees who cost us time and money."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that personnel and labor is a huge barrier. He said, "We had to scale way back. If you can't keep people busy then you can't keep them employed."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that personnel/labor can be a big barrier. She said, "You have to keep them busy or you will lose them."

One interviewee said that personnel and labor challenges are affected by discrimination. Interviewee #26, the female majority president of a WBE-certified construction company, stated that personnel and labor can be a barrier. She said "Men do not like taking directions from women. Of course, our employees are all family members."

Other interviewees perceived no barriers in connection with access to labor and personnel. For example, Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that personnel and labor is not a barrier. "We pay pretty well and provide good benefits. We have never lost a driver because of lack of work, benefits or pay," she said.

Working with Unions.

Some interviewees perceived working with unions as a barrier to pursuing business opportunities. The study team discussed whether unions presented a barrier for firms doing business, especially in the public sector. Many firm owners indicated that working with unions did present a barrier, and often discussed difficulty paying prevailing wage. In general, business owners did not suggest that minority- and women-owned firms faced any greater barriers than other firms in dealing with these issues. Although the discussion focused on business owners' and managers' perspectives about working with unions, some individuals also discussed whether unions had been a barrier to entry and advancement for minorities and women.

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that "unions are not concerned with employers and their profitability. Prevailing union wages are a barrier."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that unions can be a barrier depending on the area/specialty. He said, "You can work with them but union specifications don't make sense sometimes. The specs for the jobs are classified wrong. You have concrete guys doing electrical and they aren't qualified. If the specs are written wrong and you can use unqualified and cheaper guys then I can't compete."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "Working with the unions can be a barrier. We have had our issues with the Local 12 & 3 in the past."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that working with unions can be a barrier. He said, "Occasionally we have to meet prevailing wage requirements. That means we have to charge a higher rate or make less money."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that working with unions is a barrier. He said, "Unions are a major barrier that keeps us from getting work. I've had people tell me that 'We don't want non-union members taking food out of the mouths of our union members.'"

Interviewee #20, the white male owner of a majority-owned demolition and loading company mentioned that he has had issues working with the unions many times over the years. He stated, "The [unions] are the devil. They make working with them very difficult."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that unions can be a barrier. He said, "Occasionally, we've done work where we have to have union credentials to get the work. We can't afford to pay union dues when your rate can't make up for the expense."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that working with unions can be a barrier. She said, "If we get a prevailing wage job then we have to pay union rates. That usually cuts into our margin."

Some interviewees pointed out that thought unions discriminated against women and minorities. Interviewee #25, the Hispanic female partner in a non-certified consulting firm, reported issues working with unions. She stated that unions are not shy about bias toward women and

minorities. She added that men routinely made crude remarks to women working in the construction trade and expected the women to adjust.

Interviewee PH#15, the female owner of a striping firm, said, "There's been discrimination in the unions. Some of our WCOE members that have come up through the trades have the most horrendous stories to tell of the things that they have had to put up with. And if you'll look at the union membership now, you'll see that there are very few women in there still."

Many interviewees reported that working with unions does not pose a barrier to pursuing or obtaining business opportunities. For example, Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, indicated that working with unions is not a barrier for her company. She said, "We are not union so that has never been a problem."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said this can be a barrier. She said, "We pay prevailing wages and meet all state criteria." She continued, "How can unions dictate like this to the state? This isn't fair to small businesses. You have to be competitive to get the job and owners go without profit sometimes in order to meet prevailing wage requirements."

Being a Union or a Non-Union Employer.

Some interviewees felt that the fact that they were not a member of a union or a union employer operated as a barrier to pursuing or obtaining work in the local marketplace. Many small business owners that were non-union employers indicated barriers. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that not being union has some drawbacks in not being able to compete for some work in the public sector. He also said that being in a union would require joining many unions and paying multiple dues. He explained that despite those hassles, his firm still would not qualify for union benefits.

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, stated, "Because we are a non-union employer we have a difficult time with harbor unions and their picketing. This doesn't have anything to do with discrimination just normal union ways."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that being a non-union employer is a barrier. He said, "We can't bid on things sometimes because we are non-union."

Interviewee PH #21, the owner of a DBE-certified surveying company, said, "I thought at the time I was doing the [DBE] registration and going through — jumping through all those hoops that I was going to get some kind of an opportunity with Caltrans to provide surveying services. The bottom line is while there are a lot of projects being bid, every time I look at the scope of the project and involve myself with the prime contractors, there's a union affiliation that seems to get in the way. I'm not union affiliated, and being a small firm, I don't have the resources to have people on staff doing all the paperwork and whatever it is required to get — to get the union certification, so it really hasn't done me a whole lot of good."

The white male owner of a construction company [Interviewee SM#10] reported that he is required to hire subcontractors that are union contractors. "As union contractors as primes, we cannot sign up anybody as a non-union company."

Other interviewees perceived no barriers in connection with being a union or a non-union employer. As one example, Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated "We are a non-union company and haven't had issues with the local union."

Obtaining Inventory or Other Materials and Supplies.

Some interviewees indicated that obtaining inventory and other materials was a barrier, especially in terms of being cost-competitive and its impact on cash flow. Interviewees did not indicate additional disadvantages based on race or gender. Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that inventory and supplies are expensive. He said, "It is like equipment costs. Everything has gotten more expensive or you can't find supplies that meet the specifications at a reasonable cost."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that obtaining inventory or other materials and supplies is a barrier. She said, "We are at the mercy of retail costs for materials. Sometimes we will submit a bid for something and costs will rise before the job starts and that eats into our profit."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "Getting product can be a problem. Cash flow is sometimes a problem when billings take 60 days."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, indicated that obtaining inventory or other materials and supplies can be a barrier. He said, "We do have accounts that we can tap for materials but slow cash flow can make that a challenge."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that obtaining inventory and supplies can be a barrier. He said, "Yes, keeping inventory and supplies in an uncertain market is risky. You have to balance it to make sure you don't get over-extended."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that obtaining inventory and other materials is a barrier. He said, "It's the same as equipment, we can't afford a lot of equipment and we have to do everything ourselves to keep our equipment running."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that obtaining inventory or other materials/supplies can be a barrier. She said, "If primes don't pay us quickly, we have to sweat it out with our suppliers."

Most interviewees reported that obtaining inventory and other materials and supplies is not a barrier to pursuing or obtaining business opportunities. For example, Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said obtaining inventory or other materials and supplies is not a problem as long as the bills are being paid.

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that there is no barrier obtaining inventory or other materials and supplies. "We have small accounts with suppliers and that has never been a problem," she said.

Prequalification Requirements.

Some interviewees identified prequalification requirements as a barrier to pursuing business opportunities. Interviewee #2, the white principal of an energy company, stated that "there are pre-qualification barriers during the Request for Proposal process. Prime bidders want specific smaller firms to participate."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that pre-qualification requirements can be a barrier. She said, "We had a project with [a city] recently and it was very time consuming to fill out all the forms. They can be very confusing — you have to re-submit qualifications again and again and they change requirements on a whim. They should keep it simple and not over complicate the process."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that pre-qualification requirements are a significant barrier. He said, "We encounter pre-qualification requirements all the time. The … airport job we did required us to do test pours and run tests on them to ensure that they met the specs. This takes up time and money. It is just part of doing business, though. It is more of a challenge than a barrier for us, but for others it can be a show-stopper if they have to spend money on outside labs to get pre-qualified."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said that prequalification requirements could be a barrier. He said, "There is a problem due to bonding requirements."

Other interviewees identified no barriers in connection with prequalification requirements. For example, Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said there are no problems with the pre-qualification requirements. Everything he has applied for he has successfully pre-qualified.

Experience and Expertise Requirements.

Some interviewees identified experience and expertise as a barrier to pursuing business opportunities. Some interviewees thought that experience and expertise requirements presented a barrier, but that is was the same for small businesses in general. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that experience and expertise can be a significant barrier to small businesses like hers. She said, "It isn't based on race or gender, it is basically discrimination against small businesses. Caltrans doesn't scope work in favor of small businesses. They don't break down projects so a small business can bid on them independently."

The white male owner of an SBE-certified engineering company [Interviewee SM#8] reported a recent experience to team with a larger A/E firm on a project where the prime was scored based on their prior experience working with each subconsultant on the team. "All of a sudden, boom … I was out the door. I didn't have experience [with the prime]." He agreed that it was a "Catch 22" situation.

Some other interviewees said that experience and expertise of minorities and women were subject to question by others due to race, ethnicity or gender or that experience requirements on contracts put minorities and women at a disadvantage. Interviewee #38, the white male partner of a certified woman-owned environmental consulting firm, said the experience and expertise of his female partner was questioned based, apparently, on gender.

Interviewee PH#2, the owner of a UDBE, said, "I think it's very important that you understand, especially with Hispanics and blacks, not only do we have the problem of being Hispanic and black or disadvantaged, we also have a problem of having the background experience or the performance background to show to be able to get on some of the contracts in which Caltrans put a minimum background on past performance on."

Other interviewees indicated that experience and expertise are not barriers to pursuing or engaging in business opportunities. For example, Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that experience and expertise are not a barrier for her company because they have been providing these services for a long time and are very experienced and well know to their customers.

Licenses and Permits.

For some business owners, obtaining licenses and permits were barriers to doing business. In general, business owners did not identify additional barriers for small businesses owned by minorities or women. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "There is no race or gender barrier for obtaining licenses, it is just difficult due to the nature of the tests."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, indicated that licenses and permits are a barrier. She stated, "There are a lot of permits and licenses to keep up with. We have to keep up with these. Some expire annually, some semi-annually, some quarterly. This can be hard to keep up with if you don't keep track of it."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, indicated that licenses and permits are expensive and create a significant barrier.

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that licenses and permits are a huge barrier. She said, "The cost to stay licensed all year is huge. Why should we pay these costs just to bid? If we win [a bid] we could get the licenses before we start, otherwise it is just a huge cost we incur all year long when we do mostly seasonal work."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that licenses and permits are a significant barrier. He said, "Licensing fees exist for everything in our business: small engine licenses, air quality control permits, heater licensing, compressor permits, storage container inspections, water quality, etc. We have to devote resources — both people and money to these inspections and keep track of the expiration for each one. It is expensive and time consuming."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that licenses and permits are a significant barrier. He said, "They are so restrictive. You need city, county, state, fire, CHP licenses or permits. They all make it so restrictive and time consuming that it is hard to keep up with and pay for."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that licenses and permits can be a barrier. She said, "It depends on the customer. Some cities have specific permits and certifications you need that you don't need anywhere else. This is potentially expensive and time consuming."

Other interviewees indicated that obtaining licensing and permits is not a barrier to pursuing or engaging in business opportunities.

Notification of Work Opportunities/Marketing.

Some interviewees identified notification of work opportunities and marketing as a barrier to pursuing business opportunities. Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that learning about work and marketing can be a barrier for firms like his. He said, "There should be a website where Caltrans can let us know what specifically we can bid on based on our specialty."

Other interviewees indicated that notification of work opportunities and marketing is not a barrier to pursuing or engaging in business opportunities. As one example, Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that learning about work and marketing are not a barrier for her firm because they have been providing these services for a long time and are well known to customers.

Contract Specifications and Bidding Procedures.

In general, interviewees who identified contract specifications and bidding procedures as barriers did not indicate that those barriers were any different between minority- and women-owned small businesses and majority-owned small businesses. Interviewee #3, the white male owner of a concrete and construction company, said, "It just seems like some public sector bids require a lot of detail compared to residential. No discrimination that I'm aware of but it is just restrictive for a small business."

Interviewee #5, the sales manager of a non-certified concrete paving company, mentioned that he has always thought that barriers do exist with regards to restrictive contract specifications for public sector contracts. He stated, "Restrictive contracts prevent us from doing more work in the public sector." He also said, "The bidding process overall is broken, the majority of the contracts just want the lowest bid not the best vendor."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that "the bidding process can be very cumbersome to small businesses. The bids often require a high number of hours to complete."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, indicated that restrictive specifications and bidding procedures are a huge barrier for small businesses. He said, "This is one of the biggest problems. You have people writing specifications who don't understand what they are doing so they require things that don't make sense. The result is that only big businesses can compete." He also said, "How do you identify the pieces that you might be qualified for? You can't bid on the whole thing [as a small business] so only big firms get the work. "

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that unnecessarily restrictive contract specifications and bidding procedures can be a barrier for small businesses like hers.

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that the requirements and specifications can be a barrier. She said, "The formulas and requirements often don't make sense and require a lot of paperwork just to bid." She also said that the bidding process is a huge barrier. She said, "They just need to simplify it and not require so much paperwork and repetitive information."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that unnecessarily restrictive contract specifications and bidding procedures are a significant barrier. He said, "All public sector work is hard and they should streamline the bidding procedures so that it doesn't take so much time to respond to a bid."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, indicated that contract specifications and bidding procedures are a barrier. He said, "All plants are certified and we have to meet Caltrans specifications and our materials and equipment has to meet their tolerances. It is overwhelming and maddening that we have to pay this much money to many different agencies for certification just to meet specs before we ever get a job."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that unnecessarily restrictive contract specifications and bidding procedures are a barrier. He said, "Jobs based on union restrictions unnecessarily can create an issue."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that contract specifications are a significant barrier. He said, "We never get an opportunity to bid on jobs directly. It seems like someone else always gets the work and we only get the scraps." He also said that the bidding process was a barrier. He said, "The big firms have a big advantage and Caltrans always seems to use the same firms over and over — even when they screw things up. The process is not fair."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that restrictive contract specifications and bidding procedures can be a barrier. She said, "Our bids are usually fairly simple but we will sometimes get blueprints and if the blueprint is wrong, we have to decipher that and make the changes. This can take a lot of time."

Interviewee WT#7, the female owner of a DBE-certified research firm, said, "The accounting requirements for subcontractors can be prohibitive. For example, a recent RFP from Caltrans required that both primes and subs would need to have an accounting system that allows for 'continuously updated' overhead rates. We were not able to participate because of this requirement."

Interviewee PH #7, a small business contractor, said, "It's very hard for me to do blueprints over BidSync. I tried to get information from the chief engineer. He said I need to request it through BidSync. BidSync wouldn't respond to me quickly enough. The blueprint by — on the record, was 497 pages. The job was one page. So if that gives you any idea of what I have to deal with as just a metal fabricator, there's just way too many pages that I didn't need at all. I mean, they could have summarized it up. The sketch that they had was not accurate, even close. It was like a generic sketch. And the measurements that were on that sketch weren't even accurate, so there's no way

a small business guy like me could accurately bid that job, even come close to bidding that job without the correct measurements being on that. I tried to get the measurements. I mean, I just needed to know — just get me close. Give me the width of the road. The width of the road wasn't on 497 pages, nor was it on the sketch. And that's pretty bad. I was really upset about that. There were just not enough measurements there for me to accurately give a bid."

Other interviewees reported that unnecessarily restrictive contract specifications and bidding procedures do not pose a barrier to pursuing or obtaining business opportunities. As an example, Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said contract specifications seem pretty fair, and that most bidding processes are pretty straightforward, but you have to really know the system. He stated that there is "lots of paperwork" involved in the process.

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that bidding processes do not present a barrier to her business.

Factors Public Agencies or Others Use to Make Contract Awards.

Some interviewees identified various factors public agencies or others use to make contract awards as a barrier to pursuing business opportunities. Some interviewees identified factors that favored large businesses over small businesses, and some said that the low-bid system represented a barrier. In general, interviewees did not report that these factors affected minority- and women-owned small businesses differently than majority-owned businesses.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that the factors agencies use to make awards are a huge barrier. He said, "They are geared to big companies only. They write specifications so only big companies can win."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that factors public agencies use to make contract awards are a barrier. She said, "Low bidder winning doesn't make sense. Just because the bid is lowest doesn't mean it is the best value."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that the factors public agencies or others use to make contract awards is a barrier. He said, "They take the low bid and then make up for it later with change orders because they know they are underbidding."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, felt that factors public agencies use to make contract awards can be a barrier. He said, "Opening the door for new guys is difficult. Agencies prefer to award contracts to firms they have been working with."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, stated that factors public agencies or others use to make contract awards can be a barrier. He said, "Contracts should be awarded based on low price so small companies can compete with large contractors."

Other interviewees identified no barriers posed by the factors that public agencies or others use to make contract awards.

Bid Shopping.

Some interviewees identified bid shopping as a barrier to pursuing business opportunities or that bid shopping is a frequent occurrence. A number of interviewees reported the existence of bid shopping. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, reported that within general contractors bid shopping happens, that "[the general contractors] solicit bids and show them to their buddies."

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that bid shopping happens all the time.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "Bid shopping even happens in public works, but good luck proving it."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that bid shopping occurs but she said "this is part of doing business. Customers will give us prices to beat all the time. This is an opportunity."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that bid shopping is a barrier. She said, "This happens all the time. Contractors will ask you to beat someone else's bid in order to get work."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, said, "I don't deal with people who shop bids. I know it happens, know who they are, but it is not worth the liabilities."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "Bid shopping is a huge barrier. We can't bid with certain primes. Recently, we posted a bid early to the website and we heard through the 'grapevine' that our bid was shopped. This is just business though and has nothing to do with discrimination."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that bid shopping has happened a few times in the past.

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "[Bid shopping] happens all the time, but it has nothing to do with discrimination."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that bid shopping can be a barrier. He said, "Certain companies are known for this. They take bids and then ask you to beat them. Our approach is to just give them our best number — we don't like to play that game."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that bid shopping was a barrier. He said, "Yes, we have people come to us with bids to beat all the time."

Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "Bid shopping certainly occurs in the market. I have had it cost me a few jobs in the past. Something needs to be done about this."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that bid shopping is a significant barrier. He said, "We have other big firms come to us all the time telling us what the bid is we have to beat."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that bid shopping is a huge barrier. She said, "Many primes will ask you to beat bids they have. We have to adjust our bids to beat them if we want the work."

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, is aware that bid shopping happens. He said, "It happens all the time. I hold off on price until the last minute."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "I've heard of [bid manipulation and bid shopping] happening a lot. When I worked for [a large consulting company], I pick on them a lot because this was glaring. They had a guy who worked for Caltrans who went over to [a large consulting company]. It was pretty obvious that we got a lot of contracts from Caltrans because he had inside people getting work."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company; said that bid shopping is "prevalent in the public and private sectors."

Interviewee PH #13, a representative of a UDBE-certified construction company, said, "I've had my bids shopped out before with that agency. Bid shopping is where you have a bid that's due at maybe two o'clock, and around twelve o'clock if you are — if you are bidding jobs to everybody on the list, you start getting phone calls, 'You're $500 high, $200 high. You're got to be here.' That's bid shopping."

Interviewee PH #15, the female owner of a striping firm, said, "I've been bid shopped many times recently on a design/build contract with Caltrans, where the subs are not listed at the time of bid."

When talking about design-build contracts, Interview SM#11, a female owner of a construction business and representative of Women Business Owners and Executives, said, "There's no listing of subs at bid time on that. It gives [primes] time to bid shop your bid. You give them the best bid at the time of bid, and then they want to come and work you over. That's very hard on small business because we're giving you the best bid at the time of bid."

Other interviewees indicated that bid shopping is not a barrier to pursuing or engaging in business.

Bid Manipulation.

Some interviewees identified bid manipulation as a barrier to pursuing or obtaining business opportunities. Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that "a lot of semi-crooked things happen all the time. Some big primes will manipulate bids and specifications and take it out on their subs so they can make money."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that bid manipulation is a significant issue. She said, "We have had contractors ask us to violate our commercially useful function (CUF) so that they can get credit. Caltrans needs to investigate and punish these practices."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that bid manipulation is a barrier. He said, "Primes will basically tell you 'take it or leave it' for a bid knowing that what they will pay you barely covers costs."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that bid manipulation is a barrier. He said, "Same as bid shopping. I think that Caltrans knows who they want to use and manipulate specs and requirements to make it fit."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that bid manipulation is a barrier. She said, "A lot of firms underbid on purpose knowing the low bid gets the job. Then they make up for it with change orders. How is this not fraud?"

A small business owner and representative of the California Small Business Association [Interviewee SM#4] reported, "Two years ago we were having problems with these big primes … bidding below cost …. We got the loss-leader law put into procurement law where every bid that goes out is required to have the loss-leader verbiage which says you can't sell below cost in the State of California. That's been a law that's been on the books since the 50s, but we actually got them to require it to be put on supposedly all state procurement." Interviewee SM#4 added, "We were finding that they were bidding below cost … and then do overruns. Once there's somebody brought to task and debarred … it shows that if you continue to do this, it's going to hurt you."

When talking about unfair practices on the part of a prime contractor, Interviewee SM#12, the Hispanic American owner of a DBE-certified highway contracting firm, said, "There's not many DBEs that are going run around to sue a contractor for a small job, spend a lot of money over something they may never win," Interviewee SM#17 disagreed, saying that he was aware of

many large DBEs that sued prime contractors, and the same companies would call them back. "Sometimes the guy that makes a lot of noise gets the goodies." Interviewee SM#1, a Hispanic contractor and representative of the Hispanic Contractors and Suppliers Association said that no, small businesses would typically not challenge prime contractors in court. "We're small businesses, we're very conservative, we're going to watch what we say." Interviewee SM#16, the female owner of an engineering firm agreed that subcontractors are very reluctant to take any actions against prime contractors.

Some interviewees indicated that bid manipulation is not a barrier to pursuing business opportunities or they were unaware that bid manipulation occurred. For example, Interviewee #2, the white principal of an energy company, stated that "he is not aware of bid manipulation in this field."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said she is not aware of bid manipulation.

Treatment by Prime Contractor or Customer During Performance of Work.

Some interviewees identified treatment by prime contractors or customers during the work performance as a barrier to pursuing or obtaining business opportunities. Some interviewees reported abuse of small firms in general and others identified specific mistreatment of firms based on the race or gender of their ownership.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that many primes treat subs really bad. He said, "Some primes won't pay you what they really owe you. If you keep your mouth shut, you get paid faster. If you don't take your per diem you will get paid faster. There is little integrity with big contracts."

Interviewee PH #1, the owner of a DBE-certified environmental consulting firm, reported that he felt he had been treated unfairly. He said, "I would have to say as a business owner, I feel there have been some very particular instances where I have felt I have been treated unfairly. I won't say it was discrimination, but definitely unethical practices. It's hard to prove discrimination by race, gender, or color, but if there is an ethical practice that is not consistent throughout the different districts and different projects, we are definitely a victim of that."

Interviewee PH#25, the female president of a certified DBE/UDBE/WBE/LBE/CBE/VFBE resource management company, said, "There's a really big situation out there with client abuses from prime contractors using a small firm, and I've got to tell you what the gentleman before me said, if I could get a million dollars' project, I would not be complaining. I would just like something for $20,000. I'd be happy."

Interviewee #38, the white female principal and partner of a WBE-certified environmental consulting firm, reported that treatment by prime consultants or customers during work performance can be a barrier. She said "The prime gets you because you're a WBE or DBE and then they don't give you the work."

Interviewee #39, a representative of the Young Black Contractors Association, mentioned, "That's always a problem, because in most instances, these primes always have someone who's being disrespectful or calling somebody names. It happens a lot. I tell me guys that 'we're not here to make friends.' It's race specific."

Other interviewees reported that they had no experience with and were unaware of barriers in connection with treatment by a prime contractor or customer during the work performance. For example, Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that he has not had bad experiences regarding treatment by prime consultants or customers.

Approval of the Work by the Prime Contractor or Customer.

Some interviewees identified approval of the work by prime contractors or customers as a barrier that they have experienced or are aware exists in the local marketplace. Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that approval of the work can be a barrier. She said, "Not necessarily the approval, but what jumps out at me is the short time frames for making corrections. This process should be clearer and more collaborative between the contractor and Caltrans."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that there are some barriers to getting approvals. He said, "Getting approvals can be a barrier but we always over-design so it generally isn't a problem for us. However, getting approvals often require showing how goals and standards are met or exceeded which can be time consuming. If they aren't met then payment can be withheld."

Other interviewees indicated that approval of work by a prime contractor or customer is not a barrier to pursuing or engaging in work For example, Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, stated that approval of the work by the prime or customer is not a barrier.

Payment by the Prime Contractor or Customer.

Many interviewees identified issues related to payment by a prime contractor or customer as a barrier to pursuing business opportunities. Interviewees did not say that minority- and women-owned firms had more disadvantages than other small businesses. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, mentioned that payment is a "big problem, I don't know how to solve it." He also stated that they often submit multiple invoices to the prime before being paid.

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that timely payment is a barrier for her business. She said, "Yes, slow payment is always a barrier. As a small business, you can't have accounts receivable floating out there too long."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that there are some "shady" practices by some primes. He said, "Sometimes you have to do what the prime wants in order to get paid, even if it not part of the contract. There is no oversight. There should be a hotline for identifying shady business practices with staff dedicated to following up on these types of complaints."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that timely payment is a huge barrier. She said, "Caltrans sometimes makes progress payments to our customers that don't match our services. We will sometimes have huge asphalt deliveries that won't be paid for immediately but we have to pay our suppliers." She continued, "Why doesn't Caltrans pay for our services like we have to pay our suppliers?"

Interviewee #13, the African American female owner of a non-certified trucking company stated, "Getting paid by the brokers is always difficult. This happens to almost everyone that subcontracts."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm, mentioned that customers have terms and conditions but these do not match with government terms and conditions. He stated, "Getting paid on our schedule is next to impossible based on government terms and conditions."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that timely payment by the customer or prime is always a barrier. He said, "Slow paying customers make it difficult to pay our drivers and employers and to maintain our equipment."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that timely payments is always a barrier. He said, "Payments seem to always be an issue, especially lately. It seems like the bigger the company, the more they drag their feet in paying you."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that timely payment is always a barrier for a small business. He said, "It is hard to make payroll, maintain equipment, buy new equipment or pay yourself when you have primes who pay you slowly. It's like they are trying to run us out of business and they blame Caltrans for the slow payment."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that treatment by prime or customer is a barrier. She said, "Some pay slowly. Sometimes more than 90 days or even longer, then they try to get you to take less just so you'll get something."

Interviewee WT#6, the female owner of a SWBE-certified trucking firm, said, "The problem is, the majority of the brokers no longer pay their subcontractors on time because they are not getting paid on time. Where we could previously expect payment for our services within 45 to 60 days, we now have to wait 90-plus days. Small businesses like myself cannot withstand the lag and continue to sink deeper and deeper into debt."

Interviewee SM#11, the female owner of a construction business and representative of Women Business Owners and Executives, reported that payment of subcontractors by the prime contractor is "a very big problem."

Interviewee SM#21, the white male owner of an engineering company, said that banks do not look favorably on his accounts receivables that are 60 or 90 days because he has yet to be paid by the prime.

Interviewee SM#8, the white male owner of an engineering firm, reported that there may be lags in getting paid for subcontract work because the prime consultant won't invoice every month for the services if the dollars are too small. This can be a big disadvantage for small business because they still need to pay employees and outside vendors on time.

Some interviewees identified no barriers in connection with payment by a prime contractor or customer. For example, Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that they have been blessed with respect to prompt payment. In her company's long history they just had one client that was slow making payments.

The Hispanic American owner of an engineering company [Interviewee SM#12] reported that his company is not having issues being paid by primes. He indicated that most of the primes his firm works with are good about that. He said he may not be having problems because prompt payment is a contract requirement.

Other Barriers.

Impact of new environmental regulations. A small business owner and representative of the California Small Business Association [Interviewee SM#4] reported on the burden of new environmental regulations on small construction firms. "Unfortunately, more recently it's not been positive, especially with things that are going on with the 8032 [new regulations on diesel engines]. Everybody's having to get new equipment, or they essentially can't get new equipment, or they're going to go out of business. One of our prime board members is a striping company and she's doesn't know what she's going to do. It's getting bad for [small] businesses out there." He described the situation for one firm that moved all of their trucks out of California and bought new trucks for California. "Small businesses including DBEs, they don't have that kind of money. They can't even get access to capital. Bonding kills them. All they're doing is driving another stake in the heart."

Interviewee SM#11, a female owner of a construction business and representative of Women Business Owners and Executives, also reported that environmental regulations are having a negative impact on small businesses.

Some interviewees identified additional barriers to pursuing or engaging in business. Interviewee #3, the white male owner of a concrete and construction company, said, "Being a small, un-established company makes it difficult. Until I'm more established, it will be hard to get more work."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that the biggest barrier is that "being a small business puts you at a disadvantage related to big firms. There are a lot of jobs I know I can't bid on based on the size and scope."

E. Knowledge or Experience Concerning Any Discrimination Based on Race, Ethnicity or Gender in the Local Marketplace

The interviewees were asked whether they were aware of or had experienced discrimination in the local marketplace based race, ethnicity, or gender.

The following presents responses for questions relating to the potential for:

- Price discrimination in obtaining financing, bonding, materials and supplies, or other products or services;
- Denial of the opportunity to bid;
- Stereotypical attitudes on the part of customers and buyers;
- Unfair denials of contract awards;
- Unfair termination of contract;
- Double standards in performance;
- Discrimination in payments;
- Other predatory business practices;
- Unfavorable work environment for minorities or women;
- The 'good ol' boy network' or other closed networks;
- Government resistance to use of MBE/WBEs;
- MBE/WBE and DBE fronts or fraud;
- False reporting of MBE/WBE participation or falsifying good faith efforts; and
- Any other related forms of discrimination against minorities or women.

Note that there is some overlap between the above list and the topics in Part D above that were discussed in a more general way in the interview.

Price Discrimination in Obtaining Financing, Bonding, Materials and Supplies, or Other Products or Services.

Some interviewees reported being aware of or having experienced price discrimination in obtaining financing, bonding, materials and supplies or other products or services. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, reported that price discrimination in obtaining financing, bonding, materials, and supplies or other products or services occurs. He said it is "probably because they work only who they are comfortable with. There might be reverse discrimination because minorities work for less and that might be more attractive for some."

Interviewee #2, the white principal of an energy company, stated that "price discrimination is not overt but it's there. Not sure if SBE/MBEs can handle the rigidity of the bureaucracy."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, reported that minorities and women are adversely affected when attempting to obtain financing. She said that she could not have obtained financing if her partner was not Caucasian. She continued by stating that when she attempted to obtain financing for her firm she was unsuccessful while her Caucasian partner was able to access financing.

Interviewee SM#1, a Hispanic contractor representative of the Hispanic Contractors and Suppliers Association, said that minorities don't have the same wealth as non-minorities, which has lasting impacts on who is able to start a business and the success of those businesses. He also said that banking decisions might take into account race and ethnicity, and that minorities could suffer because of discrimination in lending decisions. Interviewee SM#12, the Hispanic American owner of a highway contracting DBE, agreed about the history of discrimination in banking. "I saw that with my Dad's business in the late 70s, but I haven't seen it since I've been in business …" A number of the participants in this stakeholder meeting agreed that whether someone "looked Mexican" or could "pass for a European" would affect how they are treated.

Interviewee SM#16, the white female owner of an engineering business, said that obtaining a small business loan was critical to her success. She indicated that she was denied a loan by the first bank she went to but was successful at the second bank. She noted that she thought the first bank was "male-oriented" and was not interested in meeting with her and looking at her materials, but the second bank had a female manager who was more understanding of a women-owned business seeking a loan. She reported, "Women owned businesses are often not seen as credible. Persistence pays off, but it is work to get financing."

One interviewee said that his company was affected because it was a small business. Interviewee #23, the Hispanic male owner of a non-certified construction company, said that price discrimination in obtaining financing, bonding materials, and supplies is a problem but not because of race or gender. He said, "It isn't discrimination on race because I'm Mexican. It is discrimination because as a small business you can't get access to the resources you need to help you compete. You need money to compete for these jobs."

Many interviewees reported having no awareness of or experience with price discrimination in obtaining financing, bonding, materials and supplies or other products or services. For example, Interviewee #26, the female majority president of a WBE-certified construction company, said that her company had not experienced any discrimination with respect to obtaining financing, bonding, materials and supplies or other products or services.

Denial of the Opportunity to Bid.

Some interviewees reported an awareness of or experience with being denied the opportunity to submit a bid. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that her company has been denied the opportunity to bid by Caltrans. She said, "Caltrans doesn't understand the nature of our work and has been adversarial by making us feel like we are doing something wrong for working within the parameters of the certification program."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that denial of opportunity to bid is a big problem being a woman-owned firm. She said, "A lot of these guys think a woman can't know this business. They look at me and say, 'We expected a man, does your husband do the work or own the business?'"

Many interviewees reported no awareness of or experience with being denied the opportunity to submit a bid.

Stereotypical Attitudes on the Part of Customers and Buyers.

Some interviewees reported having experienced or been aware of stereotypical attitudes on the part of customers and buyers. Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that stereotypical attitudes on the part of customers and buyers are a problem. She said, "There are very few women in this business and [men] don't think I understand how the business works."

Interviewee SM#20, the Asian-Pacific American female owner of a DBE-certified construction services company, said that when she attempted to obtain certification through Caltrans, a male Caltrans staff member was skeptical of her ability to perform specific types of work and denied a number of NAICS codes on her DBE certification. She attributed this to gender discrimination. "That sort of discrimination still does exist." She continued, "There's an expectation that things work a certain way … working a certain way might have to do around education levels, might have to do around economics, might have to do with gender or ethnic background, but there still seems to be an expectation that things work a certain way. 'You know you're a woman, you can't be a [certain trade or occupation].'"

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, stated that there are customers or buyers with stereotypical attitudes. He said, "There's nothing you can do about that. Some people are prejudiced."

Interviewee PH #12 said, "In actuality the awards continue to be the same, because the minority, the very small minority companies are perceived to not be capable, whether or not they are, whether or not they're in partnership with large reputable companies."

The Native American owner of an engineering-related firm [Interviewee SM#3] reported, "Some of the larger firms approach us as though we're a hobby business because we're small or a DBE …. I've owned the business for 15 years, and it's not a hobby. I've gotten to the point where I resent that."

As discussed later in this appendix, some interviewees said that there is a negative stigma to being DBE-certified. For example, Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated, "The view in the marketplace is that companies with that certification have poor qualifications and are not qualified."

Many interviewees reported no experience with or awareness of stereotypical attitudes on the part of customers and buyers.

Unfair Denials of Contract Awards.

Some interviewees reported awareness of or experience with having been unfairly denied a contract award. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that unfair denials of contract awards depend on the bid. He said, "Lowest bidder should win but you can be deemed unqualified or fail a reference check" which is subjective.

Interviewee #20, the white male owner of a majority-owned demolition and loading company mentioned that he has seen contracts awards that were denied and he believes strongly that it had to do with discrimination. He stated, "Customers have discriminated against friends of mine just because of their race. It is ridiculous."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that unfair denials of contract awards is a problem. She said, "It's the good ol' boy network. They give jobs to their friends and do favors for each other."

Interviewee PH#19, the owner of a DBE-certified small business, said, "We've sent out numerous bids, I mean, and it's a very lengthy process. A lot of, you know, time and effort goes into sending out the bids, and I haven't received work off of one bid that we sent out. Even on the DBE projects, I never even hear back from the estimator on something. I look at the bid summaries, and I know that our prices are competitive, and in most cases we're coming under on our prices, so I'm not sure what the case is there. I did talk to one estimator. She said, 'We already worked with our group of people.' So it's almost like they already have their own network going on, and they don't really want to deviate from there if they don't have to."

Some interviewees reported a difficulty in discerning whether a denial of a contract award was in fact "unfair." Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that there were no blatant denials of contract award. She indicated that excuses, other than race and gender, such as a lack of experience were given. She continued by stating that the 'good ol' boys club' is a fact of life.

Many interviewees reported no awareness of or experience with unfair denial of contract awards.

Unfair Termination of Contract.

There were no interviewees who reported awareness or experience of having a contract terminated unfairly.

Double Standards in Performance.

Some interviewees reported being aware of or having experienced double standards in performance. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "I have seen prime contractors have double standards regarding subcontractors when it comes to race."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that double standards in performance is a problem for a woman-owned business. She said, "I hate when people act like you are stupid because you are a woman. They look at me like I couldn't possibly do the work like a man can."

Interviewee #33, the African American male owner of a certified concrete company, said in regards to double standards that "primes expect that you will not be able to do the work. They use you only because they have to."

Many interviewees reported no awareness of or experience with being held to double standards in performance.

Discrimination in Payments.

Some interviewees reported being aware of or having experienced discriminatory practices with respect to payment including slow and non-payment. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that discrimination happens to all competitors. He stated, "All companies deal with discrimination in payments and that is not specific to his company."

Interviewee #39, a representative of the Young Black Contractors Association, stated, "Yes. I think it hinges back onto the prime. I know Caltrans gives dollars once the bid is awarded, and the biggest issue is that primes don't feel like they need to pass those dollars onto their subs. And when a white general contractor gets a white subcontractor, and that white subcontractor tells the general that they need money, they don't really have a problem getting it. But when a black contractor goes to the general as says we need some mobilize money, it turns into a big issue

when they're already got the money. A certain percentage of that money should be going to mobilizing the subcontractor, but it doesn't happen."

Interviewee PH#25, the female president of a certified DBE/UDBE/WBE/LBE/CBE/VFBE resource management company, said, "The problem I have is especially in transportation, is that there's no teeth in the regulations at all that, if your prime contractor doesn't pay you, per the Prompt Payment, there are penalties that are supposed to be enacted. There's no repercussions against that prime contractor. I have had projects that I haven't been paid for years, and when I complain, I get thrown off the job because I cause trouble."

One interviewee reported having difficulty getting paid, but felt that this was not because of discrimination. Interviewee #13, the African American female owner of a non-certified trucking company mentioned that receiving payments is often one of her biggest challenges. She stated, "Getting paid on-time is difficult but it doesn't have anything to do with discrimination."

Other interviewees reported no awareness of or experience with discrimination in payment.

Other Predatory Business Practices.

There were some interviewees who discussed being affected by predatory business practices. Interviewee SM#3, the Native American owner of an engineering-related business, said, "Another problem is the endless accommodations that smaller firms have to make because of their size … and because they've been granted UDBE on a contract. That means 'you provide us with more work, and we're not going to pay you for all of it.' It's almost like, 'we've done you a favor by bringing you into these contracts because you're UDBE or DBE.'"

Unfavorable Work Environment for Minorities or Women.

Some interviewees reported being aware of or having experienced an unfavorable work environment for minorities or women. Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that unfavorable environments for women are a huge problem in her business. She said, "Men make offensive comments all the time when there is a woman on the job. Sometimes they won't even talk to me about jobs."

Interviewee #26, the female majority president of a WBE-certified construction company, said, "I've experienced some offensive comments and behavior from men, but it was all between family members who were also working in our company."

Interviewee #35, the African American male owner of a certified electrical company, reported awareness of an unfavorable work environment for minorities. He said, "Yes. Minorities get the lowest pay rates and are the first to go."

Interviewee #37, the African American male president of a certified electrical company, reported some awareness of an unfavorable work environment for minorities or women. He said, "Oh, I've heard of them — sure. Have I become a victim of them? They wouldn't let me know. It's all things said behind closed doors."

Interviewee PH#24, the female president of a UDBE/WBE-certified firm, stated that at a recent workshop held by Caltrans a speaker presenting on how to do business with Caltrans said "… all those pioneers who met their death as a result of being fatally shot in the back by arrows …" when discussing demographic changes that occurred in the construction industry workforce as men and women retire. Interviewee PH#24 said, "Her clear implication was that Native Americans are of the sort of people who would shoot you in the back, a truly inflammatory and highly amazing racial slur. I was shocked. I took corrective action the next day by bringing this racially offensive remark to her attention via e-mail. I told her how it was interpreted, and recommended that, if this expression is used within her company, that their human resources department needs to correct their racial sensitivity awareness training program. As for me, this remark has a chilling effect as I determine which contractors I want to develop successful working relationships. The impression I have is that it would be a long, hard road to travel just to get recognized and treated with respect as a valued environmental management consultant on any of her companies' teams."

Many interviewees reported no awareness of or experience with an unfavorable work environment for minorities or women.

The "Good Ol' Boy Network" or Other Closed Networks.

Many interviewees reported knowledge of or experience with a "good ol' boy network" or other type of closed network. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, reported that the "good ol' boy network" exists and is a barrier. He said, "Yes, there are some general contractors who manipulate bids. It's not clear how these guys make money because they shop bids and then show them to their friends who undercut bidding process." He went on to say, "This is how construction works, guys play golf together, introduce them to friends of friends and then steer work to them."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated that the "good ol' boy network" exists, "especially in the unions."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that the "'good ol' boy network" is just the way business is done." She said, "Business relationships are key in this business."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said the "good ol' boy network" is "alive and well." He said, "If Caltrans made things more open and transparent this wouldn't go on. The big guys wouldn't get all the work if Caltrans really wanted to eliminate this. There is very little competition and the big firms don't really compete or bid against each other."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that the "good ol' boy network" exists but that it is just the way business is done. She said, "I might be naïve, but I don't think it is based on race and gender but it is just the way business is done. Everyone is reluctant to bring in new people — they want to work with people they know and trust."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, stated, "I'm aware this is around — hard to prove though."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "The 'good ol' boy network' is a big deal in the construction business and we constantly have issues with this. It's sad because we don't give out our prices or do engage in this type of behavior, we are honest while others aren't."

Interviewee #13, the African American female owner of a non-certified trucking company mentioned that "good ol' boy network" is out there all over the construction industry. She stated, "I know that we have missed out on work because of the ["good ol' boy network"] but what can you do."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm mentioned that this happens everywhere in business, especially in the construction business. He stated, "It is natural that companies want to work with their friends, within their network."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that the "good ol' boy network" is "alive and well. It's not what you know, it's who you know."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that work often goes through closed networks. He said, "Sometimes it's who you know and networking that lead to jobs."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I know that the 'good ol' boy network' exists, but I go with people I know, people I trust."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that the "good ol' boy network" is an issue for small businesses. He said, "Big firms are the only ones who can do the big jobs it seems like. I'm not part of that [closed network]."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that the "good ol' boy network" is an issue. He said, "Everyone works with who they know — that's the way our business works. Whether it's discrimination or not is hard to say."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that the "good ol' boy network" is a problem. She said, "Women can't get into the club. But if you do good work and you can fit in and not cause problems you can prove yourself. It is not easy though."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that the "good ol' boy network" was a fact of life that made it difficult for DBE/MBE/WBE firms to get government contracts.

Interviewee #33, the African American male owner of a certified concrete company, reported awareness of the "good ol' boy network." He said, "High dollar contracts are awarded to the big contractors, and just a small percentage flows down to small business."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, stated that the "good ol' boy network" is a problem. He said, "Oh yes. You can put a big star next to that. That's a problem. Whoever the project manager for the state or local government agency is, it seems like the same people always get theirs — they get favorite people — they always get everything. Anybody new doesn't get anything."

Interviewee SM#3, the female owner of a DBE-certified construction business, was asked if she was treated the same as men. "If I'm sending over a quote … and I'm at $20,000 and my competitor is at $25,000, they're not noticing that I'm a woman-owned business." She added, "When it starts off that way, then no, I don't think I am [treated differently]. But when you go to some of the meetings, I think that sometimes it comes into play, but it hasn't discouraged me to stop doing what I'm doing and trying to be successful." "Sometimes you got the 'good ol' boy' mentality … which doesn't recognize a woman in the industry. That doesn't always happen, but yes, it has happened. I just have to know that going in and recognize with certain contractors that I know that that's the way it is … It has played a part."

Interviewee SM#16, a white female owner of a DBE-certified engineering firm, reported, "Often women or minorities are left out of the boardroom." She went on to give examples of the impact. "Figuring out how to read a contract is often left to the principals. Without mentoring, this puts the inexperienced business owner in a weaker position during negotiations."

Some interviewees indicated that they had no knowledge of or experience with a "good ol' boy network." Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that the "good ol' boy network" is not apparent in the local marketplace.

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that the "good ol' boy network" doesn't occur in their type of work. He stated, "Our reputation keeps things going."

Governmental Resistance to Use of MBE/WBEs.

Some interviewees reported being aware of or having experienced governmental resistance to the use of MBE/WBEs. Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that governmental resistance to DBE/MBE/WBEs was not blatant, but that other excuses were given to avoid the award of contracts.

Many interviewees reported no awareness of or experience with governmental resistance to the use of MBE/WBEs.

MBE/WBE and DBE Fronts or Fraud.

Some interviewees reported experience with or awareness of the existence of MBE/WBE or DBE fronts or other fraud. Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that fronts and/or frauds are common. He said, "This happens all the time. I've had women approach me saying they are a woman-owned business and need men to carry out the work."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that she has no direct experience with MBE/WBE/DBE fronts or frauds, but she said, "I have heard it happens."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "In my estimation, one out of every 10 MBE/WBE/DBEs are fronts for other businesses. There are also others that are fishy."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that MBE/WBE/DBE fronts and frauds are out there. He stated, "We haven't had any direct experience with MBE/WBE/DBE fronts or frauds but we know of some who have had issues."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "We have seen this around here, but I don't believe it had anything to do with Caltrans."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm mentioned that he was aware of certified companies that were fronts. He stated, "There are more fraudulent companies out there than people know."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that MBE/WBE/DBE fronts and frauds are "very prevalent." She indicated that other companies had wanted to use her company name and would pay her, but she would not have to perform any work. She refused to participate in such an arrangement.

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said "[DBE/MBE/WBE fronts or frauds are] all over. Policing is not there."

Interviewee WT#24, a representative of an MBE/SBE-certified trucking firm, said, "Large companies obtaining certifications by appoint an employee/friend to start their own "pass-through" and using the equipment and personnel of the large company to perform the job with a supposed "lease" agreement. This undermines the purpose of the entire program and is actually giving the work to large companies that are not disadvantaged in any way."

A small business owner and representative of the California Small Business Association [Interviewee SM#4] reported that there was abuse of state and federal small business programs. "With the state side, we have found that, a lot of contracts, the primes have found less than scrupulous small businesses that they can use their name and essentially pay them a fee or a commission so that they don't have to really use a small business … The federal government ... is running into the same problems. They're looking at different vehicles to stop the pass-through, which just makes it bad for all small businesses. I'm wondering if … primes are becoming much better at finding these kinds of individuals." Interviewee SM#4 added, "[Until more crack-down on pass-through] I don't think a lot of small businesses are going to get the chance." Interviewee SM#4 continued, "A lot of the small businesses … are not renewing their small business certification, because they see no chance."

Interviewee SM#4 went on to report about efforts to better enforce commercial useful function requirements to reduce fraud. "The next thing we did is the CUF issue [commercially useful function] … last year we got the penalties increased, which includes debarment for small business, for lying on their CUF certification. It went from $1,000 on first offense to $10,000 to $30,000, jail time, civil penalties, civil fines, perjury charges, and then all costs that are incurred. And it also now ties back to the primes. So until some of the primes and small businesses are brought to task, it's not going to change because they don't feel there are any penalties. But we're getting things put in place that, down the road, we'll see things change."

Some interviewees reported no knowledge of or experience with MBE/WBE or DBE fronts or fraud.

False Reporting of MBE/WBE Participation or Falsifying Good Faith Efforts.

Some interviewees reported that they were aware of or have had personal experience with false reporting of MBE/WBE or DBE participation or falsifying good faith efforts. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am aware of false reporting and falsifying good faith efforts. Overall, the good faith program is not good. Caltrans should look into this program."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "I have heard of good faith efforts that were not completed properly. It's not fair to the other companies that are capable of doing the work."

Interviewee #28, the white male president of a certified majority DVBE, said, "Prime contractors do falsify good faith efforts for DVBEs. They call you up for initial discussions, but never follow-through. Then they say they made good faith efforts."

Interviewee #37, the African American male president of a certified electrical company, reported some awareness of false reporting of DBE/MBE/WBE participation or falsifying good faith efforts. He said, "They're probably out there. Do I have evidence of it? No, of course not. They're too sharp for that."

Interviewee PH#4, a representative of a DBE-certified program and project management company, said "[Local agencies] have UDBE and DBE goals, but they call it more a good-faith effort. So consequently they are not holding their contractors, who already kind of require it, all contractors have to do is send out a couple e-mails and maybe a couple of phone calls, say we tried to reach out, we couldn't find anybody."

Interviewee PH #8, the female owner of a DBE/WBE-certified public relations firm, said, "Come up with ways to assure us that the rates or information listed on Caltrans' DBE database is not being misused by some companies to simply show that they made a 'good faith effort' to find a qualified underserved, namely an African American-, Asian-American-, or woman-owned company. They should be required to do more than simply to go that database."

Interviewee PH#25, the female president of a certified DBE/UDBE/WBE/LBE/CBE/VFBE resource management company, said, "Now, my problem what I'm seeing with being a DBE is what most people call the good faith effort. I had to change that because what all of us DBE people know in the room it's really called a good *fake* effort because they tell you they want you on their team, and then they never use."

Interviewee WT#1, a DBE-certified wire and cable manufacturing firm, stated, "Good faith efforts are the practice of just sending emails. No true outreach efforts are made to determine matched in need of supplies from manufacturers."

Interviewee WT#6, the female owner of a SWBE-certified trucking firm, said, "I received emails and faxes asking for me to bid which I did. It was so amazing that everyone wanted me to bid jobs and I did. It took me awhile to understand that the reason they were requesting a bid from me was to supply their quota for 'good faith effort.'"

Interviewee WT#8, the female owner of a UDBE/WBE/SBE-certified firm, said, "I have experienced problems with being utilized *after* I have been awarded a contract. It appears that some of my projects have used me as a UDBE/WBE but have been underutilized, sometimes not all, once the project gets underway. It appears as if they have met their goal by using a company like mine, but then do the work in-house."

Interviewee WT#9, the female president of a DBE-certified ecological consulting firm, said, "My experience is that primes are active in soliciting bids with DBE firms; however, if they win the bid with our firm included in the bid proposal there is often no work that follows. Over the past several years I've had the unfortunate experience of being asked to participate in preparing a bid for a prime contractor for Caltrans projects. After spending time and money preparing the bid materials and providing a copy of our Caltrans DBE to the prime (as they request) I later find out the prime contractor has won the bid with our firm included in the bid but we are never contacted to perform the services. Classic example of contractors contacting us for the purpose to obtaining our DBE certification with no intent of actually using our firm. When I've contacted them they indicate that they decided to use another firm or they are performing the work in-house. They seem to do this with impunity and I don't know what, if any recourse, a small firm such as mine would have in such cases. As a result, we have become very reluctant to respond to bid requests from prime contractors that we have not worked with in the past."

Interviewee WT#12, the president of a DBE-certified engineering firm, said, "Prime contractors seeking DBEs to attain good faith effort are usually in the practice of seeking DBEs through whatever means they have to prove that they are serious in reaching out. But there is a problem of loophole. These primes are responsible only to the point of contact, and that is where their responsibility of 'good faith effort' terminates."

Interviewee WT#21, a representative of a DBE-certified engineering firm, said, "In my opinion, [DBE good faith efforts] did not work at all. The so-called DBE outreach effort by prime consultants is just for show. Even worst, some major firms hired outreach firms to seek potential DBE firms for teaming. I have received several such notices requesting for qualifications on different projects, and I have submitted our qualifications in response. However, these outreach firms and major firms have no intention of interviewing and following up on the qualifications I have submitted (except in the end, they sent notice to advise that we were not selected). It is a total waste of my time and effort."

Interviewee SM#3, the Native American owner of an engineering-related firm, was critical of good faith efforts. "We have gotten requests to bid two days before bid day." Interviewee SM## said, "It doesn't give time to do anything. [DBEs] are receiving notification … but there's no time [to bid]. That existed four or five years ago and it still exists today."

Interviewee SM#3 went on to say that there is a condescending attitude on the part of prime contractors. "We have had firms come in, take our information, use our DBE status and not notify us." Interviewee SM#3 continued, "Primes are not being asked [by agencies], 'who are your UDBEs and show us the documentation.'"

Interviewee SM#6, the female owner of a DBE-certified construction firm, said that sometimes the timing of when some prime contractors contact her for a bid does not leave her enough time for the bid. "We're already doing searches for … projects coming up … we are already doing our bid schedules and have an idea [about the project], but sometimes something comes up that we didn't know about. A contractor will send us something at the very last minute … there have been several times that I couldn't bid on it." She said that it takes about two weeks for her to prepare a bid depending on where they are or the plans for the project. "At least a week minimum."

One interviewee reported that they were aware of or have had personal experience with false reporting of MBE/WBE or DBE participation or falsifying good faith efforts in the past, but that this was no longer a problem. Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said, "There used to be a lot of [MBE/DBE/WBE false reporting] going on. [Prime contractors] had to show a good faith effort, but now that's kind of gone. I don't think there's a problem there anymore."

Several interviewees discussed agency enforcement of DBE participation. Interviewee SM#13, a representative of the Port of Los Angeles, indicated that the Port performs an end of contract audit, and if that if a listed sub is not used then the prime is fined with withholding of final payment equal to 10 percent of what they did not contract out. "That is not a very strong penalty … we at the Port believe that is not the strongest penalty and maybe it would not be the entire

amount … and if that's done once, that would be the penalty and if it's done twice, you go on the non-responsive list."

Interviewee SM#14, a representative of the Port of Long Beach, reported that the Port of Long Beach makes the contract information known to subcontractors and lets the subs make the complaint to the Port or Caltrans. The white male owner of an engineering firm [Interviewee SM#8] reported that, from the perspective of the sub, "you almost shoot yourself in the foot when you do that. Even if you do it silently, it comes around. It sounds very easy, but it's not business-wise because you'll be black-balled in your industry or specialty."

Other interviewees reported no awareness of or experience with false reporting of MBE/WBE or DBE participation or falsifying good faith efforts.

Other Potential Forms of Discrimination Against Minorities or Women.

Some interviewees reported knowledge of or experience with other possible forms of discrimination in the local marketplace. Interviewee #35, the African American male owner of a certified electrical company, said, "There is little diversity in the workers at public worksites."

Interviewee SM#17, a representative of Associated Professionals and Contractors of California, said that, in the 1950s, unions tended to recruit people of the same ethnic background (Irish, Italians, Swedes, etc.) and that Hispanics were not recruited. "There was no Mexican local, there was no black local …." He said he was the first Hispanic to enter the local union for his trade. He reported that entry into unions is different now, but that the history of limited opportunities for minorities had a lasting effect. "To go from carpenter to foreman to project manager and so forth takes many years … and we're still working on that." He reported that "we're still seeing the effects of that." Interviewee SM#10, a white male owner of a construction company, reported that the industry does a lot of outreach now to all groups and have difficulty recruiting new workers because construction jobs are seen as hard work and less desirable than other occupations.

Interviewee PH #14, a representative of the Hispanic Contractors and Suppliers Association, said, "Three or four years ago, before the first disparity study was published, there were some 300 members throughout the state in the Hispanic Contractors Association, and today we don't have anywhere near that many, because many of them have gone out of business, have gone under, declared bankruptcy because of the effects of the discrimination that has been practiced against the minority communities."

Interviewee PH #15, the female owner of a striping firm, said, "[Women are] 50 percent of the population, and there's very little participation in the construction field, of women. Discrimination has always been alive and well, and I know I've been in business a long time, but it is still there. We have moved a little bit, but not much." She added, "I've been discriminated with suppliers. You go to trade shows and you go up and talk to the suppliers. If they don't know who you are, they'll barely talk to you. They want to talk to some man, because they think he's going to buy more or something."

Interviewee PH#16, a representative of the BRIDGE Indian Training Trust, said, "I just see a lot of discrimination. A lot of contractors will talk out of the side of their mouth. They'll get the contractor, but they'll never follow up. And if they do follow up and hire some token Indian to sweep or just to do some labor work, they're not on the job very long."

"It's challenging for everybody," according to Interviewee SM#10, the white male owner of a construction business when talking about the issues affecting construction businesses. He also reported that these challenges were felt more by small businesses and minority- and women-owned businesses. He also said, "I don't care what color your skin, to be in business today is an absolute nightmare … Yes it's probably harder for minorities and women."

Interviewee SM#16, the white female owner of a DBE-certified engineering company, said that the "ultimate insult" from prime contractors is "no recognition for job performance." She said, "I currently have a project where another engineer's name will be listed on the plans in my place. The prime does not want the client to know that my firm provided services on the project."

Some interviewees reported no knowledge of or experience with other possible forms of discrimination in the local marketplace

F. Insights Regarding Neutral Measures

Interviewees were asked whether they had any experience with or were otherwise generally aware of any race-, ethnicity- or gender-neutral programs or measures to assist small businesses, including minority-owned and female-owned businesses. Interviewees were then asked to provide their impressions with respect to a number of specific race-, ethnicity- or gender-neutral programs or measures listed in detail below.

Overall Comments about Neutral Measures.

Some interviewees indicated that they had no knowledge of any race-, ethnicity-, or gender-neutral programs or measures to assist small businesses, including minority-owned and female-owned businesses. Some interviewees said that they were not aware of these types of programs but would be interested in them or would find them useful.

For example, Interviewee #3, the white male owner of a concrete and construction company, said, "I am not aware of any neutral measures but would be interested in a lot of these categories."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that she is not aware of any specific neutral measure but said that she was interested in any programs that help small businesses like hers.

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that she is not aware of any programs that would help them but said, "Anything that will help us identify work would be appreciated."

Other interviewees reported general awareness of certain race, ethnic, or gender-neutral programs or measures to assist small businesses, including minority-owned and female-owned businesses. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that measures to encourage small business participation are helpful but "they might limit their effectiveness or quality by not reaching out further" to non-local competition.

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that he knows that some neutral measures exist. He stated that he does not participate in any of the programs. He also said it would likely be beneficial to multiple businesses if the number of neutral measures were increased and more widely publicized.

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that training is a big chunk of measures or programs that are helpful to small MBE/WBEs. She indicated that joint training that includes bright people from small companies as well as from government would help build networks and establish bonding during the training sessions, and that this would lead to a different type of 'good ol' boy network' that would reduce risks.

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, said, "I've heard of neutral measures." He added that he felt that the programs are helpful, saying, "If you know the ins and outs of anything that makes you faster."

Some interviewees reported on the neutral efforts implemented by their agencies. Interviewee SM#5, a representative of the San Mateo County Transit District, reported on his agency's small business efforts. These efforts include obtaining quotes from one to three small businesses for informal purchases, facilitating interaction between prime contractors and subcontractors, requiring vendors to register on their website as planholders (so that they can be sent updates), registration of firms interested in prime contracts and subcontracts, using a small business preference (up to 5 percent for bids and up to five points for consultant evaluations). They are also looking at SBE contract goals (not operated in tandem with the DBE contract goals.) They are submitting such efforts as part of their small business program they have developed for USDOT.

Some interviewees knew of neutral programs and did not think they were helpful. Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "Oh, I'm aware of [neutral measures]. I don't think they're helpful. Right now they're giving a lot of contracts to the veterans of Iraq and Afghanistan. It's all politics. It's whichever way the wind blows."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, mentioned that "I am aware that there are neutral measure programs being done, but they are not very helpful and have minimal impact on the bottom line."

Technical Assistance and Support Services.

Some interviewees reported awareness of technical assistance and support services and thought they were helpful. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am aware of similar services. I attend a class at USC that teaches estimating, insurance and safety. I think this type of class is very helpful to small businesses."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that he was aware of programs being offered at Cal State Fullerton that help smaller companies learn how to work with primes. He stated, "The technical assistance training was helpful."

Interviewee #26, the female majority president of a WBE-certified construction company, said, "Technical assistance and support services are helpful. The SBA has a program that provides technical assistance and support services."

Interviewee SM#17, a representative of Associated Professionals and Contractors, said that Caltrans used to have a program out that would do training of businesses "… and that is still needed."

Interviewee SM#23, a representative of the National Society of Hispanic Professional Engineers, said that "it's very difficult for local construction business owners to make the leap from local and small to the size and complexity of the work that goes on at the state level." He said that there needs to be more assistance by state and local agencies to help these firms.

Some interviewees reported awareness of technical assistance and support services and did not think they were helpful. Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that he was aware of government programs to help contractors in submitting bids, but that his company did not find them particularly helpful.

Other interviewees reported that they were unaware of technical assistance and support services for small businesses. For example, Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated she was not aware of technical assistance programs but "this would be helpful for me and the administrative assistant."

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that technical assistance "would be helpful because there is a need for better education about this type of support — how to keep your business running."

Interviewee #3, the white male owner of a concrete and construction company, said these services "would definitely be helpful. Small businesses need help in knowing the ropes and support for all the things it takes to grow a small business."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that technical assistance and support services "would be helpful to a business so that you could focus on getting quality work done, not on paperwork."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that technical assistance initiatives would be helpful for small businesses. She said, "Clarification of the many forms would be helpful, or just don't make them so complicated in the first place."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that technical assistance would be useful to any small businesses.

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I have heard of these but I have not attended any of these. I think they would be helpful."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that assistance with bidding would be helpful. He said, "Just having help understanding what's out there and how to bid would be helpful."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that technical assistance would be helpful. He said, "Yes, it would definitely help. I can do most of this myself but it took me a long time to learn how. It would have been nice up front to have some assistance when I started my company."

Interviewee #28, the white male president of a certified majority DVBE, said that assistance preparing bids according to the "unit of measure" would be helpful.

Other interviewees indicated that the provision of technical assistance or support services would not be beneficial to small businesses. Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm mentioned that he was not aware of these types of services being offered. He stated, "I don't know that these would be that helpful. I use QuickBooks and everybody should be able to do that."

Interviewee #29, the white male owner of a concrete and landscaping company, indicated that programs or initiatives for technical assistance and support services are not needed, because he designs his own programs and is happy with them.

On-The-Job Training Programs.

Some interviewees reported awareness of on-the-job training programs available to small businesses and thought they would be helpful. Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I have heard of these but I have not attended any of these. I think they would be helpful."

Interviewee #29, the white male owner of a concrete and landscaping company, indicated that he was familiar with a training program for development of a Lead Compliance Plan, and felt that was helpful.

Other interviewees reported that they were not aware of any on-the-job training programs available to small businesses, but thought they would be helpful. For example, Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said that he is not aware of on-the-job training programs. However, he said, "These [on-the-job training programs] would be helpful because actual work is the best way to learn."

Interviewee #3, the white male owner of a concrete and construction company, said he is not aware of any but would be interested.

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am not aware of this program but it would be helpful."

Other interviewees did not think that on-the-job training programs would be beneficial to small businesses. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "I don't think [on-the-job training] would be helpful to me."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said she is not aware of any on-the-job training programs but does not know how helpful they would be.

Mentor/Protégé Relationships.

Some interviewees reported that they were aware of mentor/protégé programs available to small businesses and thought they would be helpful. Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I have heard of these but I have not attended any of these. I think they would be helpful."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said he had experience with mentor/protégé relationships. He said that his mentor gave up on the paperwork snowstorm and, therefore, did not get certified. He explained that since his mentor was not certified, "I was not compliant, and I haven't gotten any work since."

Interviewee PH #1, the owner of a DBE-certified environmental consulting firm, said, "I am a member of Calmentors Program. It's a nice program. For my company itself, it has not yet bared any fruits. In the long run, it may. So Calmentors Program is a good program."

Interviewee SM#15, a female business owner and representative of the Southern California Contractors Association, said that mentor-protégé relationships help both partners in the relationship and the industry at large. She recommended expansion of these programs.

Some interviewees reported a negative experience with the Calmentor Program. Interviewee PH #21, the owner of a DBE-certified surveying company, said, "I heard somebody mention the Calmentor Program. That's another thing I participated in or attempted to participate in when I got my certification. I submitted the paperwork, I submitted applications, I sent e-mails, I left phone messages, and it was totally nonresponsive to me. I contacted the mentor that was assigned to my particular field and got no response. I did this two or three times. About once a year, I get an inquiry from the Calmentor Program asking how the Calmentor Program is helping

me. The first time, I responded with all the politically correct phrases and whatnot and got no response. The second time, I — I was pretty clear in — in my lack of being able to receive any kind of mentoring. It was pretty — worded strongly, I guess I'll put it that way. I got nothing back. And just the other day, I got another message, how are we doing in the Calmentor Program for you, and I responded again that it's been totally unresponsive to me, that it doesn't do me any good, and it hasn't done me any good."

Interviewee PH #22, the owner of an equipment rental company, said, "I heard mention of the Calmentorship Program. They mentioned the Calmentorship Program, so when the workshop finished, I, you know, went to go speak to somebody about the Calmentorship Program. They said, 'Well, okay. What kind of business do you do?' I said, 'We will do — we have an equipment rental company.' [They] said, 'Oh, okay. We're — sorry, the Calmentorship Program is really services for engineers, for contractors. Since you're providing just rentals, and we really can't help you.' So I thought, well, okay. That's kind of a disadvantage. So I'm not sure if that's something that you guys can maybe improve or change, because, you know, having a mentor for us, even though it's — you know, we're not engineers or anything like that or consultants, it would be, you know, very beneficial to us."

The Asian-Pacific American owner of an engineering firm and representative of the American Council of Engineering Companies-California [Interviewee SM#2] said, "The Calmentor program, we participated in that over the past two or three years, but it hasn't really worked. We couldn't find a mentor, there aren't enough mentors around. That's the problem."

Many other interviewees reported that they were unaware of state level mentor/protégé programs available to small businesses. Some thought that such programs could be helpful. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am not aware of mentor/protégé programs but they would be helpful."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said pairing up small businesses with larger businesses might be helpful.

Interviewee PH#2, the owner of a UDBE, said, "The mentor/protégé program would be an exceptional program to help especially under-utilized DBEs by giving them a past performance and getting on the contracts, but everyone wants the DBE to have past performance already. To me, how can you get the past performance if no one is allowing you to get on the contract?"

Other interviewees did not think that mentor-protégé programs would be beneficial to small businesses. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "Mentor/protégé relationships won't provide anything to me."

Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "I'm not aware of this, but I don't think this would be helpful."

Interviewee #29, the white male owner of a concrete and landscaping company, said he did not believe that mentor/protégé relationships were helpful.

Joint Venture Relationships.

One interviewee reported that they were aware of joint venture relationships available to small businesses. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "We currently have joint venture types of agreements with other vendors, but it would be useful if this information was more widely available to other small businesses."

Other interviewees reported that they were unaware of joint venture relationships available to small businesses. For example, Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am not aware of any joint venture program but it would be helpful and a great opportunity for small businesses."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that joint venture relationships "could be very useful in helping small companies identify where they fit into big Caltrans contracts."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that joint ventures and teaming up with other companies would be helpful. He said, "This is why I got my certification, so I could team up with other large firms doing business with Caltrans [and other agencies]."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that joint venture relationships would be helpful. He said, "Yes, if we could team up with other firms, we would be able to compete with bigger firms."

Other interviewees reported that joint venture relationships would not be beneficial to small businesses. Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "I'm not aware of this, and I don't think this would be helpful."

Financing Assistance.

Most interviewees reported that they were unaware of the availability of financing assistance, but thought they would be helpful. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said he is not aware of any financing assistance like loan guarantees and inventory financing but indicated that these types of programs would be helpful.

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, mentioned that he is not aware of any financing assistance programs.

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, indicated that financing assistance would be helpful.

Interviewee #3, the white male owner of a concrete and construction company, said, "I am not aware of [financing assistance], but it would be very helpful because banks and suppliers are very restrictive for small businesses."

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that financing assistance programs would be useful. He stated, "Most businesses need financial assistance from time to time."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that financing assistance would be a great help to small businesses. He said, "Small businesses need help with equipment, making payroll, and buying supplies. You know the money will get paid but it takes a while sometimes which makes it hard to get financing."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that financing assistance would be helpful. He said, "The key in this business is access to money so you can get equipment to compete. You need money for fuel, insurance, wages because sometimes you don't get paid quickly. You have to have money to bridge those gaps."

One interviewee reported that the provision of financing assistance would not be beneficial to small businesses.

Bonding Assistance.

Many interviewees reported that they were unaware of the availability of bonding assistance, but thought it would be helpful. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said he is not aware of any bonding assistance but said, "bonding is expensive" so any support would be welcome.

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, mentioned that he is not aware of any bonding assistance programs, but, mentioned that he would find bonding assistance programs useful.

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, was not aware of bonding assistance. She did mention that "bonding assistance would be helpful as many small businesses don't know what it available to them."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that bonding assistance would be helpful. He said, "We have people and equipment to do the work but if you can't afford the bond then that is a huge barrier."

Other interviewees did not think that the provision of bonding assistance would be beneficial to small businesses. Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "I'm not aware of this and I don't think this would be helpful."

Interviewee #29, the white male owner of a concrete and landscaping company, indicated that bonding assistance would not be helpful.

Assistance in Obtaining Business Insurance.

Most interviewees reported that they were unaware of the availability of assistance to obtain business insurance, but thought it would be helpful. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said he would be interested in learning more about assistance in obtaining business insurance.

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that assistance in obtaining business insurance would be helpful. She said, "The state should provide some brokering help that could benefit small businesses and decrease costs." She continued by saying that, "If they just eliminated the need to provide the same insurance information over and over again that would be nice. We have to do so much paperwork and answer the same questions over and over. Why isn't this stuff kept on file?"

Interviewee #35, the African American male owner of a certified electrical company, said, "That would be good if available during the company's first year. Assistance in obtaining $2 million insurance coverage would be helpful."

Other interviewees thought that the provision of assistance to obtain business insurance would not be beneficial to small businesses. Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm mentioned that his company has had no problems getting insurance and that this wouldn't be that useful of a program.

Interviewee #26, the female majority president of a WBE-certified construction company, said, "Assistance in obtaining business insurance is not necessary; however, it would be helpful if the $5 million umbrella insurance coverage was reduced."

Assistance in Using Emerging Technology.

Some interviewees were aware of the provision of assistance in using emerging technology and thought it was helpful. For example, Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "I have used assistance that helped with electronic bidding and it was very helpful."

Other interviewees reported that they were unaware of the provision of assistance in using emerging technology, but thought it would be helpful. A number of interviewees pointed out potential assistance with electronic bidding. Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said she is not aware of any assistance in using emerging technology.

Interviewee #3, the white male owner of a concrete and construction company, said that this would be helpful. He said, "Help with complex electronic bids would be nice."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said any assistance in using emerging technology "would definitely be helpful because we don't have a lot of experience in electronic bidding, searching for available bids on line, or just using computers."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that assistance in using emerging technology would be helpful. She said, "Electronic bidding would be helpful but unless Caltrans is willing to sit down and really understand their own bidding process, just making it electronic wouldn't be a benefit."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that any assistance with emerging technology would be helpful for many smaller businesses.

Interviewee #3, the white male owner of a concrete and construction company, said, "Help with electronic bids for complex bids would be nice."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said with respect to assistance in using emerging technology being provided for WBE/MBEs, "that would be ideal." She indicated that information technology training is required throughout one's career.

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "That would be really beneficial, because it's pretty challenging when you get on these government websites."

Some interviewees did not think that the provision of assistance in using emerging technology would be necessary or beneficial. Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, felt that assistance in using emerging technology would not be helpful. He said, "I'm not a fan. Paper is good. They'll train you; they'll change it."

Other Small Business Start-Up Assistance.

Most interviewees reported that they were unaware of start-up assistance for small businesses, but thought it would be helpful. For example, Interviewee #25, the Hispanic female partner in a non-certified consulting firm, said that providing small business start-up assistance or WBE/MBEs "would be wonderful."

A few interviewees thought that the provision of other business start-up assistance would not be beneficial to small businesses.

Information on Public Agency Contract Procedures and Bidding Opportunities.

Some interviewees reported that existing information on public agency contract procedures and bidding opportunities was helpful. Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that this information already exists and that contracting procedures and bidding opportunities are well documented.

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I have attended meetings discussing bidding opportunities. I found this program to be helpful and I think it would be helpful to others."

Interviewee #29, the white male owner of a concrete and landscaping company, said that the existing weekly publication on Caltrans bidding opportunities is helpful.

Some interviewees were not aware of information on public agency contract procedures and bidding opportunities, but thought that this would be helpful. Interviewee #3, the white male owner of a concrete and construction company, said, "I would love to get information on where these exist. Any online or other support would be helpful."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that any information on public agency contracting procedures and bidding opportunities would be helpful. "Anything that streamlines their process would be helpful to us," she said.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said there should be workshops for small businesses to help them understand the contracting procedures and bidding opportunities. He said, "Caltrans should help people with notification of opportunities. They could use email or other notifications to let them know about opportunities by geography. They aren't geared towards small contractors."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that information on public agency contracting procedures and bidding opportunities would be helpful. She said, "They should work with us instead of against us before they create the bids. The business community can really help shape the bids in a positive way."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said he is aware that bidding opportunities are online but indicated that it would be helpful to "know what opportunities are available that I am qualified to bid on and help with the contracting procedures." He said, "They should make it more relevant to small businesses so that it is clear what you are qualified to bid on. Right now it seems that everything is geared to big companies."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that additional information on contracting procedures and bidding opportunities would be helpful. He said, "I've seen the Caltrans website and it doesn't seem that comprehensive. It would be helpful for better guidance and instructions on how we could contract directly with Caltrans."

Interviewee #33, the African American male owner of a certified concrete company, said, "I would like to learn details on whether subs are included in primes' bids."

Online Registration with a Public Agency as a Potential Bidder.

Some interviewees reported that they were aware of opportunities to become registered to receive information as a potential bidder. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am aware of online registration and it is helpful. We do this with Caltrans."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I have used the online registration opportunities for various bids. I found this option to be helpful and I think it would be helpful to others."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "I've done online registration and then they never get back to me." He indicated that it would be helpful "if it's done well" and "if it actually works."

Other interviewees reported that they were unaware of opportunities to become registered with an agency as a potential bidder, but thought that this would be helpful. Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that online registration with a public agency is helpful but that "it would be more helpful if it was easier to target what you are qualified to bid on."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that online registration with public agencies as a potential bidder would be helpful. He said, "Any way that we can find out about upcoming bids that we qualify for would be helpful."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that online registration with public agencies as a potential bidder would be helpful. She said, "Any way we can get our name out there and find out about work would be helpful to us."

Hard Copy or Electronic Directory of Potential Subcontractors.

Some interviewees reported that they were aware of hard copy or electronic directories of potential subcontractors. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am aware of this because of the work we do with Caltrans. I like being able to look-up other subcontractors."

Other interviewees reported that they were unaware of hard copy or electronic directories of potential subcontractors, but that that this could be beneficial to small businesses. Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that hard copy or electronic directories of potential subcontractors would be helpful. He said, "This could help us identify potential partners."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that electronic directories of potential subcontractors might be helpful. He said, "I think all of this information is paper-based now. Having it online would be helpful."

One interviewee thought that the provision of a hard copy or electronic directory of potential subcontractors would not be beneficial to small businesses.

Pre-Bid Conferences Where Subcontractors Can Meet Prime Contractors.

Some interviewees reported that they were aware of pre-bid conferences that allow subcontractors to meet prime contractors, and thought they were helpful. Interviewee #2, the white principal of an energy company, stated, "I know [pre-bid conferences] exist and that they are helpful to some firms depending on the contract and their previous relationships."

Interviewee #3, the white male owner of a concrete and construction company, said pre-bid conferences are helpful, but they are time consuming.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "We have attended a few pre-bid conferences and they have been helpful to identify potential partners."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that she has had experience with many pre-bid conferences and that they "are a great place for subs to meet primes. We have made many contacts at these meetings."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that Caltrans should have more pre-bid conferences. He said, "There should be more pre-bid conferences where we can team up with partners."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, stated, "We have attended pre-bid conferences with Caltrans and these have been very helpful. I encourage others to attend these type of conferences."

Some interviewees reported that they were aware of pre-bid conferences that allow subcontractors to meet prime contractors, and did not think they were helpful. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said he has attended some pre-bid conferences, but no vendor fairs. He indicated that they are time consuming.

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that pre-bid conferences are not really helpful. She said, "These take a lot of time and expense and Caltrans won't really tell you anything. They don't really collaborate or provide good information."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that she is aware of pre-bid conferences where subs meet primes. She said, "I've been to some pre-bid meetings but they are time consuming for a small business, especially when you aren't guaranteed you can even bid."

Interviewee #29, the white male owner of a concrete and landscaping company, in response to the helpfulness of pre-bid conferences where subs and primes meet, said, "No. I hate those."

Other interviewees reported that they were unaware of any pre-bid conferences, but thought they could be helpful. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am not aware of pre-bid conferences but it sounds like it might be helpful."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated that she was not aware of pre-bid conferences where subs can meet primes, but she thought that it would be helpful.

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that pre-bid conferences where subs can meet primes would be helpful for him to identify partnering opportunities. He said, "That is why I got my certification — so I could market myself to bigger companies and get a piece of bigger contracts."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I have attended pre-bid conferences to meet primes. I found these meetings to be helpful and I think they would be helpful to others."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that pre-bid conferences where subs can meet primes would be helpful. He said, "Getting small pieces of jobs from big firms is fine but we need help in getting partnered with the right people."

Interviewee #28, the white male president of a certified majority DVBE, said that it would be helpful to have pre-bid conferences where subs and primes meet and lists of planholders or other lists of possible prime bidders are distributed to potential subcontractors.

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said that he had never attended a pre-bid conference, but felt that they would be helpful.

Other interviewees did not think that pre-bid conferences to allow subcontractors to meet prime contractors would be beneficial to small businesses. Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that pre-bid conferences are not helpful because they are too time consuming for most small business owners.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that pre-bid conferences would be helpful but that they should not be limited to helping subs meet primes. He asked, "Why can't they have conferences geared for small businesses to help them identify opportunities?"

Distribution of Planholders' Lists or Other Lists of Potential Prime Bidders to Subcontractors.

Some interviewees reported that they were aware of distribution lists to subcontractors of planholders concerning potential prime bidders, and thought they were helpful. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am aware of planholders lists because of Caltrans project. These are helpful as we determine who to bid with."

Interviewee #33, the African American male owner of a certified concrete company, said, "They already have [planholders' lists]. It is useful to know who to talk to."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, mentioned that there are websites and training from contractors associations. He stated, "It is very helpful to know who is bidding."

Other interviewees reported that they were not aware of any distribution to subcontractors of planholders' lists or lists of other potential prime bidders, but thought they would be helpful. Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that distribution of lists of planholders or other lists of possible prime bidders to potential subcontractors would be helpful.

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, said, "I think it's helpful. I do think that it encourages bid shopping a little more. You're going to be firing your number all over the place — not secure anymore."

Some interviewees thought that the distribution to subcontractors of planholders' lists or lists of other potential prime bidders would not be beneficial to small businesses. Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "A planholder list would not be that helpful for my business. I also work with the same primes almost all the time."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, indicated that she felt the distribution of planholder lists or other lists of possible prime bidders to potential subcontractors was a part of the bias and reflected a control of information.

Other Agency Outreach.

Some interviewees reported that they were aware of agency outreach and other outreach. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "We have gone to vendor fairs and met a few potential partners. This opportunity should be used by other small businesses."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said they have done some vendor fairs but was not sure how effective they were. He said, "We've done a few vendor fairs where we brought some trucks to attract hiring but I'm not sure how worthwhile they were. Maybe if they defined what the benefit was it would be helpful."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, indicated that agency outreach can be helpful. She indicated that she is a member of the California Transportation Association and that she goes to some of their meetings to find out what is going on in the industry. She said, "They have a lot of meetings and summits that have buyers and other potential customers."

Interviewee PH #20, the owner of a UDBE-certified construction management firm, said, "We're pretty excited to be finally certified as a disadvantaged business, and being a minority, we automatically become UDBE as well. Our challenge is to be involved in opportunities where we can get to see the primes face-to-face, get to learn about upcoming projects, form a relationship, let the primes know we're — we exist, we have the following type of staff, and more opportunities in the sense where consultants like us can come in and hear what Caltrans plans to do in the future, six months, a year, two years, three years, and then also allow us a — an outreach type of activity where we're mingling with the primes, we're trying to learn who these primes are, what type of projects do they specialize in, and if they'll have a need to use companies like us."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that agency outreach would be helpful "as long as they aren't too time consuming." He said, "Small businesses don't have a lot of time to chase these types of events."

One interviewee said that he was no longer participating in outreach activities because he did not find them useful. Interviewee SM#3, the Native American owner of an engineering-related business, said, "I'm not participating in [agency outreach] meetings anymore, because we've found that the A/E players are the ones that have the biggest drums, they have the business development teams, they have business development officers, they go out and bang the drums louder than anybody else … and those are the ones getting the contracts."

Interviewee SM#16, the white female owner of a DBE-certified engineering firm, said, "A lot of times I go to these small business gatherings that have and they end up being more of the mixers … I feel like they give me bottled water and a fortune cookie and 'Good luck!' I really feel like, as a business owner, there are so many things that I'm responsible for that I need to know that I could use … additional advice, mentors or additional resources. That's one of the things that the state and Feds can help us out with."

"The amount of time you take from small businesses to go to pre-bid meetings and matchmaking meetings, these are big impacts," according to Interviewee SM#20, an Asian-Pacific American female owner of a construction services business.

Other interviewees reported that they were unaware of agency outreach.

Streamlining or Other Simplification of Bidding Procedures.

Most interviewees reported that they were unaware of any steps taken to streamline the bidding process. Some interviewees thought that the streamlining or other simplification of bidding procedures could be beneficial to small businesses. Interviewee #2, the white principal of an energy company, stated that "streamlining the bid process would be helpful to the business community and would allow for more competition."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "Any program that simplified the bidding process would be useful to any size business. We have not heard of this type of neutral measure."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated streamlining bid procedures would be helpful as many small businesses "don't have the capability to respond to procurements due to the difficulty and complexity of the required responses."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that simplification of the bid process would be of particular interest. "The process is too complex now," she said.

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that streamlining/simplifying the bidding procedures would be helpful. She said, "Eliminate the need to provide the same information over and over again."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that streamlining/simplifying bidding procedures would definitely help. She said, "Caltrans doesn't understand what they need or want most of the time which requires us trying to translate their specifications. This takes a lot of time. They should work with us to clarify specifications and requirements."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that streamlining/simplification of bidding procedures is needed. He said, "Simplifying bidding procedures is needed for anyone trying to get work. You can spend all your time putting bids together because they are too complex."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that streamlining bidding is needed. He said, "With the way bids are now, we don't have time to respond to them even if we are qualified."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that streamlining/simplification of the bidding process would help her. She said, "A lot of public sector bids have to be broken down into a lot of detail. Any way to simplify the process would make it easier for us to bid."

Some interviewees thought that streamlining or otherwise simplify bidding procedures would not be beneficial to small businesses. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, stated that the process is reasonably fair and should not be changed.

Interviewee #26, the female majority president of a WBE-certified construction company, in response to the question regarding her experience and awareness and the usefulness of streamlining and simplification of the bidding procedures, said, "That is not needed."

Segmenting Larger Contracts into Smaller Pieces.

Most interviewees were unaware of any efforts to segment larger contracts into smaller pieces, but this would be helpful. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business said he is not aware of efforts to break up larger contracts into smaller pieces, but he said "it would be helpful for bonding and insurance requirements."

Interviewee #3, the white male owner of a concrete and construction company, said he is not aware of this but it would be helpful.

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "Breaking up contracts for more vendors would definitely benefit small vendors. It would allow for more participation in public sector contracts."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that she has not had direct experience with breaking up large contracts into smaller pieces, but she thought that "overall the idea of breaking up of the contracts has more pros than cons. I think if it is done correctly this could benefit many businesses."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "I'm not aware of this but [breaking up contracts] would be especially helpful during the bidding process."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that breaking up large contracts into smaller pieces is key for small businesses getting work. He said, "Breaking up contracts would give you a better shot at getting work, especially for subs that provide a narrow set of services."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that breaking up large contracts into smaller pieces would be beneficial to small businesses like his. He said, "Otherwise we can't compete with big companies and we are only going to help them meet their quotas."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that breaking up large contracts into small pieces would be helpful. He said, "You could break it up into smaller pieces. There is no reason to keep everything closed up for big firms only."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that breaking up large contracts into smaller pieces would be helpful. He said, "They definitely need to break contracts up — otherwise we can't compete the way things are today."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that breaking up large contracts into smaller pieces would be beneficial to her business. She said, "Right now, we can't really compete with bigger companies on big jobs. If there were pieces we could bid on that we do well, that would be better."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, indicated that the breaking up of large contracts into small pieces would be beneficial to WBE/MBEs. She said, "Contracting is not rocket science." She explained that with the availability of word processing and data processing it is simpler now to have numerous small contracts rather than a limited number of large contracts.

Interviewee #26, the female majority president of a WBE-certified construction company, said, "Yes, it would be helpful to break up large contracts into small pieces." She added, "It would also be helpful to award contracts to local firms."

Interviewee #28, the white male president of a certified majority DVBE, said, "Breaking up large contracts into small pieces would be good. Caltrans jobs are getting bigger."

Interviewee #29, the white male owner of a concrete and landscaping company, said, "Definitely, I think [breaking up large contracts] should be an objective for Caltrans."

Interviewee #30, the white male president of a certified micro grading, concrete, and paving business, said "[Breaking up large contracts] would be huge. That would be good for me. [Caltrans] likes to bundle it up and make it simple for themselves. Now you got [a major construction company], or whoever, doing the dispatching for them. There's nothing set-aside for a white guy."

The female owner of a construction business and representative of Women Business Owners and Executives [Interviewee SM#11] said that bundling of contracts hurts small businesses. "Sometimes they [contracts] get so big that we can't wrap our arms around them."

Bid Depository or other Changes to Bidding Process.

In one Stakeholder Group Meeting, participants discussed the idea of a bid depository for subcontractor bids. Using this concept, Caltrans would segment portions of contracts and then ask for bids from subcontractors, which would be available for all prime contractors bidding the project. This system is used for certain types of public works contracts in states such as Massachusetts.

Interviewee SM#17, a representative of Associated Professional sand Contractors of California, reported that California used to have a bid depository and no longer does. He said the problem was that subcontractors, including himself, would not always give the same price for all the general contractors. "I used to vary my bid … one general I'd bid higher than the next." He would give higher bids to general contractors that didn't pay on time.

Interviewee SM#10, a white male owner of a construction business, said that he liked the general concept of the bid depository. He talked about the idea that an agency might decide how it wanted to structure subcontracted items and then obtain subcontractor bids a day or two in advance, which would be available to the prime contractors. He said that most of the traditional subcontracted items on a typical Caltrans project are too big for small businesses. "We've got to find a way of breaking it down before bid day."

Interview SM#10 also reported that, for a 2 p.m. bid deadline on a project, he receives his bid from a subcontractor at 1:52 p.m. "I've still got to figure out who's low, write it all out, put those guys in, spell it all out, and submit it to Sacramento and have it turned in by 2 p.m." He added, "We're talking about breaking down work. How am I going to get an electrical contractor that's bidding to me … to agree to use a minority or SBE company to dig a trench for them if I don't even know who's going to be low?"

In discussing how project owners structure projects and how prime contractors choose subcontractors, Interviewee SM#20, the Asian-Pacific American female owner of a construction-related services company, said that "changing of the behavior is the key here." Interviewee SM#10, the white male owner of a construction company said, "It's not going to work … we've been trying to change contractors' behavior for 30 years. It's all mandated by the fact that we've got to survive. I've got a [very old] company, and I struggle to stay in business every day."

When asked whether getting a sub's bid sooner would help the bidding process for a prime, Interviewee SM#10, the white male owner of a construction company, said, "The soonest I'll get a sub bid is 24 hours [before bid deadline] … if someone gets me a bid earlier, it doesn't matter because someone else is going to come in with a cheaper price between now and then anyways."

Interviewee SM#12, the Hispanic American owner of DBE-certified highway construction firm and representative of the Engineering Contractors Association, said that a bid depository will not work because, as a sub, you don't get the numbers that you need to submit a bid far enough in advance that aren't going to change before bid date. "So, I need a concrete price and I need a rebar price and other things for my scope of work that I'm going to bid to the prime, but I don't get it until bid day. I don't get until an hour before." He said he has the same problems putting together a bid as a sub that the prime has putting together the overall bid.

Interviewee SM#16, the white female owner of a DBE-certified engineering company, reported that, a bid depository will not work for A&E contracts. She indicated that these contracts are awarded based on qualifications.

Price or Evaluation Preferences for Small Businesses.

Most interviewees reported that they were unaware of any price or evaluation preferences for small businesses, but thought it would be helpful to small businesses.

Interviewee #3, the white male owner of a concrete and construction company, said that he is not aware of this but that "it would definitely help small businesses compete with the big firms who have an advantage going in."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that price or evaluation preferences for small businesses would be beneficial. She said, "This is often the only way small businesses can compete with bigger firms who will often underbid just to get the work and make up for it with change orders."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, said that price or evaluation preferences for small businesses would be helpful. He said, "Contracts should have goals for small businesses so that we can compete with the big boys."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that price and evaluation preferences for small businesses are important but that "Caltrans should make specifications that [small businesses] can respond to rather than gearing them only to big companies."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that price or evaluation preferences for small business is necessary. He said, "If you don't have pricing and evaluation preferences, what is the point of being certified?

Interviewee #33, the African American male owner of a certified concrete company felt that price evaluation for small businesses would be helpful, "especially since workers' comp is 23 percent for small business and 8 percent for large business."

Some interviewees did not think that price or evaluation preferences would be beneficial to small businesses or appropriate. Interviewee #26, the female majority president of a WBE-certified construction company, said, "I don't think [price or evaluation preferences for small businesses] are appropriate."

Interviewee #29, the white male owner of a concrete and landscaping company, said that he did not believe it would be advantageous to provide price or evaluation preferences for small businesses.

Small Business Set-Asides.

Many interviewees reported that small business set-asides could be beneficial to small businesses. Some interviewees had comments about how set-asides should be structured Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that she likes the idea of small business set-asides but noted, "I wish they would change the name of this, it has a negative connotations to small business."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that small business set-asides would be a great advantage for small businesses. He said, "That is the only way you can change the culture and get away from only awarding work to the same big firms who underperform."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that small business set-asides would be helpful. She said, "I thought that was the purpose of the program. Instead it just seems like they want to make us all subs to bigger firms."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that small business set-asides are needed. He said, "Otherwise big firms get everything."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that small business set-asides would be helpful. She said, "There are a lot of jobs that are perfect for our company but the big companies come in and undercut us."

Interviewee #29, the white male owner of a concrete and landscaping company, said, "[Small business set-asides] would benefit me, but I don't think it's really fair."

Interviewee #30, the white female vice president of a certified micro grading, concrete, and paving business, said "I think something like [small business set-asides] would be good if it was just small business, if it wasn't the women-owned and minority-owned because you put all those together as a bundle all the time, and we get overlooked because of that."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said, "[Small business set-asides] should be helpful, but big guys are still coming in. Fourteen million dollars in annual sales is too large to be a small business. When they exceed the maximum sales, they start up another small business."

Interviewee SM#24, a representative of a DBE-certified, woman-owned environmental consulting firm, said that set-asides rather than big bundled contracts to give more opportunities directly to small businesses rather than have them working as subcontractors.

One interviewee said that he participated in the state SBE program but has not seen any work. A white male owner of an engineering company that is SBE-certified [Interviewee SM#8] reported that his firm has been awarded contracts as an SBE but not given any work [as a prime]. "I've been sitting on a contract for almost two and a half years and not gotten any work from it." He reported that he is working on trying to figure out why he hasn't received any work. He also reported that is hard to get SBE certification.

Mandatory Subcontracting Minimums.

Some interviewees reported that they were aware of mandatory subcontracting minimums and had comments on how this program might be improved. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said she is aware this already exists but that it is not transparent enough.

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated, "We are aware of subcontracting minimums, but we believe that they should be raised to higher than 6 percent."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "I am in favor of raising the minimums. This would help out more small businesses."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, said that mandatory subcontracting minimums would be helpful, but "most of these subcontractors are just facades, the primes would be giving more money to their buddies."

Some interviewees reported that mandatory subcontracting minimums would not be beneficial to small businesses. Interviewee #20, the white male owner of a majority-owned demolition and loading company, stated, "Subcontracting minimums don't apply to me so I don't think this would be useful."

Interviewee #29, the white male owner of a concrete and landscaping company, indicated that he was not in favor of mandatory subcontracting minimums.

Many interviewees reported that they were not aware of mandatory subcontracting minimums.

Small Business Subcontracting Goals.

Some interviewees reported that they were aware of small business subcontracting goals, and had suggestions for improvements. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that she is aware of small business subcontracting goals but that these goals are not transparent enough.

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that small business subcontracting minimums already exist but are not transparent to most. He said, "It seems like we are discouraged from bidding and that they only want to make it appear that they are trying to help us meet goals."

Other interviewees reported that they were not aware of any small business subcontracting goals.

Some interviewees thought that small business subcontracting goals could be beneficial to small businesses. Interviewee #3, the white male owner of a concrete and construction company, said that small business subcontracting goals would be helpful for small businesses. He said, "This would be helpful because otherwise, it is hard for a small business to compete with larger, more established firms."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that small business subcontracting goals would be beneficial. She said, "Yes, this could help if they had real goals that they actually tried to meet."

Other interviewees said that small business subcontracting goals would not be beneficial to small businesses. Interviewee #29, the white male owner of a concrete and landscaping company, said that small business subcontracting goals were not helpful.

Interviewee #30, the white male president of a certified micro grading, concrete, said, "A goal doesn't mean anything. They're not going to meet any goal unless it's mandatory."

Formal Complaint / Grievance Procedures at the Public Agency.

Some interviewees reported that they were aware of formal complaint and grievance procedures. Interviewee #29, the white male owner of a concrete and landscaping company, said that there is a formal complaint/grievance procedure in place and it is good.

Some interviewees had recommendations about formal complaint and grievance procedures. Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that there should be a hotline where small firms can report complaints. He said, "One of the biggest problems is the lack of standards and quality and no one seems to care. They need a hotline for identifying shady business practices. This is one way to improve standards and identify [chronic] poor performance."

Interviewee #3, the white male owner of a concrete and construction company, said he is not aware of a formal complaint and grievance procedure but that it might "help create a fairer playing field."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that a formal complaint/grievance procedure is needed. She said, "Definitely, the nature of business with Caltrans is that they don't often really understand what they are looking for. This requires a lot of collaboration which they aren't willing to engage in. They need a good complaint or escalation process."

Interviewee #19, the white male safety and training manager of a majority-owned concrete and construction company, said that a complaint/grievance process would be beneficial. He said, "With all of the inspections and licenses we have, any one of them can cause a problem and many of them don't have formal processes for complaints."

Other interviewees indicated that the implementation of formal complaint or grievance procedures would not be beneficial to small businesses. Interviewee #20, the white male owner of a majority-owned demolition and loading company stated, "I'm not aware of this, but I don't think this would be helpful."

Interviewee #30, the white male president of a certified micro grading, concrete, said, "They have [formal complaint procedures], but I don't think they do any good. Those big guys are good at what they do."

Interviewee #31, the white male owner/operator of a certified small majority-owned road grading business, did not think that formal complaint/grievance procedures would be helpful. He said "In this business — yeah — no thanks. There's no such thing as a blacklist right? Open your mouth and find out."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said, "[A formal complaint/grievance procedure] would fall on deaf ears. Who carries the burden of proof?"

F. Insights Regarding Race-, Ethnicity- or Gender-based Measures

Some interviewees reported a positive experience in connection with the Federal DBE Program. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, believes that the state DBE programs are solid programs and that additional measures "can be good for businesses if they are properly determined and enforced."

Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "The programs are good and useful for my business. The best certification is the UDBE. This has led to the most work."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that they their experience with the DBE program has been positive and is a stepping stool for MBE and WBEs. He stated, "The program administrators should continue to be tight and strict with acceptance into these programs."

Interviewee PH #1, the owner of a DBE-certified environmental consulting firm, said, "I would say that the DBE program is effective. It's actually affected my company. We went from one individual, myself, to now 10. We have seven — a solid seven, plus we have an additional three that kind of come in when we need additional help and assistance."

Interviewee WT#7, the female owner of a DBE-certified research firm, said, "Overall, our experience with the [DBE] program has been positive. Large communication firms specially reach out to us on state contracts because of the DBE requirement."

Interviewee WT#19, the owner of a DBE-certified engineering firm, said, "I am very thankful for the DBE program, which provided me the opportunity to provide my engineering services for Caltrans."

Interviewee WT#21, a representative of a DBE-certified engineering firm, said, "First of all I would like to commemorate the Department for actively advocating the DBE program in the past for both design and construction contracts. The Department has set up a model that has helped many small businesses (like my firm) to succeed and be able to participate in many large public works projects. The DBE program allows small competent firm to have the opportunities to be a team member of major design team. Through the design process, DBE firms (like mine) will learn from the Department and major firms and eventually build-up substantial experiences and capabilities to complete as prime consultants. I look to the Department for leadership in continuous implementation of a strong DBE program and DBE participation."

The Asian-Pacific American owner of an engineering company and representative of the American Council of Engineering Companies-California indicated that there may be an increase in DBE certification applications from engineering-related firms because of the increase in the SBA size standard, which allows higher-revenue businesses to be certified as DBEs. He also stated that he would hate to see firms that have not applied for DBE certification get the benefits of the program. [Interviewee SM#2]

Interviewee SM#6, the female owner of a DBE-certified construction firm, reported that her company "has picked a considerable amount of work because we're a UDBE." She added, "The majority of my [current and recent] contracts are UDBE contracts." She continued, "In my business, there's about six or seven other companies [in her part of the state]. Mine by far is the smallest …. So for me, the DBE and UDBE has helped out a lot because we can now get jobs that we might not have been able to get because a lot of times in our industry the bigger companies can come in and bid at a lower dollar amount to keep the overhead going throughout the year to keep the crews going … we can't do that because we are so small." Interviewee SM#6 stated further, "Our UDBE status has helped out a lot because there are more prime contractors reaching out to me … we definitely get tons of emails and faxes with outreach to bid on particular projects, plus we do our own research on projects we're going to bid. The majority of the prime contractors in this area are the same. We work for a lot of big paving contractors. We did have a rapport with them, but I would say that once we became certified … and people may need DBE or UDBE to qualify for the job, we definitely heard from a lot more contractors … contractors that we'd never dealt with. I've definitely gotten a lot more contractors calling and wanting to do business with us because of my certification."

Some interviewees reported challenges or concerns regarding the Federal DBE Program. Some interviewees said that the DBE contract goals portion of the Federal DBE Program does not work well because of the limited availability of DBEs to bid on Caltrans subcontracts and the dynamics of putting bids together. Interviewee SM#10, the white male owner of a construction company, said that many minority- and women-owned firms, including DBEs, are not available for subcontract work "on bid day." He said that many DBEs will indicate that they are available for Caltrans work but not submit bids. He said that the result is that goals are such that they cannot be achieved. He also reported that the program doesn't achieve the objective of building minority- and women-owned firms. He suggested that it just creates a process of prime contractors documenting good faith efforts without actually using minority- and women-owned firms.

Interviewee SM#10, a white male owner of a construction firm, also explained the difficulty of meeting a DBE contract goal at bid time. He said that, "At the end of the day, it's not necessarily discrimination … general contractors are not sitting there saying, 'I don't want to use them because they're small business or UDBE.' We're bidding work, we're in a horrible economy, we're doing everything we can to get work. What drives this whole thing is money. We look at a bid and say, 'you know what, we can't afford not to list the low person.' Well, that's not fair to the UDBE or the small business that's put all this work in and their price may be a little higher. Of course it's going to be higher. They're not going to be like a 'normal subcontractor.' We don't make allowances for that, we don't have a way to build that into the system. We don't have ways of unbundling, there's too many moving parts." How are we accomplishing goals? … through trucking for the most part."

Interviewee SM#10 recommended looking at new ways to meet contract goals that do not rely on prime contractors choosing low bid subcontractors at time of bid. "Put a line item in there [in the contract specifications] with an allowance that makes it a responsibility of the general contractor to fulfill that by utilizing small businesses and underutilized businesses, and make that allowance, that number in the bid, the portion of the bid that need to go to the goal." He continued, "The prime contractor gets to use that money, that allowance, as a force account, so the person is not held to lowest bid, they [the small business or DBE] get to get paid a fair and reasonable amount … to perform some task or work on that job … and to develop and grow people in an atmosphere that's not hostile and that's so risky."

Interviewee SM#10, the white male owner of a construction company said, "We need to come up with a better way … something we can all look back and say were a part of changing it fundamentally in how we do business, and look at all these companies that are prospering because of it."

Interviewee SM#10 explained that it's "too much of a lift, too big of a battle" for small business and DBE subcontractors to have a complete bid, that covers all their items, that they can give to their general contractor and be price competitive. He said that "we're failing miserably" in building small businesses with the current implementation of the DBE Program.

Interviewee SM#1, a Hispanic contractor representative of the Hispanic Contractors and Suppliers Association, said that "I've heard the AGC guy say, 'Why don't we just have a set-aside program and just knock [out] all this other nonsense. ' So they're ready to support a more out-of-the-box type of approach."

Interviewee SM#20, the Asian-Pacific American female owner of a DBE-certified construction services company, said "We need to change people's behavior, and you usually get what you incent." "Right now you're asking primes to take on a whole bunch of extra work.

Interviewee SM#22, the Hispanic American owner of an engineering company, said that DBE goals "become a ceiling rather than a floor." He recommended a sliding scale for goals and providing incentives to prime contractors to have higher DBE participation on the contract.

Interviewee SM#1, a Hispanic American contractor and representative of the Hispanic Contractors and Suppliers Association, said, "If setting the goals is going to be contingent on how prime contractors have performed their part of the bargain in the past, then those goals are going to be difficult to meet. Prime contractors have not really bent over as far as unbundling is concerned. I don't think prime contractors have done enough working with subs, because the subcontractor market is where the small business contractors' opportunities are …. Unless a prime contractor unbundles, or unless a prime contractor works with a sub to unbundle, it isn't going to happens … If you go to the small business market and you start querying them about participation on Caltrans contracts, and all they can think of, is 'I saw this contract [request for bid] and I saw the bid items and there wasn't a bid item on there less than $5 million, there's no way I'm going to have any interest in that, there's no way I'm going to get in that market.'"

Interviewee SM#1 went on to explain that the market for minority-owned subcontractors has been somewhat dictated by how prime contractors have performed outreach in the past. "I think that the answer, as far as achieving goals is concerned, lies in the issue of unbundling." He explained that primes do not typically specialize in the trades covered by subcontracting areas (electrical, concrete or structural), "They hire subs for that. For the prime to be asked to do the unbundling is very difficult. When you unbundle you have discrete lines that outline, precisely, the scope of work. Many of the primes don't have that capability. I've talked with them, I get their invitations to bid. I talk to them about unbundling." When asked whether a DBE contract goal would give primes the incentive to unbundle, Interviewee SM#1 said, "You would think so, but the prime is going to have trouble unbundling because they don't have the wherewithal, the knowledge to draw the lines about where the discrete chunks of work are … that's what I've been told anyway."

Interviewee SM#12, the Hispanic American owner of a DBE-certified highway construction firm and representative of the Engineering Contractors Association, said, when the DBE contract goals went away, his participation on a contract didn't matter as much as did with the goals. His business was not affected that much because they competed as any other firm for that work. "If that means finding the prime contractors and getting to know them or their staff and preparing ourselves to know the vendors who supply us numbers … whatever you have to do you have to do, because it's a business at the end of the day. It's very color-blind now … you better be the low bidder because they're not going to use you if you're not the low bidder."

Interviewee SM#20 recommended that Caltrans simplify how DBE subcontractors can respond to requests for subcontractor quotes by making it possible for the DBE subcontractor to respond once, online, and have each prime contractor have access to that information, rather than individually responding to each prime contractor. Everybody [every prime] has to have their own forms, have their own logo on it, and I fill that out over and over and over again … just to find out at the bid opening that they [the prime] didn't even bid. No, that's a colossal waste of time … Subcontractors cannot afford this.

Interviewee SM#10 described the opt-in feature for prime contractors and subcontractors on the Caltrans website that helps primes and subs communicate to each other their interest and capabilities concerning a particular upcoming bid opportunity.

The white female owner of a DBE-certified engineering firm [Interviewee SM#16] reported, "The last UDBE program disallowed credit for UDBE firms acting as a prime. The contract budgets, scope and schedule are driven by the prime. UDBEs were effectively left trying to drive from the back seat. As I stated before, primes do not want to allow their subs any access to the client, even if this puts their project at a disadvantage. I have often seen the prime do the work in house, leaving the sub out of the process. The UDBE/DBEs are seen as easy competition to knock off."

Other negative comments about implementation of the Federal DBE Program. Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, stated that her experience has mostly been negative. She said, "We have been treated with suspicion and like we are doing something wrong." She continued, "Caltrans should just say up front what they are looking for and what information they want. Don't act in such an adversarial manner and don't discourage everyone by accusing them of being a front."

Interviewee #11, the white female owner of a certified woman-owned engineering business, said that it would be helpful if Caltrans and other agencies "would actually work with us instead of treating us like the enemy." She continued by saying, "There are a lot of knowledgeable people out there who can help Caltrans with developing specifications. Why don't they use them as the experts they are?"

Interviewee #23, the Hispanic male owner of an MBE-certified construction company, said that in his experience, it is not clear what advantage there is to being certified. He said, "I don't see a clear advantage to being a certified firm. I do get some calls from primes asking for my certification, but certification shouldn't be just geared towards being a subcontractor."

Interviewee #26, the female majority president of a WBE-certified construction company, in response to her experience with DBE or any State program and comments or recommendations, said "I don't feel it was fair that a State contract was awarded to a DVBE from out-of-state."

Interviewee #34, the Asian-Pacific American male president of a non-certified female Asian-Pacific American owned environmental company, said "It's all political. It's great if you're an Iraq veteran, but the rest of us are not getting anything."

Interviewee PH #9, a representative of a DBE-certified engineering company, said, "Until about three or four years ago we were very happy with the program, DBE program. Unfortunately, in the last three or four years the program has been detrimental to our business because of the multiple barriers the program has created, itself, as one of the barriers, a separate requirement of UDBE versus DBE."

Interviewee PH#29, an employee of a DBE/SBE/UDBE/WMBE-certified marketing firm, said, "I want to make a point that the DBE program is supposed to be for disadvantaged business enterprises, but this program actually adds more disadvantage to the disadvantaged business enterprise that's trying to not be disadvantaged anymore. And in saying that, it's what everybody has talked about jumping through hoops, spending money, spending time, human capital, all the resources just to get in the door, and I'm asking that the program itself actually check itself because what you're doing is you're actually using all the small disadvantaged businesses to tout your own efforts of doling out taxpayer money on public jobs after you already picked the prime contractor and you give the prime contractor sole discretion to pick winners and losers after that."

Interviewee PH#30, a representative of a DBE-certified firm, said, "The new DBE rules have resulted in returning the Chicano/Latino contractor back to a second class status, and I'm not going to stand for that."

Interviewee SM#1, a Hispanic contractor representative of Hispanic Contractors Association in Northern California, stated that Caltrans has suffered a severe setback in DBE utilization. He asked what extent that the 2007 Disparity Study was responsible for this setback. In 2007, he said Hispanic contractors were doing something like 10 percent and today it is closer to 2 percent because Hispanic American firms were not eligible to meet UDBE goals.

Interviewee WT#1, a DBE-certified wire and cable manufacturing firm, stated, "No effort is given to supporting a manufacturer. The processes in your program are designed for contractors. No attention has been given on behalf of manufacturers."

Interviewee WT#2, the president and CEO of a DBE-certified structural engineering firm, said, "Since 2009, a new category, Race Conscious UDBE, has been introduced as a requirement on State projects receiving Federal-Aid funds. Businesses owned by Asian Subcontinent Americans and Latino/Hispanic Americans are excluded from racial groups that can be certified as 'Race Conscious UDBE.' In practice, most primes end up using UDBE firms to fulfill both the UDBE and the DBE requirements, since UDBE firms continue to hold the DBE status. This significantly limits business opportunities for Race Neutral DBE businesses. Accordingly, 'Race Neutral DBE' companies face a definite disadvantage in procuring business on State contracts that can force such companies out of business."

Interviewee WT#5, the owner of a DBE/SBE certified engineering firm, stated "Between 2000 and 2007, DBE program was helpful in overcoming some of the barriers in the business world and helped us in getting some work from the State and Local agencies. However, ever since the program changed three years ago to create separate UDBE category in which Hispanics and Subcontinent Asians were not considered as part of the UDBE, we have not received a single new contract from the State or Local Agency. While I had three employees in 2009, I could not afford

to keep any one of them because of lack of any new work load from the public agencies. I have stayed in business and have worked on a Caltrans project during the last two years, but this project is a continuation of the contract we had signed before Subcontinental Asians were removed from the newly created UDBE requirement. While I have often hear from Caltrans that there is still a DBE requirement in its contracts, the fact remains that contractors have no incentive in hiring any Subcontinent Asian or Hispanic DBEs. There is simply no requirement for a DBE that cannot be filled by a UDBE. On the contrary, a Hispanic or Subcontinent Asian cannot fulfill UDBE requirements in Caltrans contracts. I believe that the two tier system of DBE and UDBE with exclusion of certain minorities from UDBE program has [reversed] the progress made by Hispanic and Subcontinent Asian businesses under the DBE program."

Interviewee WT#13, a representative of a DBE-certified firm, said, "I just wanted to let you know that after over three years of being DBE-certified, I have yet to do even ONE job through this program. I get rare notifications of a project where I may be eligible, but even after I send notification that I would like to bid, I never get a return notification."

Interviewee WT#18, the owner of a minority owned firm, said, "I was DBE-certified until earlier this year, but decided not to renew it. In the three years that I have been certified, I have not received a single request for proposal or opportunity in IT. When the utilization report was presented at the SBC a year ago, I questioned the validity of it. The report said that the IT contracts won by the companies were minority owned and therefore could be counted as DBEs. My question at that time was if they are counted towards the DBE fulfillment, then why did those companies not get certified? The assumption that they could have been is clearly wrong. Because if they were eligible, they would have been certified. Assuming that someone is eligible and counting it as encouraging the DBEs is questioning the very existence of the DBE certification if the DBE-certified companies don't actually matter."

Interviewee WT#20, a representative of a DBE-certified firm, said, "The overriding theme here is that most people don't care enough to help the small business; and there are no consequences for their behavior or incentives to help. This is not the way, I'm sure, Caltrans intended on helping the 'Disadvantaged Business Enterprise.' Those that can help perhaps do not have the right tools. I think that is what you're [sic] program is truly up against."

Interviewee WT#22, the owner of a DBE-certified trucking firm, said, "We are and have been a certified DBE trucking company for 25 years and the program has worked well for us. We were a bit confused when the district came out with a new category, UDBE, which excluded Hispanic heritage. We felt as if we were, in some ways, being penalized for not being of a different ethnicity. It seems the district has identified minority groups within minority groups. We feel strongly that the UDBE category should either be abolished or made to include Hispanics."

Interviewee SM#3, the Native American owner of an engineering-related business, reported that A/E prime consultants are confused by UDBE and DBE portions of the program.

When asked if he was pleased that he got DBE-certified, Interviewee SM#3 said that he is "going around it now … it has no relevance anymore. We're creating other markets. We're not pursuing it as diligently as we wanted to because of those things [disadvantages of being a DBE] … We've not landed a contract yet."

Interviewee SM#12, the Hispanic American owner of an engineering business, said, "You get work now because you're low … the incentive to get work because you're a DBE or UDBE … has now been minimized because everybody is just trying to survive … not just the small businesses, but also the primes. They've been forced into a corner where as much as they'd like to be magnanimous and try to help, this is not an entitlement program."

Some interviewees were critical of the Good Faith Efforts component of the program. Interviewee SM#12, the Hispanic American owner of an engineering business, indicated that Good Faith Efforts responses are now 1,100 to 1,200 pages long. "It's hard to not approve that as being a Good Faith Effort but they're not going to make the goal because largely the resources just don't exist from a subcontractor perspective."

Interviewee SM#10, a white male owner of a construction firm, observed that the Good Faith Efforts process is "horrible." "The Good Faith Efforts process is purely a function of CYA." "If you look at these 800-900 pages … all that energy and time could be used to connect with DBEs and actually do something useful. It's disappointing."

A female business owner and representative of the Southern California Contractors Association [Interviewee SM#15] gave some specific comments about the Good Faith Efforts process. "You have two competing bidders and they start attacking one another's efforts. It almost becomes the self-enforcer … the bidder takes on the role of enforcing the program by being able to show that your competitor didn't meet those requirements … I don't know that that's what the Program wants to have. These people should be in the business of constructing. They shouldn't have to take on the role enforcing those issues or becoming investigators."

Interviewee SM#17, representing Associated Professionals and Contractors of California, said that Caltrans does not have enough staff to fully evaluate prime contractors Good Faith Efforts.

Interviewee SM#13, representing the Port of Los Angeles, agreed that, in his experience, most of the contested bids are on the basis of MBE/WBE or DBE requirements. "They're just going after the GFE."

Interviewee SM#13 went on to describe how the Port has changed its programs. In 2007, the Port of Los Angeles implemented a small business enterprise program. "It was our effort to get away from the Good Faith Efforts program that the rest of the City had … where there was such a huge burden on proposers and bidders on going through that process, and even if they went through it, there was a way to, potentially, get around hiring any minority or women business enterprises at all." When the Port started with the SBE program, it had a GFE element. "The very first contract that we had go through our board, the contractor went through the Good Faith Effort, went around to all of the small businesses they could find, and awarded the subcontracts to whoever they worked with initially [non-SBEs]." After that, the Port eliminated the Good Faith Effort component of the SBE program. It now sets SBE contract goals that must be met. If the bidder doesn't meet the minimum number, its proposal or bid is not considered. Interviewee SM#13 reported that about 11 percent of contract dollars going to minority- and women-owned firms.

Interviewee SM#13 also talked about other efforts at the City of Los Angeles. The City of Los Angeles has moved to an electronic Good Faith Efforts process on its Business Assistance Virtual Network. Primes are required to utilize the Network. All interaction between primes and subs is documented electronically on the Network. "Electronic notification of when contracting opportunities come up is invaluable and is a huge step in the right direction. The implementation of an electronic GFE system, if it's required, is a huge improvement over the old system."

Interviewee SM#10, a white male owner of a construction firm, talked about the opt-in system that Caltrans has that allows prime contractors to reach out to subcontractors about the bids they are looking for. UDBE and DBE contractors also go on the database to inform prime contractors of their interest in doing certain types of work. Interviewee SM#10 reported that he has used this with his company. "It's very useful." He reported that it is not yet well known within the industry. "When it's used, it's used effectively."

Interviewee SM#12, the Hispanic American owner of a DBE-certified highway contracting firm, said that "This is another hazard that Caltrans allows to happen … we have been brought to be substituted when our quote says we're not going to provide a bond but after we're named for the job, the prime then wants us to provide a bond and it becomes an issue. So we've got to go to the substitution hearing, and Caltrans will let that happen and be a reason to disqualify us and substitute somebody else. Without it being counted towards the goal, there was no search for another DBE."

Some interviewees cautioned that prime contractors cannot meet contract goals if they are unrealistically high. The Hispanic American owner of an engineering company [Interviewee SM#12] observed during a discussion of the level of utilization other agencies have reached, "It's a huge achievement to get 10 percent. Again, I'd like to caution everybody that there's just not enough resources in the form of contractors available to make that sort of a goal when it comes to Caltrans. I think they'd have to have a version to allow it to happen or the goal has got to be lowered. It's not magic."

Interviewee SM#9, the Subcontinent Asian American owner of an engineering firm, also spoke about what he saw as limited availability of UDBEs, at least in his line of business, to meet the goal. "There aren't many UDBE firms [in his line of work]. When the goals are set as high as 8 percent UDBE participation, the contractors will have a hard time meeting these goals."

The Hispanic American owner of an engineering firm [Interviewee SM#12] also reported that the Good Faith Efforts process is especially burdensome for DBE primes. "If you're ever a DBE bidding as a prime, which doesn't happen a lot, they [the DBE] could not fashion a good faith effort in the same grand nature that the primes do. They spend a horrendous amount of money doing it. [Speaking about his own firm] We don't have a department to do that. We don't have a Good Faith Effort budget to do that. It puts the DBEs at a disadvantage when trying to compete."

Interviewee SM#10, a white male owner of a construction firm and United Contractors board member, commented on what he saw a disconnect between DBEs and prime contractors. He reported that there was a real challenge in identifying DBE companies that wanted to work with primes, and vice versa. "Every time we set [DBE contract] goals that may be overstated, it's damaging the ability of the DBE world to get work and the primes … and it's making us all look bad." He explained that his interest was in future implementation of the DBE Program that was sustainable and able to work over the long term.

Interviewee SM#10 went on to explain that it is difficult to categorize contractors according to the work they do if they "sign up" for many different types of work. He described the challenge at bid time, "We have 10, 12, 15 different types of work at Caltrans to bid on … it's not just signing up and saying 'I want to do excavation,' it's signing up and saying 'I'm going to give you a bid for storm drainage — complete' … 'I'm going to give you an electrical package — complete' … 'I'm going to do landscaping – complete.' Part of the challenge that I see in looking at all this is, we have this big bowl of everybody who's in there that says 'I want to do excavating' … 'I want to do dirt' … 'I want to do different categories, different aspects of work,' but when it comes to giving a price at bid time on bid day, that pool is hundreds and hundreds of times reduced." Interviewee SM#10 said that many firms just can't give a price complete on bid day.

Interviewee SM#10 said, "The system right now doesn't work … we need a program that allows DBE firms to get experience and get exposure to Caltrans … without the risk of losing money and without the prime contractor worrying about losing money."

A female business owner and representative of the Southern California Contractors Association [Interviewee SM#15] observed, "One of the major challenges that the Program has in its entirety is … that the construction industry as a whole does not respect the Program … In one sense they think it's unrealistic percentages, and then they don't understand what the purpose behind it is."

She said that there needs to more education about the program, making it relevant and realistic and ensuring more accountability. "You can't just set requirements and percentages without (a) enforcing them and (b) being able to know that those percentages were realistic to begin with because they could have been met, in practical terms, not just in theory." When asked what a successful Program would look like, she said, "Its acceptance and adherence. Unfortunately, right now, I think the program struggles with both."

Some interviewees indicated a lack of knowledge or experience regarding the State MBE/WBE or Federal DBE Programs. Interviewee #3, the white male owner of a concrete and construction company, said he is not aware of any additional measures limited to certified MBE/WBE/DBE firms that would be useful or needed. He said, "I'm not certified so I don't have any real experience here."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "I don't have experience with any of the state programs. We are a 'new' business and will probably look into programs in the future if we decide to pursue more public sector work." He also stated that he doesn't have experience with the Federal DBE Programs.

H. Certification

The Certification Process.

Some interviewees reported relatively positive experiences with the certification process. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported that the certification process was not too difficult.

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that the process to certify is not that difficult. He stated, "Pretty easy, not difficult at all."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "The process was not difficult, we filled out the paperwork, did the inspections. The process is the same every five years."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "The certification process is OK. It's painful because of the amount of paperwork but it's acceptable."

Interviewee #35, the African American male owner of a certified electrical company, said, "Certification was easy."

Interviewee #37, the African American male president of a certified electrical company, said regarding the certification process, "It's fairly easy. You will have to jump through a few hoops."

Interviewee PH#4, a representative of a DBE-certified program and project management company, said, "First, I want to acknowledge that staff of the certification office, as well as your small business liaison, have been very, very supportive and very informative in terms of every time I interacted with them."

The Asian-Pacific American owner of an engineering company and representative of the American Council of Engineering Companies-California complimented Caltrans on the certification process. He reported that it took less than two months to become certified as a DBE by Caltrans. Within a week or two of submitting applications, Caltrans had questions back to the firm [Interviewee SM#2].

Other interviewees reported challenges and barriers in connection with the certification process. This caused some firms to forgo certification. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, said that the people conducting the certification process were making it more difficult than it should have been. "If the people were better trained then it would be easier for new applicants."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, stated that her company is not certified with the state or a local agency as an MBE/WBE or DBE. She said that the process was too confusing and took too long. "As a small business owner, I didn't have time to wade through all of the requirements and certification genres," she said. She added, "I did contact a business that helps you get certified but I became

discouraged because it wasn't clear what the benefits would be." She also said, "If it was easy, we would be certified…I think it may be worth it to go through the process but just be straight with me about what you are looking for and what I need to do to qualify."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that the certification process was extremely difficult. She said, "It is not easy, we were initially denied certification because they discounted all of my experience. They said that I didn't have the required experience. I had to join a lot of organizations and reach out to a lot of contacts to get credibility and backing" before getting certification. She added, "Caltrans has been combative and adversarial. They make us feel like we are doing something wrong for working within the parameters of the program."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, mentioned, "From what I recall the [certification] process was difficult. It took effort — tax records, forms, notary."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that the certification process was difficult. She said, "The process was intensive. Small businesses don't have time to do all this paperwork and actually do real work at the same time."

Interviewee #13, the African American female owner of a non-certified trucking company stated, "The certification process is cumbersome." She reported that the biggest disadvantage of certification was the sign-up process. She stated, "We had to meet certain criteria and get all the materials together."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that the certification process is difficult. He said, "It is a lot of paperwork and it is not clear what the advantage is. I haven't seen any benefit from my certification yet. Is there someone who can help me find a benefit to all the work I did?" He said, "[The certification process] was extremely paper intensive and difficult to manage while running a small business."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that his firm is not certified as an MBE or DBE. He said, "We were told that we couldn't qualify as an MBE because of education but I think this is wrong. We are definitely interested in learning more about how to become certified." said that the disadvantages to being certified would be paperwork. He said, "I've heard there is a lot of paperwork [to get certified]. We are on the job six days a week. When would we ever find time to do this?"

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that the disadvantages of certification are the paperwork. He said, "It was a lot of paperwork and bureaucracy to get the certification. The first time was very difficult but the paperwork has gotten easier as time has gone on and we learned more about it."

Interviewee #25, the Hispanic female partner in a non-certified consulting firm, reported that she once attempted to get the company certified as an MBE/WBE, but abandoned that attempt when the government official required documentation to prove her Hispanic ethnicity. She reported that the Caltrans official asked for documentation of her grandmother's ethnicity. This female Hispanic partner in a non-certified consulting firm said of the certification process that, "It was so humiliating."

Interviewee #26, the female majority president of a WBE-certified construction company, felt that the certification process was "very difficult!"

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, stated that the certification process is difficult. He said, "You give them the information, and they ask for more. Then they interpret it."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said, "MBE certification is overly burdensome."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "The recertification process is easy, but the initial certification process is challenging." He also said, "The paperwork is a snowstorm. I just went through the City of Oakland to get this local small business certification. My God it's just ridiculous."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said about the certification process that "it was difficult for my company because of the time constraints."

Interviewee #39, a representative of the Young Black Contractors Association, said, "The most difficult one is the state DBE. It takes a number of years' tax returns. It also has a lot to do with your performance, who you worked for, and the size of jobs. That one has the most procedures."

Interviewee PH #10, the female owner of a WBE-certified management consulting firm, said, "The first barrier is just the certification process, itself. What happens is that if you have a company like mine, I am one person, you are going to crush me under the weight of the process. I can't give it my full attention while I'm out trying to work, trying to win jobs, and then the rules, stated in 49 CFR, I mean, it says 90 days. I turned in my application on January the 10th. I was certified July 1st."

Interviewee PH#26, the female owner of a DBE/SBE-certified administrative services provider, said, "I am certified DBE, SBE. Why do I need to go through another certification process to get UDBE, XYZ, whatever acronym you want — qualifications you want me to have. Otherwise, I'm spending all of my time filling out paperwork. It's just constant."

Interviewee WT#3, the owner of a non-certified trucking firm, stated, "Half of the reason there are not enough certified truckers in this area is due to the process involved in getting certified as a DBE company. The application, interviews and follow up documentation is completely overwhelming and almost impossible to provide. This is causing many companies like ours, to ultimately be weeded out of the certification process completely."

Interviewee WT#25, the Vietnamese owner of a trucking firm, said, "I am writing this letter because I feel that the DBE certification process and guidelines are unfair. A program such as DBE is supposed to create fairness and equal opportunities for small business owners such as myself. Yet becoming certified has nearly become a discriminant [sic] act within itself. Much of the information required to attain certification for DBE is extremely personal. Information that is insignificant to my origin as being disadvantaged or a true small business owner is requested for certification. Telephone bills, credit card statements, personal tax information and proof of how I attained funds to start my business, all of which I feel are unnecessary in providing proof of my being a small business owner of Vietnamese decent. Why has becoming certified for DBE become so difficult? As a matter of fact, I have friends who have applied for their certification that find themselves in the same situation with the same questions as myself. None of them have been certified. My last effort to become certified resulted in a response letter that requested even more thorough information be submitted in a time frame of less than 14 days. That to me seems like a short window of opportunity purposely created to make applying difficult."

The Asian-Pacific American owner of an engineering company and representative of the American Council of Engineering Companies-California indicated that he has to go through a separate process for LA Metro. He said that it was the same form as the DBE certification form. Primes seeking LA Metro work are requiring his firm to be separately certified with that agency [Interviewee SM#2].

Interviewee SM#3, the Native American owner of an engineering-related company, indicated that there is a perception in California that "everyone [each agency] requires their own certification." He said that there is confusion about whether each agency has to have its own DBE certification.

A representative from San Mateo County Transit District responded that LA Metro was operating a small business program, which was why LA Metro was requiring a separate certification [Interviewee SM#5].

Some minority and female business owners said that they were not familiar with the program or the certification process. For example, Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said that her firm is not certified. She said, "We weren't aware of the program or how to qualify for it."

Perceived Value to Certification.

Some interviewees perceived a value to certification. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, stated that "certification might allow me to possibly pick up more work and in this economy you need to find work where you can."

Interviewee #4, the African American owner of a DBE/MBE/SBE-certified engineering company, mentioned that the benefits of certification include the percentage of state and local contracts being set aside for these certified parties. He did not mention any disadvantages of certification. He mentioned that approximately 30 percent of his work results from projects with DBE/MBE/WBE goals.

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that the benefits of certification are that "the company is considered, registered, and identified as a disenfranchised company and that leads to opportunities."

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that she sees the benefits of certification as possibly leading to more business and possibly providing greater visibility to her company with other businesses. She stated that "it is a benefit to be certified because it can open up opportunities to work with the government and Caltrans. I see Caltrans trucks out there and I want to be a part of it."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that the advantages of certification are simple for their company. She said, "We meet a lot of contractors at bid meetings who need qualified certified firms to provide services like we provide."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified waste transportation company, mentioned that each of the acquired certifications has helped them get business. He added "The benefits of the certification come from the contracts with required minimums for certified companies."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated the benefits of certification are that "we get requests for bids frequently; it helps get our name out there."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "One of the primary benefits of being certified is that it shows we are legitimate. It also helps when the big contracts have WBE requirements."

Interviewee #17, the white male estimator at a non-certified woman-owned trucking company, indicated that he had some past experience in working with other DBE firms with a previous employer. He said that he thinks the benefits would be that you might get some better opportunities to compete for work. He said, "I know that we've lost bids to certified firms."

Interviewee #21, the white male owner of a DVBE-certified highway construction company, mentioned that there are a few minor benefits of certification and one major benefit. He stated, "The only way to get the 5 percent segment in the public sector is to be DVBE certified. This is the biggest benefit of certification."

Interviewee #22, the Hispanic male owner of a non-certified construction company, said that although they are not certified, he thinks that the advantages to certification would be more work. He said, "I know that there are opportunities for minority owned businesses that I'd like to tap into."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that he sees the benefits of certification as a way to get exposure for jobs and that some of his customers need certified firms and he fills that need. He said, "We were told several years ago that we needed to be certified so that we could compete for work so we did. The certification has led to some good opportunities."

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, stated that the company is not certified, but they are "working on it because certification should provide more business opportunities."

Interviewee #35, the African American male owner of a certified electrical company, said one benefit to certification is "bid preferences if prices are close."

Interviewee #38, the white male partner of a certified woman-owned environmental consulting firm, said, "I think [certification] increases our opportunities, especially in this economy and especially with goals becoming more important."

Interviewee PH #1, the owner of a DBE-certified environmental consulting firm, said, "We like this program, the DBE program. It is a good program. I see it worked for us. You have to know how to navigate through it, through the system, and to build relationships with companies."

Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, stated that he is not sure how difficult the certification process is, but he said, "I would like to become certified now because of the poor private sector market. Finding work in the private sector is hard right now."

Some minority and female business owners perceived limited or no value to certification. Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that they are not certified with the state or local agency as an MBE/WBE or DBE. He said, "There is no advantage. I don't see any payoff for the hassle" of obtaining certification.

Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that one disadvantage of certification is that "it is not worth the time it takes to complete the process." She continued, "It probably doesn't lead to the increase in business that you think it will so I didn't complete the process." She further stated that she sought out the help of a business that specializes in helping with certification but that this process was discouraging.

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, mentioned, "I was certified as an MBE with the State and the City of Fresno seven years ago. I did not find any benefit with being certified. The process was cumbersome and it seemed like the same certified vendors were being chosen for everything. I didn't see the point in paying to continue certification as I wasn't getting anything out of it." He added, "I didn't get any benefit from it. It was more of a hassle than anything."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that the disadvantage to certification was the amount of paperwork required to gain and maintain certification. She added, "We work with a large engineering firm who pushed us to get certified but we haven't seen anything come from our certification."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, stated that the disadvantage of certification is that "it doesn't really lead to that much work."

Interviewee #26, the female majority president of a WBE-certified construction company, in response to the question of what she saw as benefits of certification, replied simply, "None."

Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated that his firm "is not certified and is too new to know how advantageous this might be."

Interviewee #34, the Asian-Pacific American male president of a non-certified Asian-Pacific American female-owned environmental company, said, "I don't know if there are any benefits. People find you and they go down the list and say, 'I need to hire a person who's certified by the state.'"

Interviewee PH #3, the owner of a DBE-certified data collection company, said "in the beginning, I thought [my DBE certification] was a feather in the cap, you should mention it every chance you get, but I have not seen any fruit from the effort. My question is, why are we not promoting it?"

Interviewee PH #19, the owner of a DBE-certified small business, said, "Myself, as a small business owner and being part of the DBE certification, at first, I was ecstatic, you know, just to know that I had gone through the paperwork process, and it was all done, and I had been approved for the DBE certification. But it's been about 15 months now, and it really hasn't done much for me, unfortunately. So I look at it, and it's like, okay, what did I do wrong, or what's wrong with the process?"

Interviewee SM#1, a Hispanic American contractor and representative of the Hispanic Contractors and Suppliers Association, said, "I try to get my guys [Latino contractors] to get certified, but I can't show them any success stories." "I keep saying to Caltrans, 'We need winners to get players.'"

Some interviewees identified certain disadvantages to certification. Some interviews said that there is a negative stigma to certification. Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that the disadvantages of certification are that "the rest of the firms that are not certified view your company differently, in a more negative light due to the lack of education around what a DBE certification entails. The view in the marketplace is that companies with that certification have poor qualifications and are not qualified."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that the disadvantages to certification are that "the [agencies] seem to actually discourage you. Goals are good, but they are hard to figure out. What is the advantage to me if I am certified? This should be clearer."

Interviewee #36, the Asian-Pacific American male owner of a certified engineering company, said one disadvantage to certification is that "People look at you like you got the work only because of your certification."

Interviewee SM#3, the Native American owner of an engineering-related company, reported, "We've found an expectation that we should provide below normal rates [because we're a UDBE]."

Recommendations Regarding the Certification Process.

Some interviewees recommended that the certification application and/or renewal process be simplified and/or condensed. Interviewee #5, the owner of a non-certified concrete paving company, stated "We have heard from business associates that the certification process is a bit difficult and repetitive. If it could be shortened and simplified that would be beneficial to businesses."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that the certification process is not easy. He said, "The system is hard to navigate. They should make it easier to figure out how to do it." He added that the certification process could be improved by making the Caltrans website easier to navigate. He said, "All this information should be on their website."

Interviewee #9, the African American female owner of a DBE-certified construction and hauling company, said that her recommendations for improving the certification process are for Caltrans to be more transparent. She said, "Just say up front what you want for documentation and don't act so adversarial. It was insulting to me that they were implying that I was simply a 'front' because I was a woman."

Some interviewees recommended that the State simplify the certification process. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated "We have heard from business associates that the certification process is a bit difficult and repetitive. If it could be shortened and simplified that would be beneficial to businesses."

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Interviewee #33, the African American male owner of a certified concrete company, said "It could be done quicker. My certification took six months."

Interviewee #11, the white female owner of a federally-certified woman-owned engineering business, said that she would recommend they simplify the process. She said, "It is way too complicated. Why do they need to have personal financial information that isn't relevant? They should base certification of your qualifications not on financial information."

Interviewee #15, the Hispanic American office manager of a SBE/DBE-certified concrete company, said that the certification process "can be streamlined quite a bit, that there are too many repetitive items."

Interviewee #23, the Hispanic male owner of a non-certified construction company, said that his recommendation for improving the certification process would be to make the process more transparent and to make the benefits easier to track. He said, "Make it easier to get jobs as a prime instead of just as a sub and make the process easier to track."

Interviewee #26, the female majority president of a WBE-certified construction company, recommended that "companies should have just one number for government identification purposes. We have so many numbers to keep track of and have to look for all of them when it's time to recertify."

Interviewee #32, the white male senior project manager of a non-certified Subcontinent Asian American electrical contractor, said, "They should streamline the MBE certification process and reduce it from six months to two weeks."

Interviewee #33, the African American male owner of a certified concrete company, said, "It could be done quicker. My certification took six months."

Interviewee #38, the white male partner of a certified woman-owned environmental consulting firm, said that the difficulty and delays in getting the firm certified as a WBE constituted a barrier.

Interviewee PH#17, the female owner of a DBE-certified materials supplier firm, said, "I was directed on what to do to get the codes changed. That is when my nightmare began. Never in my 64 years have I been treated so poorly as I was treated by [specific Caltrans staff member] of the certification unit. Even [specific Caltrans staff member], another employee in the same office, had said there had been several complaints against her. She recommended that I file the complaint, which I did. I got a letter back stating that [she] did nothing wrong, end of story. My request for change of codes was denied. [She] even accused me of lying. I find it hard to believe that my livelihood depends on someone who works with Caltrans on a daily basis."

Some interviewees recommended that Caltrans provide more training or assistance concerning the certification process. Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that her recommendations for improving the certification process would include ensuring that agencies that work with Caltrans to provide certification services should not discourage companies like hers from completing the process. She said, "The firm we worked with was not helpful and actually discouraged us from completing the certification process."

Some interviewees recommended that the certification process should have more oversight. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "There are too many fronts, it needs to stop. There is not enough investigation to the companies applying."

Interviewee #16, the white male vice-president and co-owner of a woman-owned non-certified power and communication conduit firm stated, "I think that the [governing bodies] should conduct on-site inspections once in a while. This would help sort out the good vendors from the bad vendors."

One interviewee recommended that Caltrans conducted in-person interviews as part of the certification process. Interviewee #38, the white female principal and partner of a WBE-certified environmental consulting firm, when asked if she had any recommendations about improving the certification process, said, "I recall that when I did this the first time in 1994 that I was actually interviewed, and I think that would be valuable. In this particular situation, when Caltrans recently denied the company's application for WBE certification, there was no conversation at all."

Some interviewees recommended more coordination among certifying agencies. The representative of the Port of Los Angeles [Interviewee SM#13] recommended creation of a state-wide database where all local cities use the same system. He indicated that each city and private company (such as Northrup Grumman or Toyota) has its own databases. "[If you're a minority-owned firm] you need a full-time IT person to make sure you're on all these databases and you have your certifications."

Interviewee SM #15, a female business owner and representative of the Southern California Contractors Association, agreed. "One of my biggest criticisms is we have so many certifying agencies with different requirements. If it was universal, it would benefit everyone in so many ways … DBE companies looking for work as well as agencies contracting the work."

One interviewee had no recommendation because they thought the certification process worked well. Interviewee #21, the white male owner of a DVBE-certified highway construction company, stated, "I have no recommendations about improving the certification process. It appears to be working."

I. Other Recommendations to Caltrans Offered by Interviewees

Some interviewees suggested replacing the "meeting goals or showing good faith" elements of the Program with incentives or allowances for prime contractors to use DBEs. Interviewee SM#10, a white male owner of a construction firm, said, "I think we need to look at somehow to put allowances in contracts so that the money is in there to achieve the goals that Caltrans wants. And then we take out the issue of the low bidder and the lowest cost and we have an allowance as a bid item that we all want to make." He recommended that Caltrans set a contract specification for inclusion of DBEs with a dollar amount that the prime contractor could then use, in a flexible way, for this purpose.

Some interviewees discussed encouraging DBE utilization as second-tier subs. Participants in one stakeholder meeting said that it would be beneficial to encourage DBE utilization as second-tier subcontractors [working as subcontractors to other subcontractors]. When asked whether it is common to meet a DBE contract goal through second-tier subcontractors, participants in a stakeholders group meeting said "no." The Hispanic American owner of an engineering firm [Interviewee SM#12] indicated that that was "pretty rare … it hardly ever happens." The white male owner of a construction firm [Interviewee SM#10] agreed, noting that "it's got to be a really, really huge contract that allows those guys to go out and make that effort, otherwise it's not happening."

A representative of the Port of Los Angeles [Interviewee SM#13] said that he was aware of Los Angeles World Airports' efforts to achieve DBE participation as second-tier subs for a $1 billion terminal project. That was the only time he was aware of DBE participation at the second-tier level.

A representative of the Port of Long Beach [Interviewee SM#14] talked about a $700 million design-build project. Under the design-build law, primes are allowed to pick subs based on either low bid or "best value process." Under the best value process, the Port of Long Beach is expecting that subs will be getting bids from second-tier subs.

Interviewee SM#1, a Hispanic contractor and representative of the Hispanic Contractors and Suppliers Association, explained that he has had difficulty doing business as a subcontractor to other subcontractors on a project. He said that he will ask prime contractors for names of key subcontractors they work with, and the primes will give him those names. "I'll call those subs up … do they return my call? No. Why? Because nobody's jumping on them to meet any goals." "The goals have to translate down to the subs. Once the goals translate down to the subs, all kinds of wonderful things are going to happen, because that's where the work is."

Some interviewees recommended that the State have an advisor dedicated solely to assisting small businesses or develop a system to share what makes firms successful. Interviewee #7, the African American female co-owner of a non-certified construction and hauling company, said that Caltrans should provide one person that businesses can contact for guidance. She said, "There should be an advisor for small businesses who is dedicated to answering questions about the process from start to finish. One go-to person."

A small business owner and representative of the California Small Business Association [Interviewee SM#4] recommended identifying what makes some DBEs successful and then sharing those best practices with other firms.

Some interviewees recommended that the State improve its communication within agencies and notification of work opportunities. Interviewee #4, the African American owner of a DBE/MBE/SBE-certified traffic engineering company, suggested that Caltrans do a monthly email push to qualified MBE/WBE/SBEs. He stated, "It would be useful for Caltrans to send out monthly email to qualified businesses."

Interviewee #6, the African American diversity marketing manager of an MBE/SBE/DBE-certified environmental consulting company, stated that, "Caltrans should have a better alerting system that would allow us to know further in advance about opportunities and would allow us to better set aside time to respond to these opportunities."

Interviewee #14, the African American operations manager of an MBE/WBE/DBE-certified hazardous waste transportation company, mentioned that he thinks that Caltrans should do more to enhance the programs. He stated, "Caltrans should send out information as opposed to us having to dig for it on a weekly basis."

Some interviewees recommended that the State make work opportunities more accessible to small businesses. Interviewee #1, the Hispanic male owner of a non-certified construction and concrete business, said Caltrans should open up more opportunities to support the work done by small businesses. He said they should "help remove barriers like excessive bonding and insurance requirements. Costs have increased but rates haven't." He concluded that Caltrans should examine rates and budgets to account for rising costs of equipment and materials.

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that there should be regional liaisons for small businesses who are dedicated to helping them find work. He added that Caltrans should have better websites with access to information for small firms. He said, "Everything is electronic today. It shouldn't be that hard to have information geared for small businesses" related to Caltrans contracts.

Interviewee #22, the Hispanic male owner of a non-certified construction company, said, "We only want a fair shot at getting the work we know is out there. By making it so complex and time consuming to just bid, you are leaving out a lot of good small firms who can do the work better and cheaper."

Interviewee #23, the Hispanic male owner of an MBE-certified construction company, said that he would recommend making financing more accessible. He said, "The thing that would really help is financing and access to the work that only goes to big firms now."

Interviewee #24, the Hispanic female owner of a non-certified asphalt paving company, said, "We're hard workers and just want the opportunity to do work. Give us the opportunity and we will get the job done. There are a lot of small businesses like ours who can do the work better and cheaper than the big companies that continually get the work."

Interviewee #27, the male vice president and treasurer of a non-certified woman-owned construction company, said, "Many contracts are too big and small businesses can't get bonding. The breakout into smaller contracts would be helpful."

Interviewee #29, the white male owner of a concrete and landscaping company, said, "The best way to help a small business is to actually provide projects that are attainable by a small business. Which would be, I would say, contracts $500,000 and less. Maybe even $50,000 contracts thrown in there now and then. But you can't say we're all for small business and then have everything that's out there $12 to $800 million jobs. And the data is really looped toward that direction. I noticed lately that Caltrans is putting all these large amount of money jobs – a billion dollar job. Why not make a thousand million dollar jobs or two thousand $500,000 jobs, or break these things up a little bit, and some of them are just ridiculous the way they structure them. You look at some of these contracts are going they could have totally split this into several contracts and helped out contractors in this state instead of just helping just one large company that might not even be from California. They're not doing any good for anybody doing that."

Interviewee #34, the Asian-Pacific American male president of a non-certified female Asian-Pacific American owned environmental company, said that it would be helpful "if they would send Emails to small businesses letting us know there are contracts out there."

Interviewee #38, the white male partner of a certified woman-owned environmental consulting firm, said, "We like the idea of goals. Making some of the contract monies available like splitting large contracts is probably a useful thing. Making sure that there isn't just a suite of consultants that get selected time and time again, but that there is a rotation."

Some interviewees suggested that the State improve payment processes within State agencies. Interviewee #34, the Asian-Pacific American male president of a non-certified female Asian-Pacific American owned environmental company, indicated that prime contractors were slow making payments to subcontractors. He suggested that the government should "require documentation [from prime contractors] that all subs were paid."

One interviewee recommended that Caltrans provide training on how to use their website. Interviewee #16, the white male vice-president and co-owner of a WBE-certified power and communication conduit firm mentioned that any form of website navigation training from Caltrans would be very useful. He stated, "I don't know how to navigate the website very well. I feel like if it were easier than it might be beneficial to my business."

One interviewee recommended that the State do more to prevent bid shopping. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, recommended, "Private auditors should be around on bid days to prevent bid shopping. Caltrans should also reprimand primes to prevent kick-backs. They could set-up 'sting' operations."

Some interviewees recommended that the State provide greater oversight of the MBE/WBE and DBE Programs. Interviewee #12, the white female owner of a WBE/SBE/DBE-certified company, reported, "There are too many fronts, it needs to stop. There is not enough investigation to the companies applying."

Interviewee #16, the white male vice-president and co-owner of a WBE-certified power and communication conduit firm stated, "I think that the [governing bodies] should conduct on-site inspections once in a while. This would help sort out the good vendors from the bad vendors."He added, "The certifying boards should confirm certifications are legitimate. People are using shell companies and just taking the 10 percent."

Interviewee PH#23, the female owner of a DBE/SBE/LSBE/CBE/MBE/WBE-certified research firm, said "I would like to see these — I would like to see some accountability and have, you know, there be some procedures, some oversight as to how these companies are fulfilling their DBE contracts, the transportation companies."

Some interviewees recommended that Caltrans should better recognize DVBEs. Interviewee #16, the white male vice-president and co-owner of a WBE-certified power and communication conduit firm, stated, "They should give a higher percentage to DVBE businesses that are just getting back into the workplace."

Interviewee #28, the white male president of a certified majority DVBE, said, "Caltrans should include DVBEs too." when asked about race/ethnicity/gender-based measures. He added, "Some minority-owned firms seem to be owned and operated by immigrants who don't speak English. Veterans who have served their county should not be penalized by awarding contracts to non-Americans. DVBEs also employ vets, including those returning from Iraq and Afghanistan. Immigrant-owned companies that bid low prices are likely not paying prevailing wages or meeting insurance requirements. Caltrans should throw out bids that they know are too low to cover mandatory costs and acceptable materials."

Some interviewees recommended that the State do more to encourage MBE/WBE/DBE utilization. Interviewee #5, the Subcontinent Asian American owner of a non-certified concrete paving company, stated, "My recommendation is to allocate more work to actual ethnic groups with solid business quals and to award more minority work."

Interviewee #8, the Native American owner and president of a non-certified electrical contracting business, said that the commitment by Caltrans to the DBE/MBE/WBE programs is not clear. He said, "Caltrans should really encourage participation by small/minority companies. Don't just give it lip service."

Interviewee #10, the Asian-Pacific American owner of a non-certified engineering company, recommended that the State and Caltrans should use more outside firms for designing and reviewing engineering work. He indicated that this should be done with more small firm requirements, including DBE/MBE/WBEs.

Interviewee #11, the white female owner of a certified woman-owned engineering business, said that it would "be useful if Caltrans would have real goals and targets for WBEs and small businesses like ours that we could understand. It seems like they only give lip service to using firms like ours."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that Caltrans should not just give "lip service" to the certification process. He said, "It seems like they actually discourage DBEs from doing work. Goals are good to have but unless you have a way to make sure they are measured, it doesn't work."

Interviewee #39, a representative of the Young Black Contractors Association, said, "I really think that each district should be promoted in a DBE situation, whether that's quarterly or annually. These subs should be checking into Caltrans to give and update their information. In the form of a mixer of some sort to find out who's interested and who each other are. To give the smaller contractors a better chance to begin to work together. You don't need to help the big guy. It's the smaller guy that creates more of a tax burden if we don't get them working and get them into a position of leadership at some point."

Interviewee WT#12, the president of a DBE-certified engineering firm, said, "I also recommend that Primes need to show proofs that DBE submittals were seriously accounted for by including in their bid submittals any statement whether or not the DBEs meet the Prime criteria, such as "the lowest responsible bid" or any justification for not meeting their criteria."

Some interviewees recommended that the state provide better outreach to MBE/WBE/DBE firms. Interviewee #15, the Hispanic American office manager of an MBE/WBE-certified concrete company, stated, "It would be great if there were quarterly meetings of DBEs to discuss how to better utilize certifications and make it work for us. Also other ways to meet contractors would be great."

Interviewee #18, the African American male owner of a certified DBE telecommunications company, said that Caltrans needs to make the advantages of being a DBE more transparent. He said, "There should be a better pay off for going through the process" of getting certified.

Interviewee #35, the African American male owner of a certified electrical company, said, "I recommend that pre-bid meetings be held with DBE/MBE/WBEs to advise them of jobs and provide free sets of plans." He added that Caltrans should have "outreach programs that bring businesses together for government to see what's available, and a website with diversity statistics."

Interviewee SM#13, a representative of the Port of Los Angeles, recommended creating a video about programs and putting it on the web.

APPENDIX K.

Detailed Disparity Results

Figure K-1 (2 pages)

Figure K- :	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Agency																													
Caltrans and local assistance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							X	X	X	X	X
Caltrans																			X	X	X								
Local assistance																						X	X	X					
Funding and program																													
All funding sources	X	X	X													X	X		X	X	X	X	X	X	X	X	X	X	X
Federal with race conscious program							X	X	X									X											
Federal without race conscious program				X	X	X							X	X	X			X											
State				X	X	X				X	X	X																	
Time period																													
All	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X
2007-2008																X													
2009-2010																	X												
Type																													
Transportation construction and engineering	X			X			X			X			X			X	X	X	X			X			X			X	
Construction		X			X			X			X			X						X			X			X			X
Engineering			X			X			X			X			X						X			X			X		
Contract role																													
Prime/Sub	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Prime																									X	X	X		
Sub																												X	X
Region																													
California	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
North (District 1, 2 and 3)																													
Bay Area (District 4)																													
Central (Districts 5, 6, 9 and 10)																													
Southern (Districts 7, 8, 11, 12)																													
Contract size																													
All	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Under $2M																													
Under $500k																													
Over $2M																													
Over $500k																													
Components of DBE goal																													
Analysis of potential DBEs																													

Figure K- :	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Agency																						
Caltrans and local assistance	X	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X
Caltrans								X	X													
Local assistance										X	X											
Funding and program																						
All funding sources	X							X	X	X	X	X	X	X	X	X	X	X	X			
Federal with race conscious program			X	X	X															X	X	X
Federal without race conscious program		X		X	X															X	X	X
State		X				X	X															
Time period																						
All	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2007-2008																						
2009-2010																						
Type																						
Transportation construction and engineering		X	X	X	X	X	X	X	X	X	X	X	X	X	X					X		
Construction																X		X			X	
Engineering	X																X		X			X
Contract role																						
Prime/Sub												X	X	X	X					X	X	X
Prime				X		X		X		X						X	X	X	X			
Sub	X	X	X		X		X		X		X											
Region																						
California	X	X	X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X
North (District 1, 2 and 3)												X										
Bay Area (District 4)													X									
Central (Districts 5, 6, 9 and 10)														X								
Southern (Districts 7, 8, 11, 12)															X							
Contract size																						
All	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					X	X	X
Under $2M																X						
Under $500k																	X					
Over $2M																		X				
Over $500k																			X			
Components of DBE goal																						
Analysis of potential DBEs																				X	X	X

Figure K-2.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	15,446	$11,397,030	$13,330,858				
(2) MBE/WBE	4,509	$1,434,119	$1,680,388	12.6	18.1	5.5	69.7
(3) WBE	1,431	$455,493	$525,843	3.9	4.3	0.3	92.6
(4) MBE	3,078	$978,626	$1,154,545	8.7	13.8	-5.2	62.6
(5) African American-owned	110	$14,407	$20,315	0.2	0.9	-0.8	16.5
(6) Asian-Pacific American-owned	542	$82,340	$115,316	0.9	1.8	-1.0	47.3
(7) Subcontinent Asian American-owned	287	$27,471	$30,988	0.2	0.3	-0.0	84.3
(8) Hispanic American-owned	1,661	$791,296	$924,753	6.9	9.8	-2.8	71.1
(9) Native American-owned	343	$50,819	$63,174	0.5	1.0	-0.6	45.2
(10) Unknown MBE	135	$12,292					
(11) DBE-certified	2,770	$449,206	$559,802	4.2			
(12) Woman-owned DBE	858	$79,720	$98,569	0.7			
(13) Minority-owned DBE	1,908	$368,975	$460,721	3.5			
(14) African American-owned DBE	89	$9,163	$13,396	0.1			
(15) Asian-Pacific American-owned DBE	497	$71,691	$98,775	0.7			
(16) Subcontinent Asian American-owned DBE	47	$8,205	$8,922	0.1			
(17) Hispanic American-owned DBE	967	$262,817	$317,226	2.4			
(18) Native American-owned DBE	308	$17,099	$22,403	0.2			
(19) Unknown DBE-MBE	4	$511	$511	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-3.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	14,636	$10,948,749	$12,820,954				
(2) MBE/WBE	4,285	$1,391,861	$1,631,117	12.7	17.5	4.8	72.7
(3) WBE	1,365	$445,823	$514,799	4.0	4.2	0.2	95.3
(4) MBE	2,920	$946,038	$1,116,318	8.7	13.3	-4.6	65.5
(5) African American-owned	106	$14,114	$19,311	0.2	0.8	-0.6	19.5
(6) Asian-Pacific American-owned	471	$66,061	$95,331	0.7	1.5	-0.7	50.9
(7) Subcontinent Asian American-owned	269	$23,105	$26,503	0.2	0.2	-0.0	117.8
(8) Hispanic American-owned	1,603	$780,506	$912,078	7.1	9.8	-2.7	72.4
(9) Native American-owned	342	$50,791	$63,095	0.5	1.1	-0.6	46.7
(10) Unknown MBE	129	$11,461					
(11) DBE-certified	2,611	$415,185	$520,577	4.1			
(12) Woman-owned DBE	819	$70,820	$88,754	0.7			
(13) Minority-owned DBE	1,792	$344,365	$431,822	3.4			
(14) African American-owned DBE	85	$8,870	$12,419	0.1			
(15) Asian-Pacific American-owned DBE	442	$59,136	$83,627	0.7			
(16) Subcontinent Asian American-owned DBE	34	$5,159	$5,847	0.0			
(17) Hispanic American-owned DBE	924	$254,129	$307,568	2.4			
(18) Native American-owned DBE	307	$17,071	$22,361	0.2			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-4.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	810	$448,281	$509,904				
(2) MBE/WBE	224	$42,258	$49,271	9.7	33.0	23.3	29.3
(3) WBE	66	$9,670	$11,043	2.2	5.4	3.3	39.8
(4) MBE	158	$32,588	$38,228	7.5	27.6	20.1	27.2
(5) African American-owned	4	$293	$1,010	0.2	4.8	4.6	4.1
(6) Asian-Pacific American-owned	71	$16,279	$20,269	4.0	11.0	7.1	36.0
(7) Subcontinent Asian American-owned	18	$4,366	$4,546	0.9	2.8	1.9	31.9
(8) Hispanic American-owned	58	$10,790	$12,359	2.4	8.0	5.5	30.4
(9) Native American-owned	1	$28	$43	0.0	1.0	0.9	0.9
(10) Unknown MBE	6	$831					
(11) DBE-certified	159	$34,021	$39,225	7.7			
(12) Woman-owned DBE	39	$8,900	$9,815	1.9			
(13) Minority-owned DBE	116	$24,610	$28,899	5.7			
(14) African American-owned DBE	4	$293	$976	0.2			
(15) Asian-Pacific American-owned DBE	55	$12,555	$15,148	3.0			
(16) Subcontinent Asian American-owned DBE	13	$3,046	$3,075	0.6			
(17) Hispanic American-owned DBE	43	$8,688	$9,658	1.9			
(18) Native American-owned DBE	1	$28	$42	0.0			
(19) Unknown DBE-MBE	4	$511	$511	0.1			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-5.
Agency: Caltrans and Local Assistance
Funding and Program: Federal without Race Conscious Program and State
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	10,582	$7,549,722	$8,812,309				
(2) MBE/WBE	2,883	$1,015,586	$1,160,920	13.2	17.9	4.7	73.6
(3) WBE	817	$325,060	$369,524	4.2	4.1	0.1	101.4
(4) MBE	2,066	$690,526	$791,396	9.0	13.8	- 4.8	65.2
(5) African American-owned	33	$4,584	$5,898	0.1	0.9	0.8	7.6
(6) Asian-Pacific American-owned	345	$51,541	$72,665	0.8	2.0	- 1.2	41.0
(7) Subcontinent Asian American-owned	227	$22,106	$23,763	0.3	0.3	- 0.0	90.4
(8) Hispanic American-owned	1,168	$587,439	$666,127	7.6	9.6	- 2.0	78.9
(9) Native American-owned	206	$18,656	$22,943	0.3	1.0	0.7	26.1
(10) Unknown MBE	87	$6,201			-		
(11) DBE-certified	1,614	$286,250	$341,944	3.9	-		
(12) Woman-owned DBE	442	$49,128	$58,605	0.7			
(13) Minority-owned DBE	1,168	$236,611	$282,828	3.2			
(14) African American-owned DBE	20	$1,720	$2,477	0.0			
(15) Asian-Pacific American-owned DBE	308	$41,278	$57,808	0.7			
(16) Subcontinent Asian American-owned DBE	32	$6,418	$6,418	0.1			
(17) Hispanic American-owned DBE	624	$179,032	$206,975	2.3			
(18) Native American-owned DBE	184	$8,163	$9,151	0.1			
(19) Unknown DBE-MBE	4	$511	$511	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-6.
Agency: Caltrans and Local Assistance
Funding and Program: Federal without Race Conscious Program and State
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	9,942	$7,188,704	$8,403,581				
(2) MBE/WBE	2,717	$980,470	$1,119,465	13.3	17.2	3.9	77.3
(3) WBE	768	$316,674	$359,999	4.3	4.1	0.2	104.9
(4) MBE	1,949	$663,797	$759,466	9.0	13.2	- 4.1	68.7
(5) African American-owned	30	$4,294	$4,909	0.1	0.7	0.7	8.1
(6) Asian-Pacific American-owned	290	$38,058	$55,972	0.7	1.6	- 0.9	42.8
(7) Subcontinent Asian American-owned	213	$18,597	$20,199	0.2	0.2	- 0.1	134.1
(8) Hispanic American-owned	1,128	$578,442	$655,458	7.8	9.7	- 1.9	80.4
(9) Native American-owned	206	$18,656	$22,928	0.3	1.0	0.7	27.2
(10) Unknown MBE	82	$5,750			-		
(11) DBE-certified	1,503	$258,262	$309,410	3.7	-		
(12) Woman-owned DBE	415	$41,482	$50,263	0.6			
(13) Minority-owned DBE	1,088	$216,780	$259,147	3.1			
(14) African American-owned DBE	17	$1,430	$1,503	0.0			
(15) Asian-Pacific American-owned DBE	268	$31,415	$45,695	0.5			
(16) Subcontinent Asian American-owned DBE	22	$4,121	$4,121	0.0			
(17) Hispanic American-owned DBE	597	$171,651	$198,677	2.4			
(18) Native American-owned DBE	184	$8,163	$9,151	0.1			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-7.
Agency: Caltrans and Local Assistance
Funding and Program: Federal without Race Conscious Program and State
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	640	$361,019	$408,728				
(2) MBE/WBE	166	$35,116	$41,455	10.1	31.7	21.5	32.0
(3) WBE	49	$8,386	$9,526	2.3	5.2	2.9	44.7
(4) MBE	117	$26,729	$31,929	7.8	26.5	18.7	29.5
(5) African American-owned	3	$290	$1,001	0.2	4.2	4.0	5.8
(6) Asian-Pacific American-owned	55	$13,483	$16,928	4.1	11.4	7.2	36.4
(7) Subcontinent Asian American-owned	14	$3,508	$3,608	0.9	2.7	1.9	32.2
(8) Hispanic American-owned	40	$8,997	$10,392	2.5	7.2	4.7	35.3
(9) Native American-owned	0	$0	$0	0.0	0.9	0.9	0.0
(10) Unknown MBE	5	$451					
(11) DBE-certified	111	$27,988	$32,534	8.0			
(12) Woman-owned DBE	27	$7,646	$8,343	2.0			
(13) Minority-owned DBE	80	$19,831	$23,680	5.8			
(14) African American-owned DBE	3	$290	$973	0.2			
(15) Asian-Pacific American-owned DBE	40	$9,863	$12,113	3.0			
(16) Subcontinent Asian American-owned DBE	10	$2,297	$2,297	0.6			
(17) Hispanic American-owned DBE	27	$7,381	$8,298	2.0			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	4	$511	$511	0.1			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-8.
Agency: Caltrans and Local Assistance
Funding and Program: Federal with Race Conscious Program
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	4,864	$3,847,307	$4,518,549				
(2) MBE/WBE	1,626	$418,533	$519,468	11.5	18.5	7.0	62.3
(3) WBE	614	$130,433	$156,319	3.5	4.5	1.0	76.9
(4) MBE	1,012	$288,100	$363,149	8.0	14.0	- 5.9	57.6
(5) African American-owned	77	$9,823	$14,545	0.3	1.0	- 0.7	31.9
(6) Asian-Pacific American-owned	197	$30,799	$42,752	0.9	1.5	- 0.5	64.4
(7) Subcontinent Asian American-owned	60	$5,365	$7,185	0.2	0.2	- 0.1	68.6
(8) Hispanic American-owned	493	$203,858	$258,113	5.7	10.1	- 4.4	56.5
(9) Native American-owned	137	$32,164	$40,554	0.9	1.1	- 0.3	78.2
(10) Unknown MBE	48	$6,091				-	
(11) DBE-certified	1,156	$162,956	$217,858	4.8		-	
(12) Woman-owned DBE	416	$30,592	$39,964	0.9			
(13) Minority-owned DBE	740	$132,364	$177,894	3.9			
(14) African American-owned DBE	69	$7,443	$10,919	0.2			
(15) Asian-Pacific American-owned DBE	189	$30,412	$40,967	0.9			
(16) Subcontinent Asian American-owned DBE	15	$1,787	$2,504	0.1			
(17) Hispanic American-owned DBE	343	$83,785	$110,251	2.4			
(18) Native American-owned DBE	124	$8,937	$13,253	0.3			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-9.
Agency: Caltrans and Local Assistance
Funding and Program: Federal with Race Conscious Program
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	4,694	$3,760,045	$4,417,373				
(2) MBE/WBE	1,568	$411,390	$511,652	11.6	18.0	6.4	64.3
(3) WBE	597	$129,149	$154,801	3.5	4.5	1.0	78.6
(4) MBE	971	$282,241	$356,851	8.1	13.6	-5.5	59.6
(5) African American-owned	76	$9,820	$14,533	0.3	0.9	-0.5	37.8
(6) Asian-Pacific American-owned	181	$28,003	$39,501	0.9	1.3	-0.4	69.8
(7) Subcontinent Asian American-owned	56	$4,507	$6,269	0.1	0.2	-0.0	84.4
(8) Hispanic American-owned	475	$202,065	$256,062	5.8	10.1	-4.3	57.5
(9) Native American-owned	136	$32,135	$40,487	0.9	1.1	0.2	79.8
(10) Unknown MBE	47	$5,711					
(11) DBE-certified	1,108	$156,923	$211,167	4.8			
(12) Woman-owned DBE	404	$29,338	$38,492	0.9			
(13) Minority-owned DBE	704	$127,585	$172,675	3.9			
(14) African American-owned DBE	68	$7,440	$10,916	0.2			
(15) Asian-Pacific American-owned DBE	174	$27,721	$37,932	0.9			
(16) Subcontinent Asian American-owned DBE	12	$1,038	$1,725	0.0			
(17) Hispanic American-owned DBE	327	$82,478	$108,891	2.5			
(18) Native American-owned DBE	123	$8,908	$13,211	0.3			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-10.
Agency: Caltrans and Local Assistance
Funding and Program: Federal with Race Conscious Program
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	170	$87,262	$101,176				
(2) MBE/WBE	58	$7,142	$7,816	7.7	38.3	30.6	20.2
(3) WBE	17	$1,284	$1,518	1.5	6.3	4.8	23.7
(4) MBE	41	$5,859	$6,298	6.2	32.0	25.7	19.5
(5) African American-owned	1	$3	$3	0.0	7.1	7.1	0.0
(6) Asian-Pacific American-owned	16	$2,796	$3,341	3.3	9.7	6.4	34.0
(7) Subcontinent Asian American-owned	4	$858	$944	0.9	3.0	2.1	31.0
(8) Hispanic American-owned	18	$1,793	$1,965	1.9	11.1	9.1	17.5
(9) Native American-owned	1	$28	$45	0.0	1.1	1.1	3.9
(10) Unknown MBE	1	$380					
(11) DBE-certified	48	$6,033	$6,691	6.6			
(12) Woman-owned DBE	12	$1,254	$1,472	1.5			
(13) Minority-owned DBE	36	$4,779	$5,219	5.2			
(14) African American-owned DBE	1	$3	$3	0.0			
(15) Asian-Pacific American-owned DBE	15	$2,692	$3,035	3.0			
(16) Subcontinent Asian American-owned DBE	3	$749	$778	0.8			
(17) Hispanic American-owned DBE	16	$1,307	$1,360	1.3			
(18) Native American-owned DBE	1	$28	$42	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-11.
Agency: Caltrans and Local Assistance
Funding and Program: State
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	6,146	$2,853,857	$2,865,226				
(2) MBE/WBE	1,710	$447,914	$450,002	15.7	19.7	4.0	79.6
(3) WBE	426	$147,342	$147,854	5.2	4.6	0.5	111.7
(4) MBE	1,284	$300,572	$302,148	10.5	15.1	- 4.6	69.8
(5) African American-owned	19	$2,582	$2,598	0.1	1.1	1.0	8.1
(6) Asian-Pacific American-owned	188	$19,413	$19,533	0.7	2.3	- 1.6	29.3
(7) Subcontinent Asian American-owned	159	$13,173	$13,254	0.5	0.3	- 0.2	181.3
(8) Hispanic American-owned	721	$251,047	$254,176	8.9	10.2	- 1.3	86.9
(9) Native American-owned	159	$12,510	$12,587	0.4	1.2	0.8	36.9
(10) Unknown MBE	38	$1,847			-		
(11) DBE-certified	953	$121,972	$123,236	4.3	-		
(12) Woman-owned DBE	234	$23,730	$23,747	0.8			
(13) Minority-owned DBE	718	$98,226	$99,473	3.5			
(14) African American-owned DBE	11	$1,000	$1,000	0.0			
(15) Asian-Pacific American-owned DBE	177	$15,192	$15,192	0.5			
(16) Subcontinent Asian American-owned DBE	26	$4,747	$4,747	0.2			
(17) Hispanic American-owned DBE	362	$71,890	$73,137	2.6			
(18) Native American-owned DBE	142	$5,397	$5,397	0.2			
(19) Unknown DBE-MBE	1	$16	$16	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-12.
Agency: Caltrans and Local Assistance
Funding and Program: State
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	6,009	$2,704,102	$2,715,471				
(2) MBE/WBE	1,672	$438,322	$440,410	16.2	19.4	3.1	83.7
(3) WBE	413	$145,408	$145,919	5.4	4.7	0.7	114.8
(4) MBE	1,259	$292,914	$294,490	10.8	14.7	- 3.8	73.9
(5) African American-owned	17	$2,525	$2,541	0.1	1.0	0.9	9.4
(6) Asian-Pacific American-owned	178	$16,833	$16,938	0.6	1.7	- 1.1	36.5
(7) Subcontinent Asian American-owned	153	$11,484	$11,556	0.4	0.2	- 0.2	178.4
(8) Hispanic American-owned	715	$247,729	$250,867	9.2	10.5	- 1.3	87.9
(9) Native American-owned	159	$12,510	$12,589	0.5	1.2	0.8	37.4
(10) Unknown MBE	37	$1,833			-		
(11) DBE-certified	925	$113,744	$115,007	4.2	-		
(12) Woman-owned DBE	228	$22,216	$22,233	0.8			
(13) Minority-owned DBE	697	$91,528	$92,774	3.4			
(14) African American-owned DBE	9	$943	$943	0.0			
(15) Asian-Pacific American-owned DBE	167	$12,611	$12,611	0.5			
(16) Subcontinent Asian American-owned DBE	21	$3,952	$3,952	0.1			
(17) Hispanic American-owned DBE	358	$68,624	$69,871	2.6			
(18) Native American-owned DBE	142	$5,397	$5,397	0.2			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-13.
Agency: Caltrans and Local Assistance
Funding and Program: State
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	137	$149,755	$149,755				
(2) MBE/WBE	38	$9,592	$9,592	6.4	26.1	19.7	24.5
(3) WBE	13	$1,934	$1,934	1.3	3.5	2.2	37.3
(4) MBE	25	$7,657	$7,657	5.1	22.7	17.5	22.6
(5) African American-owned	2	$57	$57	0.0	3.5	3.4	1.1
(6) Asian-Pacific American-owned	10	$2,581	$2,585	1.7	13.6	11.9	12.7
(7) Subcontinent Asian American-owned	6	$1,689	$1,692	1.1	0.6	0.6	200+
(8) Hispanic American-owned	6	$3,317	$3,323	2.2	4.7	2.5	47.1
(9) Native American-owned	0	$0	$0	0.0	0.3	0.3	0.0
(10) Unknown MBE	1	$14					
(11) DBE-certified	28	$8,228	$8,228	5.5			
(12) Woman-owned DBE	6	$1,514	$1,514	1.0			
(13) Minority-owned DBE	21	$6,698	$6,698	4.5			
(14) African American-owned DBE	2	$57	$57	0.0			
(15) Asian-Pacific American-owned DBE	10	$2,581	$2,581	1.7			
(16) Subcontinent Asian American-owned DBE	5	$795	$795	0.5			
(17) Hispanic American-owned DBE	4	$3,266	$3,266	2.2			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	1	$16	$16	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-14.
Agency: Caltrans and Local Assistance
Funding and Program: Federal without Race Conscious Program
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	4,436	$4,695,866	$5,947,083				
(2) MBE/WBE	1,173	$567,672	$710,918	12.0	17.0	5.1	70.2
(3) WBE	391	$177,718	$221,671	3.7	3.9	0.2	95.5
(4) MBE	782	$389,954	$489,248	8.2	13.1	- 4.9	62.6
(5) African American-owned	14	$2,002	$3,297	0.1	0.8	- 0.7	7.2
(6) Asian-Pacific American-owned	157	$32,128	$53,210	0.9	1.9	- 1.0	48.2
(7) Subcontinent Asian American-owned	68	$8,933	$10,469	0.2	0.3	- 0.1	55.2
(8) Hispanic American-owned	447	$336,392	$411,952	6.9	9.3	- 2.4	74.6
(9) Native American-owned	47	$6,145	$10,320	0.2	0.9	- 0.7	19.2
(10) Unknown MBE	49	$4,355			-		
(11) DBE-certified	661	$164,278	$218,709	3.7	-		
(12) Woman-owned DBE	208	$25,398	$34,858	0.6			
(13) Minority-owned DBE	450	$138,385	$183,355	3.1			
(14) African American-owned DBE	9	$720	$1,477	0.0			
(15) Asian-Pacific American-owned DBE	131	$26,087	$42,616	0.7			
(16) Subcontinent Asian American-owned DBE	6	$1,671	$1,671	0.0			
(17) Hispanic American-owned DBE	262	$107,141	$133,838	2.3			
(18) Native American-owned DBE	42	$2,765	$3,753	0.1			
(19) Unknown DBE-MBE	3	$496	$496	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-15.
Agency: Caltrans and Local Assistance
Funding and Program: Federal without Race Conscious Program
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	3,933	$4,484,602	$5,688,110				
(2) MBE/WBE	1,045	$542,148	$679,055	11.9	16.2	4.3	73.6
(3) WBE	355	$171,266	$214,079	3.8	3.8	0.0	99.2
(4) MBE	690	$370,882	$464,976	8.2	12.4	-4.3	65.8
(5) African American-owned	13	$1,769	$2,363	0.0	0.6	-0.5	7.0
(6) Asian-Pacific American-owned	112	$21,226	$39,073	0.7	1.5	-0.8	46.3
(7) Subcontinent Asian American-owned	60	$7,113	$8,612	0.2	0.2	-0.0	100.3
(8) Hispanic American-owned	413	$330,712	$404,618	7.1	9.3	-2.2	76.4
(9) Native American-owned	47	$6,145	$10,309	0.2	0.9	-0.7	20.4
(10) Unknown MBE	45	$3,917					
(11) DBE-certified	578	$144,518	$194,402	3.4			
(12) Woman-owned DBE	187	$19,266	$28,029	0.5			
(13) Minority-owned DBE	391	$125,252	$166,373	2.9			
(14) African American-owned DBE	8	$487	$560	0.0			
(15) Asian-Pacific American-owned DBE	101	$18,804	$33,084	0.6			
(16) Subcontinent Asian American-owned DBE	1	$169	$169	0.0			
(17) Hispanic American-owned DBE	239	$103,026	$128,806	2.3			
(18) Native American-owned DBE	42	$2,765	$3,753	0.1			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-16.
Agency: Caltrans and Local Assistance
Funding and Program: Federal without Race Conscious Program
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	503	$211,264	$258,973				
(2) MBE/WBE	128	$25,524	$31,863	12.3	34.9	22.6	35.3
(3) WBE	36	$6,452	$7,591	2.9	6.2	3.3	47.0
(4) MBE	92	$19,072	$24,272	9.4	28.7	19.3	32.7
(5) African American-owned	1	$233	$951	0.4	4.7	4.3	7.8
(6) Asian-Pacific American-owned	45	$10,902	$14,395	5.6	10.1	4.5	55.1
(7) Subcontinent Asian American-owned	8	$1,819	$1,887	0.7	4.0	3.3	18.2
(8) Hispanic American-owned	34	$5,680	$7,039	2.7	8.6	5.9	31.5
(9) Native American-owned	0	$0	$0	0.0	1.2	1.2	0.0
(10) Unknown MBE	4	$438					
(11) DBE-certified	83	$19,760	$24,306	9.4			
(12) Woman-owned DBE	21	$6,132	$6,828	2.6			
(13) Minority-owned DBE	59	$13,133	$16,982	6.6			
(14) African American-owned DBE	1	$233	$917	0.4			
(15) Asian-Pacific American-owned DBE	30	$7,283	$9,532	3.7			
(16) Subcontinent Asian American-owned DBE	5	$1,501	$1,501	0.6			
(17) Hispanic American-owned DBE	23	$4,115	$5,032	1.9			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	3	$496	$496	0.2			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-17.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California
Time Period: 2007 and 2008

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	7,785	$6,436,279	$7,606,712				
(2) MBE/WBE	2,130	$873,526	$1,005,443	13.2	17.5	4.3	75.7
(3) WBE	624	$296,693	$339,466	4.5	4.0	0.5	112.2
(4) MBE	1,506	$576,834	$665,977	8.8	13.5	- 4.7	64.9
(5) African American-owned	23	$2,766	$4,059	0.1	0.8	0.7	6.9
(6) Asian-Pacific American-owned	254	$36,907	$52,793	0.7	2.0	- 1.3	34.6
(7) Subcontinent Asian American-owned	187	$17,448	$19,053	0.3	0.3	- 0.1	82.9
(8) Hispanic American-owned	832	$499,593	$571,122	7.5	9.5	- 2.0	79.4
(9) Native American-owned	139	$14,964	$18,949	0.2	0.9	- 0.7	26.3
(10) Unknown MBE	71	$5,155			-		
(11) DBE-certified	1,187	$231,452	$279,329	3.7	-		
(12) Woman-owned DBE	345	$40,924	$50,308	0.7			
(13) Minority-owned DBE	840	$190,426	$228,919	3.0			
(14) African American-owned DBE	15	$1,031	$1,788	0.0			
(15) Asian-Pacific American-owned DBE	230	$31,013	$42,864	0.6			
(16) Subcontinent Asian American-owned DBE	13	$2,695	$2,695	0.0			
(17) Hispanic American-owned DBE	456	$149,250	$174,410	2.3			
(18) Native American-owned DBE	126	$6,438	$7,163	0.1			
(19) Unknown DBE-MBE	2	$102	$102	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-18.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California
Time Period: 2009 and 2010

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	7,661	$4,960,751	$5,724,146				
(2) MBE/WBE	2,379	$560,592	$674,945	11.8	18.9	7.1	62.3
(3) WBE	807	$158,800	$186,377	3.3	4.6	1.4	70.3
(4) MBE	1,572	$401,792	$488,569	8.5	14.3	-5.8	59.7
(5) African American-owned	87	$11,641	$16,339	0.3	1.1	-0.8	25.4
(6) Asian-Pacific American-owned	288	$45,433	$62,672	1.1	1.6	-0.5	68.9
(7) Subcontinent Asian American-owned	100	$10,023	$11,922	0.2	0.2	-0.0	86.6
(8) Hispanic American-owned	829	$291,703	$353,221	6.2	10.2	-4.0	60.8
(9) Native American-owned	204	$35,855	$44,415	0.8	1.2	-0.4	65.3
(10) Unknown MBE	64	$7,137					
(11) DBE-certified	1,583	$217,755	$280,473	4.9			
(12) Woman-owned DBE	513	$38,796	$48,261	0.8			
(13) Minority-owned DBE	1,068	$178,549	$231,802	4.0			
(14) African American-owned DBE	74	$8,132	$11,608	0.2			
(15) Asian-Pacific American-owned DBE	267	$40,677	$55,911	1.0			
(16) Subcontinent Asian American-owned DBE	34	$5,510	$6,227	0.1			
(17) Hispanic American-owned DBE	511	$113,567	$142,816	2.5			
(18) Native American-owned DBE	182	$10,662	$15,240	0.3			
(19) Unknown DBE-MBE	2	$410	$410	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-19.
Agency: Caltrans and Local Assistance
Funding and Program: Federal
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	9,300	$8,543,173	$10,465,632				
(2) MBE/WBE	2,799	$986,205	$1,230,386	11.8	17.7	5.9	66.6
(3) WBE	1,005	$308,151	$377,989	3.6	4.2	0.5	86.8
(4) MBE	1,794	$678,054	$852,397	8.1	13.5	- 5.3	60.4
(5) African American-owned	91	$11,825	$17,757	0.2	0.9	- 0.7	19.4
(6) Asian-Pacific American-owned	354	$62,927	$95,939	0.9	1.7	- 0.8	54.2
(7) Subcontinent Asian American-owned	128	$14,298	$17,659	0.2	0.3	- 0.1	60.0
(8) Hispanic American-owned	940	$540,250	$670,399	6.4	9.6	- 3.2	66.5
(9) Native American-owned	184	$38,309	$50,644	0.5	1.0	- 0.5	47.9
(10) Unknown MBE	97	$10,445			-		
(11) DBE-certified	1,817	$327,234	$436,566	4.2	-		
(12) Woman-owned DBE	624	$55,990	$74,822	0.7			
(13) Minority-owned DBE	1,190	$270,748	$361,249	3.5			
(14) African American-owned DBE	78	$8,164	$12,396	0.1			
(15) Asian-Pacific American-owned DBE	320	$56,499	$83,584	0.8			
(16) Subcontinent Asian American-owned DBE	21	$3,458	$4,174	0.0			
(17) Hispanic American-owned DBE	605	$190,926	$244,089	2.3			
(18) Native American-owned DBE	166	$11,702	$17,006	0.2			
(19) Unknown DBE-MBE	3	$496	$496	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-20.
Agency: Caltrans
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	11,320	$9,051,314	$9,051,314				
(2) MBE/WBE	3,221	$1,136,551	$1,136,551	12.6	17.1	4.5	73.6
(3) WBE	1,008	$363,640	$363,640	4.0	3.6	0.4	110.3
(4) MBE	2,213	$772,910	$772,910	8.5	13.4	-4.9	63.6
(5) African American-owned	64	$8,281	$8,349	0.1	0.9	-0.8	10.5
(6) Asian-Pacific American-owned	369	$55,676	$56,131	0.6	1.7	-1.0	37.3
(7) Subcontinent Asian American-owned	221	$24,884	$25,088	0.3	0.3	0.0	103.6
(8) Hispanic American-owned	1,216	$634,516	$639,705	7.1	9.8	-2.8	71.9
(9) Native American-owned	279	$43,284	$43,638	0.5	0.8	-0.3	61.2
(10) Unknown MBE	64	$6,269					
(11) DBE-certified	1,924	$325,703	$325,703	3.6			
(12) Woman-owned DBE	604	$58,405	$58,405	0.6			
(13) Minority-owned DBE	1,316	$266,786	$266,786	2.9			
(14) African American-owned DBE	49	$4,576	$4,576	0.1			
(15) Asian-Pacific American-owned DBE	339	$47,844	$47,844	0.5			
(16) Subcontinent Asian American-owned DBE	37	$7,876	$7,876	0.1			
(17) Hispanic American-owned DBE	636	$192,554	$192,554	2.1			
(18) Native American-owned DBE	255	$13,937	$13,937	0.2			
(19) Unknown DBE-MBE	4	$511	$511	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-21.
Agency: Caltrans
Funding and Program: All Funding Sources
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	10,726	$8,657,316	$8,657,316				
(2) MBE/WBE	3,055	$1,099,096	$1,099,096	12.7	16.3	3.6	77.7
(3) WBE	960	$354,922	$354,922	4.1	3.6	0.5	114.0
(4) MBE	2,095	$744,174	$744,174	8.6	12.7	- 4.1	67.5
(5) African American-owned	61	$8,222	$8,287	0.1	0.7	0.6	13.8
(6) Asian-Pacific American-owned	320	$41,739	$42,070	0.5	1.2	- 0.7	40.4
(7) Subcontinent Asian American-owned	204	$20,579	$20,743	0.2	0.1	- 0.1	176.1
(8) Hispanic American-owned	1,171	$624,489	$629,447	7.3	9.9	- 2.7	73.3
(9) Native American-owned	279	$43,284	$43,628	0.5	0.8	0.3	64.2
(10) Unknown MBE	60	$5,862			-		
(11) DBE-certified	1,806	$294,825	$294,825	3.4	-		
(12) Woman-owned DBE	577	$50,284	$50,284	0.6			
(13) Minority-owned DBE	1,229	$244,541	$244,541	2.8			
(14) African American-owned DBE	46	$4,516	$4,516	0.1			
(15) Asian-Pacific American-owned DBE	300	$36,718	$36,718	0.4			
(16) Subcontinent Asian American-owned DBE	25	$4,891	$4,891	0.1			
(17) Hispanic American-owned DBE	603	$184,479	$184,479	2.1			
(18) Native American-owned DBE	255	$13,937	$13,937	0.2			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-22.
Agency: Caltrans
Funding and Program: All Funding Sources
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	594	$393,998	$393,998				
(2) MBE/WBE	166	$37,454	$37,454	9.5	33.1	23.6	28.7
(3) WBE	48	$8,718	$8,718	2.2	4.6	2.4	47.8
(4) MBE	118	$28,736	$28,736	7.3	28.5	21.2	25.6
(5) African American-owned	3	$60	$61	0.0	4.9	4.9	0.3
(6) Asian-Pacific American-owned	49	$13,937	$14,137	3.6	11.8	8.2	30.5
(7) Subcontinent Asian American-owned	17	$4,305	$4,367	1.1	3.2	2.0	35.1
(8) Hispanic American-owned	45	$10,027	$10,171	2.6	7.9	5.3	32.8
(9) Native American-owned	0	$0	$0	0.0	0.8	0.8	0.0
(10) Unknown MBE	4	$408					
(11) DBE-certified	118	$30,877	$30,877	7.8			
(12) Woman-owned DBE	27	$8,121	$8,121	2.1			
(13) Minority-owned DBE	87	$22,245	$22,245	5.6			
(14) African American-owned DBE	3	$60	$60	0.0			
(15) Asian-Pacific American-owned DBE	39	$11,125	$11,125	2.8			
(16) Subcontinent Asian American-owned DBE	12	$2,985	$2,985	0.8			
(17) Hispanic American-owned DBE	33	$8,076	$8,076	2.0			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	4	$511	$511	0.1			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-23.
Agency: Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	4,126	$2,345,716	$4,279,544				
(2) MBE/WBE	1,288	$297,568	$543,837	12.7	20.3	7.6	62.7
(3) WBE	423	$91,853	$162,203	3.8	5.6	1.8	68.1
(4) MBE	865	$205,715	$381,635	8.9	14.7	- 5.8	60.7
(5) African American-owned	46	$6,125	$12,106	0.3	1.0	- 0.7	27.5
(6) Asian-Pacific American-owned	173	$26,665	$59,750	1.4	2.2	- 0.8	64.2
(7) Subcontinent Asian American-owned	66	$2,587	$5,783	0.1	0.3	- 0.2	46.2
(8) Hispanic American-owned	445	$156,781	$284,495	6.6	9.6	- 3.0	69.3
(9) Native American-owned	64	$7,535	$19,500	0.5	1.6	- 1.1	28.4
(10) Unknown MBE	71	$6,023			-		
(11) DBE-certified	846	$123,503	$234,099	5.5	-		
(12) Woman-owned DBE	254	$21,315	$40,164	0.9			
(13) Minority-owned DBE	592	$102,188	$193,935	4.5			
(14) African American-owned DBE	40	$4,587	$8,820	0.2			
(15) Asian-Pacific American-owned DBE	158	$23,847	$50,931	1.2			
(16) Subcontinent Asian American-owned DBE	10	$329	$1,046	0.0			
(17) Hispanic American-owned DBE	331	$70,262	$124,671	2.9			
(18) Native American-owned DBE	53	$3,163	$8,467	0.2			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-24.
Agency: Local Assistance
Funding and Program: All Funding Sources
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	3,910	$2,291,432	$4,163,638				
(2) MBE/WBE	1,230	$292,765	$532,021	12.8	19.9	7.1	64.1
(3) WBE	405	$90,901	$159,877	3.8	5.5	1.7	69.9
(4) MBE	825	$201,864	$372,143	8.9	14.4	- 5.5	61.9
(5) African American-owned	45	$5,892	$11,141	0.3	0.9	- 0.7	28.8
(6) Asian-Pacific American-owned	151	$24,322	$53,810	1.3	2.0	- 0.7	64.8
(7) Subcontinent Asian American-owned	65	$2,525	$5,681	0.1	0.3	- 0.1	53.0
(8) Hispanic American-owned	432	$156,017	$282,084	6.8	9.6	- 2.9	70.3
(9) Native American-owned	63	$7,507	$19,428	0.5	1.6	- 1.1	29.0
(10) Unknown MBE	69	$5,599				-	
(11) DBE-certified	805	$120,360	$225,751	5.4		-	
(12) Woman-owned DBE	242	$20,536	$38,470	0.9			
(13) Minority-owned DBE	563	$99,823	$187,281	4.5			
(14) African American-owned DBE	39	$4,354	$7,903	0.2			
(15) Asian-Pacific American-owned DBE	142	$22,417	$46,909	1.1			
(16) Subcontinent Asian American-owned DBE	9	$268	$956	0.0			
(17) Hispanic American-owned DBE	321	$69,650	$123,089	3.0			
(18) Native American-owned DBE	52	$3,134	$8,425	0.2			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-25.
Agency: Local Assistance
Funding and Program: All Funding Sources
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	216	$54,283	$115,906				
(2) MBE/WBE	58	$4,804	$11,817	10.2	32.5	22.3	31.3
(3) WBE	18	$952	$2,325	2.0	8.2	6.2	24.5
(4) MBE	40	$3,852	$9,491	8.2	24.4	16.2	33.6
(5) African American-owned	1	$233	$1,008	0.9	4.6	3.7	19.0
(6) Asian-Pacific American-owned	22	$2,342	$6,224	5.4	8.6	3.3	62.1
(7) Subcontinent Asian American-owned	1	$61	$99	0.1	1.6	1.5	5.5
(8) Hispanic American-owned	13	$763	$2,114	1.8	8.3	6.4	22.1
(9) Native American-owned	1	$28	$46	0.0	1.3	1.3	3.0
(10) Unknown MBE	2	$424					
(11) DBE-certified	41	$3,144	$8,348	7.2			
(12) Woman-owned DBE	12	$779	$1,694	1.5			
(13) Minority-owned DBE	29	$2,365	$6,654	5.7			
(14) African American-owned DBE	1	$233	$917	0.8			
(15) Asian-Pacific American-owned DBE	16	$1,430	$4,023	3.5			
(16) Subcontinent Asian American-owned DBE	1	$61	$90	0.1			
(17) Hispanic American-owned DBE	10	$613	$1,582	1.4			
(18) Native American-owned DBE	1	$28	$42	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-26.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	2,940	$8,241,250	$9,693,967				
(2) MBE/WBE	487	$587,477	$683,697	7.1	13.6	6.6	51.7
(3) WBE	125	$165,452	$181,585	1.9	2.3	0.4	83.0
(4) MBE	362	$422,024	$502,112	5.2	11.4	- 6.2	45.5
(5) African American-owned	1	$209	$831	0.0	0.6	- 0.6	1.4
(6) Asian-Pacific American-owned	51	$34,162	$46,653	0.5	1.2	- 0.8	39.0
(7) Subcontinent Asian American-owned	32	$8,388	$8,674	0.1	0.2	- 0.1	39.7
(8) Hispanic American-owned	240	$361,491	$425,007	4.4	8.3	- 3.9	52.9
(9) Native American-owned	29	$13,781	$20,948	0.2	1.0	- 0.8	21.6
(10) Unknown MBE	9	$3,994				-	
(11) DBE-certified	204	$118,641	$161,599	1.7		-	
(12) Woman-owned DBE	28	$14,551	$19,013	0.2			
(13) Minority-owned DBE	176	$104,090	$142,585	1.5			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	38	$27,707	$39,078	0.4			
(16) Subcontinent Asian American-owned DBE	25	$6,647	$6,677	0.1			
(17) Hispanic American-owned DBE	105	$67,611	$91,888	0.9			
(18) Native American-owned DBE	8	$2,125	$4,942	0.1			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-27.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction
Role: Prime Contractors
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	2,695	$7,882,241	$9,292,726				
(2) MBE/WBE	451	$568,915	$663,487	7.1	12.8	5.7	55.7
(3) WBE	115	$161,444	$177,149	1.9	2.2	0.3	88.0
(4) MBE	336	$407,471	$486,338	5.2	10.7	- 5.4	49.1
(5) African American-owned	1	$209	$830	0.0	0.4	- 0.4	2.0
(6) Asian-Pacific American-owned	40	$26,563	$38,138	0.4	0.8	- 0.4	52.3
(7) Subcontinent Asian American-owned	27	$5,409	$5,620	0.1	0.1	- 0.0	57.1
(8) Hispanic American-owned	232	$357,939	$420,832	4.5	8.3	- 3.8	54.4
(9) Native American-owned	29	$13,781	$20,919	0.2	1.0	0.8	22.5
(10) Unknown MBE	7	$3,571			-		
(11) DBE-certified	184	$104,705	$147,329	1.6	-		
(12) Woman-owned DBE	21	$10,662	$15,050	0.2			
(13) Minority-owned DBE	163	$94,042	$132,280	1.4			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	33	$22,144	$33,286	0.4			
(16) Subcontinent Asian American-owned DBE	22	$4,672	$4,672	0.1			
(17) Hispanic American-owned DBE	100	$65,102	$89,380	1.0			
(18) Native American-owned DBE	8	$2,125	$4,942	0.1			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-28.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Engineering
Role: Prime Contractors
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	245	$359,009	$401,242				
(2) MBE/WBE	36	$18,562	$20,210	5.0	32.5	27.5	15.5
(3) WBE	10	$4,009	$4,435	1.1	4.3	3.2	25.6
(4) MBE	26	$14,553	$15,774	3.9	28.2	24.3	13.9
(5) African American-owned	0	$0	$0	0.0	4.9	4.9	0.0
(6) Asian-Pacific American-owned	11	$7,599	$8,837	2.2	11.6	9.4	18.9
(7) Subcontinent Asian American-owned	5	$2,978	$3,181	0.8	3.0	2.2	26.5
(8) Hispanic American-owned	8	$3,552	$3,757	0.9	7.7	6.7	12.2
(9) Native American-owned	0	$0	$0	0.0	1.0	1.0	0.0
(10) Unknown MBE	2	$424					
(11) DBE-certified	20	$13,936	$14,269	3.6			
(12) Woman-owned DBE	7	$3,888	$3,964	1.0			
(13) Minority-owned DBE	13	$10,048	$10,305	2.6			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	5	$5,564	$5,792	1.4			
(16) Subcontinent Asian American-owned DBE	3	$1,975	$2,005	0.5			
(17) Hispanic American-owned DBE	5	$2,509	$2,509	0.6			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-29.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	12,506	$3,155,779	$3,636,891				
(2) MBE/WBE	4,022	$846,642	$996,691	27.4	30.0	2.6	91.4
(3) WBE	1,306	$290,041	$344,258	9.5	9.6	0.1	98.6
(4) MBE	2,716	$556,601	$652,433	17.9	20.4	2.4	88.1
(5) African American-owned	109	$14,198	$19,541	0.5	1.7	1.2	31.3
(6) Asian-Pacific American-owned	491	$48,179	$68,688	1.9	3.4	1.5	55.4
(7) Subcontinent Asian American-owned	255	$19,083	$22,349	0.6	0.4	0.2	150.1
(8) Hispanic American-owned	1,421	$429,805	$499,581	13.7	13.7	0.1	100.5
(9) Native American-owned	314	$37,039	$42,273	1.2	1.2	0.0	98.9
(10) Unknown MBE	126	$8,298					
(11) DBE-certified	2,566	$330,566	$398,203	10.9			
(12) Woman-owned DBE	830	$65,169	$79,556	2.2			
(13) Minority-owned DBE	1,732	$264,885	$318,136	8.7			
(14) African American-owned DBE	89	$9,163	$13,396	0.4			
(15) Asian-Pacific American-owned DBE	459	$43,984	$59,697	1.6			
(16) Subcontinent Asian American-owned DBE	22	$1,558	$2,245	0.1			
(17) Hispanic American-owned DBE	862	$195,206	$225,338	6.2			
(18) Native American-owned DBE	300	$14,974	$17,461	0.5			
(19) Unknown DBE-MBE	4	$511	$511	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-30.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	11,941	$3,066,508	$3,528,229				
(2) MBE/WBE	3,834	$822,946	$967,630	27.4	29.8	2.4	92.0
(3) WBE	1,250	$284,379	$337,650	9.6	9.6	0.0	99.7
(4) MBE	2,584	$538,566	$629,980	17.9	20.2	2.4	88.3
(5) African American-owned	105	$13,905	$18,546	0.5	1.6	1.1	32.3
(6) Asian-Pacific American-owned	431	$39,499	$57,223	1.6	3.2	1.6	50.0
(7) Subcontinent Asian American-owned	242	$17,695	$20,934	0.6	0.4	0.2	165.5
(8) Hispanic American-owned	1,371	$422,567	$491,043	13.9	13.8	0.1	100.8
(9) Native American-owned	313	$37,010	$42,233	1.2	1.2	0.0	100.5
(10) Unknown MBE	122	$7,890					
(11) DBE-certified	2,427	$310,481	$373,247	10.6			
(12) Woman-owned DBE	798	$60,158	$73,705	2.1			
(13) Minority-owned DBE	1,629	$250,322	$299,543	8.5			
(14) African American-owned DBE	85	$8,870	$12,419	0.4			
(15) Asian-Pacific American-owned DBE	409	$36,992	$50,341	1.4			
(16) Subcontinent Asian American-owned DBE	12	$488	$1,175	0.0			
(17) Hispanic American-owned DBE	824	$189,026	$218,188	6.2			
(18) Native American-owned DBE	299	$14,946	$17,419	0.5			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-31.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	565	$89,272	$108,662				
(2) MBE/WBE	188	$23,696	$29,062	26.7	34.7	8.0	77.1
(3) WBE	56	$5,662	$6,608	6.1	9.5	3.4	63.8
(4) MBE	132	$18,035	$22,453	20.7	25.2	4.5	82.1
(5) African American-owned	4	$293	$994	0.9	4.6	3.7	19.9
(6) Asian-Pacific American-owned	60	$8,680	$11,450	10.5	8.8	1.7	119.4
(7) Subcontinent Asian American-owned	13	$1,388	$1,413	1.3	2.1	0.8	62.9
(8) Hispanic American-owned	50	$7,238	$8,553	7.9	9.0	1.2	87.2
(9) Native American-owned	1	$28	$43	0.0	0.7	0.6	6.0
(10) Unknown MBE	4	$408					
(11) DBE-certified	139	$20,085	$24,956	23.0			
(12) Woman-owned DBE	32	$5,011	$5,851	5.4			
(13) Minority-owned DBE	103	$14,563	$18,594	17.1			
(14) African American-owned DBE	4	$293	$976	0.9			
(15) Asian-Pacific American-owned DBE	50	$6,992	$9,356	8.6			
(16) Subcontinent Asian American-owned DBE	10	$1,070	$1,070	1.0			
(17) Hispanic American-owned DBE	38	$6,180	$7,149	6.6			
(18) Native American-owned DBE	1	$28	$42	0.0			
(19) Unknown DBE-MBE	4	$511	$511	0.5			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-32.
Agency: Caltrans and Local Assistance
Funding and Program: Federal without Race Conscious Program and State
Type: Construction and Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	8,458	$2,069,839	$2,390,100				
(2) MBE/WBE	2,509	$564,737	$660,955	27.7	29.7	2.0	93.1
(3) WBE	725	$193,775	$228,008	9.5	9.4	0.1	101.1
(4) MBE	1,784	$370,962	$432,947	18.1	20.3	- 2.2	89.4
(5) African American-owned	33	$4,584	$5,937	0.2	1.6	1.3	16.0
(6) Asian-Pacific American-owned	308	$27,547	$42,223	1.8	3.7	- 2.0	47.4
(7) Subcontinent Asian American-owned	200	$15,342	$16,882	0.7	0.4	- 0.3	163.4
(8) Hispanic American-owned	978	$310,441	$357,757	15.0	13.4	- 1.5	111.3
(9) Native American-owned	182	$7,783	$10,147	0.4	1.1	0.7	38.3
(10) Unknown MBE	83	$5,265					
(11) DBE-certified	1,465	$200,540	$238,300	10.0	-		
(12) Woman-owned DBE	426	$36,710	$43,735	1.8			
(13) Minority-owned DBE	1,035	$163,319	$194,053	8.1			
(14) African American-owned DBE	20	$1,720	$2,477	0.1			
(15) Asian-Pacific American-owned DBE	284	$23,739	$34,428	1.4			
(16) Subcontinent Asian American-owned DBE	10	$1,154	$1,154	0.0			
(17) Hispanic American-owned DBE	543	$129,654	$148,503	6.2			
(18) Native American-owned DBE	178	$7,052	$7,491	0.3			
(19) Unknown DBE-MBE	4	$511	$511	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-33.
Agency: Caltrans and Local Assistance
Funding and Program: Federal with Race Conscious Program
Type: Construction and Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	4,048	$1,085,941	$1,246,791				
(2) MBE/WBE	1,513	$281,905	$335,736	26.9	30.5	3.6	88.3
(3) WBE	581	$96,266	$116,250	9.3	9.9	0.6	94.1
(4) MBE	932	$185,640	$219,486	17.6	20.6	3.0	85.6
(5) African American-owned	76	$9,615	$13,632	1.1	2.0	0.9	54.2
(6) Asian-Pacific American-owned	183	$20,631	$26,479	2.1	2.8	0.7	75.6
(7) Subcontinent Asian American-owned	55	$3,742	$5,458	0.4	0.4	0.1	119.7
(8) Hispanic American-owned	443	$119,364	$141,720	11.4	14.1	2.7	80.7
(9) Native American-owned	132	$29,256	$32,197	2.6	1.3	1.3	197.9
(10) Unknown MBE	43	$3,032					
(11) DBE-certified	1,101	$130,025	$159,904	12.8			
(12) Woman-owned DBE	404	$28,459	$35,820	2.9			
(13) Minority-owned DBE	697	$101,566	$124,083	10.0			
(14) African American-owned DBE	69	$7,443	$10,919	0.9			
(15) Asian-Pacific American-owned DBE	175	$20,245	$25,269	2.0			
(16) Subcontinent Asian American-owned DBE	12	$404	$1,091	0.1			
(17) Hispanic American-owned DBE	319	$65,552	$76,834	6.2			
(18) Native American-owned DBE	122	$7,923	$9,970	0.8			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-34.
Agency: Caltrans and Local Assistance
Funding and Program: Federal
Type: Construction and Engineering
Role: Prime Contractors
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	1,581	$6,124,001	$7,567,244				
(2) MBE/WBE	207	$315,816	$410,551	5.4	12.8	7.4	42.2
(3) WBE	59	$62,023	$78,155	1.0	2.0	1.0	51.6
(4) MBE	148	$253,792	$332,396	4.4	10.8	- 6.5	40.5
(5) African American-owned	1	$209	$835	0.0	0.6	- 0.6	1.9
(6) Asian-Pacific American-owned	34	$23,563	$36,098	0.5	1.0	- 0.5	48.4
(7) Subcontinent Asian American-owned	8	$3,092	$3,327	0.0	0.2	- 0.2	18.9
(8) Hispanic American-owned	88	$217,371	$278,927	3.7	8.1	- 4.4	45.5
(9) Native American-owned	10	$6,075	$13,209	0.2	1.0	- 0.8	18.3
(10) Unknown MBE	7	$3,482				-	
(11) DBE-certified	96	$67,010	$108,813	1.4		-	
(12) Woman-owned DBE	18	$6,521	$10,983	0.1			
(13) Minority-owned DBE	78	$60,489	$97,830	1.3			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	26	$21,141	$32,512	0.4			
(16) Subcontinent Asian American-owned DBE	5	$2,802	$2,831	0.0			
(17) Hispanic American-owned DBE	42	$35,052	$58,175	0.8			
(18) Native American-owned DBE	5	$1,493	$4,311	0.1			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-35.
Agency: Caltrans and Local Assistance
Funding and Program: Federal
Type: Construction and Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	7,719	$2,419,172	$2,898,388				
(2) MBE/WBE	2,592	$670,389	$819,835	28.3	30.2	1.9	93.7
(3) WBE	946	$246,128	$299,834	10.3	9.8	0.5	105.6
(4) MBE	1,646	$424,262	$520,002	17.9	20.4	2.5	88.0
(5) African American-owned	90	$11,616	$16,950	0.6	1.7	1.1	35.4
(6) Asian-Pacific American-owned	320	$39,364	$59,847	2.1	3.5	1.5	58.5
(7) Subcontinent Asian American-owned	120	$11,206	$14,348	0.5	0.4	0.1	121.5
(8) Hispanic American-owned	852	$322,878	$391,390	13.5	13.6	0.1	98.9
(9) Native American-owned	174	$32,234	$37,466	1.3	1.2	0.1	111.7
(10) Unknown MBE	90	$6,963					
(11) DBE-certified	1,721	$260,224	$327,753	11.3			
(12) Woman-owned DBE	606	$49,469	$63,839	2.2			
(13) Minority-owned DBE	1,112	$210,260	$263,419	9.1			
(14) African American-owned DBE	78	$8,164	$12,396	0.4			
(15) Asian-Pacific American-owned DBE	294	$35,358	$51,071	1.8			
(16) Subcontinent Asian American-owned DBE	16	$656	$1,343	0.0			
(17) Hispanic American-owned DBE	563	$155,874	$185,914	6.4			
(18) Native American-owned DBE	161	$10,208	$12,695	0.4			
(19) Unknown DBE-MBE	3	$496	$496	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-36.
Agency: Caltrans and Local Assistance
Funding and Program: State
Type: Construction and Engineering
Role: Prime Contractors
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	1,359	$2,117,249	$2,126,724				
(2) MBE/WBE	280	$271,661	$273,145	12.8	16.5	3.6	78.0
(3) WBE	66	$103,429	$103,429	4.9	3.2	1.7	153.6
(4) MBE	214	$168,232	$169,716	8.0	13.3	- 5.3	60.0
(5) African American-owned	0	$0	$0	0.0	0.8	0.8	0.0
(6) Asian-Pacific American-owned	17	$10,599	$10,631	0.5	2.1	- 1.6	23.6
(7) Subcontinent Asian American-owned	24	$5,295	$5,311	0.2	0.2	- 0.1	125.6
(8) Hispanic American-owned	152	$144,120	$146,045	6.9	9.0	- 2.1	76.4
(9) Native American-owned	19	$7,705	$7,729	0.4	1.2	0.8	31.0
(10) Unknown MBE	2	$512			-		
(11) DBE-certified	108	$51,631	$52,786	2.5	-		
(12) Woman-owned DBE	10	$8,030	$8,030	0.4			
(13) Minority-owned DBE	98	$43,601	$44,756	2.1			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	12	$6,566	$6,566	0.3			
(16) Subcontinent Asian American-owned DBE	20	$3,845	$3,845	0.2			
(17) Hispanic American-owned DBE	63	$32,559	$33,713	1.6			
(18) Native American-owned DBE	3	$631	$631	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-37.
Agency: Caltrans and Local Assistance
Funding and Program: State
Type: Construction and Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	4,787	$736,607	$738,502				
(2) MBE/WBE	1,430	$176,253	$176,856	23.9	29.1	5.1	82.4
(3) WBE	360	$43,913	$44,425	6.0	8.8	2.8	68.4
(4) MBE	1,070	$132,340	$132,431	17.9	20.3	2.3	88.5
(5) African American-owned	19	$2,582	$2,608	0.4	2.0	1.6	18.0
(6) Asian-Pacific American-owned	171	$8,814	$8,904	1.2	2.9	1.7	41.0
(7) Subcontinent Asian American-owned	135	$7,878	$7,958	1.1	0.4	0.7	200+
(8) Hispanic American-owned	569	$106,927	$108,108	14.6	13.7	0.9	106.8
(9) Native American-owned	140	$4,805	$4,854	0.7	1.2	0.6	52.8
(10) Unknown MBE	36	$1,335					
(11) DBE-certified	845	$70,341	$70,450	9.5			
(12) Woman-owned DBE	224	$15,700	$15,717	2.1			
(13) Minority-owned DBE	620	$54,625	$54,717	7.4			
(14) African American-owned DBE	11	$1,000	$1,000	0.1			
(15) Asian-Pacific American-owned DBE	165	$8,626	$8,626	1.2			
(16) Subcontinent Asian American-owned DBE	6	$902	$902	0.1			
(17) Hispanic American-owned DBE	299	$39,332	$39,424	5.3			
(18) Native American-owned DBE	139	$4,766	$4,766	0.6			
(19) Unknown DBE-MBE	1	$16	$16	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-38.
Agency: Caltrans
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	2,130	$6,537,010	$6,537,010				
(2) MBE/WBE	383	$483,196	$483,196	7.4	12.8	5.4	57.9
(3) WBE	97	$155,746	$155,746	2.4	1.7	0.7	137.6
(4) MBE	286	$327,450	$327,450	5.0	11.0	- 6.0	45.4
(5) African American-owned	0	$0	$0	0.0	0.6	0.6	0.0
(6) Asian-Pacific American-owned	35	$25,751	$25,939	0.4	1.3	- 0.9	31.7
(7) Subcontinent Asian American-owned	30	$8,277	$8,337	0.1	0.2	- 0.1	52.0
(8) Hispanic American-owned	194	$281,866	$283,929	4.3	8.3	- 4.0	52.3
(9) Native American-owned	23	$9,178	$9,245	0.1	0.6	- 0.5	22.3
(10) Unknown MBE	4	$2,379			-		
(11) DBE-certified	157	$82,418	$82,418	1.3	-		
(12) Woman-owned DBE	19	$12,953	$12,953	0.2			
(13) Minority-owned DBE	138	$69,465	$69,465	1.1			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	26	$20,112	$20,112	0.3			
(16) Subcontinent Asian American-owned DBE	24	$6,586	$6,586	0.1			
(17) Hispanic American-owned DBE	82	$41,603	$41,603	0.6			
(18) Native American-owned DBE	6	$1,163	$1,163	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-39.
Agency: Caltrans
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	9,190	$2,514,304	$2,514,304				
(2) MBE/WBE	2,838	$653,355	$653,355	26.0	28.3	2.3	92.0
(3) WBE	911	$207,895	$207,895	8.3	8.6	0.3	96.1
(4) MBE	1,927	$445,460	$445,460	17.7	19.7	1.9	90.2
(5) African American-owned	64	$8,281	$8,354	0.3	1.6	1.3	20.8
(6) Asian-Pacific American-owned	334	$29,925	$30,189	1.2	2.7	1.5	43.9
(7) Subcontinent Asian American-owned	191	$16,608	$16,754	0.7	0.3	0.3	200+
(8) Hispanic American-owned	1,022	$352,650	$355,757	14.1	13.8	0.3	102.5
(9) Native American-owned	256	$34,106	$34,407	1.4	1.2	0.2	115.7
(10) Unknown MBE	60	$3,890					
(11) DBE-certified	1,767	$243,285	$243,285	9.7			
(12) Woman-owned DBE	585	$45,452	$45,452	1.8			
(13) Minority-owned DBE	1,178	$197,322	$197,322	7.8			
(14) African American-owned DBE	49	$4,576	$4,576	0.2			
(15) Asian-Pacific American-owned DBE	313	$27,732	$27,732	1.1			
(16) Subcontinent Asian American-owned DBE	13	$1,289	$1,289	0.1			
(17) Hispanic American-owned DBE	554	$150,951	$150,951	6.0			
(18) Native American-owned DBE	249	$12,773	$12,773	0.5			
(19) Unknown DBE-MBE	4	$511	$511	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-40.
Agency: Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	810	$1,704,240	$3,156,957				
(2) MBE/WBE	104	$104,281	$200,501	6.4	15.5	9.1	41.1
(3) WBE	28	$9,706	$25,839	0.8	3.3	2.5	24.5
(4) MBE	76	$94,574	$174,662	5.5	12.1	6.6	45.7
(5) African American-owned	1	$209	$840	0.0	0.7	0.7	3.8
(6) Asian-Pacific American-owned	16	$8,411	$20,785	0.7	1.2	0.5	55.0
(7) Subcontinent Asian American-owned	2	$111	$294	0.0	0.2	0.2	5.0
(8) Hispanic American-owned	46	$79,625	$140,970	4.5	8.3	3.8	54.0
(9) Native American-owned	6	$4,603	$11,773	0.4	1.8	1.4	21.2
(10) Unknown MBE	5	$1,615					
(11) DBE-certified	47	$36,223	$79,181	2.5			
(12) Woman-owned DBE	9	$1,598	$6,060	0.2			
(13) Minority-owned DBE	38	$34,625	$73,121	2.3			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	12	$7,595	$18,966	0.6			
(16) Subcontinent Asian American-owned DBE	1	$61	$90	0.0			
(17) Hispanic American-owned DBE	23	$26,007	$50,285	1.6			
(18) Native American-owned DBE	2	$962	$3,779	0.1			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-41.
Agency: Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Subcontractors and Suppliers
Region: California

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	3,316	$641,476	$1,122,587				
(2) MBE/WBE	1,184	$193,287	$343,337	30.6	33.8	3.2	90.5
(3) WBE	395	$82,146	$136,364	12.1	11.8	0.3	102.8
(4) MBE	789	$111,141	$206,973	18.4	22.0	- 3.5	83.9
(5) African American-owned	45	$5,917	$11,368	1.0	2.0	1.0	51.2
(6) Asian-Pacific American-owned	157	$18,254	$39,106	3.5	4.9	- 1.4	70.7
(7) Subcontinent Asian American-owned	64	$2,475	$5,540	0.5	0.6	- 0.1	82.6
(8) Hispanic American-owned	399	$77,155	$143,293	12.8	13.3	- 0.6	95.8
(9) Native American-owned	58	$2,933	$7,666	0.7	1.2	- 0.5	59.0
(10) Unknown MBE	66	$4,407			-		
(11) DBE-certified	799	$87,281	$154,918	13.8	-		
(12) Woman-owned DBE	245	$19,717	$34,104	3.0			
(13) Minority-owned DBE	554	$67,563	$120,814	10.8			
(14) African American-owned DBE	40	$4,587	$8,820	0.8			
(15) Asian-Pacific American-owned DBE	146	$16,252	$31,965	2.8			
(16) Subcontinent Asian American-owned DBE	9	$268	$956	0.1			
(17) Hispanic American-owned DBE	308	$44,255	$74,386	6.6			
(18) Native American-owned DBE	51	$2,201	$4,687	0.4			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-42.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: North (Districts 1, 2, and 3)

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	3,135	$2,142,108	$2,421,643				
(2) MBE/WBE	815	$221,854	$265,048	10.9	17.0	6.1	64.3
(3) WBE	345	$82,899	$101,205	4.2	3.8	0.4	109.4
(4) MBE	470	$138,955	$163,843	6.8	13.2	6.4	51.3
(5) African American-owned	20	$1,142	$1,951	0.1	0.7	0.6	11.6
(6) Asian-Pacific American-owned	113	$7,402	$8,162	0.3	1.3	1.0	25.4
(7) Subcontinent Asian American-owned	4	$352	$358	0.0	0.5	0.5	2.9
(8) Hispanic American-owned	252	$115,587	$134,717	5.6	9.9	4.3	56.2
(9) Native American-owned	62	$12,936	$18,655	0.8	0.8	0.0	100.9
(10) Unknown MBE	19	$1,535					
(11) DBE-certified	553	$76,403	$96,278	4.0			
(12) Woman-owned DBE	230	$23,272	$31,221	1.3			
(13) Minority-owned DBE	322	$52,737	$64,662	2.7			
(14) African American-owned DBE	20	$1,142	$1,919	0.1			
(15) Asian-Pacific American-owned DBE	99	$6,860	$7,139	0.3			
(16) Subcontinent Asian American-owned DBE	1	$240	$240	0.0			
(17) Hispanic American-owned DBE	162	$40,434	$48,113	2.0			
(18) Native American-owned DBE	40	$4,060	$7,251	0.3			
(19) Unknown DBE-MBE	1	$394	$394	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-43.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: Bay Area (District 4)

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	2,541	$2,596,168	$2,819,777				
(2) MBE/WBE	635	$315,944	$338,178	12.0	16.6	4.6	72.3
(3) WBE	215	$74,279	$80,324	2.8	3.8	0.9	75.7
(4) MBE	420	$241,665	$257,854	9.1	12.8	3.7	71.4
(5) African American-owned	18	$680	$1,568	0.1	0.9	0.8	6.2
(6) Asian-Pacific American-owned	77	$12,266	$15,236	0.5	1.8	1.3	30.0
(7) Subcontinent Asian American-owned	14	$1,850	$2,553	0.1	0.2	0.1	49.6
(8) Hispanic American-owned	257	$202,017	$213,279	7.6	9.5	1.9	79.8
(9) Native American-owned	32	$22,910	$25,219	0.9	0.5	0.4	194.6
(10) Unknown MBE	22	$1,943					
(11) DBE-certified	462	$109,647	$121,883	4.3			
(12) Woman-owned DBE	119	$22,935	$24,979	0.9			
(13) Minority-owned DBE	341	$86,610	$96,802	3.4			
(14) African American-owned DBE	18	$680	$1,551	0.1			
(15) Asian-Pacific American-owned DBE	77	$12,266	$15,070	0.5			
(16) Subcontinent Asian American-owned DBE	11	$695	$1,370	0.0			
(17) Hispanic American-owned DBE	205	$71,524	$77,070	2.7			
(18) Native American-owned DBE	30	$1,445	$1,741	0.1			
(19) Unknown DBE-MBE	2	$102	$102	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-44.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: Central (Districts 5, 6, 9, and 10)

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	4,022	$1,793,067	$2,226,292				
(2) MBE/WBE	1,129	$151,242	$186,868	8.4	20.6	12.2	40.7
(3) WBE	412	$32,770	$43,466	2.0	5.0	3.1	39.0
(4) MBE	717	$118,472	$143,401	6.4	15.6	9.2	41.3
(5) African American-owned	32	$3,230	$5,055	0.2	1.1	0.9	20.4
(6) Asian-Pacific American-owned	66	$5,908	$7,952	0.4	1.7	1.3	21.1
(7) Subcontinent Asian American-owned	89	$6,087	$6,565	0.3	0.2	0.1	121.6
(8) Hispanic American-owned	368	$95,291	$114,736	5.2	11.2	6.0	46.2
(9) Native American-owned	144	$6,924	$9,094	0.4	1.4	1.0	29.3
(10) Unknown MBE	18	$1,033					
(11) DBE-certified	811	$64,227	$86,331	3.9			
(12) Woman-owned DBE	287	$11,286	$15,498	0.7			
(13) Minority-owned DBE	524	$52,941	$70,833	3.2			
(14) African American-owned DBE	24	$2,482	$3,558	0.2			
(15) Asian-Pacific American-owned DBE	63	$4,771	$6,724	0.3			
(16) Subcontinent Asian American-owned DBE	10	$2,234	$2,246	0.1			
(17) Hispanic American-owned DBE	286	$38,035	$51,495	2.3			
(18) Native American-owned DBE	141	$5,419	$6,810	0.3			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-45.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: South (Districts 7, 8, 11, and 12)

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	5,623	$4,771,082	$5,768,543				
(2) MBE/WBE	1,900	$740,255	$885,471	15.3	18.1	2.8	84.6
(3) WBE	444	$262,493	$297,795	5.2	4.4	0.8	118.2
(4) MBE	1,456	$477,762	$587,676	10.2	13.8	- 3.6	73.9
(5) African American-owned	40	$9,354	$11,751	0.2	0.9	0.7	22.7
(6) Asian-Pacific American-owned	280	$56,164	$83,554	1.4	2.0	- 0.6	72.3
(7) Subcontinent Asian American-owned	177	$19,026	$21,388	0.4	0.2	- 0.1	163.6
(8) Hispanic American-owned	778	$377,387	$460,935	8.0	9.3	- 1.3	85.6
(9) Native American-owned	105	$8,050	$10,048	0.2	1.3	1.1	13.2
(10) Unknown MBE	76	$7,782			-		
(11) DBE-certified	926	$195,076	$251,458	4.4	-		
(12) Woman-owned DBE	214	$19,447	$24,091	0.4			
(13) Minority-owned DBE	711	$175,613	$227,351	3.9			
(14) African American-owned DBE	27	$4,859	$6,368	0.1			
(15) Asian-Pacific American-owned DBE	254	$47,685	$69,733	1.2			
(16) Subcontinent Asian American-owned DBE	23	$5,028	$5,057	0.1			
(17) Hispanic American-owned DBE	310	$111,867	$139,591	2.4			
(18) Native American-owned DBE	97	$6,175	$6,601	0.1			
(19) Unknown DBE-MBE	1	$16	$16	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-46.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction
Role: Prime Contractors
Region: California

Contracts under $2M

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	2,034	$1,092,346	$1,606,843				
(2) MBE/WBE	394	$181,094	$246,351	15.3	28.5	13.1	53.8
(3) WBE	96	$42,692	$57,413	3.6	8.5	4.9	42.1
(4) MBE	298	$138,402	$188,939	11.8	20.0	8.2	58.8
(5) African American-owned	1	$209	$845	0.1	1.3	1.2	4.1
(6) Asian-Pacific American-owned	36	$18,759	$29,851	1.9	3.0	1.1	62.5
(7) Subcontinent Asian American-owned	27	$5,409	$5,723	0.4	0.5	0.1	78.0
(8) Hispanic American-owned	199	$98,680	$133,283	8.3	11.8	3.5	70.4
(9) Native American-owned	28	$11,774	$19,236	1.2	3.5	2.3	34.1
(10) Unknown MBE	7	$3,571					
(11) DBE-certified	172	$69,475	$102,406	6.4			
(12) Woman-owned DBE	20	$5,484	$9,871	0.6			
(13) Minority-owned DBE	152	$63,991	$92,534	5.8			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	29	$14,340	$24,561	1.5			
(16) Subcontinent Asian American-owned DBE	22	$4,672	$4,672	0.3			
(17) Hispanic American-owned DBE	93	$42,855	$58,360	3.6			
(18) Native American-owned DBE	8	$2,125	$4,942	0.3			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-47.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Engineering
Role: Prime Contractors
Region: California

Contracts under $500k

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	120	$17,293	$27,279				
(2) MBE/WBE	23	$3,104	$4,386	16.1	33.7	17.6	47.7
(3) WBE	8	$930	$1,357	5.0	9.6	4.6	52.0
(4) MBE	15	$2,173	$3,029	11.1	24.2	13.1	46.0
(5) African American-owned	0	$0	$0	0.0	3.8	3.8	0.0
(6) Asian-Pacific American-owned	5	$403	$1,108	4.1	7.4	3.4	54.8
(7) Subcontinent Asian American-owned	2	$170	$278	1.0	2.8	1.8	36.2
(8) Hispanic American-owned	6	$1,177	$1,643	6.0	9.3	3.3	64.5
(9) Native American-owned	0	$0	$0	0.0	0.8	0.8	0.0
(10) Unknown MBE	2	$424					
(11) DBE-certified	12	$1,686	$2,019	7.4			
(12) Woman-owned DBE	5	$810	$885	3.2			
(13) Minority-owned DBE	7	$875	$1,133	4.2			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	2	$204	$432	1.6			
(16) Subcontinent Asian American-owned DBE	1	$61	$90	0.3			
(17) Hispanic American-owned DBE	4	$611	$611	2.2			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-48.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Construction
Role: Prime Contractors
Region: California

Contracts over $2M

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	661	$6,789,895	$7,685,883				
(2) MBE/WBE	57	$387,821	$417,136	5.4	9.6	4.1	56.8
(3) WBE	19	$118,751	$119,737	1.6	0.8	0.7	183.8
(4) MBE	38	$269,070	$297,399	3.9	8.7	- 4.8	44.4
(5) African American-owned	0	$0	$0	0.0	0.3	0.3	0.0
(6) Asian-Pacific American-owned	4	$7,804	$8,726	0.1	0.3	- 0.2	34.7
(7) Subcontinent Asian American-owned	0	$0	$0	0.0	0.0	- 0.0	0.0
(8) Hispanic American-owned	33	$259,259	$286,667	3.7	7.6	- 3.9	49.1
(9) Native American-owned	1	$2,007	$2,007	0.0	0.5	0.5	5.5
(10) Unknown MBE	0	$0			-		
(11) DBE-certified	12	$35,230	$44,924	0.6	-		
(12) Woman-owned DBE	1	$5,178	$5,178	0.1			
(13) Minority-owned DBE	11	$30,051	$39,746	0.5			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	4	$7,804	$8,726	0.1			
(16) Subcontinent Asian American-owned DBE	0	$0	$0	0.0			
(17) Hispanic American-owned DBE	7	$22,247	$31,020	0.4			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-49.
Agency: Caltrans and Local Assistance
Funding and Program: All Funding Sources
Type: Engineering
Role: Prime Contractors
Region: California

Contracts over $500k

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	125	$341,717	$373,963				
(2) MBE/WBE	13	$15,458	$15,823	4.2	32.4	28.2	13.0
(3) WBE	2	$3,078	$3,078	0.8	3.9	3.1	20.9
(4) MBE	11	$12,380	$12,745	3.4	28.5	25.1	12.0
(5) African American-owned	0	$0	$0	0.0	4.9	4.9	0.0
(6) Asian-Pacific American-owned	6	$7,196	$7,561	2.0	12.0	9.9	16.9
(7) Subcontinent Asian American-owned	3	$2,808	$2,808	0.8	3.0	2.3	25.0
(8) Hispanic American-owned	2	$2,375	$2,375	0.6	7.6	6.9	8.4
(9) Native American-owned	0	$0	$0	0.0	1.0	1.0	0.0
(10) Unknown MBE	0	$0					
(11) DBE-certified	8	$12,251	$12,251	3.3			
(12) Woman-owned DBE	2	$3,078	$3,078	0.8			
(13) Minority-owned DBE	6	$9,172	$9,172	2.5			
(14) African American-owned DBE	0	$0	$0	0.0			
(15) Asian-Pacific American-owned DBE	3	$5,360	$5,360	1.4			
(16) Subcontinent Asian American-owned DBE	2	$1,914	$1,914	0.5			
(17) Hispanic American-owned DBE	1	$1,898	$1,898	0.5			
(18) Native American-owned DBE	0	$0	$0	0.0			
(19) Unknown DBE-MBE	0	$0	$0	0.0			
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-50.
Agency: Caltrans and Local Assistance
Funding and Program: Federal
Type: Construction and Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Analysis of Potential DBEs

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	9,300	$8,543,173	$10,465,632				
(2) MBE/WBE	2,799	$986,205	$1,230,386		12.5	0.7	
(3) WBE	1,005	$308,151	$377,989		4.0	0.3	
(4) MBE	1,794	$678,054	$852,397		8.5	0.4	
(5) African American-owned	91	$11,825	$17,757		0.8	0.6	
(6) Asian-Pacific American-owned	354	$62,927	$95,939		1.1	0.2	
(7) Subcontinent Asian American-owned	128	$14,298	$17,659		0.3	0.1	
(8) Hispanic American-owned	940	$540,250	$670,399		5.4	1.0	
(9) Native American-owned	184	$38,309	$50,644		1.0	-0.5	
(10) Unknown MBE	97	$10,445					
(11) DBE-certified	1,817	$327,234	$436,566				
(12) Woman-owned DBE	624	$55,990	$74,822				
(13) Minority-owned DBE	1,190	$270,748	$361,249				
(14) African American-owned DBE	78	$8,164	$12,396				
(15) Asian-Pacific American-owned DBE	320	$56,499	$83,584				
(16) Subcontinent Asian American-owned DBE	21	$3,458	$4,174				
(17) Hispanic American-owned DBE	605	$190,926	$244,089				
(18) Native American-owned DBE	166	$11,702	$17,006				
(19) Unknown DBE-MBE	3	$496	$496				
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-51.
Agency: Caltrans and Local Assistance
Funding and Program: Federal
Type: Construction
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Analysis of Potential DBEs

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	8,627	$8,244,647	$10,105,483				
(2) MBE/WBE	2,613	$953,539	$1,190,707		11.8	0.0	
(3) WBE	952	$300,415	$368,880		3.9	0.2	
(4) MBE	1,661	$653,124	$821,827		7.9	0.2	
(5) African American-owned	89	$11,589	$16,805		0.6	0.4	
(6) Asian-Pacific American-owned	293	$49,229	$78,506		0.9	0.1	
(7) Subcontinent Asian American-owned	116	$11,621	$14,884		0.2	0.0	
(8) Hispanic American-owned	888	$532,777	$661,070		5.2	1.3	
(9) Native American-owned	183	$38,281	$50,562		1.0	-0.5	
(10) Unknown MBE	92	$9,628					
(11) DBE-certified	1,686	$301,441	$405,569				
(12) Woman-owned DBE	591	$48,604	$66,521				
(13) Minority-owned DBE	1,095	$252,837	$339,048				
(14) African American-owned DBE	76	$7,927	$11,476				
(15) Asian-Pacific American-owned DBE	275	$46,525	$71,016				
(16) Subcontinent Asian American-owned DBE	13	$1,207	$1,895				
(17) Hispanic American-owned DBE	566	$185,504	$237,697				
(18) Native American-owned DBE	165	$11,674	$16,964				
(19) Unknown DBE-MBE	0	$0	$0				
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-52.
Agency: Caltrans and Local Assistance
Funding and Program: Federal
Type: Engineering
Role: Prime Contractors, Subcontractors and Suppliers
Region: California

Analysis of Potential DBEs

Firm Type	(a) Number of contracts (subcontracts) in sample	(b) Dollars in sample (thousands)	(c) Estimated total dollars (thousands)*	(d) Actual utilization (column c / column c, row1) %	(e) Utilization benchmark (availability) %	(f) Difference (column d - column e) %	(g) Disparity index (d / e) x 100
(1) All firms	673	$298,526	$360,149				
(2) MBE/WBE	186	$32,666	$39,679		31.7	20.7	
(3) WBE	53	$7,736	$9,109		6.1	3.6	
(4) MBE	133	$24,931	$30,570		25.6	17.1	
(5) African American-owned	2	$236	$959		5.3	5.0	
(6) Asian-Pacific American-owned	61	$13,698	$17,744		7.0	2.0	
(7) Subcontinent Asian American-owned	12	$2,677	$2,822		3.7	2.9	
(8) Hispanic American-owned	52	$7,473	$9,001		8.5	6.0	
(9) Native American-owned	1	$28	$44		1.1	-1.0	
(10) Unknown MBE	5	$818					
(11) DBE-certified	131	$25,793	$30,997				
(12) Woman-owned DBE	33	$7,385	$8,301				
(13) Minority-owned DBE	95	$17,912	$22,201				
(14) African American-owned DBE	2	$236	$920				
(15) Asian-Pacific American-owned DBE	45	$9,975	$12,567				
(16) Subcontinent Asian American-owned DBE	8	$2,251	$2,280				
(17) Hispanic American-owned DBE	39	$5,422	$6,392				
(18) Native American-owned DBE	1	$28	$42				
(19) Unknown DBE-MBE	3	$496	$496				
(20) White male-owned DBE	0	$0					
(21) Unknown DBE	0	$0					

Note: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

* Unknown MBE, Unknown DBE-MBE, and Unknown DBE dollars were allocated to MBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX L.
Additional Anecdotal Information

Appendix L provides a summary of additional qualitative information about marketplace conditions in the California transportation contracting industry.

Introduction and Background

Appendix L presents information from more than 130 interviews that BBC and its subconsultants conducted as part of three recent disparity studies in Southern California — a 2011 disparity study for the Burbank-Pasadena-Glendale Airport Authority (BGPAA), a 2010 study for the San Diego County Regional Airport Authority (SDCRAA), and a 2010 study for a consortium of Southern California transportation agencies (the Consortium).[1] BBC conducted the interviews with local business owners and trade association representatives. The interviews included discussions about the DBE Program and contracting and procurement policies, practices, and procedures of transportation agencies in California.

Appendix L also includes information from testimony that California businesses provided in connection with public forums that were part of BBC's 2010 Consortium disparity study.

Interviews

Interview participants included prime contractors, subcontractors, professional service providers, and trade associations and professional organizations that have a membership base of numerous MBEs, WBEs, and majority-owned businesses. BBC recruited interview participants primarily from a random sample of businesses that was stratified by type of firm, location, and the race/ethnicity and gender of the owners. BBC and subconsultants conducted most of the interviews with the owner, president, chief executive officer, or other manager of each business or organization. The interviewees are identified in this Appendix by their interview number.

Interview information for Appendix L came from the following sources:

- 18 interviews from the 2011 BGPAA disparity study;
- 60 interviews from the 2010 SDCRAA disparity study; and
- 60 interviews from the 2010 Consortium disparity study.

[1]The Consortium study included a consortium of five Southern California transportation agencies: Los Angeles County Metropolitan Transportation Authority (Metro), the Southern California Regional Rail Authority (Metrolink), the Orange County Transportation Authority (OCTA), the San Diego Association of Governments (SANDAG), and the San Diego Metropolitan Transit System (MTS).

Interviews from the BGPAA study are referenced using a "BGP" prefix before the interviewee number. Interviews from the SDRCAA study are referenced using a "SD" prefix before the interviewee number. Interviews from the Consortium study are referenced using a "CON" prefix for Consortium interviews.

Public Forums and Written Testimony

In addition to information from personal interviews, Appendix L also includes testimony that the public provided in connection with public forums that BBC conducted as part of the 2010 Consortium disparity study. Individuals had the opportunity to submit written or verbal testimony about current marketplace conditions in Southern California at two public forums — one that was held in Los Angeles, California, on October 20, 2009, and one that was held in San Diego, California, on October, 21, 2009.

In the Consortium sections, the Appendix also includes anecdotes from written testimony and anecdotes from verbal public forum testimony. Written testimony is referenced using a "WT" prefix before the interviewee number and verbal public forum testimony is referenced using a "PF" prefix before the interviewee number.

Summary of Anecdotes

A. Certification

BGPAA Study Anecdotes Regarding Certification

The certification process.

Some interviewees reported a positive experience with the certification process. [Interviewees #BGP: 2, 4, 12, 14, TA #2]. Interviewee #BGP2, a manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that the certification process is "pretty easy."

Interviewee #BGP4, a manager of a WBE-certified construction firm, said, "There are parts of the [certification] process that drive you crazy, but you know it's probably that way because of how it's been manipulated. So, it's tough, but it's worth it. They always want another interview or a phone call, but it's been pretty easy for us because the owner is so involved."

Interviewee #BGP12, a manager of a WBE/DBE-certified construction supply firm, said that the company has been certified for as long as they have been with the firm. Interviewee #12 said that the renewal process is "pretty clear cut." Interviewee #12 said, "We've been doing it for a while, so it's just a matter of resubmitting everything."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, stated that he had had a "mostly positive" experience with the certification process. He said that because the company is "a member of several of the [Native American] groups," such as the Native American Center, the company has access to assistance "in getting [its] status."

Some interviewees reported challenges in connection with the certification process. [Interviewees #BGP: 1, 3, 6, 9, 10, 11, 15]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that "there's one portion of the certification process where they ask that you prove that you're a minority, and I think that once you get certified, that shouldn't be a question. It should be automatically known that you're a minority when you're up for certification renewal. Otherwise, the process is fair and quite good."

Interviewee #BGP3, the co-owner of a white woman-owned construction firm, stated that it has been difficult to maintain his firm's WBE certification. He said, "It's very difficult … For example, we just found out that in our bylaws … I'm the Director, even though my wife has been the owner for 15 years. One of the certifying agencies found that out and said, 'You're no longer a WBE.'" He said that the certification process is "honest" and "straightforward." He said that "it took us forever to get certified."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that the certification process is "tedious." Interviewee #6 stated, "The initial process is cumbersome, but after you jump that hurdle, it becomes relative easy." Interviewee #6 said, "When they put the CUCP [California Unified Certification Program] in, it helped a lot. Once you're certified, everyone else accepts it. It was so much paperwork for every agency, but once I had that certification, then it's in the State database."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, said that "I think that anything that requires lengthy paperwork is going to be a pretty major turn off. I have better things to do."

Interviewee #BGP10, a principal at an engineering firm, reported that the certification process was "very burdensome" initially when each agency had its own certification process, but "it is better now." He said that "it is still not to the point of where the California Unified Certification Program is universal." He added that prior changes were supposed to simplify the process, and they "did somewhat" when "some agencies removed their requirements that [companies] needed to be certified with them" and implemented more reciprocity, but a number of agencies still "have their own requirements, and you submit the same package basically but reformatted, and it's a three inch thick package of paper."

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that the initial certification process involves considerable paperwork, and it took the company "the better part of six months to get certified" last time. He said that the renewal process is not that lengthy.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she was first "certified through the City of Los Angeles, and they expedited [her] certification." She said that when she was going through the certification process, "the guy that came out to certify" her asked her why she "wanted to be certified as a Mexican because [her] sir name and [her] maiden name are English, and [she has] green eyes." She said that she "was kind of offended about that." She said that the second time that she obtained certification she went through Metro's process, which she described as a "fantastic" process, although the company has "never gotten any work out of

them." She added, "The City of L.A. is just very, very slow in certifying … since it's a CUCP certification that's recognized by all of the state and local agencies."

One interviewee reported having either limited or no experience with the certification process. [Interviewee #BGP: 8]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that he sees his firm going through the WBE certification process at some point when his firm is not as busy.

Perceived value to certification.

Many interviewees perceived a value to certification. [Interviewees #BGP: 1, 2, 3, 4, 6, 8, 10, 12, 13, 15]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that he "thinks [that the certification program is] a good program, and that they get a heads up on outreach meetings and upcoming work" because of their certifications.

Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that the certifications "have been helpful."

Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that certification "opens up doors to work [that] we normally wouldn't be offered. … Most of the airport work now, you have to be … certified. … all the big companies want you to be certified as something, it doesn't have to be [WBE]. … Everybody has goals they are trying to reach. … Being a small company, a woman-owned company, that all helps."

Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that the WBE certification "helped the most with federal work. We didn't realize how important [certification] was for federal work, but since we've been bidding some military work, we see that this is where we should have been looking."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that the firm's WBE certification was not useful initially "because most of the clients were in the private sector. As I learned of the opportunity, and I pursued it, and that helped me grow. It is certainly advantageous."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that he perceives a value to certification. He said, "Many projects … have WBE and disadvantaged business, small business set asides. So [certified firms] get some priority as a small company going up against the big ones."

Interviewee #BGP10, a principal at an engineering firm, stated that he does feel that there is value to certifications, and "many of the agencies that do have goals or programs require certification." He reported that the firm obtains "a large percentage" of its business because it is a small business. Interviewee #10 said more agencies seem to be using "the small business as opposed to the other categories," particularly since Proposition 209 "was passed about 10 years ago, that basically said in California you're not supposed to discriminate on the basis of race, religion and all that sort of thing." He estimated that the firm obtains "about 20 to 25 percent" of

its business because of its DBE certification. He said that "the DBE percentage [requirement] is usually associated with some federal funding."

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that they attribute a value to certification because "it opens up doors for us, helps us grow the business." Interviewee #12 reported that approximately 30 percent of the company's business is obtained as a result of its DBE certification.

Interviewee #BGP13, the owner of a non-certified construction firm, said that the company was not certified, but if the company did more public sector work, it "would probably pursue at least one of those classifications to aid" the company in obtaining work.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, commented that she sees a value to certifications, particularly "as a woman-owned business." She said, "It allows me to introduce myself to the prime."

Other interviewees perceived limited or no value to certification. [Interviewees #BGP: 11, 13, 14, TA #2]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he was unsure of how much of the company's business is attributable to the company's DBE status. He said that he thinks the certification played a role in the company's bid on a Burbank contract, but he does not think that it has "much to do with anything" and will not carry much weight in the future. He added, "I wish it did, but it doesn't." He said that he once believed there was a greater emphasis on certification, but the benefits of certification seem to be declining, and today, it does not seem that important.

Interviewee #BGP13, the owner of a non-certified construction firm, said he does not think that certification is "an advantage in the private sector."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that he would attribute "less and less" of the company's business to its MBE/DBE certification. He stated that in 2003 "there were actually bids that" called for a certain percentage use of certified companies, and that would result in a certified company winning the bid. He said that, today, use of certified companies "does not seem to be criteria that is required on all of these projects," so "they don't give [the company] any percentage point extra on a bid because we're minority business, but they like to know that we are because they have certain federal requirements that they have to put down."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, stated that "The certification process is pretty good, but the commitment for people to honor the certification is below standard." He stated that there would be a benefit to certification if people would enforce utilization.

One interviewee identified certain disadvantages to certification. [Interviewee #BGP4: 1]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that the certifications do have some disadvantages. He said, "There are firms that use my name as their DVBE to win the projects, and I never heard from them. When that happens

with state work, I report it to the state, and the state pays me my share. I don't know if the state punishes the architect of record. Some of the same firms call now, and I tell them that I won't work with them."

Recommendations regarding the certification process.

Some interviewees recommended that the certification application or renewal application be simplified or condensed. [Interviewees #BGP: 1, 6, 10, 12]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that a firm's minority status should not be re-evaluated during the renewal process.

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that the certification process would be easier "If more agencies used the CUCP (California Unified Certification Program)."

Interviewee #BGP10, a principal at an engineering firm, recommended "[h]aving fewer certified agencies and [a] more consistent" standard for what is considered a small business or what qualifies for certification. He said that some agencies have net worth criteria or other criteria that add another layer of complexity. He said that he would prefer others agencies to adopt the SBA's definition of a small business, which is "uniform and can be applied over a wide variety of businesses because they have quite an extensive list of categories [into] which various businesses fall."

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that the certification "could be streamlined" but added that "they're pretty diligent in California."

One interviewee recommended enforcing MBE/WBE/DBE utilization on projects with participation requirements. [Interviewee #BGP: TA #2]. Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, stated that his recommendation would be "to hold the developers and contractors accountable for utilizing the required participation, whether it's MBE, Help Fund, whatever it could be … and penalize them if they don't."

SDCRAA Anecdotes Regarding Certification

The following anecdotes regarding certification were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

The certification process.

Some interviewees described the certification process as being long and time consuming or as otherwise cumbersome. Interviewee #SD4, representing a white male-owned firm, stated that the certification process is "slow." He described an African American male-owned firm with whom he has worked in the past that has never been formally certified because of how much time the process takes.

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, did not have positive impressions of the certification process: "[The certification process] sucks! I had to prove that my wife was black." He went on to say that the process "is very time consuming."

SDTA #6, representing an Asian American trade organization, said that the certification process can be "extremely onerous" and that many of the organization's members do not have the expertise to fill out all of the forms.

Interviewee #SD19, representing a white male-owned firm, indicated that it is difficult for firms to get certified, particularly those with multiple owners: "At one point our company was owned by one woman partner — 51 percent — but because of our structure we couldn't certify. It is tough to get that certification. Certification is more for those companies that are sole proprietors." She went on to note that "the perception of being MBE or WBE doesn't benefit anyone. You need the certification."

Interviewee #SD17, representing a white female-owned firm that is in the process of becoming certified, indicated that the certification process is difficult and requires a great deal of work: "I'm doing the paperwork to become a certified WBE with Caltrans; it is a lot of work."

Interviewee #SD18, representing a white female-owned firm that is not certified, said that the firm's reasons for not becoming certified primarily have to do with their reluctance to publicize personal assets and finances: "If we publicized our personal assets and financials, the unions would have a field day." Interviewee #SD18 went on to say that if the firm did not have to report their assets in a line item fashion, then they would be "more than willing" to go through with the certification process.

Interviewee #SD43, representing a Hispanic male-owned firm, reported that her firm is not yet MBE certified, because the process is so cumbersome and time-consuming: "It's a difficult process … It's just very time consuming."

Some interviewees described the certification process as simple and straightforward. Interviewee #SD14, representing a Hispanic American male-owned firm, remarked that the certification process is relatively easy and "didn't cost anything but time." Interviewee #SD20, representing an Asian American male-owned firm, characterized the process as "easy."

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, stated that the certification process was no more difficult than applying for a loan. She said that the Unified Port of San Diego provided her with assistance in getting through the certification process.

Perceived value to certification.

Many DBE certified firms recognized the benefits of certification. Interviewee #SD20, representing an Asian American male-owned firm, attributed the growth of his business in part to his firm's DBE certification: "[DBE certification] really helped to grow the company and open

doors. However, he pointed out that his firm's DBE certification only plays a role on federally-funded projects.

Interviewee #SD9, representing a minority female-owned firm that is a concessionaire at the Airport, said that all of her airport revenue comes as a result of her ACDBE certification. She went on to say that she strongly supports DBE programs and that discontinuing them would be harmful to both minority- and female-owned businesses.

Similarly, Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, acknowledged that without the ACDBE program, her firm would not have had the opportunity to work as a concessionaire at the Airport.

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, indicated that the firm would not be doing business at the Airport if it were not for their ACDBE program: "If [the master concessionaire at the Airport] was master lease and there was no DBE program, we could kiss this lease goodbye …" He continued, "The certification has created opportunities for me …" Interviewee #SD 12 added, "For [the master concessionaire] to be a success they had to meet the 30 percent [ACDBE] goal. They did not choose us because [the master concessionaire] is the good guy – it is because they had to do this to do business. If [the master concessionaire] didn't have to do this they wouldn't have used us."

Interviewee #SD8, representing a minority male-owned firm that is a concessionaire at the Airport, indicated that his MBE status was one of the primary reasons that he pursued and won a concessions opportunity at the San Diego International Airport.

Interviewee #SD10, representing an African American male-owned firm, reported that his firm's DBE certification has certainly been beneficial: "I am a certified firm — that is a benefit to me and to the prime contractor using my services … I would say that 99 percent of the agencies or private companies using us are using us to meet their [DBE] goal." However, he cautioned that being DBE certified does not solely determine success: "If you go into a business thinking that MBE, WBE certification [alone] is going to make you successful, it's not the case."

Interviewee #SD2, representing a white female-owned firm, reported that her firm's WBE certification has led to more relationships with prime contractors as well as to more work. However, she also noted that she has "won over" other local firms and agencies because of the quality of her work.

Interviewee #SD28, representing a white female-owned firm, indicated that the primary advantage of being DBE certified and of good faith efforts is that it forces prime contractors to at least consider her firm for subcontracting opportunities: "The contractors have to look at us a little closer … before [good faith efforts] they might not have even looked at us or even given us a shot." She continued, "In our business, if we can get our foot in the door, usually we can get the door open and get in. [The certification] helps quite a bit." Interviewee #SD28 made clear her belief that firms should not be given contracts just because they are DBE firms, but that they should be given the opportunity to demonstrate that they can do the work: "I'm not saying you should be given the job just because you're a DBE … give the company a chance to do that work and prove that they are equal [to majority-owned firms]."

Similarly, Interviewee #SD30, representing an African American male-owned firm, indicated that DBE certification gives small firms a chance to break into the industry: "Being certified … gives the small [firms] a foot in the door to play with the big boys a little bit."

Interviewee #SD36, representing an African American male-owned firm that is in the process of becoming certified indicated that the certification will help his firm get business: "Certification could help us get more business. [Certified firms] get the first choice to get the contract. Typically, the minority contractor does not get the big contract … The DBE certification system makes [public agencies] do what they don't typically want to do [and award contracts to minority-owned firms] … With certification, they put companies like me at the front. That is how I see it benefiting me."

Interviewee #SD47, representing an African American female-owned firm, reported that nearly all of her business comes as a result of her DBE certification. She said that she spent several years building a reputation for her firm before becoming DBE certified and marketing her firm as such.

Some firms that are not DBE certified recognized the benefits of certification. Interviewee #SD16, representing an African American male-owned firm that is currently working through the certification process, attributes getting work with the Airport to his firm's small business certification: "Certification landed me work here with the airport … It makes me visible." Interviewee #SD16 indicated that he viewed DBE certification to be just as useful as his small business certification.

Interviewee #SD18, representing a white female-owned firm that is not certified, said that her firm misses out on certain contracts because they are unable to "mark the WBE box."

Similarly, Interviewee #SD19, representing a white male-owned firm, said, "We probably miss out on a lot of jobs because we aren't certified." She went on to report that her firm has been denied subcontractor opportunities, because they are not DBE certified: "We have been passed over at least three or four times before, because we don't [help the prime contractor] meet the DBE or WBE certification goals…."

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, indicated that a firm's DBE status likely plays a substantial role when public agencies award contracts, "I think having the DBE designation would help, and I think it will probably help the next time [a contract] goes out to bid."

Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, reported that the Airport gave at least one firm the opportunity to work as a concessionaire because of its MBE/WBE status:"[The firm] … probably would never have ended up as an airport retailer if not for [the ACDBE program]." Interviewee #SD13 went on to assert that the Port Authority (who was in charge at the time) approached the owner of the MBE/WBE as a potential subtenant precisely because she would be qualified to be ACDBE-certified.

Interviewee #SD31, representing a white male-owned firm that is DVBE certified, indicated that he definitely sees advantages to DVBE and MBE/WBE certification: "[The certification] gets

people's attention. It says, 'We should at least look at this company,' where as before … we would just be part of the herd." However, Interviewee #SD31 also pointed out that a potential disadvantage of certification is the stigma with which it might come: "Most people assume that … certification does not equal competency. … So the question is, are you really a competent firm, or are you just trying to ride your certification?"

Several firms argued that there is no advantage associated with certification. Interviewee #SD14, representing a Hispanic American male-owned firm, stated that there are no benefits associated with being certified: "There is no advantage anymore of being a DBE … I don't get any of my work from DBE [goals]." He went on to say, "DBE goals are out. … There are no benefits at all [to being DBE-certified]."

Interviewee #SD5, representing an African American male-owned firm, said: "There are some serious low baller bids that knock other bids out. The low bid gets the contract." Similarly, Interviewee #SD14, representing a Hispanic American male-owned firm, indicated that, like other contractors, he does not consider minority or gender status when selecting subcontractors — he simply selects the subcontractor that submitted the lowest bid.

SDTA #7, representing a construction trade organization, said that the primary consideration that prime contractors make in selecting subcontractors is low bid status (i.e., prime contractors select the lowest bidder). Regarding that selection process, SDRCONTA #7 said, "The minority community doesn't quite understand [the selection process]. There isn't any special stuff going on." SDRTA #7 went on to say that his organization's Hispanic members tend to not get certified, because they do not see any advantages associated with certification: "… [Hispanic contractors] don't tend to get into the programs and stuff as much. They don't even try to get certified…. They're all sorts of them out there that just don't pay any attention to the DBE programs, because it's a lot of crap."

Interviewee #SD6, representing a white male-owned firm, said, "the DBE program doesn't help anyone."

Interviewee #SD31, representing a white male-owned firm that is DVBE certified, said that he questions the legitimacy of MBE/WBE certification: "DVBEs are different than everybody else. The state monitors our certification yearly. We don't go to some funky non-profit organization and say, 'Hey, guess what — I'm a minority!'" I really question … some of those [MBE/WBE] certifications and how valid they are."

Interviewee #SD33, representing a Hispanic American male-owned firm, reported that less than 10 percent of his firm's sales can be attributed to DBE goals. He said that the firm does not market itself as a DBE — to get work, it relies heavily on the reputation it has established over the past 35 years.

Interviewee #SD44, representing a Hispanic male-owned firm, stated that his firm was previously MBE certified as a Hispanic American-owned firm, but it did not renew its certification because "it wasn't worth it." He indicated that his firm had no trouble getting certified, but working with public agencies as a DBE — particularly Caltrans — was difficult: "It

was a pain … all the hoops they want you to jump through to try and sell them a product … was too much of a hassle."

Interviewee #SD46, representing an African American male-owned firm, indicated that his firms DBE certification only accounts for approximately 5 percent of his firm's work. He noted that his firm does not "market" its certification status when responding to bid solicitations from prime contractors. When asked if there are any advantages to being DBE certified, Interviewee #SD46 said, "I don't see any benefits."

Consortium Anecdotes Regarding Certification

The following anecdotes regarding certification were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

The certification process.

Some interviewees reported a positive experience with the Consortium's certification process. [Interviewees #CON: 9, 10, 11, 13, 14, 15, 19, 20, 21, 22, 23, 24, 28, 30, 35, 36, 38, 39, 43, 44, 46, 48, 52]. Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that although he has not had experience with the certification process since 1987, he believes that the process is getting "smoother and smoother."

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, reported that the certification process involved a lot of paperwork and it was a long process; overall it was a positive experience. Interviewee #CON10 stated that it took them approximately eight hours to complete the paperwork.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that the certification process was fairly easy and took her about 15 minutes to fill out the forms online. She stated the L.A. County MTA process was more involved including an interview; she stated that paperwork took "a couple of hours" to complete.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that the Consortium certification process is "fine." He stated the Consortium does a pretty good job of site visits, surveys, and audits. He stated that there are forms to fill out and the certification process is in line with the certification process of other states.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that with respect to the Metrolink certification process, the forms are challenging but Metrolink has done a better job of streamlining the process.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, stated the certification process is not too cumbersome. The company is currently involved in the certification process with L.A. County MTA.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, felt her experience with the Consortium certification process was excellent.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that her experience with L.A. County Metro's certification process was easy.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she had no problem with the Consortium's certification process.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that his experience with certification occurred a long time ago. He recalled that it required a lot of paperwork but overall there was no problem.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that her experience with certification was good in that it proceeded smoothly.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated that he has had a good experience with the Consortium's certification process. His administrative assistant stated that their contact at L.A. County MTA was very helpful and supportive.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he had a fairly good experience with the Consortium certification process.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that a large prime contractor assisted him with obtaining his certifications; they walked him through the process which made it easier for him to become certified.

Interviewee #CON35, an African American female-owned WBE/MBE-certified management consulting firm, stated that the Consortium's certification process was simple and easy.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that the certification process was smooth but involved a lot of paperwork.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that he had a relatively good experience going through the certification process. He stated they performed a very diligent and thorough investigation. In his opinion it was a "meaningful operation" and he was very happy that they took the time to make sure that you qualify as a DBE when you apply for certification.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that the process was adequate and did not notice anything out of the ordinary.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, stated that the Consortium certification process was smooth with no problems.

Interviewee #CON44, a DBE/MBE/SBE-certified African American male owner of a financial planning services firm, described the certification process as fine and smooth.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that L.A. County MTA made the certification process easy.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, stated that the certification process was quick and painless.

Some interviewees reported challenges in connection with the Consortium's certification process. [Interviewees #CON: 12, 16, 17, 18, 25, 26, 29, 32, 33, 34, 37, 40, 41, 42, 45, 47, 49, 50, 51, CONTA #2, PF #4, 12]. Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that his business was certified through the Consortium through OCTA. They had originally tried to get certified with the City of Los Angeles but they take "forever" and you can wait years before receiving your certification. He stated that the process with OCTA was "excellent" and they received their certification within three months, in part, because the effort was driven by a proposal.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, indicated that the certification process was somewhat cumbersome because of the amount of paperwork, specifically the volume of financial data required to be produced; as a smaller company, Interviewee #CON16 stated that it did not have ready access to all of the financial information requested during the certification process. According to Interviewee #CON16, there is always more paperwork, and it is very repetitive.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that the certification process is cumbersome. Interviewee #CON17 stated that very early in the certification process, many, many years ago, the certifying agencies were suspicious about where certain monies came from during start up. The agencies were suspicious that Interviewee #CON17 was not actually running the business herself, but that it was a front.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, indicated that most recently, the certification process was easy, but that a couple years ago it was extremely arduous and it took her more than a year to get certified. She was surprised during the last renewal process when it only took about two weeks to receive the certification paperwork back after submission. Interviewee #CON18 noted that the certification process has greatly improved over a very long time frame. In the past, Interviewee #CON18 stated that she was often faced with many repetitive requests for information, and the time associated with certification was "unsettling."

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that the Consortium's certification process was tedious.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, found the Consortium certification process to be complicated and incredibly time-consuming. She also thought that it was invasive in terms of the financial information requested.

Interviewee #CON29, an African American male-owned electrical contractor, stated that he has attempted to get certified but he feels frustrated that after 21 years he has not been able to get certified. He stated that the certification process is difficult, tedious, and hard to understand.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that the certification process was not easy; they had to submit a lot of documents. He understood that was the process so he followed the rules with the hope that it would provide avenues to do business with the L.A. County MTA.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, felt that there was a value to certification. She did, however, state that Caltrans was two years behind on approving applications for certifications; the L.A. County MTA was very slow, and the state process is confusing. She also stated that some other agencies' certification process was not very good. In her experience, BART (Bay Area Rapid Transit) was the best. Her recommendation would be to have a "Unified Qualification Process," where one clearinghouse can review applications and issue certifications that will be accepted by all the agencies.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that the certification process was tedious. She stated that BART's (Bay Area Rapid Transit) system is better by comparison.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that the certification process involved a lot of unnecessary and intrusive paperwork.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that the certification process was not completed in a timely manner.

Interviewee #CON41, an Asian American male owner of a DBE/MBE-certified general contracting firm, stated that the certification process was tedious and filled with a lot of paperwork.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, felt that there was a lot of paperwork involved in the certification process. She stated that there was so much paperwork that she considered not renewing her certification. After some serious reconsideration, however, she decided to renew it.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated she feels that the process to renew certification is too extensive and extremely invasive. She stated that it was too time-consuming and all around "too much."

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that the certification process was lengthy. He stated also that the L.A. County MTA lost his application and he had to complete the process all over again.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that the certification process and the information requested is not relevant to the actual job that they do.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that there was a lot of paperwork although he was used to that given the nature of his business. However, he stated that there were too many reasons to potentially exclude an applicant.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, felt as though the certification process was very cumbersome. He stated that it took too long to complete, there was too much paperwork, and "even the renewals take a lot of time."

CONTA #2, the President of the Black Contractor's Association, stated that his association's members find the certification process intrusive. Many members do not want to provide their tax information and are concerned about who will see the information.

PF #4, an individual representing a certified MBE firm stated that the certification process to become an MBE was fraught with requirements that resulted in the certification process itself becoming a real impediment to participation by small businesses in large contracts. She suggested that, "There has to be a better way, or your staff needs to be better trained to work with small businesses to obtain the certification." (Public Forum Los Angeles held on October 20, 2009).

PF #12, a Hispanic individual who is a 'Principal' of his company provided oral testimony at a public forum held on October 20, 2009. His main concern was that the certification process to become a DBE was keeping qualified small businesses from participating in contracts. He stated that a change to the certification process would improve the lot of all disadvantaged businesses in the public sector contracting process. (Public Forum Los Angeles held on October 20, 2009).

Some interviewees reported having either limited or no experience with the Consortium's certification process. [Interviewees #CON: 1, 2, 3, 6, 7, 8, 27]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, does not have any experience with the Consortium certification process. He has applied for certification with other agencies but he does not believe that there has been any value to the certification; the amount of paperwork is "kind of ridiculous."

Interviewee #CON2, a DBE-certified African American male owner of a structural engineering firm in the San Diego area, had no experience regarding the Certification process. He stated that he has considered working with the Consortium but he is too busy to have time for the cumbersome certification process.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that he has only remote knowledge about the Consortium's certification process. Between 1990-1995 one of the firms that he worked at (prior to starting his current

business) mentored small firms so he was a little more involved as to the requirements of those businesses but does not currently have much knowledge about the process.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that their certification is through Caltrans so they had no experience with the Consortium's certification process.

Perceived value of certification.

Most interviewees perceived a value to certification. [Interviewees #CON: 2, 3, 4, 5, 9, 10, 12, 13, 14, 15, 17, 19, 20, 22, 23, 24, 25, 26, 29, 30, 32, 33, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 51, 52, 55]. Interviewee #CON2, an African American male structural engineer in the San Diego area, is not certified but stated he thinks that there could be some value to the certification process because the Consortium agencies encourage minority hiring. It could open a door if the prime consultants are willing to work with DBEs.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that he does think there is value to the certification process. However, there are problems with certain firms obtaining DBE certification inappropriately (i.e., DBE fronts). Interviewee #CON3 stated that the certification procedure used by the Consortium sometimes allows participation of firms that do not really qualify. He stated that these DBE fronts still exist today but could not identify any specific projects they worked on. However, he does not believe that the business owner's status as a minority or woman matters in the end. He stated, "If you do a good job you get work, if you do not you won't." Firms that continue to grow do so because they do the work properly.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that there is value to certification because once he made the decision to concentrate on public works projects, the certification helped. Without the certification, he believes that none of the prime contractors would have come to his company to request proposals. He stated the fact that his company is certified as a DBE definitely helps in terms of getting solicitations from the prime contractors. When the DBE Program was dropped by Caltrans he saw a decrease in requests for proposals. By that time, however, he had already established the company and had working relationships with the prime contractors so the prime contractors kept coming back.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, thinks that certification is valuable because many of the governmental entities have to have a certain amount of DBE contractors on their teams. The prime contractor has to look at what percentage of the RFP or proposal request is requesting DBEs and they have a list of certified entities that they pull from. Also, Interviewee #CON5 stated that electrical engineering is one of the areas in which the agencies want DBEs.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that there is a value to certification and that is "what started the company and what grew the company" (his company graduated from the DBE Program in 2004).

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that there is a value to certification and they would not be in business without it.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that "unfortunately" there is a value to certification. He stated that in many cases when they team up as a prime contractor they solicit or team up with larger firms because they are a DBE; this selection is based on qualifications. In contrast, however, when their firm is selected, he said it is based on their DBE status instead of on their qualifications.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that certification is valuable to a company that is just starting out and it has helped him sustain his business. He also said that the contracts received due to his certification have been helpful.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that there is a value to certification.

Interviewee #CON15, a Hispanic American male owner of an MBE-certified engineering and construction company, feels that there is value to certification, but that it is more "obvious" with Caltrans than with the Consortium entities.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that certification is a priority and that it is very important to her company. To Interviewee #CON17, having her certification is like doing her homework and being ready for opportunity to come.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that certification could be valuable if he could get more work.

Interviewee #CON29, an African American male-owned electrical contractor, stated that even though he is not certified he feels that there is a value to certification. He stated that he believes with certification his business would flourish and he would not be in the situation he is in now where he has to travel down to the valley and to San Diego to wherever the work is.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that there is a value to becoming certified. He stated that it helps small firms open relations with large firms and builds relationships that can be longstanding and profitable for both parties involved.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, perceived a value to certification — that is why they went through the process.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that there is a value to certification but she did not know to what extent. She is not able to determine the effect of certification on her business' ability to obtain work.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated there was "absolutely" a value to certification; he stated that getting certified sends the message that small businesses are really in business to do business and are serious about being competitive.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that there is definitely a value to certification; this is the only thing that makes going through the certification process worthwhile.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, attributed 30 percent of his business to his DBE certification, but did not know whether there was a value to certification.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that there is definitely a value to certification when bidding because it provides necessary government documentation.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that there is a value to certification on federal projects, but not at the local level. He stated that ever since Proposition 209 passed, there are no more goals on projects. He stated that the City of Los Angeles has a policy known as "best efforts" which he does not believe is effective. He stated that the City of Los Angeles should have goals so that the DBEs can get work.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that there is absolutely a value to certification.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that there is a value to certification although sometimes it is a double-edged sword and does not do a whole lot. Nonetheless, he felt as though certification is good to have and the good outweighs the bad.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, reported that there is a value to certification because now government jobs would be awarded to his firm.

Interviewee #CON55, a representative from a white male-owned large construction services and program management firm, stated that there is a value to a business having certification depending on state law.

Other interviewees perceived limited or no value to certification. [Interviewees #CON: 6, 11, 18, 21, 27, 28, 31, 34, 35, 37, 47, 49, 50, CONTA #1, 2]. Interviewee #CON11, a SBE-certified white female ergonomic prime consultant, stated that she has not seen any monetary benefit to having certification. Interviewee #CON11 did not have any recommendations for improving certification; she stated that certification is not the issue that impedes her ability to do work with the Consortium.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, does not believe that there is a value to certification, but she does not think that it hurts to be

certified. Interviewee #CON18 is not sure whether or not she has won or lost a job as a result of having any certification. She is not sure how it hurts, but how much it helps is difficult to quantify. Interviewee #CON18 stated that in the past, the certification process used to have more value because it got you onto bid lists. Now she is not sure how that happens.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, felt there was absolutely no value to certification. She believes that the City of L.A., in general, is unfriendly to small businesses. She feels that it should follow the federal small business guidelines like the U.S. Department of Housing.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that there used to be a value to certification, but now, he stated, it is kind of useless; he stated that his company receives very little business as a result of certification.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated that he did not see any value to the certification process.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, feels that he has received almost no business due to his multiple certifications. In the years he has been in the business, he feels that the work he has received has been because of his proven record as opposed to any of the certifications; he is starting to question the value of certification. He has done one job for a contractor in Long Beach and they did ask about his SBE HUD Section 3 certification. He stated that maybe there is some value to being certified because of the advertisement in the Blue Book, and it does result in inquiries in to his business and their services and can lead to work.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, does not feel that there is a value to certification. She believes that there is a negative connotation associated with being a certified DBE/MBE/WBE when seeking potential work.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that certification helps with relationship building, but it does not give you an edge or help economically.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, did not feel as though there was a value to certification and stated that he has not received a single contract as a result of his certification.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that the certification does not carry the same weight or value as it did in years past.

CONTA #1, the President of the Latino Business Owners of America, stated that most of his members feel that the certification programs are "a joke." He stated that many of his members do not renew their certifications because unless they are versed with the process, certification does not accomplish much for his members. His members become discouraged when they do not

receive contracts and then often do not renew their certification. His members cannot afford to divert their attention for a couple of weeks to a RFP when they are not sure that their efforts will be fruitful; they need to keep cash flowing. When a small business ties up its assets on a public project, they cannot operate effectively in other areas and many of his members are not willing to do it. He provided one example of a trucker, for instance, who lost everything because he was unable to grow his business.

CONTA #2, the President of the Black Contractor's Association, stated that members sometimes feel there is value to the certification and other times not any value to the certification. He stated that certification encourages prime contractors to use DBEs, however, the prime contractors only use those DBEs when they are required to do so and do not use them when not required to do so. He also stated that the value of certification diminished after Proposition 209 was passed. He stated that Proposition 209 did away with race-conscious programs, and this has had an impact in terms of the availability of public work. He stated that some contractors do not call DBE subcontractors at all anymore.

Recommendations related to the certification process.

Several interviewees recommended streamlining the certification process such that certification applies from agency to agency. [Interviewees #CON: 1, 13, 16, 30, 33, 34, CONTA #1]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, recommended making the certification process easier and involving less paperwork. He stated that it would be helpful to have a single entity responsible for maintaining certification and then allow other agencies to cross-reference the information. He stated that the certification process has deterred him from bidding on a number of projects because of the time and resources involved.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, recommended more reciprocity between agencies and from state to state with respect to certification. He stated that the certification process requires a lot of paperwork and red tape, but he understands the need for it and thinks that the process is reasonable.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that one problem with the certification process is that the various certifying entities do not recognize each other's certifications – each year there is a requirement that "change affidavits" be submitted, in addition to more documents and financial paperwork. But Interviewee #CON16 noted that he understands the reasoning for the extensive paperwork, acknowledging that one of the goals is likely to eliminate non-DBE/minority "figureheads" who are not actually running businesses. Interviewee #CON16 suggested that the certification process be simplified such that each of the certifying entities recognizes other certifications for the full length of the certification period.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, recommended that the certification process be nationalized so that there will be a national database that can be accessed by agencies and other entities seeking such information.

This would eliminate the need to be certified with multiple agencies that have diverse and tedious processes in place.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, recommended implementing a "Unified Qualification Process," where one clearinghouse can review applications and issue certifications that will be accepted by all the agencies.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, recommended a nationalized certification program whereby certification would be accepted in all jurisdictions.

CONTA #1, the President of the Latino Business Owners of America, stated that one way of improving the certification process is to streamline the process. He suggested eliminating the need to certify for each agency and have one certification apply for each agency. He also stated that the program needs to encourage businesses to participate. He stated that although the agencies or prime contractors say there is no availability of DBEs for particular projects, if the Consortium created more opportunities, the these businesses would develop. He also suggested better outreach efforts. He stated that the Consortium should try to better dispense revenues evenly among larger and smaller businesses. He also suggests that the Consortium stop requiring certain specializations for projects if the contractor has some general area of knowledge that could apply to projects. He also suggests that the Consortium stop requiring particular products that prime contractors have an exclusive on and state in the specifications that a comparable or equal product may be used.

Other interviewees recommended simplifying the application process. [Interviewees #CON: 4, 14, 20, 25, 26, 27, 29, 30, 39, 41, 42, 50, 51]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, recommended making a change to shorten the time it takes for certification and making the process easier. He noted that the time investment is difficult for a small business. Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that it is hard enough for a small business to get started without the added attention required to complete the certification process. He stated that the certification process requires the attention of the president of the company, an additional person, and a lot of resources.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that the "system" can be confusing and the Consortium could do a better job of explaining how to get through the evaluations. She stated that site visits are an imposition for small businesses. She stated a classic example was that her business lost its certification in San Francisco because of three random site visits while her staff was out in the field; she was very frustrated and there was nothing that she could do about it.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that it took six months for his certification to be approved after he submitted his application. He was told the delay was due to a backlog of applications. He recommended streamlining the application process so that it does not take so long.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, recommended that the Consortium adjust the amount of required paperwork according to the size of the firm; she stated that many of the questions did not apply.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that since most businesses applying for certification are small, it would be preferable to reduce the amount of paperwork involved.

Interviewee #CON29, an African American male-owned electrical contractor, stated that the application process should be easier to understand and accessible to everyone interested in the certification process. He stated "make the knowledge available."

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that there should be a shorter turnover period for processing and review of applications. He stated that the timing is inconvenient and it takes too long to receive certification. He does not understand why it would take over 30 days.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, recommended that paperwork be streamlined. He stated that the certification application requires a tremendous amount of hours to complete.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, recommended making the required application forms available online.

Interviewee #CON41, an Asian American male owner of a DBE/MBE-certified general contracting firm, recommended streamlining the application process; they stated that it took a long time to prepare which took away from their other business.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that the paperwork should be streamlined and less intrusive.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, reported that the certification process was "intrusive" and had a number of requirements that were "invasive;" he did not understand the need for some of the requirements.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, recommended streamlining the certification process and noted that it would speed up if the agencies were not short-staffed. He stated that the L.A. County MTA needs more staff in order to handle the certification applications.

A few interviewees recommended changes to the certification process or to the qualifications. [Interviewees #CON: 6, 26, CONTA #2]. Interviewee #CON6, a white male co-owner of a non-DBE Native American and white owned recycling and materials supplying company in the San Diego area, could not make many recommendations for changes or improvements to the certification process because he was not that familiar with the process, but did suggest that the threshold amount be raised to include companies with volume under $2 million so that more businesses can qualify for the program. Interviewee #CON6 also stated that government should

support small businesses by not placing so many financial restraints on the business (such as permitting restraints).

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that the Consortium should modify the qualifications to accommodate small businesses and make the request for financial information less intrusive.

CONTA #2, the President of the Black Contractor's Association, recommended the following changes or improvements for the certification process: the process should be streamlined; applicants should not be required to provide tax records, and a sworn affidavit regarding the applicant's financial status should be sufficient. In general he suggested less bureaucracy.

Two interviewees noted that the process has changed and the Consortium should reevaluate the certification process. [Interviewees #CON: 24, 39]. Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that L.A. County MTA has "changed the ball game" and the process should be evaluated.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, suggested that the Consortium revisit the application process. She feels that some of the questions are ridiculous such as the size of her firm as it relates to her ability to perform on large projects. She does feel, however, that as far as some of the DBEs are concerned, if they cannot complete the forms then they do not need to be certified. She stated that in her opinion some of the questions help with the vetting process assisting in sorting out companies that cannot handle the work. This saves her firm and many other firms from wasting a lot of time using companies just because they are DBEs and not based off of their qualifications.

Some interviewees wanted to see a more immediate benefit to certification. [Interviewees #CON: 5, 28, 32, 36, 37, 47]. Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, recommended that the Consortium allow companies like his that are minority run to qualify as a DBE even if the owner is a non-minority.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, recommended that the Consortium increase vendor participation.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, wanted to see a more immediate benefit to certification.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she became certified to obtain new business, but she has not in fact obtained any new business. She stated that there needs to be a system whereby DBEs are monitored, and thus leveling the playing field and making it fair for all contractors, large and small. She stated there has to be some way to make sure that everyone gets a piece of the pie.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that the Consortium needs to provide a significant amount of contracts on a rotating basis

to allow businesses who have not yet developed beneficial connections to be involved in projects.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that it seems as though all of the large firms receive the contracts over and over again. He stated that he wants a contract with the Consortium and is frustrated that he has not received one.

B. Public and Private Sector Work

BGPAA Study Anecdotes Regarding Public and Private Sector Work

Private sector work experience.

Some interviewees reported working predominately in the private sector, success working in the private sector or a preference for work in the private sector. [Interviewees #BGP: 3, 8, 11, 13]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that 100 percent of the company's work is private and that all of the company's contracts are with airlines. He noted that the company did have a contract with the Airport Authority for five years but no longer has that contract.

Some interviewees reported challenges in connection with pursuing or performing work in the private sector. [Interviewees #BGP: 6, 7, 11]. Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said, "There is no private work. It's coming back, but there's very little." Interviewee #6 said, "We used to have a 50/50 public/private mix. That is no longer the case. I'm staying in business because of public works projects right now. Many firms I know of are closed now because they only had private clients."

Interviewee #BGP7, the owner of a white male-owned SBE-certified landscaping business, reported that private sector work is relationship driven and that public sector work just requires a bid.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that it is "getting extremely difficult to make any money" in the private sector. He said that airlines are being forced to make cutbacks "because of fuel prices," and that affects the amount of money that subcontractors are paid as well. He reported that in the private sector, airlines are putting out RFPs and then asking the selected company to take a 6 percent decrease in income. He said that if the company refuses, the airline puts out another RFP mid-contract. He said that this did not occur on BGPAA projects, but he knows of at least two companies for which this has occurred at the Los Angeles Airport.

Public sector non-BGPAA work experience.

Some interviewees reported some success obtaining public sector, non-BGPAA jobs. [Interviewees #BGP: 1, 10, 12, 14, 15, 16]. Interviewee #BGP10, a principal at an engineering firm, stated that last year more than 80 percent of the firm's work was in the public sector. He

said that the amount of public work has increased during the last few years, but even during good economic times, approximately 70 percent of the firm's work was in the public sector.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, reported that the company supplies both primes and subcontractors in both the public and private sector. He said that approximately 70 percent of the company's work originates in the public sector and 30 percent originates in the private sector. He said that this has changed over the years, adding, "During the building boom, [it was] pretty close to 50/50 [between public and private sector work]. When the [housing boom] ended, it went back to what it's traditionally been, even more so now. But we've always been oriented toward municipal projects."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that 70 percent of the company's work is in the public sector and 30 percent of the company's work is in the private sector. He added that "with the downturn in the economy" the company "moved [its] business more into the public sector" because "the private sector business has slowed down." He said that before the downturn, the company's work was split evenly between the public and private sectors. He said that recently he has "noticed a little bit of a pickup" in work in both the public and private sector, but that observation has only been true for "just this first part of the year."

Interviewee #BGP15, the majority owner of an MBE/WBE/DBE-certified Mexican American female-owned design, consulting, architectural engineering, and construction support services firm, stated that approximately 95 percent of the firm's work is in the public sector. She said that she does not necessarily prefer public sector work. She said that she "just fell into it."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that the corporation prefers public sector work because there is less "politics involved, especially at the federal level." He said that the corporation prefers federal public sector work "because the local politics don't get involved, [and they are] larger projects, so they're easier to schedule and keep an even workflow."

Some interviewees reported difficulties in pursuing or performing work on public sector, non-BGPAA jobs. [Interviewees #BGP: 1, 3, 5, 8, 9, 15, TA #1]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that "on the public side, now the same projects that we, as a small business, are pursuing are now being pursued by the big companies."

Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that his firm does very little public sector work. He said, "To work public work, you have to have a lot of money. You have to be able to do the whole project on your own money, and hopefully you'll get paid. Eventually … you'll get paid, but they're so far behind with pay." He said that public sector work is too impersonal. He stated, "To me contracting is relational. So when you work in the public sector, there's no relation. You don't know who's paying you. You don't know who's in charge. You don't know anything about them. … I don't like working that way. … You don't mind going an extra yard for somebody that you know. You work harder for those kinds of people. Working for the government is like working for nobody."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said, "The biggest problem with the public sector is with the lowest qualified bid. It's exactly that; you're getting the lowest qualified person to do the work. Frequently the people are incompetent." He said that "Sometimes firms will be asked if they included everything in the bid, and they will immediately say yes without looking. Then if they left out a substantial portion of the project, they're given a major change order, which will bring them above the next lower bidder. These are the types of pitfalls you have in the public sector because of the method of bidding."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that there is a lot of competition in the public sector. He said, "Right now, a barrier is that a lot of people are hungry, so when you go to the pre-bid meeting, they're packed. I guess that's a good thing for the public sector, but it's not a good thing for each individual [firm]."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, said that "in the public sector there's too much politics. The private sector seems to be a little more straight forward. When we bid for public jobs, not just work with the airport but all public sector work, they really doctor up the paper work to be the advantage of a certain vendor. That's a norm. They cater to one vendor."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she has seen "fewer jobs being put out to bid" in the public sector "in the last five years because of the economy." She added that she has noticed that now, when "there is a pre-bid meeting; it's usually … standing room … only." She added that the primes in attendance are from "throughout California, where before, it would be just local or … L.A. City or Orange County primes."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that few contract dollars are awarded to African American-owned firms in California. He said, "[African American] people in the State of California spend about 23 percent on state taxes. … [African American] contractors in this State … we are awarded less than 1/17 of 1 percent of highways, bridges, freeways, airports, seaports … we get none of those contracts."

Work experience with BGPAA.

Some interviewees reported success in obtaining work with or performing work for the Airport Authority. [Interviewees #BGP: 1, 2, 5, 7,11, 13, 14, 16]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that his firm has worked with the Authority since 2000, and it has been "excellent." He said, "When we first started the meetings with the Airport [and] their representatives were very good. Everyone there has respect for everyone else."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that the firm has been working with the Authority for decades. He said that working with the Authority is "much easier because they have a competent engineering staff on site. They have people that actually understand the business."

Interviewee #BGP7, the owner of a white male-owned SBE-certified landscaping business, said that his firm is currently doing work for the Authority and that pursuing work and doing work for the Authority is no more difficult than any other public agency. He said, "They are demanding but it's OK. I like that.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, stated that the company's work for the Authority was very positive, and public sector work is probably the way to go if you can do it. He said that the company lost its contract with the Authority because it was outbid. He stated that the company had a very positive experience working for BGPAA from 2004 until 2009. He said that when the company did the work, he felt that the focus was on service and job quality.

Interviewee #BGP13, the owner of a non-certified construction firm, said that he worked with the Authority as recently as that day and that, in addition to bidding work there, the company has a maintenance contract with the Authority, so the company works there "pretty often."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, estimated that 20 percent of the company's public work is with the Authority. He said that that source of work is "more reoccurring than anybody else." He said that the Authority is "probably one of the easiest public entities we have to work with."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, reported that he has had a "very positive" experience working with the Authority. He said that "Burbank has been very non-political, very open … [regarding] … what … the future workload might look like."

Some interviewees reported difficulties in connection with obtaining work with or performing work for the Airport Authority. [Interviewees #BGP: 8, 9, 10, 14, 15, TA #1, TA #2]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said, "We haven't been doing as much airport-type work. … Maybe a lot of [Airport Authority work has] been completed or flights are being cut back now … so maybe the overall noise issues are reducing a bit." He said that his firm's airport work began falling off "three or four years ago."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, said that "there more background checks. It's gotten worse over the past two years. That's because of the economy. Now they're just really nitpicky and penny pinching, doing things that are really unethical." Interviewee #9 went on to explain that, the airport will "have us bid a job. We designed the job, we bid the job, and then they go get other bids, and the person that's the low bidder doesn't even know what to put in. Then they'll come to us and ask if they can take a picture [of their design] so they can sell it to the firm that won." Interviewee #1 said that they have had this experience with the airport authority twice. "They have you design build something, which takes time, then after you bid it, then they'll go and get that copy and give it to someone else and let them run with it. That doesn't make any sense."

Interviewee #BGP10, a principal at an engineering firm, stated that "a very small percentage" of the firm's work is with the Authority and estimated that "certainly less than 5 percent, could be less than 1 percent," of the firm's work is with the Authority. He reported that the Authority has

"preconceived ideas" regarding what they want from the firm and "has already made a decision as to what they want." He provided an example saying, the Authority may tell the firm the pavement thickness it wants, so it asks the firm to go out to the site, drill some holes, and provide the results. Interviewee #10 stated that this process differs from other airports for which the firm would go to the site, drill some holes, analyze the situation and then provide the airport with a pavement thickness.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported the Authority selects bidders based upon "bottom line price. Low price wins." He said that he has not "had a bid for Burbank this year yet, so [he did not] know if they're changing." He said that elsewhere in the industry "it was basically low bid price wins, and now they've gone to a criteria-based bidding system where it's all weighted. So, they'll weigh points to your price, they'll weigh points to your presentation, they'll weigh points to your installation, procedures and practices, and they'll break them down into multiple areas. And then, … they go into committee on it, … and they'll assign points to you. They'll give you … 20 points for this, 10 points … and at the end, who has the most points wins the bid. … It's not as apples to apples as it used to be." He said that the Los Angeles Airport is using this more weighted system, and he commented that he thinks the new bidding system is intended to allow the public entity "to rule [a company] out and … take somebody who has a higher bid because they have more points in other areas," especially when the entity "may not like the way" the company with the lower bid would "actually put the project together."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that the company "had one contract" with the Authority three or four years ago, but she has "never seen any other opportunities" to work there. She said that during her previous contract, "mid-way through the contract … [the Airport Authority] had a lot [of] personnel change, and afterwards," things were more difficult. She reported that when the company began working with the Authority, the experience "was very positive," but when the Authority went through a "staff upheaval," the company no longer had "a relationship with the new people, so it was different."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that his organization recently walked out of a meeting with the Authority and expressed disappointment over an experience with a project manager because "we asked him who was doing a project over there and he couldn't or wouldn't answer." He said that the Authority's general message to minority contractors is that they are doing all they can do to help. He said the Authority told minority contractors that "'we're going to do the best we can to help.'" He said that he does not believe that the message is genuine.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, stated that his members have not been successful bidding on Authority projects. He said, "Yeah, we've made a lot of attempts; you know we're aggressively pursuing [the Airport Authority], but there's too many loop holes … good faith is one of them. He said, "I mean [the members are] invited to bid, but from my personal experience, they get the bids too late; you know the bid could be out for three months, but they won't notify us until maybe a week before and then they can say that we were non-responsive and then we would respond back that we can't bid this project. We let them know that there's not enough notice." He

said, "I find that people who have [worked for the Airport Authority] … only get the small portions of work. They'll be like a major project but there will be like minorities getting a small little side…. They'll give you a couple of crumbs but you know, but you won't get a piece of the lion's share." He said these experiences with the Authority projects are recent.

Differences between private sector and public sector work experience.

Many interviewees identified differences in securing or performing work in the public and private sectors. [Interviewees #BGP: 1, 2, 4, 5, 6, 7, 8, 10, 12, 13, 14, 16, TA #1, TA #2]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that "the only difference is that, as far as getting paid as a prime, when working for public clients, the State has a good policy for payment, especially for certified small businesses. If an invoice goes beyond 30 days without payment, the State will pay interest. We've been paid that interest many times." Interviewee #1 said that public clients may not be prompt in payment, but they hold up to their end of the payment contract. He said "that for most private contracts, the profit margin is a little bit less" than for public contracts.

Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that "our goal is to go more private, because private work is steadier. With public work, there's no guarantee that we'll win the bid in the next three to five years when it goes up for bid."

Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that, "In my experience, private work pays better [than public sector work]. You make more profits, and you're paid quicker."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said, "When we do [work] in the private sector, work goes out to select bidders list. You don't have the incompetent people there. One of the things that happens in the public sector is that you're constantly fighting over change orders. In the private sector, the contractor can try to bleed every nickel they can out of the owner, and the net result is that they don't get another job in that particular industry. It forces a more honest relationship." He said that "there can be" a difference in profitability between the sectors, "depending on the type of project."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that working in the public sector versus the private sector is "very different:" Interviewee #6 said, "It's the same kind of work, but it's the way the contracts are structured and the paperwork is quite different. In the private sector, if I give them a fee, that's good enough for them. A lot more scrutiny is involved in public work and things like insurance requirements have to be met. It's a lot of paperwork." Interviewee #6 stated, "The needs are quite different [between the two sectors]. In the private [sector], people don't need as much detail. There are a lot of regulations in public work." Interviewee #6 said that the profitability is slightly better in the private sector.

Interviewee #BGP7, the owner of a white male-owned SBE-certified landscaping business, reported that he believes the private sector is more profitable than the public sector.

Interviewee #7 stated, "There's lots of work in my industry — there's never a shortage of work. Where I find a shortage is in pricing. … Everybody, it seems to me, is dropping their prices."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said, "The public sector has their own … established procedures … . [The private sector is] pretty dependent on us to tell them what the requirements are going to be and what they're going to have to comply with to have a successful project … . The public sector typically has that awareness already." He stated, "[The public sector has] budgets that are dependent on taxes and when taxes go down, their budgets go down and they cut projects. The private sector usually doesn't begin a project until their funding [is] in place." He said, "It may be a little harder [to obtain work] in the public sector because in the public sector they require an … open bidding process so … you end up with more competition." He also said that it's sometimes more difficult to do work in the public sector due to security constraints when they exist.

Interviewee #BGP10, a principal at an engineering firm, reported that work in the private sector typically has "higher profit margins [and] significantly less paperwork." He said that private sector work is "significantly more volatile," and there is a high "likelihood of not getting paid if you don't work for the proper client." He said public sector work involves significantly more paperwork and low profit margins, but the work is "more stable, and payment is invariably slow but certain."

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that business is "more risky with [the] private [sector]" in terms of payment, but they did not think that there was a significant difference in terms of profitability between the two sectors. They stated, "Both are real competitive right now. On municipal projects, the inspection and specifications are better enforced." Interviewee #12 stated that it is easier to learn about work opportunities in the public sector than in the private sector. They reported that they receive notifications concerning bidding opportunities from the Los Angeles Department of Public Works, commenting that "their new ERSP program … is fantastic." They added that Caltrans also "has a terrific website and notification program," and "even the County of Santa Rosa … A lot of the municipalities are very, very good. They're getting up to speed." They said that in the private sector they learn about most work opportunities "because a contractor will notify" the company, but "private projects are much more difficult to find."

Interviewee #BGP13, the owner of a non-certified construction firm, said that he prefers working in the private sector because "bonding has become very stringent right now, and there's not as big of [a] bonding requirement in the private sector, … so it's giving us a little bit more access in the private sector versus the public sector. … I'd say ever since … 2008 into 2009, bonding companies became very stringent on their requirements as far as bonding capabilities, [regardless] of your history." He stated that bonding requirements seem "to be loosening up a little bit" as the economy improves. He stated that "there's a little bit more paperwork on the public side than on the private side."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that he prefers to work in the private sector because "there are a lot less hurdles to jump through." He stated that "public [jobs are] usually are less profitable. The private ones are more profitable." He reported that "usually, [the company has not] had a problem in getting paid in

either" the public or private sector. He said that in the public sector there are "sometimes … more hurdles … to getting paid, but you know that going in." He said that there is "not notice" about job opportunities in the private sector. He said that companies learn of opportunities through "work of mouth" when a company will "solicit usually the manufacturers to recommend dealers." He said that the public sector advertises opportunities and provides bid information on the entities' websites. He added that the company "get[s] a lot of information from those [websites]." He continued, "That's why public [sector work] is more readily available right now, because it's posted, whereas the private [work], it's not that way." He said that private sector work is comprised of more design-build projects, and the public sector work is comprised of work building to a pre-determined design that is "all spelled out." He continued that in the public sector, the company gives the entity what it wants "even if it's something that we know could be better in [a] certain area. … You really can't change it. You can try adding change orders to it, but they don't want to change pricing, so" this is usually not effective.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, stated that work in the public sector is advertised more.

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that it might be easier for minority contractors to obtain work in the public sector and it might be easier to advocate for minority contractors in the public sector. He said, "It's always in the back of my mind that it's easier … with public money because there are so many people you have to hold accountable in the private sector."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, stated that it is easier for his members to obtain work in the private sector than the public sector. He said, "The private sector [is] built on relationships so it would depend on the relationships that they would have with the private sector and we have a strong relationships in the private sector." He stated that the private sector is more profitable and easier to perform work in than the public sector because there are fewer requirements.

Other interviewees reported similarities in securing or performing work in the private and public sectors. [Interviewees #BGP: 3, 9, 11, 13, 16]. Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said profitability is about the same between the private and public sectors.

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, indicated that there was no difference between working in the public versus private sector as far as work type, role or price. Interviewee #9 said, "We price them all the same. We don't care if they're public of private."

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that payment does not vary significantly between the public and private sector. He stated that "there are certain carriers … that are a little late in their payments," but he said that did not notice a big difference between the public and private sectors.

Interviewee #BGP13, the owner of a non-certified construction firm, reported that notification regarding work opportunities is "approximately … the same" in the public and private sectors.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that he thinks that certainty of payment is "about the same" in the public and private sectors.

Anecdotes regarding businesses acting as prime contractors and subcontractors.

Some interviewees reported principal work as a prime contractor due to the nature of the firm's work, a general preference for performing work as a prime contractor or other reasons. [Interviewees #BGP: 1, 3, 7, 9, 14, 16]. Interviewee #BGP7, the owner of a white male-owned SBE-certified landscaping business, said that his firm always works as a prime contractor and never uses subcontractors. He said, in general, the projects on which his firm works are too small to include subcontractors.

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, said they act as a prime, because "We're in a specialty trade, and usually they're just asking for that particular project. For a security system, they're going to go directly through us." Interviewee #9 said that "the only time we are subs is when they put our work under a giant construction project."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that the company is "a little too small to act as a prime in a lot of these cases in the public [sector] unless [the project is] based on specific criteria." He said that the company "almost always" acts as a prime contractor in the private sector.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that approximately 75 percent of the firm's work is performed as a prime.

Other interviewees reported principal work as a subcontractor due to the nature of the firm's work, a general preference for performing work as a subcontractor or other reasons. [Interviewees #BGP: 2, 4, 8, 10, 11, 13, 15, TA #2]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that the firm works primarily as a subcontractor because engineering firms working in acoustics typically work as consulting engineering firms for relatively small portions of the overall project.

Interviewee #BGP10, a principal at an engineering firm, reported that the firm acts as a subcontractor almost all of the time because its work is so specialized. He added that agencies often want one contact, but larger architectural or engineering firms, often do not perform the kind of very specialized work that his company performs, so the large firm will subcontract out specialized portions of the project, and there may be two to 20 firms on a team working with the prime depending on the size of the project.

Interviewee #BGP13, the owner of a non-certified construction firm, reported that his company works as a subcontractor approximately 75 percent of the time and as a prime contractor 25 percent of the time. He stated that her prefers the role of a prime contract, and the firm often takes on the role of prime because the company's "overhead costs are a little bit lower … because even when we're prime, we're still performing the electrical. It just seems that there is a little bit more cash flow when we're a prime versus a subcontractor being totally dependent."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she primarily takes on the role of a subcontractor because of her company's "size" and because "for the City of Los Angeles … the Port of LA, and the airport," there is no MBE/WBE requirement if a project is "under … $150,000."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, stated that its members work almost exclusively as subcontractors because of the type of their trades.

Several interviewees reported having worked with an MBE/WBE/DBE prime contractor. [Interviewees #BGP: 4, 5, 8, 10, 14, 15, 16, TA #2]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that there was no difference between working with MBE/WBE/DBE primes compared with non-MBE/WBE/DBE primes.

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that working with an MBE/WBE/DBE prime contractor is no different than working with other firms. He said, "I haven't noticed any difference. …There's nothing that stands in my mind as being significantly better, different, or risky. … I would not hesitate to work for [MBE/WBE/DBE firms]."

Interviewee #BGP10, a principal at an engineering firm, reported that the firm has experience working with an MBE/WBE/DBE prime contractor, and that experience is similar to working with other non-certified firms.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that the company has worked with MBE/WBE or DBE primes and said that the experience was the same as working with a non-certified firm.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she was familiar with MBE/WBE/DBE prime contractors and has always had "very good relationships" with them. She said that sometimes these companies are her "clients, and other times, they're [her] competitors." She said that she has "a lot of respect for the ladies," and she thinks that "it's fantastic."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that he is aware of MBE/WBE/DBE prime contractors, and although he cannot remember a particular instance, he thinks that the corporation has worked under an MBE/WBE/DBE prime contractor.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that its members have most likely worked for a certified prime or general but he cannot think of a specific example.

Other interviewees reported having limited to no experience working with an MBE/WBE/DBE prime contractor. [Interviewees #BGP: 6, 11, 12, 13]. Interviewee #BGP6, the president and

marketing coordinator of a WBE-certified engineering firm, said, "We don't know very often if [primes] are MBE or WBE[-certified]. Many of the primes that we work for are huge corporations, so they're probably not going to be an MBE/WBE."

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that he was aware of MBE/WBE/DBE prime contractors, and the company has submitted bids to work with these contractors, but so far, the company has never worked with an MBE/WBE/DBE prime contractor.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, reported that the company does not ask primes whether they are MBE/WBE or DBE certified, so they would not know if they have done business with a certified prime contractor.

SDCRAA Anecdotes Regarding Public and Private Sector Work

The following anecdotes regarding work in the public and private sectors were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

Private sector work experience.

Some interviewees reported success for minority- and female-owned firms in the private sector. Interviewee #SD16, representing an African American male-owned firm, indicated that most of his firm's work comes from the private sector. Interviewee #SD20, representing an Asian American male-owned firm, and Interviewee #SD5, representing an African American male-owned firm, both also indicated that their firms are successful in the private sector.

Interviewee #SD20, representing an Asian American male-owned firm, said that bidding on public work requires a well developed system and a well established support staff to find projects and put together proposals. As a result, he said that private work might be is easier for MBE and WBE firms (that tend to be small) than public work.

Some interviewees indicated that there is more flexibility and greater profit potential in the private sector. Interviewee #SD24, representing a white male-owned firm, stated that the profit potential is much higher in the private sector than in the public sector: "Private work is more profitable because the rates are better. Public work requires more effort to win the work and the rates are not as good." He went on to say that bids are so low in the public sector in the current market that being profitable is even more difficult.

Interviewee #SD20, representing an Asian American male-owned firm, also said that profit potential is higher in the private sector but said that payment problems are also much more common compared to the public sector.

Interviewee #SD17, representing a white female-owned firm, said that over 60 percent of her firm's business comes from the private sector. She said that although "public work is more consistent," private work tends to be more profitable.

Interviewee #SD42, representing a white male-owned firm, suggested that work in the private sector is more profitable than in the public sector, but he noted, "Profitability depends on the contract."

Interviewee #SD45, representing a white male-owned firm, indicated that profitability is higher in the private sector than in the public sector due to there being far fewer contract requirements in the private sector.

SDTA #7, representing a construction trade organization, reported that private sector work is easier than public sector work, because it tends to be less structured: "In general, there is more flexibility for contractors working in the private sector." He went on to say that the bureaucracy in the public sector makes it more difficult for firms to maneuver.

Other interviewees reported that there are no consistent differences between working in the private and public sectors. Interviewee #SD21, representing a white male-owned firm, indicated that profitability used to be better in the private sector, but that today the profitability of the private and public sectors is comparable. However, he pointed out that doing work in the private sector is riskier than doing work in the public sector, primarily because of non-payment issues.

Interviewee #SD40, representing a white male-owned firm, indicated that the profitability of the private and public sectors changes often, so one it is not consistently more profitable to work in one rather than the other: "The way San Diego works is that the public is never doing as good as the private and then it switches. If you can work on both sides of the fence you can sustain yourself here … If you are locked into one sector, your roller coaster will have much larger dips."

Some interviewees said that MBE and WBE firms participate less in private sector work. Interviewee #SD2, representing a white female-owned firm, reported that only 10 percent of her work comes from the private sector. Similarly, Interviewee #SD14, representing a Hispanic American male-owned firm, explained that only 20 percent of his business comes from the private sector. He went on to say that his firm prefers not to work in the private sector because of a number of barriers that MBE and WBE firms face, including: exclusion from the "Good Old Boy Network", rampant bid shopping, and the private sector's disregard for MBE/WBE status.

Interviewee #SD47, representing an African American female-owned firm, said that MBE/WBE firms have a more difficult time succeeding in the private sector due to racism and stereotypical attitudes: "… the private arena is culturally biased. We thought we didn't fit in from a race and gender perspective — we definitely don't fit in the private sector. You look at these large corporations, the big hotels that you see — they're not trying to see [MBE/WBE firms succeed]. If we don't have a tray in our hand, if we're not in a serving capacity, then we're invisible."

Some interviewees reported that it is more difficult for minority- and female-owned firms to be successful in the private sector due to the non-existence of DBE goals. Interviewee #SD21, representing a white male-owned firm, remarked that DBE status does not play a role in the private sector, making it more difficult for minority- and female-owned firms. When asked why that is the case, Interviewee #SD21 replied, "On the private side, it's all strictly low bid type stuff. It's dollar driven."

Interviewee #SD20, representing an Asian American male-owned firm, said that in the private sector low bids and personal connections play a much larger role in winning contracts than MBE/WBE status.

Interviewee #SD30, representing an African American male-owned firm, explained that his minority status does not help his firm get work in the private sector: "Private work really [comes down to] who [the prime contractors] know, and who has the best price." He went on to say, "My experience in the private [sector] is that they really just want the best bang for their buck. They just want a good product in the end."

Interviewee #SD32, representing an African American male-owned firm, indicated that DBE status does not play a role in contract awards in the private sector: "I've never seen a contract just because they were minority-owned or a DBE in the private sector.

Public sector work experience.

Several minority- and female-owned interviewees reported success in the public sector. Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the San Diego Airport, indicated that she has had great success in the public sector operating six concessions at there. Similarly, Interviewee #SD9, representing a minority female-owned firm that is a concessionaire at the Airport, and Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, both reported success working there.

Interviewee #SD20, representing an Asian American male-owned firm, said that, compared to the private sector, finding out about projects is easier in the public sector and contract awards are fairer: "[The public sector process] is more open, more transparent. [Agencies] understand that because it's public money, they have to select a group of consultants or contractors that's qualified, based not solely on price. They put more emphasis on the qualifications of the team that does the work." Interviewee #SD20 went on to say that as a result of the current recession, most of his firm's work comes from the public sector.

Interviewee #SD28, representing a white female-owned firm, indicated that establishing relationships with prime contractors in the public sector is crucial to getting work in the future and allows small firms to be successful in the public sector: "Once you get that bond with [certain prime contractors] a lot of them don't even call around for [other bids]."

A few interviewees reported that projects in the public sector tend to be more profitable than projects in the private sector. Interviewee #SD19, representing a white male-owned firm, said that "public jobs are more profitable [than private sector jobs]." She went on to say that the one exception to that claim is if the private sector client is a large company.

Interviewee #SD31, representing a white male-owned firm, said that public sector projects with prevailing wages are more profitable than both other public sector projects and private sector projects (which are comparable in profitability). However, Interviewee #SD31 estimated that prevailing wages apply to only half of the public sector projects on which his firm works.

A few interviewees reported that minority- and female-owned firms are not successful in the public sector. Interviewee #SD21, representing a white male-owned firm, said that it is "very, very difficult" for MBE and WBE firms to remain competitive in the public sector because they tend to be smaller and less established than majority-owned firms. He went on to say that DBE certification does not help either, because DBE goals are no longer mandatory: "I don't think [DBE status] comes into play."

Interviewee #SD5, representing an African American male-owned firm, reported that although he used to have success in the public sector, he is yet to win a public sector contract since reopening his business in 2006.

Interviewee #SD33, representing a Hispanic American male-owned firm, reported that his firm's public sector work is decreasing. A number of agencies have reduced the frequency with which they use his firms services (e.g., the Port Authority and the City of San Diego).

Some interviewees indicated that public sector work is very competitive as a result of the current recession. SDTA #7, representing a construction trade organization, indicated that there is increased competition in the public sector: "There was one bidders list the other day that had 43 bidders on it!" SDTA #7 went on to say that increased competition would affect small firms more than the larger firms, because they are "the weakest financially."

Consistent with those comments, Interviewee #SD11, representing a white male-owned firm, also indicated that public sector work has become quite competitive recently: "We are having 20 to 25 bidders on our work where we used to have seven. Work has slowed down as a result of the economic downturn."

Interviewee #SD28, representing a white female-owned firm, explained that the current recession has resulted in increased competition in his firm's sector: "Where it used to be [that] there were three main players [in the firm's industry], now there are five or six."

Interviewee #SD6, representing a white male-owned firm, indicated that the public sector is "extremely competitive." He explained that his firm was the second-lowest bidder on 13 projects in the past year, and in all cases their bids were less than 1 percent higher than that of the lowest bidder and they did not win any of those projects.

Interviewee #SD18, representing a white female-owned firm, said that the market is very competitive and that price is very important, particularly in the public sector: "Service does not tend to be a value added for this industry."

Interviewee #SD37, representing a white male-owned firm, reported that the current market has resulted in increased competition in his firm's industry. He noted that the residential market has slowed down and that the contractors who previously worked in the residential sector are now entering the commercial, industrial and government markets.

Interviewee #SD41, representing a white male-owned firm, explained that private sector opportunities have dried up dramatically and that firms that used to bid on private sector work are now bidding on public sector work, increasing the amount of competition in the public

sector. He went on to say that many of those firms do not have experience bidding on public sector work and their bids are too low to be profitable: "People are bidding 10 to 15 percent below my costs … my bare minimum costs!"

Interviewee #SD38, representing a Hispanic male-owned firm, also reported that there is more competition in the current market. He described a recent bid that his firm submitted: "Competition is higher … We bid [a project at a local high school] … There were 21 general contractors [bidding]."

Interviewee #SD43, representing a Hispanic male-owned firm, reported that the current recession has made it difficult for small firms, because there has been a steep increase in competition, which has in turn increased the probability of her firm being outbid. She went on to say that the increased competition means that firms have to exceed clients' expectations in order to compete for jobs with them in the future.

Interviewee #SD46, representing an African American male-owned firm, indicated that, due to the current economic conditions, his firm now competes for public sector work with a number of firms who previously only worked in the private sector. He said, "Times are tough right now — it's the economy."

A few interviewees cited complex bid procedures or restrictive contract specifications as a barrier to doing work in the public sector. Interviewee #SD3, representing a white male-owned firm, said that the bidding process for public agencies takes some sophistication. Interviewee #SD21, representing a white male-owned firm, commented that the bidding procedures in the public sector "… could be a barrier to an inexperienced entity. They're complex and … difficult."

Interviewee #SD28, representing a white female-owned firm, said that the primary difference between the private and public sectors is that working in the public sector requires firms to follow more stringent guidelines and restrictions. She remarked, "You have to jump through some different hoops [in public sector]."

Interviewee #SD31, representing a white male-owned firm, stated that the biggest differences between working in the private sector and working in the public sector are that in the private sector firms do not have to deal with bonding nor do they have to deal with "idiotic RFPs." Regarding contracts and RFPs, he said, "I find that many of these things are written by lawyers who don't know electricity from wind, and they put such stupid things in the contracts … they've got informed attorneys sticking their nose where it doesn't belong."

Interviewee #SD32, representing an African American male-owned firm, reported that dealing with the contract specifications of government projects can be difficult for new firms: "I would think it's really difficult for a new emerging … company to come in and meet the requirements that the government sets forth. Typically, you get a contract and you get a book that's four inches thick full of specifications." Comparing public sector work to private sector work, Interviewee #SD32 said that there are "a lot more hoops to jump through" in the public sector.

Interviewee #SD43, representing a Hispanic male-owned firm, indicated that contract specifications in the public sector can be "difficult to deal with."

Interviewee #SD44, representing a Hispanic male-owned firm, stated that his firm rarely sells products to public agencies — he said that 99 percent of his firm's business comes from the private sector. He indicated that doing public agency work requires more personnel and a well-established system: "It's just a different animal [working with public agencies]. We're not set up to do that right now. … We don't have the manpower to do it."

Interviewee #SD45, representing a white male-owned firm, stated that there is a great deal of subjectivity in how public sector staff interprets contract specifications and regulations. Interviewee #SD45 described an experience he had working with Caltrans: "When they took all their requirements and punched them all down here in District 11, we had people that interpreted the rules by their own means. It's almost a fiefdom — like a third world country down here. You have a Green Card running the engineering for minor B-contracts. The one underneath him is a Green Card from the Philippines. The guys who are emptying the trash cans are the certified Caltrans engineers who can build bridges. It's so upside down." He went on to say that "…regulations are written for somebody in the industry who understands them. It's not for … idle interpretation."

Interviewee #SD46, representing an African American male-owned firm, reported that firms have to meet more requirements to win public sector work compared to private sector work: "The public sector requires more qualifications than the private sector. You have to be licensed, insured and bonded. In the private sector sometimes those are not a requirement."

Interviewee #SD47, representing an African American female-owned firm, said that the relationship that a firm has with a contracting officer goes a long way in determining the firm's success with the public agency. She said that much of the bid process in the public sector is subjective and a lot of it is dependent on how the contracting officer feels about a particular firm: "[Contracting officers] can change your life, change your business — help propel it to be successful, cause it not to be successful. They have so much power and authority. If they are of poor character in any capacity — if they are racist, or bigoted, or anything, they can dictate where your business is going to go, and I think that's unfair."

Some interviewees cited extensive paperwork as a barrier to doing work in the public sector but others cited it as a feature. Interviewee #SD11, representing a white male-owned firm, indicated that extensive paperwork in the public sector impedes success: "The biggest barrier for bidding public works is the huge amount of paperwork that public agencies require … A few of my friends have companies but they won't do public work because of the paperwork …"

Interviewee #SD41, representing a white male-owned firm, said, "Public projects are more paper heavy. You have to submit cut sheets on everything and anything — lots of checks and balances. The public has its own specifications for each job. You have to read the specs in their entirety. That could mean 250 to 1,000 pages. There is a lot of up front work." He continued, "Bidding on the public [sector], it separates the men from the boys …"

In contrast, Interviewee #SD16, representing an African American male-owned firm, said that the extensive paperwork is an advantage to working in the public sector: "I really like the paper work game with the public work. It eliminates the possibility of doing something wrong. Everything is documented."

Interviewee #SD37, representing a white male-owned firm, said that public sector projects are described in much more detail than private sector projects, making it easier to complete the work: "Larger public jobs usually have a more complete set of plans or engineered drawings, so you know exactly what you're going to build when you bid on it. Private jobs rarely have drawings and it will just be a verbal scope of work. The private [sector] will provide us with specifications along the way, but we figure out how we're going to build it."

Interviewee #SD40, representing a white male-owned firm, reported that public sector work is generally more difficult than private sector work: "Public projects have more politics and you have to be patient — there is a broader audience to please and things don't go as fast as you would like. He went on to say that there is also less flexibility in the public sector than in the private sector.

Interviewee #SD46, representing an African American male-owned firm, reported that there is a great deal of paperwork involved with public sector work, and that it can be difficult for firms to learn: "You learn the paperwork while you're doing the job. There's no training for what you haven't done paper wise." He continued, "Paperwork can be a problem. The general cannot get paid until the sub's paperwork is together. The sub doesn't want to do the paper work because they're bombarded." Interviewee #SD46 indicated that his firm often does paperwork on behalf of subcontractors.

Interviewee #SD47, representing an African American female-owned firm, said that, compared to private sector work, there is much more paperwork associated with public sector work. She said, "[In the private sector] you do a job walk, you give them a quote, they give you a contract, you do the work, you bill, and you get paid. The public sector is paperwork and huge contract. There's always some kind of code, FAR regulations with the feds …."

DBEs as prime contractors.

A few MBE firms indicated that they often work as prime contractors. Interviewee #SD14, representing a Hispanic American male-owned firm, reported that approximately half of his work comes as a prime contractor. Similarly, Interviewee #SD20, representing an Asian American male-owned firm said that over half of his work comes as a prime contractor. Interviewee #SD43, representing a Hispanic male-owned firm, said that her firm works almost exclusively as a prime contractor.

Interviewee #SD5, representing an African American male-owned firm, said that he prefers to work as a prime contractor, because it allows him to control his own money, deal directly with agencies and owners, and be the first to get paid. Of his work as a prime contractor, Interview #SD5 remarked, "[Working as a prime contractor is] more responsibility but better circumstances for me."

Several interviewees were able to name successful minority and female-owned firms that work as prime contractors. Interviewee #SD21, representing a white male-owned firm, indicated that there are a number of minority-owned firms working as prime contractors in the San Diego area: "There are numerous highly qualified, motivated, and financially able black and

Latino contractors in Southern California." Interviewee #SD21 went on to specifically name a female-owned firm with which his firm has worked in the past.

Interviewee #SD14, representing a Hispanic American male-owned firm, said that he has worked with MBE/WBE prime contractors and has had good experiences with them. Interviewee #SD26, representing a white male-owned firm, named a Subcontinent Asian American-owned firm that he described as "one of the best project managers I have ever worked with."

SDTA #6, representing an Asian American trade association, reported having at least a few members that work as prime contractors and specifically named a minority-owned engineering firm. Similarly, SDTA #4, representing a local chamber of commerce, was able to name a successful minority-owned construction firm that works as a prime contractor in the San Diego area.

Interviewee #SD28, representing a white female-owned firm, said that her firm has worked with a few MBE/WBE prime contractors. She went on to say that working with those contractors is not any different from working with non-DBE prime contractors. She reported that the only difference is that MBE/WBE prime contractors tend to be more understanding of her firm's position as a WBE firm: "I think [MBE/WBE prime contractors] understand a little more about what we're going through [as a DBE firm]."

Other interviewees had trouble naming minority- and female-owned prime contractors. When asked if he has worked with other minority- or female-owned prime contractors, Interviewee #SD14, representing a Hispanic American male-owned firm, said, "not a whole lot." Similarly, Interviewee #SD20, representing an Asian American male-owned firm, could not think of any examples of minority- or female-owned prime contractors with which his firm had worked, and he said that he was confident that his firm had never worked with a minority- or female-owned prime contractor on a large project.

Interviewee #SD2, representing a white female-owned firm said that her firm "rarely" works as a prime contractor.

Interviewee #SD30, representing an African American male-owned firm, indicated that there are only a small number of minority- and woman-owned firms in the San Diego area: "There's not really a lot [of MBE/WBE firms] in San Diego … I'm sure that has a lot to do with the small percentages [of minorities in San Diego]." He went on to say that he has never worked with an MBE/WBE prime contractor.

SDTA #1, representing a local chamber of commerce, indicated that he could not think of a single successful minority- or female-owned firm that worked as a prime contractor in the San Diego area.

Interviewee #SD43, representing a Hispanic male-owned firm, reported that she could not think of any successful MBE/WBE prime contractors in the construction industry besides her own.

Some interviewees indicated that firm size is a barrier to minority- and female-owned firms working as prime contractors. Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, said that given the size of competing firms, it is unlikely that a minority- or female-owned firm could be successful as a prime contractor in his firm's industry.

Similarly, SDTA #1, representing a local chamber of commerce, expressed his belief that most minority- and female-owned firms are too small to be successful as prime contractors: "My bias is that [minority- and female-owned firms] are generally not [large enough]."

Consortium Anecdotes Regarding Public and Private Sector Work

The following anecdotes regarding work in the public and private sectors were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Private sector work experience.

Some of the minority- and female-owned businesses interviewed reported at least some success in the private sector. [Interviewees #CON: 1, 2, 9, 11, 13, 17 18, 19, 20, 21, 22, 23, 27, 28, 29, 30, 34, 35, 36, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 49, 50, 51, CONTA #1, 2]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that they do very little advertising in the private sector because their product is based on their reputation; they pride themselves on doing a quality job, paying their employees a fair wage, and always getting the referral and call-back. He stated that 95 percent of their business is repeat customers or referrals.

Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that people are more open minded and willing to give minority consultants a shot in the private sector. However, Interviewee #CON2 stated that the market is going through a tough economic cycle and the industry is reflective of that. Interviewee #CON2 stated that his status as a minority business owner does not affect his business in the private sector. He said that the market has been the biggest factor. He said that his business began to feel the market slowdown in 2007. He does not believe that the impact of the current economy is any different for minority or non-minority business owners. Interviewee #CON2 stated his experience in the private sector has been mixed. He has been able to obtain a few of the kinds of projects that he would like work on. He stated that it is 50-50; he reported that this primarily has to do with him operating a new, small firm. He said that it is hard to break into the market and compete. Interviewee #CON2 stated that the most challenging issue is the marketing and networking. He stated that the best thing to do would be to hire a marketing firm, but that would come at a huge cost. He stated that it is hard to do the work and marketing at the same time.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that they like to work in the private sector, because, in general, the work is more profitable. However, the profitability in the private sector fluctuates with the economy.

Interviewee #CON11, an SBE-certified Caucasian female ergonomic prime consultant, stated that work in both the private sector and the public sector is "great."

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that the actual work in the private sector and the public sector does not feel different. He stated that in the private sector, there is not as much scrutiny on his rates.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that her experience in the private sector has been positive.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, indicated that working in the private sector, her work has been largely with non-profits and 501(c)(3) organizations with transportation project components Those experiences have been very positive because by the time those companies find Interviewee #CON18, they are in desperate need of assistance. Her work in the private sector is not much money, but the work has been steady over the years.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, reported that her business has been very successful in the private and public sectors.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, has worked in the private sector and she has been successful.

Interviewee #CON29, an African American male-owned electrical contractor, stated that all of his business comes from the private sector; he works primarily on residential and commercial buildings. He stated that he has been successful in business for the past 21 years and has a steady flow of work. He stated that his business comes from referrals from contractors.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he has been successful in the private sector.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that she has been somewhat successful in the private sector. She characterized her experience as "okay." She stated that the private sector does not utilize her company's services. She stated that there are big barriers to working in the private sector and the payment policies are horrible.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that she has been successful in the private sector; she stated that after years of working with a Southern California utility company, the relationships that she has developed are strong and lead to more work.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she has been successful in the private sector, but noted that she "might not get paid."

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that his first 10 years working in the private sector were very good. He stated, however, that recently project opportunities have been slow.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, reported that he has definitely been successful in the private sector. He stated that he is even happier about the recent changes including that young people are getting into positions of power and looking at things differently. He stated that he is tired of the "Good Old Boy Network." He recalled getting a contract and walking into a room at a treatment plant. He stated that the whole room became very quiet and that made him nervous; one of the men shouted: "We do not need any more minorities!" He informed the men that he was on the project and that was not going to change. He stated that this has been a way of life for him but he is tired of it.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, reported that she has been successful in the private sector, but noted that her success is dependent upon the economy; when the economy is good she is successful.

Interviewee #CON44, a DBE/MBE/SBE-certified African American male owner of a financial planning services firm, stated that he has had a positive experience working in the private sector. He reported that he is always looking toward the future and at new contract possibilities.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that he has had a decent experience working in the private sector but noted that there is always a battle to receive payment in the private sector; he stated that they want the work done but they do not want to pay for it.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that he has had some success working in the private sector but stated that prime contractors in the private sector want to make their own rules.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, reported that most of his work comes from the private sector. He stated that he has to work harder in the public sector than in the private sector and the rates are "not too good" but he does feel as though he has been successful.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that he has been successful working in the private sector. He indicated that he has seen more success in the private sector over the past two years than he has in the public sector.

CONTA #1, the President of the Latino Business Owners of America, stated that most of his members work in the private sector. A few of his members will mix their private sector work with 10 percent public work. Generally members have experienced more success in the private sector. Members often have a better understanding of the private sector, how they can get paid and work on more than any one large project. CONTA #1 identified several differences between public and private sector work. He stated that projects in the private sector can be large and that

private sector contractors or owners have no problem working with DBEs. There are a multitude of different projects that his members can do in the private sector. Also, members can get involved in private sector projects more quickly. Interviewee CONTA #1 stated that the private sector is more open because the people making decisions are not as restricted as government staff.

CONTA #2, the President of the Black Contractor's Association, stated that members enjoy the private sector because they are timely paid in the private sector. He stated that subcontractors are paid according to the contract schedule instead of 30-60 days after schedule and after having financed the job. He stated that members are placed in a bad situation if they are required to finance a job before receiving payment.

Some minority- and female-owned businesses reported negative experiences in the private sector. [Interviewees #CON: 14, 25]. Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that the private sector is disadvantaged by budgeting and micromanaging and by the "stakeholders" in the community. Interviewee #CON14 also stated that there is more volatility in the private sector. He stated that the "politics" in the private sector consist of people from the same background. He stated that there is more "backstabbing" in the private sector. Interviewee #CON14 described the difference between the public and the private sectors by stating that in the public sector people "cover their butt" whereas in the private sector people "cover their back."Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that he did some work for a private firm but it came with a lot of difficulties.

Some DBE interviewees felt they were unsuccessful in the private sector or had limited experience working in the private sector. [Interviewees #CON: 4, 10, 15, 16, 24, 26, 31, 32, 41]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, explained that he does not typically receive private work from a prime contractor reaching out to him, without some contacts. For instance, the private developer that he is working with now came to him because the developer was referred to Interviewee #CON4 by someone from the San Diego Port District who also knew Interviewee #CON4 well. Interviewee #CON4 stated that in 1979 he did work in the private sector. He initially began with clients that he had worked with previously in other jobs. In the beginning it was not that difficult to obtain work in the private sector, but in the mid 1980s a lot of the large firms that traditionally used to be located in Los Angeles started opening branch offices so there was a lot more competition and it became more difficult to obtain private sector jobs. Interviewee #CON4 also stated that marketing for the small company was not on the top of his priority list, so he would try to do business development only when he had time. He found it more difficult to obtain business and decided to switch and concentrate more on the public sector. Interviewee #CON4 stated that his company still does about 1 percent in the private sector. Interviewee #CON4 stated that he cannot really say whether there are any differences between public sector and private sector work because he does so little private sector work. Interviewee #CON4 stated that he does not really pursue private sector work so he has little experience being used on private sector projects.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, did not have any experience working in the private sector.

Interviewee #CON15, a Hispanic American male owner of an MBE-certified engineering and construction company, stated that in the private sector, a lot of his work depends on the contacts of his company and who he knows.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, noted that working in the private sector is not profitable for his business. He also stated that because the business serves in a niche capacity, companies in the private sector do not care whether you are a DBE or a minority. According to Interviewee #CON16, working in the private sector is basically a price game.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that she has had very little success in the private sector.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, reported that she does not do any work in the private sector.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that right now business is slow. He stated that commercial liability insurance is extremely high and [it is difficult] to be able to pay that with things being as unstable as they are with the current economic situation. He said it is been like this almost as long as he has been in business after the economic decline following the September 11, 2001 tragedy. He feels he is capable of doing the work, but he just is not getting a fair chance at showing that he can do the work.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that he does not have any experience working in the private sector.

Most white male-owned businesses reported success in the private sector. [Interviewees #CON: 7, 8, 52, 53, 54, 55, 56, 57, 58]. Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that in the private sector a business' ability to obtain work is all about competence. Interviewee #CON7 thought that general contractors or owners do not care that a business is minority-owned if the job is performed right. In the public sector, however, Interviewee #CON7 stated that there are goals and contracts that hinge upon whether you are a minority.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that working in the private sector is "excellent" because goals and objectives are clearly defined; deliverables are clearly defined and direction is clear and succinct.

Interviewee #CON56, a white male owner of a small electrical contracting firm, reported that they have had good experiences working in the private sector. He stated that they are continuing to improve and there is tremendous room for growth.

Interviewee #CON58, a white male owner of an engineering consulting firm, reported success working in the private sector. He reported that they have offices and consultants in multiple locations and felt as though they have been very successful.

Public sector work experience.

Most of the minority- and female-owned businesses interviewed reported some success obtaining public sector jobs. [Interviewees #CON: 1, 3, 4, 9, 12, 13, 17, 18, 19, 20, 22, 24, 25, 26, 27, 28, 30, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 49, 50, WT #1]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that they do work for some governmental agencies and these agencies repeatedly call them because they do quality work and they do not overcharge. Interviewee #CON1 stated that every time he has tried to bid a municipal job, he has run into numerous obstacles. He provided an example when a non-Consortium agency was bidding out too large a scope of work for the problem presented. In another instance, Interviewee #CON1 discussed a situation where the non-Consortium agency was requiring certain license requirements that were not appropriate for the work required. Interviewee #CON1 characterized this as a lack of knowledge and has prevented him from trying to bid on public sector projects.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that most of his public sector work is for local agencies, including the city and county of San Diego. He stated that his company does a fair amount of work for the San Diego County Water Authority and a little work for the Port District and some public school projects. Interviewee #CON4 stated that his company has been successful in public sector (non-Consortium jobs) because over the years he has been able to establish working relationships with a lot of the prime firms. The prime contractors already know his company and what he can do and they feel comfortable with Interviewee #CON4. Interviewee #CON4 stated that after his business was certified by Caltrans in the 1990s he tried to shift his focus to public sector work. When he first started in 1979, his company did more residential work. Today, however, his company does 99 percent public work. Interviewee #CON4 stated that it is a lot easier to deal with the owner agencies rather than private developers because with private developers you never get a good feeling about what their expectations are whereas with the owner agencies the scope of work is well defined and they tell you exactly what they want so you prepare your proposal based on what they want.

Interviewee #CON4 stated public sector work is a lot easier and he enjoys the work better than private sector work. Interviewee #CON4 stated that his current private sector work involves improvements in two existing marinas to include putting in land site improvements, buildings, parking lots etc. On the public sector side, Interviewee #CON4 stated that his company has developed a reputation in the arena of underground utilities, and does a lot of work related to water, waste water, recycled water, pipelines, pumping stations, and all sorts of work related to storage and transportation of water. Interviewee #CON4 stated that there is no difference in the private or public sector jobs in terms of whether he is a sub or prime, in either sector, he is generally a subcontractor. Interviewee #CON4 stated that the scope of the work is generally the same whether it is the public sector or private sector. He said that he still has to go through the same steps in terms of collecting data to examine and make samples of the soil, and then test them in the laboratory and do engineering analysis. He explained, the steps are the same but what you may be looking for is different. In terms of the amount of the contracts, he stated the private sector projects were generally small residential projects (like a single family residence or subdivision) and the public sector projects can be a higher dollar value and last longer.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that most of their work comes from the non-Consortium public sector. He stated that in the public sector, the work is also good although the work is generally not as profitable and payment can be slow. Interviewee #CON9 stated that, in general, his experience on Consortium projects is the same as his experience on other public sector projects.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that in the public sector, their general work experience has been very good because most of their business is generated based on their qualifications and their past project delivery.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that work for other public agencies is similar to the work that he does for the Consortium. He stated that he is currently working on a project for the City of San Francisco that has "a lot of new age type requirements." Interviewee #CON13 stated that he does a lot of work for smaller agencies and they do not have as many lengthy requirements as do the larger agencies. He stated that the lengthy requirements are "not a DBE thing," However, he does not have the same legal resources as do the larger companies working for larger agencies. He suggested implementing a legal help desk to be made available to companies.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that her experience in the public sector on non-Consortium jobs has been excellent — her company is respected and she does good work. Interviewee #CON17 stated that the company's MBE/DBE/WBE status truly acts as a door opener, and it gives you a "toe in."

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, stated that non-Consortium public sector jobs make up the most of her work. Interviewee #CON18 indicated that the notification and qualification process for non-Consortium public sector jobs has been much better and easier than working with the Consortium. These agencies and entities are much more accessible.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, reported having been very successful in the public and private sectors.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that she has had a good experience working on non-Consortium public sector projects. She said that they have certification monies set aside.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that he had been somewhat successful obtaining non-Consortium public sector jobs. He stated that for the first four years of his business, all of their work was as subcontractors and without certification, it would not have been possible.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that 100 percent of her work experience is in the public sector and she has been very successful.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that success in the public sector varies from agency to agency. He stated that there is less risk in not getting paid on public sector work, but it takes longer to get paid, particularly with the City and County of L.A. He stated that you must develop a level of trust with the agencies to become successful and that establishing relationships is key.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated that his company has been very successful in the non-Consortium public sector. He attributed this success to perseverance.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, felt that she was successful obtaining work in the non-Consortium public sector.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that her work in the non-Consortium public sector has involved school districts and water districts projects. She stated that Proposition 209 has supposedly precluded large firms from using DBEs. She has had no difficulty in obtaining work and feels as though she has been successful in the public sector.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, felt that she has been successful in the non-Consortium public sector.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she has been successful in the non-Consortium public sector, but noted that she "might not get paid."

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that overall he has had a very good experience working in the non-Consortium public sector. He stated that he had five very profitable years while working on a public project for the Los Angeles World Airport. He stated, however, that he felt he had to make compromises on the public sector non-Consortium jobs and ethics was sometimes an issue.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that he has done a lot of work in the public sector. He has done public sector work for the City of Palm Springs and the San Fernando Valley and all have turned out well.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that her experience in the non-Consortium public sector is about the same as in the private sector; it is about a 50-50 split between public sector and private sector work. She stated that she has been successful in the non-Consortium public sector, but it could be better. She said that sometimes when you have a small company, the Consortium and big companies think that you are inept. Interviewee #CON39 stated that she was hired by the Department of Homeland

Security to do a large project and she was able to take the lead. She stated that she had to hire a large firm to be a subcontractor and that turned out to be very successful.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that he has been successful in the non-Consortium public sector, but feels that the relationship between the prime contractor and the subcontractor should be monitored. He stated that often the prime contractor abuses the subcontractor and requires the subcontractor to perform additional work beyond the scope of the project without additional compensation.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that she was successful in the non-Consortium public sector and referred to a lucrative account with a city government public library.

Interviewee #CON44, a DBE/MBE/SBE-certified African American male owner of a financial planning services firm, stated that he has been extremely successful working in the non-Consortium public sector work; he cited a contract with a community college that was very lucrative.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, reported that she has had the most success working for state agencies and the federal government.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he has been very successful in non-Consortium public sector; he stated that these were competitive bids and 8(a) contracts which are set-aside contracts and non-compete.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, indicated that he has had a positive experience working for schools but stated that there is not enough steady work.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that he has had an okay experience working on public sector non-Consortium projects. He reported that he has run into issues with pricing and stated that all public sector contracts involved bidding wars.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that he is doing okay working in the non-Consortium public sector and he is trying to become more successful. He stated that there is a much higher "doorstep" in the public sector and he has to try even harder to get into the private networking in the public sector.

WT #1, an individual representing an automobile parts store submitted written testimony in connection with the Consortium public forums to report a positive experience working with LACMTA. "I have only had perfect relationships with [LACMTA] over the years. They are a great polite group to work with." (Written testimony submitted 9/24/09).

Some minority and female-owned businesses reported difficulties in pursuing work on public sector jobs. [Interviewees #CON: 2, 10, 14, 16, 23, 29, 31, 32, 41, 51, CONTA #1]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he has no experience working in the public sector. He is not certified with any of the Consortium agencies. Though Interviewee #CON2 has been certified with Caltrans for approximately one year, he stated that the certification has not provided any public work, though he used to be employed by Caltrans. Interviewee #CON2 stated that he has tried to obtain work through Caltrans but has had no success. He stated that the agencies only encourage companies to work with minorities but they do not require it. Interviewee #CON2 stated that he has sent letters to prime consultants expressing his interest in projects but has received no response. Interviewee #CON2 stated that all of his work has been from the private sector because it is much easier to obtain work in the private sector. He stated, if the economy is doing well, he can obtain work in the private sector with a simple phone call and interview. In the public sector, however, he stated that there are various other requirements to fulfill. To start, you have to have public sector experience to apply for public sector work and this has been a problem for those with no public sector experience.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that on non-transportation public sector projects, the negotiation process as between them, the prime contractor, and the government has been slow and has held up the process.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that the public sector has a lot of challenges overall. Interviewee #CON14 stated that the political structure in the public sector is "pretty heavy" and is not necessarily conducive to efficiency.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that his experience on non-Consortium jobs has been terrible. Interviewee #CON16 noted that these agencies only use their local favorites and there is no reference checking about various companies' abilities. Interviewee #CON16 indicated that for the most part, the schedules set for non-Consortium jobs are generally "ridiculous."

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, reported mixed success obtaining non-Consortium public sector work. He stated that the City of Los Angeles, in particular, has cut back on rates and business opportunities with them.

Interviewee #CON29, an African American male-owned electrical contractor, stated that he has had only one project in the public sector at UCLA 15 years ago.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that with respect to doing business with non-Consortium public sector agencies, he feels there needs to be some sort of way of negotiating with the government entities as opposed to negotiating and putting bids in with the prime contract holders. There is no way to judge who or how the subcontractors are chosen and picked. Are they picked by lowest bidder, off of gut instinct and/or feelings, are the relationships established beforehand as the project goes up for bid and the prime contractors apply with that as a part of their package? Interviewee #CON31 reported that it is hard to figure out how to get in on the work that is out there.

Interviewee #CON31 stated that he was capable of doing the work and that he has been involved in one way or another his whole life since the age of about 15 ½ years old. He knows the business of block/brick-laying and building walls inside and out. He stated that if the dealings with prime contractors were cut out, and he could deal directly with the government agencies, he feels the games and questioning would be out of the door and that he could get more work and business would be much better. There is no chance for subcontractors to compete when big businesses can do the entire project and charge less in some areas and more in others especially when they own the equipment and rental fees are eliminated. He stated that he feels he could be doing so much better in terms of work in the non-Consortium public sector. It has been a couple of months since his last job of note and he is feeling the pressure to get the next one, not only for himself, but for his family and the men and their families who depend on his projects.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated he had no experience working in the public sector; "it hasn't happened yet."

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, has experience working in the public sector and noted the process of obtaining work takes a while. He believes that most prime contractors do not reach out to DBEs.

CONTA #1, the President of the Latino Business Owners of America, stated that his members have experienced challenges working in the public sector. In the public sector members must divert attention away from revenue and spend approximately two weeks working on a bid that they do not know they will win. Therefore, right away members tie up part of the bond. By nature this process is discouraging. Interviewee CONTA #1 stated that most of the companies who bid on projects are structured so that they have someone in place whose responsibility is to bid on such projects. Also, most members find that they need to have a relationship with the contractor before the bidding. If they wait until they receive outreach, the odds of participating are not good.

Most white male-owned businesses reported success in the public sector. [Interviewees #CON: 5, 8, 52, 53, 54, 55, 57, 58]. Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated public sector work pays much better and more quickly than in the private sector. The amounts of the contract are greater in the public sector.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that work in the public sector is very good but contracts are "fuzzy;" he does make money, however, because of the change order process. He stated that the bidding process, the directions, and the goals and objectives are cumbersome.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, reported having worked on a Caltrans project. He stated that he has been successful due to his firm's reputation and also because they have a relationship with their manufacturer who is a source of positive referrals for them.

Interviewee #CON58, a white male owner of an engineering consulting firm, reported success working in the non-Consortium public sector; he cited work for multiple public agencies on different projects.

Differences between private sector and public sector work experience.

Interviewees reported some differences between public sector and private sector work. [Interviewees #CON: 1, 8, 11, 12, 13, 14, 16, 18, 29, 30, 31, 33, 37, 39, 40, 45, 47, 55]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that his company is not the lowest price in the county or the state but his clients know that he does quality work and is dependable. He stated that the lowest bid is not always the best value, but unfortunately the state and the municipalities always go for the lowest bid.

Interviewee #CON8 stated that there is no difference in the type of work or price of the contract between the public sector and the private sector. He stated, however, that the private sector is "meaner." He stated the prime contractors in the private sector look to find a glitch in the contract or the work completed.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that both the public and private sectors present different work environments for her business. Interviewee #CON11 said that her work for the Consortium is very narrow in scope and she has no flexibility to go outside the scope of work. In contrast, Interviewee #CON11 stated that in the private sector, she has more leeway to make recommendations and go outside the scope of work. Interviewee #CON11 also identified the scope of work and training requirements as differences between working in the private sector and the public sector.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that in the public sector there is a greater consideration to the size of the firm and reasonable project schedules. In contrast, in the private sector, there is sometimes a complete disregard for who is doing the work and payment can be held up. Interviewee #CON12 stated that his work as a subcontractor in the private sector is characterized by a faster pace, demanding schedules, and poor payment.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that there is not as much red tape in the private sector and it is easier to get a project started.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that the resources are better in the private sector. He said that there is better qualified talent in the private sector marketing departments and noted that the private sector has a better understanding of the marketing investment. In contrast, Interviewee #CON14 stated he feels that people in the public sector generally are not as qualified. He said that there is less accountability in the public sector and it is more difficult to fire someone. Interviewee #CON14 stated that the public sector agencies do not have the same understanding of the marketing process as do the private sector agencies.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that his work in the public and private sector is different. In the public sector, Interviewee #CON16 functions as more of a systems integrator and manufacturer. In the private sector, Interviewee #CON16 functions mostly as a supplier of product and sometimes a contractor if a company has a small project, but not on big scale projects.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, indicated that the work she does in the public and private sectors is largely the same, but noted that the difference depends on the scale of the project.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that private sector work is much more flexible and not as rigid as public sector work in terms of regulations.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that the bidding process is different as between the public and private sectors.

Interviewee #CON29, an African American male-owned electrical contractor, stated that there is a significant difference between work in the public sector and the private sector. He stated that there is more responsibility working in the public sector; you have to maintain all of your insurance paperwork and "workers' compensation is another big one." He said that it is hard for small businesses to meet the requirements of public sector work because of the rigorous qualifications to be able to obtain such work.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that there is stringent competition within the public sector as it relates to the award of contracts and working in the public sector. He said that there is more paperwork and strenuous regulations in the public sector that have nothing to do with increasing his performance or output or outcome of the project.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that some of the major difference between private sector and public sector work are the scale of the projects and the politics that go on behind the scenes to get the projects. He said that the price does go down significantly when considering the differences between public and private sector work.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that there are more opportunities in the public sector for her type of business.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that private sector and public sector projects are completely different. He stated that in the private sector contractors can speak directly to the decision maker and have the ability to negotiate. He also stated that the private sector is more flexible, and larger firms can go after small projects. In the public sector, however, the work directive, requirements, and pay schedules are fixed and slow.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that the quality of work is the same although the discipline is different.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that the public sector has different reporting and other requirements than the private sector.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that there is a monetary difference and a difference in the contract compliance aspects of her work as between the private and public sectors.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that receiving payment in the private sector is always difficult. In contrast, he noted that payment by the federal government is different and more prompt.

Interviewee #CON55, a representative from a white male-owned large construction services and program management firm, stated that although the scope of work is the same, the profit margin in the public sector is much higher than it is in the private sector (15-40 percent in the public sector as compared to 5-8 percent in the private sector). He stated that his firm prefers work in the public sector.

CONTA #2, the President of the Black Contractor's Association, stated that members are not timely paid in the public sector. He said that public sector jobs pay well and are plentiful, but the jobs are also much harder to obtain. He also stated that members find more discrimination in the public sector. CONTA #2 stated that there are several differences between public and private sector work. He said that most private sector work involves homebuilding while public work involves commercial construction. Generally, the contract amounts are larger in the public sector. He also said that there are fewer DBE prime contractors in the public sector.

Other interviewees reported no differences between private sector and public sector work. [Interviewees #CON: 15, 17, 24, 30, 32, 34, 35, 36, 38, 42, 44, 46, 49, 52, 54, 57, 58].

Anecdotes regarding businesses acting as prime contractors and subcontractors.

Interviewees reported reasons behind their decision to act as a prime or subcontractor. Some interviewees reported their decision to act as a prime contractor or a subcontractor is dependent on the project; some interviewees reported a preference to act as a prime contractor. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that his business acts as a prime contractor or a subcontractor "because that is where the work is."

Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he would rather be a prime contractor than a subcontractor. He said that market conditions dictate which role he plays. He stated that when you are a subcontractor you are at the mercy of the prime contractor because of the payment arrangement. Interviewee #CON2 stated that he prefers to have a direct relationship with clients because they honor

payments. Interviewee #CON2 said that he has had prime consultants default on payments on three separate occasions; the prime contractors were architects.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that most of his work is as a prime contractor because he has a particular approach to environmental projects – he buys contaminated property and cleans it up and resells it. He stated that you have to have money to do it, and banks do not loan money to buy contaminated property.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that their decision to act as a prime or a subcontractor is dependent on the work that is available.

Interviewee #CON11, a SBE-certified white female ergonomic prime consultant, stated that she acts as a prime contractor because that is how she chooses to bid. She does act as a subcontractor on occasion in the private sector, but she would rather be a prime contractor. She stated that a lot of prime contractors call her to participate on public sector bids because she is on a list of small businesses, however, because her work is so specialized, they often contact her to do work that she is not qualified to do. Interviewee #CON11 stated that she does act as a subcontractor in the private sector, however, she would prefer to act as a prime contractor.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that they base their decision whether to act as a prime contractor or a subcontractor on the expertise involved and their knowledge of the client. If both components are strong, then they will act as a prime contractor.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he prefers to act as a prime contractor on a project because that gives him more control. He stated, however, that a large number of contracts are too large to act as a prime contractor, and acting as a subcontractor gives him the opportunity to work on a lot of difference projects. Interviewee #CON13 stated that "teaming is the name of the game."

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that their decision to act as a prime or a subcontractor on a contract is dependent on the type of contract. He indicated that their company will act as a prime contractor when their specialty is the primary focus of the contract. Interviewee #CON14 stated that their company will act as the subcontractor when other services are more important on the contract then theirs.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, also noted that his company generally works as a prime contractor because they cost their jobs as project managers – they're involved some way in every single project.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that his business predominantly functions as a prime contractor because of its line of products that it develops; it does not usually buy and resell products.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that the business functions more as a prime consultant because the business is small. Interviewee #CON17's goal has been to build a reputable consulting practice, to grow, and to be competitive.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, typically functions as a prime contractor because her work is very specialized. Much of her work as a prime contractor she undertakes by choice rather than in a subcontractor arrangement. Interviewee #CON18 builds the partnership that is going to run a project or functions as a part of a team.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, indicated that his business acts mostly as a subcontractor, but it is dependent on the project.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that she typically acts as a prime contractor and if the client asks her to take the lead she will bid accordingly. Interviewee #CON26 acts as a subcontractor when the work is a small component of a larger project.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, reported that his business works mostly as a prime contractor because of the type of work that they do.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, reported that her business chooses to act as a prime contractor or a subcontractor depending on the opportunities available and what is more advantageous; it is dependent upon the size of the project and the scope of work.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that her business principally acts as a prime contractor because she wants to be in control of her business and to be paid on time.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that her business acts as a prime contractor because she has the capacity to provide the services requested.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that his decision to work as a prime contractor or subcontractor is based on the size of the project and the types of design disciplines required for the project.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that when he acts as a subcontractor for the L.A. County MTA it is because of the skill sets that are needed. When he is the prime contractor, he will utilize subcontractors to complete other necessary work on the project.

Interviewee #CON41, an Asian American male owner of a DBE/MBE-certified general contracting firm, stated that they typically go after the project itself as a prime contractor rather than signing on later.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that they typically act as the prime contractor.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, stated that his decision to act as a prime contractor or a subcontractor is dependent upon the type of contract they have applied for and the scope of work.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that he will bid as a prime contractor if the requirement is purely electrical; if the work requires other services then he will not bid on it because it is beyond his capabilities.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, reported primary work as a prime contractor due to the nature of his business.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, reported that he sometimes is hired as a prime contractor on smaller projects, but their business is not set up to act as a prime contractor on larger projects.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, stated that they act as a prime contractor on mid-size projects but as a subcontractor on larger projects. He stated that if the project requires a bond of $1,000,000.00 or more they will get a larger firm to act as the prime contractor.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, reported that his decision to act as a prime or a subcontractor is dependent on the size of the project.

Interviewee #CON54, a white male owner of a general contracting firm, reported that they act as a prime contractor due to their size and capabilities; they favor being a prime contractor because it is all-inclusive.

Interviewee #CON55, a representative from a white male-owned large construction services and program management firm, stated that they act as a prime contractor due to their size and a preference to be in control of the project.

Interviewee #CON57, a white male owner of a construction and landscape architecture firm, stated that their decision to act as a prime or subcontractor is dependent on the scope of work encompassed in the project.

Interviewee #CON58, a white male owner of an engineering consulting firm, reported his firm's decision to act as a prime or a subcontractor depends on the size of the project and the disciplines required within the scope of work.

Other interviewees reported primary work as a subcontractor due to market conditions and other factors. [Interviewees #CON: 4, 8, 21, 22, 25, 40, 50, 56, CONTA #1, 2]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that his business acts as a subcontractor because there are very limited opportunities for geotechnical consultants to be a prime. In most projects the owner hires either a civil engineer or architect to be the prime and then his business would serve as a subcontractor. Interviewee #CON4 stated that his company is a subcontractor most of the time and always has to market themselves to the prime because there are never any RFPs or RFQs for geotechnical workers.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that the reason that his business acts as a prime or a subcontractor is based on the "ability capacity" — he made the analogy to bonding capacity in the construction industry. He stated that public contracts often require extensive and specific experience.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that when her business acts as a prime contractor, it has been as a federal contractor, which system is set up for small businesses. When she worked as a subcontractor, she felt it was because it was advantageous for the large firm to work with a small firm. She also felt the RFPs are designed for small businesses not to get business.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, reported that bonding is the principal reason that his firm does not bid as a prime contractor.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that given the nature of his business, bidding as a subcontractor is more feasible in terms of obtaining work, particularly on large public sector projects.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that his company typically is used to fulfill the DBE requirements placed on larger majority owned firms; they typically cannot compete for the larger contracts.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that his company is not big enough to act as a prime contractor.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that his firm acts as a subcontractor because he would have a difficult time regulating so many employees; otherwise he would like to bid as a prime contractor.

Interviewee #CON56, a white male owner of a small electrical contracting firm, stated that his firm is very specialized and are not able to oversee work outside of their area.

CONTA #1, the President of the Latino Business Owners of America, stated that members act as a prime or subcontractor depending on the size of the business and the financial status. Many clients will not contract with a company that has no financial wherewithal to handle a project.

CONTA #2, the President of the Black Contractor's Association, stated that most members are subcontractors because most members specialize in one trade or another, often in residential or trucking industry. He explained that it is a lot easier to manage a business in a smaller specialized area.

Several interviewees reported that there are DBE prime contractors working in the Consortium transportation industry. [Interviewees #CON: 3, 4, 7, 10, 12, 13, 15, 17, 18, 20, 22, 24, 26, 30, 31, 32, 34, 39, 41, 42, 46, 51, 52, 54, 55, 56, 58, CONTA #1, 2]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that there are DBE prime contractors. He stated he is aware of two Indian partners who became prime contractors, and he recalled one other DBE prime contractor whose name he could not remember.Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, was aware of two minority-owned prime contractors in San Diego although he did not believe they were DBE certified; one is a structural engineering firm and the other is a large geotechnical firm. Interviewee #CON4 indicated that he believed that there are no DBE prime contractors because to qualify as a DBE, there is a threshold amount that the firm can earn, and once the firm is successful they automatically exceed that threshold and can no longer qualify as a DBE. Interviewee #CON4 stated that he believed the structural engineering firm likely started out as a DBE.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that he is aware of a female prime contractor who bonds construction. Interviewee #CON7 is also aware of two or three minority prime contractors who work in securities and construction; however, Interviewee #CON7 did not know if any of these businesses were certified as DBE. Interviewee #CON7 thought that if any of these businesses were certified as DBE the owners would not necessarily tell subcontractors.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that there are "quite a few" DBE prime contractors.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that there are DBE prime contractors and they know who their competition is. He stated that the number of DBE firms has changed over the past five or ten years, in part, because they either graduate from the DBE Program or are purchased. He stated that his company is part of the "new wave" of DBEs. Interviewee #CON12 stated that they had probably worked under a DBE prime contractor but not often.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that there are DBE prime contractors but there are not too many in his field.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that her firm has worked with two DBE prime contractors and both times it was a good experience.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that there are DBE prime contractors but not many. He has worked under a DBE prime contractor.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that there are DBE prime contractors working in the industry but there are not many of them.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that she is a DBE prime contractor although she was not aware of any others.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, reported having observed one or two DBE prime contractors over the past ten years.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, stated that he has never paid attention but that he was sure that there were DBE prime contractors working in the industry.

Interviewee #CON54, a white male owner of a general contracting firm, reported that they are aware of DBE prime contractors working in the industry and utilize them when it makes sense.

CONTA #1, the President of the Latino Business Owners of America, stated that he is aware of approximately five DBE prime contractors who are working on a regular basis. He stated that his members have worked with or under a DBE prime contractor.

CONTA #2, the President of the Black Contractor's Association, stated that he is aware of one prime contractor that operates as a general contractor and is 8A certified by the SBA. He also stated that he is aware of two prime contractors that are certified with Caltrans, one is a woman-owned firm specializing in military projects and the other is a WBE engineering firm. He also stated that he is aware of a former prime contractor who returned to subcontracting because he could not handle the headaches of being a prime contractor and sending other subcontractors work. CONTA #2 was not sure whether any of his members had every worked with or under a DBE prime contractor.

Some interviewees reported limited knowledge, if any, of DBE prime contractors working in the Consortium transportation industry. [Interviewees #CON: 1, 2, 5, 6, 8, 11, 14, 16, 35, 36, 37, 38, 40, 43, 45, 47, 48, 49, 50, 53, 57]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he does not know any MBE or DBE prime contractors. He believes it is because there are not a lot of minorities in the engineering field and he stated, typically people go out on their own and pursue employment. He stated that it is a challenge to minorities to venture out and sometimes people venture out for a couple of years and find they that cannot get work. Interviewee #CON2 stated that he has never worked under a DBE prime contractor.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated he does not know how many electrical engineering DBEs

there are but believes there are not many in San Diego. Interviewee #CON5 stated that his company specializes in lighting consulting and as he understands there are no DBEs in lighting consulting.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, did not know of any DBE prime contractors. He stated that they are not advertised as much. Interviewee #CON6 was aware of two other DBE subcontractors: a trucking company and another company involved in materials recycling.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, was not aware of DBE prime contractors working in their line of business.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, was aware of one prime contractor who might have been a DBE but he was unsure whether the contractor was DBE-certified.

Several interviewees had worked with, or under, a DBE prime contractor. [Interviewees #CON: 9, 10, 13, 15, 17, 18, 20, 22, 23, 24, 27, 29, 30, 31, 33, 46, 53, 54, 55, 56, 58]. Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated he was not aware of other DBE prime contractors in the engineering and architecture fields. He stated that most of the companies get too big to meet the federal size standards for the Federal DBE Program. If a firm were to act as a "prime contractor a lot and won a lot of contracts, they would graduate out of the DBE Program; "that is what happened to us." Interviewee #CON9 did indicate, however, that he has worked with DBE prime contractors within the past four years, approximately four or five times; all of these were in the public sector. He stated that that has been a positive experience and noted that DBE prime contractors understand the "situation" of other DBEs.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he had worked for a DBE prime contractor a few years ago in Oakland, California.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that she has proposed together and even worked as a subcontractor with other DBE prime contractors. Some DBE prime contractors have performed a subcontractor role with Interviewee #CON17's company.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, has worked with other DBE and WBE prime contractors. Interviewee #CON18 is more inclined to work with sole proprietors.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, believed that he may have worked as a second-tier subcontractor under a DBE prime contractor.

Interviewee #CON29, an African American male-owned electrical contractor, worked with a DBE prime contractor about 15 years ago.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that technically he had worked with a DBE prime contractor in that the company was legally owned by a woman and was classified as a WBE; that is a large part of how and why they got the majority of their contracts. However, the company was only owned by the female in the sense that her name was the one used as the legal owner. Interviewee #CON31 stated that he had never seen her on a project in the time that he had dealings with that company; the husband was the one running the business and had worked in the industry his entire life. The husband should have been the one classified as the owner.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, has worked once or twice with or under a DBE prime contractor.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, believed that he may have once worked with or under a DBE prime contractor.

Interviewee #CON56, a white male owner of a small electrical contracting firm, stated that they are currently working on a project with a DBE prime contractor; the project is almost 80 percent complete and it has been an overall pleasant experience.

Most interviewees had never worked with, or under, a DBE prime contractor. [Interviewees #CON: 1, 4, 5, 6, 7, 8, 11, 12, 14, 16, 19, 21, 25, 26, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 47, 48, 49, 50, 51, 52, 57]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, was not of having worked with or under a DBE prime contractor.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, was not sure whether he had ever worked with or under a DBE prime contractor, but did work once on a project for a minority-owned firm. At that time, however, he believes that the minority-owned firm had graduated from the DBE Program. The prime contractor in that instance was the designer on a project for the City of San Diego and Interviewee #CON4 acted as its subcontractor.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he does not think that his company has ever worked with or under a DBE prime contractor but he was unsure. Typically, he stated, prime contractors are large corporations and not required to be DBEs.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, has worked with a DBE prime contractor only once about 20 years ago. The DBE was a construction company. He stated that he could not recall the name of the project, but recalled that it was a redevelopment project someplace.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she had not worked with too many DBEs but she is always willing to work on a good project and it does not matter whether they are a DBE.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that he has never worked with or under a DBE prime contractor. He stated that he once had a deal in the works to work with or under a DBE prime contractor, but the negotiations did not work out after a Hispanic firm was proposed for the work instead. He stated that the outcome was frustrating, but he did not complain because he did not want to hurt his future business opportunities.

Interviewee #CON57, a white male owner of a construction and landscape architecture firm, did not believe that he had ever worked with or under a DBE prime contractor, but noted that he may have worked with such a firm and not know their certification status.

C. DBE Utilization

BGPAA Study Anecdotes Regarding MBE/WBE/DBE Utilization

Prime reported utilization of MBE/WBE/DBEs by prime contractors in the public and private sectors.

Some interviewees reported hiring the same subcontractors for private and public sectors jobs. [Interviewees #BGP: 5, 9, 10, 13, 16]. Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, said they "very rarely sub work out," but when they do, they use the same subcontractors in the private sector as in the public sector. Interviewee #9 said that they have not worked with any minority- or women-owned firms and that they don't ask if they are minority- or women-owned.

Interviewee #BGP10, a principal at an engineering firm, stated that the firm uses the same second tier subcontractors in the private sector and public sector.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that the corporation uses the same subcontractors in the public and private sector "if they can do the work necessary." He said that he believes that the company has used MBE/WBE and DBE firms in the private sector.

Several interviewees reported positive experiences working with minority- and woman-owned subcontracting firms. [Interviewees #BGP: 5, 6, 10, 14, 15, 16]. Interviewee #BGP5, the president of an 8A-certified engineering firm, said that the firm's is experience with MBE/WBS/DBEs is the same as non-certified firms "because we're not seeking minority- or women- owned subcontractors, it just turns out that way. We're trying to retain someone that [is] competent to do the work."

Interviewee #BGP10, a principal at an engineering firm, said that some of its subcontractors are small businesses, though many of them probably have not obtained certification. He said that his

experience working with MBE/WBE/DBE firms has been the same as working with non-certified firms.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that his experience working with MBE/WBE/DBE-certified firms has been the same as his experience working with non-certified firms.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she uses second tier subcontractors "for some specialized work" and will use MBE/WBE/DBE entities "if they have the right skill sets that [she is] looking for." She said that she has had a positive experience with certified subcontractors. She said that the "biggest problem" has been "when they say they're certified …, but it turns out that the agencies that they're registered through are not recognized by CUCP (California Unified Certification Program)." She added that she will ask to see proof of claimed certification, and she will advise the subcontractors that they "really need to go through and get certified, but they don't want to go through the process." She said that lack of certification has not precluded her "from using [the companies] because they have the skill sets that" she needs.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, reported that the corporation has used MBE/WBE/DBE subcontractors on Authority projects. He reported that his experience using MBE/WBE/DBE subcontractors has been positive "for the most part." He said, "We've had some DBEs that after we took the time to train them … [have] not performed well. … [W]e wasted our time and haven't used them in the future. But I'm sure that can be true of non-certified subs as well."

One interviewee reported no difference in working with minority-or women-owned firms [Interviewee #BGP9]. Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, indicated that there was no real difference in working with a MBE/WBE/DBE. Interviewee #9 said, "The only difference is that, hey, this guy put his wife down as the owner, and now he has a woman-owned business. In today's times, in LA, the white guy's the minority. To say a minority-owned business has less chances, everyone I'm bidding against is a minority. I mean, in California, we're talking about a 45% Hispanic state. What good does 'minority-owned' do?

A couple interviewees reported limited to no experience working with minority- or woman-owned firms. [Interviewees #BGP: 11, 13]. Interviewee #BGP13, the owner of a non-certified construction firm, reported that the company may have used an MBE/WBE/DBE subcontractor, "but it's not a requirement" for the company, so he does not check for certification.

No interviewee reported having refused to work with a minority- or woman-owned firm based on the race, ethnicity or gender of the owner. [Interviewees #BGP: 13, 14].

Businesses' perception of being utilized by prime contractors in the public and private sectors.

Some interviewees reported that the same prime contractors solicit them for work in both the private and public sectors. [Interviewees #BGP: 10, 12, 13, 16]. Interviewee #BGP10, a principal at an engineering firm, stated that the same prime contractors use the firm on public sector projects and private sector projects. Interviewee #10 noted that firm primarily works for prime contractors that do infrastructure projects, so most of the work is public sector work.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that the prime contractors and subcontractors use the company for both public and private sector work.

Interviewee #BGP13, the owner of a non-certified construction firm, stated that prime contractors use his company on both public and private sector projects.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, stated that the same primes hire the firm to do work in the public and private sectors. He stated, "In fact, I recall a case where we worked under a DBE prime for a private sector job."

Other interviewees reported that the same prime contractors do not solicit them for work in both the private and public sectors. [Interviewees #BGP: 8, 11, 15]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that certain prime contractors work in the private sector and others work in the public sector due to their specializations, so the same prime contractors that use his firm in the public sector do not use his firm in the private sector.Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that the prime contractors that use the company for airport cleaning would not also use the company for private sector work because the two sectors do not overlap. He said that the public sector work is "controlled by the L.A. Department of Airports," and that Department releases "individual bids for those contracts." He said that he does not see the same prime contractors being hired by the private and public sector at the airport. He said that the public sector bid selection process is purely a low bid process, so no consideration is given to a company's experience in the airport or local connection.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that prime contractors that use her company in the public sector do not usually use her firm in the private sector because the type of work that she does is "primarily with state and local agencies."

A few interviewees reported that a prime contractor has not and would not refuse to work with them because of the firm's status as an MBE/WBE/DBE-certified firm. [Interviewees #BGP: 10, 14, 15]. Interviewee #BGP10, a principal at an engineering firm, said that no prime has ever refused to work with the firm because of its status as an MBE/DBE firm.

SDCRAA Anecdotes Regarding DBE Utilization

The following anecdotes regarding DBE utilization were obtained from interviews that the study team conducted in connection with BBC's 2009 SDCRAA study.

Successful MBE/WBE Firms.

Several interviewees reported being aware of successful minority- and female-owned firms. SDTA #3, representing a local chamber of commerce, said that there are a number of successful minority- and female-owned firms in the San Diego area, both small and large. Regarding the success of those firms, SDTA #3 said, "I really don't think it's their gender or ethnicity — it's hard work and determination [that explains their success . …"

SDTA #2, representing a Hispanic American trade organization, also reported that there are a number of successful minority- and female-owned firms in the San Diego area. However, he indicated that they only work in certain industries: "Successful DBEs are mostly in janitorial or landscaping industries."

When asked to name successful MBE/WBE subcontractors, Interviewee #SD28, representing a white female-owned firm, was able to name two. She said that to be successful like those firms, DBE firms have to "be active — be at every mixer, every association [event]." She added that DBE firms have to make an effort to "keep [their] name in front of everybody." She also indicated that small firms cannot turn down jobs — they have to be willing to bid on and accept all available contracts.

SDTA #9, representing a public works trade organization, reported that many of his organization's minority and female clients have a sense of entitlement that is detrimental to their success: "A lot of our clients have bad attitudes. Those clients, we see don't do as well in business. For example, there is a sense of entitlement that used to be among the minority-owned businesses that they should have a successful business because of their classification. I have seen this entitlement change from minority-owned businesses to disabled vet[eran]-owned businesses now."

Similarly, Interviewee #SD3, representing a white male-owned firm, said that MBE and WBE firms who get into the business with a sense of entitlement do not succeed. He said that minority- and female-owned firms need a strong work ethic to be successful.

Several interviewees made non-specific comments indicating that they were aware of successful minority- and female-owned firms across several different industries (e.g., Interviewee #SD3, Interviewee #SD11, Interviewee #SD19, Interviewee #SD27, Interviewee #SD32, Interviewee #SD33, Interviewee #SD34, Interviewee #SD37, Interviewee #SD41, Interviewee #SD45, Interviewee #SD46. SDTA #1, and SDTA #9).

Some interviewees had trouble naming successful minority- or female-owned firms. When asked if there were any successful MBE or WBE firms in San Diego, SDTA #5, representing a government advisory commission on minority issues, said that if there are any she is unaware of them. She went on to explain, "What has happened is that many of them who had the means have

already left San Diego or many have gone out of business … [MBE/WBE firms] have been driven out."

Interviewee #SD38, representing a Hispanic male-owned firm, had trouble naming a female-owned firm and had trouble naming minority-owned firms that were not Hispanic: "We know people with their own landscaping or drywall company, but women don't come to mind. Most of what you will see is Hispanic due to our geographic location."

Interviewee #SD40, representing a white male-owned firm, also had trouble naming successful MBE/WBE firms. He said, "There aren't a lot of [MBE/WBE firms]. This is one of our issues here in San Diego."

Interviewee #SD44, representing a Hispanic male-owned firm, could only name one other successful local MBE/WBE firm in his firm's industry.

Reported utilization of DBEs by prime contractors in the public and private sectors.

Several interviewees indicated that they solicit bids from minority or female-owned firms but primarily for public sector work. Interviewee #SD20, representing an Asian American male-owned firm, indicated that including minority-owned or female-owned firms on a proposal makes it more competitive in the public sector but not in the private sector. Interviewee #SD20 described MBE and WBE participation as a "non-issue" in the private sector.

Interviewee #SD11, representing a white male-owned firm, indicated that his firm only solicits bids from MBE and WBE firms when those solicitations are required: "When [MBE or WBE participation] is required to do work and complete the deal, we find someone to do it and pay them 2-3 percent more and [we] do all the work."

Interviewee #SD4, representing a white male-owned firm, reported that when mandatory DBE goals were in place for public sector projects, he would solicit bids exclusively from minority- and female-owned firms.

Interviewee #SD3, representing a white male-owned firm, said that his firm has relationships with at least one minority- or female-owned firm in each construction industry that is outside of his firm's expertise and, when necessary, subcontracts work out to those firms. However, he went on to say that his firm tries to avoid subcontracting any work at all.

Interviewee #SD32, representing an African American male-owned firm, said that because his firm is a DBE certified firm itself, DBE goals usually do not affect the process by which the firm selects subcontractors. However, he indicated that his firm has worked with a number of MBE/WBE subcontractors, and the experience of working with those firms is comparable to working with non-DBE subcontractors.

Two interviewees indicated that their firms solicit bids or price quotes from minority or female-owned firms for moral reasons and regardless of sector. Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, explained that his

firm tries to promote diversity whenever possible. That is, when all else is equal, Interviewee #SD15 tries to choose minority- or female-owned vendors.

Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, said that her firm fully complies with the Airport's DBE program: "[We] compl[y] with the ACDBE program, because it's the right thing to do even without mandates." Interviewee #SD13 went on to say that approximately 30 percent of her firm's Airport-related revenues come from minority- or female-owned concessions.

Interviewee #SD20, representing an Asian American male-owned firm, said that when he selects subcontractors, he tries to use local firms as much as possible. Regarding that philosophy, Interviewee #SD 20 said, "What I believe is giving back to the community. That's what distinguishes us from the other firms."

Several interviewees reported difficulties associated with soliciting bids from minority- and female-owned firms because those firms are not available to do the required work.
Interviewee #SD6, representing a white male-owned firm, reported a number of difficulties associated with soliciting bids from MBE and WBE firms. He indicated that there are only a small number of minority- or female-owned firms qualified to complete the work that his firm requires, and even a smaller number respond to solicitations. He went on to say that his firm has frequently received hostile responses from MBE and WBE firms.

Interviewee #SD24 reported that although his firm regularly subcontracts work out to MBE and WBE firms, sometimes it is difficult finding minority- and female-owned subcontractors that do work in industries that his firm requires: "Given what the contract requires, [sometimes] there's just not firms that do [that type of work]. Environmental consulting is a pretty small niche in the economy, and with those specialties, it's difficult to find firms that meet those goals."

Similarly, Interviewee #SD7 stated that there are not any MBE or WBE firms working in the industries that his firm requires: "There are only a couple of firms in the country that can handle runway rubber removal, taking the deposits off the runway without damaging it."

With regard to soliciting MBE/WBE subcontractors for work, Interviewee #SD31, representing a white male-owned firm that is DVBE certified, said, "I wouldn't know where to find one if I wanted to."

SDTA #7, representing a construction trade organization, said that there simply are not many opportunities for prime contractors to sub out work to minority- and female-owned firms due to the small population of minorities in San Diego: "The City of San Diego has terrible minority numbers, but 95 to 98 percent of their projects are overlay or sewer and water. There just [aren't] a lot of [minority] subs in [those industries]. You dig a hole and put a pipe in it. Who do you sub it to?" SDTA #7 said that in those situations, prime contractors "just fill out the paperwork, good faith effort." He went on to say, "You can't go explain that to a black city council member that's got a constituency that thinks they should get a huge amount of work out of these things."

Interviewee #SD7, representing a white male-owned firm, reported that fulfilling DBE goals can be challenging because minority- and female-owned firms that appear on approved lists are not identified well. For example, "carpet cleaning" firms might be listed as "painting" firms.

Two interviewees indicated that claims about MBE/WBE firms being unavailable are baseless. Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, said that he used to work on a citizen oversight committee related to DBE issues and a number of contractors would come to the committee claiming that they could not find minority- or female-owned firms from which to solicit bids. Interviewee #SD12 went on to explain that those contractors had no trouble finding minority- or female-owned firms when they found out that their proposals were about to be denied.

SDTA #10, representing a supplier trade organization, explained that many public agencies in the San Diego area assert that they cannot find minority- and female-owned firms from whom to solicit bids. SDTA #10 stated that that assertion "makes no sense" and that the City of San Diego and other public agencies are "not serious" about addressing MBE and WBE issues.

Many interviewees reported positive or neutral experiences working with minority- or female-owned firms on public sector projects. Interviewee #SD7, representing a white male-owned firm, reported that when his firm finds a qualified minority- or female-owned firm, they try to work with them again on future projects. Interviewee #SD7 cited an example of an MBE asbestos removal firm with which his firm liked working and that they contacted again about future work.

Interviewee #SD11, representing a white male-owned firm, said that his firm has relationships with several minority- and female-owned subcontractors with which they work regularly. Regarding his firm's selection of subcontractors, Interviewee #SD11 said, "We work with the subs who are the lowest, qualified bidder."

Interviewee #SD25, representing a white male-owned firm, reported that his firm regularly maintains over 20 percent participation from MBE, WBE, and SBE firms. He said that every member of their contracting "team" is an MBE, WBE, or an SBE.

Interviewee #SD27, representing a white male-owned firm, reported that his experience working with minority- and female-owned firms is no better or no worse than working with majority-owned subcontractors.

Interviewee #SD26, representing a white male-owned firm, indicated that his firm has worked with several MBE and WBE firms on public agency projects, and that 60 percent of those experiences have been positive. Of the positive experiences, Interviewee #SD26 said that he saw the DBE program "pay off" and give MBE/WBE firms the opportunities that they needed to grow.

Interviewee #SD24, representing a white male-owned firm, reported that his firm "has lots of experience in working with [MBE and WBE subcontractors]." He noted that the quality of those experiences was "all over the board" and was dependent on the quality of each individual firm.

Two interviewees reported negative experiences working with minority- or female-owned firms on public sector projects. Interviewee #SD6, representing a white male-owned firm, cited an example in which he accepted a subcontractor bid from a minority-owned firm on a public sector project with DBE goals. It turned out that the firm was not qualified to do the work, and Interviewee #SD6 had to use a different DBE firm. The second DBE firm was more expensive than the first one, and the agency did not cover the difference in cost — it came out of his firm's profits.

Interviewee #SD4, representing a white male-owned firm, recounted a public sector project in which he was required to use a DBE subcontractor for two pieces of work on a historic preservation project. Interviewee #SD4 did not have a positive opinion of the subcontractor's work: "They killed the job for me. They did not keep up to schedule and they were not proactive in addressing problems."

Some interviewees offered comments about the differences between utilizing minority- and woman-owned firms in the public and private sectors. SDTA #11, representing a veterans trade organization, reported that, compared to the private sector, the public sector does a better job of addressing some of the barriers that disadvantaged businesses face and are more conscious of the non-mandatory goals that remain for MBE and WBE firms.

Interviewee #SD20, representing an Asian American male-owned firm, indicated that in the private sector MBE or WBE status does not play much of a role in selecting subcontractors. Instead, that selection process is largely dependent on the desires of the clients (e.g., How quickly does the client want the work completed? How much is the client willing to spend?).

Interviewee #SD5, representing an African American male-owned firm, indicated that his firm has worked as a subcontractor on several non-Airport, public sector projects, primarily because the prime contractor needed to meet DBE goals. However, Interviewee #SD5 went on to say that he has worked as a subcontractor on at least two public sector projects with no mandatory DBE goals in place.

No Interviewees reported that they had refused to solicit or utilize a minority- or female-owned firm due to race, ethnicity, or gender. However, some interviewees said that they have refused to work with certain MBE and WBE firms due to their low quality of work. Interviewee #SD2, representing a white male-owned firm, explained that there are a number of subcontractors with whom he will not work, but that his refusal to work with those firms is based on their previous performance and not their DBE status. Interviewee #SD21 went on to say that the only difference between working with DBE and non-DBE firms is that sometimes DBE firms are financially incapable of taking on certain projects.

Interviewee #SD14, representing a Hispanic American male-owned firm, also indicated that there are a number of minority- and female-owned firms with whom he refuses work, but that it has nothing to do with their minority or gender status: "There are bad contractors in any field, DBE or not."

Some minority- and female-owned firms reported seeking out prime contractors to bid on projects rather than waiting for solicitations. Interviewee #SD20, representing an Asian American male-owned firm, reported that, at least in the public sector, his firm takes a proactive approach to winning subcontracts. They research available projects, determine which prime contractors would likely be interested in those projects, and try to sell the project and themselves to those prime contractors. Regarding his firm's approach, Interviewee #SD20 explained, "I don't wait for the prime to reach out to me. That's too late."

Similarly, Interviewee #SD5, representing an African American male-owned firm, reported that his firm finds subcontracting opportunities by calling prime contractors that appear on planholders lists. He went on to say that his firm's approach has helped them build relationships in the construction industry.

Reported utilization of DBEs by prime contractors on San Diego Airport projects.

Some interviewees reported neutral experiences working with minority- or female-owned firms on Airport projects. Interviewee #SD14, representing a Hispanic American male-owned firm, indicated that he has never worked as a prime contractor at the Airport but has done work as a subcontractor there.

Interviewee #SD4, representing a white male-owned firm, said that of the few projects that his firm has completed with the Airport, they have only used one or two minority- or female-owned firms. He went on to say that if his firm cannot use MBE or WBE firms, they will sometimes use MBE or WBE suppliers to meet DBE goals.

SDTA #6, representing an Asian American trade organization, reported that she is aware of at least one minority-owned firm that has done work with the Airport as a prime contractor and one minority-owned firm that has done work there as a subcontractor.

The master concessionaire at the San Diego Airport reported negative experiences working with minority- or female-owned firms. Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, indicated that the vast majority of criticism that her firm receives from the Airport is related to their minority- and female-owned concessions: "95 percent of the complaints we get from the Airport Authority really have to do with the ACDBE subtenants." She went on to say, "The feedback I get from the airport authority regarding [cleanliness or appearance] … comes from the ACDBE locations. They don't come from [our] locations." Interviewee #SD13 acknowledged that some of those problems are a result of the vast differences in resources between her firm and the MBE and WBE concessions, and that the Authority is sensitive to those differences.

Two interviewees reported being unaware of any minority- or female-owned firms being utilized on San Diego Airport projects. SDTA #11, representing a veterans trade organization, indicated that he is not aware of the airport awarding substantial contracts to local minority- or female-owned firms (as prime contractors or as subcontractors), and he attributes part of that phenomenon to the barriers that those businesses face, "… there's too many pitfalls, too many requirements [for MBE and WBE firms]."

Interviewee #SD7, representing a white male-owned firm, reported that his firm has completed three projects at the Airport as a prime contractor and have not worked with any minority- or female-owned subcontractors.

DBE utilization following Proposition 209.

Several interviewees reported a decline in participation of minority- and female-owned firms after Proposition 209 passed and prohibited mandatory DBE goals on state-funded contracts. Interviewee #SD14, representing a Hispanic American male-owned firm, indicated that the situation changed substantially for minority- and female-owned firms after Proposition 209 passed: "Fifteen years ago [the situation] was a lot different. Ten to fifteen years ago there was a mandatory goal … [MBE/WBE firms] were on the bigger projects. … [Prime contractors] used [MBE/WBE firms] because they had to meet the goal." Interviewee #SD14 went on to say that after Proposition 209 passed prime contractors awarded far fewer contracts to minority- and female-owned firms. He said that a firm's status as low bidder became the most important factor: "The way times are now, it's the low bid that will get you the job."

Interviewee #SD2, representing a white female-owned firm, indicated that removing DBE goals after Proposition 209 hurt many minority- and female-owned firms. She said that DBE programs "gave [MBE/WBE firms hope … after [Proposition] 209, they lost hope." She also stated that there would be more African American contractors if Proposition 209 had not passed, and that she saw a number of strong, African American-owned firms go out of business as a result of Proposition 209. With regard to her own firm, Interviewee #SD2 explained that after Proposition 209 passed, she no longer received as many requests for bids from prime contractors: "[It was like] night and day … the phone calls just stopped."

Interviewee #SD5, representing an African American male-owned firm, reported that after Proposition 209, he won far fewer contracts. He said that he had a lucrative business as a minority subcontractor throughout the first half of the 1990s, but over a nine month period following Proposition 209 his business plummeted, leading him to liquidate it in 2000.

SDTA #2, representing a Hispanic American trade organization, indicated that his organization engaged in extensive outreach with minority- and female-owned firms immediately following Proposition 209 in an attempt to offset its effects. However, SDTA #2 said that despite his organization's efforts, there was a dramatic decrease in the participation of MBE/WBE firms after the bill passed.

Interviewee #SD25, representing a white male-owned firm, indicated that prior to Proposition 209, seeking out MBE and WBE used to be highly encouraged, and he said that his firm would try to go above and beyond the stated DBE goals.

With regard to DBE goals, Interviewee #SD28, representing a white female-owned firm, indicated that those goals help her firm get work, and that the elimination of mandatory DBE goals (as the result of Proposition 209 and Caltrans implementing a race-and gender-neutral DBE program) hurt her firm's success: "I think [DBE goals] help, and I think [mandatory goals] going away hurt us."

SDTA #5, representing a government advisory commission on minority issues, reported that public agencies in San Diego stopped making efforts to promote diversity following Proposition 209: "As a result of Prop 209, [the City of San Diego] feels they can't do anything — the City can't be aggressive in demanding diversity or creating standards."

One majority-owned Interviewee said that doing business became easier after Proposition 209 passed. Interviewee #SD11, representing a white male-owned firm, remarked: "After Prop[osition] 209 passed, it was much easier to do business," He indicated that he is not supportive of DBE programs or of their intent. He said, "When you submit a bid they are all submitted on white paper with black ink. This is not a racial issue."

Consortium Anecdotes Regarding DBE Utilization

The following anecdotes regarding DBE utilization were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Reported utilization of DBEs by prime contractors in the public and private sectors.

Some prime contractors reported using the same subcontractors in the private and public sectors. [Interviewees #CON: 3, 5, 8, 14, 16, 18, 19, 20, 21, 22, 24, 26, 33, 34, 35, 36, 38, 41, 42, 46, 48, 49, 53, 54, 55, 58]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, reported that he uses the same subcontractors in the private sector and in the public sector because there are a limited number of them and once you develop a relationship with them, if you are happy with them, you continue to use them. He stated that competency was never an issue for the DBEs that he used. Interviewee #CON3 recalled using DBEs on private sector projects, most recently, in 2007. The project was an investigation to determine the amount of contamination at a site. He stated that he used a DBE analytical firm. Interviewee #CON3 stated that he has used DBEs on private sector projects tens of times. Typically the DBEs would always be analytical firms or drillers and they would be located all over Southern California. He recalled a project in which he used a demolition contractor who was a DBE. Interviewee #CON3 stated that the demolition contractor was a "sham" DBE. The demolition contractor represented that it was woman-owned but was in fact operated by a white male. Interviewee #CON3 stated that he generally finds DBEs by recommendation of colleagues. Occasionally he also finds DBEs through the agencies. Often when the Consortium puts the project out for bid, the agency will attach a list of qualified DBEs. Interviewee #CON3 stated that the typical cost of the project in the private sector that he used DBEs on was $50,000 - $100,000, and the DBE portion might be $10,000 to $30,000. Public sector jobs are more extensive, $4 million to $6 million. Private sector jobs tend to be small with certain exceptions like refinery sites. Interviewee #CON3 stated in the private sector the client also wants to spend less money, so they want you to take less samples, how many holes you put in the ground, how much analytical work you do.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that when his company was a prime contractor, the company would sometimes have to hire a structural engineer to provide structural calculations. Interviewee #CON5 stated that his company used the same sub-consultants in the private sector as in the public sector. Interviewee #CON5 stated that he thinks the structural engineer was a

DBE but was unsure. He stated that the structural engineer is Asian and would likely qualify as a DBE. Interviewee #CON5 stated that he has used the structural engineer in public and private jobs.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, uses the same subcontractors in the private sector as in the public sector. Interviewee #CON16 stated the reason is because of his subcontractors' knowledge, experience, and reliability. Interviewee #CON16 also noted the competitive pricing of his subcontractors as a reason for using them in both the public and private sectors.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, does use the same subcontractors in both the private and public sector, but she's not very likely to use subcontractors in the private sector; the majority of her private work is with small non-profit organizations

Interviewee #CON19, an MBE-certified African American male attorney, reported that he utilizes the same subcontractors in the private sector and the public sector. He stated that he tries to ensure that all of his subcontractors are minority or female-owned. He stated that many of his subcontractors are DBEs. He stated that he locates DBEs by word of mouth or he already knows them. Interviewee #CON19 stated that he always tries to utilize DBEs after soliciting them depending on the need.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that she does use the same subcontractors in the public and private sectors; she stated that good work and good relationships dictate that decision.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, uses the same subcontractors in the public and private sectors. She stated that she is small business friendly and she will work with firms that are open to sharing information. She stated that these subcontractors are minority- or female-owned but did not know whether they were DBE-certified. She stated that she has attempted to utilize minority- and female-owned subcontractors in the private sector. She stated that she has also utilized DBEs on Consortium projects. She stated there is an advantage to using small businesses because they are flexible and do not have as many layers as larger companies. She stated that she locates DBEs via word of mouth and uses them "all the time" after soliciting business. She said the average price of the subcontracts to DBEs is between $10,000 and $100,000.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that for the most part she utilizes the same subcontractors in the public and private sectors. She stated that she utilizes the same subcontractors because their relationships, experience, staffing, resources and qualifications have been established and thoroughly vetted. She said that some of her subcontractors are female-owned and some are DBEs; she stated that always attempts to use minority- and female-owned and DBE subcontractors in the private sector. Interviewee #CON22 stated that she feels it is important to work with DBEs because her firm is a DBE; she locates DBEs through Caltrans, MTA and OCTA. She stated that she utilizes DBEs as often as she can after they reach an agreement as to terms.

Interviewee #CON22 reported that she typically subcontracts CAD work and the average price of subcontracts she lets is $50,000.00.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, reported that she utilizes the same subcontractors across the public and private sectors based on relationships and known qualifications. She stated that some of these subcontractors are female- and minority-owned. She stated that she has tried to use female/minority/DBE subcontractors in the private sector and on Consortium projects; she said that it is required but not mandatory. She stated that she locates DBEs using the list provided by L.A. County MTA and she often utilizes DBEs after soliciting them.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that she does use the same subcontractors in the private sector as in the public sector. She stated that she bases her selection of subcontractors on their qualifications. She said that some of these subcontractors could have been minority- or female-owned, but, again, the decision to use them is based on qualifications. She said she has used DBE subcontractors, especially when required to do so by the agency. However, she has not attempted to use minority/female/or DBE subcontractors in the private sector. She stated that on Consortium projects, she solicits price quotes from DBEs about once a year because it is required under an RFP. She stated that she locates DBEs by word of mouth and always uses them after soliciting a price quote; said the price range of these projects is between $20,000 and $800,000.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, reported using the same subcontractors in the public and private sectors and stated that experience is the overriding factor in determining which subcontractors to utilize. She stated that these subcontractors are minority- or female-owned and more often than not she utilizes minority- or female-owned firms with whom she has a relationship. She does not know whether these subcontractors are DBE-certified because she focuses on the firm's qualifications. She has attempted to utilize minority/female/DBE-subcontractors in the private sector but she has not had any assignments in the private sector. She stated that she utilizes DBEs in public sector work 100 percent of the time after soliciting them; she noted that she does not necessarily utilize DBEs because they are certified but rather because they are in her "network of people" that she uses based on the quality of their work. She stated that she has become familiar with certain DBEs through teams on former jobs. When she is seeking a subcontractor to work on a particular specialty area she will draw from her network. The average price range of her projects to DBEs is between $60,000 and $1,000,000.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that when the opportunity presents itself she uses the same subcontractors in the private and public sectors. She indicated that if they deliver quality service she will utilize them again. She stated that she always attempts to utilize minorities in the private sector. She stated that she locates DBEs through organizations and other referrals. She utilizes DBEs 100 percent of the time after soliciting them.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she uses the same subcontractors in the public and private sectors because she was confident in their work and knew how they worked. She stated that

some of these subcontractors are female- or minority-owned. She does not always know until the start of the project whether her subcontractors are DBEs; she is more concerned with the quality of the work. She stated she would always try to utilize female- and minority-owned subcontractors in the private sector but the quality of the work is her priority. She said that she keeps a roster of good people and tries to update it based on recommendations. She stated that she locates DBEs by sending out letters to court reporters (her business) who have just passed the exam. The average contract amount to "subcontractors" is $200 to $2,000.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, reported using the same subcontractors across the private and public sectors because they are excellent at what they do. He reported utilizing minority- and female-owned and DBE-certified subcontractors. He stated that he solicits DBEs for price quotes 100 percent of the time; he solicits them because they are good at what they do and they are familiar with the reporting processes of the industry. He stated that he locates DBEs through experience working with other businesses and through recommendations; he also advertises. He also stated that he locates them through an organization of which he is a member: National Center for American Indian Enterprise Development (NCAIED). He stated that he utilizes the firms that he solicits pretty often depending on the quality of work. Interviewee #CON38 stated that the average price range of subcontracts is $100,000.

Interviewee #CON41, an Asian American male owner of a DBE/MBE-certified general contracting firm, reported using the same subcontractors in the public and private sectors because it is easier – they know the quality of work and it is easier to explain the vision for a project because of the working relationship they have maintained. They may have worked with a minority-owned firm but not a female-owned firm; he was not sure whether any of his subcontractors were DBEs although they have tried to work with DBEs in the private sector past. However, they do not target DBE firms.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, reported that she utilizes the same subcontractors in the private and public sectors because of the relationships that have developed and the knowledge and understanding that they have of the services provided and the related expectations. She stated that the quality of work is better. Interviewee #CON42 stated that she does use minority- and female-owned subcontractors, but she did not know whether they were certified DBEs. She stated that in both the private and public sectors she utilizes the vendors that she knows; whether they are minority- or female-owned is a secondary consideration. She does not look for DBEs in particular. The average price of her subcontracts is about $5,000.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he tries to utilize the same subcontractors in the private and public sectors because of the quality of their work, their history, and their dependability. He stated that all of his subcontractors are female- or minority-owned but he did not know whether they were certified DBEs. He stated that he has not necessarily tried to use DBEs in the private sector because it is not required. He stated that he builds his workforce based on capabilities and skills and work history and not on a subcontractor's DBE certification — if they happen to be a DBE so be it.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated he very rarely utilizes subcontractors but noted that he does utilize the same subcontractors across all sectors. He stated that he has utilized a female-owned firm before but did not know if he had ever utilized a DBE-certified firm.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, reported using the same subcontractors in the private sector as well as the public sector because he is confident in the quality of their work and the services they provide. He stated that none of his subcontractors are DBE-certified although they are minority- or female-owned. He stated that his success on contracts has nothing to with whether he utilizes DBEs; he stated that he looks for experienced subcontractors and a lot of times DBEs are lacking in experience.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, stated that he most likely uses the same subcontractors across the public and private sectors due to the quality of their work. He stated that he utilized a female-owned firm and may have utilized a DBE. He stated that he only uses firms with whom he is familiar with their work history and would not seek out a minority- or female-owned firm or a DBE unless they happened to fall into his category of quality subcontractors.

Interviewee #CON54, a white male owner of a general contracting firm, reported that they make a point to use the same subcontractors in the public and private sectors because of the quality of work and services they provide. He stated that some of these subcontractors are minority- or female-owned or DBEs. He stated that they solicit DBEs all the time based on the quality of their work. He indicated that they locate DBEs through the Community Service Department which maintains a database of DBE subcontractors. He stated that the subcontracting work is for document control, scheduling, and estimating, and the price range for the subcontracts is about $10 million.

Interviewee #CON55, a representative from a white male-owned large construction services and program management firm, stated that they use the same contractors who they are familiar with and enjoy good relationships. He stated their primary concern is the quality of work. He reported that some of their subcontractors are minority- and female-owned. He was not aware of his firm specifically pursuing DBEs in the private sector but believes that this is the case. He stated that they do solicit DBEs for price quotes often and they locate DBEs through an online certification vehicle. He reported that the price range for projects subcontracted to DBEs ranges between $100,000 to $5 million. He stated that since the passage of Proposition 209, if the contract does not have a goal, they will select a subcontractor based on work history and a firm's ability to handle all aspects of the job.

Interviewee #CON58, a white male owner of an engineering consulting firm, reported that his firm utilizes the same subcontractors across the public and private sectors. He stated that the subcontractors' disciplines, quality of work, skill set, and past relationships that have been built all contribute to this. He stated that they utilize DBE firms and have attempted to utilize DBE, and minority- and female-owned firms in the private sector. He stated that when they do utilize DBEs it is usually one that they know or that has been referred to them; in some instances they have obtained a list of approved DBEs. He stated that typically when they use a DBE, they do so because it is a requirement and will use them on additional projects as required.

Some prime contractors reported using different subcontractors in the private and public sectors for various reasons. [Interviewees #CON: 9, 11, 15, 30, 37, 39, 43, 57]. Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that he does not use the same subcontractors in the public and private sectors because every project is different and "there are a lot of alternatives out there." Interviewee #CON9 stated that he has used a DBE subcontractor both in the public and private sectors. He stated that he has not had any problems using DBEs on Consortium projects or on private sector projects.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that she does not use the same subcontractors in the private sector and the public sector because the Consortium has very specific requirements for the subcontractors that she may use.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, reported that in the private sector, his company generally functions as a subcontractor, and he notices that prime contractors generally use many of the same subcontractors. Interviewee #CON15 rarely uses DBEs on private sector projects, but he reported that is largely an issue of pricing.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he does not use the same subcontractors in the public and private sectors because of the different expertise required for different projects.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he does not use the same subcontractors in the private sector and public sector. He stated that his usage of subcontractors is dependent on the discipline and the scope of work. For instance, in the high design sector he generally works with big name firms. He stated that some of the subcontractors are DBEs, but he does not always use DBEs. Though DBE usage is a priority, he stated, that his main focus is credibility, work history, and delivery.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that she does not always utilize the same subcontractors across the public and private sectors because sometimes it is not possible (e.g., for work that is abroad). She stated that she hires subcontractors on a case-by-case basis and she hires only the most qualified subcontractors that may or may not be minority- or female-owned. She stated that some of these subcontractors are DBE-certified but they are not hired on that premise; occasionally she finds out after the fact that a subcontractor is DBE-certified but it would be a coincidence because she does not make an extra effort to use DBEs. She stated that she has tried to utilize minority- and female-owned subcontractors in the private sector but again her main focus is the quality of work; she stated that she is more likely to go after quality and credibility and if a DBE has those traits it is mere coincidence. She stated that the average price range for her subcontracts is approximately $250,000.

Interviewee #CON57, a white male owner of a construction and landscape architecture firm, stated that they do not use the same subcontractors across the public and private sectors because their private sector subcontractors do not have the necessary public sector background. He stated that some of their subcontractors are minority- or female-owned, but he did not know

whether they were DBE certified because they only pay attention to the prospective firm's work history and quality of work. He stated that their firm does not make any attempt to use minority- or female-owned firms or DBEs in the private sector because their firm evaluation is based solely on the quality of work.

Some prime contractors reported having no need for subcontractors on private sector contracts. [Interviewees #CON: 12, 13, 17, 52]. Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that they do not use subcontractors in the private sector.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that his work is very different as between the public and private sectors; he currently has one project in the private sector and he is acting as a subcontractor. Interviewee #CON13 stated that he has used a DBE on a Consortium project and it was no different from a non-DBE; he stated that he selected them because he thought they could do the work and not because they were a DBE.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated her company hasn't had the need to subcontract in the private sector.

Most contractors reported having had a positive experience working with DBEs. [Interviewees #CON: 3, 9, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 24, 26, 30, 33, 34, 35, 36, 37, 38, 42, 46, 48, 49, 54, 55, 57, 58]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, reported that his experiences working with DBE have always been fine.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that in his experience, DBEs are very good at assisting during the proposal stage, which he surmised is because DBEs "get used to getting calls at the last minute." He stated that after the proposal stage, there is no "notable difference" between working with DBEs and non-DBEs.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he has not used a DBE subcontractor on a Consortium project. He has used a DBE subcontractor on a non-Consortium public sector project and that experience has been very good. Interviewee #CON12 stated that typically the DBEs that they look at are based on the ability to deliver; they do not like to just "go out and check in the yellow pages" to select a DBE because "you do not know what you are going to get" and it could put the project at risk.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he had a positive experience working with a DBE on a Consortium project.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that he has had "a lot of positive" experiences working with DBEs and MWBEs. He stated that his

company chooses to work with qualified subcontractors; he stated that they look for firms that are qualified first, and then consider whether they are a DBE.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, stated that his experience using DBEs on Consortium projects has been fine. He stated that his experiences are generally positive with DBEs, and that if there is a problem, he will go directly to the owner and get the problem resolved.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, has not utilized DBEs on Consortium or private sector projects when functioning in a prime contractor capacity. Interviewee #CON17's other experiences with DBEs has been very positive, but she noted that the experience depends largely on any business' philosophy.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, stated her experiences with DBEs on Consortium projects has been positive because she only works with people that she knows will give her a good product – she's too small. Interviewee #CON18 once had problems with a DBE business partner, and that led her to not work with the DBE again. Interviewee #CON18 does not have to work with DBEs, so she works with people that she needs to complete a given job.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that she has worked with many DBE subcontractors and stated that her network consists mainly of minority- and female-owned firms. She stated that if she receives a call to refer a group for a project, she tends to refer people within her own network. Interviewee #CON20 stated that she utilizes DBEs because it is good for business. She stated that after being in business for 15 years, she just knows who the DBEs are and she utilizes them all the time.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that she has had a positive experience working with DBEs.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that she has had a positive experience working with DBEs. She stated that she rarely solicits DBEs unless it is required and she finds DBEs through word of mouth. After soliciting DBEs she uses them about 80 percent of the time. She stated that the average price on subcontracts that she gives to DBEs is between $20,000 and $40,000.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, reported using minority- and female-owned subcontractors. He locates DBEs through association groups that have such listings. He stated that overall he has had a positive experience subcontracting work to DBEs. He typically subcontracts various types of engineering and construction management jobs to DBEs. He stated that these are generally smaller scale projects and range in value from $5,000 to $25,000.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that her experiences with DBEs have been mostly positive; the only occasional issue may have been managing the subcontractor's work.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that his experience working with DBEs has been positive. He stated that he solicited DBEs for a major project at the Los Angeles World Airport, not only because the contract required it, but because he also wanted DBE participation. He stated that he subcontracts engineering, cost estimating, specifications, and move coordinator work to DBEs at an average price of four (4) to six (6) figures depending on the discipline and project duration. The frequency of DBE solicitations depends on the DBE's work history and project requirements.

A few prime contractors reported having had a negative experience working with DBEs. [Interviewees #CON: 13, 39]. Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he had major problems in the past with a WBE that he hired, but it was a long time ago, and he declined to provide further detail.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that she had a negative experience working with one (1) DBE because she felt that the company was inept. She does not like having DBE certification required and would prefer to focus on quality of work over certification.

Several interviewees indicated they have little or no experience working with DBEs in either the public or private sector. [Interviewees #CON: 2, 4, 5, 6, 7, 8, 11, 16, 17, 52]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he uses subcontractors for drafting services in the private sector, but he does not perform any work in the public sector. Therefore, he uses these subcontractors only in the private sector. Interviewee #CON2 stated that he has not used any DBEs on Consortium projects because he has not performed any work for the Consortium. Interviewee #CON2 stated that he is not sure whether he has ever used any DBEs. He stated that he may have used a DBE for drafting services but is not sure whether the firm is a DBE. He stated that he has used this firm on four projects. Interviewee #CON2 stated that he has not used many DBEs, but he has had a positive relationship with the drafting firm. He stated that besides the drafting firm he has not used any other DBEs on private sector projects. He said that he uses the same firm because he knows the firm and has developed a working relationship with them over the years.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that his company was awarded a contract by the City of San Diego for on-call geotechnical services in the mid 1990s and was a prime contractor on that project. There were occasions on the project where his company needed a subcontractor, for instance, to drill holes, and he would look for a DBE drilling contractor to drill holes. Interviewee #CON4 could not answer whether he used the same subcontractors in the private sector and the public sector because his private sector work as a prime contractor was much earlier (1979). Interviewee #CON4 has not worked on any Consortium projects and therefore, has no experience using DBEs on such projects. He stated that he has not used any DBEs on private sector projects because the opportunity never came up.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that has had no experience using DBEs on Consortium projects because he has not worked on any Consortium projects. He stated that other than a structural engineer who might have been a DBE, he has not used any other DBEs on private sector projects. He stated that he has used the structural engineer about twice a month in all of his jobs for the past five (5) years. Interviewee #CON5 stated that he has never tried to find any other DBEs to work with but stated that it would be a good idea. He stated that he uses this DBE rather than looking for any others because he has known the structural engineer for many years and he has always used him. The structural engineer always does a good job, his work is timely, fast and inexpensive and he is readily available. Interviewee #CON5 stated that he cannot say that other DBEs are not readily available because he has never tried to use another. He stated "when something works you do not need to fix it."

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company, has referred customers to DBEs, but has had no occasion to hire a DBE because he is a subcontractor and sells materials.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that he has used subcontractors at times (although he reported acting as a subcontractor 98-99 percent of the time) and he has probably used DBE subcontractors before but did not know because he never asked. Interviewee #CON7 stated that he has not had any experience using DBEs on Consortium projects. Interviewee #CON7 could not describe his experiences with DBEs because he was not sure which subcontractors were DBEs and whether he had worked with any.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, has responded to an RFP with a DBE component but has never actually worked with a DBE subcontractor.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that she has never worked with a DBE although she did try once to work with a DVBE.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, has not really used DBEs on the company's projects for Consortium entities, indicating that there is no need to do so. Interviewee #CON16 works more with the various agencies rather than with other DBE companies. Interviewee #CON16 has no experience working with DBEs in private sector projects. Interviewee #CON16 has not had particular experiences with other DBEs of note, but the company does use small businesses whenever possible, despite that they may not be certified as minority-owned or disadvantaged businesses. Interviewee #CON16 very rarely likes to use large companies unless the scope of a project is so big that a smaller company cannot handle a job. Interviewee #CON16 notes that small businesses may not provide the best price, but they usually provide the best overall work experience and value. Smaller business, noted Interviewee #CON16, tend to value long-term relationships that are established over time.

No prime contractor reported having refused to work with a DBE because they were a DBE. However, some prime contractors reported having declined to work with a DBE for reasons other than their certification. [Interviewees #CON: 3, 9, 14, 13, 15, 17, 19, 22, 34, 53].
Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, reported that he has never refused to work with a DBE, and does not specifically know of that happening with any other prime. He stated that what might happen is that there might be one or two people within the DBE firm who the prime contractor might not like. The prime contractor may request that particular person not participate in the project. He stated that this is much more likely than refusing to work with the DBE. He does not believe that any of his colleagues, even the most prejudiced would not work with a DBE because, for instance, they do not believe women should be geologists. Interviewee #CON3 stated he does not believe that kind of thing would happen. He does think that there are situations where someone inside the firm would cause you not to work with that person, but not the firm in general.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that he has decided to work with one firm over another, but it was not related to a firm's DBE certification.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he had turned down teaming opportunities with both DBEs and non-DBEs in the past.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, could not remember whether he had ever refused to work with a DBE.

Interviewee #CON15, a Hispanic American male owner of a MBE certified engineering and construction company has sometimes refused to work with DBEs, but it is a business and financial concern, not because of their certification status.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that she has, in the past, refused to work with DBE companies because of their business ethics, but not because of their status as a disadvantaged business.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that her firm has refused to work with a DBE in the past only because the companies could not come to terms.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that she has never refused to work with a DBE based on their DBE status. She stated that the decision to not work with a DBE would have been based on their work and not their certification.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, reported that he may have refused to work with a DBE if they did not produce.

Minority and female-owned business perceptions of being utilized by prime contractors in the public and private sectors.

Some minority- and female-owned business reported that the same prime contractors utilize them in the private and public sectors. [Interviewees #CON: 1, 9, 14, 15, 20, 22, 23, 28, 33, 36, 45, 49, CONTA #1, 2]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, reported that the same prime contractors utilize his business in both the private and the public sectors. Interviewee #CON1 stated that he has not recently been directly impacted by a prime contractor refusing to work with him because he is a minority, but he is "sure" that that condition still exists in the field.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that the same prime contractors use his business both in the private and the public sectors. Interviewee #CON9 stated there is no notable difference between being utilized on Consortium and non-Consortium public sector projects or private sector projects.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, rarely does work in the private sector, but he continues to get regular calls from the same prime contractors in the public sector for work — his business is very competitive.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that she has pursued work with prime contractors in the private sector and reported that the same prime contractors use her firm in the public and the private sectors. She stated that this is due to her firm's work history and past performance; she instructs her team that every project is a marketing tool.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that the same prime contractors utilize her firm in the public and private sectors. She attributed this to her ongoing relationships and experience with the work proposed. She stated that she has attempted to work with prime contractors in the private sector. She stated that she is solicited for price quotes on private sector jobs approximately 30-40 percent of the time; these projects do not have goals. She stated that these solicitations result in work approximately 60 percent of the time and the type of work is the same as it is in the private sector.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, reported that the same prime contractors sometimes utilize them in the public and private sectors due to their reputation, work, and performance. He has attempted to work with prime contractors in the private sector. He stated that they are solicited daily for price quotes on private sector projects that come in on the fax machine; he did not know whether the private sector projects had goals. He stated that these solicitations result in work 5 percent of the time. They perform hauling and demolition work in the private sector.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, reported that same prime contractors utilize his business

in the public and private sectors. He stated that this is due to his number of years in business, credibility, relationships and professionalism. He stated that his company always pursues projects. He stated that the private sector projects do not generally have goals, and solicitations from prime contractors result in work approximately 50 percent of the time.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, reported that the same prime contractors utilize her in both the public and private sectors and this utilization is based on her qualifications. She reported however, that although prime contractors "always" solicit her for price quotes on private sector projects, these solicitations rarely result in work. She stated that she has attempted to work with prime contractors in the private sector, however, these attempts have not been very successful.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that it depends upon the prime contractor whether they utilize her in both the private and public sectors. She stated that she tries to maintain her relationships so that she can get work and good referrals. She stated that she has attempted to obtain work with prime contractors in the private sector and she sends out letters and a newsletter that she has developed. She is not solicited very often for work on Consortium projects. She stated that she has not received many solicitations or work resulting from solicitations lately and was not sure if that was attributable to increased competition or if things were changing.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that the same prime contractors utilize her across the public and private sectors and stated that she receives a lot of referrals due to the quality of her work. She stated that in the private sector she is frequently solicited to work on projects and many of these projects have goals because they receive federal funding. She stated that these solicitations result in work almost all of the time and she receives good work from the prime contractor.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, reported that the same prime contractors utilize his firm across the public and private sectors. He stated that this is due to the quality of his work and his company's reputation.

CONTA #1, the President of the Latino Business Owners of America, stated that prime contractors who build a relationship with a subcontractor will use that subcontractor on their public sector and private sector jobs because of the trust factor.

CONTA #2, the President of the Black Contractor's Association, stated that once a DBE subcontractor breaks in and establishes a relationship with a prime contractor in the public setting, the subcontractor generally stays "in" with the prime contractor.

Some minority and female-owned businesses reported that the same prime contractors do not utilize them in the private and public sectors. [Interviewees #CON: 2, 4, 12, 13, 16, 17, 21, 24, 26, 27, 29, 30, 31, 32, 35, 37, 38, 40, 47, 48, 50, 51]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that there is a difference between the prime consultants who use him in the private sector and those who use him in the public sector. He stated that there are architects and developers who strictly go after public sector work and there are some that only go after private sector work.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he has never really considered whether the same prime contractors who use him in the public sector use him in the private sector. For example, he noted working with a prime contractor that only utilizes his firm for public sector work, although he is aware that the prime contractor also does work in the private sector. Interviewee #CON4 stated that some of the large prime contractors do private sector work but never use the DBEs for that work. Interviewee #CON4 stated that he suspects prime contractors use him on public jobs because his company has been around long enough and has a good relationship with the public agencies so the prime may increase its chances of winning a bid if it uses Interviewee #CON4 on the public sector work; in contrast, he stated that there is no benefit to the prime contractor for using Interviewee #CON4's firm in the private sector.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that the same prime contractors who use him in the public sector do not use him in the private sector. He stated it has been "clearly marked" that they only work for their public sector prime contractors in the public sector usually because of the discipline. He stated that in the private sector they are working for architects whereas in the public sector they are working for engineers.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that the prime contractors that he works with focus their activity in the public sector. Interviewee #CON13 stated that there is no difference as to being utilized on Consortium and private sector projects.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that when the company functions as a subcontractor, the same prime contractors do not use him in the public and private sectors because the nature of the work is different.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that the prime contractor's decision to use his firm across the public and private sectors depends largely on the mercy of the project manager. Interviewee #CON17's biggest concern is that sometimes the teams who make proposals are not the teams delivering the project – this makes business very difficult as a subcontractor. Interviewee #CON17 stated that this disconnect leads to broken promises and understandings from the time of proposal to job execution.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that the same prime contractors who utilize her business in the public sector do not use her business in the private sector; she assumes that if the opportunity presents itself they would.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that the same prime contractors who use her in the public sector do not use her in the private sector. She does not know why, but stated that the prime contractors have their own relationships.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that the same prime contractors that use her in the public sector do not use her in the private sector; she stated that they do not do so because it is not required.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, reported that he has tried to work with a prime contractor in the private sector, but these efforts have not been successful. He stated that some of the private sector projects have goals.

Interviewee #CON29, an African American male-owned electrical contractor, stated that he does not do any work in the public sector, and he does not know how to find prime contractors who need subcontractors. He stated that he is solicited for work every day on private sector projects but business has been slow over the past year. He stated that in the private sector the goal is to get the project done as cheaply as possible. He stated that because of his ethnicity he is, many times, expected to do the work for dirt cheap. He gave the example of a project that should have cost $10,000. At that time, that was the going rate and it would have covered his costs as well as paid his employees. The prime contractor cut the staff and Interviewee #CON29 eventually cut his price in half to $5,000 just to keep the job and pay his men. He stated that they want him to work as cheaply as possible while keeping the credibility of the project and that is very hard to do. He stated that most of his work comes through relationships and referrals. He stated that people want the job done well and he will discuss the price at the beginning of the project. He stated that solicitations almost always result in work; it is very rare when he receives a call and does not get the job.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that the same prime contractors do not use his business in both the public and private sectors for a simple reason: it is not required. He stated that the goals on private sector projects are different and normally do not require that a DBE be a part of the team. He stated that he does not get many calls to perform work in the private sector.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that he does not do work in the private sector very often. He stated that the overhead and the insurance are too expensive to maintain. He stated that working in the private sector comes with a lot of risk and exposure to a significant amount of overhead even when business is slow. He stated that his attempts at seeking work with prime contractors in the private sector have not been successful. Interviewee #CON31 stated that prime contractors often solicit him for work in the private sector but these solicitations rarely result in work. He stated that he submits "responsible" price quotes on bids that interest him. He stated that most of his work comes through recommendations from previous work and not through solicitations.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that he has tried to work with prime contractors in the private sector but he keeps getting the run around and has been unsuccessful in that regard. He stated that they do receive solicitations from prime contractors in the private sector but it is not often. He stated that he had "not hit the nail on the head yet" in terms of getting work in the private sector but he will keep trying; he does not know why they have not received work yet.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that the same prime contractors do not use her in the public and private sectors (although she reported acting as a prime contractor 100 percent of the time). She stated that she has tried to work with prime contractors in the private sector but these efforts have been unsuccessful. She stated that she has an alliance with a large firm and she is included in share pricing for RFPs. She stated that on the instances when she has been solicited for work in the private sector, it was on projects that did not have goals.

Interviewee #CON 37, an African American male owner of a SBA-certified architecture firm, stated that the same prime contractors do not use him in the public and private sectors. He stated that he assumes the prime contractors are utilizing different firms.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that the same prime contractors do not use him across the public and private sectors. He believes it is because of the "Good Old Boy Network." He stated that he will continue to try to obtain work in the private sector.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that prime contractors never solicit him for price quotes in the private sector. He stated that prime contractors have their own team and only utilize his business or other DBEs when it is required and they receive points or other credit. He stated that he has not attempted to obtain work with a prime contractor in the private sector.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that he has tried to obtain work with prime contractors in the private sector but the same prime contractors do not utilize his firm across the public and private sectors. He stated that he is not often solicited for work on Consortium projects.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that the prime contractors who use him in the public sector do not use him in the private sector. He stated that this is due in large part to the fact that there is not a [DBE] requirement in the private sector; he stated that the prime contractors utilize their own network of subcontractors for private sector projects. He stated that he no longer tries to obtain work with the public sector prime contractors in the private sector.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that the prime contractors who utilize him in the public sector do not utilize his firm in the private sector. He stated that the prime contractors that use his firm in the public sector do so because of the mandatory requirements; he stated that he has stopped trying to seek work with prime contractors in the private sector because it is not an efficient way to run his business. He stated that prime contractors do not solicit his firm in the private sector. He stated that private sector projects do not have goals, which makes it highly likely that this is the primary reason that he does not get work in the private sector.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that the same prime contractors do not utilize his firm across the public and private sectors. He stated that he has tried to obtain work in the private

sector with those firms who have utilized him in the public sector, but this has not been successful, he believes, because those firms are not required to use him in the private sector.

Some minority- and female-owned businesses reported not seeking out work from prime contractors in the private sector. [Interviewees #CON: 18, 25, 26, 30, 40]. Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, could not think of a private sector project on which she has functioned as a subcontractor. As a subcontractor on Consortium projects, though, Interviewee #CON18 recounted a positive experience.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he has not really attempted to gain much work in the private sector based on his experience in not receiving the work and the prime contractors sticking within their own "Good Old Boy Network".

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that he rarely attempts to obtain work from prime contractors in the private sector. He stated that prime contractors do not have any reason to share the wealth because there is no mandate to do so. He also stated that he is rarely solicited by prime contractors on private sector projects. He stated that he believes he only receives solicitations because of something specific that he does, or he believes it is probably political.

Most interviewees reported that a prime contractor has not and would not refuse to work with them because they are a DBE, however, a prime contractor may have refused to work with them for other reasons. [Interviewees #CON: 2, 9, 10, 12, 15, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 38, 40, 42, 43, 44, 45, 47, 48, 49, 51, CONTA #1, 2]. Interviewee #CON2 stated that he would not say that a prime consultant has refused to work with him because he is certified with Caltrans, but he is turned down by architects on a routine basis. He stated that this is not because he is a DBE; the architects are not even interested in knowing if he is a DBE. He stated that he is often turned down because of the relationship between the architect and the engineer that architect has built a relationship with. He stated if an architect has been working with a certain engineer, the architect often wants to continue working with that engineer.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that no one has said directly to his face that he would not receive a contract or work simply because of his DBE status.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that he does not think a prime contractor has ever refused to work with him because he is a DBE; at least no one has ever said that or made him feel like that is the reason.

Interviewee #CON44, a DBE/MBE/SBE-certified African American male owner of a financial planning services firm, stated that he is considered for work because of his credibility; he does not believe that this consideration has been affected by his DBE status.

CONTA #1, the President of the Latino Business Owners of America, stated that a prime will never refuse to work with a DBE, but instead will use a DBE for a smaller amount or will

sometimes state that it is using a DBE and change to another subcontractor. He stated that this occurred as recently as two to three years ago. CONTA #1 stated that the incident was not reported because he does not know who you would report it to.

A couple of interviewees reported feeling as though a prime had refused to work with them because they are a DBE. [Interviewees #CON: 16, 37]. Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, noted that while no company has ever specifically told him that his DBE status precluded the company from getting work, he has been blown off and he knows that is actually the case. The company makes strong efforts, but large companies will generally end up using whoever they want.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that he feels that a prime has probably refused to work with him because he is DBE, but he did not know it. He stated that no one has said it outright but it is more or less a feeling that he has.

Some interviewees reported that they did not know whether a prime had ever refused to work with them because they are DBE. [Interviewees #CON: 4, 18, 50]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he has no idea whether a prime has ever refused to work with his company because it is a DBE; he stated if so, the prime would never say so.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, did not know whether prime contractors have refused to work with her because she is a DBE — many projects fail to materialize.

D. The Bidding Process

BGPAA Study Anecdotes Regarding the Airport Authority's Bidding Process

Experiences with the Airport Authority's bidding process.

Some interviewees reported neutral or positive experiences with the Airport Authority's bidding process. [Interviewees #BGP: 1, 2, 5, 9, 11, 14, 16]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that the Authority's bid process is "pretty easy." He said that there is no difference between the Authority's bid process and other public agencies.

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm, reported that the Authority's bidding process is like any other public works process. He said, "I can't say that they are any better or any worse." Interviewee #BGP9 added that, "The Airport is not as bad as the schools and colleges. When you get to the college projects, you have to do all that paper work for the bond and for the PLA (labor agreement with the union). That is crazy!"

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that the Authority's bidding process was similar to other public agencies. He said that the Authority's bidding process was probably "a little bit more thorough in all of the requirements than we faced ever before." He added that the process was "very lengthy," but it was professional, and he "felt [that] all of the questions that were asked were fair."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that the Authority's bidding process is "pretty much like any other entity." He said that it is difficult for small companies to respond to the voluminous paperwork required in public projects, so the company often requests help from other entities, such as Native American groups.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, stated that most of the corporation's work with the Authority is obtained through a "qualification process," not a bidding process. He said that his experience with this process has been "very good" and commented that he thinks "they've been fair." He added that the corporation has been working with the Authority for 14 years.

Some interviewees reported challenges in connection with the Airport Authority's bidding process. [Interviewees #BGP: 4, 6, 10, 13, TA #1, TA #2]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, said, "When we do federal and military work, we usually get tons of feedback on a bid. In regard to the Airport, nothing ever filters back to us. There's zero feedback and zero reasons why [we didn't win the bid]. We don't know why we're not being used." He said, "The people who run the [a certain Airport Authority program] are infamous for collecting all the bids then throwing them all out and rebidding the whole project. It's not fair. Let's say the first firm has a problem with their bid, then it should go to the second firm, but instead, they'll declare everyone non-responsive and throw every bid out. This saves the Airport a bunch of money, because they know all the firms are just going to browbeat each other over money. All that does is hurt firms like ours." He said, "There has been some real outcry over how the Airport has declared firms non-responsive. There was a while when no one wanted to bid the Airport anymore, because they felt like all they're going to do is take our bids and throw them back out to save a bunch of money."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that "You have to be specifically on the Airport [Authority's] list. They have their own SBE or WBE qualifications, and I did not know that. That is not published very [clearly]."

Interviewee #BGP10, a principal at an engineering firm, reported that its experience bidding with the Authority has been "[n]ot good and getting worse." He said that in California professional service providers are supposed to be selected on the basis of qualifications, and contractors who construct things are supposed to be selected on the basis of price. Interviewee #10 stated that the Authority is more and more frequently selecting professional service providers on the basis of price alone, and the low bid gets the project.

Interviewee #BGP13, the owner of a non-certified construction firm, stated that in the Authority's bidding process, the "low number gets the job, and it's bonded work." He added that bid competition has increased significantly recently, but when he sees "projects going to 10, 20,

30 percent below your cost, you know that person is probably not prepared [for] that project, but they're awarded the project, and it's bonded, … but generally you don't see that contractor again." He stated that the number of bidders has doubled within the last couple of years. He said where between five and seven contractors were bidding before, now he is seeing "15 to 20 contractors bidding." He said that the Authority has "pushed to try to keep the work local," but "low numbers still rule."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that the Authority seems to write contract specifications for particular firms and that his organization has expressed this concern to the Authority. He said, "What we said to them is that the specifications that are written … are written [for a particular firm] to get the job. … That's a no-no."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, described the Authority's bidding process as "kind of unfavorable." He said, "Well the notification process, the outreach program … [are] not effective. He said that "bundled projects, make it harder for smaller business to have a part in the project [when] there's no requirement for 2nd and 3rd tier contractors; it is flawed during the design process." He said that if "you have a $20 million dollar contract then there's no way that you should just do the whole $20 million; you should partner in and have relationships with smaller SBA, MBE, you know companies, I think that's what the main problem is, it's not solicited correctly or favorably, you know fair…because if you don't have the big money, the big bonding you know then you're out and there's no requirement to utilize. They could say, we want you too, but they're like, well we can't find anybody."

A couple of interviewees reported limited or no experience with the Airport Authority's bidding process. [Interviewees #BGP: 12, 15]. Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, reported that the company has "very little" experience supplying or working with the Authority and has not bid significantly on projects with the Authority because it has not found many projects that match the "scope" of work that the company usually performs. Interviewee #12 said that they did not have any experience with the Authority's bidding process. They said, "I wish we had; I wish there was more." They said that they have had experience with the bidding process associated with other public agencies in the transportation industry in the Los Angeles area, particularly Caltrans, and that experience has been "very positive." They added that "[d]ue to budget constraints, sometimes they are slow to award, but that's understandable."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she does not remember anything about the Authority's bidding process because she thinks that the Authority gave her company "a sole source contract," so a bidding process was not required. She said that if she remembers correctly, the company "just provided a quote and then issued a contract."

Notification of opportunities to bid.

Some interviewees reported that the Airport Authority has good notification procedures in place to notify individuals of opportunities to bid. [Interviewees #BGP: 2, 4, 5, 9, 10, 13, 16]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that the Authority calls them about job opportunities.

Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that "In terms of notification and access to plans, that's all great. It's very accessible to get involved in the bid process [with the Airport Authority]. Compared to other airports, that's very good."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that "occasionally we go through an RFP process, but the Airport usually contacts us directly, and we provide a proposal." He said that the Authority advertises bid opportunities and that also "notify competent people that they have a past relationship with to notify them that projects are coming up and ask them to bid on it."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm stated, "I have never been notified of any bid. They just call me up and ask me to bid. I never get email notifications or mail or nothing like that. I guess because I'm their vendor of choice, they just call me up and ask for a bid."

Interviewee #BGP10, a principal at an engineering firm, commented that the Authority provides adequate notification regarding opportunities to bid or present proposals. He said that he does not remember exactly how the Authority notifies the public, but the firm subscribes to a marketing service and when a request for qualifications is released, the marketing service notifies the firm. He said that the firm usually submits its qualifications but declines to submit a price quote because the firm is good at what it does and is not the cheapest firm around.

Interviewee #BGP13, the owner of a non-certified construction firm, said that he is adequately notified of opportunities to bid with the Authority. He said that the company is "registered with [the Airport Authority's] business opportunities on their website, so [the company will] generally follow up on that to see what's going on and [remain] up to date." He said, "We also read the paper and see things posted [there], and because [the company is at the airport so often, it has] a general air of what's going on at the airport and what's coming up."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, reported that he was notified about opportunities to work with the Authority "either by word of mouth" through employees that are currently working there "or by e-mails or by advertisements in the typical venues like the newspaper or journals or whatever." He said that he thinks that these advertisements and e-mails are distributed by the Authority.

Other interviewees reported challenges in connection with learning of opportunities to bid. [Interviewees #BGP: 1, 8, 12, 14, TA #2]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that in regard to the Authority's registration, "it hasn't been helpful yet for us." He said that "in the past six months, he has only received two e-

mails from the Burbank Airport" regarding potential work, but that "may[be] that's just all they have, so I can't really say that they aren't sending information about projects that they have."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that it might be more difficult to learn about work opportunities with the Authority because "the fact that we haven't heard anything or haven't been contacted and haven't seen anything publicized; it probably is [harder to learn about work with the Airport Authority]."

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, reported that the company does not receive notification from the Authority regarding potential work opportunities. Interviewee #12 reported that "some agencies are much, much better than others" at notifying companies about potential work opportunities. They added, "We see more and more projects being advertised, even on small municipalities, smaller towns. They're getting it right. Sometimes their websites are tough to navigate. They seem to be making improvements."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that "there's no notification method" concerning jobs with the Authority, so "you have to search for it."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that his members have missed opportunities to bid on Authority projects and other public sector projects because they have not been notified of the opportunities to bid. He said, "Well, it's just like you know, you guys, you know, it's like we weren't even notified … that about this program … and we just brought this to their attention, like you didn't notify us, so we didn't have any participation but we weren't notified that there was a project going on…maybe there was no standard to hold the general contractor to use minorities."

Some interviewees reported having limited to no experience with the Airport Authority's notification of bid opportunities. [Interviewees #BGP: 6, 11, 14]. Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said, "We don't really touch the Airport [Authority's bids]. We mostly work with the prime." Interviewee #6 said that "The prime comes to us asking us to be on their team, and we send them our qualifications and our rate schedule. Then they send in their qualifications and proposal to the Airport."

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, stated that he does not remember how the Authority notified potential bidders of business opportunities. He stated that "the L.A. Airport has a system" for notifying potential bidders about requests for proposals every time the City of Los Angeles releases a new request for proposal. He said that to his knowledge, the Authority does not have that system, but it would be "very beneficial" if it did. He recommended that the Authority could improve its communications concerning available work, not only work with the Authority but also with private entities that work at the airport, so that companies may learn about opportunities there.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that he is not aware of notifications directly from the Authority concerning work

opportunities. He stated that the company is notified about projects at the Airport Authority "through manufacturers' reps, or the manufacturer." He continued, "The manufacturer has representatives for our equipment that we install, and whatever entity is seeking the equipment at the airport will ask them to recommend dealers, and because they're local in the area, they'll recommend [our company] and three other companies, or two other companies, to bid the project."

Knowledge of prime contractors' interest in bid.

One interviewee reported that a subcontractor can determine which prime contractors have expressed interest in a particular RFP. [Interviewee #BGP: 16]. Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that he is not sure whether the Authority has this, but in public sector work, "[a] lot of times, there's a list of people that attend pre-submittal conferences, … [and] you can get the registration list." He said that this is how the company generally learns about opportunities to work as a subcontractor.

Other interviewees reported that subcontractors are unable to determine which prime contractors have expressed interest in a particular RFP. [Interviewees #BGP: 11, 12, 13, TA #2]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that there is no way to identify opportunities to work with prime contractors until a company attends "a pre-RFP walk around" when the company can sign up with all of the interested prime contractors. He said that his firm participates in these walk arounds because if you do not attend, "you're excluded from the bid."Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, stated that some prime contractors advertise to notify potential bidders about opportunities, but some do not.

Interviewee #BGP13, the owner of a non-certified construction firm, stated that he does not "think that there's any specific notification" process regarding opportunities to work with primes. He said that his company is only notified of opportunities to work for primes when "somebody is contacting [the company] specifically" requesting a bid on a project. He added that the community is "pretty small, … and the airport is not that big," so the company is able to work off of "general knowledge" regarding "who might be bidding a project."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said there is no way for its members to know which primes have expressed an interest in an RFP unless the primes contact them directly.

Denials of bid or price quote submission opportunities.

Some interviewees reported never having been denied the opportunity to submit a bid on a project. [Interviewees #BGP: 1, 2, 6, 9, 11, 12, 13, 14, 15, 16].

A few interviewees reported instances in which they believe they were denied the opportunity to submit a bid on a project. [Interviewees #BGP: 4, 5, TA #2]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, said, "It's odd to me that they single source the materials. The last two jobs, I didn't even bother to bid because the Airport said, 'It has to be this one [type of material].' They limit opportunity, and that's frustrating. Even though my

[materials] function identically, I've probably missed a quarter of a million dollars in work, because I was told 'don't even bother to bid.'" He said that the Authority "is not reasonable. They won't even sit down to talk about it. When I call, they say, 'That's just the way it is.' They don't even want to address what I have to say."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that the firm has been denied the opportunity to bid by a prime contractor. He said, "It's generally when you have a very large firm that is looking for minority content. We also lost one project because we lost our small business certification last year."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he is not aware specifically of his members being denied the opportunity to submit a bid. He said "I don't know about denied. I don't know that they've even been denied the opportunity, there just wasn't enough time to prepare one, so if you could say, keeping on time, we could have, then we were denied the opportunities based on the timeline that we were notified and received bidding documents."

Recommendations.

One interviewee recommended implementing changes to the bidding process in order to make the bidding process more accessible to small businesses and DBEs. [Interviewee #BGP: 11]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, recommended that the Authority give more consideration to a company who has been working for the Airport Authority for several years.

Some interviewees recommended that the Airport Authority implement race- and gender-conscious goals and small business set-asides in connection with the bidding process. [Interviewees #BGP: TA #1, TA #2]. Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that there are no provisions for small or minority-owned contractors in BGPAA projects. He said, "How can you let a [project manager] put no provisions in the contract that he's going to be overseeing for $130 million? There's no provision for small businesses. There's no provision for diverse businesses. There's no provision for minority businesses. There's no provision for local businesses. … It has to be in the specifications." He said, "My recommendation [to the Airport Authority] was to take our local people here from Pasadena and Burbank … and add them to the team."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, recommended that the public agencies "establish criteria that must be abided to in regards to minorities, small businesses that would eliminate the general contractor from being awarded the contract if he didn't comply … In other words, when you have this project, you come in and you list your subs because what happens … is that they list us but then they get hold of the contract and don't utilize us…that happens a lot. That is a common practice, so they meet all of the requirements and then it sounds really good but then when the job is awarded we never get the call, like I said, that happens all of the time.

A couple of interviewees made other recommendations. [Interviewees #BGP: 4, 10]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, said, "I wish we

could change the bid process in itself because it's a low bid dollar process, and that isn't always best for the Airport [Authority's] or homeowner's interests. Some of these bids are too low, and when they're too low, they're going to take shortcuts, and those shortcuts are going to come out in someone's home. Maybe there should be a minimum on bids, or the process should be changed from low dollar to true evaluation of the package and contractor experience."

Interviewee #BGP10, a principal at an engineering firm, recommended that the Authority pick a firm based on qualifications and not open the fee until the firm is selected. He said that the perception is that the Authority wants the fee upfront and makes a selection based upon that fee. He added that many agencies, such as the Los Angeles World Airports and the Los Angeles County Metropolitan Transportation Authority, will go through the selection process, select a firm, and then negotiate the scope of the work and associated fee. He commented that he thinks that this is a preferable process for the agency and for the engineering community.

SDRCAA Anecdotes Regarding the San Diego International Airport Bid Process

The following anecdotes regarding the San Diego International Airport bid process were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

Bid notification.

Interviewees reported different ways in which they find out about Airport bid opportunities. Interviewee #SD2, representing a white female-owned firm, said that her firm finds out about Airport bid opportunities through prime contractors who solicit her firm for a bid or through published listings (e.g., The Daily Transcript and through the Associated General Contractors of America).

Interviewee #SD27, representing a white male-owned firm, said that his firm finds out about Airport projects through personal relationships that he has made with Airport personnel. He went on to say that he developed those relationships through working on Airport projects, attending networking events, and on-site visits.

Interviewee #SD5, representing an African American male-owned firm, reported that his firm is made aware of Airport projects through third party emails.

Some interviewees indicated that they use the Airport's website to find out about bid opportunities. Interviewee #SD21, representing a white male-owned firm, indicated that he finds out about Airport bid opportunities by closely monitoring their website: "For airport work, [the website is] the best source." Similarly, Interviewee #SD24, representing a white male-owned firm, and Interviewee #SD28, representing a white female-owned firm, both said that the Airport posts projects on their website and that their staff monitor it to keep aware of potential projects.

SDTA #3, representing a local chamber of commerce, indicated that the organization's members find out about Airport work by way of its website.

Adequacy of notification.

Some interviewees reported that the San Diego International Airport adequately notifies potential bidders about bid opportunities. Interviewee #SD3, representing a white male-owned firm, said that it is easy to stay informed about Airport projects. He reported that his firm spends one day each week reviewing a number of different sources providing information about bid opportunities (e.g., e-bid board, the blue book, trade papers, and emails and faxes).

Interviewee #SD20, representing an Asian American male-owned firm, reported that finding out about Airport bid opportunities is relatively easy, because the agency is local and they do a good job of advertising their projects. In describing that process, Interviewee #SD20 remarked that, "[The Airport] lets everyone know [about available projects] and then [local firms] compete."

Interviewee #SD4, representing a white male-owned firm, stated that he has no trouble finding out about Airport bid opportunities because they are advertised so well.

A few interviewees reported that the San Diego International Airport's Requests for Quotes (RFQs) and Requests for Proposals (RFPs) are too complex. SDTA #2, representing a Hispanic American trade organization, said that the language that public agencies use in RFP's and RFQ's is too complex and their requirements are too stringent to garner a wide network of competition: "The language is too technical. For example, on a contract that [an MBE/WBE firm] was bidding on, the agency required the bidding company own a big rig truck. [The firm] wanted this contract so bad that they went and bought a $25,000 truck because they didn't know any better. The public agency ultimately said the big rig was not necessary to bid on the contract after the fact. This company lost $25,000 just on the bidding for this project." SDTA #2 went on to suggest that there might be a racial component to how agencies write RFPs and RFQs: "RFPs are written to deter applications from people like us [i.e., minority- and female-owned firms]."

Similarly, Interviewee #SD24, representing a white male-owned firm, noted that RFPs for all public agencies could be written more clearly. However, he went on to say that they are not overly restrictive. Interviewee #SD18, representing a white female-owned firm, said about the Airport's RFPs, "The RFP language is difficult and the package is so thick."

Experiences with the San Diego International Airport Bid process.

Some interviewees reported positive or neutral experiences with the Airport's bid process. Interviewee #SD4, representing a white male-owned firm, said that the Airport's bidding process is better than that of other public agencies. Interviewee #SD4 went on to remark that it is easy to learn about Airport projects, and it is fairly straightforward to prepare a bid. Similarly, Interviewee #SD21, representing a white male-owned firm, said that bidding on Airport projects is "generally straight forward."

Interviewee #SD3, representing a white male-owned firm, reported that the Airport's specifications and bidding procedures are clear and straightforward. However, Interviewee #SD3 added that the Airport "doesn't know how to administer a contract."

Interviewee #SD14, representing a Hispanic American male-owned firm, indicated that winning work with the Airport is no easier or harder than winning work with any other entity. He added that the process is largely dependent on being the low bidder and unrelated to a firm's DBE status. Related to those comments, Interviewee #SD36, representing an African American male-owned firm, and Interviewee #SD38, representing a Hispanic American-owned firm also reported that public sector contracts always go to the lowest bidder. Interviewee #SD37 said, "[Public agencies] take the low bidders every time."

Interviewee #SD20, representing an Asian American male-owned firm, also indicated that winning work with the Airport is no easier or harder than with any other entity: "You win some, you lose some."

Interviewee #SD33, representing a Hispanic American male-owned firm, said that his firm has been doing work with the Airport for approximately eight years. He characterized the agency as organized, as having a "big picture" plan, and as being advocates of quality work. He said that it is a pleasure to work with the Airport.

Interviewee #SD42, representing a white male-owned firm, reported that the Airport was quite helpful throughout the bid process of a project related to the Quieter Home Program: "The Authority was helpful to us throughout the bidding process. We were prequalified through the MATOC program but were awarded a sole contract with the Airport to complete a phase of the Quieter Home Program." Interviewee #SD42 went on to describe Airport staff as supportive and helpful during the bid process.

Other interviewees reported negative experiences with the Airport's bid process. Interviewee #SD16, representing an African American male-owned firm, indicated that bidding on work with the Airport is more difficult than with other agencies: "There are more hoops to jump through and more paper work to deal with." He went on to report that his firm has a three year service contract with the airport, but that he was disappointed that the contract was also awarded to three other contractors with whom he has to compete for each piece of work. Regarding that arrangement, Interviewee #SD16 said, "It is possible to have a contract and never get a job. Why are there three [contractors]? It is misleading."

Interviewee #SD5, representing an African American male-owned firm, reported that other contractors have informed him that certain Airport projects require financial commitments that dissuaded his firm from bidding on them: "I have had conversations with others in the industry. They say that before they start work, they have to buy the materials, including windows. As a result, the contractors are spending $250,000 before they have even begun work on the project."

Interviewee #SD4, representing a white male-owned firm, indicated that the detail required in the Airport's bidding form is burdensome (e.g., unit pricing). He went on to say that he would prefer it if the Airport would have more concern for contractors' profits rather than only being concerned about saving money.

Interviewee #SD18, representing a white female-owned firm, indicated that the Airport's bid process is very cumbersome: "The amount of paper work in [the Airport's] bid package is over 100 pages, in addition to the security check. It takes a lot."

Similarly, Interviewee #SD37, representing a white male-owned firm, said that in comparison to other public agencies, it is harder to bid work for the Airport because of the increased security restrictions: "We have to go through TSA to get a badge, etc. We have seven men who are authorized to go in restricted access areas like behind counters, baggage areas, etc., but if those seven guys are on a pre-existing job, then we can't bid on the work."

Interviewee #SD17, representing a white female-owned firm, characterized the Airport's bid process as time consuming and as often being a source of frustration: "The [bid] process is very time consuming. A lot of times bids are time consuming and end up going nowhere – this is frustrating."

Interviewee #SD31, representing a white male-owned firm, indicated that, in his experience, the Airport is neither helpful nor responsive in addressing the concerns of contractors: "I attended one of their DVBE outreach programs … met with all kinds of people from the Airport, sent emails … They didn't even reply to my emails, even after I met them at an outreach program and they said 'Contact me.'" He continued, "I've found at least with other agencies, even if there was nothing going on, I was at least given a reply to my email."

Interviewee #SD43, representing a Hispanic male-owned firm, reported that she has attended a number of outreach events that the Airport hosted, but has not yet submitted a bid because the idea of bidding with the Airport is "overwhelming." She said, "They give you a lot of pamphlets and information and [have you] go to their website. It seems like you constantly have to keep going to workshops and to seminars …. It seems like it's difficult to get the process going with them."

SDTA #11, a veterans trade organization, said that there is too much paperwork and hassle associated with bidding on public sector projects, particularly with the airport.

Similarly, SDTA #1, representing a local chamber of commerce, has heard specific complaints from the organization's members about winning work with the Airport: "There have been members who have voiced frustration with getting work at the airport."

Interviewee #SD46, representing an African American male-owned firm, expressed concerns about the Airport awarding Quieter Home Program contracts to the same few firms. He said, "I think it's not a fair and equitable [process], but I mean you really can't say that because if it's the low bidder who has been fortunate enough to have won six bids in a row … [but] it doesn't give [small firms] the opportunity … to get in there edgewise and try to submit something."

Recommendations related to the San Diego International Airport bid process.

A few interviewees offered recommendations regarding the San Diego International Airport's bidding process. Interviewee #SD2, representing a white female-owned firm, said that she would like to see a system in place by which she can determine which firms the Airport actually uses on their projects.

Interviewee #SD19, representing a white male-owned firm, recommended that the Airport simplify its bid process and its invoicing procedures.

Interviewee #SD46, representing an African American male-owned firm, suggested that the Airport downsize Quieter Home Program bid packages from a $2.5 million range to a $1.5 million range in order to increase competition.

SDTA #6, representing an Asian American trade organization, reported that the Airport could improve how it disseminates information about available projects, how firms can become qualified to bid on those projects, and how firms can become DBE certified.

Similarly, SDTA #4, a local chamber of commerce, indicated that the Airport should improve contractors' access to information about project guidelines and also offer assistance in putting together bids and proposals.

A number of telephone interview respondents — primarily majority-owned firms — recommended that public agencies should consider more than just low bidder status when awarding contracts. Respondents suggested that a firm's qualifications should play a bigger role in contract awards. For example, a majority-owned firm said that focusing on price leads to a disproportionate number of contracts going to minority-owned firms: "My experience is that [public sector contracts] are usually only [going to] the lowest bid, and it's usually going to Mexicans. My complaint is, let's leave it in the country."

E. Partnerships

BGPAA Study Anecdotes Regarding Partnerships

Joint ventures.

Several interviewees reported knowledge of or experience with a joint venture program. [Interviewees #BGP: 2, 8, 10, 16, TA #2]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that "sometimes a bigger company will ask us to go in on a project with them that has a DBE requirement. This has been helpful."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that the firm has participated in joint ventures. He said, "I've worked on a lot of joint venture projects. Sometimes they are necessary because projects are of such a nature that you have to bring together a number of major capabilities that may not exist [in a single firm]."

Interviewee #BGP10, a principal at an engineering firm, reported that the firm has had experience with joint venture relationships. He said that the firm has worked with two firms in addition to the joint venture with which it is currently involved, and the experience has been positive.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that he believes that the company has participated in a joint venture with another firm. He said that he "heard that the problem with a joint venture is … who's really in charge." He said that "sometimes joint venture firms point fingers at each other," but he did not know if his company had experienced this problem.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, stated that his members have participated in some joint venture relationships. He said "Well, from my personal experience [firms] outreach to NAMCO and we are able to partner in some qualified contractors."

Other interviewees reported no knowledge of or experience with joint ventures. [Interviewees #BGP: 1, 6, 11, 12]. Interviewee #BGP1, the African American owner of an MBE/DBE and DVBE-certified architecture firm, said that he has not been in nor would he want to be in any joint venture relationships because you are creating a new entity, and a joint venture is normally only for very big projects.

Mentor-protégé.

Several interviewees reported knowledge of or experience with a mentor-protégé program. [Interviewees #BGP: 6, 14, 15, 16, TA #2]. Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said, "I know that Caltrans has a mentor/protégé program, and it could be useful in breaking in new firms. I think it's useful for younger firms."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that the company participates in mentor-protégé relationships through the Native American Center. He said, "We'll actually bring in disadvantaged youths, and they will come to work for us. Sometimes we have actually hired them, kept them past the six month [training] period. … We're not under any requirement to. … We usually train them, and if they show a lot of promise, or show up to work, and everything is good, and we have the need, we'll actually hire them full time."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she was mentored by "some of the prime companies … when [she] started out," and she is now "sort of mentoring new businesses along [and] helping them get through the process." She said that she obtained her certification on her own, but "the City of L.A. provides a list on their business website of other sources where you can contact minority businesses," and organizations, such as "the Latin Business Association [and the] … National Association of Women Business Owners … [do] some degree of mentoring and certification."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that the firm has participated in mentor-protégé relationships. He said that when his firm uses subcontractors, "a lot of times [the corporation will] train them on how [it wants] the work done."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that its members have participated in mentor-protégé relationships and the "ones that have had it, have been very successful … but they're far and few in between." He said that mentor-protégé relationships are far and few between "because it costs companies money to mentor, time and money. It's like being in the service, it costs you time and there's not a whole lot of payback for the individual."

Other interviewees reported no knowledge of or experience with mentor-protégé relationships. [Interviewees #BGP: 8, 11, 12, 13]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, expressed support for mentor- protégé relationships. She said "I think [mentor-protégé programs] would be a major help for small emerging firms. I have never heard of that happening, but that would be a good thing. "

Interviewee #BGP13, the owner of a non-certified construction firm, said that he is "not familiar" with mentor protégé programs, but he said that the company is "a member of ABC, Association of Builders and Contractors," and participates in ABC's apprenticeship program, which he feels "has improved the apprenticeship of electricians."

SDCRAA Anecdotes Regarding Partnerships

The following anecdotes regarding partnerships were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

Joint ventures.

A few interviewees shared their experiences with joint ventures. Interviewee #SD9, representing a minority female-owned firm that is a concessionaire at the Airport, said that her firm has been a part of two joint ventures, both as concessionaires at the Airport. Currently, her firm is involved in a joint venture with the master concessionaire at the Airport. Interviewee #SD9 indicated that the joint venture agreement has been beneficial for her firm, as the master concessionaire has taught her firm how to be competitive and has saved them a great deal of money (because the master concessionaire can purchase business-related products more cheaply than her firm).

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, described her involvement in a joint venture as a concessionaire at the Airport. Interviewee #SD1's partner was an African American female-owned firm that was responsible for business administration. The relationship was not particularly successful, as the business dissolved after only 18 months.

Interviewees #SD31, representing a white male-owned firm, indicated that joint ventures are very beneficial to his firm and to other small firms in construction. Regarding joint ventures, he explained: "It gives me access to a level of [the company] that I wouldn't get otherwise."

Interviewees #SD40, representing a white male-owned firm, said that joint ventures make sense for his firm on large projects: "We sometimes [participate in joint ventures] on large mega projects because we find that two firms are better than one. … You cannot have everything tied into one project and can combine the expertise of two firms."

Several interviewees who reported having no direct experience with joint ventures had positive or neutral opinions of them. SDTA #1, representing a local chamber of commerce, indicated that he supported the idea of joint ventures, because "[joint ventures] could help to get some of the local smaller firms … into the game."

SDTA #3, representing a local chamber of commerce, and SDTA #11, representing a veterans trade organization, both said that joint venture programs are worthwhile endeavors for minority- and female-owned businesses. Similarly, Interviewees #SD14, representing a Hispanic American male-owned firm, said that joint ventures are useful for minority- and female-owned firms, particularly on large projects.

Interviewees #SD20, representing an Asian American male-owned firm, indicated that he supports the idea of joint ventures but that their utility is dependent on whether the team makes sense. That is, each partner has to bring skills to the project that the other partner cannot bring on its own.

Interviewees #SD32, representing an African American male-owned firm, stated that joint ventures can work, particularly on large projects: "If you're looking at a gigantic contract — $300 million — there are very few companies that can do those kinds of jobs without a joint venture."

Other interviewees who reported having no direct experience with joint ventures had negative opinions of them. Interviewee #SD21, representing a white male-owned firm, said that he could imagine joint venture working for minority- and female-owned firms, but that he views them as being unfair. He said, "I don't believe it's reasonable [to offer financial incentives to find a joint venture partner]."

Interviewee #SD45, representing a white male-owned firm, said that joint ventures are " … good to a point, but generally [small] firms don't want to cough up ownership [to large firms]."

SDTA #10, a supplier trade organization, described joint ventures and joint venture incentives as "a tough area." He said that very few small firms understand them and their utility. He noted that small firms prefer to work under their own brand names.

SDTA #7, representing a construction trade organization, reported that joint ventures involving MBE or WBE firms typically are not very successful. He said that such agreements are usually set up to "pacify the politicians," rather than to create sensible partnerships. He remarked, "… when you're in a joint venture you got to bring something to the table other than [being] black."

Mentor-protégé.

Several interviewees shared their experiences with mentor-protégé programs. Interviewee #SD14, representing a Hispanic American male-owned firm, reported that his firm has taken part in mentor-protégé programs through Caltrans as the protégé. He said that those programs are useful in that they bring prime contractors face-to-face with smaller, MBE and WBE firms. He reported that those programs helped his firm in terms of networking and marketing.

Interviewee #SD5, representing an African American male-owned firm, is currently part of a mentor-protégé relationship as the protégé. He said that the mentor has been "very helpful." Interviewees #SD20, representing an Asian American male-owned firm, reported that his firm has taken part in mentor-protégé programs several times as the protégé. He said that the programs were useful but that the number of mentor-protégé opportunities is limited.

Interviewee #SD24, representing a white male-owned firm, reported that his firm is working with two protégés as part of SANDAG's mentoring program. Regarding his firm's motivation to participate in the program, Interviewees #SD24 stated, "We were encouraged to participate by SANDAG, and we certainly want to be on good terms with them. Maybe we're imparting great value to this [WBE firm] whose wealth and income I would envy."

Interviewee #SD4, representing a white male-owned firm, participated in a mentor-protégé program twice as the mentor. He reported that the first protégé with whom his firm worked went out of business after submitting a bad bid, and the second protégé had unrealistic expectations regarding her firm's growth.

Interviewee #SD25, representing a white male-owned firm, was involved in mentor-protégé programs when he worked at a large national firm. He indicated that they were positive experiences, and that he still works with most of the protégés from those programs. He said that he has seen their firms grow substantially over the years. Interviewees #SD25 went on to say that he understands why firms in construction (as opposed to firms in engineering) are hesitant to take part in mentor-protégé programs as mentors — it is akin to those firms strengthening their own competition in a "low bid environment."

Interviewee #SD37, representing a white male-owned firm, said that he supports mentor-protégé programs and finds them to be mutually beneficial: "It shows us what the smaller companies are doing and the way they are approaching work. But it also shows them how we're approaching it."

Interviewee #SD46, representing an African American male-owned firm that participated in a mentor-protégé program as the protégé, reported that the program helped his firm learn about the business side of the industry and also helped increase his firm's bonding capacity.

Regarding mentor-protégé relationships, Interviewee #SD47, representing an African American female-owned firm, said, "[Mentor-protégé relationships] can be helpful or they can be a hindrance. If [the mentor] makes you sign something saying you can't participate with anybody else … it could be three years that you're stuck with somebody that's not trying to help you …"

Several interviewees who reported having no direct experience with mentor-protégé programs had positive or neutral opinions of them. Interviewee #SD21, representing a white male-owned firm, said that although his firm has never directly participated in a mentor-protégé program, they worked with a mentor-protégé pair on a project. According to Interviewee #SD21, the arrangement appeared to work well in that case. He said, "I believe the mentor ended up finishing the job. The mentor entity actually provided labor and labor financing."

Interviewee #SD27, representing a white male-owned firm, said that his firm is interested in participating in a mentor-protégé program through the Airport. He said that his firm considers their subcontractors as their employees, and they see both a moral value and a business value in supporting local firms.

Interviewee #SD31, representing a white male-owned firm, described mentor-protégé programs as "excellent," because "it's one of the main ways to cover bonding." That is, as part of those relationships, the mentor can bond for the protégé. In addition, Interviewees #SD31 suggested that the mentor can help the protégé make connections within the industry.

Interviewee #SD32, representing an African American male-owned firm, indicated that mentor-protégé programs are very helpful, particularly to small firms trying to grow: "It gives you the ability to bond higher, get that larger job that you wanted. …" But, Interviewees #SD32 said that he has also seen a few situations in which the mentor has taken advantage of the protégé: "Essentially, the big business [does] the small business's work even though it was the small business that got the contract — just using [the small business] as a vehicle to get more work."

Interviewee #SD40, representing a white male-owned firm, reported that the Associated General Contractors of America (AGC) has a mentor-protégé program that is very beneficial to local MBE/WBE firms.

SDTA #7, representing a construction trade organization, indicated that his organization supports the idea of mentor-protégé programs and has one in place for its members. Speaking about mentor-protégé programs in general, SDTA #7 remarked, "… what a great deal [for the protégés] to be able to have [a mentor] that's been in the business for years get in and tell you what to do. It takes years out of the learning curve." He added that in order for mentor-protégé programs to be successful, the pair has to be matched correctly.

SDTA #2, representing a Hispanic American trade organization, indicated that he strongly supports mentor-protégé programs and believes that public agencies should offer financial incentives to develop mentor-protégé relationships. SDTA #2 said that mentor-protégé programs give smaller firms the confidence to progress and teaches them the basic skills needed to be successful: "Most jobs aren't rocket science — they require a check list and repeat."

SDTA #13, a retired official from a local public agency, stated that the Airport should continue encouraging participation in mentor-protégé programs and should do more to facilitate firms meeting and entering into those relationships. She went on to say that businesses have to stop viewing each other as combatants and instead view each other as friendly competitors.

SDTA #11, representing a veterans trade organization, said that mentor-protégé programs are excellent, but one disadvantage of them is that mentors are legally prohibited from working with their protégés in the future.

SDTA #3, representing a local chamber of commerce, and SDTA #10, representing a supplier trade organization, both said that mentor-protégé programs can be useful to MBE and WBE firms. Interviewees #SD 16, representing an African American male-owned firm, also indicated that such programs are worthwhile.

SDTA #9, representing a public works trade organization, described mentor-protégé programs with which he was familiar: "The California Mentor Program for [architecture and engineering] was great. This program had 25 [mentor-protégé] pairs in its first year. The program is for small business with a focus on DBEs. The City Program on the other hand takes on two to three new teams per year. The issue is finding mentors who are willing to regularly meet face to face. This type of programming can be very helpful, but there are not enough opportunities and it is very competitive." He indicated that in order for mentor-protégé relationships to be successful, both partners have to have similar expectations: "I think the difficulty with DOT mentor-protégé programs is that the mentor and the protégé have different perceptions of what should come out of the relationship."

Other interviewees who reported having no direct experience with mentor-protégé programs had negative opinions of them. Interviewee #SD2, representing an African American female-owned firm indicated that mentors are not ideally suited to give advice to protégés: "You need to know so much as a company to be able to advise me. The mentor only knows a slice of the business and can't advise across all areas." One problem that Interviewees #SD2 described specifically is that mentor firms tend to be larger and thus can only provide advice about systems and procedures for large firms but not small ones.

Interviewee #SD10, representing an African American male-owned firm, indicated that training programs in general are of no use to his firm: "Training and mentoring is a waste of time and money. I have been at this too long for that to be of use for me."

Interviewee #SD28, representing a white female-owned firm, said that mentor-protégé relationships are useful in general, but that they are not very applicable to her firm's situation because of the niche industry in which the firm works. She added that the competition is so stiff in her firm's industry that it would be difficult to convince one firm to help another: "One of our competitors is not going to … take us under their wings … and help us. Nobody's going to give any advice to help anyone else out."

SDTA #8, representing an electrical workers trade organization, reported that she has heard quite a bit of negative feedback about mentor-protégé programs. The complaints have predominantly been related to the time commitment and a reluctance to share trade secrets.

SDTA #1, representing a local chamber of commerce, described mentor-protégé programs as "intriguing", but indicated that he is worried about the mentor being in a position to take advantage of the protégé.

Consortium Anecdotes Regarding Partnerships

The following anecdotes regarding partnerships were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Some of the businesses interviewed reported no knowledge of or experience with partnerships, either joint venture or mentor-protégé arrangements. [Interviewees #CON: 1, 5, 6, 7, 9, 10, 11, 19, 28, 29, 40, 41, 43]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, did not have any experience with a joint venture but he would be interested in participating with that; he would also like to participate in a mentor protégé program but he had no experience with such a program.

Joint ventures.

Several interviewees reported knowledge of or experience with a joint venture program. [Interviewees #CON: 2, 3, 4, 8, 13, 14, 17, 18, 20, 22, 23, 25, 26, 30, 31, 32, 33, 34, 35, 38, 39, 44, 45, 46, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, CONTA #2]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he has heard of joint ventures between DBEs and non-DBEs. For instance the public agencies, like SANDAG, require DBEs to pair up with prime contractors to do work for the agencies. SANDAG provided him with contact information to pair up with a prime contractor. However, the prime contractors already have their teams. Interviewee #CON2 said the agencies have pretty much relegated the responsibility to the prime contractors to hire DBEs. He stated that he has been unable to pair up with any of the prime contractors.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that joint ventures between DBEs and non-DBEs are fairly rare in the environmental consulting business. They do happen on occasion but only between large firms with thousands of employees. He stated that typically a large firm would not joint venture with a smaller firm. Rather, the larger firm would hire the smaller firm as a subcontractor and it would hold the purse strings. Interviewee #CON3 stated that he vaguely recalled several years ago there was some entity trying to promote a joint venture but he does not think it ever happened. He suspects that it did not happen because the prime contractor wanted complete control of projects. The other issue is money, everybody has to be billable. Depending on firms the prime may want the DBE to be 100 percent billable. The prime expects to get so much money from the contract. Interviewee #CON3 did not have any knowledge of or experience with a mentor-protégé program.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, entered into a joint venture with two other firms in the 1990s: a large non-DBE firm and another DBE firm. Interviewee #CON4 stated that the entities formed a partnership to go after work in San Diego. The partnership lasted seven years. He stated that they were successful in obtaining between 12 and 20 public projects in San Diego. The joint venture has since been dissolved.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, has "often considered" entering into a joint venture with a DVBE; he is aware of this

program through the State of California. Interviewee #CON8 did not have any knowledge of or experience with a mentor-protégé program.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, entered into a joint venture agreement with a non-DBE in 1999 or 2000 for MTA; he stated that it was a positive experience.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that he had once participated in a joint venture and it was a "tough situation." He stated that joint ventures are not easy relationships to build. He stated that his company engaged in a joint venture when they felt it was advantageous, dependent upon the contract. He stated that companies engage more in joint ventures when they are starting out in order to supplement their experience and meet the requirements for an RFP. Interviewee #CON14 did not have any knowledge of or experience with a mentor-protégé program.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, has submitted proposals as a joint venturer, but the company has never won any of those jobs.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, has had positive experiences with the joint venture program, and has been involved with joint ventures for many proposals. Interviewee #CON18 did not have any knowledge of or experience with a mentor-protégé program.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, participated in a joint venture with a private sector prime contractor.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, has participated in joint ventures in both the public and private sectors; she stated that there are always joint ventures.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, reported that he has participated in a joint venture on a private sector project.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, was aware of joint ventures within the Consortium but had never participated in one.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that she has participated in a joint venture in the public sector. She is aware of joint ventures with the Consortium and across the public and private sectors.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, had participated in a joint venture in the public sector.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, has not experienced a joint venture between a DBE and non-DBE. He stated that he has not partnered in the capacity of a joint venture. He has worked with other firms on projects but none within the same scope of work in which they were considered partners. He

stated that he feels there is not any incentive to initiate a joint venture type of relationship between a DBE and non-DBE firm. He stated that joint ventures do exist but they are typically beneficial to the larger business' interests.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that he has participated in a joint venture with the manufacturer of some of his products.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, was aware of joint ventures in the Consortium, non-Consortium public sector, and the private sector.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, reported having participated in a joint venture on a public sector project in Texas with a DBE; she was not aware of any other joint ventures.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that she participated in a joint venture in the public sector.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, has participated in a joint venture in the public sector.

Interviewee #CON44, a DBE/MBE/SBE-certified African American male owner of a financial planning services firm, participated in a joint venture through one of the Consortium member agencies.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that she had experience with a joint venture with the Consortium.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, had experience with a joint venture in the private sector.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, reported having participated in a joint venture with another electrical contractor.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that he was aware of two or three joint ventures over the past 15 years.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, indicated that he has discussed participating in a joint venture and anticipates participating in one in the next six months.

Interviewee #CON54, a white male owner of a general contracting firm, reported that his firm has participated in joint ventures and was aware of other joint ventures in existence.

Interviewee #CON55, a representative from a white male-owned large construction services and program management firm, was aware of joint ventures but had never participated in one.

Interviewee #CON56, a white male owner of a small electrical contracting firm, reported having knowledge of joint ventures in the private sector but had not participated in one.

Interviewee #CON57, a white male owner of a construction and landscape architecture firm, reported having participated in a joint venture in the private sector.

Interviewee #CON58, a white male owner of an engineering consulting firm, stated that he was aware of joint ventures but noted that his firm has intentionally avoided participating in one because it is too time-consuming and requires one to practically set up an entire new company.

CONTA #2, the President of the Black Contractor's Association, stated that he is not aware of any joint ventures between a DBE and non-DBE in the private sector, but stated that there have been several in the public sector.

Mentor-protégé.

Several interviewees reported knowledge of or experience with a mentor-protégé program. [Interviewees #CON: 2, 4, 12, 13, 15, 16, 17, 21, 22, 23, 24, 26, 27, 30, 31, 33, 35, 36, 37, 42, 45, 46, 47, 49, 50, 51, 53, 54, 55, 56, 57, 58, CONTA #1, 2]. Interviewee #CON2, an African American structural engineer, stated that he has heard of mentor-protégé programs between DBEs and non-DBEs. He stated that once in a while he receives an email from Caltrans about such programs. He stated that he knows of one DBE that participated in the program five or six years ago as a subcontractor for a prime. This particular subcontractor really liked it, and it was a good project, a SANDAG railway project. Interviewee #CON2 stated that he has considered participating in the program when it begins again.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he was not aware of the Consortium's mentor-protégé program but was aware that Caltrans had a "protégé" program in which he participated last year. The program went pretty well and was helpful. His mentor was a non-DBE. He explained that the program works by pairing large prime contractors to volunteer as a mentor and protégé with DBEs. The program was just a one-year program. Interviewee #CON4 stated that he began participating in the program in October 2007 and the program will end in October 2008. Interviewee #CON4 stated that he found value in the program.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he did have experience with a mentor-protégé program through Caltrans District 7. He stated that in his experience the program was "non-results oriented." He stated that the first mentor "perhaps forgot that we were their protégé." He stated that they dissolved that relationship and signed up to receive a second mentor with whom they pursued a project; they were not successful. He stated that as the protégé they actually brought work to the mentor. Interviewee #CON12 did not have any knowledge of or experience with a joint venture.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he believes a mentor-protégé program would be a great idea but he has not been able to find anyone to partner with. He stated that the mentor-protégé program with the SBA was a lot of work for not a lot of benefit.

Interviewee #CON15, a Hispanic American male owner of a MBE certified engineering and construction company stated that he has a lot of experience in the mentor-protégé program, and has been very successful with his mentor. Interviewee #CON15's work has been referred out by his mentor and it is through the program that he was encouraged to become a prime contractor. Interviewee #CON15 did not have any knowledge of or experience with a joint venture.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, has no experience with the mentor-protégé program because they haven't found anyone that wants to participate in the program with them. Interviewee #CON16 noted that it sounded like a great program that isn't being "recommended." Interviewee #CON16 thinks that there are not enough incentives for the larger companies to participate in the mentor-protégé program. Interviewee #CON16 did not have any knowledge of or experience with a joint venture.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that the company is now a mentor, but that it never participated as a protégé. The mentor-protégé program has been very positive for Interviewee #CON17's company.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, had experience with a mentor-protégé program through the federal government.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, had participated in a public sector mentor-protégé program.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, participated in a mentor-protégé program years ago but was not aware of any such programs now.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that she has participated in a mentor-protégé program in the private sector with USC through its public arts program.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, reported that he had minimal experience with a mentor-protégé program.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, had participated in a mentor-protégé program through Caltrans.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, has heard of mentor-protégé programs but has never participated in such a project. He has learned that the people who do get to participate in these types of programs are

handpicked (most likely a family member or relative or close friend or some sort of other way that would make them want to train a potential competitor), thus limiting the ability for regular firms and truly disadvantaged firms to become a part of such programs. He suggested forcing mentors to work with their protégés. He stated they should position them in a way in which they would work with them to get a project or risk losing their funding.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, had participated in a mentor-protégé relationship in the Consortium.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, had heard of a mentor-protégé programs but was not aware of any real program.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, was aware of MBDC Capacity Building sponsored in part by Southern California Edison. She did not have any experience, however, with a mentor-protégé program.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she was aware of some mentoring programs sponsored by private companies and through public universities. She also stated that she has developed her own mentoring program and the people that she invited to participate were graduates of court reporting schools.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he has participated in a mentor protégé program in the private and public sectors.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, was involved in a mentor-protégé program at the State Board of Equalization.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that she had experience with a mentor-protégé program, but she did not feel that it was a true mentor-protégé program.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that the federal government, L.A. County MTA, and Metro all have mentor-protégé programs and he has been trying to get involved in one for 10 years, but he just has not had the time.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, believed that he remembered participating in a mentor-protégé program through the federal government. He was not aware of other mentor-protégé programs.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, was aware of mentor-protégé programs and noted there used to be several programs in the past.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, was aware of a mentor-protégé program offered by a private company.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, had no knowledge of any mentor-protégé program but reported having heard prime contractors talk about such programs during projects. He stated that no such opportunities have materialized and he feels that once majority firms learn that there is no benefit to them, they lose interest in the idea.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, reported having participated in a mentoring program — not targeted towards DBEs — through private organizations of which he is a member.

Interviewee #CON54, a white male owner of a general contracting firm, stated that they have an internal mentoring program for small firms within a department of their firm.

Interviewee #CON55, a representative from a white male-owned large construction services and program management firm, stated that he has participated in several mentor-protégé programs and he understands the importance of them. He stated that he would like more small and minority-owned businesses to do well.

Interviewee #CON56, a white male owner of a small electrical contracting firm, reported having general knowledge of mentor-protégé programs, but said he had no knowledge of the specific details.

Interviewee #CON57, a white male owner of a construction and landscape architecture firm, reported having participated in a mentor-protégé program through a local college and was also aware of programs in other areas.

Interviewee #CON58, a white male owner of an engineering consulting firm, noted that an office of his firm has participated in a mentor-protégé program as a mentor to a DBE. He was aware of other mentor-protégé programs.

CONTA #1, the President of the Latino Business Owners of America, stated that he has heard of mentor-protégé programs between DBE and non-DBE business owners but was not aware of any such program with Consortium agencies.

CONTA #2, the President of the Black Contractor's Association, stated that he is not aware of a Consortium mentor-protégé program between DBEs and non-DBEs and did not believe that Caltrans had any such program. He did recall that the City of San Diego had a similar program that was not very successful because the program only accepted one-two protégés and it was a very slow process.

F. Prequalification

BGPAA Study Anecdotes Regarding Prequalification

Some interviewees reported a successful or positive experience with the Airport Authority's prequalification procedure. [Interviewees #BGP: 9, 14, 15, TA #2]. Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm stated that prequalification for the Authority's insurance was easy. He said, "I've only been the prequalification for the insurance and so forth, and for us it's easy, because we have everything in place."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, stated that there are qualifications that must be met to bid on projects with the Authority, such as being qualified as a "local business contractor" or meeting certain education criteria. He said that these pre-qualification requirements were "typical" and "good because … the Airport needs to be protected and bring in qualified firms, and I don't think that they ever use the pre-qualifications to specifically limit who bids [on] their jobs."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she had a good experience with pre-qualification "with the Bureau of Engineering." She noted that the agency pre-qualification process is generally "very slow and very lengthy," but she said that she thinks "that's just the way that agencies work nowadays."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that it is "not a problem filling out the paperwork [for the prequalification process], but the problem is that you get prequalified but then nothing happens there." He said, "You are not placed on a list … for example, I'm a [general contractor], I go to the Airport, I fill out my pre-qualifications for you, pre-qualify, what happens when a mechanical contractor is awarded a job, what happens to that 2nd and 3rd opportunity, never happens."

Several interviewees had no experience with the Airport Authority's prequalification process. [Interviewees #BGP: 10, 11, 12, 13, 16]. Interviewee #BGP10, a principal at an engineering firm, said that he is unfamiliar with the Authority's prequalification process if it has one. He reported that some other public agencies have a prequalification process for the professional services field, and his firm has participated in the process. He said that "some of the other agencies will have one where they will prequalify firms," and, as projects come up, these agencies will allow prequalified firms to submit proposals. He said that he does not think that the Authority works that way.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he did not know if the Authority has a prequalification process. He said that the Los Angeles Airport does not have a pre-qualification requirement, and anyone can bid on any request for proposal. He said that a prequalification process has been proposed at the Los Angeles Airport and is under consideration.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that they were unaware of whether the Authority has a prequalification process. Interviewee #12 reported that some public agencies have a prequalification process, but it is very rare. They said that prequalification requirements make "things over exclusive."

Interviewee #BGP13, the owner of a non-certified construction firm, said that he has been working with the Authority "for about 20 years," and he does not "have a recollection of prequalifying other than what our insurance requirements are and everything … because of the maintenance contract."

Some interviewees had recommendations for improving the prequalification process. [Interviewees #BGP: 10, TA #2]. Interviewee #BGP10, a principal at an engineering firm, recommended having a prequalification process so that the agency and the engineering community can go through a single prequalification process and so that neither has to go through a time consuming prequalification process for each individual project.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, recommended that the general contractors' lists of potential bidders for projects be made available to subcontractors because some prequalified subcontractors are not being listed as potential bidders.

SDCRAA Anecdotes Regarding Prequalification

The following anecdotes regarding prequalification were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

A few interviewees recommended that more public agencies prequalify firms in particular industries. Interviewee #SD21, representing a white male-owned firm, recommended that public agencies prequalify some number of MBE and WBE firms within each construction sector and require prime contractors to subcontract out to those firms when they need that type of work completed.

Similarly, Interviewee #SD4, representing a white male-owned firm, recommended that the San Diego International Airport prequalify MBE and WBE firms within specific trades.

Interviewee #SD37, representing a white male-owned firm, indicated that prequalifying bidders would be beneficial to both the Airport and to bidders: "The Airport should pre-qualify bidders. This would be beneficial, because it would eliminate contractors I don't think are qualified. Pre-qualifying bidders would cut the competition down, and the Airport would get more qualified contractors doing the work for them."

Interviewee #SD45, representing a white male-owned firm, suggested the San Diego International Airport should provide general contractors with a list of prequalified subcontractors. He recommended that the Airport develop a prequalification program that evaluated quality and price rather than just price. He said, "Intangibles need to be considered."

Two interviewees indicated that prequalifying firms is a barrier to small firms being successful in the public and private sectors. SDTA #5, representing a government advisory commission on minority issues, reported that prequalification does not help small firms: The City [of San Diego] has been neglectful and dysfunctional. Prequalification is a choice that San Diego has made — they do things without thinking about consequences. Prequalification is a barrier to small businesses."

Interviewee #SD46, representing an African American male-owned firm, stated that prequalification processes are time consuming: "By the time you can complete the prequalification process, the bid is over." He went on to say that prequalification should be considered unnecessary if a firm can get bonded for the project.

One interviewee reported that the prequalification process is expensive. Interviewee #SD5, representing an African American male-owned firm, characterized the prequalification process as too expensive to be practical: "The city requires a lot to be pre-qualified. They require businesses to do a compilation, an audit, and a bonding letter. Many of these requirements cost a lot of money to get together. For example, the compilation requires an audit by a CPA. Many small businesses cannot afford the three to five thousand dollars required just to get pre-qualified to do work with the city." However, Interviewee #SD5 pointed out that the SDRCAA offers assistance in getting through the certification process.

G. Licensing

BGPAA Study Anecdotes Regarding Licensing

Most interviewees reported no issues in connection with obtaining the licensing required in their particular field. [Interviewees #BGP: 1, 2, 3, 5, 6, 9, 10, 11, 12, 13, 16, TA #2]. Interviewee #BGP10, a principal at an engineering firm, reported that members of his firm are licensed as individual professionals.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, stated that the Los Angeles Airport requires companies to have a non-exclusive operating license. He said that "every firm that operates on the airport is given a five year non-exclusive license to operate there, and at the end of the five years, you have to go back and reapply again." He said that the process to obtain a license takes a while, but more emphasis is being placed on this licensure.

Some interviewees reported mixed or negative experiences regarding licensing. [Interviewees #BGP: 8, 14]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that the firm had an issue with the City of Los Angeles requiring certain types of engineering firm to be licensed as such in the State of California.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that "state licensing is not a problem, … but it's getting more and more difficult in California … [because of] the hurdles you have to jump through." He said that some cities require city business licenses, and if you are pulled over in a business vehicle without a city business license, you will receive a ticket.

H. Experiences with Payment

BGPAA Study Anecdotes Regarding Experiences with Payment

Some interviewees reported a positive experience in connection with payment by the Airport Authority. [Interviewees #BGP: 1, 5, 11, 13, 14, 16]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that he has had no issues with receiving payments from the Authority, and that the payment process is very clear.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that the company "didn't have any problems … with payment" from the Authority. He said that the public sector is pretty good about payment.

Interviewee #BGP13, the owner of a non-certified construction firm, reported that the Authority "has been very good about paying." He said that the Authority usually pays within 30 to 45 days.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that payment from the Authority has been "consistent [and] good. We never have to call and ask for payment. It always happens per the contract."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that the company's experience obtaining payment from the Authority has "been very good." He said that there might be "a little lag in receiving payment" when the company acts as a subcontractor instead of a prime, but he is "not aware of much of a difference."

Some interviewees reported a negative experience in connection with payment by the Airport Authority. [Interviewees #BGP: 2, 4, 9, 10, TA #2]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that relative to other public agencies, "it's a little harder" to receive payments from the Authority.

Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that the firm has experienced difficulties related to payment by the Authority. He said, "The contractor performs the work, but the Airport won't close the work so [the contractor] can get paid. They hold the retention, and the contractor is losing money every day. That can drive our prices up through credit reasons because we don't know how long it will take to get paid. It definitely drives up financing charges. When that happens, you scare away the good contractors." He said, "My average Burbank Airport payment, from the day I deliver to the day I get paid, is 120 days. The average finance charge is 3 to 4 percent. So when the Airport takes four months to pay, the subcontractor is losing 3 to 4 percent every month. My profit margin is 10 percent for the whole job, and when I have to finance for four months, it costs me to do these jobs."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm reported that his firm had a problem once with the Authority, but that it was fixed. He said, "We ran into a problem and one time, but they corrected…" When asked how the Authority compares to other public sector work in timely payment, Interviewee #9 said, "It's fair. On a scale of 1 to 10, it's about a six-and-a-half.

Interviewee #BGP10, a principal at an engineering firm, reported that payment by the Authority is "slow." He said that the public sector is slow generally, "slower than it should be." Interviewee #10 said that there is a different payment process for engineers and other contractors, and the firm's average payment window is usually "a little over 90" days. He stated, "You know, the public sector can pay their contractors within 30 days, but they find it difficult to pay engineers within 60 to 90 days." He said that the law requires the Authority to pay contractors "within 30 days," and "[c]ontractors will … stop work if they don't get paid," so payment is made on time. He said that the problem with slow payment is with the Authority and is not the result of the prime taking too long to pay the subcontractor. He said that the prime usually pays a subcontractor within five or 10 days of receiving payment from the Airport Authority.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that payment by the Authority is "slow … slow to very slow."

One interviewee reported that timely payment does not present a barrier to working with public agencies and/or the private sector. [Interviewee #BGP: 5].

Some interviewees reported that timely payment presents a barrier generally with public agencies and/or the private sector. [Interviewees #BGP: 2, 3, 6, 8, 11, 12, 13, 14, 15].
Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, stated that timely payment has been an issue for the firm. He said that "a lot of state agencies are slow because of budget issues. We have experienced payment delays."

Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that timeliness of payment can present a barrier for small contractors. He said, "Cash is king, so yeah, if you have problems with cash flow, you're not going to stay in business very long."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that timely payment is "an issue. We have the prompt pay law in the State of California where when a prime is paid, then they have ten day to pay us, but some primes do not do that."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said, "We have not seen a slump in work. What we have seen is a slump in getting paid. … I think it's a general delay [in payment]." He said that there are certain firms that his firm will not work with because "they don't pay their bills."

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that the company has had problems with late payments from airlines as a result of the airlines' "financial condition," but "that happens everywhere." He said that payment issues occur more in the private sector because private companies have "their own financial problems." He added that contracts often call for late fees when an airline is late with payment, but the company usually does not enforce these provisions because it is important to maintain the company's positive relationship with the airline, and the airline does not look favorably upon enforcement of these late fee provisions.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, reported that payment "varies project to project. There are some agencies that pay very quickly. There are some up front, for example, [that] just say, 'Hey, I won't even submit [the invoice] until 55 days after delivery, and then it has to touch seven or eight people [before] you finally get a check back.'" They said that in those situations, payment is usually received within 90 to 120 days, but on average the company receives payment in between 60 and 90 days. They added that "it's very slow."

Interviewee #BGP13, the owner of a non-certified construction firm, said that the Authority usually pays within 30 to 45 days. Regarding everyone else, he said, "Everybody's taking forever to pay now," and the typical payment window is "running 60 to 120" days.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that when the company works as a subcontractor, payment from the prime may be delayed if the company's work is tied to another subcontractor's work that has not yet been completed. He reported that most private entities pay once a quarter, and it does not matter when the invoice goes out or when the contract says payment will be made. He said that the company will often offer early payment discounts, but some private entities do not take advantage of this offer.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she does not recall her experience with obtaining payment from the Authority. She said that with public agencies, the company does not "get paid until the prime gets paid, and once the prime gets paid, the primes are usually good about cutting … checks to us within five days. However, … it can be 90 to 120 days" before an agency pays the prime, "and that's really way too long for a small business. I mean, it hurts." She said that in the private sector, a prime generally pays the company "once a client approves the project." She said that this "typically" takes "net 30 days."

Some interviewees identified paperwork and related issues as a barrier to receiving payment. [Interviewees #BGP: 12, 13, TA #2]. Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, stated that payment varies "greatly" depending upon who is acting as the prime contractor on the project "and how they turn in their paperwork." They added, "Change orders tend to get paid more slowly because they require more paperwork."

Interviewee #BGP13, the owner of a non-certified construction firm, stated that subcontractors do not get paid "until the prime contractor has been paid, … so even if you have a 30 day net on your invoicing, it doesn't matter, and nobody's really chasing any type of penalties or anything like that, so … the prime takes 30 days or 60 days to get paid, [and] … a pretty common contractual agreement is you have about 10 days to pay [the subcontractors] after you've been paid as a prime." He added that "nobody's financing the job except for the … subcontractors." He said that if there is a barrier concerning prompt payment, it is associated with proper processing of paperwork by the project owner or user. He said that often the "paperwork [is] sitting with the user" waiting for approvals and such, but he said that this observation is not unique to "a specific entity" and is "just industry-wide."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that the pay cycle is a barrier to payment. He said, "Yes, you have 30 days, right, plus if you took it down to, you can say you can do it on a 20 day cycle or a 15 day cycle then you would turn over the invoices faster, so you wouldn't have to work with 30 days, during the invoice after 30 days then there's usually another 15 days before you get payment on that, so it's actually like 45 days to 60 days before you get a check, in the meantime, on the second cycle you're still working and paying out of pocket … so to shorten the cycle." He said that payroll expenses present a big barrier for firms when pay cycles are slow.

Most interviewees reported that their race, ethnicity or gender does not affect their ability to receive payment. [Interviewees #BGP: 1, 2, 3, 5, 8, 9, 10, 11, 12, 13, 14, 15]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that "I wouldn't say it is discrimination, but we have issues with slow payments."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that slow payment is a general problem and probably not a based on race or gender. He said, "We get a lot of slow pays, and I bet [minority firms] get a lot of slow pays. … Maybe they're a little slower with minority owned firms, but I haven't heard … that complaint expressed."

Some interviewees had recommendations for improving payment. [Interviewees #BGP: 4, 10, 12, 13, 15, TA #2]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, recommended that the contractors be pre-qualified by the Authority to ensure that they can pay their subcontractors.

Interviewee #BGP10, a principal at an engineering firm, recommended that that Authority "pay within 30 days." He said that he thinks that this payment window is feasible for the Authority. He said that slow payment forces "small firms to finance … work and finance the airport," which is a "significant difficulty" for small firms.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, recommended that agencies pay "more quickly" and "streamline the payment process to the general contractor."

Interviewee #BGP13, the owner of a non-certified construction firm, recommended that the project owner pay faster so that contractors are not forced to finance the projects. He said that he has noticed payment windows getting "longer and longer over the last … three to five years." He suggested that a 10 to 15 day turnaround on payment of invoices should be feasible.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that in obtaining timely payment, it is important to make "sure that the statement of work is clearly identified," that the same terms are used in all of the documents, and that all of the parties are "on the same page" regarding what particular terms mean. She said that a company "shouldn't have to submit timecards" when it is "working on projects that are not to exceed the lump sum … because it's

going to be lump sum, and those are based on milestone deliverable." She said that agency inputting and enforcing these requirements can cause delay, and the process is unnecessary.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, recommended shortening the pay cycle.

SDCRAA Anecdotes Regarding Experiences with Payment

The following anecdotes regarding experiences with payment were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

Payment by prime contractors, public agencies, or private sector clients.

Some interviewees reported positive experiences with getting paid by prime contractors or public agencies. Interviewee #SD11, representing a white male-owned firm, indicated that his firm has never had issues with agencies paying them. As an example, he said, "The City just paid us in seven days." Interviewee #SD11 went on to say that his firm has never had any issues paying their subcontractors, and that it is their policy to pay their subcontractors within seven days of getting paid themselves. He said that any delay in paying subcontractors is due to delays in receiving payment from the agency: "Our problem is that we are waiting up to 60 days to get paid from the public agency which might slow down the payment time."

Interviewee #SD2, representing a white female-owned firm, also has had good experiences getting paid on projects. She said that the only difficulty comes when the project goes considerably beyond the original estimate. Interviewee #SD22, representing a white male-owned firm, also reported experiencing no issues related to payment.

Interviewee #SD45, representing a white male-owned firm, said that receiving payment in a timely manner is "always, always a problem." In describing the differences between receiving payment in the public and private sectors, Interviewee #SD45 commented, "Payment may be slow in the public sector, but it is guaranteed. You need a gun to get paid in the private sector."

Several interviewees complained that prime contractors or agencies often pay slowly in the public sector. Interviewee #SD14, representing a Hispanic American male-owned firm, said that there are "always" agencies and prime contractors that pay slowly. He explained that slow payment is especially problematic now because of the recession. Interviewee #SD20, representing an Asian American male-owned firm, expressed a similar sentiment: "[Slow payment] happens all the time! I would like to see some sort of contract clause between the primes and agencies [so that the prime contractor], within 10 days of getting paid, has to pay the subs."

Interviewee #SD16, representing an African American male-owned firm, reported that slow payment is a negative aspect of doing public sector work: "It is hard to get paid." He went on to say that slow payment becomes particularly difficult in times when his firm has limited capital.

Interviewee #SD18, representing a white female-owned firm, indicated that payments from public agencies take between 60 and 90 days, longer than payments from private entities: "The

difference between public and private agencies is the decision making process. The public sector takes a long time to make decisions."

Interviewee #SD19, representing a white male-owned firm, reported that "50 percent of payments [from public agencies] take over 120 days …" She went on to say that when her firm works as a prime contractor payment tends to be faster than when they work as a subcontractor. Regarding her firm's payment experiences as a subcontractor, Interviewee #SD19 said, "We may have finished our piece of the job, but [if] the prime contractor is not on schedule, […] we don't get paid until the job is complete." She continued, "There are cases where we did not get paid at all."

Interviewee #SD37, representing a white male-owned firm, indicated that his firm prefers to work as a prime contractor, because there are too many payment issues associated with subcontractor work: "The company doesn't have to worry about getting paid when [it is] the prime. We are currently working with a general as a subcontractor and have been working with them for over a year, and we practically have to dig our money out of them." He went on to say that sometimes his firm will simply forego payment from general contractors, because pursuing legal action against them is too expensive.

Interviewee #SD33, representing a Hispanic American male-owned firm, reported that payment issues are prevalent on construction projects, because prime contractors often delay payments because of "re-do's or go-backs." He went on to say that small firms are more likely to be affected by slow payments and that "it's sometimes 60 - 90 days out before the initial payment on a new project is received." Interviewee #SD36, representing an African American male-owned firm, said, "Always with [public agencies] you can count on a 60, 90 or 120 day pay period. That will affect you if you don't have the foundation to pay people on time."

SDTA #2, representing a Hispanic American trade organization, and Interviewee #SD25, representing a white male-owned firm, both also reported that payments from public agencies take anywhere from 60 to 90 days. SDTA #2 indicated that payment delays that are longer than 90 days are usually the prime contractor's fault and not the agency's.

Interviewee #SD24, representing a white male-owned firm, reported that payment to subcontractors is often delayed because of the processing that is required on the part of the prime contractor, or because the agency rejects one or more payment invoices.

Interviewee #SD3, representing a white male-owned firm, explained that there is typically a 10-week lag between the start of a public agency project and the first payment. He said that the time that it takes to get paid is almost twice as long for subcontractors than for prime contractors. Interviewee #SD3 remarked that because of payment delays, it is crucial for firms to have a good line of credit.

Interviewee #SD28, representing a white female-owned firm, said that slow payment is "always" an issue. She explained that both public and private entities are typically taking "at least 120 days right now" to pay contractors. She went on to say that because her firm is usually not the biggest firm on a project, its payment concerns are not as high on the prime contractor's priority list. She said, "We don't have as much pull [to demand quicker payment]."

Interviewee #SD35, representing an Asian American male-owned firm, reported that he used to own another firm that went into bankruptcy, primarily because prime contractors refused to pay his firm: "… we couldn't get paid from several of our primes." Interviewee #SD35 indicated that one prime contractor in particular put his former firm out of business: "They would always come up with some reason why we weren't getting paid on time. Usually, it was the paper work. In the last days of [the firm], [the prime contractor] owed $180,000. [The prime contractor] put us out of business." Interviewee #SD35 indicated that his previous problems with payment have made him hesitant to take on subcontractor roles with his current firm.

Interviewee #SD43, representing a Hispanic male-owned firm, said that slow payment is often an issue, but it is especially difficult for firms working in the public sector. She explained that in her experience, public agencies can take anywhere from three to four months to pay contractors. She said that in the private sector it only takes a couple of weeks to receive payment.

Interviewee #SD46, representing an African American male-owned firm, reported that a prime contractor withheld payment for more than 60 days on a public sector project with which is firm was involved. Interviewee #SD46 said that it would be helpful if agencies posted prime contractor payment data so that subcontractors would know when they could expect payment.

SDTA#9, representing a public works trade organization, explained that although payment issues are not as prevalent as they were in the past, they can still pose problems for small firms: "The payments have gotten a lot better than they used to be from public agencies, [but] the 60-90 days that it takes to get paid is difficult for small businesses." He went on to say that payment issues are much more common for subcontractors than they are for prime contractors.

Several interviewees also complained of slow payment in the private sector. Interviewee #SD21, representing a white male-owned firm, indicated that payment issues are a substantial barrier to working in the private sector as well: "One of the toughest parts of the business on the private side is just getting paid." He went on to say that not receiving payment in a timely manner (or at all) is a barrier to contractors' progress and growth.

Interviewee #SD5, representing an African American male-owned firm, reported several incidents in which he had trouble receiving payments from prime contractors in both the public sector and the private sector. He said that in one case his firm had to wait over six months to get paid.

Interviewee #SD34, representing a white male-owned firm, said that he is often given the "runaround" when getting paid by his clients. He said that he frequently has to follow up with them to get paid.

Interviewee #SD41, representing a white male-owned firm, reported that his firm has over $2 million in unpaid invoices from private sector clients that have gone bankrupt. He said, "We are in court now trying to litigate. … Getting paid is a big risk in the private industry. I would be happy getting 10 cents on the dollar right now."

Interviewee #SD44, representing a Hispanic male-owned firm, remarked that slow payment is often an issue with which all firms have to deal and indicated that the issue does not selectively affect MBE/WBE firms: "With every business you have [slow payment issues]."

Some interviewees suggested that slow payment disproportionately affects small firms. Interviewee #SD7, representing a white male-owned firm, indicated that payments "aren't going to come when you think they are going to come." He went on to say that slow payments are "just a hiccup, not a show stopper" for large, well established firms but could be catastrophic for minority- or female-owned firms that are smaller and less established.

Interviewee #SD30, representing an African American male-owned firm, reported that slow payment is a barrier, particularly for a small firm. He explained that most clients typically pay contractors 30 days after receiving an invoice, but that delay makes it difficult for small firms to cover costs in the meantime.

Interviewee #SD31, representing a white male-owned firm, stated that slow payment is an issue for small firms on large projects, because they do not have the capital to cover upfront costs. He said, "Nobody is going to ship you a million dollars worth of [materials] without getting most of their money up front." And he went on to indicate that bridge loans are too expensive to be practical.

Interviewee #SD40, representing a white male-owned firm, reported that payment delays are difficult for small firms to handle: "The 60 to 90 day payment is difficult for small businesses. I love it when a guy calls and says I need my check." Interviewee #SD40 reported that his firm pays its subcontractors within 30 days. He said, "We take a lot of pride in making sure all of our paperwork is correct. We do what we call a pencil copy five days before the invoice is due to ensure our payment is on time."

Consistent with those comments, SDTA#1, representing a local chamber of commerce, reported that payment delays pose a substantial problem for small firms, because, relative to large firms, they have less capital.

SDTA#4, representing a local chamber of commerce, said that she has seen good, small firms struggle to make payroll as a result of payment delays.

A few interviewees expressed a preference to work in a particular sector because of payment considerations. Interviewee #SD16, representing an African American male-owned firm, stated that he prefers to work for large private clients, because he finds payments to be more secure: "I prefer to work for a large private company who I know pays their bills."

Interviewee #SD35, representing an Asian American male-owned firm, said that he prefers to work in the private sector to avoid payment delays: "I prefer private work, because you get paid sooner as opposed to the public. We also prefer to prime projects because of payment issues."

In contrast, Interviewee #SD 20, representing an Asian American male-owned firm, said that he prefers to work in the public sector, because, from a legal standpoint, payments are much more secure.

Payment experiences with the SDCRAA.

Many interviewees shared positive experiences with getting paid by the Airport. Interviewee #SD16, representing an African American male-owned firm, indicated that he has never had trouble getting paid on Airport projects and that in fact the Airport pays earlier than required: "I have received two payments from the airport and neither was held to the thirty days (the limit by which public agencies are required to pay contractors after receiving an invoice)." Similarly, Interviewee #SD21, a white male-owned firm, also reported positive experiences with being paid on Airport projects.

Interviewee #SD24, representing a white male-owned firm, indicated that when he works as a prime contractor on Airport projects, the agency's payment schedule is more consistent and less challenging than that of other public agencies. However, he went on to say that when he worked as a subcontractor on an Airport project his payment was much slower.

Interviewee #SD17, representing a white female-owned firm, reported that, in general, her firm has not experienced any problems receiving payment from the Airport: 'We just email a PDF and usually get paid within 15 to 20 days from the Airport."

Interviewee #SD42, representing a white male-owned firm that worked on a contract related to the Quieter Home Program, said that the Airport paid his firm on a bi-weekly basis in a timely manner until the agency cancelled his contract for reasons unrelated to payment.

A few Interviewees shared negative experiences with getting paid by the Airport. Interviewee #SD28, representing a white female-owned firm, reported that she has experienced only one payment issue with the Airport. A few years ago, the Airport bounced a check in trying to pay her firm, but she went on to say that the Airport took care of the situation immediately.

Interviewee #SD35, representing an Asian American male-owned firm, explained that the Airport's payment policy makes it difficult for small firms to remain competitive: "When working with the Airport, contractors are required to purchase materials up front without funds from the Authority. This is an issue because the wholesale suppliers want to be paid within 30 days, and if you aren't getting paid by your prime or the agency, it is difficult to have the capital to keep you afloat. As a small business you can't carry the overhead."

Interviewee #SD47, representing an African American female-owned firm, reported that in her experience, the Airport and other state agencies pay quite slowly: "We were going out of business because they didn't pay [quickly]." She continued, "We don't have lines [of credit] and loans where we can wait [for payment]."

Denial of payment based on race, ethnicity, or gender.

Two MBE/WBE interviewees reported that their minority or gender status played a role in experiencing payment delays. Interviewee #SD10, representing an African American male-owned firm, said that he has felt discriminated against when trying to be paid. He described a situation in which he was refused payment because of his minority status: "I had a guy from San Diego County call me because they were late for paying me for one of my accounts. He said the

check was ready but insisted that I come to their offices to get it even after I asked multiple times for him to send it. The man at the County … insisted that he would leave the check at the front desk for me." Interviewee #SD10 ultimately agreed to pick up the check, but once he arrived at the front desk they made him go to another office to pick it up. Once he arrived at the second office, a white male who was holding his check asked him, "How did you get this contract?" Interviewee #SD10 said of the situation, "It got to the point that I couldn't get paid. I had to go to the city council to help me get my money. Once he saw the color of my skin he asked how I got the contract. This was with the County of San Diego about five years ago. He wanted to know how a black man got this opportunity. This is the nature of the business."

Interviewee #SD2, representing a white female-owned firm, also reported that she has been discriminated against in certain payment situations, albeit several years ago. She provided an example from 20 years ago when she needed payment from a prime contractor to make payroll. She said that she visited the prime contractor about receiving payment, and he told her that he was not going to pay her. She subsequently sent her husband to talk to the prime contractor, and he wrote her a check immediately.

Recommendations related to payment.

A few interviewees recommended that public agencies be more proactive in ensuring that subcontractors get paid in a timely manner. Interviewee #SD20, representing an Asian American male-owned firm, stated that public agencies need to monitor how quickly prime contractors pay their subcontractors: "Make sure the prime pays the subs."

Interviewee #SD2, representing a white female-owned firm, suggested that public agencies follow Caltrans' example and list when they pay prime contractors on their websites. She indicated that access to payment information has made a substantial difference in terms of subcontractors being paid quickly.

Interviewee #SD35, representing an Asian American male-owned firm, suggested that public agencies (and the Airport in particular) play the role of watchdog to ensure that subcontractors get paid: "If a sub[contractor] is not getting paid by a government agency or their prime contractor, then the public agency, in this case the Airport, should become a watchdog for those small subcontractor businesses." He continued, "Not getting paid on time can break a business. …"

SDTA#5, representing a government advisory commission on minority issues, recommended that public agencies figure out a way to ensure that firms get paid quickly: "Cash flow is very important to small businesses with payroll, etc. [Public agencies] have to create ways for people to get paid quickly and on time. If [they] aren't sensitive to those needs these businesses will go under."

Consortium Anecdotes Regarding Experiences with Payment

The following anecdotes regarding payment were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Some interviewees reported positive experiences being paid by prime contractors on private sector projects. [Interviewees #CON: 8, 13, 18, 20, 22, 28, 29, 31, 37, 49, 51, 56, CONTA #2]. Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that payment by prime contractors in the private sector is "excellent."

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he has had a very good experience being paid by a prime contractor on private sector projects.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated that he has had a good experience being paid by prime contractors in the private sector, but stated that is due to the caliber of prime contractors that he does business with.

Interviewee #CON29, an African American male-owned electrical contractor, stated that he has had positive experiences being paid on private sector projects. He stated that he makes arrangements to have his money available at the end of the project or upfront as segments of the project are completed.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that in the private sector he typically has goals on his projects which dictate his pay schedule. He feels this makes it easier for him to get paid because the prime contractor can see the results.

Interviewee #CON37, an African American male owner of a SBA certified architecture firm, stated that he has had a positive experience being paid by prime contractors on private sector projects.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, reported that payment by prime contractors in the private sector is fairly prompt; at the very least he has been paid in accordance with the agreed upon terms.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that payment by prime contractors on private sector projects has been good and prompt.

CONTA #2, the President of the Black Contractor's Association, stated that in the private sector, subcontractors receive timely payment according to their contracts with the prime contractor.

Some interviewees reported negative experiences being paid by prime contractors on private sector projects. [Interviewees #CON: 11, 12, 14, 15, 23, 30, 33, 36, 38, 39, 43, 45, 52, 57, PF #19]. Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that she did have a problem at one point in time being paid by prime contractors on private sector projects; she identified a lack of funds as a the source of this problem.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated the payment in the private sector has been "terrible," so much so that they are no longer interested in pursuing work in the private sector. He stated that with new or questionable clients they request a 30 percent retainer.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that he has not always had good experiences being paid by prime contractors on private sector projects. He stated that they are currently working on a contract out-of-state and the prime contractor is two to three months behind on billing; this has caused the prime contractor to be three to four months behind on paying the subcontractors. He stated that when the prime contractor is "not sharp" the subcontractor will suffer.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, reported that payment by prime contractors on private sector projects is slow and often problematic. Many times, Interviewee #CON15 reports requirements of releases, signatures, etc. for vendors and payment — there is much more paperwork in the private sector.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, reported that payment from prime contractors in the private sector is usually late.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that his experience being paid by prime contractors in the private sector is about the same as on Consortium projects; he stated that sometimes it takes a lot to get his money.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that her experience being paid by prime contractors in the private sector has not been too good. She stated that "if the prime does not get paid, we do not get paid." She stated that payment in the "old days" was better in that you could depend on getting paid within 60 to one hundred 100 days.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she had difficult experiences getting paid by prime contractors on two private sector projects; they claimed they had to wait to get paid.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, reported that payment in the private sector has been very slow in some instances, which is very difficult for a small firm to carry.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that payment by prime contractors in the private sector has also been slow.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, stated that in his experience prime contractors on private sector projects have been slow to make payments, which is difficult for small businesses.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that payment by prime contractors on private sector projects is very slow.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, reported that they have experienced late payment by prime contractors in the private sector.

Interviewee #CON57, a white male owner of a construction and landscape architecture firm, stated that payment by prime contractors in the private sector varies a great deal and is dependent upon the contractor; he stated that some firms are slow and others are just okay.

PF #19, an individual representing a minority-owned construction management small business firm provided oral testimony at a public forum held on October 20, 2009. He suggested that the payment process to small businesses be changed because, in his personal experience, he sometimes did not receive payments for up to five years. In these cases, his money was held as a retainer by the Prime contractor.

Other interviewees reported mixed experiences being paid by prime contractors on private sector projects. [Interviewees #CON: 1, 2, 4, 9, 27, CONTA #1]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that in the private sector, 90 percent of the prime contractors pay them on time; the other 10 percent drag out payment or state they will pay when paid. He stated that in the public sector, the prime contractors also agree to pay when paid.

Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that architects in general in the private sector often default on payment; developers and owners are very good in paying, and with the exception of the current economic crisis, generally pay on time. Interviewee #CON2 said that he has heard from other consultants that they are paid in a timely manner on public sector projects.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that the only difference in being paid by the prime contractors on private sector projects is that he dealt directly with the developer or owner or contractor so it is a direct one-on-one relationship whereas in the public sector there is another step involved. Interviewee #CON4 has to submit his invoice to the prime contractor and then the prime contractor incorporates it into their invoice and it goes to the client. As a result, Interviewee #CON4 stated that it takes longer to get paid in the public sector but on the other side, with the private sector, he explains that you always have the risk of the client you are working for going bankrupt or disappearing and never collecting your money whereas in the public sector you know you will get paid; it is just a slow process.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that

payment is the same in the private sector as it is in the public sector. He stated that when a problem arises it is more difficult to remedy it. He stated payment was okay up until the beginning of this year; he stated that the economy has now affected payment.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, reported that payment by prime contractors on private sector projects has been both positive and negative — you either are paid quickly or not at all.

CONTA #1, the President of the Latino Business Owners of America, stated that the trend in the private sector is that there is a much tighter relationship between the subcontractors, prime contractors, and owners; payment and timing of payment is negotiated so that these problems are not as prevalent in the private sector.

Some interviewees reported no experiences with being paid by prime contractors on private sector projects. [Interviewees #CON: 16, 40, 44, 47, 48, 50, 54].

Several subcontractor interviewees reported that timely payment by prime contractors is an issue "throughout the industry" and across the private and public sectors. [Interviewees #CON: 5, 7, 21, 22, 37, 52, CONTA #2]. Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that receiving payment is a problem throughout the industry. He stated that his company is currently having problems with prime contractors on city projects because the prime contractors want to pay the sub-consultants when the prime gets paid. Interviewee #CON5 stated that because his contract is with the prime contractor and not the prime contractor's client, he feels that his company should be paid when the work is completed. Interviewee #CON5 stated that this is an industry-wide problem, but it has nothing to do with being a DBE or the Consortium; it is a sub-consulting issue.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that in general all subcontractors have a tough time obtaining payment from prime contractors on both private sector and public sector projects. He stated that many times owners do not pay on time and in most cases the prime contractor will not pay subcontractors until the prime contractor is paid.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that her experiences with receiving payment have varied; she stated that some experiences were awful and one incident almost put her out of business. She stated that "thankfully" the federal government now has a "prompt payment act" for small businesses where she is paid within 30 days. She stated that there is similar legislation under California law.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that the barrier to receiving payment is late payment by a prime contractor.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that the lack of enforcement of the agreed payment schedule is a barrier to receiving

payment. He stated that there is no one making sure that prime contractors pay their subcontractors within a certain time period.

CONTA #2, the President of the Black Contractor's Association, stated that the experience of being paid by a prime contractor on public projects varies depending on the prime contractor and the relationship between the prime contractor and the subcontractor. He stated that some subcontractors may be timely paid (within the 30-day billing period or even sooner) if the subcontractor has a good relationship with the prime. He stated that it is a problem when prime contractors get paid and there is no way that subcontractors know. He stated that some agencies have tried to make prime contractors inform subcontractors when they are paid, but the practice of not informing the subcontractors is rampant. Generally, his members try to stimulate their own commerce among businesses in the private sector rather than to rely on public work.

Some interviewees identified paperwork and related issues as a barrier to receiving payment. [Interviewees #CON: 8, 9, 13, 14, 16, 17, 27, 30, 35, 37, CONTA #1]. Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that in the non-Consortium public sector, the notice of completion is not always known to the subcontractors or the project manager; this he says is a barrier to receiving payment.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, identified the rejection of invoices for "trivial reasons" like leaving off an expense as a barrier to receiving payment; he was not sure whether that had ever happened with one of the Consortium member agencies.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, identified agencies' failure to timely review invoices as a barrier to receiving payment. Interviewee #CON13 stated that on one occasion L.A. County MTA was in the process of installing a new bidding system; payment was delayed for two months because the system did not work.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that the biggest barrier to receiving payment is that often they are working with a procurement agent dealing with an engineering contract that is not geared toward the type of billing that they use in the marketing area. He stated that billing for marketing often covers intangible items, but the procurement agent will request his company to adapt their billing to a more tangible format.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that sometimes paperwork issues preclude fast payment, and also stated that all paperwork must be filled out correctly to receive payment.

Interviewee #CON17 stated that payments are subject to a lot of scrutiny before they are made, and if there were any barriers to payment it would be a covert not an overt action.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that it takes forever to get contracts approved.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that sometimes the procedures and paperwork associated with payment can be quite tedious; if one item is missing it can push back his payment on projects and work being done.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, felt that a major barrier to receiving payment is the payee's lack of payment technology.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, identified paperwork as one barrier to receiving payment.

CONTA #1, the President of the Latino Business Owners of America, stated that there are a number of barriers to receiving payment, including excessive paperwork, failing to complete paperwork on time, not meeting the expectation of the prime contractor, and the client not being satisfied.

Some interviewees identified the owner/client's failure to pay the prime contractor or failure to approve a project as a barrier to receiving payment. [Interviewees #CON: 12, 23, 33, 56]. Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that a common barrier to receiving payment is when the ultimate client does not pay the prime contractor and then the prime contractor cannot pay the subcontractor. Interviewee #CON12 stated that another barrier is when the client does not approve the project. Interviewee #CON12 stated that he was recently a subcontractor to an architect who had two contracts with a school district; they were attracted to assist on this contract because the school district guarantees payment within 30 days. However, it turned out that that meant payment within 30 days of project approval which took over a year; he stated this was "gut-wrenching."

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that the impediment to receiving timely payment in the private sector is due to the fact that the prime contractor is usually waiting to be paid.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that the only barrier to payment is when the prime contractor does not get paid.

Interviewee #CON56, a white male owner of a small electrical contracting firm, noted that they have encountered issues being paid by the average customer although they have received payment in the end.

Some interviewees identified various other issues with respect to the prime contractor that act as a barrier to receiving payment. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that the prime contractor's lack of adequate financing is a barrier to receiving payment.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that delay on the part of the prime contractor is a barrier to receiving payment.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that he has read books and gone through classes on financing projects and he makes sure that his people get paid. He stated that he had an issue getting paid on a HUD project in which he blew the whistle on a crew that was doing his work after hours. This was an incident in which he was a subcontractor, but he told on the prime contractor who was taking away his work after hours and on weekends against the rules because he would have received time and a half on this work and they were likely getting much less.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that people are supposed to pay you for work delivered but that no one is watching the prime contractors to make sure that they pay their subcontractors. She stated that if she complains then she runs the risk of losing future contracts.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that the only barrier to receiving payment is unexplained late payment.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that prime contractors want to pay their subcontractors last; they do not follow the Prompt Pay Act set forth in the C.F.R.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that the process to receive payment is slow and cumbersome. He stated that there should be some sort of checks and balances system in place that would allow subcontractors to receive payment directly from the project owner instead of having to rely on payment from the prime contractor.

Most interviewees reported no barriers to receiving payment. [Interviewees #CON: 2, 3, 4, 6, 10, 11, 15, 18, 19, 20, 21, 24, 26, 28, 29, 34, 38, 40, 42, 43, 44, 47, 48, 49, 50, 53, 54, 55, 57, 58, CONTA #2]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, did not think that there are generally any barriers to receiving payment, but noted that one "methodology" for delaying a payment is to reject an invoice, whether because of the format or otherwise.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, did not identify any barriers to receiving payment and did not feel as though her race, ethnicity, or gender has ever affected her ability to receive payment.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that she was aware of barriers to receiving payment, but she could not specify any time in which she experienced such a barrier.

CONTA #2, the President of the Black Contractor's Association, stated that there are generally no barriers to receiving payment. He stated that if a contractor is qualified, he is usually paid unless there are issues of nonperformance or workmanship disputes.

The majority of interviewees reported that their race, ethnicity, or gender does not affect their ability to receive payment. [Interviewees #CON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 33, 35, 38, 39, 42, 43, 44, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, CONTA #1, 2]. Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he cannot specifically say that race, ethnicity, or gender has ever affected any business's ability to receive payment, but thought that all minorities could say that it has at some point. He stated there would be no EEOC and agencies of that nature if there were no problems.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated he does not feel that the race, ethnicity, or gender of a business owner affects the business's ability to receive payment. He stated that the quality of work is much more a factor than race, ethnicity, or gender.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that she did not feel that race, ethnicity, or gender has affected her ability to receive payment. Sometimes it is late, but that is not a result of discrimination.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that the size of his firm affects his ability to receive payment more so than race or gender.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that his race, ethnicity, or gender may have affected his ability to receive work, but not to actually receive payment.

CONTA #1, the President of the Latino Business Owners of America, stated that he does not think that race, ethnicity, or gender affects his members' ability to receive payment. He stated that prime contractors "play games" no matter who the subcontractor is.

CONTA #2, the President of the Black Contractor's Association, stated that he does not feel that race, ethnicity, or gender has ever affected a business owners' ability to receive payment.

Some interviewees reported feeling that their race, ethnicity, or gender has affected their ability to receive payment. [Interviewees #CON: 25, 34, 36, 37, 40, 45, 50, 51]. Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, reported feeling instinctively that his race, ethnicity, or gender may have affected his ability to receive payment. He stated that he does not believe Caucasian-owned firms have the same problem being paid.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, does feel as though her gender has affected her ability to receive payment. She believes that some large firms may not have paid her due to her gender. She stated that she had no concrete evidence of this, but instinctively felt it to be the case. She believes that her gender has affected her business relationships generally and in addition to payment issues.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that indirectly she believes that her race or gender has affected her ability to receive payment, but it is nothing that she can prove.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he knows beyond the shadow of a doubt that race has affected his ability to receive payment.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, reported feeling as though his ethnicity may have affected the timeliness of his payment on one Consortium project. He stated that he turned in his billing in February, but was not paid until May while the other subcontractors were paid a month before that.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, felt that his race has affected his ability to receive payment, but could not identify any experience that has lead to this belief.

A couple of interviewees did not know whether their race, ethnicity, or gender has affected their ability to receive payment. [Interviewees #CON: 14, 46]. Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, did not know whether race, ethnicity, or gender has affected his ability to receive payment.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he would never know whether his race, ethnicity, or gender would affect his ability to receive payment because "you do not know what people say about you when the door closes."

I. Experiences with Financing, Bonding and Insurance

BGPAA Study Anecdotes Regarding Experiences with Financing, Bonding and Insurance

Some interviewees reported issues related to obtaining financing. [Interviewees #BGP: 1, 3, 4, 6, 8, 10, 11, 14, TA #1, TA #2]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, stated that they have not had to obtain financing to run a project, but he said that contractors may have difficulties obtaining financing because they have "20 people out there working and they have to make payroll."

Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that obtaining financing is difficult for most small businesses. He said, "The banks are really tough right now. I've been talking to my banker … and he said most of the contractors he works with have lost their line of credit." He stated that his firm has not experienced barriers related to obtaining financing.

Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that obtaining financing was a potential barrier to pursuing business opportunities. He said, "Let's say that I was to bid a job that started in September. I need to have all my supplies in by August, so my billing cycle is in August, but I won't get paid by the contractor until 30 days from the September start date. Where does a new business find the money to finance this? If the Airport was proactive and got the subs paid on time, you can usually make it work without needing financing, but that's not the reality." He said, "Financing is a huge hurdle, and it's hard to get."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that obtaining financing "the first one to three years was difficult, but once I had the firm's financial history established, it wasn't difficult."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that financing is a barrier. He said, "I think right now the barrier [associated with financing] is universal. In the current economy … they've raised the bar on qualifications. It's almost like you have to not have to have the money in order for them to approve you. It's very difficult. … We've actually not been able to get any funding in the last year. We've had to do our funding through credit cards."

Interviewee #BGP10, a principal at an engineering firm, reported that obtaining financing was a barrier when the firm began when "no one wanted to loan [the firm] money," and it is still difficult "now that money is a lot tighter." He said that he does not think that the race or ethnicity of the firm contributed to this barrier.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that financing is "extremely hard to get," and banks are "very, very slow to approve any kind of a financing arrangement." He said that the individual owner of the company is the person requesting financing, and the rest of the company does not really participate. He stated that part of the reason the company has not gotten into the ground handling business is because of the expense involved.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that obtaining financing was a barrier during "the earlier days of the business" but not recently.

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that obtaining financing is "really a problem, but we don't really address those issues. … We're not worried about the money; we want the contract."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that obtaining financing is difficult in this market and that the barrier is related to race and ethnicity.

Other interviewees reported no issues related to obtaining financing. [Interviewees #BGP: 2, 5, 9, 12, 13, 15, 16]. Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm indicated they did not have any problems obtaining financing. He said, "now is a great time to start a minority- or women- owned business, or any small business,

because the economy is struggling, interest rates are low, and it's the perfect time for any small business."

Interviewee #BGP13, the owner of a non-certified construction firm, said that he has not experienced any specific barriers to obtaining financing, but he stated that opportunities to obtain financing, particularly credit lines, disappeared in 2008.

Some interviewees reported issues related to obtaining bonding. [Interviewees #BGP: 2, 4, 12, 13, TA #2]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that "our rating used to be really good, but then we [performed some work] for [a public agency], and they weren't all great profits for us, so out rating went down a little bit. It's been a little harder to bond higher expense contracts since [then]."

Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that "Bonding is not an issue for most guys with good credit. If their business has suffered, then I could see bonding as a tough thing and a barrier."

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, stated that the company "rarely" has bonding requirements. They said that when it is required, it creates "a little stress" for the company and "a little strain on the cash flow" because the company is "not used to having to buy a $25,000 bond."

Interviewee #BGP13, the owner of a non-certified construction firm, reported that obtaining bonding is a barrier to obtaining work, but he does not think that the Authority's "bonding requirements are so out of line. It's a typical bid bond and performance and payment bond, … which is fine. It's just that … that market really tightened up, and if you have a lapse in your bonding, where we might be doing a lot of private work and not a lot of public work, … it's like starting all over again." He said that he thinks "bonding is a good requirement, [and] … paying one and one half or … up to 3 percent of a project's value to have that insurance … is a good idea, but on the construction side, it's become harder and harder to obtain those bonds." He said that the company may have "shied away from some of the public work because of the bonding requirements," but he said that the company has recently been able to and required to "acquire bonding for some private projects that weren't necessarily required before." He added, "I don't see a lot of bid bonds in the private sector, but we are [seeing requirements for] performance and payment bonds," and although the public sector requires bonds for anything $25,000 and above, the private sector usually only requires bonds for anything over $100,000.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that "bonding is always an issue" but is related to "dollars" not race, ethnicity, or gender. He said that bonding presents a significant barrier to its members. He said, "We're looking at jobs, like oh man but the bonding, we can't bond it…we can do it but we just can't bond it. [A firm can't obtain bonding] unless you have adequate cash flow. The bonding companies want so much, in collateral, and they don't want to touch you, right now we need to call somebody else, somebody more solvent."

Other interviewees reported no issues related to obtaining bonding. [Interviewees #BGP: 1, 3, 5, 6, 9, 11, 12, 14, 15]. Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that the company has always been able to get around barriers to obtaining insurance because the company carries "an office policy." They said that businesses sometimes want the company to add "them as an additional insured." They said that the company is "not at that point yet because that's like a … $25,000" a year policy, which is "a little out of reach" for their small business. Interviewee #12 said that "it takes some negotiating," but the company has "been able to stay away from" the really "high aggregate policies" and has been able to work with contractors and subcontractors to make the deal work. The said that so far, the company has not "lost any contracts or sales because of it," but the "time may come when [it] … may have to modify that."

Some interviewees reported issues related to obtaining insurance. [Interviewees #BGP: 2, 5, 8, 10]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, stated that he does not deal directly with insurance, but "from what I understand, it's not easy for a small business to get insured."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that obtaining insurance may be a barrier. He said, "Larger clients frequently want us to have a level out of line for the type of services we're performing, and in many cases, uninsurable."

Interviewee #BGP10, a principal at an engineering firm, reported that obtaining insurance is "very expensive" and is a barrier for many firms, especially firms that work primarily in the private sector and smaller firms that are not insured. He said that most agencies "require professional errors and omissions insurance," which costs "between 2 and 4 percent" of the firm's gross fee. He said that that means that if the firm hires a second tier subcontractor and pays the subcontractor $10,000, the firm must pay a $400 insurance fee for that work. He reported that public agencies are tending to require firms to have higher insurance limits. He added that agencies previously required a $1 million limit per claim or occurrence, and now, many agencies require a $2 million limit, and some are requiring up to $5 or $10 million. He said that $5 and $10 million insurance limits are not available for a small business, so these requirements are effectively excluding small businesses. Interviewee #10 said that he does not recall whether the Authority requires these extreme insurance limits.

Other interviewees reported no issues related to obtaining insurance. [Interviewees #BGP: 1, 6, 9, 11, 13, 14, 15, 16, TA #2]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that the company has had no problem obtaining insurance and that the company has had a good relationship with those providing insurance products. He noted that "auto insurance at the airport is going way, way up, [and] the L.A. Airport is increasing [its] insurance from a total of $5 million to $10 million; they're doubling it." He said that these are expenses that companies have to absorb because "airlines … will not accept [price] increases."

Interviewee #BGP13, the owner of a non-certified construction firm, said that he has not experienced obtaining insurance to be a barrier. He said that he has not seen excessive insurance requirements, and his only vendor requiring substantial insurance is the Authority, which requires the company "to have a pretty high liability insurance for the airport because [the

company does] work … on the runways and stuff like that." He said that because of the high cost of insurance, the company really has to "watch to make sure that the value of [its] work" with the Authority is sufficient to justify the cost of the insurance because the cost of the insurance "is based on [the company's] gross sales," not just its work with the Authority, "and if [the company is] only doing so much work over there but [is] paying for that policy," it has to be sure that the income generated justifies the cost of insurance. He added that the company values its relationship with the Authority, though, and ties to do what it can to continue that relationship.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that obtaining insurance was not a barrier. She said that the insurance requirements have been appropriate "for the most part." She said that some agencies, particularly "the ports and the airport authorities where they deal with an awful lot of trucks and that kind of stuff," "have some bizarre requirements. The City of L.A. [requires] that you … have a separate auto rider even though we're never going to be driving our car on the tarmac." She said that the company has "tried … contesting some of these requirements, and then it gets kicked up to risk management, and it usually doesn't do us any good, so we just carry the additional riders that we need." She said that this causes a financial impact, but it is not a barrier to obtaining the business.

A couple of interviewees reported that race, ethnicity, or gender may affect a firm's ability to obtain financing, bonding or insurance.[Interviewees #BGP: 4, TA #2]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, stated that there is discrimination in obtaining financing, bonding, materials and supplies or other products or services. He said, "It's all a perceived risk thing. They don't really look at the business. They see MBE or WBE, and there's some preconceived thing that they're small and ineffective, that they're only there to satisfy someone's check box."

Other interviewees reported that they did not feel as though race, ethnicity, or gender affected a businesses' ability to obtain financing, bonding or insurance. [Interviewees #BGP: 2, 3, 6, 8, 9, 10, 11, 12, 13, 15].

A few interviewees made recommendations for improving access to financing, bonding and insurance. [Interviewees #BGP: 10, 13, TA #2]. Interviewee #BGP10, a principal at an engineering firm, recommended that agencies write contracts more fairly and pay specific "attention to … California Civil Code [Section] 2782.8," which he said prohibits a public agency from requiring a professional "to indemnify and defend that agency unless [it is] negligent." He reported that "[m]any agencies will [include] an indemnification clause [in a contract] that completely ignores" this prohibition causing firms to put their firm at risk with each contract.

Interviewee #BGP13, the owner of a non-certified construction firm, said that "banks just need to open their doors a little bit more." He stated that he previously used a credit line to assist with things such as payroll, and others use it to assist with capital financing and to assist when they are waiting for payment. He said that even companies with a good history are "feeling the pinch."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, suggested that there be bonding assistance offered to small businesses. He suggested that the bonding premium could be put into the contractor's cost and

that fee could be added to the bottom line but it wouldn't come out of the contractor's pocket up front

SDCRAA Anecdotes Regarding Experiences with Financing, Bonding and Insurance

The following anecdotes regarding experiences with financing, bonding, and insurance were obtained from interviews that the study team conducted in connection with the 2009 SDRCAA study.

Many interviewees reported that financing and bonding are barriers to success in the public and private sectors. Speaking generally about doing business in California, SDTA #3, representing a local chamber of commerce, indicated that obtaining financing is generally very difficult in San Diego, particularly in the current market. She also stated that operating expenses are very high in the state of California: "It's expensive to do business in California. …" She listed workman's compensation, living costs, and utility costs as some of the reasons why operating expenses are so high.

Interviewee #SD16, representing an African American male-owned firm, described financing as "a large barrier." He continued, "It takes operating and working capital to be competitive. The money allows you to be visible. … If I had capital, I'd be better off." Interviewees #SD 16 explained that he applied for a loan in the past but was denied.

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, said that, unlike large, well-established firms, small firms do not have the financial clout to receive preferred rates on loans. She remarked that small firms have to take the loans that they can get and be grateful.

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, reported that financing is a significant barrier to being successful. He explained that in his firm's line of work, firms have to pay high operating expenses that the awarding agency reimburses at a later date. Thus, firms generally have to take out loans to cover those expenses.

Interviewee #SD9, representing a minority female-owned firm that is a concessionaire at the Airport, reported that obtaining a loan is very challenging for small firms and that the process is becoming stricter. She said that when her firm tried to get a loan they had to approach several different banks.

Interviewee #SD20, representing an Asian American male-owned firm, explained that credit is extremely tight in the current market and particularly so for small firms that are not well established. Regarding credit for smaller firms, he asked rhetorically, "If I am a bank, would I loan money to [someone] with no experience?" Interviewees #SD 20 went on to explain that the process of obtaining financing is also time consuming and requires a great deal of effort.

Interviewee #SD36, representing an African American male-owned firm, indicated that obtaining loans is difficult so he never attempted to do so: "I never went to the bank [for a loan]. I didn't even try because I know how that works. It just doesn't work for me, so I went ahead and [financed my business] myself."

Similarly, Interviewees #SD32, representing an African American male-owned firm, reported that financing is a substantial barrier that firms face, particularly those firms that are just starting out. He said, "You'd have to have a lot of cash in order to be able to get working, because most of these [banks] aren't giving credit lines unless you've really established yourself."

Interviewee #SD22, representing a white male-owned firm, said that financing is a significant barrier to working in the public and private sectors, particularly because profit margins are quite small.

Interviewee #SD28, representing a white female-owned firm, explained that financing is particularly problematic in the current market, because banks are not loaning money. She said, "[Financing] was hard before. I would say it's even harder — if not impossible — to get financing and financial help nowadays." Regarding bonding, Interviewees #SD 28 reported that bonding can be a substantial barrier in her firm's industry. She said that sometimes the bonding requirements actually exceed the value of a contract (e.g., a $7,000 contract requiring an $8,000 bond).

Interviewee #SD33, representing a Hispanic American male-owned firm, expressed concern about tight credit. He stated that it will be difficult for smaller companies to expand and purchase equipment, because lenders are making it more difficult to obtain loans.

SDTA #4, representing a local chamber of commerce, reported that access to capital is a significant barrier for small firms. She said that smaller firms tend to perceive the loan process as very difficult and that they are afraid to spend a great deal of time on it only to be rejected in the end.

Interviewee #SD5, representing an African American male-owned firm, stated that firms must have a good line of credit and a bond to be successful but that those things are difficult to obtain. With regard to bonding in particular, Interviewees #SD5 said, "Our bonding capacity is only half a million dollars. This doesn't allow us to be very competitive." He went on to explain that public agencies have large bonding requirements, which severely limit opportunities for smaller firms who do not have the bonding capacity to bid on that work.

Interviewee #SD21, representing a white male-owned firm, described the bonding process as "arduous." He said that, in his experience, public agencies in California require contractors to bond the full value of projects and thus it can be quite expensive. Consistent with those comments, Interviewees #SD14, representing a Hispanic American male-owned firm, indicated that bonding is a substantial barrier to success. He said that bonds are more difficult to get — but are also more important to have — in construction compared to other sectors. With regard to the importance of bonding, he said, "Without a bond, you'll never grow."

Interviewee #SD31, representing a white male-owned firm, said that financing is a "very big barrier" in the current market. He indicated that it is very difficult to obtain loans, because banks are not lending money to contractors in most industries, his firm's industry being an exception: "If you're not in a sexy industry … don't even bother walking in the door." Interviewees #SD31 went on to say that bonding is "probably the biggest issue" facing firms in San Diego. He explained that his firm does not bond — typically, the firm teams up with a third party that will

bond on its behalf. He said, "I don't have $20 million to put aside for surety to use against to give me a bond. I've had to turn down jobs because of bonding."

Interviewee #SD42, representing a white male-owned firm, reported that financing is the biggest barrier that firms face in San Diego: "The biggest barrier is capital — having money to do what needs to be done to make money." He went on to explain that his firm had to get creative with financing: "I come from the spectrum of starting with little capital and putting together an organization. I have learned to creatively finance my previous businesses and now have the confidence to continue that."

SDTA #2, representing a Hispanic American trade organization, said "Working with the public agencies is all about bonding ability. If you don't have any bonding capacity, you can't do work." He went on to explain that many minority and female-owned businesses simply do not have enough equity and assets to obtain bonds.

SDTA #7, representing a construction trade organization, indicated that most firms in the San Diego area are having trouble obtaining loans and bonds: "I would be surprised if [his organization's members] aren't having trouble with their bank, lines of credit, that sort of thing." With regard to bonding specifically, SDTA #7 remarked, "Bonding has been tough for quite a while. It's not let up. … "Those that have [bonds] can't increase them as easily. … Getting a bond will be much tougher [with the recession]." However, SDTA #7 indicated that troubles with bonding are offset to some degree for smaller firms, because prime contractors "almost always" bond for their subcontractors, particularly in the current market.

SDTA #9, representing a public works trade organization, said that bonding serves as a large barrier to being successful in the public sector: "Public works requires three bonds: full performance bond, bid bond, and labor and materials bond, all of which tie back to ownership assets. If you are capable … that is not enough to get a bond." SDTA #9 said that he has not seen discrimination in bonding, only cases in which small firms do not have the assets to obtain bonding. He did say that the Airport is doing a good job in helping small firms with bonding.

SDTA #11, representing a veterans trade organization, indicated that, along with bonding, financing is the most substantial barrier facing small businesses in the San Diego area: "The biggest issues are financing and bonding." He explained that financing problems stem from the fact that small businesses have less capital than larger, more established ones. SDTA #1, representing a local chamber of commerce, agreed that, compared to large firms, it is much more difficult for small firms in San Diego to obtain a bond and to raise capital for operation costs and equipment.

Interviewees #SD38, representing a Hispanic male-owned firm, said, "Our biggest obstacle that we have seen is the bonding … it is really high. When you have jobs in the millions they want a certain percentage of bonding and that is money that is tough for us to put out."

Interviewee #SD43, representing a Hispanic male-owned firm, stated that financing is difficult, particularly for small firms: "For a small company, if you don't have the assets … financing is difficult." She went on to say that it is particularly difficult for minority-owned firms to obtain financing. When asked why she thought that was the case, Interviewee #SD43 responded, "I

don't know … I don't if they're afraid that the people that [Hispanic-owned firms] hire aren't legal. I think that can have something to do with it." She explained that as a result of the difficulties associated with financing her firm only takes on jobs that they can afford to do with the capital that it has on hand.

Interviewee #SD44, representing a Hispanic male-owned firm, remarked that small firms (including MBE/WBE firms) have trouble competing with large firms because of capital restrictions: "[Minority- or woman-owned firms] aren't going to have the buying power of the big boys …."

Interviewee #SD45, representing a white male-owned firm, described bonding as a "big issue." He stated, "[Sureties are] only matching you dollar for dollar. You have to hock anything you have [to obtain a bond]. For subcontractors, it's probably impossible [to obtain a bond]."

Interviewee #SD47, representing an African American female-owned firm, said that her firm's bonding capacity limits growth and success. She indicated that currently, her firm's gross revenue substantially exceeds her firm's bonding capacity.

Several interviewees indicated that it is crucial to develop relationships with bankers in order to be successful. Interviewee #SD3, representing a white male-owned firm, said that financing and bonding are two of the most critical elements of a firm's success. He indicated that a number of MBE and WBE firms fail because they do not develop financing and bonding relationships. Interviewees #SD3 went on to report that the bonding process is much more difficult in the current market than it was in the past.

Consistent with those comments, Interviewees #SD2, representing a white female-owned firm, reported that it is important for firms to have a relationship with a bonding company: "You have to have a relationship with the bonding company … they have to know your philosophy in life."

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, said that although he has not had trouble obtaining loans and bonds himself, most other minority- and female-owned firms do not have the banking relationships that he developed in his previous career and thus likely find financing and bonding to be more difficult than his firm does.

Interviewee #SD43, representing a Hispanic male-owned firm, reported that bonding companies like to see that firms have experience working in the public sector before awarding them bonds, which makes bonding especially difficult for new firms. Interviewee #SD43 indicated that it is important to build and maintain relationships with bonding companies to ensure that the process goes smoothly on future projects.

Several interviewees indicated that insurance is more expensive in particular industries or in California. Interviewee #SD14, representing a Hispanic American male-owned firm, reported that construction companies are required to hold more insurance compared to other sectors. Similarly, Interviewees #SD15, representing a white male-owned firm that is a concessionaire at the Airport, said that companies in his firm's industry have to carry two types of liability insurance.

Consistent with those comments, SDTA #11, representing a veterans trade organization, explained that the City of San Diego requires contractors to hold separate insurance policies for residential and commercial construction. He argued that those requirements make it difficult for small firms to compete with large firms that can afford those insurance policies more easily.

Interviewee #SD3, representing a white male-owned firm, indicated that insurance is quite expensive in construction. He reported that his firm pays approximately $40,000 per year in insurance premiums. Similarly, Interviewees #SD5, representing an African American male-owned firm, indicated that his firm's insurance premiums are also very expensive (approximately $17,000 per year).

Interviewee #SD28, representing a white female-owned firm, said, "Insurance costs are extremely high. We shop them every six months. …" She went on to say that a number of insurance companies will not insure firms that work in her firm's industry because it is so dangerous.

Interviewee #SD36, representing an African American male-owned firm, reported that his firm holds both liability and workmen's compensation policies and that both are quite expensive: "Workmen's comp and liability — they cost a lot of money. The higher your payroll, the higher the workmen's comp."

Interviewee #SD43, representing a Hispanic male-owned firm, explained that insurance costs are very high and insurance requirements are very stringent in the construction industry: "Right now we have general liability, we have workman's comp. But then comes a case where you need a certain other [type of] insurance, and just the insurance is $500 extra for just that one job."

SDTA #3, representing a local chamber of commerce, explained that insurance is expensive in California compared to other states and is thus a barrier for all local firms.

SDTA #9, representing a public works trade organization, said that many of his organization's clients have stopped bidding on work with public agencies due to the insurance requirements: "Some of our clients have not bid [on contracts] because of increased level of insurance requirements on public contracts."

Many interviewees reported that bonding, financing, or insurance are not barriers to pursuing work in the public and private sectors. Interviewee #SD11, representing a white male-owned firm, indicated that obtaining a loan is relatively easy, regardless of race, ethnicity, or gender. He described his own experience in obtaining a loan: "I just went to [a national bank chain]. They asked if I had a house, I said 'Yes' and they said 'OK.' They gave me the line of credit right then." He continued, "Race and gender is not an issue in banking and bonding … [banks] are in business trying to get money, not turn you away because of what you look like." However, Interviewees #SD 11 acknowledged that there are likely a few lenders that are less willing to give loans to minority- and female-owned firms but that ultimately those lenders still approve the loans: "There are probably a few stubborn [lenders] out there, but why would [they] give up money because of the way someone looks?"

Interviewee #SD21, representing a white male-owned firm, reported that he is not aware of any barriers related to financing but that procuring equipment can be quite expensive in the construction industry. Similarly, Interviewees #SD24, representing a white male-owned firm, said that there are no barriers in construction associated with financing, bonding, or insurance.

Interviewee #SD5, representing an African American male-owned firm, indicated that obtaining a loan was relatively easy for his firm.

Interviewee #SD17, representing a white female-owned firm, reported that bonding is not a barrier to her firm's success: "We are not bonded, although some jobs have asked that we are. We would consider getting bonded if it was necessary and made a difference in getting a job, but so far it hasn't mattered."

Interviewee #SD10, representing an African American male-owned firm, reported that financing is not necessary to be successful in his line of work: "If your house is in order you should be ok [without loans]." He indicated that he has maintained his operating expenses by relying on his personal savings. Similarly, Interviewees #SD18, representing a white female-owned firm, said that the firm has never experienced any substantial financing issues, because they rely on their long-standing business revenues rather than on loans.

Interviewee #SD41, representing a white male-owned firm, indicated that if a firm has good credit, obtaining financing is relatively easy: "If you have a good credit history and a good banking relationship I don't think financing is too bad. Right now it is tough. Fortunately, we haven't had an issue, even with the current economic conditions."

Interviewee #SD46, representing an African American male-owned firm, said that insurance is not a barrier in his firm's industry: "Insurance has not been a problem. We have to shop it on a yearly basis to try to look for the best price."

Recommendations related to bonding and financing.

Some interviewees suggested that public agencies should provide finance and bonding assistance for minority- and female-owned firms. Interviewee #SD3, representing a white male-owned firm, said that public agencies should relax bonding requirements for MBE and WBE firms, because, along with insurance, bonding is a substantial barrier to entry into the construction industry. Interviewees #SD3 also suggested that public agencies (and prime contractors) should grant a 5 percent price preference to MBE and WBE firms for contracts worth up to $100,000.

Interviewee #SD4, representing a white male-owned firm, recommended that public agencies should relax insurance requirements for subcontractors proportional to the size of their firm.

Interviewee #SD5, representing an African American male-owned firm, recommended that public agencies help MBE/WBE firms secure lines of credit from banks, obtain liability insurance at lower rates, and pay initial material costs. Regarding the latter point, he said: "Agencies should pay for materials and have them delivered to the job site. They should be supporting the general contractor in upfront costs of the job."

Consortium Anecdotes Regarding Experiences with Financing, Bonding and Insurance

The following anecdotes regarding experiences with financing and bonding were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Some interviewees reported issues related to obtaining financing and bonding. [Interviewees #CON: 2, 7, 8, 15, 16, 18, 20, 21, 23, 30, 31, 34, 35, 37, 40, 43, 46, 48, 51, 52, 53, CONTA #1, 2, PF #19]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he has had a bad experience attempting to obtain financing. He stated that he could not obtain approval for a $100,000-$200,000 loan though his credit score is excellent. He stated that the firm had no credit score. He was only able to obtain a $15,000 line of credit. Interviewee #CON2 stated he does not know why his business is unable to obtain financing other than that the business is new.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that money is an issue in terms of a DBE's ability to obtain financing. He stated that financing issues affect more DBEs because you have to have assets available to obtain a loan. Interviewee #CON7 stated, however, that bonding is an even bigger issue for DBEs. He stated that all public jobs require bonds. Contractors cannot work on Consortium projects without obtaining a significant bond. He stated if general contractors do not carry DBEs under their bond, it becomes a major issue for DBEs.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that the excessiveness of insurance requirements has discouraged him from trying to work with SANDAG. Interviewee #CON8 stated that other public sector agencies are bureaucratic and you need to understand that when working with them.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, reported difficulties obtaining financing in the early years because he had no credit history, but now that he's established, there are no problems to report. Interviewee #CON15, also noted problems with bonding that result from constant changes in job specifications with regard to bonding amounts required for various projects. Interviewee #CON15 does not understand how projects can be with the same agency, in the same area, with different bonding requirements; this did not make sense to Interviewee #CON15.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that obtaining financing has been very difficult. Interviewee #CON16 received a couple of loans from the SBA, and that has been positive. In the private sector, Interviewee #CON16 noted that financing is difficult because the banks want private guarantees for loans, especially for anything about a hundred thousand dollars. Interviewee #CON16 has not had any bonding experience.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, noted difficulty obtaining bonding, but stated that the problem was related to her company's size and not due to race, ethnicity, or gender.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that financing is hard as a small business owner — she stated that when the business is waiting for payment and has to carry the bills her FICA score will "take a hit" and then financing becomes even more difficult. She stated that unless a business has family money, there are no alternatives available to fill in cash flow; that is the reality of the marketplace. Interviewee #CON20 also indicated that the Consortium has recently required E&O Insurance which is very expensive ($7,000 per annum) and a waste.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that financing was very hard to obtain but did not provide further detail.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that there are barriers to obtaining bonding (but not financing). He stated that insurers will not bond a company unless they know them.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that sometimes there are barriers in obtaining financing such as receiving a line of credit. He stated that sometimes these are barriers that would keep him off of a project or keep him from getting awarded a project.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that he has had difficulties obtaining financing. This is a part of the reason why he is a disadvantaged business. He has had personal issues in the past that has affected his ability to receive financing on projects. It does not make sense to him when he is trying to make payroll and payments to rent equipment and has an outstanding history of making those payments as it relates to his business, but when it comes to obtaining financing for his work related projects, he has difficulty obtaining financing because of issues in his personal life. He stated that with respect to obtaining bonding, on a $1 million bond, 2.5 percent is required. He said that if he had that kind of cash available, he would not qualify for disadvantaged status. He feels that this is another way that small businesses are disqualified for projects.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that initially it was difficult for her to obtain financing because she had no credit history. She stated that it has become easier over time.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that start-up financing was difficult, and it was the biggest difficulty as related to financing.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that it is difficult to obtain bonding. He stated that bonds are larger than your financials will allow.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that it has been very difficult for him to receive bonding because of all of the applications and the "enormous" assets required. He stated that it worked out for him in the

end, but that the asset requirement was well beyond what it would have cost him to do the job, which he believed does not make sense and is unreasonable.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, had not experienced any barriers with respect to obtaining financing. He stated that he had to obtain a bond once for a small amount and that was difficult because of the liquid assets that it required.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that obtaining financing is always difficult and a challenge. He stated jobs tend to be undercapitalized and more capital is needed than the job is typically worth.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that he had not encountered any issue obtaining bonding until recently. He stated that he was unsure whether it was economy or some other factor that has caused him some difficulties recently in this area. He stated that he has had an "okay" experience obtaining financing.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that he has experienced barriers in trying to obtain financing and noted that the qualifications are hard to meet and get approved. He stated that the requirements for bonding are even more outrageous than the ones for financing.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, stated that the financial institutions and markets are in ruins now so it is very hard to obtaining financing and there are a lot of requirements. He stated that bonding is another problem and has been a nightmare. He stated that the requirement of up-front assets is an issue with obtaining bonding.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, reported that his firm maintains a line of credit and has for many years. He stated that once they got over the initial paperwork everything was fine.

CONTA #1, the President of the Latino Business Owners of America, stated that his members' ability to obtain financing is a directly related to their ability to collateralize. If members do not have assets to collateralize it becomes a problem for their business. Sometimes members get a bid which takes them out of their economic zone. Members have to have cash on hand to sustain the project and if they cannot obtain money they cannot bid on a project. Interviewee CONTA #1 stated that "funding is crucial." Most members as a whole have been successful obtaining loans from banks, however, it depends on how well they manage their business credit and relationship with the banking institution.

CONTA #2, the President of the Black Contractor's Association, stated that most members have a hard time obtaining financing because most are undercapitalized and have limited resources. He stated that credit, lack of assets, lack of a steady flow of profitable jobs, and lack of an asset base to collateralize all affect a business owner's ability to obtain financing. CONTA #2 stated that members try to obtain bonding but many do not qualify for bonding because of lack of cash flow, lines of credit and no asset base.

PF #19, an individual representing a minority-owned construction management small business firm provided oral testimony at a public forum held on October 20, 2009. He suggested the need for changes in the procurement process for insurance and bonding requirements. He said, "It is practically impossible for minority and small businesses to compete effectively when there are insurance and bonding issues that would really be extreme impediments…" He believes LACMTA and other public agencies should revitalize their education and assistance to small businesses regarding paperwork and document preparation for minority contractors. He stated, "It seems to be getting tougher, tougher, and tougher as it gets more competitive out there." (Public Forum Los Angeles held on October 20, 2009)

Some interviewees reported they felt as though race, ethnicity, or gender affected a businesses' ability to obtain financing or bonding. [Interviewees #CON: 7, 22, 23, 31, 37, 40, 46, 51, CONTA #1, 2]. Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that he feels that race, ethnicity, or gender can affect a business owner's ability to obtain financing or bonding because of the potential lack of collateral.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that race, ethnicity, and gender have affected her ability to obtain financing or bonding and it is much harder for minorities to obtain financing than it is for Caucasian business owners. She stated that she has had a good experience obtaining financing and bonding, especially now, since she has been in the business for a long time and knows many of the players. She stated that for start-up companies there are barriers.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that his race is a big part of having been denied bonding.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he cannot put his finger on it, but believed that race or ethnicity affects his ability to receive financing or bonding.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, did believe that one or more of those factors did affect his ability to obtain bonding but he does not know how to prove it.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he felt that his race absolutely affected his ability to obtain financing. He feels as though his financials and credit are more closely scrutinized than a white-owned firm seeking credit.

CONTA #1, the President of the Latino Business Owners of America, stated that he believes race, ethnicity, or gender is a factor in a business owners' ability to receive financing or bonding, but cannot unequivocally state. He thinks that it goes back to the asset base.

CONTA #2, the President of the Black Contractor's Association, stated that race, ethnicity, and gender affects a business owner's ability to receive financing or bonding because demographically people are discriminated against because of a lack of capital.

Two interviewees stated that they were not sure whether race, ethnicity, or gender affected a businesses' ability to obtain financing or bonding. [Interviewees #CON: 2, 35]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he does not know whether his race or ethnicity has affected the business's ability to obtain financing. He said it could be the case or might not be.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that she did not know whether her race or gender has affected her ability to obtain financing because that has never been overtly obvious.

Most interviewees reported that they did not feel as though race, ethnicity, or gender affected a businesses' ability to obtain financing or bonding. [Interviewees #CON: 1, 3, 5, 16, 20, 21, 24, 25, 26, 28, 29, 30, 33, 34, 38, 39, 41, 43, 44, 45, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that he is not aware of his race, ethnicity, or gender having affected his ability to obtain financing or bonding. He stated that he understands that some people are "set in their ways."

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, was not aware of any circumstances in which race, ethnicity, or gender has ever affected a DBE's ability to receive financing or bonding.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, did not feel that his race, ethnicity, or gender has affected his ability to obtain financing but he wasn't sure. He felt that the economy affected his ability to obtain financing more so than race.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that her experience obtaining financing was okay and she did not believe that it was affected by her gender. She stated that generally if you have been in business for a long time and are in good standing it is easy to get financing.

Other interviewees reported no issues related to bonding or financing. [Interviewees #CON: 1, 3, 4, 9, 26, 28, 29, 37, 38, 41, 45, 49, 54, 55, 56, 57, CONTA #1]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that obtaining bonding was not too difficult. Interviewee #CON1 did not identify any barriers to obtaining bonding. Interviewee #CON1 is currently looking into obtaining financing.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, was not aware of any specific barriers to DBEs obtaining financing or bonding.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that once a company has been in business a few years and has a relationship with financial institutions and "they know you" there are no problems obtaining financing. Interviewee #CON4 stated, however, if you are new to the business it would be more difficult to obtain financing. Interviewee #CON4 stated that he has not had any problems in terms of obtaining loans from a bank. Interviewee #CON4 does not have to obtain bonding for his work.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that 10 years ago it was difficult to obtain financing but now it has gotten easier. She has not had any issues obtaining bonding or insurance.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated that he has had a good experience trying to obtain financing. His company has rarely needed bonding.

Interviewee #CON29, an African American male-owned electrical contractor, reported no issues related to financing or bonding. He has used only the standard bonding of $12,500 that is required as insurance under the law.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he has not experienced any barriers while trying to obtain financing.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that he has had an overall good experience obtaining financing and bonding with no problems to report.

Interviewee #CON41, an Asian American male owner of a DBE/MBE-certified general contracting firm, stated that he felt the process to obtain bonding went smoothly.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that he had an okay experience obtaining financing. He stated that he was asked to supply a business plan and collateral in order to secure the financing he needed.

Interviewee #CON54, a white male owner of a general contracting firm, reported that they have not experienced any barriers in connection with obtaining bonding or financing, and noted that his firm will often team up with developers allowing them easier access to financing.

Interviewee #CON55, a white male owner of a construction services and program management firm, stated that because they are a large firm they have not had difficulty securing a line of credit.

Interviewee #CON56, a white male owner of a small electrical contracting firm, stated that obtaining bonding was relatively simple. He stated that "without any black marks on your record, you should not have any problems with obtaining bonding."

Interviewee #CON57, a white male owner of a construction and landscape architecture firm, reported having an overall good experience obtaining financing.

CONTA #1, the President of the Latino Business Owners of America, stated that obtaining bonding is not as much of an issue as financing because in the last couple of years prime contractors are helping with bonding as a result of the problems that subcontractors faced due to the high costs of obtaining bonding.

Several interviewees had no experience with bonding or financing. [Interviewees #CON: 2, 8, 9, 10, 11, 12, 13, 14, 17, 18. 19, 24, 27, 36, 39, 42, 44, 47, 50]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he does not have to obtain bonding in his line of work. He stated that he does have to obtain insurance but insurance has not been a problem.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, does not have experience with financing or bonding.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, has not had much of a need to obtain financing. Interviewee #CON17 stated she's not a risk taker when it comes to money, just lots of risks otherwise. There was an issue when she first started the company, Interviewee #CON17 reported that it was difficult to get even a credit card in her name, but that was many, many years ago.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, has never had to obtain financing because all of her costs are labor costs, so she's able to keep her overhead experience low.

Recommendations related to bonding and financing. One interviewee requested the implementation of training programs to assist with bonding and financing. Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that he would like to see training and assistance in receiving bonding. He stated that he has been unable to receive bonding even with using his property as collateral. He stated that the bonding process needs improvement from city to state.

J. Anecdotes Regarding the Effect of Race, Ethnicity, and Gender, if Any, Upon a Business Owner's Ability to Obtain or Engage in Business

BGPAA Study Anecdotes Regarding the Effect of Race, Ethnicity, and Gender upon a Firm's Ability to Obtain or Engage in Business

Some interviewees reported that race, ethnicity, and/or gender affected their ability to obtain or engage in business. [Interviewees #BGP: 3, 10, 12, 14, TA #2]. Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that majority-owned firms are discriminated against, not MBE/WBEs. He said, "It's quite opposite. If you're a DBE or any kind of minority[-owned] company, you have a priority in this country, and you can do very well. [It's] almost [the case that] the average, healthy Joe doesn't have a chance. If you want to talk about discrimination, it's discrimination against the average guy, not minorities."

Interviewee #BGP10, a principal at an engineering firm, reported that he is aware of discrimination occurring among different racial and ethnic groups. He said that "an Asian firm

[will] typically hire … only Asian subs," and firms usually only have people of the same race or ethnicity working for them. He said that Caucasians do not care and will hire everyone.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that the gender of the company's owner has positively affected the company's ability to obtain business.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, stated that the race or ethnicity of the firm's owners has actually "helped the company positively. … In the earlier days of the business, [it] helped us a lot and probably helped to establish us. … [But] it's less and less of a positive or negative."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that the work environment for MBE/WBE/DBEs "would be the culture of white male dominant and the general contractor." He said that disadvantaged businesses need to be segmented more by race, ethnicity and gender.

Some interviewees reported that their race, ethnicity, and/or gender had no effect on their ability to obtain or engage in business. [Interviewees #BGP: 13, 15, 16]. Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she does not think that race, ethnicity or gender has affected her ability to engage in business positively or negatively. She stated that over the last "five years now," the "City of L.A. has been" including "OBE" requirements in RFPs, or requirements that companies use "other business enterprises." She said that this classification is a category for "the white, middle-aged man" and that she has seen this change in agencies across the State.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that he is not aware of race, ethnicity or gender being barriers to engaging in business, but he said that discrimination "probably does happen."

Work environment for minorities and women.

Some interviewees reported no significant difference in the work environment for minorities and women when compared to the work environment for men and majority firms. [Interviewees #BGP: 1, 2, 3, 5, 6, 12, 14].

One interviewee reported differences in the work environment for women and minorities when compared to the work environment for men and majority firms. [Interviewee #BGP: 8, 9]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that offensive comments and behavior still exists toward minorities and women in the construction and engineering industries. He said, "I think you become aware of [stereotyping] more just in the side comments and things like that when teams are being pulled together or working together. Unfortunately, I think there are still some attitudes … just downright racist. … That still goes on.

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm said "They're [MBE/WBE/DBEs] usually the ones that get the priority."

Stereotyping.

Some interviewees reported having heard of or experienced stereotyping on the job site. [Interviewees #BGP: 4, TA #1]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that there are stereotypical attitudes in the marketplace. He said, "There's a preconceived notion that when you're on a difficult project, an MBE or WBE will be a liability because they're not going to be as big or as organized. There's a stereotype in the overall capabilities."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that the local contracting industries have a poor perception of minority-owned contractors, particularly those that are African American-owned. He said, "The perception out there about [African American] contractors is … '[African American people] are cowards, they're lazy, and they're not going to fight you if you push them away a little bit."

Many interviewees reported never having heard of or experienced stereotyping on the job site. [Interviewees #BGP: 1, 2, 3, 5, 6, 9, 11, 12, 14, 15]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he has not experienced any stereotyping based upon the racial or ethnic composition of the company. He said that he thinks that "every company runs into some kind of comments and so forth, but these are comments made between people in the same company. … If anything like that should happen between two separate companies, … they're dealt with immediately. For example, we could have an aircraft cleaner up there cleaning an airplane and a caterer comes down and makes some [inappropriate] statement, … that will be dealt with immediately between the two companies, but we don't see that very much either."

Offensive comments or behavior.

Some interviewees reported having heard of or experienced offensive comments or behavior on the job site. [Interviewees #BGP: 8, 14, TA #2]. Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that discrimination and offensive behavior still exists. He said, "Almost every project that we've been on … everybody on the team goes on sensitivity training. … I think … the laws have clamped down a lot and big companies are doing what they're supposed to do, but I still think out in the mud, some [discrimination and racist and sexist behavior] still goes on."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that he has experienced inappropriate comments on worksites but the comments are mostly related to the company being non-union. He stated that he has not experienced inappropriate comments while working on Authority projects.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he does not experience offensive comments or behaviors on the job site as much as he did in the past.

Some interviewees reported never having heard of or experienced offensive comments or behavior on the job site. [Interviewees #BGP: 3, 9, 12, 13, 15]. Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she has not experienced offensive behavior on the basis of race, ethnicity or gender, and said, "That will not be tolerated."

Discrimination.

Some interviewees reported never having heard of or experienced discrimination on the job site. [Interviewees #BGP: 3, 5, 6, 9, 13, 14].

Sexual harassment.

Some interviewees reported never having heard of or experienced sexual harassment on the job site. [Interviewees #BGP: 9, 12, 13, 14, 15].

SDCRAA Anecdotes Regarding the Effect of Race, Ethnicity, and Gender upon a Firm's Ability to Obtain or Engage in Business

The following anecdotes regarding the effect of race, ethnicity, and gender upon a firm's ability to obtain or engage in business were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

Perceptions regarding race, ethnicity, or gender effects.

Many interviewees reported that issues related to race, ethnicity, and gender hinders the ability of firms to obtain or engage in business. Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, indicated that although racial discrimination is not the same as it was in the past, his firm has still faced discrimination in its business dealings: "Outright discrimination doesn't exist the way it did 40 years ago. The objective and goals are still the same, but [discrimination is] much more sophisticated the way it is executed." He went on to describe negotiations that his firm had with the master concessionaire at the Airport in which Interviewee #SD12 felt discriminated against: "There were negotiations taking place with [the master concessionaire at the Airport] when a young MBA … thought it would be ok to treat us as if we were Neanderthals and we should have never got the contract." Interviewee #SD12 noted that the man did not say anything inappropriate but made him feel very uncomfortable.

Interviewee #SD5, representing an African American male-owned firm, indicated that his race prevented him from joining a San Diego construction trade: "Until 2002 blacks contractors could not get into the San Diego union. He continued, "I tried to get into the union. I paid about $12 per month to stay on the list for about two years before I went into business. I was never accepted."

Consistent with those comments, SDTA #13, a retired official from a local public agency, stated that although local unions do not openly discriminate, they practice favoritism with regard to membership and they prefer members who are white males. SDTA #13 described the local

unions as being based on a "Good Old Boy Network" and that union membership is "by invitation only."

Interviewee #SD16, representing an African American male-owned firm, indicated that, based on previous research and anecdotal stories from other local firms, he believes that discrimination still exists in San Diego. He reported that discrimination generally takes place in the form of prime contractors discriminating against subcontractors on the basis of race, gender, or age. However, those beliefs notwithstanding, Interviewee #SD16 indicated that the Airport and other agencies have treated his firm quite well.

Interviewee #SD10, representing an African American male-owned firm, said that racial discrimination affects the way he markets his firm. Specifically, he tries not to mention that his firm is African American-owned. Regarding that strategy, he said: "If I come up I will become a target to those who do not want to see a black man succeed."

Interviewee #SD2, representing a white female-owned firm, said that financing is much more difficult for a WBE firm compared to a male-owned firm, because most bankers are men. Interviewee #SD2 reported that particularly in the early years of her business, she had difficulty dealing with bankers and experienced gender discrimination: "[They would say] 'bring your husband in to sign the paperwork.'"

Interviewee #SD28, representing a white female-owned firm, reported that she started her own firm, because the firm she worked for previously made clear to her its stance that "a woman should [not] be in management."

When asked if his firm has been discriminated against based on the owner's ethnicity, Interviewee #SD36, representing an African American male-owned firm, said: "To be honest with you, of course I have been discriminated against. They will give you the contract, but in order to keep it I have to put the white person out there to be the front man." He continued, "Once they find out it is a black man behind the operation they will unfairly terminate the contract." Interviewee #SD36 reported that, "The City and County don't do this, but private [sector clients] do this all the time."

Interviewee #SD45, representing a white male-owned firm, indicated that women do not perform adequately as laborers and are better suited for operating equipment: "Women are great equipment operators — that's the best place for them to go. They make good wages, and it doesn't require superhuman strength."

Interviewee #SD46, representing an African American male-owned firm, reported that race is a substantial issue in his firm's industry: " … whether it's leasing a space, buying a car, [obtaining] a line of credit from supplies, [race is] a factor in everything we do."

SDTA #2, representing a Hispanic American trade organization, observed that approximately 50 percent of all construction workers in San Diego are Hispanic Americans and yet the vast majority of construction firms are owned by Caucasians: "For example, [take the construction of] Petco Park – over one half of the workforce is Latino and most of the owners are white." SDTA

#2 went on to say that even when constructions firms are Hispanic American-owned, those firms usually do not work as prime contractors.

SDTA #6, representing an Asian American trade organization, estimated that the Asian American population in San Diego is close to 12 percent. In contrast, she guessed that the percentage of contracts that go to Asian American-owned firms is less than 1 percent.

SDTA #4, representing a local chamber of commerce, said that there is not a level playing field for minority- and female-owned firms in San Diego, despite the fact that a large percentage of the population believes that there is. However, she indicated that she believes that society is making progress in limiting the effects of discrimination.

SDTA #8, representing an electrical workers trade organization, reported that across all construction sectors, women are severely underrepresented.

Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, reported that many large franchises are not interested in obtaining space at the Airport because they do not want to do business with the subtenants with whom the master concessionaire does business. When asked why that was the case, Interviewee #SD13 replied, "[The MBE/WBE subtenants] are the unknown. Franchises want specific guidelines followed. They want that reassurance that they get from [the master concessionaire running their stores]."

Several interviewees reported that issues related to race, ethnicity, and gender does not affect the ability of a firm to obtain or engage in business. SDTA #7, representing a construction trade organization, stated, "I do not think there is discrimination, and I'm not just saying that because of my position." He continued, "… I think when the baby boom generation came in [racial discrimination] pretty well dissipated. That's me and I think the next generation won't even know what we're talking about. We're electing a black man president. You can't tell me there's a lot of prejudice deep seeded in the country when we're electing Barack Obama now." He went on to say that there is a group of organizations in San Diego who benefit from having the public believe that discrimination exists in the construction industry.

Interviewee #SD14, representing a Hispanic American male-owned firm, repeatedly mentioned that, given Proposition 209 and the state of the economy, race and gender do not play a role in winning contracts — it is all about being low bidder.

Interviewee #SD8, representing a minority male-owned firm that is a concessionaire at the Airport, said that he does not have any experience with discrimination with the Airport, nor has he seen discrimination against anyone other firms.

Interviewee #SD33, representing a Hispanic American male-owned firm, said that when his father started the firm 30 years ago he experienced discrimination, primarily because he did not know a great deal of English. However, the firm was able to remain competitive and grow because it provided a quality product. He went on to say that there are such a large number of Hispanic Americans (and other minorities) in his firm's industry today that discriminating against them would be akin to discriminating against the entire industry — it would be too

impractical. He went on to say that the contracting industry in San Diego is "an even playing field" with regard to race and gender.

Interviewee #SD34, representing a white male-owned firm, remarked that MBE/WBE firms do not need any help to be successful. He said, "If they are strong, they should be fine. They can learn from firms they worked with before starting their own businesses."

Interviewee #SD40, representing a white male-owned firm, reported that, to his knowledge, there is no discrimination based on race or gender in San Diego. He said that he has no knowledge of firms being denied the opportunity to bid, contract awards, financing or any other opportunity based on race or gender.

Interviewee #SD44, representing a Hispanic male-owned firm, speaking generally about the effect of MBE/WBE status on a firm's success in his industry, remarked: "The people that are in our industry … are all very helpful to one another. It doesn't matter … what your ethnicity is." He went on to say, "I've had good experience in this business."

SDTA #6, representing an Asian American trade organization, indicated that she is not aware of any acts of discrimination against minority- or female-owned firms, but that those firms would be unlikely to file formal complaints about discriminatory acts even if they occurred.

SDTA #12, representing a workforce trade organization, indicated that his organization's members complain about hiring discrimination based on age but that he has not heard complaints about contracting discrimination based on race, ethnicity, or gender.

SDTA #13, a retired official from a local public agency, indicated that issues related to race, ethnicity, or gender do not make it more difficult to engage in business in San Diego — what matters is firm size: "People need to let go of [the idea that race, ethnicity, or gender affect success] and stop saying, 'Oh, it's because I'm black, or it's because I'm a woman, or it's because of this' and just realize that small businesses have a disadvantage."

Some interviewees reported that minority- and female-owned firms have been afforded a number of opportunities because of their race, ethnicity, or gender. SDTA #3, representing a local chamber of commerce, indicated that, in her view, MBE/WBE firms have a great deal of opportunity to succeed in the greater San Diego area. Regarding local opportunities for those firms, SDTA #3 said, "To me, there are so many resources out there that I think [MBE/WBE firms] actually have more opportunities [than majority-owned firms] at times." She went on to say that race and gender typically do not play a role in the local marketplace, and what matters is each person's work ethic, "I haven't heard of any problems [related to race and gender]." She continued, "To me it's not your gender, it's not your race — it's your work ethic and what you decide to be. Any opportunity we can give them to be successful is there. …" Speaking more generally, she indicated that racism and sexism are not as problematic as they were in the past. With regard to racism, she said, "We've come a long way." With regard to sexism, she commented, "Twenty years ago … there was a different pay scale [for men and women], but I believe those days are gone."

SDTA #7, representing a construction trade organization, expressed his belief that there are no barriers in construction specific to minority- or female-owned firms. He said, "We do all these nice things [i.e., agencies' remedies], but cutting through all that, you got to train people to be contractors and [the] market will probably take care of its self. There isn't a real barrier — that I can see anyway — for minorities getting to be a contractor." He went on to explain that the determining factor for success in construction has nothing to do with race — it is about taking chances: "You got to be a young guy and want to run out and take a chance. … Does some African American or Hispanic guy take that chance to quit that nice project manager job [they] got? … The first thing you got to have is the guts to do it."

Interviewee #SD24, representing a white male-owned firm, indicated that he has not observed any manifestations of discrimination against minority- or female-owned firms, and he said that instead DBE programs have afforded them a number of advantages: "If anything I think it's the opposite [i.e., MBE/WBE firms are advantaged], because there are often DBE related requirements. Firms like that tend to be courted more than anything else."

Work environment.

Some interviewees indicated that the work environment for minorities and females working in San Diego is less favorable than it is for white males. Interviewee #SD2, representing a white female-owned firm, reported that it is difficult for her firm to develop relationships with prime contractors, precisely because her firm is female-owned. She said that there have been instances when she had to bring a male employee from her company to meetings with prime contractors so that they would treat her with more respect. She indicated that there is an aversion to women in the construction industry.

Interviewee #SD17, representing a white female-owned firm, reported that she has been the victim of gender discrimination on a number of occasions. She indicated that sometimes that discrimination has been subtle, but other times it has been blatant. Regarding subtle discrimination, Interviewee #SD17 said, "As a woman, I am aware of unspoken discrimination. For example, contractors will automatically call and ask for my husband Jeff to come to the job even though my name is on the company and I am the president." Regarding blatant discrimination, Interviewee #SD17 indicted that some contractors have been quite audacious with her on the telephone: "One client called and said he would give our company a [contract], but only if I was hot." She also said that her firm has worked on a project for which the foreman told her that he refuses to work with women.

Interviewee #SD20, representing an Asian American male-owned firm, indicated that an unfair work environment continues to exist from time to time for MBE and WBE firms. He gave an example of women contractors not commanding as much respect as their male counterparts.

Interviewee #SD21, representing a white male-owned firm, is aware of rampant, race-related graffiti being present on some of his work sites. He referred to the construction industry as a "jungle environment," and as such he acknowledged that more could be done to help minority- and woman-owned contractors in the field. However, he also pointed out that those firms are making good progress in today's construction industry. He said that many more MBE/WBE contractors have college degrees today than in decades past, and those contractors are either

running construction companies themselves or are playing integral roles in someone else's construction company. He said, "Things are evolving so that the playing field is much more [level]."

Interviewee #SD32, representing an African American male-owned firm, reported that many people in the construction industry are "not necessarily racist, but prejudiced in general and make [discriminatory] remarks." He indicated that although such remarks are unpleasant, he does not think his firm has lost any work because of the owner's race. With regard to women, Interviewee #SD32 said, "I think due to the nature of construction being dominated by males in general … it's hard for women to come into an industry like this and be accepted as peers."

Interviewee #SD34, representing a white male-owned firm, commented that women-owned firms encounter problems in the contracting industry because, "there are still men out there who think it's a man's world." He noted that minority-owned firms also encounter difficulties. Interviewee #SD34 reported that he has witnessed contractors making inappropriate comments toward both minorities and women on job sites.

Interviewee #SD39, representing a Hispanic female-owned firm, reported that the work environment is particularly unpleasant for Hispanics working in his firm's industry: "Discrimination is going on with the drivers because they don't speak very good English."

Interviewee #SD47, representing an African American female-owned firm, stated that eight of her own employees were recently terminated for using the "N" word and making derogatory comments about her and her brother, the firm's Operations Manager. She said that her firm has retained the services of a well-respected diversity consultant to address her firm's race-related difficulties. Interviewee #SD47 also reported that the "N" word was directed at one of her employees on a work site in the private sector during a project on which her firm was working as a subcontractor.

SDTA #5, representing a government advisory commission on minority issues, indicated that public agencies in San Diego actively prevent minority- and female-owned firms from being successful: "San Diego creates barriers for people to get involved and does the same thing over and over until the "Good Old Boy Network" can pretty much kill off small and black-owned or other ethnic-owned businesses. … There is no consequence for not doing outreach or supporting diversity in San Diego." She went on to explain that racism is a substantial issue in San Diego but that the city makes an effort to hide those problems: "San Diego is bona fide racist — that is it! San Diego reports themselves as the finest city, but indicators of harsh racism are hidden."

Stereotypical attitudes.

Several interviewees indicated that MBE/WBE firms are sometimes victim to stereotypical attitudes on the part of prime contractors or agencies. SDTA #10, representing a supplier trade organization, said that some of the personnel at public agencies believe that MBE/WBE firms are less qualified than large, well-established firms and that their participation generates additional costs. SDTA #10 said that many of those people believe there are "no good MBEs out there." He remarked, "These individuals should be open to accepting that there are, in fact, good [MBE/WBE] firms and that their utilization does not increase costs."

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, stated that some of the master concessionaire's personnel take the attitude toward Interviewee #SD1 that "You're only here because you're a minority." She went on to say that those people do not appear to have bought into the notion that minority-owned firms are legitimate and are "here to stay."

Interviewee #SD21, representing a white male-owned firm, indicated that minority- and female-owned firms still face stereotypical attitudes in the construction industry but that the problem is relatively small. He said, "You'll get an old inspector … they're not necessarily too enthused when a woman project manager rolls in."

Interviewee #SD20, representing an Asian American male-owned firm, reported being aware of prime contractors and agencies having stereotypical attitudes about minority- and female-owned firms but only in subtle, indirect ways.

Interviewee #SD28, representing a white female-owned firm, reported that she has often been victim to prime contractors having stereotypical attitudes against women in which "they don't think you know anything because you're a woman." In describing how she deals with those situations, she said, "If I swallow my pride, I just give [the phone] to [a male member of the firm] and [he] tells them the same thing that I would tell them."

Interviewee #SD43, representing a Hispanic male-owned firm, said that agencies and prime contractors sometimes assume that Hispanic-owned firms will hire illegal immigrants or cheap labor to complete the work.

Interviewee #SD46, representing an African American male-owned firm, indicated that sometimes subcontractors appear to question his firm's ability to act as a prime contractor due to his minority status. He said that some subcontractors seem to wonder "Can this guy pay me? Is he for real?" He went on to say that when he goes on job walks, he gets the sense that other firms look at him and wonder, "Are there goals on this project?"

Interviewee #SD47, representing an African American female-owned firm, indicated that there is a stigma associated with being DBE certified that the firm is unqualified: "I'd heard so much about the stigma of these certifications … [Other firms in the industry] talk about how unqualified [DBE certified] firms were and how they couldn't perform." She went on to say that it is very difficult being an African American woman in the construction industry: "In this industry, if there is a white male with me, … they could be the driver … they're going to get more respect than I will. If it's a Black male, they'll get more respect, too. If it's a white female, they're going to still be addressed and interacted with more than me. I'm always the low man on the totem pole."

Consortium Anecdotes Regarding the Effect of Race, Ethnicity, and Gender, if any, upon a Firm's Ability to Obtain or Engage in Business

The following anecdotes regarding the effect of race, ethnicity, and gender were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Some businesses interviewed felt that race, ethnicity, or gender affected their ability to obtain or engage in business. [Interviewees #CON: 2, 4, 5, 10, 12, 13, 16, 17, 19, 20, 21, 22, 25, 26, 27, 29, 30, 31, 33, 34, 35, 36, 37, 38, 40, 43, 45, 46, 47, 50, 51, CONTA #2, WT #9, 10, PF #8]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that race or ethnicity may affect his business's ability to obtain business because of the lack of financing or being unable to obtain financing.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he believes that race, ethnicity, or gender indirectly affects his ability to obtain or engage in business because he does not believe that prime contractors would contact him if his company was not certified as a DBE. He stated, "I know the only reason they did in the very beginning was because we were certified and at that time [the programs required between 10 to 15 percent DBE participation]; that is the only reason why they would call us."

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he is aware of one situation in which the race, ethnicity, or gender of the owner of a business has affected the businesses' ability to obtain or engage in business. Interviewee #CON5 stated that his company cannot receive DBE certification and cannot compete for certain jobs, though most of the employees are minorities, because the owner of the company is Caucasian.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that they had a feeling their race, ethnicity, or gender had affected their ability to obtain or engage in business. Interviewee #CON10 declined to elaborate further for purposes of the report.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he could not prove any instance in which his race, ethnicity, or gender has affected his ability to obtain or engage in business; but, he stated that he has tried pursuits in the past that have left him feeling "that maybe that was a part of it" (e.g., race, ethnicity, or gender). He stated he was left feeling like he did not represent the local community. He stated that in other cases, "it has been the complete opposite" in that he has benefited the team, not so much due to his ethnicity, but due to the fact of where he grew up. He stated that he knew the local sensitivities, the local priorities, and he could relate to the locals.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, believes that his race and ethnicity affect his company's ability to obtain or engage in business. He stated that he used to have a white male business partner and he seemed to always have a lot of work. Interviewee #CON13 stated that although the difference in the amount of work may be due to his marketing skills, he believes there is a "Good Old Boy Network" at play.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that race, ethnicity, and gender have affected the business' ability to obtain and engage in business. The DBE/MBE certification has given the company opportunities and the ability to participate in the work environment on a larger scale. Without the qualifications associated with Interviewee #CON16's race, ethnicity, and gender, the company

would just be another one of hundreds to choose from for large companies; the DBE/MBE status helps to differentiate the business.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that race, ethnicity, and gender has affected the business' ability to obtain and engage in business, noting that this is the result of human nature. Interviewee #CON17 stated affirmatively that companies work with whom they are comfortable. Interviewee #CON17 reported that "we all have our paradigms, and it takes a long time to get over them."

Interviewee #CON19, an MBE-certified African American male attorney, stated that there are always barriers to pursuing work. He stated that African American law firms are not treated the same as Caucasian law firms.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that if asked 14 years ago she would have said that her race, ethnicity, and gender have affected her ability to obtain and engage in business. She stated that today her company has relationships with many of the large firms that they work with and those large firms come from the same social network that she does. She stated that there is a certain hesitancy among companies to trust her business with large projects. She stated that she felt the Consortium has encouraged prime contractors to work with minority- and female-owned businesses, but it is dependent on the constituency. She stated that prime contractors should utilize firms that reflect the constituency of the municipality and should be sensitive to that need. She stated that in the private sector it is a challenge to obtain work and her firm is contacted when the prime contractor needs an African American firm.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, felt that her race and gender has probably affected her ability to obtain or engage in business with the Consortium and prime contractors. She did not feel as though this has been an issue in the (non-Consortium) public sector although it has been an issue in the private sector.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, felt that his race has played a positive role in helping him to obtain business with the Consortium, but that it has negatively impacted his ability to work with prime contractors.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, does feel sometimes that being a female in a male-dominated field has affected her ability to obtain or engage in business. She stated that her gender has affected her ability to obtain work with prime contractors approximately 50 percent of the time whereas in the public sector, depending on the job, her gender has affected her ability to obtain or engage in business approximately 30 percent of the time.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, did not believe race or gender has affected his ability to obtain or engage in work in an overt way, but stated that there is a tendency for a firm "to go with people who know

your work." He stated that "you have to break in to the inner circle. It is harder to do when you are a minority. It is hard to gain their confidence."

Interviewee #CON29, an African American male-owned electrical contractor, stated that his race, ethnicity or gender has "absolutely" affected his ability to obtain or engage in business considering the fact that he has never worked with a huge firm on any large-scale projects. Interviewee #CON29 stated that with respect to pursuing work with the Consortium, the knowledge of the availability of contracts is not available to the public or on the website so he feels that it is a selective process and they select who they want based on friendships and relationships. He stated that relationships result in the contracts and that minorities are not able to develop relationships because they do not socialize with the majority firms; they are typically kept out of the inner circle. He stated that he has never worked in the public sector other than his single project with UCLA, so he does feel that there is a bias. He stated that typically the "worker bees" will be minorities and possibly one or two at the top, but there is indeed a bias as it relates to the awarding of contracts and the knowledge of projects. He stated that his race, ethnicity, or gender has positively affected his ability to obtain work in the private sector. He stated that even though companies and people feel that they can get over on him, he feels that it does allow him to keep his business afloat. He stated that people do hire him because of his race and that gets him in the door. He stated that once he gets a job it is proven that it will lead to more work either through the same person or a referral and that is what has sustained his business.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he does feel as though his race and ethnicity affect his ability to obtain and engage in business. He feels that this happens in instances in which he does not fit into the mainstream look of other investors or contractors even if he has done past business with them and they can vouch for his performance and his business' quality of work. He does not feel that it has affected his ability to obtain work with the Consortium or with other prime contractors.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated both "yes" and "no" as to whether his race, ethnicity, or gender has affected his ability to obtain or engage in business. He stated that his business has been identified as a minority business even though he utilizes the best crew that he can assemble. He does not care if they are minorities: black, white, blue, or brown. He just uses the crew that can perform to the standards which he places on them. Interviewee #CON31 said he is the face of the business and as the face of the business there are some stereotypes and preconceived notions about the work that African Americans do. He stated there is the thought that African American workers are lazy, overcharge, and cut corners. He feels that none of these examples characterized what he and his company have done on their completed jobs.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that her gender has "absolutely" affected her ability to obtain and engage in work with the Consortium and in the non-Consortium public sector and private sector.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, feels that her race and her gender have affected her ability to obtain or engage in

business. She feels that the Consortium has a bias against DBEs. She stated that she has experienced gender bias with prime contractors and in the public sector.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that her race, ethnicity, or gender has probably affected her ability to obtain or engage in business with prime contractors and in the private sector. Interviewee #CON35stated that many times things are worked out ahead of an RFP even being presented to the public; she feels as though race is sometimes a factor.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she believes that her race and gender affect her ability to obtain or engage in business. She stated that she had a recent contract with Metro but then they called her and decided to take all the work back. She feels that when you are African American you get questioned a lot about your company's price structure. She stated that with respect to law firms in the private sector, she believes that large non-African American law firms will not utilize her services, but will work with someone from their race instead (although it is not something someone would say to her face). She stated that if she knows that the law firm is not African American she will send a white employee to get the business.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that he felt that his race or ethnicity affects his ability to obtain or engage in business with the Consortium, with prime contractors, and in the private sector in general. He stated that it is common knowledge that prime contractors do not want to use DBEs. He stated that, in the private sector, if prime contractors do not have to use a minority firm, and they do not receive any incentive for using one, the prime contractors will not use minority firms but use their friends instead. He stated that his firm has been successful in the public sector generally though he did not get everything that he bid on. He stated that he works everyday to build his business and credibility.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that his race or ethnicity has affected his ability to obtain or engage in business across all sectors. He explained that there are very few Native Americans in the contracting business; he stated that the L.A. County MTA and other agencies then have a lot of curiosity about Indians. He stated that they want to see his identification, ask him how he got his identification, and ask him how he knew that he was an Indian.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, felt that his race or gender has affected his ability to obtain or engage in business with the Consortium, with prime contractors, and in the private sector (but not in the non-Consortium public sector). He stated that the only reason a prime contractor will contact him is if DBE participation is required; it is only to help them make money. He stated that the Consortium should somehow put small businesses and DBEs in a position to make money too.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, stated that it was possible that his race, ethnicity, or gender has affected his ability to obtain or engage in business with prime contractors and in the private sector. He did not believe these

factors affected his ability to obtain or engage in work with the Consortium or in the public sector.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, does not feel as though her race, ethnicity, or gender have affected her ability to obtain or engage in business because they just do not give the offers anymore. This has been the case in the public and private sectors.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he believes his race has definitely affected his ability to obtain or engage in business with the Consortium (MTA and RTD), with prime contractors and in the private sector to a lesser extent. He stated that ever since white females became a protected class "it has been downhill." He stated that he is competing with white females as minorities or white males using white females as "fronts" so that they can get the minority business.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that his race has probably affected his ability to obtain or engage in work with the Consortium, in the non-Consortium public sector, and with prime contractors, but stated that he could not prove it. He stated that in the private sector, when you do not get picked for a job but know that you are just as qualified as the competitor, you have to wonder if it is because you are African American.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that if he were Caucasian he would get more contracts. He stated that no one would help him to obtain bonding which he felt was also a factor in his ability to obtain or engage in business. He stated that when he needs to get an insurance claim approved he will send a white employee because the rate for which they will receive approval is higher than that of other employees. He stated that last year, in the public sector, a white-owned firm with no license and no insurance received a contract based on the fact that they were not minority owned. Interviewee #CON50 also cited his race and ethnicity as a barrier to pursuing work with the Consortium.

CONTA #2, the President of the Black Contractor's Association, stated that the race, ethnicity, or gender of a business owner does affect the businesses' ability to obtain or engage in business because prime contractors often have a lack of confidence in newcomers or others who they feel have not met certain prequalification requirements. Interviewee CONTA #2 stated that in general DBEs, women, and minorities are impacted by the lack of outreach utilization in the Consortium transportation industry. He stated that women have a particularly hard time with prime contractors working on public contracts.

WT #9, a Principal of a small business transportation planning consulting firm, in the process of getting certified as a DBE, submitted written testimony regarding the Southern California Regional Disparity Study. He noted the major problem is the year of the data used for analysis, since during those years the economy was at the highest point and there were a lot of projects — so many that the big firms were willing to share with smaller DBE/SBEs. Times have changed now with not that many projects out to bid and numerous firms applying. He stated, "the results of [the] study is not valid to the current business environment and no one expects that we would

see the 2006/2007 [results] again in the near future or even again in our lifetime." He further stated, "In short, if you don't mandate DBE or SBE requirements, a lot of DBE firms won't be around next year." (Written testimony not dated)

WT #10, a female representing an SBE firm that is in the process of getting certification for WBE/DBE submitted written testimony that the Disparity Study is not valid to the current business environment. "It was [done when] the economy was at the highest point and there were a lot of projects. The big firms had so [many] projects that they were willing to share with smaller DBE/SBE firms. But time has changed drastically. There are not that [many] projects out there. In short, if you don't mandate DBE requirements, a lot of DBE firms won't be around next year." (Written testimony submitted 11/03/09).

PF #8, a woman representing the minority business opportunity services in the Mayor's office provided oral testimony at the public forum held on October 20, 2009. She addressed the need for checks and balances, "[b]ecause we have people with personal agendas and personal issues that they may not want to see fairness across the board." (Public Forum Los Angeles held on October 20, 2009).

Some interviewees felt their race, ethnicity, or gender had no effect on their ability to obtain or engage in business. [Interviewees #CON: 1, 3, 6, 7, 8, 11, 14, 15, 18, 22, 23, 28, 32, 39, 41, 42, 52, 53, 55, 56, 57, 58, CONTA #1]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, does not believe that his race, ethnicity, or gender has ever affected his firm's ability to obtain or engage in business.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, was not aware of any circumstances in which the race, ethnicity, or gender of the owner has affected the businesses' ability to obtain or engage in business.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company, was not aware of any incidents in which race, ethnicity, or gender of the owner of a business has affected the business's ability to obtain or engage in business.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that he does not think that the race, ethnicity, or gender of the owner of a business affects the businesses' ability to obtain or engage in business. He stated that it is generally a positive because on government jobs there are goals for employing DBEs. In the private sector a business' ability to obtain business is related to its competence; general contractors just want the job done. Therefore, being a minority is an asset. He stated that he has never seen a situation in which the race, ethnicity, or gender of the owner was a negative.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that her race, ethnicity, or gender has not affected her ability to obtain or engage in business with the Consortium or with non-Consortium public sector work, but it has sometimes affected her ability to engage in business in the private sector.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that his race, ethnicity, or gender has not affected his ability to obtain or engage with business with the Consortium or prime contractors. He felt it was hard to say whether it has affected his ability to engage in business in the non-Consortium public sector and the private sector.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, does not feel as though her race or gender has affected her ability to obtain or engage in business, but she does feel that there is a mental block toward small businesses.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, reported that only the quality of his work affected his ability to obtain or engage in business.

CONTA #1, the President of the Latino Business Owners of America, stated generally a businesses' ability to obtain or engage in business is not based on race, ethnicity, or gender but on ability. He did state, however, that minorities have a harder time building relationships. CONTA #1 stated that this problem is generational. Non-minorities have more contacts than minorities. CONTA #1 stated he believes that this situation is somewhat different in Los Angeles because there are more mature minority firms there. He stated that in comparison, most minority firms in San Diego are still in their infancy.

A few interviewees did not know whether their race, ethnicity, and/or gender had an effect on their ability to obtain or engage in business. [Interviewees #CON: 9, 24, 44, 48, 49].
Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, did not know whether his race, ethnicity, or gender has affected his business' ability to obtain in or engage in business.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that she did not think her race, ethnicity, or gender has affected her ability to obtain work with the Consortium, but sometimes a light bulb comes on and she thinks that maybe it is.

Interviewee #CON44, a DBE/MBE/SBE-certified African American male owner of a financial planning services firm, stated that he does not believe that his race, ethnicity, or gender has affected his ability to obtain or engage in business, but stated that it is not something he would ever know because it is not obvious.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, did not feel as though his race, ethnicity, or gender had affected his ability to work with the Consortium or in the non-Consortium public sector. He was not sure whether it affected his ability to obtain work with prime contractors but stated that he could not prove anything.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, did not feel as though he has been shut out of opportunities with prime contractors, the

Consortium, or other public sector entities. He did not know whether his race or ethnicity has ever shut him out of opportunities to obtain business.

Work environment for minorities and women.

Some interviewees reported no differences in the work environment for minorities and women than for non-DBEs in the Consortium transportation industry. [Interviewees #CON: 3, 7, 8, 9, 11, 16, 18, 20, 22, 23, 37, 39, 48]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, did not know of any differences in the work environment for DBEs, women, and minorities in the Consortium transportation industry. From his perspective as a prime contractor, he noted that he did not care who showed up to work a job; gender and minority status had no impact on the job.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated in general there are no issues with the work environment for DBEs, women, and minorities in the Consortium transportation industry. He stated, in general, the private sector goes on competence. If the general contractor or owner thinks that a business is competent, they do not care about race, ethnicity, or gender. If, however, they think that you obtained the job by means other than competence, then it becomes an issue. However, if the DBEs know what they are doing, no one cares that the company is a DBE.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that there is no "significant distinction" as to the work environment for women, minorities, or DBEs. He spoke negatively about the DBE Program. He stated that if for some reason the state needs a quick turn-around on a project they will waive the DBE requirement. He stated that the DBE Program is arbitrary and as a result, he feels it is "worthless." He stated that the DBE subcontractors that he has spoken with indicated to him that "nothing has ever come of their" DBE certification.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that among the transportation engineering firms, the work environment for women, minorities, and DBEs is not significantly different than that for non-DBEs; "there are a lot of good engineering firms out there."

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, declined to describe the work environment for DBEs, women, and minorities in the Consortium transportation market, but stated that her personal experience has been "great."

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, noted that the work environment for DBEs, women, and minorities in the Consortium transportation industry is very inviting and that it is a positive work industry. In large part, diversity is being enforced and promoted on various projects. Interviewee #CON16 did state that people are generally chosen because of their abilities.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, noted that "she's having a blast," and that there are lots of opportunities for small businesses to do important things in the Consortium transportation industry.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that the work environment for women and minorities is very positive and very integrated; this has been very helpful for business. Interviewee #CON20 identified an African American female-owned business with a fleet of over 7,000 buses; she thought this was very impressive.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she has experienced normal work days.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, stated that the work environment for women and minorities is "okay."

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he did not remember anything negative about the work environment for DBEs, women, and minorities in the Consortium transportation industry. He stated that, for the most part, the work environment is okay.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that she does not think the work environment in the transportation industry is different than anyone else's; she stated that work can be difficult and hard and that just comes with the territory.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that as far as he knows the Consortium work environment for DBEs and women-owned business is okay.

Some interviewees reported "inequalities" in the work environment for DBEs, women, and minorities when compared to the work environment for non-DBEs, non-women, and non-minorities. [Interviewees #CON: 14, 26, 33, 34, 40, 50, 51]. Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that inequalities in the work environment often happen because the agencies with whom they work do not understand the industry. He stated that the ability to do good work is tied directly to the qualifications of the project manager and in the public sector, the project manager often does not have the required experience.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that the work environment for women and minorities is not easy, is sometimes hostile, and is very male-dominated.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that the work environment for women and minorities is "all over the map" in terms of how it affects women and minorities. She stated that it is dependent on the prime contractor and

the circumstances of the project. She stated that in the final analysis, the work environment created by the prime contractor is usually based on trying to save money.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated there is generally a bias against women in the industry and an institutional bias against DBEs in particular.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, observed that DBEs are "kind of looked down upon." He stated that the Consortium makes you feel like you are only there because you are a minority and you should be happy with any amount of money that you make; they want the DBEs to think that they are lucky to be there working.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that the work environment for women and minorities is very difficult; he stated that the work environment for Caucasian people is very easy.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, stated that he has come to the conclusion that small businesses cannot compete in the transportation industry.

Some interviewees reported that "women and minorities" are still affected by who they are. [Interviewees #CON: 1, 4, 13, 17]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that people are still affected by who they are. He stated that he believes women who are aptly qualified for a job are still discriminated against and not given their full opportunity. He stated he had experience in a private sector company when "an extremely gifted" apprentice was sexually harassed "and left the field because of it." Instead of the female taking action, she just left the trade. He stated that in contrast he has also seen some extremely talented women "living up to their full potential" and running crews in the field.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that the work environment in the industry for DBEs, women, and minorities is not easy because you have to sell yourself to the prime contractors and make sure that they are willing to put you on their team as a subcontractor. He said even if you are successful in getting on the team, you have to be lucky enough that the prime contractor actually wins the contract.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that while he could not comment on gender, he does have a white male assistant and sometimes he feels as though his assistant is able to better relate to his white male clients.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, described the work environment for DBEs, women, and minorities in the Consortium transportation industry as fine. Interviewee #CON17 has been in the industry for a long time and knows the people, and her company has earned its reputation.

Interviewee #CON17 knows there are opportunities that she's missed because she's not the right ethnicity or not the right race, but she just moves on to other opportunities.

Some interviewees reported a difficulty in new DBEs' ability to obtain contracts. [Interviewees #CON: 12, 30]. Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that most members of the Consortium (OCTA, L.A. County MTA, and SCRA) have done an excellent job of offering opportunities to DBEs, WBEs, and MBEs, and that support has allowed the industry to diversify and has forced large companies to increased participation by qualified firms. In some cases, it has opened up opportunities for new DBEs. The issue with the Consortium agencies is that some will introduce new DBEs although others will only use the "same old, same old" DBEs.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he can perform the work as well as audit and accounting processes, but he is not called to perform the work because he is a small business.

Stereotypical attitudes.

Some interviewees reported having experienced stereotyping "first-hand." [Interviewees #CON: 12, 17, 19, 20, 25, 26, 28, 31, 33, 34, 40, 45, 46, 50, CONTA #2, WT #11]. Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he had experienced stereotyping within the Consortium transportation industry. He stated that he had one situation where he was "tagged" as a "rail engineer" without the understanding or wanting to understand that he does more than that; this happened in an interview with one of the Consortium agencies and his company did not receive the job. He stated that one of the key members of the panel called one of his friends to learn more information about Interviewee #CON12 and classified him on that basis.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that she has knowledge of stereotyping in the Consortium transportation industry, but that when this occurs the work is not worth it. Interviewee #CON17 immediately handles any reports of this kind of behavior when reported by her employees.

Interviewee #CON19, an MBE-certified African American male attorney, stated that he believes that his firm is not given high-profile cases because of stereotyping.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that she has experienced stereotyping in the Consortium transportation industry. She stated that typically women are called when the project calls for outreach; this is in her favor because that is her firm's focus.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that he has heard of stereotyping within the Consortium transportation industry; he felt as though a firm's DBE certification is like a negative label.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that she has heard about stereotyping in the industry and she has overheard male contractors make references about certain people that were stereotypical.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated that stereotyping is a matter of perception; his company endures and they move on to the next bid.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, has experienced stereotyping. Although it was not in the Consortium transportation industry, he feels that he has dealt with it in the sense that when he arrives on a project with a diverse crew of the best men available, in his opinion, they look at him and expect less immediately. They assume that the quality of work will not be up to snuff whereas when he has worked on a project for a minority firm with all white men, and maybe he, and one other [minority], there is not the same feeling or expectation for failure.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that it can be very difficult to get out of the mold of the impressions that prime contractors have about DBEs. She stated that even when prime contractors have previously worked with a subcontractor, it is very difficult for them to understand that you may have the skills other than those utilized on prior jobs.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, stated that she has experienced stereotyping in that because she is a small firm, she is presumed to be incompetent and incapable of doing the job.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that he has experienced stereotyping and there are always conflicts between the prime contractors and the subcontractors. He stated that even if the Consortium believes that he can do a certain job the prime contractor is not convinced.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that the Consortium always utilizes the same companies as opposed to opening opportunities to new companies and inviting fresh ideas.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he has experienced stereotyping "a little bit." He stated that he has gone out on some little meetings to discuss a contract and he could see the meeting participant's surprise when he walked into the room.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that he has the feeling that he is stereotyped any time that his face is shown. He stated that his appearance has been a factor in his inability to receive the quantity of work that he is capable of performing.

CONTA #2, the President of the Black Contractor's Association, stated that he has experienced first-hand stereotyping of African Americans in the Consortium transportation. The stereotype is

that they are "lazy" and "do not want to work." Similarly there are stereotypes that Asian people do not do construction because they do computers, and Native Americans do not do construction because they have bingo. CONTA #2 stated that last year he approached a Hispanic foreman and asked the foreman why there were no African Americans working on the project. He recorded the response, "they're lazy and they do not want to work." CONTA #2 stated that he also went to another Caucasian foreman and asked the same question, why there were no African Americans on the job, and was told "they do not want to work." CONTA #2 taped the comments and reported it to the local government. The job site was shut down that day. The next day CONTA #2 met with the owner, and the owner hired a couple of African Americans who were subsequently laid off after the job was completed. The company has not hired any other African Americans and they are still doing work for the City of San Diego. The City Attorney met with CONTA #2 and listened to the recording. CONTA #2 was told that the City would audit the company's employee records. CONTA #2 later learned, however, that the audit was only a "desk audit" in which a questionnaire was completed. The company was also determined to be in compliance.

WT #11, a Hispanic individual representing a minority woman-owned small business IT firm submitted written testimony in connection with the Southern California Regional Disparity Study to report what he believes is "evidence of Discrimination based on race, gender or ethnicity in the transportation contracting industry." He stated that he has participated in OCTA Small Business Match Making Meetings and submitted at least a dozen requests to the OCTA Contracting Office for the opportunity to demonstrate a new technology that can benefit OCTA operations but his requests were ignored. "So, yes I believe that because of my Hispanic background I'm being ignored and not taken seriously." (Written testimony submitted 9/29/09).

Some interviewees had heard of stereotyping but not experienced it. [Interviewees #CON: 15, 22, 49, 51]. Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, has heard of stereotyping in the Consortium transportation industry, but he noted that the majority of that conduct was in the early 1990s, much of which has gone by the wayside. Interviewee #CON15 has specifically informed his employees that kind of behavior is intolerable and not allowed.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she had heard of stereotyping.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that he had heard of stereotyping and was sure that it exists.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, reported having heard of stereotyping in the Consortium transportation industry.

Discrimination.

Some interviewees reported the existence of discrimination in the transportation industry. [Interviewees #CON: 2, 4, 13, 14, 15, 17, 19, 22, 24, 25, 27, 30, 34, 37, 38, 40, 46, 47, 49, 50, 51, 52, 53, 55, 58, CONTA #1, 2, WT #12, 13, 14, 15]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he experienced discrimination while employed by Caltrans five or six years ago. He stated that non-minorities were favored for promotion.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that although he has not specifically heard of any instances of discrimination in the industry, he is sure that there are such instances of discrimination in the industry, but it is so hard to prove.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he had never heard of or experienced "overt" discrimination, but it is hard to tell. He stated that there is much that could be discriminatory but everyone is "politically correct." Interviewee #CON13 also stated that he has observed favoritism on the part of the agency favoring a male over a female counterpart.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that he had "maybe" heard of discrimination in the Consortium transportation industry; for example, he has heard comments like "people do not like to work with women." He stated that he does not know the basis for decisions (i.e., whether discrimination is involved) because he is not there when the decisions are made.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, has heard of discrimination in the Consortium transportation industry, but he noted that the majority of that conduct was in the early 1990s, much of which has gone by the wayside.

Interviewee #CON19, an MBE-certified African American male attorney, stated that he has experienced subtle discrimination by the Consortium in that he is not given the quality or quantity of cases that he deserves; he stated that they are not assigned the high-value cases.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she has heard of discrimination in the transportation industry.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, reported that she has heard of discrimination in the Consortium transportation industry but not as far as contracts are concerned.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that he felt as though discrimination is always present. He believes that his inability to get "face time" with prime contractors is racially motivated. He stated that "white men do not want to sit down and talk with blacks; it is hard."

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that he has experienced discrimination in the transportation industry in being placed on a team and then "put to the side."

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, feels as though there is a level of discrimination, but nothing that he can unequivocally prove simply because those types of things are not stated nor are they put in writing; rather they are manifest in actions and execution. Interviewee #CON30 has not complained about alleged discrimination because DBEs and small firms do not have the manpower nor the ability to expose them without concrete evidence.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that he has not observed any obvious discrimination but he is sure that it has happened. He stated that he would not know who to complain to about any such discrimination without jeopardizing future contracts.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that he has experienced discrimination in the Consortium transportation industry. He stated that someone once made a comment about going back to the reservation. He did not complain and he has no confidence in anyone he would complain to; he stated that this has been going on ever since [Christopher] Columbus.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, reported that he had been called a racial slur and had been verbally accosted by a prime contractor's employees.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he has heard of discrimination in the transportation industry, but "this has been going on for a few hundred years — nothing new." He stated: "I have been dealing with it all my life."

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that he had "not really" heard of discrimination in the Consortium transportation industry, but stated "it is hard to put your finger on. It is just a part of life."

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, reported that it was very possible that he had experienced discrimination in the Consortium transportation industry. He felt as though it may have happened, but he just did not recognize it.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, reported feeling discriminated against in terms of obtaining work with the Consortium, but stated that it was nothing that he could prove.

Interviewee #CON51, a DBE-certified African American male owner of a construction management and contracting firm, reported having experienced discrimination in the Consortium transportation industry. He felt that because of his color he was told not to complain

about his experience because he would suffer retaliation in terms of firms not utilizing him on future projects.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, reported having heard of discrimination in the Consortium transportation industry, but again, could not identify any specific examples.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, stated that he has heard of discrimination, but stated that it was nothing concrete.

Interviewee #CON55, a white male owner of a construction services and program management firm, stated that he believes that there is veiled discrimination in the transportation industry, but he does not know how to prove it. He feels that you can change situations by changing the requirements.

Interviewee #CON58, a white male owner of an engineering consulting firm, had heard of discrimination in the Consortium transportation industry, but could not identify any particular incident.

CONTA #1, the President of the Latino Business Owners of America, stated that there is discrimination in the Consortium transportation industry in the form of participation of minority firms. He stated that the industry does not have to directly discriminate against minorities to impact their participation. CONTA #1 stated that the program does not encourage participation and the agencies do not follow the racial breakdown of their projects.

CONTA #2, the President of the Black Contractor's Association, stated that there are lots of incidences of discrimination in the Consortium transportation industry. However, he stated that much of the discrimination is based on nepotism and discrimination regarding language. He was told 10 years ago by the owner of a project that the owner could not hire CONTA #2's members because workers in the owner's crew only spoke Spanish, CONTA #2's members would not fit in because they did not speak Spanish, and it was a Spanish-only workforce. According to CONTA #2, the workers were working on a private public works project and the City of San Diego hired them to do some redevelopment.

WT #12, an individual representing a small business performing mail delivery services submitted written testimony in response to a request for public comment regarding the Disparity Study regarding harassment, criticism and disrespect of the firm's staff by Caltrans' employees who exhibited what she calls "unprofessional conduct" causing a "monumental amount of stress" for the firm's staff. Examples cited include: "How did you manage to get this contract"; "I will give you a one month trial"; "You need to quit this now, sooner than later, sooner will be better." She stated after facing so many episodes of harassment she again informed the manager [Caltrans] who told her to give her staff the Caltrans manager's business card and call. She stated there were several Caltrans employees giving instructions to her staff concerning the job with no continuity or consistency. She stated, "[i]n spite of Caltrans' employee[s] limited communication processes and resistance, I will continue to deliver the best service possible to benefit Caltrans' day to day maintenance operations." (Written testimony submitted 9/25/09 and 10/1/09).

WT #13, an individual representing a minority woman-owned, DBE-certified, small engineering business submitted written testimony for the Southern California Regional Disparity Study public forum. She stated that, "[b]ased on my experiences, without goals for Black firms set by public agencies, Black firms will not get contracts from large white firms." She cited an example of one prime contractor offering work to them for $600 - $5,000 on a Caltrans contract estimated at around $8 million dollars just to meet the Good Faith Effort. They had informed the prime they were experienced and could handle much more work under the project but the prime implied the only reason they were contacted was for a small amount of work to fulfill DBE compliance. She asks [Caltrans], "[w]hatever happened to giving small businesses a fair share of Caltrans contracts? Is this type of behavior monitored by Caltrans, and if so, what is Caltrans doing about it? Why is this type of business behavior allowed?" (Written testimony submitted 10/19/09).

WT #14, a Hispanic male owner of an engineering firm that recently lost its DBE status provided written testimony in response to a request for comments about the Disparity Study that his firm has been "denied the opportunity to provide civil engineering/surveying services despite having the qualifications and experience working on similar projects in scope and size" and attributes "its non-selection for contracting opportunities with [LACMTA]/OCTA as based upon prejudice and discrimination." (Written testimony submitted 11/09/09).

WT #15, a male principal of a small Hispanic-owned engineering firm submitted written testimony in response to a request for public comment regarding the Disparity Study that, "there is an apparent discrimination against smaller firms and in particular Hispanics." His firm has responded as a prime to a few LACMTA solicitations and submitted a proposal but has never received a contract from LACMTA. (Written testimony submitted 11/05/09).

Most interviewees reported never having heard of or experienced discrimination in the transportation industry. [Interviewees #CON: 1, 3, 5, 6, 7, 8, 9, 10, 12, 16, 18, 20, 21, 23, 25, 26, 28, 29, 31, 32, 33, 36, 39, 41, 42, 44, 45, 48, 54, 57]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that he was unaware of any acts of discrimination in the Consortium transportation industry. The only "discrimination" that he was aware of are decisions made based upon ability or the fact that someone cannot do the job or the fact that you just do not like someone (for instance the annoying driller) not based on race or gender.

K. Perceived General Barriers to Participation in the Public and Private Sectors

BGPAA Study Anecdotes Regarding Perceived General Barriers to Participation in the Public and Private Sectors

Barriers to pursuing work with the Airport Authority.

Some interviewees identified the Airport Authority's notification of work opportunities or bidding process as barriers to pursuing work with the Airport Authority. [Interviewees #BGP: 4, 5, 10, 12]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that the contract and bid procedures were not unnecessarily restrictive for small businesses, but that "the real restriction is for big businesses. It's not worth it for the big generals to do all the paperwork. For the Airport, the sizes of the contracts are small, and there are so many small business and minority business requirements that they have built into these contracts. If they took that off, and did some sort of performance measure or best use package bid proposal, then the big guys would dominate the work. They have it set up for small generals, but that's why it's so imperative to make sure the subs are getting paid because these are small generals that are sometimes very shaky firms."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that there are barriers related to unnecessarily restrictive contract specifications and bidding procedures. He said, "It's the liabilities and indemnification clauses in those [contracts and bids]." He stated that contracts awarded on the basis of qualifications rather than the low bid can present a barrier for small businesses because "larger firms are typically going to have better qualifications, so it's going to limit your access."

Interviewee #BGP10, a principal at an engineering firm, reported that the biggest barrier to working with the Airport Authority is that the Authority appears to take the lowest bid. He said that in order to deal with this barrier, firms "try not to give a complete proposal," and if the firm knows that something "needs to be done," but it is left out of the "request for a proposal, then you leave it out" because the person who provides a proposal for "the smaller scope of work" will win the work because of the lower fee. He reported that firms have to manipulate their bid by providing a proposal that responds solely to request for proposals and nothing more so that they have a chance of winning and can add on costs that were not included in the request for proposals.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, reported that the company may have experienced a barrier to working with the Airport Authority due to lack of notification concerning opportunities.

A couple of interviewees identified obtaining financing, bonding or insurance as barriers to pursuing work with the Airport Authority. [Interviewees #BGP: 6, 13]. Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said, "Sometimes the primes want to impose flow down procedures that were imposed on them by the [Airport]

Authority or agencies, and sometimes that is unduly stringent. They're asking us for too much insurance, but I've never had a problem negotiating that to a reasonable level."

Interviewee #BGP13, the owner of a non-certified construction firm, reported that obtaining working capital is a barrier to obtaining work for all businesses.

One interviewee identified certain contract specifications as a barrier to pursuing work with the work with the Airport Authority. [Interviewee #BGP: 3]. Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that safety specifications are becoming problematic. He said, "It's getting bad. … It seems like what they're trying to do with all the safety stuff [is a barrier]. … They're tying our hands so bad [with safety specifications] that, to me, it's making things unsafe."

Some interviewees reported that they have not experienced any barriers to pursing work with the Airport Authority. [Interviewees #BGP: 11, 14, 15, 16]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that he has not experienced any barrier to pursuing work with the Authority, but that the company "would obviously like to have more business with them." He said that it might be good for Burbank to have a project notification system similar to the one used by the Los Angeles Airport to notify prospective bidders of opportunities because his company "would jump all over it."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that the company would like to work with the Authority and does not feel unfairly excluded from doing work. He said that the only barrier for doing work with the Authority is that the Airport Authority has hired its own "very sharp people" who can do much of the work themselves. He reported that negative personal relationships may be a barrier to doing work at the Los Angeles Airport but not at BGPAA.

Barriers to pursuing work with other public sector agencies.

One interviewee identified issues related to race, ethnicity, and gender as a barrier to pursuing work with public sector agencies. [Interviewee #BGP: TA #1]. Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that minority contractors need to be more assertive in trying to obtain work because the system is geared toward preventing them from obtaining work. He said. "[The message from the contracting industries seems to be], 'We [aren't] going to give you [anything], we [aren't] going to let you get [anything] until you act like you want to try and take it. Whatever you do, we're going to try to head you off at the path.' … [The system] is geared to keep [African American] people out, period."

Other interviewees identified other barriers to pursuing work with other public sector agencies. [Interviewees #BGP: 6, 13. 15, 16]. Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said, "A market barrier for any SBE trying to break into the market is the certification process. It's long, it's tedious, it's very difficult and it scares a lot of SBEs off. Or I hear 'I don't want someone to see my finances or my personal net worth.'"

Interviewee #BGP13, the owner of a non-certified construction firm, reported that bonding and access to working capital were the only significant barriers for his firm in the public sector.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that the only obstacle to working in the public sector "is knowledge that there's an opportunity."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that there are sometimes political barriers to doing work in the public sector.

Barriers to pursuing work in the private sector.

One interviewee identified small profit margins as a barrier to pursuing work in the private sector. [Interviewee #BGP: 11]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that the main barrier to working in the private sector is the lack of profit allowed by the airlines. He added that it has "gotten to a point where they want to know what your percentage profit is off of that contract," and that information is a company's private information, "but now they demand that you tell them how much money … you're going to make and … asking … questions that [allow them to] … figure up whether or not that is true. … If you want to do business out there, that's what you [have] to do."

One interviewee reported that he was unaware of any barriers to pursuing work in the private sector. [Interviewee #BGP: 13]. Interviewee #BGP13, the owner of a non-certified construction firm, said that he has not really encountered any barriers in the private sector. He said, "It's become a very competitive market right now for construction. Our margins are very small, … but I wouldn't consider it a barrier I guess."

Network/"good old boy network."

Some interviewees reported knowledge of or experience with a "Good Old Boy Network" or other type of closed network. [Interviewees #BGP: 3, 5, 6, 8, 9, 16, TA #1, TA #2]. Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that there is a "Good Old Boy Network" in the local marketplace and it makes it difficult to obtain certain work. He said, "There's definitely a "Good Old Boy Network" out there. … You can't get around that. There are some jobs — you just can't bid them, you don't go anywhere near them. It's a waste of time."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that there may be there may be some preferential networking for public agency work. He said, "If it's open bid work for the State of California, unless you're a small business or have an in, you're not going to get the project. We don't even bother." He said, "Trying to get your foot in the door is always the issue. Engineering is mostly done based on reputation, and unless you have some type of relationship with those people or a network where they know you from, you're generally not going to get invited."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said, "I hear of [the 'Good Old Boy Network'] on the contractor end. I hear of networks …, but we don't know."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that a small number of firms seem to win a lot of projects in acoustical engineering and that sometimes the outcome of the bid process seems pre-determined in favor of those firms. He said, "Sometimes I have the distinct impression that the bidding process was a formality to comply with a requirement to get three or four bids, but the winning party was pre-selected."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm reported that the "good old boy network" still exists. He said, "Of course that still goes around. Even if you're the lower bid, they'll just cancel it to give their boy a chance to bid lower again." When asked whether this was a problem in both the public and private sectors, Interviewee #9 said, "It's mainly a problem in public sector work…not with the Airport Authority."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that "some governmental agencies … may want to use their 'Good Old Boy Network' rather than the most qualified consultant." He said that he has not "had that [problem] with Burbank." He said, "There's always the possibility that the 'Good Old Boy [Network'] exists where people are working comfortably together and they do the work fine, and that's understandable." He said that within the last year he experienced a situation in which he was asked to submit a response to an RFQ, but the public entity told him that they were going with the other company because they knew the other company could "hit the ground running." He said that he knew that the only reason that he was asked to submit a response was because the public agency was required to obtain responses from more than one company.

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that there is a "Good Old Boy Network" that makes it more difficult for minority contractors and other small businesses to get work. He said, "[Problems] trickle down from the top. Cronyism. Nepotism. Favoritism. … We call it the "Good Old Boy Network". … It's strong as ever." He said, "There are people getting contracts that they don't have to bid on. There are people who get contracts from the federal government that are sole sourced to them up to $5 million. And once they get in there, they stay there. … Cronyism. Nepotism. Favoritism. 'Good Old Boy Network.'"

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that the "Good Old Boy Network" is a barrier to obtaining work in the marketplace. He said, "It's just in the culture … the coming year and when you have large firms that were never had such standard, minority businesses, they never had to a reason to outreach … it's like everything, you know that's what they're accustomed to, that's what they're comfortable with." He said that his members have experienced the "Good Old Boy Network" on Airport Authority projects.

Other interviewees reported no knowledge of or experience with the "Good Old Boy Network" or other closed networks being a barrier to pursuing business opportunities. [Interviewees #BGP: 2, 10, 11, 12, 13, 14, 15]. Interviewee #BGP10, a principal at an engineering firm, said that the firm has not experienced the "Good Old Boy Network" being a barrier to obtaining work. He said that he has heard other people complain that it is a barrier. He said that he and his partner "have been around … forever" and have established relationships, so "we're probably a

part of the 'Good Old Boy Network.'" He said that the firm typically does not care who it hires and has hired from every group.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, reported that the "Good Old Boy Network" is "not at all" a barrier to obtaining work. He said, "The Good Old Boy types of things were in effect [in] … the 60s and 70s, … and … going through that era we did have that process going on, but not now. … That situation is long gone from the … public sector, but from [the] private sector too, everybody looks at money and how much money is involved in everything."

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, stated, "There is a 'Good Old Boy Network,' but it's not a barrier. And we're actually seeing less and less of it with this influx of smaller subcontractors, so I would have to say that it's not significant."

Interviewee #BGP13, the owner of a non-certified construction firm, reported that the "Good Old Boy Network" is not a barrier to obtaining work with the Authority. He said, "There [are] no loyalties there whatsoever. I think that they know you as a contractor and your performance, but not the 'Good Old Boy [Network]' thing, absolutely not."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that the "Good Old Boy Network" is not a barrier to obtaining work "now that they have [a] prequalified on-call list where … there are certain game rules." She said that the on-call list was created "about 10 years ago," and "[i]t has opened it up for everyone to participate in a more equal environment. Prior to that, we had the experience where they had an onsite project manager that was a prime, and that prime was responsible for managing all of the subs, and … at that point, yes, that was … the 'Good Old Boy Network.' I saw that really in play in those days." She added that, previously, the "Good Old Boy Network" would use the same subcontractors, "or they would create LLPs or something just to eliminate a strategic partner down the road … on another job." She also said that "there are MBE/DBE … [and] WBE firms that are prime" today and never would have been prime before.

Bid shopping.

Several interviewees reported knowledge of or experience with bid shopping. [Interviewees #BGP: 3, 8, 10, 12, 14, TA #2]. Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that he suspects bid shopping occurs, but that it is difficult to prove.

Interviewee #BGP10, a principal at an engineering firm, said that he has experienced primes who engage in bid shopping, "but it's pretty rare," and once he finds out that a prime is doing that, he will not work for that prime anymore.

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, stated that bid "shopping does happen, but it's very low key" and does not present a barrier to obtaining work.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that he experiences bid shopping "all the time, and as a matter of fact, they'll tell you, … 'Hey, we took your bid to somebody else. They [offered to do it] … for $1,000 less than you. Can you do that?'" He said that this occurs in both the public and private sectors but more consistently in the private sector. He said that "you'll see more of that" with smaller projects. He said that he is "pretty sure" that the Authority has checked his prices with other firms, adding, "I don't know if it's bid shopping. I think it's price checking - making sure they're getting a good price." He said that this has occurred "within the last three years."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that bid shopping occurs "all of the time."

Other interviewees reported no knowledge of or experience with bid shopping. [Interviewees #BGP: 1, 2, 5, 6, 9, 11, 13, 15, 16].

Bid manipulation/different bid criteria.

Several interviewees reported having heard of or experienced bid manipulation. [Interviewees #BGP: 3, 8, 14, 15, 16]. Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that he suspects bid manipulation occurs, but that it is difficult to prove.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that he has heard of bid manipulations. He said that in his industry, companies "can't be certified by all of the different manufacturers. You have to pick the few that you work with the best and you like the equipment the best, but … sometimes … the wording in the bid … [requires the use of] a certain manufacturer [for which] … a certain dealership in the area is the certified dealer." He said, "There are times when … an architect or a design company will position a bid by utilizing manufacturers" that only have particular companies as certified dealers. He said that he has not notified the Authority of this issue.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she has heard about bid manipulation, but she has never experienced it.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, reported that he has "heard of" bid manipulation, and he vaguely remembers "maybe five [or eight] years ago" that "there may have been an allegation of some contractors or a contractor" engaging in bid manipulation. He added that he remembered "that the Burbank Airport thoroughly investigated it, and they fight very hard to make sure that doesn't occur." He said that the Authority has "done a very good job in policing it [and] making sure it doesn't happen."

Other interviewees reported having never heard of or experienced bid manipulation. [Interviewees #BGP: 1, 2, 5, 6, 9, 11, 12, 13, TA #2]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he does not "know of any specific time in which a bid has been manipulated," but said that if it occurs, it likely occurs at a higher level.

Experience/expertise.

Several interviewees reported that obtaining experience or expertise is a barrier to pursuing business opportunities. [Interviewees #BGP: 8, 14, 16, TA #1]. Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that obtaining experience and expertise is a barrier in his industry. He said that the company "may go to [a] manufacturer's rep and say, 'We would like to become certified with that manufacturer.' And depending upon the representative and the manufacturer, they may not want another dealer in the area, and sometimes that's good, and sometimes that's bad. If you're the dealer that has the certification, that's good because you don't want a bunch of people in your area to do what you do. If you're somebody who wants [a particular] project, it's not good. So, that's the limitations in our industry, so it's really based on relationships."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, stated that he is aware of obtaining experience and expertise being a barrier. He said that this has been a barrier for his firm and said that when he "tried to get work with Caltrans, … they basically said, 'You don't have enough experience in this work locally.' So it's like Catch 22. You can't get the work if you don't have the experience, and you can't get the experience if you can't get the work."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said, "A lot of people are saying, 'Are [minority-owned contractors] really out there? Can they really do the work?' The biggest thing is, [minority-owned contractors] are out there not getting a chance. We've done all the leg work that we know to do. … We only need a fair opportunity."

Other interviewees reported that obtaining experience or expertise is not a barrier to pursuing business opportunities. [Interviewees #BGP: 9, 10, 11, 12, 13, 15, TA #2]. Interviewee #BGP10, a principal at an engineering firm, said that he has not experienced obtaining experience or expertise as a barrier. He said that the firm is good at what it does, and if it does not have a particular expertise, the firm usually contacts "a university professor" who focuses "on that particular area of expertise."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that obtaining necessary expertise or experience is not a barrier because she belongs "to a really good network of professional alliances."

Access to labor/personnel

Some interviewees reported that obtaining qualified labor or personnel is a barrier to pursuing business opportunities. [Interviewees #BGP: 3, 5, 6, 8, 14]. Interviewee #BGP3, the co-owner of a white woman-owned construction firm, said that there are barriers associated with finding qualified personnel and labor, particularly for union employers. He said, "It depends on whether you're union or non-union. In my position [as a union employer], I have to take who they send to me, good or bad. If he's good, he may stay around for a while. If he's bad, he goes back to the hall right away, and then you call for more. It takes a while to weed through and find a qualified [worker]."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that attracting personnel and labor is "problematic, especially in our industry. Nobody teaches power electrical engineering anymore. Everyone's going to the high tech stuff, and power is considered passé. We're not finding U.S. citizens that are trained in this field."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that access to labor and personnel was a barrier "when the industry was booming and I needed more help. Then I'm competing against the big guys. It's more difficult because I don't have an internal recruitment agency."

Interviewee #BGP8, the technical director of a white woman-owned non-certified engineering firm, said that it can be difficult for small businesses to train personnel and get them up to speed. He said, "The barrier in our line of work is finding qualified people. Being a small business, we can't afford to take people who don't' understand our terminology and train them. We'd be interested in those that can hit the ground running."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that access to labor can be a barrier because "there are not a lot of people out there … [with the] ability to do what we do. They could learn it, but there's training" required, so the company usually tries to work with "what's out there."

Other interviewees reported that obtaining qualified labor or personnel is not a barrier to pursuing business opportunities. [Interviewees #BGP: 1, 9, 10, 11, 12, 13, 16, TA #2]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that there are no barriers associated with finding qualified personnel and labor in the architecture industry, but that it is difficult to retain qualified staff because "after six or so months, they often receive offers from other architecture firms for another dollar."

Interviewee #BGP10, a principal at an engineering firm, said that he has not experienced access to qualified labor and personnel as a barrier. He said that when the "economy was good, it was hard to hire engineers," but now that the economy is weaker, it is "much easier to hire people."

Interviewee #BGP13, the owner of a non-certified construction firm, stated that access to qualified labor and personnel has not been a barrier recently, but "when unemployment is low, experience is hard to find because the good guys are working. Right now, it's an employer's market. I think you can pretty much … get your values worth right now."

Learning about work and marketing opportunities.

Some interviewees reported that learning about work and marketing opportunities is a barrier to pursuing business opportunities. [Interviewees #BGP: 10, 12, 15, TA #2]. Interviewee #BGP10, a principal at an engineering firm, said that learning about work and marketing opportunities has always been a "struggle."

Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that learning about work and marketing is not a barrier generally,

but learning about work opportunities is probably the biggest barrier to working with the Authority.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that learning about work or marketing has been a barrier to obtaining work because she has to depend on the prime to invite her "in on the on-call opportunity" and to find out about opportunities through the on-call list.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that learning about work and marketing opportunities has been a barrier on Authority projects.

Other interviewees reported that learning about work and marketing opportunities is not a barrier to pursuing business opportunities. [Interviewees #BGP: 1, 2, 3, 5, 7, 8, 9, 11, 13, 16]. Interviewee #BGP13, the owner of a non-certified construction firm, reported that learning about work or marketing opportunities has not been a barrier to obtaining work. He said that the company has "plenty of avenues and access to the market for construction. … I get e-mails from the State of California. I get e-mails from two or three different bid marketing firms that sent stuff over. So, we always have a pretty good idea" of what opportunities are available. He said that the notification programs were for the private and public sector.

Interviewee #7, the owner of a white male-owned SBE-certified landscaping business, said that approximately 70 percent of his firm's work comes from the public sector. He said that his firm finds out about bid opportunities for public agency work through the newspaper and various agency outreach efforts.

Unfair contract denial.

Some interviewees reported having experienced or being aware of an unfair contract denial. [Interviewees #BGP: 2, 10, 14, 15, 16, TA #2]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that "we have had some weird experiences with public bids. They always give explanations that seem within their rights, but they seem funny. We had an issue with [another public agency] six years ago where they didn't want a small … company. We were the lowest bidder, and that was the qualification for the contract, but it went out for re-bid. They said that something in the bid process went wrong, so we re-bid, but someone else in the bid process was the low bidder."

Interviewee #BGP10, a principal at an engineering firm, reported that the firm has experienced an unfair contract denial. He said that last year, when his firm's proposal was not selected, he later read in the newspaper that members of the selected team were related to a city council person. He said that this was not an Authority project.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that the company is aware of unfair contract denials, like when a public entity released a company from a project based on "a financial crisis," but "it's easy for them to say financially the city doesn't have money, so … we're not going to maintain your contract anymore," but then, we found out that "sometimes they'll do that, they'll swap [the work] into a new project, and all

of a sudden there's another company taking care of that contract. … Sometimes that's due … to the fact that they want to get a better price and this was the only way for them to renegotiate. … Sometimes they'll just want to bring another firm in because they're going to get better pricing, and it's a way for them to get out of a contract."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she has experienced an unfair contract denial on "a 15-year contract [with the City of Los Angeles] to the tune of $100 million, and the recommendation from the agency who's contracting it went to the prime who was high bid and [had] the lowest MBE/WBE participation. And their offices are out of Arizona." She added that the contract still "has to go to City Council …, [which] has to decide whether they're going to" accept the recommendation.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that he has experienced an unfair contract denial. He said that he thought that "there was a contract where [the company was] most qualified, and the firm that was picked, the prime consultant, had someone in their firm that went to school with the client."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he is aware of its members being denied contract awards unfairly.

Other interviewees reported never having experienced an unfair contract denial. [Interviewees #BGP: 1, 3, 5, 6, 8, 9, 11, 12, 13].

Double standards in work performance.

Some interviewees reported experiencing or being aware of double standards in work performance. [Interviewees #BGP: 9, 10, 11, 16]. Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm noted that there are double standards in work performance occur all the time. He said, "You are going to run into that all the time. There's a double standard, because when you win a job, and you're the outsider, they want you to do a little more than when an insider does it." Interviewee #9 noted that they have not experienced the double standard issue with the Authority.

Interviewee #BGP10, a principal at an engineering firm, stated that he had not heard of double standards for work performance in the private sector, but he said that public agencies generally "hold … consultants to a significantly [higher] standard" than they hold their own employees.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he is sure that double standards in work performance occur, but he is not aware of any specific examples. He said that "it did happen" during his experience working at different airlines, but he is not aware of it occurring recently.

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, said that he has experienced double standards of work performance but not with the Airport Authority. He said that on one public project where four consultants were hired, the other three

consultants were not "held to the same standard." He said that he thinks that this may be because of "some DBE political issues."

Other interviewees reported that they have not experienced double standards in work performance. [Interviewees #BGP: 1, 2, 3, 5, 8, 12, 13, 14, 15]. Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, stated that he has not experienced double standards in work performance, but he has had "clean up other people's work" before his company can start its work on a project.

Price discrimination by a supplier.

Some interviewees reported experiencing price discrimination by a supplier. [Interviewees #BGP: 2, 13, 14]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, stated that he believes price discrimination by suppliers occurs, but it is "nothing we can prove." He said that he does not believe price discrimination is related to discrimination based on race, ethnicity or gender.

Interviewee #BGP13, the owner of a non-certified construction firm, said that he has experienced price discrimination by suppliers in the last 20 years, but "not recently."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that he has experienced price discrimination involving relationships among dealers and manufactures.

Other interviewees reported that they have not experienced price discrimination by a supplier. [Interviewees #BGP: 1, 3, 5, 6, 8, 9, 11, 12, 16]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that "there are different price levels based upon how much you buy from [a particular company]," and a company has the opportunity to say that it thinks that a particular price is too high, but he does not think that there is the opportunity to know if something is being priced differently for someone else.

Allegations of fronts.

Several interviewees reported some knowledge of alleged MBE/WBE/DBE fronts or frauds. [Interviewees #BGP: 1, 3, 5, 6, 9, 10, 11, 14, 15, TA #1, TA #2]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said, "I have worked with some [MBE/WBE fronts]. It was women-owned businesses that were fronted by the wife of a husband who has the legitimate business. Most of that went away when the State came up with the new Caltrans agreement."

Interviewee #BGP5, the president of an 8A-certified engineering firm, said that there are issues with MBE/WBE/DBE fronts or frauds. He said, "There are a bunch of firms that are women- and minority-owned by name only, where the owner's wife is the principal owner, but they are really not participants. There are very few minority- or women-owned firms that we've worked for that are truly minority- or women-owned."

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said, "I've heard about some [MBE/WBE or DBE fronts or frauds] in the industry. I'd say

that was more in the 1990's; there were a lot of fronts and frauds, especially on the contracting end. I'd hear, 'I'll just get my wife to own the company' all the time, but I don't really hear it anymore."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm stated that regarding MBE/WBE/DBE fronts and frauds, "that happens a lot. It's sad, but it's a loophole they use, but I haven't heard of this in Airport work."

Interviewee #BGP10, a principal at an engineering firm, reported that he had heard of "a couple" of MBE/WBE or DBE fronts or frauds. He said that he had seen them in the marketplace last year, but he did not come into contact with them while working on an Authority project.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that "there is no question" that MBE/WBE or DBE fronts exist, but he is not aware of any specific examples currently. He stated that he does not "think that these MBE and WBE requirements are that important anymore to anybody."

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, reported that he is not personally aware of MBE/WBE or DBE fronts or frauds, but he has "heard of it" and has heard that "they were able to gain contracts" not because they actually employed any minorities but because they were hiring minority subcontractors. He said that he was not aware of this occurring on BGPAA projects.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she has observed MBE/WBE or DBE fronts or frauds. She said that "every four or five years we have an engineer who puts his wife up, and she absolutely has no knowledge on the day-to-day business dealings or anything, and she's just there so they can get the contracts, which is unfortunate. But yes, it does happen."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that he is aware of MBE/WBE or DBE fronts and frauds. He said, "The thing that gets me about [Caucasian] women being in the same pool as [minority-owned firms] is that all they do is have the [Caucasian] husband take his business and put it in his wife's name."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he is sure there are MBE/WBE or DBE fronts or frauds but he does not have specific examples.

Some interviewees reported that they are not aware of MBE/WBE or DBE fronts or frauds. [Interviewees #BGP: 2, 8, 12, 13, 16].

Allegations of false DBE reporting.

Most interviewees reported no knowledge of false MBE/WBE or DBE reporting. [Interviewees #BGP: 2, 5, 6, 8, 9, 10, 11, 13, 14, 16, TA #2]. Interviewee #BGP10, a principal at an engineering firm, said that he is not aware of false reporting of MBE/WBE or DBE utilization. He stated that many teams are formed before the pre-proposal meeting in which good faith efforts are required, so he wonders if prospective proposers are engaging in any kind of falsification.

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he is not aware of false reporting of MBE/WBE outreach efforts. He said, "I don't know because I talked about that earlier, we don't get to see what they list and that's one reason that I mentioned that because we don't know if there is fraud going on." He said, "If you listed me, I want to see where you listed me … that should be made public."

Failure to use good faith efforts.

Some interviewees reported perceptions of instances where prime contractors did not use genuine good faith efforts to locate qualified and available DBE subcontractors. [Interviewees #BGP: 1, 4, 9, 15]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, said that he has had problems with false reporting of good faith efforts. He said, "People would call and I will tell them that we are DVBE and fill out any appropriate documents. Then we would get a copy of the prime's bid documents that claimed that they did a good faith effort but couldn't find anyone. But this problem has gone away, because the State has now says that there's no such thing as a good faith effort."

Interviewee #BGP4, a project manager of a WBE-certified construction firm, said, "There are some contractors that don't really care about the way the program is set up. They look at the minimum guidelines and say, 'Okay, all I have to do is put together this good faith effort.' They have a cookie cutter good faith effort ready to go, and if the Airport actually took the time to look back at some bid scopes, they'd see that it's the exact same thing every time. These good faith efforts are a joke. They're not really doing a good reach out."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm said, "No one really tries. They just sign that paper." Interviewee #9 added that, "People don't really falsify maliciously."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she has heard of prime contractors falsifying good faith efforts to utilize MBE/WBE or DBEs "within the last five years." She said that she has had the "most experience with" the City of Los Angeles, and Los Angeles has gone "after the good faith effort" requirement. She said that the City is "supposed to be validating how many companies" a prime is reaching out to, but the City does not "have the personnel to fully" fulfill that mandate.

Other interviewees reported that they had never heard of or experienced a prime contractor falsifying its good faith efforts. [Interviewees #BGP: 11, 12, 13, 16].

SDCRAA Anecdotes Regarding Perceived General Barriers to Participation in the Public and Private Sectors

The following anecdotes regarding perceived general barriers to participation in the public and private sectors were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

Administrative expense/bureaucracy.

Many interviewees reported that it is more expensive to work with the San Diego Airport due to various administrative expenses, and several interviewees specifically cited insurance costs. Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, said that operating expenses tend to be considerably higher for businesses in an airport compared to other venues.

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the San Diego Airport, said that insurance costs can be two to three times higher in an airport than in other venues like malls. She said that the Airport also requires concessionaires to carry a $20,000 bond in case they have trouble paying their rent.

Interviewee #SD7, representing a white male-owned firm, reported that bonding and insurance are significant issues for firms working with the Airport. He indicated that most public agencies (including the Airport) require a large bond to bid projects and a payment bond to hire subcontractors. Regarding insurance for Airport projects, Interviewee #SD7 said, "At the airport you need $3 to $10 million general liability. If you work outside you need $10 million general liability and $2 million auto insurance. He went on to say that small firms have trouble qualifying for insurance policies of that size.

Interviewee #SD2, representing a white female-owned firm, also indicated that the Airport's insurance requirements are burdensome. She said that the Airport requires firms to carry $10 million policies, a value that far exceeds her financial capability.

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, said that his firm is required to carry a great deal of insurance: "Our insurance is very expensive – it costs about $50,000 per year." He went on to say that his firm's preexisting relationship with insurance brokers helps t to bring their costs down.

Interviewee #SD4, representing a white male-owned firm, reported that bids that he receives from some subcontractors (including minority and female-owned ones) include a premium for working on Airport projects. That is, those subcontractors give higher estimates for Airport projects than for projects that are not with the Airport.

Interviewee #SD26, representing a white male-owned firm, reported that the Airport requires firms to hold $5 million of liability insurance requirement, which Interviewee #SD26 regards as excessive for his line of work: "How much damage can a sandblaster do?"

Some interviewees indicated that insurance costs are not a barrier to working with the San Diego Airport. Interviewee #SD3, representing a white male-owned firm, reported that the Owner Controlled Insurance Program (OCIP) covers workers' compensation and general liability for his firm. He added that the Airport also provides a third party broker to help with the insurance requirements for prime contractors and subcontractors.

Interviewee #SD8, representing a minority male-owned firm that is a concessionaire at the Airport, said: "If you work for a week, you should be able make enough money for the insurance. He also added that he did not need help financing his concession. Interviewee #SD9, representing a minority female-owned firm and a concessionaire at the Airport, indicated that insurance has not been a problem for her while working there. She reported that she carries her own general liability and health insurance policies.

A number of interviewees cited the San Diego Airport's bureaucracy and restrictive policies as a barrier to working there. Interviewee #SD4, representing a white male-owned firm, reported that he had a difficult time meeting DBE goals in the past, because minority- and female-owned firms considered the Airport "tough to work for." Interviewee #SD4 cited an example of a subcontractor who had to redo a powder coat because the color was "speckled white" instead of "plain white." The Interviewee added that the inspector examined the work "with a flashlight and magnifying glass."

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, said of the bureaucracy, "The bureaucracy is a problem. For this industry it is important to have a system that is sensitive to the market needs. We have to ask to get hot new items on the shelf, but the bureaucracy is too slow." He went on to indicate that no one at the Airport wants to make a decision, because they are worried about keeping their jobs: "No one wants to be held accountable…This drives me crazy!"

Interviewee #SD20, representing an Asian American male-owned firm, explained that some aspects of Airport work are more difficult compared to other entities, because the Airport is under high scrutiny due to the fact that they are spending public money. As a result, they have to make sure that contractors are doing good work. However, Interviewee #SD20 seemed understanding about the extra paperwork, the increased oversight, and the stringent standards associated Airport work.

Interviewee #SD19, representing a white male-owned firm, reported that her firm does not usually bid on work with the Airport, because of the difficulties associated with working with the Airport that they have heard about from other firms. Some of the difficulties that Interviewee #SD19 cited were: additional insurance requirements, extensive amounts of paperwork, difficult invoicing procedures, and a fear of being sued by the Airport.

Interviewee #SD26, representing a white male-owned firm, reported that his firm prefers to work as a subcontractor rather than as a prime contractor on Airport projects, because of the extensive paperwork and stress involved with working as the latter.

Interviewee #SD42, representing a white male-owned firm, reported that his firm had a $1 million contract with the Airport as part of the Quieter Home Program that was suspended due

to a disagreement between his firm and the agency: "In a nutshell, we made a minor adjustment to the delivery of a specific door that was supposed to be used for our phase of the project." Interviewee #SD42 explained that his firm did not install the doors that they agreed to install in its contract with the Airport because of a clerical error on the part of its supplier that vastly underestimated the materials costs. That clerical error led Interviewee #SD42 to install a modified version of the doors that were more cost effective. The supplier called the Airport and told the agency about the materials change. Interviewee #SD42 said that the Airport was upset with the materials change and led to the indefinite suspension of his contract: "The Airport claims we had no right to order the doors without the glass and put the glass in ourselves. They state that they have very stringent warranty requirements and the materials that [Interviewee #SD42's firm] used did not meet their requirements." He continued, "When working with the Airport, it is a one way street."

Interviewee #SD42 stated that his experience with the Airport has done a great deal of damage to his firm. He explained that the contract suspension has eliminated the possibility of his firm ever obtaining bonding again: "The failure of this contract has eliminated any future opportunity for bonding. I am completely wiped out and will not be able to get bonded probably ever again. Even if I created a new entity, there is just no possibility of getting bonded again — you don't clean up from this. Bonding companies are more conservative and more credit-sensitive than even a bank because they will be responsible for completing the work." He went on to say that his company may have to file for bankruptcy as a result of the contract: "We are hanging on, [BUT] we are very close to filing for bankruptcy and probably will … This has been a very negative process that has brought our company to its knees."

SDTA #1, representing a local chamber of commerce, explained that long approval procedures and delays associated with working at the Airport are a source of frustration for his organization's members. He said, "It would really be a positive if some of these [public sector] projects would move along."

SDTA #9, representing a public works trade organization, reported that the special requirements associated with working at the Airport are burdensome for small firms: "The special requirements from the Airport pose as a barrier and are burdensome to [our organization's] small business clients. For example, the security, bonding, and extra licensing are hard to get for small businesses."

Airport security restrictions.

Several Interviewees said that the San Diego Airport's security restrictions make it more difficult and more expensive to work there. Interviewee #SD21, representing a white male-owned firm, indicated that security requirements are a significant issue when working with public agencies and particularly when working with the Airport. Regarding the security policies at the Airport, he said, "It's costly, it's time consuming, [but] it's … necessary."

Interviewee #SD13, representing a white male-owned firm and master concessionaire at the Airport, said that all of their subtenants and their employees must pass rigorous security measures (e.g., finger printing and background checks) that not only make it more difficult to find employees but also drive up operating costs.

Interviewee #SD7, representing a white male-owned firm, reported a number of responsibilities associated with the security restrictions at the Airport. For example, he explained that in order for a firm's workers to receive security badges, they have to attend several days of classes and learn about the myriad restrictions that apply to them. He went on to indicate that the security process is also quite costly, and after he learned of the costs he substantially increased the amount of his bids on Airport work.

Interviewee #SD2, representing a white female-owned firm, reported that the Airport's security review of firms' employees is a significant issue. She explained that after a firm wins a contract, they need to spend time and money on getting security badges for their employees. Regarding that process, Interviewee #SD2 commented: "You can't have an employee with any blemish."

Interviewee #SD23, representing a white male-owned firm that is a concessionaire at the Airport, explained that the specialized security requirements at the Airport drive up the costs of insurance for firms doing work there.

Interviewee #SD28, representing a white female-owned firm, reported that the post 9/11 security restrictions at the Airport are burdensome in terms of both time and cost.

Interviewee #SD47, representing an African American female-owned firm, reported that her firm had a negative experience working with the Airport because of the agency's post-9/11 security restrictions. She said that her firm could not complete the project on time, because the security requirements were too stifling. For example, her employees had to keep their tools within a specified distance from themselves and they could only access the worksite at particular time during the day.

A number of Interviewees reported that the San Diego Airport's security restrictions also limit when contractors can work each day. Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, reported that when repairs need to be made on her concessions, security guidelines dictate that all improvements be made at night and that the contractors must pass all security and badging guidelines. Interviewee #SD1 indicated that those restrictions slow down work and make it more expensive to do business with the Airport.

Interviewee #SD4, representing a white male-owned firm, reported that the work hours at the Airport are very restrictive. He explained that contractors have to cordon off work areas and complete their work there before moving on to another area, and, as a result, the work becomes more difficult.

Interviewee #SD2, representing a white female-owned firm, indicated that a challenge associated with working at the Airport is the short amount of time each day that her firm is permitted to be working on the runway. All of their work has to be done at night and has to be completed and dry before the runway opens the next morning.

Experience and expertise.

Several interviewees indicated that a firm needs to be experienced with the San Diego Airport's organization and policies in order to be successful working there. Interviewee #SD21, representing a white male-owned firm, reported that although his firm does not find it to be particularly difficult to work with the Airport, his firm has a lot of experience working with them and that a less experienced contractor might find the process to be "much more difficult." Similarly, Interviewee #SD4, representing a white male-owned firm, said that the Airport is a difficult place to work for contractors who are unfamiliar with working there.

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, stated that both experience and firm size are barriers to doing business with the Airport. She explained that if a firm is too small or does not have enough experience, the Airport will not be interested in awarding them a concession.

Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, reported that her firm carefully evaluates potential subtenants and their business ideas to ensure that their concession will be viable. Interviewee #SD13 explained, "We don't want them to fail." As part of that evaluation process, the master concessionaire strongly considers a potential subtenant's previous experience.

Airport "uses the same large firms."

A few interviewees commented that the San Diego Airport tends to select the same large firms for many of their projects at the expense of small, less-established firms. SDTA #1, representing a local chamber of commerce, reported that a common criticism of the Airport is that they are biased toward awarding contracts to large, well-established, out-of-state firms rather than to small, local firms. SDTA #1 indicated that that trend seems to be true across different industries but seems to be especially true for construction and professional services.

Interviewee #SD30, representing an African American male-owned firm, said that the Airport should focus on awarding work to local firms: "I was really disturbed to hear that … the Airport's work is going to out-of-towners. like from New York and Kentucky — it's taking the money out of town and that's not good. I think they should definitely make an effort to [keep the money] in state."

SDTA #2, representing a Hispanic American trade organization, reported that the organization's members say that it is difficult to do work with the Airport: "[The Airport is] very private in doing business. They don't do a good job of outreaching for diversity. They are doing better though – [The Port Authority] used to be very insulated." SDTA #2 went on to say that none of the organization's current members are doing work with the Airport, and he believes that is due to the Airport having long standing relationships with other construction firms.

Another trade organization reported that the San Diego Airport tends to emphasize small business participation. SDTA #6, representing an Asian American trade organization, stated that the Airport wants to do business with small firms in particular, including minority- and female-owned ones.

Airport has limited space.

Two concessionaires indicated that there is limited space to work in the San Diego Airport. Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, reported that there is limited space in the Airport, thus limiting opportunities for potential concessionaires. Consistent with that statement, Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, said that she needs more storage space for her concessions but that it has not been granted to her due to the space limitations at the Airport. She went on to say that concessionaires who "play the game better [than her]" have received additional space.

Non-specific comments.

Some interviewees offered non-specific comments about barriers to being successful at the San Diego Airport. Interviewee #SD11, representing a white male-owned firm, indicated that working for public agencies (including the Airport) comes with a great deal of scrutiny that is difficult to manage: "Government work bothers me, because it appears the government thinks that we do something that we aren't supposed to be doing. They assume that we are the bad guy from the beginning, and then we have to come up with mountains of paperwork to prove we are doing the right thing."

Interviewee #SD13, a white male-owned firm that is the master concessionaire at the Airport, indicated that operating a small business in an airport is much more difficult than running a small business in other venues (e.g., malls, strip malls, etc.). She said, "This is a challenging environment."

In contrast, Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, stated that although there are no guarantees in business and there are always challenges, new concessions in airports have a 5 percent failure rate – much lower than the 18 percent failure rate for other new businesses.

"Good old boy network"

Several interviewees reported that a substantial barrier to obtaining work in the public and private sectors is the preexisting relationships between agencies and particular prime contractors or between prime contractors and particular subcontractors. Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, indicated that his firm is excluded from the "Good Old Boy Network". And that the "Good Old Boy Network" breeds discrimination: "Discrimination happens in construction much more because of the "Good Old Boy Network." Discriminatory attitudes manifest themselves when contractors say 'I can't find anyone to do the work.'"

Interviewee #SD20, representing an Asian American male-owned firm, reported that the "Good Old Boy Network" still affects his business, primarily in the private sector: "In the private sector, [issues related to a 'Good Old Boy Network' are] still happening!" He went on to say that those problems do not exist to the same degree in the public sector because the work is more varied, which generates opportunities for different firms.

Interviewee #SD16, representing an African American male-owned firm, indicated that the "Good Old Boy Network" causes problems for his firm: "The "Good Old Boy Network" still exists and it is wrong."

Interviewee #SD34, representing a white male-owned firm, indicated that many potential clients have existing relationships with competing firms in his industry and that it is difficult to convince them to make a change, even when his firm can offer better prices.

SDTA #1, representing a local chamber of commerce, indicated that networks of large contractors certainly present a challenge to all small firms in San Diego, including those that are minority- and female-owned.

SDTA #2, representing a Hispanic American trade organization, reported that public agencies favor certain contractors over others: "[Public agencies] have their favorites in contracting." He went on to say that the "Good Old Boy Network" in San Diego motivated the founding of his organization: "I have been questioned by other majority-serving chambers as to why we don't join [them]. My answer to them is simply. 'We created our own business network because we couldn't play in yours.'"

SDTA #5, representing a government advisory commission on minority issues, indicated that the "Good Old Boy Network" has been detrimental to small firms in San Diego, including minority- and female-owned ones: "I have seen how the "Good Old Boy Network" is an issue in doing business in San Diego and how the community can kill off small businesses through various means."

When asked if her firm has ever experienced exclusion from the "Good Old Boy Network", Interviewee #SD43, representing a Hispanic male-owned firm, stated, "Definitely." She explained, "When we send bids … we'll see the same names coming up over and over again [as the winning prime and subcontractors]." She went on to say that her firm as attempted to get more subcontracting work but has not been successful because large prime contractors tend to only use firms with whom they have worked in the past: "I think most of the big construction companies have their established subs that they go to …. They usually go with the [subcontractors] they already know."

A number of interviewees reported that networking is particularly difficult for small firms. Interviewee #SD20, representing an Asian American male-owned firm, said that the biggest problem for small firms is their inability to network with local agencies and prime contractors. He stressed that the more local connections a small firm has, the better off it will be.

Interviewee #SD14, representing a Hispanic American male-owned firm, asserted that in order to establish their names, less established firms have to work with a number of large, better established firms, which can be difficult. He remarked, "That's why I didn't change the name of [my] company [after buying it from his uncle], because it was established when I took it over."

SDTA #6, representing an Asian American trade organization, said that many of the organization's members do not know how to market their businesses effectively. She reported

that some of the organization's members quit after one or two marketing events, because they do not understand that the crux of marketing is developing relationships.

Interviewee #SD5, representing an African American male-owned firm, said that marketing is particularly difficult for small firms, because trade associations that are supposed to help them market do not do a good job of it. He indicated that those organizations do not address the marketing needs of small firms: "They are not catering to the small businesses that need help."

Interviewee #SD17, representing a white female-owned firm, indicated that advertising effectively is difficult for her firm: "Knowing when and where to advertise is difficult. It has been a hit-and-miss experiment for us."

Interviewee #SD30, representing an African American male-owned firm, explained that networking is crucial to being successful in the contracting industry. He said that finding out about work is relatively easy, but "the obstacle is getting [the work]," and that is when having a well-established network of clients and contractors helps. Regarding the importance of having relationships with other contractors, he said, "A lot of general contractors go with [subcontractors] who they're familiar with, who they know, who they've done business with before. They do … good faith efforts, but they still fall right back into lock step and go with [subcontractors] they know …" Interviewee #SD30 indicated that there are a few prime contractors with whom he has been able to build relationships.

Interviewee #SD43, representing a Hispanic male-owned firm, indicated that marketing and learning about work can be expensive and is a barrier to success for new firms: "It's just difficult getting your name out there. It seems like every time you want to put your name out there, it costs some kind of money to do it."

Some interviewees reported having issues with the San Diego chapter of the AGC. Interviewee #SD2, representing a white female-owned firm, reported being threatened at a trade meeting because she previously criticized the AGC. She said that a man who was also attending the meeting took her aside and said, "What are you saying about the AGC? You better be careful!" Interviewee #SD2 said that she did not report the incident, because she was afraid that if she did, members of the AGC would not do business with her.

Related to those comments, Interviewee #SD3, representing a white male-owned firm, reported that he had previously been a member of the AGC, but left the organization because he was uncomfortable with how it conducted business. Interviewee #SD# said that he was later blackballed by the AGC. He said that a supplier recently called him and told him that they would not sell him materials, and Interviewee #SD3 attributed that refusal to his icy relationship with the AGC.

Interviewee #SD47, representing an African American female-owned firm, stated that colleagues have advised her to "stay away from the AGC — they don't mean you any good … When you pursue your insurance or bonding, look at the AGC directory and make sure [the insurance broker or surety company] is not affiliated [with the AGC]. Interviewee #SD47 indicated that she has followed that advice since the inception her firm.

SDTA #11, representing a veteran's trade organization, indicated that a network of large contracting companies in the San Diego area makes it difficult for smaller firms to compete. He said that the AGC in particular perpetuates the problems of a "Good Old Boy Network": "[The AGC] are the big boys, and they don't want anyone [else] in the dance."

A few interviewees reported that problems with the "Good Old Boy Network" have been addressed, either by agencies or by the current market. Interviewee #SD14, representing a Hispanic American male-owned firm, said there used to be a "Good Old Boy Network" that made it difficult for small firms and MBE/WBE firms to compete for contracts, particularly in the private sector. However, because of the slow economy, agencies and prime contractors no longer rely exclusively on those contractors and instead try to find the lowest bid, some of which happen to come from minority- and female-owned firms.

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, reported that long-standing contracts in the public sector change hands quite often due to concerns about the "Good Old Boy Network", "[Some municipalities] don't want one company to be there for 30 years … because they're going to probably catch a lot of flak for that." Interviewee #SD15 explained that public agencies — like the San Diego International Airport — are required to open a contract up for bidding every five years.

Interviewee #SD33, representing a Hispanic American male-owned firm, stated, "There's going to be a 'Good Old Boy Network'" anywhere. He indicated that his firm has experienced exclusion from the "Good Old Boy Network", but "not so much in municipal work." He said that his firm has encountered that exclusion primarily in the private sector.

SDTA #10, representing a supplier trade organization, stated that some of the organization's members have experienced exclusion from the "Good Old Boy Network," but that his organization works to help mitigate its impacts.

Some MBE/WBE firms reported being part of the "Good Old Boy Network." Interviewee #SD28, representing a white female-owned firm, said that the "Good Old Boy Network" exists, and a number of small firms in San Diego are excluded from it. However, she reported that because of her existing relationships in the industry, her firm is included in the network. She added, "We've broken a lot of barriers, because [firms in the "Good Old Boy Network"] found that we could do the work."

Interviewee #SD32, representing an African American male-owned firm, stated that not only is there a "Good Old Boy Network" in San Diego but that his firm is part of the network: "We're one of the good old boys." He said that his firm is part of the network because it has marketed itself effectively and built a reputation for performing well.

Interviewee #SD18, representing a white female-owned firm, indicated that the "Good Old Boy Network" exists in San Diego, but that her firm is well accepted within the network, because it began as a white male-owned business and continues to be thought of as such.

A few interviewees said that they were unaware of the existence of a "Good Old Boy Network." SDTA #7, representing a construction trade organization, indicated that there is no "Good Old Boy Network" in San Diego. He said, "You got to work your way in — there is some of that. But a lot of it is design, bid, build …. There is no 'Casper is a demo contractor and he's 10 percent high, but we really like him because we had a drink with him the other night so I think we'll let him do [the work].'"

Similarly, Interviewee #SD22, representing a white male-owned firm, indicated that he had no direct knowledge of the existence of a "Good Old Boy Network" in the San Diego area but he wondered aloud how a competing firm recently won a contract with the Airport without Interviewee #SD22's firm even hearing about the opportunity. He said, "I wonder why the Airport didn't ask us directly — we've been in the business for so many years."

Interviewee #SD21, representing a white male-owned firm, reported that he had no knowledge of the existence of a "Good Old Boy Network" in the San Diego area.

Interviewee #SD19, representing a white male-owned firm, indicated that there used to be a "Good Old Boy Network" in San Diego that made it difficult for small firms to compete for projects, but that those problems have dissipated: "When I first started in this industry there was a lot of "Good Old Boy Networks" going on, but even now this is still not a woman's firm but I feel like most firms have at least one woman and are getting more transparent [in their subcontracting procedures]."

DBE prime contractors prefer to use DBE subcontractors.

Several interviewees explained that MBE/WBE prime contractors are more likely to use other MBE/WBE firms as subcontractors. Interviewee #SD20, representing an Asian American male-owned firm, said that his firm actively tries to use other minority- and female-owned firms when selecting subcontractors: "We strive to give opportunities to MBE and WBE firms, because we were like them before." He made clear though that DBE status is never the sole consideration.

Similarly, Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, expressed her firm's interest in providing opportunities to other MBE/WBE firms so that they can enjoy the same benefits as her firm.

Interviewee #SD5, representing an African American male-owned firm, indicated that he tends to use the same subcontractors across projects: "I know people. I have been in the construction industry since the 1980s." He went on to report that the majority of his subcontractors are African American- and Hispanic American-owned firms. Similarly, Interviewee #SD16, representing an African American male-owned firm, reported that most of the subcontractors that his firm uses are Hispanic American-owned firms.

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, said that his firm's previous owner was an African American male, and he almost exclusively used minority- or female-owned vendors. Interviewee #SD15 said, "I know that [the previous owner] … sought after DBE companies [as vendors]." As a result, the number of MBE/WBE vendors with which the firm still deals is "more than average."

Natural and unavoidable.

Some interviewees indicated that agencies or prime contractors using firms with whom they have preexisting relationships is natural and unavoidable. SDTA #1, representing a local chamber of commerce, reported that it is natural that local public agencies are more comfortable using large, well-established contractors.

Interviewee #SD30, representing an African American male-owned firm, said that a "Good Old Boy Network" exists in San Diego, but he indicated that it is natural and understandable and that it is not "exclusive to one race." He said, "I think you do need to be a part of it [to be successful]."

Similarly, SDTA #9, representing a public works trade organization, said that pre-existing relationships between prime contractors and subcontractors is the most important factor in subcontractors getting work: "Some primes might have sub opportunities and [our organization] will then post the opportunity or work to get the appropriate team together. But putting together a team is mostly about relationships and trust." He went on to say that it is difficult for small firms to develop those relationships because of their size: "Small businesses are at a disadvantage of developing relationships because of their size. They don't have the staff to allocate for business development and relationship development."

Bid shopping and manipulation.

Many interviewees reported that bid shopping or bid manipulation are barriers to be being successful in the public and private sectors. Interviewee #SD5, representing an African American male-owned firm, said that a problem with the bidding system is that there are a number of prime contractors that do not want certain subcontractors to win contracts. He explained that the prime contractor will disclose subcontractor's bids to other subcontractors that they want to use. He said, "[There are times when] I know I have a low bid and can do the job. But what the companies do is shop the bid."

Interviewee #SD2, representing a white female-owned firm, said that she is staunch about giving her lowest bid at the time of bid, but prime contractors still try to shop it. She reported that her firm has lost some good jobs "because [we] won't play the game." She indicated that bid shopping occurs most often when listing laws are not being enforced: "When there are no laws or they are not enforced, that's when you have a problem … . When the primes have one or two days to list, that's when they bid shop."

Interviewee #SD4, representing a white male-owned firm, reported that subcontractors submit their bids quite late, because they are afraid that the prime contractor will shop their bid. Similarly, he said that suppliers submit their quotes late to subcontractors, because they are afraid that the subcontractor will shop their quote. Interviewee #SD4 noted that his firm never shops bids, because they do not want to develop a bad reputation among subcontractors.

Interviewee #SD14, representing a Hispanic American male-owned firm, reported that bid shopping occurs "all the time," particularly in the private sector. He said that he often receives solicitations for bids from prime contractors that have no intention of using him. Instead, they shop his bid around until they can find a contractor that they want to use that will match his

price. He explained, "If you bid a private sector job … they'll call up somebody else and chop your [bid] up."

Interviewee #SD20, representing an Asian American male-owned firm, reported that bid shopping occurs most often in the private sector, because it is much more price driven than the public sector. He said that because the public sector is more focused on the qualifications of contractors, bid shopping is less common. Consistent with those comments, Interviewee #SD6, representing a white male-owned firm, said that prime contractors are not required to list their bids in the private sector and as a result prime contractors shop bids more often.

Interviewee #SD17, representing a white female-owned firm, reported that it is very important for a firm to offer competitive prices in order to be successful: "We have been locked out [of bid processes] because we were not the lowest bid, but we were the lowest hourly rate." She went on to say that, because of the pressure for firms to be low bidder, bid shopping occasionally takes place: "Certain companies are sneaky and they will call pretending to be inquiring about prices for a job. That doesn't happen often, but it does happen." She went to say that as a result of bid shopping, her firm generally does not share bid information with other firms: "We keep our mouth closed. We don't share bid information because we know people like [a specific firm in the area] shop bids."

Interviewee #SD28, representing a white female-owned firm, reported that she knows that prime contractors have faxed her firm's bids to other firms. She explained that one prime contractor mistakenly faxed one of her firm's bids back to her, because he thought he was sending it to another firm. However, she said that she does not think that bid shopping occurs all that often.

Interviewee #SD30, representing an African American male-owned firm, indicated that it is well known in the industry that bid shopping takes place. He said that subcontractors do their best to prevent prime contractors from shopping their bids: "The training I had is that when you submit your estimate or your proposal you want to submit it … shortly before the deadline, even if you [have] it ready a day or two before the deadline."

Interviewee #SD31, representing a white male-owned firm, stated that bid shopping occurs "no matter who you are — the big boys will do it to each other!" However, he went on to explain the likelihood of bid shopping decreases as a firm becomes bigger and builds its reputation.

Interviewee #SD32, representing an African American male-owned firm, reported that his firm often shops bids to find the best deal: "We shop everything." Interviewee #CON32 explained that although his firm shops bids, it does not manipulate them.

Interviewee #SD33, representing a Hispanic American male-owned firm, indicated that bid shopping occurs regularly, and that his firm does not submit bids to certain firms because they shop bids: "[We do] not bid to certain contractors because they use our numbers. Some generals get [our] numbers and shop around or use the numbers themselves."

Interviewee #SD44, representing a Hispanic male-owned firm, indicated that he is aware of bid manipulation taking place to some degree. He provided an example of certain public sector

contracts requiring supplies made from particular, large manufacturers (e.g., Ingersoll Rand), forcing prime contractors to buy products from those firms. Interviewee #SD44 said that he did not know why certain contracts are specified in that way.

Interviewee #SD45, representing a white male-owned firm, said his firm has frequently been victim to bid shopping: "Many times they have solicited our bid only to go shopping with it." He went on to say that bid shopping is less common on federally-funded projects.

Interviewee #SD47, representing an African American female-owned firm, indicated that bid shopping occurs so frequently in the construction industry that it is almost an accepted practiced: "Our prices used to get shopped — I've heard that's just the way the industry works. Construction is a shrewd, cutthroat, hard knock type of industry, and that that's the way business is done. [Prime contractors] get your prices, they shop around and play around with them …"

SDTA #9, representing a public works trade organization, said that his organization's clients often complain about bid shopping, but that his organization is unable to verify its occurrence: "We hear about [bid shopping] all the time but are unsure if this is actually taking place."

A few interviewees reported that bid shopping or bid manipulation is not a significant issue in the construction industry. SDTA #7, representing a construction trade organization, indicated that bid shopping is not an issue in the construction industry. He explained, "[Prime contractors] don't do this calling back and forth too much saying 'Hey, if you lower your bid [by] 10 percent we'll give [the contract] to you.' [Bid shopping] used to be a big deal, but now the listing law took care of that to a certain extent. … I'm sure [bid shopping] happens still, but not as much — it just seems like there has been a cultural change."

Interviewee #SD21, representing a white male-owned firm, reported having no knowledge of bid shopping taking place in the construction industry.

Experience and expertise.

The majority of interviewees cited a firm's experience and expertise as a barrier to being successful in the public and private sectors. SDTA #7, representing a construction trade organization, reported that experience and expertise are substantial barriers to being successful. He explained, "You actually have to learn to build something to be a contractor. … Politicians don't believe that — they just believe you can just take someone, and they can somehow magically get … bonding and all that stuff." He continued, "There's a perception among our political leaders that you can take people out of the general population, put them through some technical assistance, and they can be contractors. If you're taking someone out of the general population and trying to get them to build a sidewalk around the Airport, it's not like selling hot dogs — it's much more complicated." SDTA #7 added that it is becoming increasingly common for contractors to earn college degrees. He said, "You can't run these businesses for the most part without some academic background."

Interviewee #SD14, representing a Hispanic American male-owned firm, explained that a firm's experience is crucial to its success. He said that firms have to know what they are doing when

they take on a contract, and they also have to establish their brand, because according to Interviewee #SD14, "Construction is about trust."

Interviewee #SD21, representing a white male-owned firm, also indicated that experience and expertise are crucial to being a successful firm. He argued that firms have to be qualified to remain competitive. Otherwise, they put themselves in the position of having to deal with "uncontrollable risk."

Interviewee #SD20, representing an Asian American male-owned firm, indicated that it is more difficult for less established, small firms to compete for and win federally-funded projects in the engineering industry, because those contracts tend to be awarded on a qualification-based selection process. In other words, firms have to be deemed qualified in order to win contracts rather than simply submitting the lowest bid.

Interviewee #SD22, representing a white male-owned firm, reported that experience is definitely a barrier to staying competitive in his firm's industry. He indicated that people have to know what they are doing to be successful: "[success takes] a little bit of smarts [and] lots of perseverance."

Interviewee #SD28, representing a white female-owned firm, said that people need to take classes to learn how to work in her firm's industry, so expertise can be a barrier to success.

Interviewee #SD24, representing a white male-owned firm said that in order to remain competitive, firms have to be experienced with good reputations, have a history of quality work, and hire excellent, experienced personnel.

Interviewee #SD26, representing a white male-owned firm, stated that many contractors go out of business, because they do not know anything about running a business. They assume that contractors make a great deal of money without considering overhead costs. When asked how one learns to run a business successfully, Interviewee #SD26 replied, "Surround yourself with smart people."

Interviewee #SD43, representing a Hispanic male-owned firm, indicated that many public agencies require firms to have experience working for their agencies before awarding contracts, which is a difficult requirement for new firms to meet: "They require the company to have the experience — [that is]to say [they] have worked … in the past in public works …. [But[it's very hard to even get the first job and get your foot in the door."

Interviewee #SD46, representing an African American male-owned firm, indicated that although many MBE/WBE firms are qualified to work on contracts, they are often overlooked because they are not well known: "I feel 80 percent of the guys or companies that go in business have the basic ability to perform the work. The problem is that … not being known or recognized, you're overlooked on several project, and … [prime contractors] don't want to take the chance."

Personnel.

Some interviewees indicated that finding good personnel is a barrier to being successful in the public and private sectors. Interviewee #SD20, representing an Asian American male-owned firm, explained that finding good employees is difficult in the engineering industry, particularly for a less established firm. He said, "Why would a good engineer come work for you if you just started a company? Why wouldn't they work for a firm that's been around for thirty years? [Less established firms] are definitely at a disadvantage."

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, reported that the most challenging aspect of working with the Airport is finding good personnel: "It is difficult to find staffing and to find people with the same values as you because the turnover in the industry is so high … In order to retain staff you must create a fostering environment and help to develop their transferable skills to make them better."

Interviewee #SD24, representing a white male-owned firm, reported that the recession in the 1990s and a "post-baby boomer dip" undermined the development of a pool of experienced personnel in the environmental services industry. He went on to say that to remain competitive, firms need good personnel who have 10 years or more of experience.

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, indicated that personnel issues are also a challenge in the parking services industry, because most of the staff earns the minimum wage and there is a "revolving door to some degree." As a result, firms have to be creative in their recruiting procedures because they are competing with other minimum wage employers.

Interviewee #SD19, representing a white male-owned firm, reported that her firm's most substantial barrier is related to "management of the firm — keeping employees happy with benefits and pay."

Interviewee #SD29, representing an African American male-owned firm, indicated that it is difficult to find good employees who are willing to work for his firm, even in the current economy: "It's hard to get good people." He said that it is particularly difficult to find people who have experience in his firm's industry.

Interviewee #SD32, representing an African American male-owned firm, indicated that although his firm has no trouble finding experienced personnel in the current market, in stronger economic times it is difficult to find personnel with the necessary experience working on government projects. He said that it is crucial for a firm's employees to have experience dealing with the paperwork and bureaucracy associated with government work.

Interviewee #SD37, representing a white male-owned firm, said that to remain competitive in the marketplace, firms have to establish an exceptional staff: "It's a people business. You have to have the proper people in place. Estimators need to know how to estimate, project managers need to know how to manage, foreman need to have a sense of how to control their men without being overbearing and get the most out of them."

Interviewee #SD41, representing a white male-owned firm, said that it is difficult to find good personnel in construction: "Finding personnel is the biggest hurdle these days. In construction, there is not an abundance of kids who want to get into the industry and get dirty. They are now playing on computers. They want to show up with a laptop, not a shovel. It is hard to find good, young people to start at the bottom and work their way up both in the field and in the office."

Interviewee #SD44, representing a Hispanic male-owned firm, indicated that good personnel can be difficult to find: "To get a competent employee that is trustworthy … you probably have to go through some people …."

Interviewee #SD45, representing a white male-owned firm said that finding good personal is "the toughest part [of a firm being successful]." He explained that the current state of the economy and the lack of work in San Diego have forced skilled workers to leave the area.

Interviewee #SD46, representing an African American male-owned firm, indicated that it is difficult for small firms to attract good personnel: "Most smaller companies do not have the kind of revenue to keep [skilled personnel] on board or even to hire them." He went on to say that good personnel is crucial to a firm's success: "Personnel is one of the keys to being competitive and also advancing."

Other interviewees indicated that personnel issues are not a barrier to being a successful firm. Interviewee #SD21, representing a white male-owned firm, said that he was not aware of any barriers related to personnel and labor in the construction industry. He said that "prevailing wage" laws in California make it relatively easy for construction firms to attract good employees without those wages being unreasonably high.

Interviewee #SD16, representing an African American male-owned firm, indicated that finding qualified personnel is not an issue for his firm — a much larger issue for his firm is finding capital to pay those employees: "If I had the cash flow I could do very well."

Interviewee #SD28, representing a white female-owned firm, said that in the current market, it is relatively easy to find good labor. He explained that in the past, other firms would actively try to steal their employees but with the slowdown in the economy, there are plenty of people available for work.

Interviewee #SD43, representing a Hispanic male-owned firm, said that finding personnel is not difficult for her firm, because of her firm's contacts and because there are "a lot of people without work" in the current economy.

Learning about work.

Several interviewees indicated that it is difficult to learn about available projects. Interviewee #SD2, representing a white female-owned firm, reported that it is hard to find out about available projects from most public agencies. She said that she has tried to get her firm on agency lists, but that the process is too time consuming. However, she acknowledged that agencies *try* to let contractors know about available projects.

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, said that firms "have to do [their] homework" in order to learn about available projects. He went on to say that firms can learn about work opportunities at public agencies' networking events, in trade magazines, and by having themselves placed on agency lists.

SDTA #6, representing an Asian American trade association, reported that her organization struggles with disseminating information about available projects to their membership. It is her feeling that public agencies are not in close enough contact with her organization and do not reach out to them with information about work opportunities.

SDTA #11, representing a veterans trade organization, said that disadvantaged businesses do not learn about available contracts soon enough. He said, "I don't think [agencies are] getting RFIs (Requests for Interest) out fast enough." He said that disseminating RFIs earlier would help disadvantaged businesses compete more effectively for contract awards.

SDTA #2, representing a Hispanic American trade organization, indicated that his membership learns about available projects through on-line listings and by word-of-mouth. However, he went on to say that small businesses need to be educated on how to find out about available projects and on how to be competitive.

SDTA #1, representing a local chamber of commerce, indicated that learning about work is particularly difficult for small firms: "For many of the smaller firms, it's … a challenge to be fully aware of the opportunities that are out there." He went on to say that those firms also need assistance in trying to "maneuver around the opportunities and requirements for … public work."

DBE fronts.

A number of interviewees reported having direct knowledge of MBE/WBE frauds or fronts, including supply brokers. Interviewee #SD4, representing a white male-owned firm, reported having knowledge of a female-owned firm that serves only as a supply broker. That is, according to Interviewee #SD4, if a prime contractor has trouble meeting DBE goals, they fulfill them last minute by using a supply broker, because prime contractors are not required to list supplier information during the bidding process. The supply broker marks up the costs of goods for the project, allowing the prime contractor to meet DBE goals.

Similarly, Interviewee #SD6, representing a white male-owned firm, indicated that there are quite a few firms listed as minority- or female-owned that are actually supply brokers — they do not actually do any work, but rather provide goods at marked up prices so that prime contractors can meet DBE goals.

Interviewee #SD11, representing a white male-owned firm, spoke of a minority-owned firm that wins contracts but does not actually do any work or provide any goods — it is only included on contracts when the prime contractor needs to meet DBE goals. He said, "A lot of material brokers sprung up with the DBE program. It is hard to figure out who is a desk and who is a real business …. There are illegitimate businesses making money off of [DBE goals] … There are a lot of fronts

going on." He went on to remark that, "Using [supply brokers] make you look better on the contract but all they are doing is marking up the contract."

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, reported that his firm previously used a vendor that was certified as a WBE firm, but that was actually run by the female owner's husband.

Interviewee #SD28, representing a white female-owned firm, reported that one of her firm's largest competitors lists itself as a DBE firm, but it is neither minority- or woman-owned. She indicated that it is a mystery to her how the firm is DBE certified.

Interviewee #SD35, representing an Asian American male-owned firm, indicated having direct knowledge of DBE fronts and frauds: "Usually, [a] firm would say they were woman-owned or minority [-owned], but really, their wife was fronting or they would say their great grandma was from Mexico."

Interviewee #SD41, representing a white male-owned firm, reported that his firm uses MBE/WBE fronts quite frequently to fulfill participation goals, because there are not enough MBE/WBE firms in San Diego to fulfill them legitimately: "There are a lot of [fronts and frauds] out there … It is a niche for them to fill, and a great opportunity." He went to say, "I often thought about putting my wife on the head title holder of this company. We could all put of our wives on it because, especially in the government contracting, there are all types of set asides."

SDTA #10, a supplier trade organization, noted that he has encountered several MBE/WBE fronts in the past decade. He stated that self-certification is dangerous and that people will try to take advantage of the system in the absence of a thorough review and agency scrutiny.

SDTA #7, representing a construction trade organization, indicated that the Black Contractors Association perpetuates DBE frauds: "The Black Contractors Association will never give us a list of black contractors, but my guess is there's three or four, maybe five, that are real. There's a whole bunch of members, but they are all white contractors. …" SDTA #7 also said that when MBE/WBE contract goals have been in place in other parts of the country, prime contractors often paid MBE/WBE subcontractors even though those subcontractors did not do any work, just so the prime contractors could meet agency goals: "… when we had quotas we would just find a minority …. Typically though, [the minority contractor] wasn't actually doing anything. We would just do the work and give that person a percentage of it."

Similarly, SDTA #5, representing a government advisory commission on minority issues, said that the Black Contractors Association in San Diego is a front: "The Black Contractors Association is a front. [They are] pimping the system." She went on to say that particular contractors have "had it out against the Black Contractors Association … for their fraudulent behavior."

A few interviewees reported having no direct knowledge of MBE/WBE frauds or fronts but nonetheless suspect that they exist. Interviewee #SD13, representing a white male-owned firm that is also the master concessionaire at the Airport, said that she is unaware of ACDBE frauds working with the Airport but said that such frauds exist. She went on to say that her firm has

become increasingly careful in the past five years to ensure that MBE/WBE participation is legitimate in all of the contracts with which her firm is involved.

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, indicated that she has no direct knowledge of MBE/WBE fronts but wonders how some firms with which she deals are disadvantaged. She stated that some firm owners appear to be quite wealthy.

Interviewee #SD6, representing a white male-owned firm, wondered, "What percentage of [SBEs] are nothing more than a front for larger companies that are not [SBEs]?" He said that he suspects that 85 percent of SBEs are just a front for larger companies.

Interviewee #SD40, representing a white male-owned firm, indicated that he has no direct knowledge of MBE/WBE fronts but is confident that they exist: "I am sure [MBE/WBE fronts] are out there. You wouldn't be asking if the perception wasn't out there [that they exist]. However we haven't ever dealt with this." He continued, "Unfortunately the perception of fronts and frauds places a negative stigma on the DBE program."

SDTA #1, representing a local chamber of commerce, said that he is aware of MBE/WBE frauds and fronts, but that he is not aware of any that do business in San Diego.

Several interviewees reported having no knowledge of MBE/WBE frauds or fronts [e.g., Interviewee #SD20, Interviewee #SD21, and SDTA #2].

False DBE reporting.

Some interviewees reported knowledge of false reporting as it relates to MBE/WBE participation or good faith efforts. Interviewee #SD14, representing a Hispanic American male-owned firm, indicated that, in the past, agencies or prime contractors would call MBE/WBE firms for bids and list them as subcontractors even if they did not ultimately use them. However, Interviewee #SD14 made clear that false reporting does not occur anymore, because DBE goals are no longer mandatory deeming the practice unnecessary.

Interviewee #SD20, representing an Asian American male-owned firm, described a situation in which a prime contractor used his firm's resume as part of their proposal for a large public project and got "short listed." A few weeks later, Interviewee #SD20 heard that the prime contractor won the contract, but when he contacted the prime contractor to discuss his firm's role in the work, the prime contractor told him that it decided not to use his firm after all. Of similar situations Interviewee #SD20 said, "It happens, it still happens."

Interviewee #SD16, representing an African American male-owned firm, indicated that he received an offer from a North Carolina-based prime contractor that would pay his firm 3 percent of the contract without having to do any work — the prime contractor was only interested in his MBE status. Interviewee #SD16 turned down the offer.

Interviewee #SD45, representing a white male-owned firm that is DVBE certified, described an experience in which a prime contractor solicited a bid from his firm to which his firm responded.

Interviewee #SD45 later learned that the prime contractor erased information from the bid and reused it on other projects without Interviewee #SD45's knowledge or permission. Interviewee #SD45 also became aware that the prime contractor made fraudulent payments to his firm to make it appear as if his firm was involved on the other projects.

Interviewee #SD46, representing an African American male-owned firm, indicated that his firm often receives bid solicitations as part of good faith efforts on the day the bid is due, a practice that violates USDOT code: "[Sending solicitations the day that a bid is due] is actually not legitimate. [Prime contractors] are manipulating the dates on their paperwork … because [solicitations to MBE/WBE firms are] supposed to be [sent] two weeks prior [to the bid due date]."

SDTA #2, representing a Hispanic American trade organization said that false reporting occurs often with good faith efforts.

Price discrimination by suppliers.

Some interviewees reported awareness of price discrimination by suppliers. Interviewee #SD2, representing a white female-owned firm, said that her firm was discriminated against a few years ago by a supplier. She said that the supplier would not do business with her firm because it was woman-owned.

Interviewee #SD16, representing an African American male-owned firm, said that it is difficult to disentangle price discrimination based on race and gender from receiving worse prices as a result of being a smaller firm: "The cost of paint is measured by volume of purchase. Therefore, smaller businesses feel the impact. Institutionally the smaller business is the minority-owned business. This type of discrimination is hard to prove."

Interviewee #SD28, representing a white female-owned firm, described a situation in which a supplier refused to continue to supply materials to her, because one of its larger competitors threatened to stop using the supplier if it continued to work with her firm.

Interviewee #SD45, representing a white male-owned firm, indicated that he has experienced price discrimination by suppliers due to the small size of his firm: "If you're not a large user, they'll sometimes jack up the price or won't provide a bid at all."

Interviewee #SD47, representing an African American female-owned firm, reported that her firm cannot establish accounts with suppliers due to her ethnicity and stereotypical attitudes: "We still can't get account like everybody else." She went on to say that the situation is made even more difficult, because some large projects require her firm to use certain suppliers that do not treat her firm well: "[On certain projects], the vendor is built in … they know we have to use them."

A few interviewees reported that suppliers quote different prices to different firms, but that the practice has nothing to do with race or gender. Interviewee #SD30, representing an African American male-owned firm, indicated that "bigger firms get a bigger discount" because of the

quantity that those firms buy. Interviewee #SD30 said that price differences between firms have nothing to do with race or gender.

Interviewee #SD31, representing a white male-owned firm, indicated that several factors determine supplier prices. First, firms with a reputation of doing quality work get better prices from suppliers than firms with bad or no reputation. Second, large firms get better prices than small firms, because they tend to buy in larger quantities.

Good faith efforts.

Many interviewees reported that some prime contractors do not use genuine good faith efforts to locate qualified and available DBE subcontractors. Interviewee #SD16, representing an African American male-owned firm, characterized good faith efforts as "a numbers game for the prime contractors." He said that prime contractors often solicit his firm for bids with no intent of using it in order to fulfill good faith efforts. His firm has received solicitations for industries in which they have never done work and for projects that are not even remotely near its geographic location. Interviewee #SD16 said that he is able to recognize when his firm receives a bid solicitation only because the prime contractor is trying to fulfill good faith efforts: "I know that if I am requested to bid on a project at the twelfth hour with no access to plans — this is a strong indicator that something is not right."

Interviewee #SD30, representing an African American male-owned firm, said that he is aware of prime contractors abusing the good faith efforts process. He said that some prime contractors solicit disadvantaged firms for bids with no intention of actually using them, only to fulfill good faith efforts. He stated that good faith efforts cannot be effective if "[prime contractors] are not sincere about them." He went on to say that he does not support the idea of subcontractor goals: "I'm not for quotas or mandatory [requirements] … I think that's a bad thing — I would like to think that that wouldn't … be necessary.'

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, indicated that good faith efforts do not work because prime contractors do not take them seriously: "I see the good faith efforts in San Diego, but it doesn't work because the answer is always 'we couldn't find anyone'."

Interviewee #SD31, representing a white male-owned firm that is DVBE certified, stated that his firm receives bid solicitations on a daily basis from large firms that leave him with "ridiculously" short amounts of time to respond. He indicated that firms send those solicitations with no intention of considering his firm for work — instead, they are only interested in fulfilling good faith efforts: "It's obvious to me that they're just going through the motions."

SDTA #6, representing an Asian American trade organization, said that she does not believe that DBE goals and good faith efforts are effective and that prime contractors abuse the program. As an example, she said that several large companies have faxed her information about projects to distribute to her membership, and then considered that information to fulfill their good faith efforts.

SDTA #2, representing a Hispanic American trade organization stated, "Good faith efforts are a joke."

Similarly, SDTA #9, representing a public works trade organization, said that there are circumstances in which prime contractors will contact his organization when they are looking for SBE- or DBE-certified subcontractors, and that the practice can sometimes be problematic as it relates to good faith efforts: "The problem with this is that those prime contractors then use their phone call as good faith efforts that are submitted on public contracts, and they really haven't tried [to find SBE or DBE firms]."SDTA #9 indicated that there needs to be more oversight for MBE/WBE programs and good faith efforts to be effective: "[Our organization] has been getting notices on work that is not done by subs, so they are being used to get the contract but are not getting the dollars or the work committed to them. There needs to be oversight. …" However, SDTA #9 went on to say that those agencies that do not have MBE/WBE programs have poor participation among minority- and female-owned firms: "Overall, those agencies that don't have goals or programs are struggling in their diversity numbers. If the goal isn't supported by a public agency, their numbers are going to reflect that commitment and they will not be impressive."

Interviewee #SD14, representing a Hispanic American male-owned firm, stated that no remedies would be effective for increasing MBE/WBE participation until mandatory goals are reinstated. Regarding good faith efforts in particular, he said, "You [have to] do away with the good faith efforts." He believes that good faith efforts should only play a role on smaller contracts (i.e., contracts with only a few pieces), because for those contracts prime contractors might have a difficult time finding MBE/WBE firms that are available for the type of work that they require.

Interviewee #SD43, representing a Hispanic male-owned firm, indicated that in her experience many prime contractors are not genuine about fulfilling good faith efforts. Instead, she thinks that those firms just make sure that they contact enough MBE/WBE firms to fulfill good faith efforts but have no intention of actually using them. She said, "I think they're just trying to meet the requirements most of the time."

Interviewee #SD45, representing a white male-owned firm that is DVBE certified, stated he frequently receives bid solicitations one or two days before bids are due or for work that is outside a reasonable geographic area. Regarding such practices, Interviewee #SD45 said, "That's the game [some prime contractors] play to meet the requirements. They say 'We solicited them, I informed them.'"

Interviewee #SD46, representing an African American male-owned firm, indicated that some prime contractors will mislead MBE/WBE firms into thinking that they will be included as part of a bid when in fact those prime contractors are only interested in fulfilling good faith efforts and have no intention of including the MBE/WBE firms. Interviewee #SD46 said, " … large firms, especially for government projects, they solicit [minority-owned firms] to put a package together, and they lead you on … saying you're a part of the bid package, and once the job is awarded you find out you're not a part of [the bid package]."

Interviewee #SD47, representing an African American female-owned firm, commented that a number of MBE/WBE firms, particularly new ones, have the misconception that prime

contractors contact them because they are interested in working with them. She indicated that often they are only interested in fulfilling good faith efforts: "When you're a subcontractor and you're new to the game, you're naïve. You get all these faxes from all these companies that want you to bid. You get silly and think, 'Look at all these people that want to work with us.' No, they don't want to work with you. You're on a list … They go into these databases, they don't know who you are and don't care. They want to document that they faxed you a bid invitation so they can show they outreached to a minority or woman-owned firm."

A number of majority-owned firms indicated that they do not support DBE goals or good faith efforts, because it is too difficult to find minority- or female-owned firms who are available for or interested in the work. SDTA #7, representing a construction trade organization, stated that DBE goals and good faith efforts do not generally work, because agencies do not spend enough time carefully considering the availability of minority and female contractors. With regard to African American contractors specifically, SDTA #7 indicated that the small African American population in San Diego does not justify race-conscious goals for that group. He said, "… there is just a small black population in San Diego. What is it — 5 to 6 percent or something? So every time we get into these squabbles with city council it's because they want 10 percent of the contracts given to blacks. Well it's just not going to happen. They aren't [in the construction industry]." In describing his organization's position on DBE goals, SDTA #7 said, "… I think in general we are going to fight situations where [agencies are] trying to disguise a quota and bring it in …" With regard to good faith efforts, he stated that they involve, "just pushing paper, everybody knows that … that's just political cover, it always has been."

Interviewee #SD11, representing a white male-owned firm, reported that taking the effort to fulfill good faith efforts is not problematic but getting results is difficult. He said, "We do 90 percent of our work [ourselves], so it is hard to find subs to do this type of work." In describing his firm's position on DBE goals and good faith efforts, Interviewee #SD11 said, "If the DBE program is race neutral then I don't have a problem."

Interviewee #SD7, representing a white male-owned firm, described several problems with the good faith efforts process. He said that there is no indication of experience level when firms fill out MBE/WBE paperwork, so there are a number of firms that are not qualified to do the necessary work. He also complained that many of the minority- and female-owned firms that he solicits for bids are not receptive to his solicitations — they will say "Quit bugging me" or some will not even know why he is soliciting them to bid on a project. Interviewee #SD7 indicated that the process can be frustrating: "It's like beating your head against a wall."

Interviewee #SD4, representing a white male-owned firm, reported that the number of usable bids that he receives from soliciting MBE/WBE firms for bids is very low, making it difficult to fulfill good faith efforts. He estimated that of the MBE/WBE firms that he solicits for bids, only 15 percent will typically respond, 35 percent of which will be out of business by the time he follows up with them.

Interviewee #SD21, representing a white male-owned firm, stated that blanket, one-size-fits-all goals are not very effective, because different industries have different availability rates of MBE/WBE firms. He said that DBE goals should be tailored to fit different sectors of construction work based on the number of DBEs available to do work within each sector (e.g., higher

percentage goals should apply to those sectors with a larger number of available DBEs). With regard to the difficulty of fulfilling good faith efforts, Interviewee #SD21 said, "It is easier to meet or exceed a [DBE] goal than it is to meet or exceed the requirements of documentation and solicitation of good faith efforts."

Interviewee #SD11, representing a white male-owned firm, reported that their disapproval of DBE programs stems from public agencies only being concerned with MBE/WBE participation numbers: "… if you didn't use the DBE guy, [public agencies throw] your bid out because you were supposed to use them. The public agency is only looking for numbers, they never policed the program. …" He went on to say that it is very difficult to find MBE and WBE firms in his firm's industry that is certified and are capable of completing the work that his firm requires.

Interviewee #SD41, representing a white male-owned firm, said that his firm has experience little success in finding MBE/WBE firms to participate on contracts: "Our success in finding DBEs has been absolutely terrible. They don't exist or they can't bid the scope of work. No one will turn a bid in. It is really hard to find [MBE/WBE firms]!"

Some majority-owned firms indicated that they do not support DBE goals or good faith efforts, because the process is too costly or time consuming. Interviewee #SD7, representing a white male-owned firm, reported that DBE programs require much more than good faith efforts. He said that if his firm receives interest from an MBE or WBE firm, then they have to "hold their hand" through the process, which can be quite costly and time consuming. The process includes: copying the plans and specifications for the MBE/WBE firm, walking the firm through the plans, and ensuring that the firm has all the addendums to the project. He went on to say that "99.9 percent of the time," the MBE/WBE firm does not even bid on the project, so his firm might as well "take that cost and flush it down the toilet."

Interviewee #SD6, representing a white male-owned firm, reported that his firm spends an average of $200,000 per year to fulfill good faith efforts (including Disadvantaged Veterans Business Enterprise goals). He said that his firm spends anywhere between $5,000 and $10,000 on good faith efforts for each job on which they bid, and they win perhaps one out of every 15 of those jobs. Interviewee #SD6 referred to good faith efforts as an "abomination of cost."

Interviewee #SD24, representing a white male-owned firm, indicated that DBE goals and good faith efforts are a frustrating aspect of competing for public sector work: "It's frustrating when [DBE goals and good faith efforts] make the process longer and more expensive. Public work is already more expensive [than private work]. When you add another layer … that can be a frustration, particularly if some agencies have some fairly onerous requirements." He added, "Obviously the fewer requirements there are, the easier it is for us. …"

Interviewee #SD41, representing a white male-owned firm, said that DBE Programs are ineffective: "[The DBE program] is not working. I don't see the benefit. There has to be a better way." He continued, "[The DBE program] makes it tougher to do business. I am a firm believer that if you work hard and are honest, you are going to do well in life. I am not out to give anyone help for no reason. The not working for it I have a problem with. If you are a hard worker you will be profitable."

Two majority-owned firms reported having their bids thrown out, because of reasons related to DBE goals and good faith efforts. Interviewee #SD3, representing a white male-owned firm, stated that his firm bid on a project in which they failed to meet the 15 percent DBE goal but fulfilled their good faith efforts. Nonetheless, the awarding agency tried to throw out their bid. Interviewee #SD3 reported that his firm had to hire a $300 per hour attorney to fight the decision (which they ultimately won).

Interviewee #SD4, representing a white male-owned firm, reported that his firm bid on a project on which there was an addendum that extended the bid deadline by one week. Although his firm advertised for MBE/WBE subcontractors for the first three weeks, they did not advertise during the final week. The awarding agency found that the firm did not fulfill their good faith efforts, and their bid was thrown out. Interviewee #SD4's firm contested the decision but was unsuccessful.

Some interviewees indicated that they support DBE goals and good faith efforts. Interviewee #SD20, representing an Asian American male-owned firm, indicated that DBE goals and good faith efforts are beneficial to minority- and female-owned firms: "Those [measures] are really helpful."

Interviewee #SD27, representing a white male-owned firm, indicated that his firm supports DBE goals and good faith efforts. He said that if society has operated in a way that has disadvantaged certain minority groups, then it should take steps to try and right those wrongs. However, Interviewee #SD27 went on to say that he can appreciate the fact that there are some people who believe that giving preferential treatment to minorities and women is unfair.

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, said that without a DBE program, there are limited opportunities for minority- and female-owned firms in San Diego. She noted that large firms do not go out of their way to provide opportunities to MBE and WBE firms unless they are required to do so.

Interviewee #SD28, representing a white female-owned firm, reported that good faith efforts help DBE firms be considered for contract opportunities: "I really think [good faith efforts] help a lot of companies get their foot in the door and … to compete with [larger firms]." She went on to say that a number of prime contractors would not have used her firm if not for DBE goals, and now the firm has strong, working relationships with a number of prime contractors.

Interviewee #SD40, representing a white male-owned firm, indicated that he supports DBE programs and does not think that they should be eliminated, particularly the Airport's program: "Don't remove the program. I think the Airport has taken a lot of time to see what fits the community." Interviewee #SD40 went on to note that his firm implements internal MBE/WBE participation goals. However, Interviewee #SD40 said that he does not believe that mandatory set-asides are fair: "I personally don't believe in [race- or gender-based set asides]. I think you need the best qualified firms to do the work. I have a hard time ethically saying that a certain amount of work should be set aside for a certain type of firm. Let's get the best firms to do the work."

SDTA #6, representing an Asian American trade organization, indicated the DBE goals are helpful to minority- and female-owned firms. She said, "If you … are not as conscientious as the Airport then [race- and gender-based] targets are important."

SDTA #1, representing a local chamber of commerce, stated that his organization supports DBE goals and good faith efforts, because they give agencies concrete targets. He referred to them as "good policy."

SDTA #3, representing a local chamber of commerce, said that her organization also supports DBE goals and good faith efforts. She said that they encourage a strong work force, and they encourage people to "get in there and start."

SDTA #13, a retired official from a local public agency, indicated that DBE goals are useful, because they provide agencies information about which remedies have been effective and which have not. She also said that the goals provide an opportunity for minority and female-owned firms to interact directly with prime contractors.

Interviewee #SD35, representing an Asian American male-owned firm, reported that DBE goals have been very beneficial to his firm, especially before Proposition 209: "Because we were DBE and federally-funded contracts needed minority participation, they would call us to bid."

Interviewee #SD37, representing a white male-owned firm, indicated that he does not oppose good faith efforts and does not consider goals to be a problem: "I think any required percentage they want to set for MBE/WBE is fine. Otherwise, the big contractors would take over and there would be no work left for the small contractors."

Recommendations related to good faith efforts.

A few interviewees recommended that public agencies do a better job of enforcing MBE/WBE utilization. Interviewee #SD10, representing an African American male-owned firm, stated that public agencies should make prime contractors prove that they are utilizing MBE/WBE subcontractors that they list during the bidding process: "Every public sector job should be audited during and after construction. If you use an MBE — prove it! This should be done during and after the contract."

Interviewee #SD16, representing an African American male-owned firm, expressed a similar sentiment: "A challenge to the certification program is to ensure that if the prime uses the certified sub on a bid that they use them on the job. Public agencies should continue reporting and further their checks and balances of programs."

Similarly, SDTA #5, representing a government advisory commission on minority issues, indicated that more information about which firms receive awards would improve DBE/ACDBE programs: "I want to know what the history and who is doing the work. How do you know you are winning the game if you don't know the score?"

Interviewee #SD14, representing a Hispanic American male-owned firm, stated that mandatory DBE goals need to be in place and need to be enforced: "Make [the goals mandatory]. Then

everyone's got the same playing field." He went on to say that good faith efforts should be eliminated, particularly for larger contracts that have more subcontracting opportunities.

Double standards in performance.

A few interviewees reported that prime contractors and agencies hold MBE/WBE firms to an unfair standard of performance. Interviewee #SD20, representing an Asian American male-owned firm, said that he has often heard from other firms that when something goes wrong on a project, the scrutiny is much worse for minority- and female-owned firms than it is for majority-owned firms. Regarding those accounts, he said, "I see some truth in it."

Interviewee #SD28, representing a white female-owned firm, indicated that small firms (including MBE/WBE firms) are held to more stringent standards than larger, more-established firms. She said that double standards were especially a problem for her firm when it was just starting: "In the beginning, I really felt like we had to go the extra mile to prove ourselves, because [prime contractors] didn't think we could do the job. I don't feel it as much anymore — maybe it's because we're proving ourselves. …"

Interviewee #SD2, representing a white female-owned firm, reported that WBE firms have to complete projects better and faster than majority-owned firms in order to receive the same recognition.

Interviewee #SD34, representing a white male-owned firm, said that MBE/WBE firms "… need to do double the amount of work [and] get it done the first time [without] being given a second chance" in order to receive the same amount of recognition as majority-owned firms

Similarly, Interviewee #SD29, representing an African American male-owned firm, reported that DBE firms have to work "twice as hard" as majority-owned firms to win the same number of contracts and to receive the same recognition. He went on to say that DBE firms also have to have lower prices than majority-owned firms to remain competitive.

Interviewee #SD30, representing an African American male-owned firm, said that smaller firms are held to different standards than larger firms, but he indicated that the practice is to be expected: "If you're a small or minority firm … [prime contractors] would probably would watch you a little more carefully or inspect your work a little more closely just because it's their first time dealing with you."

Related to those comments, Interviewee #SD31, representing a white male-owned firm, said that although small, MBE/WBE firms are not held to different standards than large, majority-owned firms, initially MBE/WBE firms might have to answer more questions about their competence and their ability to do the work.

SDTA #1, representing a local chamber of commerce, indicated that although he does not have any direct knowledge about prime contractors and agencies holding MBE/WBE firms to different standards than majority-owned firms, he said, "I don't doubt that it happens …"

Interviewee #SD43, representing a Hispanic male-owned firm, indicated that double standards exist in the construction industry such that small firms (including MBE/WBEs) have to accomplish more to receive the same amount of recognition as majority-owned firms: "[Small firms] just [can] expect to do more or to go way beyond in order to be able to get the job with the same client again."

Unfair contract denials.

Several interviewees reported having knowledge of unfair contract denials as a result of race, ethnicity, or gender. Interviewee #SD10, representing an African American male-owned firm, described a situation in which he lost a concessionaire contract with the Airport to a white female-owned firm that was a front for the female owner's husband. Interviewee #SD10 indicated that the board that awarded the contract consisted of three minorities and four white males, and that the white males overruled the minority members of the board in awarding the contract to the white female-owned firm. Interviewee #SD10 said, "Race was an issue here."

SDTA #10, representing a supplier trade organization, stated he was aware of a situation in which a minority-owned firm initially won a contract, but that the awarding entity terminated the contract when it found out that the firm was minority-owned. SDTA #10 said, "Prime contractors can say they tried to work with an MBE, [but] too often they are unfairly treated and dismissed."

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, remarked that MBE and WBE firms might be discriminated against and denied contracts, but that the discrimination is too subtle or "sophisticated" to be noticed: "If someone doesn't like you because you are black, minority, or [a] woman, you won't get the opportunity. That discrimination would never be revealed."

Similarly, Interviewee #SD20, representing an Asian American male-owned firm, said that he suspects that unfair contract denials occur, but that the discrimination is too subtle to be perceived: "All [prime contractors] have to do is find *some* reason [to deny a contract]."

SDTA #13, a retired official from a local public agency, indicated that unfair contract denials occur as a result of discrimination on the part of prime contractors, but that it would be difficult for anyone to prove: "… when you look at the contractors, the prime contractors, no one is going to admit that they excluded a person because of their color or gender. It is going to be very hard to prove that discrimination has occurred."

Some interviewees reported having no knowledge of unfair contract denials as a result of race, ethnicity, or gender. Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, said that her firm has never denied a potential concessionaire space at the Airport because of their race, ethnicity, or gender. Interviewee #SD13 went on to say that in fact four concessionaire locations were added at the Airport in order to increase ACDBE revenues.

Interviewee #SD2, representing a white female-owned firm, and Interviewee #SD21, representing a white male-owned firm, both reported having no knowledge of unfair contract denials.

Consortium Anecdotes Regarding Perceived General Barriers to Participation in the Public and Private Sectors

The following anecdotes regarding general barriers to participation in the public and private sectors were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Barriers to pursuing work with public sector agencies.

A couple of interviewees identified the absence of race-, ethnic-, and gender-based goals as a barrier to pursuing work with public sector agencies. [Interviewees #CON: 12, 46]. Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that when Caltrans went race-neutral a lot of the local agencies implementing federal projects no longer required strict compliance with DBE goals. He stated that on a recent contract, his company was the low bidder and the "highest DBE firm" (the prime contractor), but the agency awarded the contract to another company based on "preferences." He stated that that the individual on the selection panel was a former employee of the company that won the contract. He stated that also during that interview, the individual leading the interview told them that "DBE is not that important anymore." To him, "it was like a slap in the face" because it was a federally-funded contract and the RFP clearly stated there was a 10 percent DBE goal.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that the absence of goals on projects in Santa Monica, San Diego, or Orange County Transit Agencies is a barrier to pursuing work.

Other interviewees identified multiple miscellaneous barriers to pursuing work with public sector agencies. [Interviewees #CON: 4, 6, 10, 31, WT #16, 17, PF #25]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that with respect to other agencies, sometimes large scale projects are so huge that even large scale prime contractors cannot handle it; they have to partner with another firm to handle the project. Interviewee #CON4 stated that it would be helpful if the owner agencies were able to break up huge projects into smaller ones and thereby create more opportunities for smaller firms to participate. For example, a county water authority is embarking on a project that will start in 2009 whereby they will raise the dam on one of the reservoirs; that is a huge project worth $600 million or more. It is so big that even the prime contractors who go after it pair up with other prime contractors. He explained that the problem is most prime contractors have enough in-house capabilities that they could do the work themselves or 95 percent of the work, and there is very little to subcontract which means that DBEs are left out. If projects that big could be broken up into smaller projects, Interviewee #CON4 stated that would help.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, stated that as for other agencies, permit fees are a barrier to pursuing work with the county government. The county

shut down Interviewee #CON6's company because of his failure to obtain a site plan for his property at a cost of $60,000 to $100,000.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that the way that non-Consortium agencies draft their RFPs is a barrier to pursuing work; the RFPs are "targeted."

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that he is a very small business and has not been successful on his attempts to work with prime contractors. He stated that he has the requisite licenses, experiences, etc., but there is no one to assist him in obtaining work. He stated that it would be great if someone could find a way to streamline and simplify the process in order to help out good contractors.

WT #16, a male Asian Pacific owner of a civil engineering firm submitted written testimony regarding the Disparity Study that he feels "most prime consultants can easily circumvent the UDBE goals by subcontracting out services they don't have in-house. [His] firm [has unsuccessfully] tried for many months to convince the big prime consulting firms to let out a small portion of their work (normally done by their in-house forces)." (Written testimony submitted 10/13/09).

WT #17, a male managing partner of a firm that makes a product from recycled tires submitted written testimony that "as a small business, we really feel that we are at a disadvantage…to break in with OCTA…." (Written testimony submitted 9/28/09).

PF #25, an individual representing a business providing uniform services described his business as "a local mom and pop shop." He lodged a complaint with MTS of San Diego that small businesses are negatively affected by the actions of agencies and prime contractors with no recourse or remedy. He shared an example of how his company, a local small business, used to provide uniform services to MTS for 33 years. MTS then ended their contract with him and hired an out-of-state uniform service company. Subsequently, his company lost approximately 33 percent of its business. He concluded by saying, "[t]hat means that the contract money from the San Diego MTS is now going to someone 'outside' of the community." (Public Forum San Diego held on October 21, 2009).

Several interviewees indicated that there are no barriers to pursing work with public sector agencies. [Interviewees #CON: 2, 5, 22, 23, 24, 26, 28, 33, 38, 39, 40, 41, 42, 44, 45, 48, 49, 52, 53, 54, 55, 56, 57, 58]. Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he has not heard of any barriers or obstacles to pursuing work with other agencies; he believes that those with DBE certification have the benefit.

Barriers to pursuing work in the private sector.

Several interviewees identified networking as a barrier to pursuing work in the private sector; some reported that in the private sector, receiving work is dependent on "who you know." [Interviewees #CON: 2, 4, 5, 10, 12, 22, 31, 32, 33, CONTA #2]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that in the private sector, the primary barrier is networking and marketing.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that in terms of private sector, the barrier is that the prime contractors do business with the same companies over and over; it is always "who they know."

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business, stated that although he has never seen any barriers or obstacles to pursuing work in the private sector, he did state that work is based on the relationship that you have with people. If his company does the job and the prime contractor likes what he does, they bring him back. Interviewee #CON5 stated that there are no issues about being a small business or DBE in the private sector.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that they do not know where the private sector work is or who the prime contractors are in order to solicit work.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that obtaining work in the private sector is dependent "on who you know" and it is very hard to get in to the network unless you have had prior experience. He stated obtaining work in the private sector is more based on luck than anything else.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that the tendency to team with friends is a barrier to pursuing work in the private sector.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that he suspects that in the private sector the prime contractors already know who they are going to work with. He stated that in addition, unless you bid the project extremely low, you will not get the contract. He stated that he cannot figure out how some firms are able to bid so low unless they are not paying decent wages or payroll taxes. He indicated that the prime contractors now are frequently self performing, which cuts out a lot of subcontractors.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that there are the same obstacles to pursuing work in the private sector as there are with other agencies — contractors will only use those subcontractors with whom they are familiar and have a relationship.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that there are barriers to pursuing work in the private sector but occasionally you can

approach the prime contractor, although they already have their team put together, and ask them to take another look at their team and consider working with your company.

CONTA #2 stated that private sector projects are pretty open. Owners choose contractors based on their comfort zone and feeling that the contractor is competent.

Other interviewees identified multiple miscellaneous barriers to pursuing work in the private sector. Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that obtaining financing is a barrier or obstacle to pursuing work in the private sector.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that the lack of regulation in the private sector could also be seen as a barrier because the evaluators are not always fair, but he stated that that occurs in the public sector as well.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that the private sector has no responsibility or goal requirement to utilize her firm; they will only utilize her firm if they have to. She stated that no matter how hard she tries to obtain work, and with all of her experience, she is still unable to obtain work in the private sector. She stated that the private sector firms have their own teams.

Interviewee #CON29, an African American male-owned electrical contractor, stated that there are few opportunities for small businesses and people want to hire "name brand" companies.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that her firm is not able to provide the same perks for her clients as are other firms; this may be a barrier to pursuing work in the private sector.

CONTA #1, the President of the Latino Business Owners of America, stated that there are barriers or obstacles to pursuing work in the private sector, but they are not as prevalent as in the public sector. He stated that it is more competitive in the private sector and the work is more spread out.

Several interviewees were unaware of any barriers to pursuing work in the private sector. [Interviewees #CON: 1, 6, 9, 23, 24, 26, 28, 38, 39, 40, 41, 42, 44, 45, 46, 49, 52, 53, 54, 55, 56, 57, 58]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that there are no barriers to pursuing work in the private sector. He stated that they try to get work, and if they do not get the work, they try to figure out why they did not get the work.

Some interviewees reported the impact that the unions have had, if any, upon their businesses. Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that unions have not had an impact on his business.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that the L.A. County Union has positively impacted her business because they hired her to do a project for them.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, did not identify any issues caused by unions.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, has not had any issue with the unions.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, stated that unions have directly impacted his ability to engage workers and get certain jobs because of Davis-Bacon wages and the use of non-union contractors. His company has a strong set of union card carrying members because Interviewee #CON15 couldn't oppose the union.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, noted that unions do have an impact on a DBE's ability to pursue, engage in, and obtain work. Davis-Bacon pay scales and rates are much better so union work is favored according to Interviewee #CON16. Interviewee #CON16 has not experienced any obstacles or barriers to work due to a union.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that she knows unions in the construction industry have had an impact on some companies, but not her company directly.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, had no experience with unions affecting her ability to work in any way in the industry.

Some interviewees commented on their experiences as — or with — suppliers and whether their experiences have been affected by their DBE certification. Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that she has not experienced any barriers regarding licensing agreements, pricing or distribution arrangements with manufacturers. She stated that she is able to obtain competitive prices for supplies and was not aware of a supplier giving a DBE firm less favorable pricing.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated he has experienced barriers regarding licensing agreements or distribution arrangements with manufacturers and distributors. He stated that it was clear discrimination in that certain distributors will refuse to quote prices to subcontractors. He is not able to obtain competitive prices for supplies all the time; he stated that sometimes the supplier refuses to quote. He was aware of situations when suppliers have given DBEs less favorable prices or treatment.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, does not feel as though he has had any issues with his suppliers. They have told him that business is slow for everyone right now. He feels he gets the same prices as everyone

else gets from his supplier. Interviewee #CON31 is not aware of any suppliers giving DBEs less favorable prices or treating them unfairly, especially with the state of the economy and the industry, they are just trying to stay above water.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that he has not had any negative experiences with the manufacturers of his cleaning products. He has been successful in negotiating good prices for his products; he is not aware of suppliers or wholesalers giving less favorable prices to DBEs.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that she has not experienced any barriers regarding licensing agreements, pricing or distribution arrangements with manufacturer or distributors. She stated that she is able to obtain competitive pricing.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that he has been able to obtain competitive prices for his supplies and has not experienced any barriers regarding licensing agreements, pricing, or distribution arrangements. He is not aware of a supplier or wholesaler giving less favorable prices to DBEs and stated that if he was he would report it.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, had never experienced any barriers with respect to licensing or distribution agreements or pricing. She is able to obtain competitive prices for her supplies and was not aware of any manufacturer or wholesaler giving DBEs less favorable prices or fair treatment.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that for the most part his experience obtaining supplies has been okay and he purchases his petroleum products directly from the refineries. In the past he has been unable to obtain competitive supplies for his prices, but now he is able to. He was aware of refineries giving more favorable prices to Caucasian-owned companies.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, noted that sometimes the manufacturer will fill large orders first and his smaller business has to wait on supplies; this would hurt their business and their reputation. He was not aware of any suppliers or wholesalers giving less favorable prices to DBEs.

"Good old boy network."

Several interviewees reported having been closed out of an opportunity because the prime contractor utilized a subcontractor within its own network. [Interviewees #CON: 1, 2, 3, 4, 7, 8, 9, 12, 13, 14, 16, 17, 18, 20, 21, 22, 27, 30, 31, 32, 33, 34, 35, 36, 37, 38, 45, 46, 48, 49, 52, 56, 58, CONTA #1, 2]. Many of these firms indicated that "it happens all the time." Several firms, however, noted that this is due to the prime contractor's comfort level with the subcontractor based on their past relationship. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that he has been closed out of an opportunity because the prime contractor used a subcontractor in his own network; he stated

that "it happens all the time." He stated that when a prime contractor finds a subcontractor that he likes to work with, he will very rarely deviate from that. He stated that at his old company, they would have members of the company bid the contract under different names to ensure that someone within their own network would get the job.

Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he feels he has been closed out of an opportunity to be a subcontractor because the prime used a subcontractor within its own network. He says it happens all the time. He stated that this occurred about six months ago. There was a private warehouse design project that came up and Interviewee #CON2 approached the developer, submitted his company's profile, and it never came to fruition. He stated that the contract was awarded to another structural engineer that the developer had worked with.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated businesses are often closed out of an opportunity to be a subcontractor because the prime used a subcontractor within its own network. He stated that it happens all the time, whether the firm is a DBE or not. He stated that prime contractors use a subcontractor with whom they have become comfortable. Interviewee #CON3 stated that the use of DBEs is not required in the private sector, so if you have a non-DBE who a prime contractor is experienced with and a DBE who it is not experienced with, the prime contractor might use the non-DBE.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he is sure there are occasions where his business has been closed out of an opportunity to be a subcontractor because the prime used a subcontractor within its own network, but there is no way to prove it. He did not know of any specific occasions or specific projects. Interviewee #CON4 stated he has done a fair amount of work on county water authority projects within the last five years, the list of projects that he has worked is more than a page long, so he has the experience. But, he explained, certain prime contractors that go after these projects never call his company or invite his company to be on their team nor does he ever receive a courtesy call from those prime contractors requesting that he submit qualifications. Interviewee #CON4 stated that he wonders what the reason is, and he knows it is not because of his capabilities or lack of experience. He stated he does not know why he does not get this work other than that firms have a special relationship with other subcontractors.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that he has known subcontractors who were cut out of a project because the general contractor did not have experience with them and chose to use a subcontractor within its own network. Interviewee #CON7 stated that this has happened as recently as the past few months on non-Consortium projects. Interviewee #CON7 stated that most contractors go with someone who is competent and the question is whether to take a risk on someone new who has no record.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that he has been closed out of an opportunity because the prime contractor used someone within its own network. In the private sector, his perception is that the prime contractor has a relationship with another subcontractor and will tend to use the other subcontractor irrespective of low bid. In the public sector, Interviewee #CON8 has had the

strong feeling that the public agency staff would never select a small firm like his over a large firm because the staff-member could then have an opportunity to work for the large firm when they leave the public sector.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that his business has been closed out of an opportunity because the prime contractor used a subcontractor within his own network. He stated that it is usually understandable when that happens because it is due to friendships and past relationships. Interviewee #CON9 stated that some non-Consortium agencies do not like them but "it is a free country."

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that it is "common" to be closed out of an opportunity because the prime contractor uses someone within their own network. He stated that there are some affiliations that you cannot break. The only way to break such affiliations is to build close ties with the ultimate client who can then advise the prime contractors as to who they should hire.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he has felt closed out of an opportunity because a prime contractor used a subcontractor within their own network. He stated that he has attended some procurements and found out that certain prime contractors are going to bid on large contracts. He stated that his business could help them but the prime contractor often has their standard team in place. He stated that he has felt "locked out" of opportunities to work with those prime contractors. Interviewee #CON13 stated that he does not feel as though he is part of a "network."

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that his company has been closed out of opportunities because the prime used a subcontractor in its own network, but "it goes for everybody." He stated that the Consortium agencies reward companies for having relationships with other companies.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that the business has been closed out of opportunities to be a subcontractor because a prime contractor used members of its own network.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, noted that she has been closed out of opportunities to subcontract because of a prime contractor favoring other subcontractors, but she indicated that this is the result of relationships. According to Interviewee #CON17, the key to success is the quality of her company's work. Interviewee #CON17 notes that favoritism isn't necessarily a bad thing.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, stated that the business has been closed out of opportunities because prime contractors use preferred providers, but noted that prime contractors have every right to do so — it is the nature of the work.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that her business has been closed out of an opportunity because the prime contractor utilized subcontractor in its own network. She stated that this goes back to relationships. Interviewee #CON20 stated that she understands why this happens, but does not feel that it is right.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that she has absolutely been closed out of opportunities because the prime contractor used a subcontractor within its own network. She stated that this is especially the case in the construction, transportation and engineering fields. She stated that she is in the marketing field and several of the prime contractors deal only with a few Caucasian-owned firms. She said this has been the consistent case for the past three years.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she sometimes feels as though she is closed out of bid opportunities because the prime contractor used a subcontractor within its own network. She stated that sometimes teams are put together long before a proposal is put out which forecloses opportunities.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that his firm has been closed out of an opportunity to bid because the prime contractor used a subcontractor within its own network. He noted that they are consultant and they get jobs by developing relationships; if they do not get there first they are shut out.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he has been closed out of an opportunity due to the "Good Old Boy Network" network and that it is difficult to break through.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that it is not easy to break through and be able to work with other agencies. He feels that since he is new and many companies do not know him, the other agencies continue to use companies and people that they already know and with whom they are familiar.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that she realizes the dictates of competition, but teams are usually formed well before an RFP issues. She could not specify a specific instance, but she knew that it has happened.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that with respect to her work with other non-Consortium public agencies, she has responded to multiple RFPs, but has not received any contracts or return phone calls.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that his firm has been closed out of opportunities because the prime contractor used a subcontractor within its own network.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that she has been closed out of opportunities a couple of times because the prime contractor used a subcontractor within its own network.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that prime contractors utilize subcontractors within their own network all the time.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, reported that he has been closed out of an opportunity because a prime contractor used a subcontractor within its own network. He stated that when Caltrans stopped their mandatory requirements for DBE utilization, all of the prime contractors went back to using their own subcontractors. He stated that his work with L.A. County MTA dropped although L.A. County MTA used to have a good DBE and MBE Program. He stated that there used to be better opportunities when contractors were required to utilize DBEs and MBEs.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that over the years he has been closed out of opportunities because a prime contractor used a subcontractor within its own network; he stated that this has happened on more than one occasion.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, stated that his firm has been closed out of a business opportunity because the prime contractor used a subcontractor within its own network but this happens in business. He indicated that this is the reason his firm considers networking to be part of his business growth strategy.

Interviewee #CON56, a white male owner of a small electrical contracting firm, stated that he has been closed out of an opportunity because the prime contractor used a subcontractor within their own network, but stated that this is a normal part of business for most firms.

Interviewee #CON58, a white male owner of an engineering consulting firm, stated that it was possible that his firm had been closed out of an opportunity because the prime contractor used a subcontractor within its own network, but he does not feel as though this has affected the success of his business as a whole.

CONTA #1, the President of the Latino Business Owners of America, stated that he is aware that businesses are often closed out of an opportunity to be a subcontractor because the prime used a subcontractor within its own network. He stated that this happens every day and he things that it is more related to a level of comfort that the prime contractors have with subcontractors that they know in their own network.

CONTA #2, the President of the Black Contractor's Association, stated that his members often feel closed out of an opportunity to be a subcontractor because the prime used a subcontractor within its own network. He stated that it happens all the time on public projects. CONTA #2 stated that he frequently hears this complaint, but could not provide any specific examples. CONTA #2 stated that in relation to other agencies, like the City of San Diego, there is a "Good Old Boy Network" that prevents his members from obtaining work. CONTA #2 stated that last

year, the City issued $400,000 in projects and CONTA #2's members received only $5,200 worth of those contracts, and this year there is zero African American participation.

Other interviewees reported no knowledge of subcontractors being closed out of opportunities because prime contractors used subcontractors within their own network. [Interviewees #CON: 11, 25, 28, 29, 32, 42, 47, 53, 57]. Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, did not know whether she had been closed out of an opportunity due to a "network" because she does not follow up with prime contractors if she loses the bid.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that he does not know if he has been closed out of an opportunity. He stated he is trying to get to know people so that he can get in the door and get a contract.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, did not know whether he had been closed out of an opportunity because the prime contractor used a subcontractor within its own network.

Some interviewees reported the existence of a "Good Old Boy Network" in the transportation industry. [Interviewees #CON: 1, 2, 3, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 26, 27, 28, 30, 31, 34, 37, 38, 45, 46, 48, 49, 54, PF #13, 24]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that there is a "Good Old Boy Network" in existence. He stated that his contractors send their numbers out to people and get repeat work, but he would hope that if someone else had a better price that the prime contractor would use them instead. He stated that he knows for a fact other contractors in the field "help manipulate the environment to better themselves."

Interviewee #CON2, an African American structural engineer, stated that he feels that there is a "Good Old Boy Network" in the transportation industry because 95 percent of the firms who are offering the work are non-minorities and they get the contracts. He stated that it is difficult to pinpoint because many of these companies have been in business for years and are positioned to obtain business, but his company is new. Hence, he stated that it is difficult to tell whether they get more business because of a "Good Old Boy Network" or because they have simply been in business longer.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that the "Good Old Boy Network" exists on some level, but that it is really about offering projects to people or entities that the prime contractor has worked with. The prime contractor will often use the same people. This happens in the private sector as well. Interviewee #CON3 said companies will always have those companies that they want to work with and sometimes this is to the disadvantage of the DBE.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that there "could be" a "Good Old Boy Network" within some agencies wherein the same firms are "connected" and repeatedly selected for work.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated there is "definitely" a "Good Old Boy Network" in the Consortium transportation industry. He stated that he believes that the selection panels are influenced by the various agency boards.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he would guess there is a "Good Old Boy Network", but he does not have evidence of that.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that there is a little bit of a "Good Old Boy Network" among the engineers, but it is not in the same sense as it is in "other industries where you actually use the term."

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated there is a "Good Old Boy Network" in the Consortium transportation industry, but had no specific incidents to report.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, said she knows there is a "Good Old Boy Network" in the industry. At first, Interviewee #CON17 was intimidated, but she is not looked down upon any more; she said she has earned her reputation.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, confirmed that there is a "Good Old Boy Network" network in the industry, but stated that is how you become known and network. Interviewee #CON18 thinks the system can be used as a place to be identified as someone who does good work. She stated that there is value to having these friendships and relationships when the firms know what to expect of each other.

Interviewee #CON19, an MBE-certified African American male attorney, reported that he was aware of a "Good Old Boy Network" network, but did not have any specific examples as it relates to the transportation industry.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that there is a "Good Old Boy Network" with the Consortium transportation industry. She indicated that she cannot even get an appointment to discuss construction related marketing material with some contractors.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that there is a "Good Old Boy Network" in the Consortium transportation industry. She stated that there is a certain amount of work available and the "Good Old Boy Network" tries to make sure that the work is spread among themselves. She feels as though they concentrate on their relationships to help them get the work.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that there are maybe six contractors that get work. He stated that they have a history and a trust and there are some individuals that get work all the time.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated that the "Good Old Boy Network" is alive and well and that it has a lot to do with relationships.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, definitely feels that there is a "Good Old Boy Network." He believes that it is extremely difficult to crack through the wall and get into the network.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated there is no doubt that there is a "Good Old Boy Network." He commented about the fact he is trying to crack the combination to get into this network. He hires all people: African American, Caucasian, Hispanic, Asian, it does not matter to him.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, reported that there is a group of firms that typically get all of the work and he noted that it is hard to crack open that door.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that the "Good Old Boy Network" is alive and well.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that there is a "Good Old Boy Network" within the Consortium transportation industry. He stated that when DBE utilization was mandatory, the prime contractors would go out and competitively seek DBE subcontractors; now that utilization is voluntary, the prime contractors use who they want on the project. He stated that the Minority Business Opportunity Center ("MBOC") is a good organization that performs outreach to encourage prime contractors to work with minority-owned businesses on major projects.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that there is definitely a "Good Old Boy Network" in the Consortium transportation industry. He also reported the existence of a "Good Old Woman Network."

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he could not specifically state that there is a "Good Old Boy Network" in the Consortium transportation industry, but thought that the "Good Old Boy Network" exists everywhere.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, confirmed that there is a "Good Old Boy Network" in the industry, but stated that is how you become known and network. Interviewee #CON18 thinks the system can be used as a place to be identified as someone who does good work. She stated that there is value to having these friendships and relationships when they know what to expect of each other.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that there is a "Good Old Boy Network" to some degree; she stated that all industry is like that.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that "of course" there is a "Good Old Boy Network" in the transportation industry.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, reported that there is a "Good Old Boy Network" everywhere in all industries. She stated that even when she is competitive and goes up against a non-minority company, she will receive various excuses as to why her firm did not receive the work, including that they need more experience or the other bid was just a bit lower.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that she was aware of a "Good Old Boy Network" and they use the same people on their contracts. She stated that she knows this from her own experience dealing with them.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that he did not know about a "Good Old Boy Network," but identified a "buddy-buddy" system throughout the industry. He stated that private sector companies do enough to pass the rules; they will put out a solicitation to everyone, but know ahead of time which companies they are going to use. He stated that about eight or nine years ago he contacted a company about a security solicitation and told them that it sounded like from the solicitation that they intended to give the contract to the incumbent. He indicated to them that he was not planning on suing them, but he did not want to spend the money to respond to the RFP if they had a firm in mind already. He stated the firm finally told him that they planned to use the incumbent. He stated that now he is pretty good at looking at the RFP and determining whether it is geared to the incumbent.

Interviewee #CON55, a white male owner of a construction services and program management firm, stated that there is a "Good Old Boy Network" in all construction.

CONTA #1, the President of the Latino Business Owners of America, stated there is a "Good Old Boy Network" in every agency. He stated that it is the nature of the business. Agencies already know who they want to do business with. He stated that there must be more accountability in the industry.

CONTA #2, the President of the Black Contractor's Association, stated that there is a "Good Old Boy Network" in the transportation industry. He said that a large contractor's association has a motto that states its members do business with its members. He also said a large engineering contractors association, which does a lot of Consortium jobs, has the same commitment to support each other.

PF #13, the President of a woman-owned IT consulting firm provided oral testimony at a public forum held on October 20, 2009. She said, "Our experience with OCTA was very, very frustrating primarily because we watched a contract go to an 'out-of-state' vendor when we were a comparably qualified local vendor, and our rates were competitive." She also stated that whenever her firm sees an RFP with a short lead time (e.g., two weeks) and it is fairly complex proposal, she believes it is an indication that a vendor has already been selected. She suggested that a better monitoring and disclosure process is needed so that small businesses can learn

from their mistakes, and 'emulate' what others are doing right. (Public Forum Los Angeles held on October 20, 2009).

PF #24, an individual representing a minority- and woman-owned business in the field of human capital management provided oral testimony at the public forum held on October 21, 2009. He stated, "The same firms (including minority-owned and other DBEs) always seem to get the contract awards." His main concern was "cronyism," not discrimination. He was also concerned that the dollar amount for the few contracts that are awarded to small businesses is simply, "too low in value to make a living and grow a business." He wants and needs contracts that are above the $3,000, $4,000 and $5,000 range in value. (Public Forum San Diego held on October 21, 2009).

Other interviewees reported no knowledge of a "Good Old Boy Network" in the transportation industry. [Interviewees #CON: 4, 6, 7, 8, 9, 11, 29, 32, 36, 42, 52, 53, 57, 58]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, did not have any thoughts on whether there is a "Good Old Boy Network" in the industry.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, did not feel that there is a "Good Old Boy Network" in the Consortium transportation industry.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that, to his knowledge, there is no "Good Old Boy Network" in the Consortium transportation industry.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, does not believe that there is a "Good Old Boy Network" in the Consortium transportation industry.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, does not believe there is a "Good Old Boy Network" in the Consortium transportation industry.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that she does not believe there is a "Good Old Boy Network" in the Consortium transportation industry and stated that the "contracts people are fair."

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, did not know whether there was a "Good Old Boy Network" in the Consortium transportation industry; he stated that he is just trying to build his company.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she did not know whether there was a "Good Old Boy Network" in the Consortium transportation industry, but stated that companies know who they like to work with and get them back when they can.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, stated that he did not know or care whether there was a "Good Old Boy Network" in the Consortium transportation industry.

Bid shopping.

Several interviewees reported knowledge of or experience with bid shopping by prime contractors. [Interviewees #CON: 1, 2, 5, 7, 8, 11, 12, 14, 15, 16, 20, 22, 26, 28, 31, 32, 33, 37, 38, 42, 45, 46, 47, 52, 53, 54, 55, 56, CONTA #1, 2]. Several interviewees relayed multiple instances of bid shopping having occurred. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, identified a recent case of bid shopping on a nationwide contract and the prime contractor was requiring the subcontractor to accept a 20 percent discount on work performed; he stated that the subcontractor will agree to do this in order to keep getting work in the future. He said that it is extremely disheartening, but it happens all the time.

Interviewee #CON2, an African American male-owned structural engineer, stated that he has experienced bid shopping within the past year. He stated that this occurs in the private sector. He said architects sometimes take proposals from engineers and shop the lowest bid to its preferred consultant. He stated that he is aware of the practice because other engineers sometimes disclose that the architects have shopped the bid to them and awarded the contract. He stated that he tested an architect by slashing his proposal by 50 percent but, even after lowering his price, Interviewee #CON2 did not get the job. The architect went to another engineer and negotiated the contract.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he cannot say that he has heard of instances of bid shopping, but knows that it happens all the time in the industry whether the subcontractor is a DBE or non-DBE. He stated that municipalities and private companies always take three bids in. Interviewee #CON5 stated that the prime contractors generally call him back and tell him what the lowest bid is, and ask if he wants to beat the price and he generally says "no." Hence, he stated, price shopping happens all the time.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that bid shopping is "very prevalent" in the industry, whether or not the subcontractor is a DBE. In fact, Interviewee #CON7 stated that the morning of this interview, he lost a bid on a project to someone else after the contractor shopped the bid.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that he has heard of bid shopping. He has suspected that it has happened on several occasions in the public sector, but none of those instances was with the Consortium. He stated that there is a law that on certain contracts the prime contractors must list the subcontractor's bid to prevent "bid peddling," but his contracts are too small to meet the threshold for this law.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that she has experienced bid shopping in the private sector and people call her all the time to get pricing. She stated that there are strict rules, and she is selected because of low price.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he has been "on the other side" of bid shopping. He stated that he receives calls for bids and he tells his people not to spend a lot of time putting together a proposal, but rather just give them a number.

Interviewee #14, a Latin American male owner of a DBE-certified marketing firm, stated that he has heard of "bid shopping." He stated that another challenge is when the pricing portion of the bid requires the use of a formula that has very little do with the actual project. For example, he stated that a proposal for a marketing plan should be evaluated based on talent and price. However, the more talented the individuals, the more expensive the proposal. He stated that this requires the talented company to underbid the proposal. He stated that sometimes this causes his company to lose a proposal to a company who is less expensive, but has "no idea what they are doing." He stated that these proposals should be evaluated by an experienced marketing planner with transportation experience as opposed to evaluation based on construction pricing.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, has experienced and heard of bid shopping. Companies have asked for quotes and his pricing and then used that information to push preferred contractors' pricing down. Interviewee #CON15 has had subcontractors call him and say, "How is my number?"

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that he has heard of and experienced bid shopping. Interviewee #CON16 notes that these games get played all the time.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that he has experienced bid shopping; this is why he feels he did not get some contracts. He believes that there have been instances where the prime contractor has taken his prices and then found someone to submit a lower bid, despite the quality of the project.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, was aware of bid shopping. She stated that it is prevalent in printing and is a standard part of the contract.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, stated that within the past two years he has had contractors ask for his price, which they will then pass on to their own electrical company so that it knows it must come in under that number. He stated that other times contractors will request a price three days before a bid is due in order to verify the price of their chosen subcontractor. He stated that he no longer provides price quotes to these companies. He stated that his bid is protected only when the prime contractor is required to have 20 percent minority participation; then they will protect his quote.

Interviewee #CON56, a white male owner of a small electrical contracting firm, reported that he was aware of bid shopping.

CONTA #1, the President of the Latino Business Owners of America, stated that he has heard of bid shopping recently. He stated that generally prime contractors make subcontractors lower their prices until they finally bow out.

CONTA #2, the President of the Black Contractor's Association, stated that he has heard of bid shopping. He stated that his members often suspect that the prime contractor provided their quote to another subcontractor to receive a lower quote. As a result, he stated that many subcontractors (whether DBE or non-DBE) call their numbers in five minutes before the bid time because they do not want their numbers shopped. He stated that if they trusted the prime they would send their numbers in a week or a day early. CONTA #2 could not provide the names of any specific projects in which bid shopping may have occurred.

Other interviewees reported no knowledge of or experience with bid shopping by prime contractors. [Interviewees #CON: 3, 4, 6, 9, 10, 17, 18, 19, 21, 25, 27, 29, 30, 34, 35, 36, 47, 49, 57, 58]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that he had not heard of any bid shopping.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he has not directly experienced bid shopping, but does not know whether it has happened to others.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, has never heard of any bid shopping.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that he has not experienced bid shopping although sometimes their business will be told that their prices are too high and that is why the prime contractor stopped calling them.

Bid manipulation/different bid criteria.

Several interviewees reported having experienced or heard of bid manipulation. [Interviewees #CON: 1, 2, 3, 4, 7, 8, 9, 13, 14, 15, 16, 20, 22, 26, 28, 31, 37, 45, 46, 47, 48, 53, 54, 55, CONTA #1, 2]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, stated that he has "absolutely" seen bid manipulation happen. He referenced the example of someone with the prime contractor's firm bidding the project under a different name to ensure that one of the parties will win the contract.

Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he has not heard of or experienced any bid-manipulation directly, but he knows that it clearly happens in the private sector. He stated that he knows for a fact that an architect will look at the low bid price and approach his preferred engineer and say "lower your price to this one and I'll give you the job." He stated that he has not seen this in the public sector.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that there is a lot of speculation about bid manipulation in the public sector. He could not give any examples, but heard of situations as recently as 2000 in which a prime contractor designated a particular DBE for bid and changed the DBE afterward. Interviewee #CON3 stated that a prime can always come up with a reason not to use a DBE. For instance, the prime might say that a DBE did not have enough manpower. Interviewee #CON3 stated that he has also heard of prime contractors satisfying the requirement to use a DBE at the bid stage and then the DBE would not get the work.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that he has not heard of bid-manipulation, but was generally aware that general contractors often sent notices out to subcontractors asking for a price quote 24 hours before the bid was due. He stated that this last occurred four months ago, on a private sector project involving electrical work for a school district.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that he has perceived bid manipulation, but it is very difficult to prove; this experience was not with the Consortium. Interviewee #CON8 provided the example of a State of California RFP that indicated that qualifications came first, and price came second; he did not think this was true.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that bid manipulation "could happen," but he does not have any proof. He stated that once in a while there will be an RFP where the price is supposed to be maintained in a sealed envelope until after the selection of the firm, but sometimes it will be "leaked out of ignorance" by the project manager; they will say "we opened it up and saw how low the other guys were so we picked them." He noted, however, that this has not happened with a Consortium agency.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he has had the experience where non-Consortium agencies have found something that they liked in a proposal they received, and have then issued an addendum to the RFP based on what they saw and what they liked; he stated that this is not fair. Interviewee #CON13 stated that he has also been told by agencies to team up with another contractor to avoid competition.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that bid-manipulation is a "touchy situation," but it "definitely" exists to some extent.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, stated that he has heard of and experienced bid manipulation. Interviewee #CON16 noted that these types of things happen all the time.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she has heard of bid manipulation, but has not experienced it. She stated that when teams do not win a project they will complain of bid manipulation.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that when large companies shop around for bids, even if a minority-owned company has the lowest bid, if they want to use their own people they will use the term "lowest responsible bidder," which allows them to award the contract to the firm that has not submitted the lowest bid.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, reported that he had experienced bid manipulation. He relayed one instance in which he bid a job at $13 million which was as low as he could go. The agency then informed him that they were going to award the contract to another bidder at $11 million. Interviewee #CON47 stated that he went back to his bid, and he removed all profit, overhead, and G&A and got his bid down to the pure cost which was around $11 million — he stated that he could not figure out how someone was able to bid the contract at $11 million. He followed up with a friend who was a friend of someone in the agency; this agency person informed him unofficially that the agency planned to amend the award to get it back up to $12 or $13 million.

CONTA #1, the President of the Latino Business Owners of America, stated that bid-manipulation happens every day. He stated that prime contractors request price quotes from DBEs for bidding purposes, but they do not provide the DBEs with enough time to respond.

CONTA #2, the President of the Black Contractor's Association, stated that he has heard of instances of bid-manipulation, primarily by calling DBE subcontractors to request a price quote the day before a bid is due so that the prime can say that it made a good-faith effort to use a DBE. CONTA #2 stated that this is commonplace and he hears about it periodically. CONTA #2 stated that he has in the past heard of occasions in which a prime contractor represents that it is going to use a DBE, but does not in fact use the DBE.

Several interviewees had never heard of or experienced bid manipulation. [Interviewees #CON: 5, 6, 10, 11, 13, 17, 18, 19, 21, 25, 27, 29, 30, 32, 33, 34, 35, 36, 38, 42, 49, 52, 56, 57, 58]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he has never heard of or experienced bid-manipulation because in San Diego most agencies follow-up. Interviewee #CON4 stated that sometimes he receives an email or call saying that his firm has been listed as someone who was contacted and the agency asks him whether it is true, and whether he submitted a bid. He stated that he is not sure whether the agencies follow-up every time, but once in a while he does receive follow-up and knows that someone is checking. Interviewee #CON4 also explained that when a prime contractor submits a proposal for a project the prime contractor is supposed to have letters of commitment from that subcontractor and if the prime contractor wins the contract it is not easy to change the subcontractor. The prime must obtain prior approval first from the agency and provide reasons why it is changing the subcontractor.

DBE fronts.

Several interviewees reported some knowledge of alleged "DBE fronts." [Interviewees #CON: 2, 3, 4, 9, 10, 13, 16, 19, 20, 22, 25, 27, 28, 30, 31, 33, 34, 36, 37, 38, 42, 45, 46, 48, 49, 54, 55, 56, CONTA #2]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he hears about DBE "fronts" "all the time." Often times, he stated that the DBE is certified because the wife of the person who operates the business is listed as the owner. He stated that he has heard of DBE "fronts" as recently as a couple of years ago, but could not recall any specific projects.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that the downside of the DBE Program is that there are often businesses certified as woman-owned but women have no involvement in the actual operations. Interviewee #CON3 stated that he is aware of a drilling subcontractor in the environmental business commonly used and certified as a woman-owned business, but the female owner did know much about the area and was not a geologist. He stated "it was a scam." This company obtained projects through the Consortium and the Consortium qualified them. Interviewee #CON3 stated that when he was employed at his previous firm, between 1990 and 1995, he thought that half to two-thirds of the subcontractors held their certification improperly. It was not always under the circumstances of a woman-named the proprietor.

Interviewee #CON3 also described other DBE "fronts" including an analytical laboratory that had a woman-owned business designation, and "sham" drillers on assessment projects. He recalled that the DBEs he felt were shams did work for the Consortium, but could not recall any projects that they worked on.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he has heard of DBE fronts. He was aware about 10 years ago of a business certified as a woman-owned business, but the wife who was owner was actually never involved in the business and the husband was running the show behind the scenes. Interviewee #CON4 stated that he is not aware whether the company obtained work through the Consortium, and could not recall any particular projects that they worked on.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, has heard of DBE fronts but has not "dealt with it much recently." He stated that sometimes this happens with a WBE firm where the wife is supposedly in charge but that is rare. He could not think of any MBE fronts.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, had heard about DBE fronts in the news. She stated that the SBA newsletter reported an incident several months ago about a firm that was not a minority at all. She stated that it is her understanding from the SBA newsletter that the SBA now has to go and investigate firms to make sure that they are in fact qualified.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he has heard of DBE fronts and provided the example of

a husband and wife team where the wife is the listed president, but the husband is really in charge of the company.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, has heard of DBE "fronts" posing as minority companies to get various contracts. Interviewee #CON16 stated that this often happens with suppliers and vendors where it is easier to write contracts around various industry standards and requirements for minority business use.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she had heard of DBE "fronts," but it was her recollection that this occurred more in the 1980s and 1990s when the DBE Program had just begun.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that he had heard of DBE fronts a long time ago, but he did not have any first-hand experience with this.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, had heard of instances of business fronts where the minority or DBE does not truly own the company.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he has heard of DBE fronts, but he's not sure about them.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that he has heard of DBE fronts. He stated that the L.A. County MTA comes to your house and looks at what you have and they want to see that you are disadvantaged; he noted that he had experienced a DBE front though. There was an instance in which he observed a DBE front where the wife of the person running the business was listed as its primary owner. This was in order for their business to receive certification as a female-owned entity. He said the husband has been a bricklayer his whole life and his wife was able to get certification and they now qualify for projects that he could not get because they are competing for the same types of funds.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that she has heard of DBE fronts. She provided the example of the wife being a nurse or a real estate agent and they open an engineering firm and the husband is an engineer; she stated that they do this to try to get business as a female/minority-owned firm.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, reported that he has heard of DBE "fronts." He stated that this is usually in the form of a female-owned business that is actually run by the woman's husband or someone else.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, reported that she had heard of DBE "fronts" about three or four years ago; she heard that men would list females or minorities, like a cousin, as the business owner in order to obtain work.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, stated that he was aware of a few DBE fronts in particular.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that he has heard of Caucasian women posing as a business owner in order to qualify for DBE certification.

Interviewee #CON56, a white male owner of a small electrical contracting firm, reported having worked at a firm in the past that he believes operated as a DBE but was a "front." He stated that the firm reportedly had a female owner, but she was the owner in name only; her husband was actually the managing owner of the organization.

CONTA #2, the President of the Black Contractor's Association, stated that he has heard of DBE "fronts" but could not say that he knew of a DBE front. He stated that he has sometimes seen teaming between a non-DBE and DBE firm to obtain projects.

Some interviewees reported that they had never heard of "DBE fronts." [Interviewees #CON: 1, 5, 6, 7, 8, 12, 14, 15, 17, 18, 21, 26, 29, 32, 35, 47, 52, 53, 57, 58, CONTA #1].

False DBE reporting.

Some interviewees reported experience with or knowledge of false DBE reporting. [Interviewees #CON: 3, 10, 19, 20, 22, 27, 28, 31, 35, 36, 37, 38, 45, 48, 49, 55, CONTA #1].
Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that he had not heard of false DBE reporting but also relayed the following example: he stated that he has heard of situations as recently as 2000 in which a prime contractor designated a particular DBE for bid and changed the DBE afterward. Interviewee #CON3 stated that a prime can always come up with a reason not to use a DBE. For instance, the prime might say that a DBE did not have enough manpower. Interviewee #CON3 stated that he has also heard of prime contractors satisfying the requirement to use a DBE at the bid stage and then the DBE would not get the work.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, had heard of false DBE reporting. Interviewee #CON10 stated that other non-Consortium agencies have a team to ensure that prime contractors properly make a good faith effort to utilize DBE subcontractors. She stated that she has received a phone call from the team to ensure that she was a DBE and was contacted by the prime contractor.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that she has heard of false DBE reporting. She noted that it had been a while, but she had heard of a company receiving 10 percent of the work and having it reported that they received 25 percent.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that in the 1990s their firm was a DBE on a rail project and the prime contractor inflated his firm's hours for reporting purposes. He stated on another occasion, a

prime contractor used their name without their permission to win work; they only found out about it by accident after receiving some mail.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, was aware of instances where prime contractors have falsely reported DBE participation in contracts.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, stated that on some non-Consortium projects she has submitted a bid, been listed as a subcontractor, but then does not receive any work.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, reported that a lot of contractors will bring on a DBE or MBE to buy something and then pay them 8 percent above the cost for their effort. For example, if the prime contractor needs the DBE to do 15 percent of the work and that is $250,000.00, the prime contractor will have the DBE purchase the materials from a designated supplier and will pay the bill and pay the DBE 8 percent for their effort; the DBE, however, is never physically on the job. He stated that passing work to buy the materials to a minority subcontractor in order to meet a goal is not the way the DBE Program was intended.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that he has heard of false DBE reporting as it relates to white female-owned firms being utilized on projects. He also reported an instance of a large company deciding not to use DBEs after they had included DBEs on their proposal. He stated that the company came up with a number of "thin-veiled" excuses to get out of using the DBEs.

CONTA #1, the President of the Latino Business Owners of America, stated that he has heard of false DBE reporting, but could not recall any specific details.

Most interviewees reported no knowledge of false DBE reporting. [Interviewees #CON: 2, 5, 6, 8, 9, 12, 13, 14, 15, 16, 17, 18, 21, 25, 26, 29, 30, 32, 34, 42, 46, 47, 52, 53, 54, 56, 57, 58, CONTA #2]. Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, had never heard of or experienced false DBE reporting or prime contractors falsifying their good faith efforts to utilize DBEs. He stated "I'm not saying it does not happen but I haven't heard of it."

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he has not experienced or heard of false DBE reporting, but he is "not in a position to know."

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, was not sure if he had heard of false DBE reporting.

A few interviewees reported that they had no direct knowledge of false DBE reporting, but were "sure" that it has happened. [Interviewees #CON: 1, 4, 7, 33]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, had never heard of false DBE reporting or of prime contractors falsifying their good faith efforts to utilize DBEs although he is "sure that it happens."

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he has never heard of any false DBE reporting, but he is sure that it has probably happened.

Interviewee #CON7, a non-DBE white male owner of a solar hydrogen fuel cell sales and installation company in the San Diego area, stated that he does not specifically know of any false DBE reporting, however, he is sure that it happens.

Good faith efforts.

Many interviewees reported perceptions of instances where prime contractors did not use genuine good faith efforts to locate qualified and available DBE subcontractors. [Interviewees #CON: 3, 4, 7, 8, 11, 12, 13, 16, 18, 20, 21, 22, 26, 27, 28, 30, 31, 33, 37, 38, 45, 46, 47, 48, 49, 54, 55, CONTA #1, 2, PF #5, 7, 10, 14, 15, 16, 22, 23, 6]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, recalled situations in 2000 where it was rumored that a prime falsified its "good faith efforts" to utilize DBEs. He stated that the prime simply explained that it could not find a DBE.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he does not think that prime contractors really make an effort to falsify their "good faith efforts" to utilize DBEs. His impression is that most prime contractors are just going through the motions when it comes to good faith efforts. They have to do it so they advertise and send faxes or emails or letters. Interviewee #CON4 stated that he does not think that they are doing it in an earnest way because often he receives a RFP with very little time on the clock left, and there is no way his firm can put together a proposal in two days or so. For example, recently he received a RFP on a fairly large project for a public agency and the prime wanted a proposal in two days; his firm could not put it together.

Interviewee #CON7 stated that he is generally aware that prime contractors falsify their "good faith efforts" to utilize DBEs. This often occurs when the prime contractors wait until twenty-four hours before a bid is due to notify DBEs of the bid.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that he has heard of prime contractors falsifying their good faith efforts to utilize DBEs, but not on Consortium projects.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that people do falsify their good faith efforts and they are just trying to satisfy the requisite criteria.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he did not have evidence to show that a prime contractor had ever falsified his good faith efforts. But, he stated that on one contract he did not think the prime contractor who won had met the DBE goal or satisfied the good faith efforts.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he receives a lot of inquiries from prime contractors doing business with the City of Los Angeles asking whether he is interested in participating on a

project; he stated that he always responds that they are interested, but he "never" gets a response from the prime contractor.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, thinks that good faith efforts are "the biggest joke out there." Interviewee #CON16 receives faxes all the time from companies seeking to certify that they have sought out minority businesses as subcontractors and meeting good faith effort standards. A lot of times Interviewee #CON16 receives these faxes for services totally unrelated to his business or sometimes a day before a bid is due — the company cannot even put a bid together in that short amount of time. "These companies are trying to bypass the system and use a loophole."

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, reported that she has heard recently about prime contractors falsifying their good faith efforts, and that this practice is ongoing.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that prime contractors will go through the effort, but already have a firm in mind. He stated that they have been helped and hurt by this, and he believes that it is the way the system works.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he feels that this has happened to him where he's received information about an opportunity, but did not hear back primarily because the prime contractor was reaching out to DBEs only because of the good faith effort requirement, which wasn't enough to actually get the contract awarded to him. It was simply an attempt to get his information to be included in a report as a "good faith effort."

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, said that often prime contractors will send him information to bid on projects for plumbing and drainage, but he is a masonry contractor. He stated that the prime contractors are just going through the step of showing a so-called good faith effort, but they are not really trying to get a subcontractor.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that she perceives prime contractors do falsify their good faith efforts. She stated that she came close to fighting a company's claim of good faith efforts a couple of times, but she did not want to spend the time trying to prove it. She wanted instead to put forth her effort at finding new business.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he has heard of contractors falsifying their good faith efforts, but that it is just the nature of the business and it is not going to change during his lifetime.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, indicated that he believes all prime contractors falsify their "good faith efforts" to utilize DBEs.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that he has received telephone calls and faxes asking him to be a subcontractor; he sends in information, but never hears back from them. He stated that within the past six to eight months, he has provided information to four companies, but has not heard back from any of them. He stated these companies may then tell the government they solicited DBEs but could not find anyone. He also indicated that prime contractors can have someone within their own company fill out the paperwork to become a DBE, and then they can award the jobs to them.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that he has heard of contractors falsifying their good faith efforts to utilize DBEs; he believes that this was reported, but nothing was done to rectify the situation.

Interviewee #CON55, a white male owner of a construction services and program management firm, reported that he has heard all the time about prime contractors falsifying their good faith efforts to utilize DBEs.

CONTA #1, the President of the Latino Business Owners of America, stated he believes that prime contractors do falsify their "good faith efforts" to utilize DBEs. He stated that they put in a little effort and simply say there was no response and then use a non-DBE. He stated that there is no way for the agency to go back and find out if the prime contractor actually requested any price quotes from DBEs. He stated that there is no monitoring of the prime contractor's "good faith efforts" and whatever the prime contractor reports is accepted by the agency. He stated that he last heard of this occurring this year.

CONTA #2, the President of the Black Contractor's Association, stated that prime contractors often falsify their "good faith efforts" to utilize DBEs by providing only a 24 hour notice of an invitation to bid so that they can have a file letter indicating that they made a good-faith effort to use a DBE. Subcontractors then have very little time, if any, to submit the quote. CONTA #2 also stated that he has heard members say that they have seen their names on bids, but were not used or the member was substituted.

PF #5, an individual representing a certified DBE/SBE public relations firm provided oral testimony at the public forum held on October 20, 2009. His concern was that when prime contractors make their good faith effort that it is not actually done in good faith. He said that the prime contractors make demands and request certifications with urgency and then they never follow through with the subs or rarely, if ever, do they actually award a contract to subs. He said, "You don't risk not sending anything because then you truly get nothing. But that's what the ultimate results are – not getting work whether you respond to a Primes request, or not. I think it is exceedingly unprofessional. What can be done about it?" (Public Forum Los Angeles held on October 20, 2009).

PF #7, an African American woman representing a certified MBE environmental company voiced frustration with the certification process and the solicitation process by prime contractors. She said, "I have to prove over and over again that I'm still a black person, for instance." She stated that the prime contractors are disingenuous in their outreach efforts to truly include minorities and award contracts to minority subcontractors. She stated that the primes are only contacting minority businesses to claim that they have done their due diligence, but their efforts are not

genuine. "The primes simply want to include the fact that they have made their outreach efforts by contacting us in their proposals, but they have very little intention of providing the work to us." She also wants more work set aside for DBEs and to stop cronyism. She wants to see an improvement and increase in outreach efforts to minority businesses, which should increase their participation in actual contracts. (Public Forum Los Angeles held on October 20, 2009).

PF #10, an individual representing an engineering firm stated, "I'm an architect at an engineering company, and I can see since when I first came in 1978 there's a change in how contracts are given to minority firms." It is his contention that since the abolishing of affirmative action, there is no mandate or requirement for large corporations to give contracts to small minority firms. "It needs to be a part of our culture." (Public Forum Los Angeles held on October 20, 2009).

PF #14, a female Hispanic individual representing a non-profit organization of Latin business owners, stated that her organization searches for RFPs and forwards the information to their members. She and her organization have serious doubts about the validity of the good-faith efforts by prime contractors. She said, "Good-faith efforts does not work for us, and I mean, we hear it all the time. It's not effort any more. I think we need to go beyond that step and build true partnerships to give true access to the minority businesses." (Public Forum Los Angeles held on October 20, 2009).

PF #15, an individual who represents a DBE certified testing and inspection firm provided oral testimony at the public forum held on October 20, 2009. She had an issue with the lack of genuine good-faith efforts made by primes. She described the good-faith process as disingenuous, and said it only serves to provide primes with validation that they made an effort, but it does not validate that they awarded work to DBEs and other small businesses. The good-faith efforts need to be mandatory. (Public Forum Los Angeles held on October 20, 2009).

PF #16, an African American woman who represents a computer supply company as well as an African American Chamber of Commerce provided oral testimony at a public forum held on October 20, 2009. She stated that there is a lack of an authentic, verifiable, and enforced good-faith effort by primes. "I have been in business for 11 years. The joke about good-faith in the small business and minority communities is to refer to the good-faith as the 'Good-Fake' effort." She also stated, "I think we need to put some teeth in the program. There should be a penalty. There should be penalties in the program… make mandatory requirements, so it's not just a good-faith estimate effort." She stated that transparency is crucial. (Public Forum Los Angeles held on October 20, 2009).

PF #22, an individual representing the interest of black-owned firms provided oral testimony. He began with the statement, "Without goals (hiring quotas for black-owned businesses), black-owned firms do not and will not receive contracts from large white-owned firms." He gave an example of being offered only $600 by a prime contractor when the total contract was worth $7.6 million. He believed that the prime was only offering this work to the minority-owned firm to fulfill their minority-owned business mandate, which was very insulting. During the public forum, he made a request that mandatory goals be included in all contracts. He stated that, "Good faith effort language is grossly insufficient to compel large primes to hire DBEs." (Public Forum San Diego held on October 21, 2009).

PF #23, an individual representing a woman- and Asian Pacific-owned firm provided oral testimony at a public forum held on October 21, 2009. Her firm went through the entire process to secure a contract with a large prime contractor. "It was a great deal of work, time, and costs that had a zero return for our efforts." She stated that it was a common experience for her firm and other small business owners to do all that is required, and then not hear back from a prime and not be accepted. She stated that the primes are just going through the motions of their due diligence to conduct outreach to small business, but have little or no genuine intent to award a subcontractor a portion of the work. (Public Forum San Diego held on October 21, 2009).

PF #6, an individual representing his company stated that it's the prime contractors who insist on a subcontractor sending certifications, without delay, and then the prime never gets back to the subcontractor. The subcontractors, he said, are at the mercy of the primes, without any enforcement or oversight for their business practices or lack of contracts awarded. The individual stated, "It is very frustrating." (Public Forum Los Angeles held on October 20, 2009).

Other interviewees reported that they had never heard of or experienced a prime contractor falsifying its good faith efforts. [Interviewees #CON: 2, 6, 14, 15, 17, 19, 25, 29, 32, 34, 36, 42, 52, 53, 56, 57]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he has not heard of or experienced prime contractors falsifying their "good faith efforts" to utilize DBEs.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, has never heard of any prime contractors falsifying their "good faith efforts" to utilize DBEs.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that he has not heard of a prime contractor falsifying their good faith efforts to utilize DBEs. Interviewee #CON14 stated however that no one audits contracts to determine what was proposed as far as DBE participation (and, presumably actual participation).

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, has been approached by companies regarding "good faith efforts." Interviewee #CON17 gets a lot of requests that she thinks are for the purpose of making good faith efforts because the company is listed in certain directories as being a contractor rather than a professional services firm.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she could not say for sure whether she was aware of prime contractors falsifying their good faith efforts, but noted that prime contractors use the firms that they want to use.

Recommendations related to good faith efforts.

Some interviewees recommended the Consortium more closely monitor DBE utilization and good faith efforts. [Interviewees #CON: 15, 16, 22, 24, 26, 36, 37, 40, 45, PF #18, 20]. Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, stated that more stringently enforced good faith efforts rules would help with compliance. He felt this is largely non-existent.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, thinks that good faith efforts should only be considered when the efforts are made in the relevant service industry and with enough time for bids to actually be completed. Otherwise, good faith efforts are completely meaningless.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, stated that the Consortium should be more consistent in its visits to work sites.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, stated that the Consortium needs to monitor the amount of the contract that is supposed to go to a DBE and the percentage that actually does. She stated that prime contractors need to be held accountable and show that monies set aside for DBEs are actually used for DBEs. She stated the Consortium should also monitor prime contractors' use of "best efforts."

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, stated that the Consortium should hold prime contractors more accountable for using DBEs on their contracts thus preventing them from using DBEs to meet bid requirements and then not using them when they are awarded the contract.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that the Consortium should perform an audit to make sure DBEs are getting the work that they are supposed to get.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, recommended stated that the Consortium should monitor DBE utilization to ensure that the process is fair and business deals are not made because of relationships. He stated that the Consortium should not make small businesses and firms always compromise to get a piece of the pie. He stated that there must be some kind of oversight to make sure the process is what it is intended to be.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, stated that the Consortium should have a system in place to monitor the worksites and the business relationship between the prime contractor and the DBE. He stated that the DBEs should not be doing 25 percent of the work when the contract only reflects them doing 10 percent of the work. He stated that in order to avoid disputes later, all levels should meet at the beginning of the project and come to an understanding so that they are all on the same page when the project begins. He stated that the agency should stay involved in each

project and there should be a mediator. This is so that no one will suffer, especially the DBE; he stated that the DBE cannot roll through problems.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, recommended that the Consortium monitor prime contractors and make sure that they are utilizing DBEs when required. She stated that the Consortium should take into consideration that DBEs are DBEs for a reason and they need to be given an opportunity to showcase their abilities to give them the ability to graduate from their DBE status. "They need to make prime contractors use the DBEs. DBEs should be referred to the prime contractors that are shortlisted for projects. [DBEs] need to be informed more than three days before a bid is due. The only letters they receive are about renewing their certifications, but nothing more than just that …. There is no way to ensure you get the work after you are solicited. You wonder if [they] wanted to use you in the first place or did they have someone else in mind from the beginning." She stated that firms are not being compliant.

PF #18, an individual representing an African American-owned private investigation small business provided oral testimony at a public forum held on October 20, 2009. His concern was that minority-owned businesses are being used and manipulated by prime contractors and others to secure federal contracts. He stated that once the federal contract is awarded, there is no participation or monies that flow to the minority business that helped the prime look good to the federal government. He suggested that there needs to be enforcement to verify participation by the small businesses identified in the primes' proposals. (Public Forum Los Angeles held on October 20, 2009).

PF #20, a Hispanic man representing a certified MBE/DBE firm as well as an organization of Hispanic contractors provided oral testimony at a public forum held on October 21, 2009. He stated that while he has been in the database as a qualified MBE/DBE for four years, his firm has only been selected for one project during that time. He asked, "How many contracts have been awarded to disadvantaged companies?" and, "Why do Primes have the right to waive contract goals for minority owned business?" He felt the right to waive contract goals was an impediment to small business contractors securing work with prime contractors. (Public Forum San Diego held on October 21, 2009).

L. Participation in and Awareness of Race- and Gender-Neutral Programs or Measures

BGPAA Study Anecdotes Regarding Participation in and Awareness of Race- and Gender-Neutral Programs or Measures

Outreach programs.

Several interviewees had participated in or were otherwise aware of race-, ethnic-, and gender- neutral programs outreach efforts. [Interviewees #BGP: 1, 10, 15]. Interviewee #BGP1, the African American male owner of an MBE/DBE-certified architecture firm, stated that most public agencies are doing a great job with their outreach.

Interviewee #BGP10, a principal at an engineering firm, reported that the Metropolitan Transportation Authority of Los Angeles County (Metro) has the largest outreach effort of which he is aware to help firms obtain business, and the U.S. Army Corps of Engineers also has a program.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she was aware of outreach efforts to increase participation by MBE/WBE/DBEs. She said that the "LA Airport… just recently … [held] seminars … and … open[ed] up the floor, so [companies could] meet all of the buyers" and obtain a list of primes. She said that she thought that the Los Angeles Airport Authority was "doing a very good job."

Several interviewees were not aware of any race-, ethnic-, or gender-neutral programs sponsored by the Airport Authority aimed at increasing small or disadvantaged business participation by increasing their opportunities and skills. [Interviewees #BGP: 10, 11, 12, 13, 14, 15, 16, TA #2]. Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he is not aware of the Airport Authority providing outreach efforts to notify businesses of how to obtain work with the Authority. He said that he, along with several other people, met with BGPAA recently to have a roundtable discussion about how to obtain work with the Authority. He said, "Prior to begging and pleading for that to happen, it never would have happened." He said that they discussed "how to utilize outreach programs, how to implement accountability for [African] Americans and ethnic groups to participate in this tier subcontracting, and encouraging them to hold general contractors liable and responsible for listing their subs and utilizing the subs listed." He said that he was satisfied with the responses he received from the Authority at the meeting.

Some interviewees were aware of financing, bonding, or insurance assistance being provided. [Interviewees #BGP: 4, 6, 9, 10, 15, 16, TA #1, TA #2]. Interviewee #BGP4, a project manager of a WBE-certified construction firm, said that financing assistance is "absolutely essential" for small businesses.

Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that they believe the City of LA offers assistance in obtaining insurance.

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm said that bonding, insurance and financing programs "would be beneficial for anyone."

Interviewee #BGP10, a principal at an engineering firm, said that he is aware of programs provided outside of the Authority to aid in obtaining bonding, insurance or financing.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that "El Camino at the Junior College [and] Harbor City College … hold classes all of the time" to assist small businesses and to teach them "how to obtain bonding," financing, and insurance. She said "that information is available on the City of L.A. Business Network."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, reported that he thinks that there are programs in the community that assist with bonding, insurance, or financing. He said that he did not know what they were, but "there's talk of it in some of the bids that have gone out. They offer resources to help with bonding."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that finance, bonding, and insurance assistance is helpful "for some people." He said that despite assistance programs, financing, bonding and insurance is "hard to get unless your paperwork looks like [Caucasian] folks' paperwork."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he is aware of programs that assist businesses with financing, bonding and insurance. He is not aware of any programs through the Authority to assist with bonding and that was discussed at the meeting he had with the Airport Authority. He said that programs to assist with financing, bonding and insurance are beneficial to small businesses.

Other interviewees were not aware of any programs to assist firms with financing, bonding or insurance. [Interviewees #BGP: 12, 13].

Some interviewees were aware of educational programs or training programs being made available to businesses. [Interviewees #BGP: 6, 9, 13, 15]. Interviewee #BGP6, the president and marketing coordinator of a WBE-certified engineering firm, said that most people are already trained but that "pre-jobsite trainings, like safety training sessions, are helpful."

Interviewee #BGP9, the owner of a non-certified Hispanic American-owned security services firm said that training programs "would help all businesses."

Interviewee #BGP13, the owner of a non-certified construction firm, reported that ABC (Association of Builders and Contractors) offers continuing education for "journeymen electricians as well as some of the staff. Some of that training might not be necessarily trade oriented. It might be CPR or OSHA training or something like that, … but … electricians are required to get 32 hours of training" and "have to recertify every two or three years." He said that employees pay for their own training.

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she was aware of educational training opportunities and that "South Bay Regional Community Center and adult schools" advertise "courses on how to start your own business, [keep] your books, Quicken for business, that sort of thing."

Streamline bidding.

Some interviewees reported awareness of efforts by the Airport Authority to streamline the bidding process. [Interviewees #BGP: 12, 16]. Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, stated that they were aware of efforts to simplify or streamline the bidding process with airport authorities and said that

ERSP has a really "neat program that [Los Angeles] just implemented last month." They said that the program allows companies to subscribe and then sends subscribers e-mails, "sometimes too many, but that's fine," with information regarding "items that they have coming up for bid throughout their entire agency. The thing that makes it unique is how quickly the communication happens because" the agency provides an e-mail address and a telephone number, "and they're very, very good, at least at this point, in getting back to you. They're terrific. If you call them and [leave them a voicemail], they'll call back usually within the hour. Often times, someone picks up the phone, and it's who you're looking for. It's excellent so far. It's only a month old."

Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, reported that the Authority has made efforts to streamline or simplify the bidding process in the past, and his company actually assisted BGPAA in its efforts.

Most interviewees reported no awareness of or experience with Airport Authority efforts to streamline the bidding process. [Interviewees #BGP: 10, 11, 13, 14, 15, TA #2]. Interviewee #BGP10, a principal at an engineering firm, said that he is unaware of efforts by the Authority to simplify or streamline the bidding process, but he said that he does think that streamlining the process would be beneficial. He said that agencies should always have a page limit for proposals between 10 and 30 pages so that proposers and agency personnel do not use excessive amounts of time preparing and reading the proposals.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he was unaware of any efforts by the Authority to simplify or streamline the bidding process. He said that whether simplifying or streamlining the process would be beneficial would depend "upon the provisions that they're streamlining" and what is left after BGPAA eliminates some of the excess.

Interviewee #BGP13, the owner of a non-certified construction firm, reported that he is unaware of efforts by the Authority to streamline or simplify its bidding process, but he said that some things have been streamlined industry-wide over the years with the use of computers and the internet.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that he was not aware of any effort by the Authority to simplify its bidding process. He said that it may take the company "a month to put a bid together for LAX, and that's five people here working on it as much as they can. [To prepare a bid for] Burbank Airport, one person can handle the project and putting it together."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she is unaware of BGPAA or any other airport authorities making an effort to streamline the bidding process "because everything is on-call now, and it's pre-qualified on-call."

Unbundle contracts.

Some interviewees reported knowledge of efforts by public agencies to unbundle large contracts to make them more accessible to small businesses. [Interviewees #BGP: 13, 15, 16, TA #2]. Interviewee #BGP13, the owner of a non-certified construction firm, said that he thinks that BGPAA has pursued efforts to unbundle large contracts in the past "where a project might be hard for one contractor to bond" to make it "a more fundable project." He said that unbundling the projects "makes the work a little bit more accessible."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, said that she was aware of efforts to unbundle large contracts. She said that "the California High Speed Rail [is] … trying to figure out how … they're going to be bundling things." She said that they are considering bundling plans that would create "opportunity for small businesses to … submit bids."

Interviewee BGPTA #2, the president of the Southern California Chapter of the National Association of Minority Contractors, said that he is not aware of any effort by the Authority to unbundle large projects. He said that he is aware of other public agencies unbundling larger projects to make them more accessible to small businesses. He said that unbundling large projects would be beneficial to its members.

Most interviewees reported having no knowledge of or experience with efforts by public agencies to unbundle large contracts to make them more accessible to small businesses. [Interviewees #BGP: 10, 11, 12, 14]. Interviewee #BGP12, a general manager and an account manager of a WBE/DBE-certified construction supply firm, said that they were unaware of an effort by any public agencies to unbundle large projects and do "not necessarily" think that such efforts would be beneficial to small businesses.

Segment larger contracts into smaller contracts.

Some interviewees reported knowledge of Airport Authority or other public agency efforts to segment larger contracts into smaller ones. [Interviewees #BGP: 10, 14, TA #1]. Interviewee #BGP10, a principal at an engineering firm, said that some public agencies segment larger projects into smaller ones, and this is good to keep the agencies from getting too tied to any individual firm. He stated that projects should not be broken up into pieces that are too small because that would cause the agency too much hassle with administrative costs. He said that a large project may effectively be split into a couple of projects. Interviewee #10 reported that he is not aware of the Authority having what he would consider larger projects that would be segmented.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that the Authority will "segment out the contracts" to some extent because they are able to do a lot of the work in house. He said, "the less they do in house … [the more they] rely on primes to handle more of those things."

Interviewee BGPTA #1, the executive director of the Young Black Contractors Association, said that breaking up large contracts into smaller pieces is "a great thing, but even when they break them up the bigger guys still get control of them; they still get it."

Most interviewees reported having no knowledge of or experience with Airport Authority efforts to segment larger contracts into smaller ones. [Interviewees #BGP: 11, 12, 13, 15, 16, TA #2]. Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he was unaware of any efforts by the Authority to segment larger contracts into smaller contracts, but he thought that such efforts would be helpful. He said that an opposing effort to make projects more condensed and larger seemed to be underway at the Los Angeles Airport.

Price or evaluation preferences for small businesses.

Some interviewees reported awareness of price or evaluation preferences for small businesses. [Interviewees #BGP: 2, 4, 5, 15]. Interviewee #BGP2, the sales manager of an Asian American-owned MBE/WBE/DBE-certified maintenance and repair firm, said that price and evaluation preferences for small businesses are useful. He said, "We usually get a 5 percent preference for being a small business, but it could be more."

Interviewee #BGP15, the owner of a Hispanic American woman-owned MBE/WBE/DBE-certified engineering and construction support services firm, stated that she is aware of some price or evaluation preferences for small businesses. She said that the "City of L.A. [has] … local agencies [that will] …give you … like a percentage."

Most interviewees reported no knowledge of or experience with price or evaluation preferences for small businesses. [Interviewees #BGP: 10, 11, 12, 13, 14, 16, TA #2]. Interviewee #BGP10, a principal at an engineering firm, reported that he is not generally aware of any price or evaluation preferences for small businesses on projects. He stated that California has a small business 5 percent preference, but he said that that really applies to supplying goods and contracting services, and the firm does not benefit from that.

Monitor utilization.

Most interviewees reported no awareness of Airport Authority efforts to monitor MBE/WBE/DBE utilization throughout a project. [Interviewees #BGP: 10, 11, 13, 14, TA #2]. Interviewee #BGP10, a principal at an engineering firm, said that he is not aware of monitoring MBE/WBE/DBE utilization by the Authority on a jobsite, but he said that he thinks that the prime is required to inform BGPAA of how much of their fee went to utilizing such firms so that the Authority can use federal funding.

Interviewee #BGP11, a manager of an Asian male-owned DBE-certified cleaning services company, said that he never witnessed officials from BGPAA or from the Los Angeles Airport visiting a worksite to monitor the MBE or DBE utilization on a project.

Interviewee #BGP13, the owner of a non-certified construction firm, said that he is not aware of any compliance efforts or monitoring by the Authority. He said that in general, not just at the

Authority, "[t]he [only] place I ever see it is maybe in a bid invitation." He said that he usually only sees it in the public sector during pre-qualifications when he may be asked if the company has any particular certification.

Interviewee #BGP14, a manager of an MBE/WBE-certified equipment supplier and installer, said that he was unaware of the Authority visiting work sites to monitor MBE/WBE or DBE utilization but did know that they would visit sites "to monitor how … the project is going."

One interviewee reported awareness of Airport Authority efforts to monitor MBE/WBE/DBE utilization on work sites. [Interviewee #BGP: 16]. Interviewee #BGP16, a manager of a non-certified engineering and information technology firm, reported that either the Authority "or somebody that works with them" monitors MBE/WBE/DBE utilization on jobsites.

SDCRAA Anecdotes Regarding Participation in and Awareness of Race and Gender-Neutral Programs or Measures

The following anecdotes regarding participation in and awareness of race-, ethnic-, and gender-neutral programs or measures were obtained from interviews that the study team conducted in connection with BBC's 2009 SDRCAA study.

Outreach programs.

Many interviewees had positive or neutral opinions about public agencies hosting outreach programs. Interviewee #SD20, representing an Asian American male-owned firm, stated that agency outreach programs are very useful for minority- and female-owned firms. He went on to say and that the Airport does a good job with such programs. Interviewee #SD21, representing a white male-owned firm, said that he believes that agency outreach programs are helpful to small firms (including MBEs/WBEs).

Interviewee #SD25, representing a white male-owned firm, said that networking opportunities are crucial for small firms in order to establish themselves. He went on to say that the networking events that the Airport has hosted have been very useful.

Interviewee #SD28, representing a white female-owned firm, indicated that she thinks that outreach programs are one of the most effective remedies that agencies can implement. She said that it gives small firms an opportunity to network with and learn about prime contractors in the area and vice versa.

Interviewee #SD30, representing an African American male-owned firm, indicated that he supports agency outreach events, particularly if the prime contractors that are invited to those events have "a proven track record of actually using [MBE/WBE] firms."

Interviewee #SD31, representing a white male-owned firm, indicated that outreach events are quite beneficial to small firms that are trying to develop relationships and make contacts with public agencies and prime contractors: "It's all about access, and anything that gives me access [to the decision makers] is good."

Interviewee #SD43, representing a Hispanic male-owned firm, reported that the Small Business Administration has helpful programs in place for small businesses, particularly as it relates to learning about work: "… [As a result of the SBA's efforts] we see a lot of the jobs that maybe we wouldn't see through E-Bid board or … Bluebook … and they're small, more local jobs. And what they'll do — maybe two or three times a week sometimes — they'll send us emails just [listing] all the small jobs and requesting subs."

SDTA #3, representing a local chamber of commerce, indicated that outreach events are very helpful for MBE and WBE firms, and that she is aware of the San Diego International Airport having hosted such events in the past. She said that if public agencies informed her organization about outreach events, then her organization would disseminate that information to its members: "If they let us know, we'll email [that information] out."

SDTA #11, representing a veterans trade organization, said that agency outreach is very useful in helping disadvantaged firms and indicated that the Airport is doing its part in hosting such events: "The Airport is the only one trying to do anything." He continued, "The people running the Airport and the outreach programs are wanting to help. …"

SDTA #7, representing a construction trade organization, stated that the Airport does a good job with its outreach programs. He explained that such programs "allow everyone to see what's available and what kind of project it is and what kind of subcontracting opportunities there will be." He added that advance notice about projects does not substantially help contractors in the public sector but does help in the private sector.

SDTA #6, representing an Asian American trade organization, indicated that outreach programs would be very helpful for small firms (including MBEs/WBEs). She went on to list a number of things that an agency should do in order to have a successful outreach program, including: informing organizations about the types of projects for which they need vendors, identify ways in which they can better assist small firms, and host an event for small firms to inform them about what projects are available.

SDTA #4, representing a local chamber of commerce, stated that informational workshops are some of the most useful tools to increase awareness of contracting opportunities. She said that she would like to see representatives from the Airport attend those workshops to provide insight to potential bidders.

SDTA #2, representing a Hispanic American trade organization, indicated that his organization has entered into agreements with various public agencies to host outreach events. Those events are intended to increase contracting opportunities for small and emerging firms.

SDTA #13, a retired official from a local public agency, indicated that outreach workshops at the Airport are some of the most effective remedial programs for small firms (including MBE/WBE firms).

SDTA #9, representing a public works trade organization, discussed local public agencies' outreach events for small and disadvantaged businesses. Overall, he indicated that whereas some outreach efforts are disappointing, others have been quite effective: "The best [agency

outreach events] give access to decision makers, and the ones that don't work [have] one per year and no follow up information. Unsuccessful efforts include connecting businesses with those who don't have [the] ability to make decisions." He went on to discuss agency outreach programs that are successful, including the Airport's: "The Airport is working hard. We submitted them for an award for supplier development award for outreach … Caltrans is good. They have buyers on the spot at their outreach events … The Navy has a good outreach program. They hold quarterly events with small businesses to make presentations and buyers come that day."

Other interviewees had negative opinions about public agencies hosting outreach programs. Interviewee #SD2, representing a white female-owned firm, indicated that outreach programs are not very effective: "There is not any substance to outreach events." She said that local agencies should list all of their available contracts in one, centralized location: "There needs to be a clearinghouse."

Consistent with those comments, SDTA #9, representing a public works trade organization, said, "No matter how good the agency is, it is hard for subs and small businesses to get all information and opportunities from them." He said that he would like his organization and other, similar organizations to act as a clearing house for public agencies to make it easier for local small business to learn about available work.

Interviewee #SD14, representing a Hispanic American male-owned firm, said that he has attended a number of events hosted by different public agencies and believes that they are not effective, because without mandatory goals agencies are only concerned with finding the low bidder — networking cannot change that.

Interviewee #SD34, representing a white male-owned firm, indicated that he does not consider agency outreach as important to the success of his firm: "[Agency outreach] doesn't matter — it's not how I get business."

Interviewee #SD43, representing a Hispanic male-owned firm, reported that she has attended outreach events at the Airport and that the Airport staff provided a great deal of information, but that they were not very helpful on an individual basis: "For example, they had different people speaking about different things all at one time …. But they didn't give you enough information as to where you felt like you can actually be part of it or get started …. It was just … general information about different subjects."

Interviewee #SD43 went on to say that she has noticed that most of the people attending the Airport's events know each other. That is, the prime contractors that attend the events seem to have developed relationships with the Airport staff.

Interviewee #SD46, representing an African American male-owned firm, indicated that outreach events do not help MBE/WBE firms get contracts: "[Outreach events] look good on the outside, but actually gaining a project from those … [the potential] is nil." He continued, "The bad part is that if you have a business starting out, or a business that is trying to maintain, they are hopeful when they attend those gatherings, but it's a lot of talk, it's a lot of hype. You don't even hear back from those vendors."

SDTA #1, representing a local chamber of commerce, said that outreach programs could be effective in principle, but in practice the marketing of those events have been quite poor. He said, "My impression would be that turn out would be relatively low [for such events]." He went on to say that agencies need to make sure that they get the attention of those companies that would most benefit from outreach programs, and try to ensure that those companies attend the events.

SDTA #10, representing a supplier trade organization, stated that public agencies are too focused on outreach and not focused enough on tangible results.

Educational, training, and technical skills programs.

Several interviewees had positive or neutral opinions about educational, training, and technical skills programs aimed at small firms. Interviewee #SD21, representing a white male-owned firm, stated that technical assistance programs are very helpful to minority- and female-owned firms. However, he would like to see unions "expand their training horizons." That is, he believes that unions should establish broader training programs for their members rather than leaving it up to individual agencies.

Interviewee #SD5, representing an African American male-owned firm, stated that a large construction firm hosts a 14-week training seminar at the Airport that he described as being very helpful. In addition, Interviewee #SD5 attends seminars with various public agencies to gather information and develop relationships with members of the certification and bonding communities.

Interviewee #SD14, representing a Hispanic American male-owned firm, indicated that technical assistance programs would be helpful for firms that are just starting out, particularly in making new contacts. He went on to say that on-the-job training programs would also be helpful for those firms, but that such programs are not very practical in the current economy.

Interviewee #SD19, representing a white male-owned firm, indicated that although technical assistance programs would not help her firm (because it is well-established and she has a great deal of experience), they would be particularly useful for less established firms: "If you are just starting out, this might be good."

Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, said that her firm provides its subtenants with support in many different areas, including: recruitment, airport badging, obtaining contractor information, warehouse discounts, rent reminders, and merchandising and business concept consultation.

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, reported that the master concessionaire at the Airport provides training and support for their subtenants. She has also received technical assistance from the SBA related to finance and understanding financial statements, marketing, and website development. She went on to say that her firm also receives a great deal of information from the Airport Minority Advisory Council (AMAC), including newsletters and information on courses that they offer.

Interviewee #SD33, representing a Hispanic American male-owned firm, indicated that technical assistance is necessary for small firms, because they may find contracting specifications and procedures overwhelming. He said, "If [public agencies] break it down and walk through it, it is helpful."

Interviewee #SD40, representing a white male-owned firm, reported that his firm offers free classes to small firms that teach them a broad range of business skills, including scheduling, bidding, and project management.

Interviewee #SD47, representing an African American female-owned firm, stated that technical assistance and training programs are vital to the success of small firms, because they cannot afford internal training programs: "People don't have any money for training …."

SDTA #1, representing a local chamber of commerce, indicated that he supports the idea of technical assistance programs and on-the-job training programs, but expressed concern about firms actually attending them. He also said that he is unaware of public agencies in San Diego implementing such programs.

SDTA #7, representing a construction trade organization, said that his organization hosts construction training classes that members and nonmembers are welcome to attend. He said, "I think we are the main training facility for this area and probably part of LA too.

SDTA #10, representing a supplier trade organization, stated that he and his staff spend at least 25 percent of their time providing technical assistance to suppliers.

Other interviewees had negative opinions about educational, training, and technical skills programs aimed at small firms. Interviewee #SD2, representing a white female-owned firm, reported that public agencies spend a lot of money on technical assistance, but most of that assistance is at a very basic level. She said that classes at that level can hurt small firms more than they can help. She said that technical programs can be improved if "actual contractors that do actual work" teach the classes.

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, said that there is too much emphasis on teaching: "Some of the teaching and assistance is good, but at some point we have to set out and play." Interviewee #SD12 reported that he would like to see more practical assistance programs in place: "I'm not looking for academic help. I'm looking for rubber to meet the road, results oriented assistance."

SDTA #10, representing a supplier trade organization, reported that not all technical programs are useful: "There are tons of technical assistance programs, but not all are good or useful." He went on to say that public agencies do not do a good job of identifying the useful programs and eliminating the bad ones: "There seems to be a willingness to simply perpetuate the programs with a focus on systems and processes, but with no attention given to the bottom line or a return."

Interviewee #SD20, representing an Asian American male-owned firm, said about his own firm: "We don't really need [technical assistance]." He also indicated that technical assistance programs would be a great deal of work for public agencies, rendering them impractical.

Interviewee #SD10, representing an African American male-owned firm, stated that the resources spent on technical assistance programs are better spent in other areas: "I am too jaded in this industry and this city to think that technical assistance works. I need help making sure I am getting the work that is promised to me."

SDTA #11, representing a veterans trade organization, indicated that he did not think that technical assistance programs were particularly useful. One pitfall that SDTA #11 pointed out about those programs was that they were too short to be productive, "When you're going to talk about bonding, don't give it a 15 minute time frame." He also said that he would prefer if agencies spent time educating their own procurement people on the needs of local small businesses.

SDTA #5, representing a government advisory commission on minority issues, reported that she considers a particular trade association's mentoring program to be a complete failure: "The … mentoring program … is a failure I believe. It is nice that they have it, but when you have a program that is seven years old and graduated only four people I don't know how you consider that a success."

Assistance with financing, bonding, and insurance.

Many interviewees had positive or neutral opinions about programs aimed at assisting small firms with financing, bonding, and insurance. Interviewee #SD14, representing a Hispanic American male-owned firm, said that finance and bonding programs would be very useful for MBE and WBE firms, particularly for small firms that are not well established. However, he indicated that he has never heard of any such programs being implemented in San Diego and would not know how to get information about them.

Interviewee #SD21, representing a white male-owned firm, indicated that programs aimed at providing financing and bonding assistance would be very helpful to MBE/WBE firms. He said that he is aware of a bond guarantee program through the Small Business Association (SBA), but did not share any opinions about it. He noted that bond waivers are not a reasonable expectation for public agency work.

Interviewee #SD20, representing an Asian American male-owned firm, indicated that financing and bonding programs would definitely help small firms (including MBE/WBE firms). With regard to financing, Interviewee #SD20 said that he would also like to see some sort of program or policy by which the prime contractor is required to pay its sub contractors in a timely fashion.

Interviewee #SD16, representing an African American male-owned firm, reported that that he is participating in a bonding class through the Airport. He indicated that the class has been very helpful to his firm and is optimistic about its positive impact on the public contracting community. Consistent with those comments, SDTA #2, representing a Hispanic American trade organization, remarked, "I hear good things about the airport's bonding program."

Interviewee #SD30, representing an African American male-owned firm, reported that financial assistance would be very helpful to small firms, including MBE/WBE firms. Regarding the importance of a firm having its finances in order, he said, "A large firm — particularly in the public sector — wants to see that you are handling your financials properly." He went on to suggest that public agencies should help small firms by lending them money upfront for startup costs on projects.

Interviewee #SD31, representing a white male-owned firm, said that bonding is absolutely the biggest hurdle that firms face in construction and any programs that help firms with bonding would be beneficial. Specifically, he indicated his preference for bond waivers rather than bond guarantees: "Bond waivers are better than bond guarantees, because in the end you still have to find someone … to put up the money [with bond guarantees]."

Interviewee #SD47, representing an African American female-owned firm, said that trade associations, particularly those representing minority- and female-owned firms, should spend more time developing relationships with financial institutions and surety companies on behalf of their members: "Instead of forming alliances with people who don't mean minority contractors any good, [trade associations should] form those alliances with surety companies, insurance companies, CPA's, accountants and bookkeepers."

Interviewee #SD47 went on to say that current bonding programs can be helpful but are inaccessible to most of the firms that need them: "I had to go all the way to Washington [to get bonding assistance … the average person will give up — I think [finance and bonding programs] are designed that way."

SDTA #8, representing an electrical workers trade organization, indicated that the San Diego Airport's bonding program is a "wonderful" program. She said that bonding is one of the biggest obstacles for small firms that are not well established. She also said that her organization's members value the Airport's bonding program — they believe that it significantly helps their employees.

SDTA #6, representing an Asian American trade organization, reported that it would be particularly helpful if the San Diego Airport developed programs to assist small firms with bonding. She went on to say that her organization would like to provide members with bonding assistance, but that they currently do not have the capacity to do so.

SDTA #11, representing a veterans trade organization, indicated that programs aimed at assisting small firms with financing and bonding are worthwhile programs. He noted that some bonding assistance is currently available for small firms through the Small Business Administration, but that many firms are not aware of it. He said that for financing and bonding programs to be effective, financial institutions and disadvantaged businesses need to be educated on them.

SDTA #3, representing a local chamber of commerce, indicated that financing programs would certainly be useful to minority- and female-owned firms, particularly given the current state of the economy and how difficult financing can be for a new business. She said, "The first three years when you start a business [are] your most difficult. …" She said finance programs would

encourage businesses to open and to compete. SDTA #3 indicated that bonding assistance would also be beneficial to MBE/WBE firms.

SDTA #7, representing a construction trade organization, said that financing assistance would certainly be helpful for small firms (including MBE/WBE firms), but that he does not think that banks would agree to such arrangements, because "they don't care what color [the contractors are] — they just look at the numbers."

SDTA #1, representing a local chamber of commerce, stated that both financing and bonding assistance would be very helpful to minority- and female-owned firms as well as to other small firms in San Diego.

Interviewee #SD9, representing a minority female-owned firm that is a concessionaire at the Airport, said that she learns about insurance policies and receives training on obtaining loans through various ACDBE conferences as well as through the Small Business Association (SBA).

Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, reported that her firm used to offer a financing program that made it easier for its subtenants to obtain loans, but that the program no longer exists.

One Interviewee reported that the SBA's bonding program is not helpful. Interviewee #SD2, representing a white female-owned firm, indicated that the SBA's bonding assistance is not very useful for small firms: When asked why not, she replied, "There is so much BS to it."

Simplification and streamlining of the bid process.

A few interviewees reported that they would like to see public agencies simplify and streamline their bid processes. Interviewee #SD28, representing a white female-owned firm, indicated that changes in bid procedures would help all firms, not just small firms or DBE firms. He thinks that public agencies in San Diego need to work together to make their bid procedures more consistent and uniform.

Similarly, Interviewee #SD31, representing a white male-owned firm, said that in principle streamlining bid procedures would be helpful, but it would be difficult to do in practice because "every agency's [bid] procedures are different." Interviewee #SD31 said that it would be helpful to make bid procedures uniform across agencies if they were "put together by competent people."

SDTA #11, representing a veterans trade organization, said that there was too much paperwork and hassle associated with bidding on public sector projects, particularly with the San Diego Airport. He indicated that he supported measures to simplify the bid process.

SDTA #1, representing a local chamber of commerce, indicated that streamlining the bid process would be very useful in helping firms better understand available bid opportunities. Similarly, Interviewee #SD21, representing a white male-owned firm, said that streamlining the bid process would be very helpful to minority- and female-owned firms.

Other interviewees expressed concerns about how bid processes would be simplified and whether it would be beneficial. Interviewee #SD14, representing a Hispanic American male-owned firm, indicated that he does not want to see any changes in bid procedures: "I think you have to keep the bidding procedures like they are." He said that he believes that the bid process as it is ensures that available contracts go to qualified contractors.

Interviewee #SD30, representing an African American male-owned firm, indicated that he would be hesitant to simplify bid procedures. He would rather see more outreach and training related to bid procedures rather than seeing them change in any way. He went on to say that that he would like see agencies' estimating procedures become more transparent to bidders: "One process I would like to see changed is … the engineer's estimate …. I really don't think it's accurate, and I think it handcuffs … the prime from the get go."

Interviewee #SD32, representing an African American male-owned firm, said that streamlining bid procedures could be problematic, because certain aspects of them are necessary to ensure that the best contractors win projects: "I think certain requirements are necessary in order to … [separate] the good contractors from the bad contractors."

Interviewee #SD20, representing an Asian American male-owned firm, stated that, in theory, streamlined bid procedures would help small, less established firms, but he thinks that all aspects of the current bid process seems necessary. He expressed concerns about what the agencies would eliminate.

SDTA #3, representing a local chamber of commerce, reported that she preferred that public agencies provide more information to potential bidders about the current bid procedures rather than change those procedures in any way.

Segmenting larger contracts into smaller contracts.

Many interviewees reported that segmenting large contracts into smaller pieces would help smaller firms. Interviewee #SD2, representing a white female-owned firm, reported that breaking contracts down into smaller pieces is important to helping minority- and female-owned firms: "Breaking up jobs would be a good thing." She went on to say that having large contracts does not save public agencies money, as many of them think: "You pay so much for different levels of construction managers [on large contracts] …. You also get more competition with smaller jobs." Interviewee #SD2 said that although many local firms prefer smaller contracts, public contracts appear to be getting larger.

Consistent with those comments, Interviewee #SD21, representing a white male-owned firm, reported that although breaking up contracts would be helpful to small firms (including MBE/WBEs), the San Diego Airport has been moving away from that measure. He said, "The Airport has gone just the opposite way [recently]. They've been lumping [contracts] together."

Interviewee #SD20, representing an Asian American male-owned firm, agreed that breaking up large contracts into smaller pieces would help minority- and female-owned firms: "That would help [DBEs and small firms]."

Interviewee #SD16, representing an African American male-owned firm, indicated that breaking up large contracts would greatly help his firm: "Let's put it like this, babies can't eat meat, right? Well businesses like mine can't take million dollar contracts." He said that the main issue for small firms is that they lack the capital to take on bigger projects.

Interviewee #SD9, representing a minority female-owned firm that is a concessionaire at the Airport, said that breaking up large contracts into smaller pieces has helped MBE/WBE firms at other airports. It allowed small firms to bid on contracts directly, increasing competition and opportunity.

Interviewee #SD28, representing a white female-owned firm, reported that segmenting large contracts into smaller pieces would help both prime contractors and subcontractors in San Diego: "The Airport was going to have … contracts in big units, and that would have meant companies from out of state that were … specialized in [that type of work] would be coming in to do them, and it would have been less work for the people here in San Diego, but [the Airport] broke [the contracts apart] …."

Interviewee #SD30, representing an African American male-owned firm, said that "without a doubt" public agencies should break up large contracts into smaller pieces to make them accessible to small firms. He gave the example of a new federal courthouse that is going up in the city: "It's easily $10 million — just the electrical — but they would list that $10 million job as a small business [opportunity]. Come on now — I think they [must] look at me as a tiny business, not a small business."

Interviewee #SD31, representing a white male-owned firm, indicated that he supports breaking up large contacts into smaller pieces: "The smaller the [contract] pieces, the easier it is to qualify for a particular piece. In other words, someone might be willing to give me a $2 million job, but are they going to give me a $50 million job?"

Interviewee #SD40, representing a white male-owned firm, reported that his subcontracts work out in small pieces to allow small firms the opportunity to bid on them. He indicated that segmenting contracts in that way creates more work for his firm, but that it is important to allow small, local firms the opportunity to compete: "We are creating work for the local community. What we do is try to create work that fits the local market. We will package work so smaller companies can compete, so they can get the insurance and the bonding. The benefit is that we get to keep as much work local as possible and grow the companies in our local market."

Interviewee #SD40 continued, "For DBEs, I think the biggest challenge is that if the work is not packaged in the right way disadvantaged firms are forced to be excluded. I think that we need to know what the requirements are and not set the bar so high so they can participate. It is sometimes more work for general contractors, but the benefit goes to the client."

Interviewee #SD43, representing a Hispanic male-owned firm, stated that segmenting large contracts into smaller pieces would go a long way in encouraging MBE/WBE participation because it would (1) make those contracts more affordable for small firms; and (2) make it so multiple small firms could participate on one project rather than having it go to a single large firm.

Interviewee #SD47, representing an African American female-owned firm, indicated that the construction industry's standard for "small" contracts is about $30 million, an amount that precludes most small firms and MBE/WBE firms from competing for them. She indicated that there needs to be more small contracting opportunities but that they do not exist because bundling contracts together is "easier for [agencies]."

SDTA #2, representing a Hispanic American trade organization, stated that breaking up large contracts would greatly benefit minority- and female-owned firms. He said, "We should be [breaking up large contracts so] most contractors [can] compete, instead of having one Goliath get all of the profits."

SDTA #9, representing a public works trade organization, reported that the Airport has recently begun to segment large contracts into smaller pieces, and that that measure has helped small firms compete for work: "The Airport has done a better job in breaking projects into [smaller] pieces for smaller businesses to have a better opportunity for bidding.

SDTA #6, representing an Asian American trade organization, reported that her organization's membership would strongly prefer that public agencies break large contracts into smaller pieces. She explained that an appropriate project size for her membership could be as low as $10,000.

SDTA #7, representing a construction trade organization, reported that breaking up large contracts would definitely help small firms. However, he pointed out that breaking up large contracts involves a great deal of coordination and planning on the part of the agency.

SDTA #5, representing a government advisory commission on minority issues, indicated that she played a role in segmenting large contracts when she used to work for a government agency and that those efforts were quite beneficial to small firms, particularly minority- and female-owned ones: "We had one man who provided all of our paper needs because of the way the contract was bundled. With such a large contract, the only way to do it was to have one large company fill the request. You get the same person every time. [After segmenting the contract], we ended up with people who did cups and another did bathrooms — smaller companies were able to work for [the agency]. Breaking up the RFP was successful and resulted in a more diverse pool of people doing business with us."

Interviewee #SD38, representing a Hispanic male-owned firm, indicated that he supports efforts to segment large contracts into smaller pieces: "I like the idea of breaking up larger contracts for smaller jobs. I think that is a smart way of doing it. It will also keep people on their toes and keep general contractors on top of the job. Also, your bracket for the workers grows."

A few interviewees expressed concern that breaking up large contracts would result in public agencies losing the "economy of scale. Interviewee #SD14, representing a Hispanic American male-owned firm, said that breaking up large contracts into smaller pieces would help small firms, particularly with bonding, "For small businesses that can't bond $20 million contracts, [they] could bond $4 or $5 million contracts." However, he expressed concerns about agencies' and prime contractors' willingness to break up contracts, because it is cheaper for them to award one large contract than several smaller ones.

SDTA #1, representing a local chamber of commerce, expressed a similar concern. Although he agreed that breaking up large contracts would be helpful to MBE/WBE firms, he reported that agencies would be reluctant to do it, because they would lose "economy of scale."

SDTA #3, representing a local chamber of commerce, also expressed concerns about losing "economy of scale" if public agencies were to break up large contracts into smaller pieces. She went on to say that large contractors effectively break up contracts on their own anyway by subbing out pieces of a project.

Price/evaluation preferences.

A few airport interviewees indicated that they supported price or evaluation preferences for MBE/WBE firms. Interviewee #SD14, representing a Hispanic American male-owned firm, stated that price preferences would definitely be helpful for MBE and WBE firms, but that he was only familiar with those programs as they relate to small business enterprises.

Similarly, Interviewee #SD20, representing an Asian American male-owned firm, and SDTA #2, representing a Hispanic American trade organization, both indicated that price and evaluation preferences would definitely be helpful to minority- and female-owned firms.

Interviewee #SD32, representing an African American male-owned firm, remarked that price and evaluation preferences seem to be a "good deal" for DBE firms, but not necessarily a good deal for the majority-owned firms that have to compete with them.

Other airport interviewees said that they did not support price or evaluation preferences for MBE/WBE firms. SDTA #11, representing a veterans trade organization, stated that price preferences generally do not work and that agencies should be concerned with best value and not lowest price.

SDTA #1, representing a local chamber of commerce, said that price and evaluation preferences sound helpful for MBE and WBE firms, but he is concerned that majority-owned firms may feel disadvantaged or discriminated against.

SDTA #3, representing a local chamber of commerce, indicated that she did not support the idea of price and evaluation preferences, "I don't like crutches where you bid other people out of business … [Agencies] should go with the best quality work."

Recommendations related to remedies.

Some interviewees recommended that public agencies engage in more outreach efforts. Interviewee #SD4, representing a white male-owned firm, suggested that public agencies should have an open forum for MBE and WBE firms and ask them, "How can I help you?" Particular to the Airport, Interviewee #SD4 said that he would like to see Airport inspectors be more helpful and less combative with regard to MBE/WBE regulations.

Interviewee #SD16, representing an African American male-owned firm, stated that public agencies need to reach out more to minority- and female-owned firms: "Reaching out to those who have been outside of the playing field for so long because of race, age or gender is

important. Public agencies should be more aggressive about attacking social ills and we could be more effective in developing a remedy."

Interviewee #SD25, representing a white male-owned firm, recommended that the Airport continue with its networking events. He said that Airport staff regularly attends local networking events and encourages small firms to bid on available projects.

Interviewee #SD30, representing an African American male-owned firm, stated that small firms are not as big of a part of the San Diego contracting industry as they should be: "I don't think it's a level playing field, because small businesses or the new start up guys are not necessarily in the loop." He said to improve the situation, public agencies need to focus on disseminating more information to small firms and need to do more outreach to help small firms be aware of work opportunities.

Interviewee #SD43, representing a Hispanic male-owned firm, suggested that the Airport should allow small firms to interview one-on-one with Airport staff, because she thinks that the Airport's current outreach events are inaccessible to small firms: "When there's so many people [at outreach events] and it's so overwhelming, they're not taking your company into consideration in particular. It's very difficult."

SDTA #3, representing a local chamber of commerce, suggested that public agencies should do more to ensure that potential bidders are informed about available projects and remedial programs. Particular to the Airport, SDTA #3 recommended that their website be thorough and inviting to potential bidders, and that representatives from the Airport speak at events that local chambers host.

SDTA #5, representing a government advisory commission on minority issues, suggested that the Airport should host "vendor fairs" that would allow large firms to meet face-to-face with small firms: "The Airport should bring people in to do business with them. Have small contracts that people could get on the spot while [attending] the vendor fair. That would encourage people to come."

SDTA #9, representing a public works trade organization, said that public agencies need to do more to encourage the participation of small firms: "We have 65,000 small businesses in California. We should be asking the question, 'How [can] local agencies work better … to help small business and themselves?' There should be a cooperation of public agencies on bidding, outreach, and communication to recruit these businesses."

Several interviewees recommended that public agencies institute education programs, both for potential bidders and for their staff. Interviewee #SD11, representing a white male-owned firm, suggested that public agencies should be involved in educating and training those in the community that are interested in entering the construction industry. He cited the success that a local organization has had in developing an apprenticeship program and training "willing workers to be subcontractors."

Interviewee #SD16, representing an African American male-owned firm, indicated that public agencies could provide more information and more learning opportunities to minority- and female-owned firms related to "how to do business."

Interviewee #SD1, representing a minority female-owned firm that is a concessionaire at the Airport, stated that the Airport needs more business-oriented staff (e.g., staff with backgrounds in business or real estate development) rather than staff that perpetuate bureaucratic problems. She indicated that the current staff needs a better understanding of the challenges of business owners.

Interviewee #SD30, representing an African American male-owned firm, stated that he would like to see education programs expand to include training beyond the classroom: "[The agencies] offer a lot of classes and seminars … [but] you really need more hands-on mentoring."

SDTA #7, representing a construction trade organization, stated that the target of most remedial programs is wrong. He said that rather than focusing on discrimination among contractors, public agencies should focus on educating people and getting them into the industry: "Almost their entire emphasis should be on getting people into the trade, getting people through construction tech. and into the universities. …"

SDTA #8, representing an electrical workers trade organization, reported that public agencies need to enforce apprenticeship laws — that is, they need to ensure that there are apprentices working on every project. She explained that most contractors move up in the construction industry through the trades, and in order to see a greater representation of minorities and females in the construction industry, public agencies have to foster education and apprenticeships.

SDTA #4, representing a local chamber of commerce, stated that MBE/WBE firms still need help with basic industry knowledge that is generally passed down from one generation to another. SDTA #4 also said that MBE/WBE firms also need improved access to information about bid opportunities and that language barriers continue to be an issue.

SDTA #11, representing a veterans trade organization, recommended that public agencies use more programs to educate MBE and WBE firms about bidding procedures and to educate their own staff about the needs of small firms in San Diego.

Regarding education and technical assistance programs, SDTA #9, representing a public works trade organization, said, "I view technical assistance as something that is one-on-one. Asking the questions, what do you need help with? Based on this definition there is not enough technical assistance being provided by public agencies. Technical assistance is limited with public agencies, because people at the public works are not able to give inside information. Additionally, they are busy and there are not enough people for one-on-one [interactions]."

A few interviewees suggested that public agencies should segment large contracts into smaller pieces. Interviewee #SD4, representing a white male-owned firm, suggested that public agencies should segment large projects into smaller pieces in order to help small firms be more

competitive. He said, "Take a small project and break it up into smaller pieces. Even a small structural metal subcontract of $5 million is still too large for small subcontractors."

SDTA #2, representing a Hispanic American trade organization, stated that public agencies should segment large contracts to allow small firms to compete against larger ones. He went on to say that the way contracts are presently sized, "large businesses can crush the small businesses."

Recommendations related to DBE programs.

Some interviewees recommended that mandatory DBE goals should be in place. Interviewee #SD2, representing a white female-owned firm, said that the Airport "should set aside contracts for small businesses."

Interviewee #SD31, representing a white male-owned firm, recommended that public agencies transition from using subcontractor goals to using mandatory quotas, assuming that there are enough competent firms available for the work: "If there were enough competent firms, I would say [quotas] might be something to consider."

SDTA #11, representing a veterans trade organization, recommended that mandatory goals should be reinstated, but said that all disadvantaged firms (e.g., African American-owned, Asian American owned, female-owned, and veteran-owned) should have the same goal: "Make it all equal [for disadvantaged firms]."

SDTA #4, representing a local chamber of commerce, indicated that mandatory DBE goals are necessary and should be reinstated, because the playing field is not yet equal for minority- and female-owned firms.

Interviewee #SD13, representing a white male-owned firm that is the master concessionaire at the Airport, said that a potential subtenant's ACDBE status plays a substantial role in whether he or she is granted a concessionaire lease at the Airport, particularly if the master concessionaire is not currently meeting their ACDBE goal, "If I'm below 30 percent [MBE/WBE goal participation], I think [ACDBE certification] would play a large role." She went on to explain that her firm takes assertive measures if it is below its 30 percent ACDBE goal.

Other interviewees recommended that DBE goals and good faith efforts should be eliminated altogether. Interviewee #SD11, representing a white male-owned firm, indicated that DBE programs should be eliminated: "Do away with regulations. Make it an open market. The small guy just can't handle all of the paperwork. They should do away with regulations. Primes should advertise and they should choose the most qualified, lowest bidder for the project." He went on to ask rhetorically, "Can we close the DBE department? It doesn't work."

Interviewee #SD7, representing a white male-owned firm, indicated that race and gender should not play a role in contracting procedures: "If you are qualified to do a job your experience level should stand on its own, no matter the color of your skin.

Interviewee #SD15, representing a white male-owned firm that is a concessionaire at the Airport, expressed concerns that DBE programs and mandatory goals will lead agencies to overemphasize race, in turn leading them to award contracts to minority- or female-owned firms that may be less qualified than other majority-owned firms. He said, "You have to look at the entire package. Focusing too much on one aspect could be detrimental." He went on to say that agencies who overemphasize race might ultimately get worse service or value. However, Interviewee #SD15, reported that, in principle, DBE programs are important: "I think it gives people opportunities that might not otherwise be there for them, in terms of competing with larger competitors."

SDTA #12, representing a workforce trade organization, said that minorities and women do not need preferential treatment — they need encouragement and the opportunity to acquire additional skills

Some interviewees recommended that public agencies pay more attention to issues related to minority- and female-owned firms. SDTA #5, representing a government advisory commission on minority issues, said that the City of San Diego and its public agencies do not focus enough on diversity issues and helping MBE and WBE firms: "I have seen what happens when there is a lack of focus … to have diversity. This is what is happening in the City [of San Diego] which I am sure is spilling into other agencies throughout San Diego. I have not seen a commitment to data collection or outreach in any seriousness throughout the City which I am sure is the same here at the Airport." She continued, "Currently, there is no will or interest to accomplish a successful DBE program. When it comes from the top it will work."

SDTA #1, representing a local chamber of commerce, said that more needs to be done to help minority- and female-owned firms, but he was careful to say that assistance should not be limited to only those firms but should include other small firms in San Diego as well. He recommended that public agencies keep the issues of all local, small firms front and center, and that those issues "shouldn't just be a box to fill out on the side."

SDTA #2, representing a Hispanic American trade organization, indicated that the Airport needs to take a more proactive approach to dealing with MBE/WBE issues: "The Airport should get more involved and step out of their comfort zone — have an attack campaign on the ground."

Two interviewees suggested that public agencies should offer monetary incentives to prime contractors to work with MBE/WBE firms. Interviewee #SD7, representing a white male-owned firm, stated that financial incentives would encourage prime contractors to use their own resources to help MBE/WBE firms get through the bid process. He suggested that prime contractors should receive a small percentage of MBE/WBE subcontractors' contract values.

Interviewee #SD6, representing a white male-owned firm, said that the Airport should maintain a Small Business Enterprise Program but eliminate its DBE program, at least how it is presently structured. He suggested that the Airport could keep DBE goals, but make them voluntary and eliminate good faith efforts. As an alternative to mandatory goals, Interviewee #SD6 suggested that prime contractors receive a monetary credit for using MBE or WBE subcontractors.

One interviewee suggested that public agencies should institute limits on how long a particular firm can be awarded a contract. SDTA #2, representing a Hispanic American trade organization, said, "There should be a limit on the amount of time you can do business with the public. For example, you can't do business longer than ten years in a row." He explained that without such limits, contracts transfer from one generation of a firm to the next. He described that practice as discriminatory: "This is general institutional racism and discrimination."

Several interviewees offered non-specific recommendations about how public agencies can improve their contracting procedures and DBE programs. Interviewee #SD21, representing a white male-owned firm, said that he is not familiar enough with DBE programs to know if there are certain components that are particularly helpful to MBE/WBE firms. He said that he is much more concerned about whether a subcontractor can help him complete a job rather than about the subcontractor's DBE status, "I'm absolutely a dollar driven guy. If somebody can walk in and help me make money, that's what's important to me."

SDTA #8, representing an electrical workers trade organization, said that any program that helps small firms (including MBE and WBE firms) is a good use of tax dollars.

SDTA #11, representing a veteran's trade organization, indicated that remedial program work as well for MBE/WBE firms as they do for Disadvantaged Veterans Business Enterprise (DVBE) firms, with the caveat that the work ethic of veterans far exceeds that of minorities and women. He said, "If it works for service disabled veterans, it will probably work for minorities [and women], with the exception of one thing … the work ethic [of service disabled veterans is better]."

Related to those comments, Interviewee #SD31, representing a white male-owned firm that is DVBE certified indicated that he supports the use of remedial programs for disadvantaged firms. However, he went on to say that DVBE firms deserve those preferences more than MBE/WBE firms: "Quite frankly, compared to the other minority categories, we feel we earned it — not born into it." With regard to MBE/WBE firms benefitting from evaluation preferences in particular, Interviewee #SD31 said, "I don't think they've earned it."

SDTA #7, representing a construction trade organization, indicated that a major problem with existing remedies is that they are more political than they are practical. Regarding those politics, he said, "A politician doesn't care about who is getting contracts or not. They just want to create a program that they can tell people that they are [addressing minority and gender issues]. The results never are good. They don't care about [minority and gender issues] — they just want to create the program."

SDTA #3, representing a local chamber of commerce, indicated that she was unfamiliar with the term "DBE" and thus had no knowledge regarding the certification process.

Interviewee #SD12, representing a minority male-owned firm that is a concessionaire at the Airport, indicated that the net worth limits of DBE programs stifle advancement: "What does the ACDBE program do for me" really? The net worth of an ACDBE cannot be more than $750,000. We want to grow and make money too . …"

Interviewee #SD43, representing a Hispanic male-owned firm, indicated that in order to encourage MBE/WBE participation, prime contractors should be required to use subcontractors that they have not used in the past, which would give opportunities to new firms: "I just think bigger companies should be able to try out different [subcontractors] and not just stick with the ones they usually do. I think it should be some kind of requirement where they have to try new, small companies just so we can get an opportunity to show what we can do."

Two interviewees recommended that public agencies should stop commissioning firms to complete disparity studies. SDTA #7, representing a construction trade organization, stated that disparity studies rarely offer an accurate depiction of the marketplace. He also indicated that his organization will formally dispute any disparity study that they view as incorrect: "As soon as [a contractor] is low [bidder], and a job is taken from them because of whatever came from the disparity study and the disparity study wasn't right there's going to be a conflict." Regarding previous disparity studies in California, SDTA #7 remarked, "You got to get it right – we haven't had one here that was right."

Consistent with those comments, SDTA #11, representing a veterans trade organization, indicated that disparity studies are not particularly useful and should be eliminated: "Don't have a disparity study."

Consortium Anecdotes Regarding Participation in and Awareness of Race- and Gender-Neutral Programs or Measures

The following anecdotes regarding participation in and awareness of race-, ethnic-, and gender-neutral programs or measures were obtained from interviews that the study team conducted in connection with BBC's 2009 Consortium study.

Outreach programs.

Several interviewees had participated in or were otherwise aware of race-, ethnic-, and gender- neutral programs provided by the Consortium. [Interviewees #CON: 4, 5, 6, 9, 10, 11, 12, 13, 15, 17, 18, 20, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 42, 44, 45, 46, 47, 48, 50, 52, 55, CONTA #1, PF #3]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that locally SANDAG does outreach efforts in conjunction with Caltrans to assist businesses by increasing their opportunities and skills to participate in Consortium projects. These are networking events with prime contractors. He has participated in some of these networking events. He sometimes found them helpful and sometimes not because the same prime contractors usually attend who already know you and what you can do. Occasionally there are new firms enabling him to establish new contacts and relationships. Interviewee #CON4 stated that the last SANDAG event occurred last year. Interviewee #CON4 also recalled that he received notice this year from the Orange County Transportation Authority about a networking event but was unable to attend. Interviewee #CON4 suggested that these outreach efforts should continue. Interviewee #CON4 stated that he has not had any direct experience with programs that assist with bonding, insurance and financing, but had seen announcements from the agencies regarding such programs. He stated that he has never seen any educational or training programs or other programs on how to do business with the Consortium.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that SANDAG, CCDC (Center City Development Corporation), Port of San Diego and some other agencies had a networking event about three months ago at the Convention Center to assist businesses by increasing their opportunities and skills to participate in Consortium projects, but he was unable to attend. The purpose of the event was to meet people and help with the certification process. He also recalled a similar networking event in Los Angeles recently, but could not recall specifics. These events are advertised. Interviewee #CON5 is also on a mailing list with the CCDC so his company receives information about RFPs, jobs, training seminars, certification process, etc. through the CCDC.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, recalled receiving information about outreach efforts by the Consortium to assist businesses by increasing their opportunities and skills to participate in Consortium projects many years ago, but did not recall anything about the program.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that the L.A. County MTA offers outreach programs. He stated that 20 years ago they had a program to assist DBEs with accounting. He did not know whether they still had such a program, but stated that it was very helpful. Interviewee #CON9 was not aware of programs to assist with bonding, insurance, or financing. He stated that L.A. County MTA has a program on "how to do business" with the Consortium.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, stated that the Consortium has a vendor fair, but that was the only outreach that she was aware of. She stated that the Consortium does ask whether small businesses need assistance with financing, bonding, or insurance; but she stated that from a CPA standpoint, the business must meet those requirements anyway and she does not feel that it is up to the Consortium to assist on that. Interviewee #CON10 stated that some of the Consortium members have information online on "how to do business" with the Consortium, but stated that basically you sign up on the vendor list and then receive an automated email.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that she was aware of emails regarding different education opportunities and training manuals on how to write a proposal and obtain insurance. She noted, however, that these programs all cost money.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that the outreach effort by L.A. County MTA is "the most impressive" in terms of "embracing and facilitating participation." He stated that L.A. County MTA has been holding a networking period for pre-proposal meetings which is helpful and provides for prequalification updates. He stated that they assist the smaller firms with their paperwork and connect with the bigger firms. He stated that the only problem is that most of the teams are set by that point, but that is not an L.A. County MTA "fault, it is just a reality."

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that L.A. County MTA or the SBA may offer programs regarding bonding and financing.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, has taken advantage of outreach programs regarding the completion of paperwork associated with Consortium work. He also has knowledge of programs assisting with monetary issues, but he has never actually used these programs. Interviewee #CON15 is also aware of educational and training programs, some even offered by other prime contractors. Interviewee #CON15 has also attended and participated in Consortium-agency sponsored vendor fairs.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, has knowledge of and exposure to a lot of the Consortium's outreach efforts and efforts to assist businesses. Interviewee #CON17's company has taken advantage of many of these opportunities.

Interviewee #CON17 is also aware of programs that assist with bonding, insurance, and financing, but she hasn't attended these programs because her company is a professional services firm.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, is aware of outreach efforts by the Consortium to assist businesses by increasing visibility. Often she does not go to programs because she does not think that she can get work at those types of events. She does know of programs to assist with bonding, insurance, and financing.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, had knowledge of Consortium outreach efforts, but stated that programs to assist with bonding, financing and insurance are not very helpful. She had knowledge of educational and training programs and of programs on how to do business with the Consortium.

Interviewee #CON24, an African American female owner of a DBE/MBE/WBE-certified private investigating firm, was aware of programs offered on how to do business with the Consortium.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, was aware of outreach programs offered by the Consortium, including programs on how to do business with the Consortium.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, was aware of outreach efforts by the Consortium (including MTA and El Camino). She had heard of or otherwise participated in educational and training programs and programs on how to do business with the Consortium.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, was aware of outreach efforts by the Consortium including programs to assist

with bonding, insurance, and financing, educational and training programs, and programs on how to do business with the Consortium.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, was aware of outreach efforts offered by the Consortium including programs to assist with bonding, insurance, and financing.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, was aware of outreach efforts offered by Caltrans and the L.A. County MTA, including educational and training programs and programs on how to do business with the Consortium. He has participated in a program with Caltrans in the past.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, believed the Consortium offered outreach programs, but had not participated in any.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated that his company had participated in a "meet the buyers" workshop and other educational programs offered by the Consortium. He had not participated in any programs on how to do business with the Consortium, but stated that he was going to start taking advantage of such programs.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that the Consortium has expended significant effort in outreach programs. She noted that Caltrans, in comparison, has done nothing in terms of outreach and they "do not try anything new." She stated that there are always seminars available to assist with bonding, insurance, and financing. She was also aware of educational and training programs and programs on how to do business with the Consortium.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, was aware of an annual business conference, but felt it was a "waste." She was also aware of a program on how to do business with the Consortium, but had a similar negative perception.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, was familiar with outreach efforts with TBAC — Transportation Business Advisory Council (an organization established under state law for Metro vendors). She was aware of programs to assist with bonding, insurance, and financing and with programs on how to do business with the Consortium.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, stated that she had participated in two workshops provided by Metro. She attended fairs that provided information regarding programs to assist with bonding, insurance, and financing. She was aware of programs on how to do business with the Consortium, but she had not attended any such programs.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that the Consortium offers a lot of outreach efforts, but he has always been suspicious of them and considered them to be shams. He was aware of programs on how to do business with the Consortium.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, reported having heard "vaguely" about programs on how to do business with the Consortium, but she did not know anything about it.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, was aware of programs to assist with bonding, insurance and financing having been offered in the past but nothing recent. He was aware of one or two educational and training programs offered by L.A. County MTA as well as programs on how to do business with the Consortium.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that she had met people in the outreach department. She was aware of educational and training programs and programs on how to do business with the Consortium.

Interviewee #CON44, a DBE/MBE/SBE-certified African American male owner of a financial planning services firm, had experience with Consortium outreach efforts including educational and training programs and programs on how to do business with the Consortium.

Interviewee #CON45, a DBE/MBE/WBE/SBE-certified African American female owner of a diversity consulting firm, stated that she had heard of Consortium outreach efforts through Consortium personnel. She had heard of programs to assist with bonding, insurance and financing, educational and training programs (through Caltrans), and programs on how to do business with the Consortium. She stated that she participated in such a class with Metro.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, was aware of outreach programs offered by Metro.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that he had participated a long time ago in a program on how to do business with the Consortium. He was not aware of any other outreach programs.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, was aware of outreach efforts offered by the Consortium. He has participated in programs to assist with financing and bonding and on how to do business with the Consortium. He was aware of other educational and training programs, but had not participated in them.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that he was recruited by an outreach program. He stated that there is such a "tall doorstep that it makes it extremely difficult to put your hand down to pull people up with you." He was aware of programs to assist with bonding and financing and other educational training programs. He was not aware of programs on how to do business with the Consortium.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, was aware of Consortium programs to assist businesses with bonding, insurance, and financing. He was not aware of other outreach efforts offered by the Consortium.

Interviewee #CON55, a white male owner of a construction services and program management firm, was aware of outreach programs to assist with bonding, financing and insurance, and had knowledge of programs on how to do business with the Consortium.

CONTA #1, the President of the Latino Business Owners of America, stated that agencies in Los Angeles are more active with outreach efforts to assist businesses by increasing their opportunities and skills to participate in Consortium projects. He stated that they provide workshops and other activities from certification instruction to payroll. He stated that San Diego's agencies are not as good in developing outreach efforts. He stated that educational outreach is helpful, but if you do not address the way that businesses are doing business it is futile. CONTA #1 stated that he has heard of a few programs that assist with bonding, insurance, and financing and believes that these programs are generally good. He also stated that he has heard of a few educational/training programs. CONTA #1 also stated that he is aware of a few workshops sponsored by different agencies on how to do business with the Consortium, but believes that these programs will be futile unless Consortium agencies make a real effort to include DBEs on their projects.

PF #3, an individual representing a black business association provided oral testimony at a public forum held on October 20, 2009. He was concerned about outreach efforts and whether or not the people in attendance were representative of firms that have the most problems with securing contracts. He thought the outreach and the efforts to raise awareness to issues are in question, and without outreach and awareness there will be reduced participation by minority owned businesses. He also questioned the effort, and authenticity of the efforts, to include African American businesses in projects. He stated that the qualifications for contracts are sometimes too stringent and that minority business owners cannot comply with them. He also questioned the enforcement process for verifying that prime contractors who say that they have done their due diligence and/or claim to have minority subcontractors under contract are actually in compliance with what they say. (Public Forum Los Angeles held on October 20, 2009).

Several interviewees were not aware of any race-, ethnic-, or gender-neutral programs sponsored by the Consortium aimed at increasing small or disadvantaged business participation by increasing their opportunities and skills. [Interviewees #CON: 1, 2, 3, 5, 6, 7, 8, 14, 19, 21, 29, 41, 49, 51, 53, 54, 57, 58, CONTA #2]. Other interviewees had very limited knowledge of such programs. [Interviewees #CON: 16, 22, 23, 37, 39, 43, 56]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, was not aware of any outreach or training programs offered by the Consortium or other agencies.

Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he has no knowledge of outreach efforts by the Consortium to assist business by increasing their opportunities and skills to participate in Consortium projects. He stated that he is aware of Caltrans networking conventions which take place at the end of October. Interviewee #CON2 also stated that he has not participated in these conventions in the past, but plans to

attend if any similar convention is held in Southern California. Interviewee #CON2 also stated that he has no experience with or knowledge of any efforts to assist with bonding, insurance, and financing, efforts to implement any educational/training programs, or with programs on how to do business with the Consortium.

Interviewee #CON7, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company, stated that he has no knowledge of any outreach efforts by the Consortium to assist businesses by increasing their opportunities and skills to participate in Consortium projects. Interviewee #CON7 stated he has not had any experience with programs that assist with bonding, insurance, and financing, but believed that there are such programs. He stated that he is unaware of any educational/training program efforts. Interviewee #CON7 also stated that he is not aware of any programs offered by the Consortium on how to do business with the Consortium, but P-TAC (an organization funded by veterans) offers programs about how to do business with the Consortium. The program is sponsored by the Water Authority.

Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated he was not aware of outreach efforts by the Consortium to increase business opportunities, but he expects that that might occur. He stated that prime contractors have in the past offered to assist him with bonding, but he has never pursued that.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, did not have knowledge of any outreach efforts by the Consortium to assist businesses by increasing their opportunities and skills to participate in Consortium projects. He did not have any knowledge of programs or efforts to assist with bonding, insurance, financing, educational or training programs. Interviewee #CON14 noted that L.A. County MTA does publish a newsletter.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, has no experience with various outreach efforts by the Consortium entities or others, except for a small business program through the City of L.A. and L.A. County MTA's programs that provide small business assistance with bonding, insurance, and financing.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, had no experience with outreach efforts by the Consortium, but was aware of programs to assist with bonding, insurance and financing, educational and training programs, and programs on how to do business with the Consortium.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, had seen flyers offering educational and training programs, but had never participated in any.

Interviewee #CON37, an African American male owner of a SBA-certified architecture firm, stated that he had heard of some business conferences, but never attended any of the conferences. He stated that he was not aware of any programs to assist with bonding, insurance, or financing or educational and training programs. He stated that he had heard of seminars on how to do business with the Consortium, but had not participated in these seminars.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, reported that she is vaguely aware of outreach efforts offered by other agencies in order to increase participation of DBEs and small businesses in doing work with the Consortium.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, stated that he had seen a flyer advertising a program on how to do business with the Consortium, but he did not attend the program.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, reported that in the past the Consortium offered outreach efforts to assist small businesses, but he stated that these programs no longer exist.

Interviewee #CON56, a white male owner of a small electrical contracting firm, was generally aware of programs to assist with bonding, insurance and financing and other educational and training programs (although it was not clear who offered these programs).

CONTA #2, the President of the Black Contractor's Association, stated that he is not aware of any outreach efforts by the Consortium to assist businesses by increasing their opportunities and skills to participate in Consortium projects. He stated that he is aware that the Metro Waste Water Treatment Plant may have such a program. CONTA #2 stated that he has not heard of any programs relating to how to do business with the Consortium.

Some interviewees were aware of or had participated in outreach programs offered by non-Consortium agencies. [Interviewees #CON: 2, 3, 4, 5, 7, 9, 11, 12, 13, 15, 16, 17, 23, 25, 26, 30, 31, 33, 36, 38, 50, 54, CONTA #1, 2]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he is aware of outreach efforts by the City of San Diego to increase participation of DBEs and small businesses in doing work with the Consortium. He stated that the City sends out emails inviting businesses to attend target events where business owners can learn about on-going projects and pair up with prime contractors. He stated that he last heard of one of these events one year ago. He stated that he attended the event, and it was somewhat helpful, but he thinks that it still comes down to networking with prime contractors.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, was generally aware that some of the agencies have seminars on how to do business with the government entity. For instance, the Metropolitan Water District has a program, but he has never attended a session. The objective of the program is to find out about projects well in advance of when they become public. Interviewee #CON3 is aware of efforts by the federal government to increase participation of DBEs and small businesses. The Navy Facility Engineering Command has done work to increase participation of DBEs and small businesses. The work involved is all environmental work relating to the base realignment closure. They also developed mentoring programs. The Command also has a mini-racks program in the $5,000 to $10,000 range which was DBE directed, but the program experienced limited success because many of the participating DBEs he believed were DBE fronts.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, was aware of several outreach efforts by others (than Consortium) to

increase participation of DBEs and small businesses. For instance, the Path to Partnership program sponsored by the County Water Authority and the State of California Department of General Services, is normally held in September or October of every year. He was also aware that the Minority Supplier Council in San Diego has a similar outreach event once a year. He said there are generally at least three networking events each year in San Diego and some of the individual agencies, such as the Port, may have their own networking event for particular projects.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he is aware of outreach efforts by others (than Consortium) to increase participation of DBEs and small businesses. For instance, he receives the Hispanic News every month and the newspaper advertises different programs including certification programs, but his company does not qualify.

Interviewee #CON7, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company, stated that he is aware of outreach efforts by others (than Consortium) to increase participation of DBEs and small businesses in doing work with Consortium. He stated that an organization called Elite SDVOB provides outreach programs. They generally hold a monthly meeting which members of the Port Authority and PG&E attend. He stated that PTAC also puts on a lot of programs relating to bonding, the Water District, and the Airport.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that L.A. County has held trade shows in the past with booths where DBEs can come to meet prime contractors; he had knowledge of them doing this at least a couple of years ago.

Interviewee #CON11, an SBE-certified white female-owned ergonomic prime consultant in the Los Angeles area stated that she uses the free services offered by the small business development center "all the time."

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he has seen programs to assist with bonding, insurance, and financing, but they do not rely on that. He stated that most of the training programs that he has seen are held by non-Consortium agencies like L.A. County. He was not aware of an outreach program re: "how to do business with the Consortium" although he noted the information may be available on the Consortium websites.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that he is aware of workshops on how to fill out a proposal, but he felt these are not offered by Consortium agencies. Interviewee #CON13 also stated there are a lot of private companies that "promise to find work" or market for companies for a fee.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, is aware that Caltrans, the City of Los Angeles, and L.A. Public Works have created outreach efforts to increase participation of DBEs and small business doing work with the contractors.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, is only aware of outreach efforts from the SBA with regard to increased participation of DBEs and small business in doing work with the Consortium.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, stated that she is aware of the Governor's initiative for small business to increase participation with the Consortium agencies.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, was aware of the State offering outreach efforts to increase participation of DBEs and small business doing work with the Consortium.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, was aware of an organization called MBOC, or the Minority Business Outreach Counsel, that has an outreach program component.

Interviewee #CON26, a Hispanic female-owned DBE/WBE/WDBE-certified art consulting firm, was aware of El Camino's outreach programs aimed at increasing participation of DBEs doing work with the Consortium.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, participated in an outreach program offered by Caltrans in the past. He was also aware of outreach efforts by MWD and LAUSD with the intent of doing business with DBEs and granting them contracts for working with their entities.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, was aware of outreach programs offered by other agencies, but believes that the participants are hand-picked.

Interviewee #CON36, an African American female-owned DBE/MBE/WBE/SBE/CBE-certified shorthand reporter, was aware of outreach efforts offered by Southern California Edison.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, was aware of outreach efforts offered through his organization, NCAIED.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, was aware of outreach efforts by Caltrans and the Department of Defense's Air Force.

Interviewee #CON54, a white male owner of a general contracting firm, noted that his own firm offers construction training programs in order to increase opportunities for DBEs and other small businesses.

CONTA #1, the President of the Latino Business Owners of America, stated that he is aware of sporadic outreach efforts by others (than Consortium) to increase participation of DBEs and small businesses in doing work with Consortium. He stated that occasionally an agency will put on a workshop on how to do business and how to get certified.

CONTA #2, the President of the Black Contractor's Association, stated that he is aware of a bonding assistance program offered by the Regional Airport Authority. Interviewee CONTA #2 stated that he is not otherwise familiar with any Consortium programs to assist with bonding, insurance, and financing. Interviewee CONTA #2 also stated that the San Diego Community College District has a partnership or collaboration with the COC (Contractors Opportunity Committee) to offer educational/training programs, but the program is not offered by the Consortium.

Other interviewees were not aware of outreach efforts by non-Consortium agencies. [Interviewees #CON: 6, 8, 9, 10, 14, 19, 20, 21, 24, 27, 28, 29, 32, 34, 35, 37, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 51, 52, 53, 55, 56, 57, 58, CONTA #2]. Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, was not aware of outreach efforts by other agencies except to the extent that they require prime contractors to reach out to DBEs to work on projects.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, was not aware of outreach efforts by non-Consortium agencies. She stated that she wanted to know how to do business with large private institutions, but cannot figure out how to break into that market.

Simplification and streamlining of the bid process.

Some interviewees were familiar with Consortium efforts to streamline the bid process. [Interviewees #CON: 4, 12, 18, 22, 24, 32, 33, 38, 42, 44, 46, 48]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that last year he heard of efforts to simplify and streamline the bidding process, but is not sure what is involved. Interviewee #CON4 stated that he could not recall what he heard. Interviewee #CON4 thinks that a more simplified and streamlined approach would be helpful.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that the OCTA "stands out as the agency" that tries to streamline the bidding process through their online system. He stated that they have an online system to request bids from consulting engineers for specific small tasks; this is helpful because you do not have to waste a lot of time putting together a bid, but the process is not transparent and you have no idea how the decision is made.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, has some knowledge of efforts to streamline and simplify the bidding process, but it depends on each individual project.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, had knowledge of Consortium efforts to simplify and streamline the bidding process, but he stated that he is waiting for it to happen.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that she has heard of efforts by the Consortium to streamline the bidding process.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that at the onset of the project L.A. County MTA will include the bidding aspects.

Most interviewees had no knowledge of or experience with Consortium efforts to streamline the bidding process. [Interviewees #CON: 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 14, 17, 19, 20, 21, 23, 25, 26, 27, 28, 29, 30, 31, 34, 35, 36, 37, 39, 40, 41, 43, 45, 47, 49, 50, 51, 52, 54, 55, 56, 57, 58, CONTA #1, 2]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, was not specifically aware of efforts by the Consortium to simplify and streamline the bidding process but did recall that he had read something about it on one of the websites.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, did not know whether the Consortium has done anything lately to streamline the bidding process. He recalled complaining in the past about the Consortium requirement to have documents notarized. He is "pretty sure" that they have ended the notary requirement.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated the he had "very little" experience with the Consortium efforts to streamline the bidding process.

Interviewee #CON29, an African American male-owned electrical contractor, was not aware of efforts to simplify or streamline the Consortium bidding process and stated that the process is extremely difficult to understand or to qualify to place a bid.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, indicated that the bidding process is not streamlined.

Interviewee #CON37, an African American male owner of a SBA certified architecture firm, stated that he has no knowledge of Consortium efforts to simplify and streamline the bidding process. He stated that he wishes it could happen because it would save his firm a lot of time and stress. He stated that he knows he is not going to get every contract, but the sooner he knows whether he will be awarded the contract or will not be awarded the contract he can move on to the next bid.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, was not aware of Consortium efforts to streamline the bidding process but thought that it would be a great idea to implement such a process. He stated that this would help cut back on unnecessary paperwork.

Interviewee #CON58, a white male owner of an engineering consulting firm, was not aware of Consortium efforts to streamline and simplify the bidding process, but stated that he wished that they would.

CONTA #1, the President of the Latino Business Owners of America, stated that he has not heard of any Consortium efforts to simplify and streamline the bidding process, and added he believed that it would make no difference.

CONTA #2, the President of the Black Contractor's Association, stated that he has not heard of any efforts by the Consortium to simply and streamline the bidding process.

Segmenting larger contracts into smaller contracts.

Some interviewees reported knowledge of Consortium efforts to segment larger contracts into smaller ones. [Interviewees #CON: 3, 5, 9, 13, 14, 18, 20, 22, 24, 33, CONTA #1]. Interviewee #CON3 was aware that in and around 2000 the Consortium tried to segment larger contracts into smaller contracts to promote opportunities for small contractors. He stated that the Consortium tried to divide the projects up internally instead of giving the entire project to one prime contractor. He said this did not help because the principal work is still done by a limited number of big contracting firms.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business, stated that he recently read something that he may have received from SANDAG regarding Consortium efforts to segment larger contracts into smaller contracts to promote opportunities for small contractors. He stated that many of the agencies are trying to break larger jobs up to bring smaller corporations in. Interviewee #CON5 stated that this is a good idea. Interviewee #CON5 stated that he has also heard of another program in which the agencies try to pull resources from the area where a project is being completed. If the contractors are located in particular zip codes, they could receive work on the project. Interviewee #CON5 stated that he has read about these programs on a number of governmental agency websites.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that he likes when the Consortium segments larger contracts into smaller contracts and "as far as he can tell" the Consortium does try to do this. He stated that when the Consortium does lump a contract together they usually provide a reason for doing so at the pre-proposal meeting.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, stated that L.A. County MTA has "work benches" for prequalification of companies, but he has not received any business from being on a work bench.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that Consortium efforts to segment larger contracts into smaller ones is done for the purpose of controlling workload and not give opportunities to smaller businesses.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, stated she knows that recent projects are being segmented to make more opportunities available for small business — she felt that this was positive.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, was aware of Consortium efforts to segment larger contracts into smaller ones and promote opportunities for smaller contractors. She stated that personally this has been helpful.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, had experience with Consortium efforts to segment larger contracts into smaller ones, and she noted that she helped to write some of the policies.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that she has heard of Consortium efforts to segment larger projects into smaller ones, but she has not seen it in her business.

CONTA #1, the President of the Latino Business Owners of America, stated that he is aware that the City of San Diego attempted about five years ago to segment larger contracts into smaller contracts to promote opportunities for small contractors. He stated that segmenting these larger contracts into smaller ones is a key element, but in general thought it might be unhelpful because agencies need to make these contracts realistic for small business owners to participate. The contracts should be more realistic in terms of the scope of services to be provided by small business owners.

Most interviewees reported having no knowledge of or experience with Consortium efforts to segment larger contracts into smaller ones. [Interviewees #CON: 1, 2, 4, 6, 7, 8, 10, 11, 12, 16, 17, 19, 21, 23, 25, 26, 27, 28, 29, 31, 32, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, CONTA #2]. Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, has not heard of any efforts to segment larger contracts into smaller contracts to promote opportunities for small contractors, but expressed a wish for more agencies to do that.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, did not have much experience with the Consortium agencies segmenting larger contracts into smaller ones. He stated that some people "could say that the on-calls are an attempt to do that" but most of the on-calls — 60 to 70 percent — translate to no business and create a waste of their time.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, would very much like to see the Consortium segment larger contracts into smaller contracts, but does not know of such efforts.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, has seen Caltrans segment large contracts into smaller contracts, and she would like to see the same happen with the Consortium agencies.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that he had no knowledge of Consortium efforts to segment larger contracts into smaller ones, but stated that the Metropolitan Water District of Southern California does unbundle contracts.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that he was not aware of Consortium efforts to segment larger projects into smaller ones, and sometimes it is the other way — contracts continue to be large and unbundled.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, would like a system in which the Consortium allowed bidding with small businesses where it was actually competitive by making it exclusive to small businesses.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, indicated that the Consortium does not segment larger contracts into smaller ones.

Interviewee #CON35, an African American female-owned WMBE/MBE-certified management consulting firm, had no experience with the Consortium segmenting large contracts to smaller ones, but believes it would be helpful.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he had never heard of Consortium efforts to segment larger contracts into smaller contracts to promote opportunities for small contractors. He stated that he wishes that there was such an effort because of his firm's discipline.

Interviewee #CON39, an Asian American female-owned 8(a)-certified architectural firm, stated that in her opinion large firms monopolize the contracts.

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, had no knowledge of Consortium efforts to segment larger contracts into smaller ones, but stated that would be fantastic positioning for smaller firms to bid on industry specific contracts.

Interviewee #CON46, a DBE/SBA/8(a)-certified African American male owner of an energy marketing firm, was not aware of Consortium efforts to segment large contracts into smaller ones, and he stated that they need to do so.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, had no experience with or knowledge of Consortium efforts to segment larger contracts into smaller ones but felt that the Consortium should make this a priority.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that the Consortium has not been proactive in trying to segment larger projects into smaller ones.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, was not aware of Consortium efforts to segment larger contracts into smaller ones, and said he believes that they should do so.

Interviewee #CON52, a DVBE-certified white male owner of a solar contracting firm, had no knowledge of Consortium efforts to segment larger contracts into smaller ones, and stated that he wished that they would do that in the future.

CONTA #2, the President of the Black Contractor's Association, stated that he has not heard of any Consortium efforts to segment larger contracts into smaller contracts to promote opportunities for small contractors.

Monitor DBE utilization.

Most interviewees were not aware of Consortium efforts to monitor DBE utilization throughout a project. [Interviewees #CON: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 17, 19, 22, 23, 25, 26, 27, 28, 29, 30, 32, 34, 36, 37, 39, 41, 44, 45, 46, 49, 51, 52, 53, 54, 56, 57, 58, CONTA #1, 2]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, had no knowledge as to whether the Consortium visits worksites to monitor DBE utilization.

Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, stated that he does not know whether the Consortium visits work sites to monitor DBE utilization throughout the project.

Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, stated that it is not his experience nor has he ever heard of the Consortium visiting work sites to monitor DBE utilization throughout the project.

Interviewee #CON4, a DBE-certified Asian-Pacific American male owner of an engineering firm in the San Diego area, stated that he has never heard of the Consortium visiting work sites to monitor DBE utilization throughout the project.

Interviewee #CON5, an employee at a non-DBE white male-owned electrical engineering business in the San Diego area, stated that he visited Consortium work sites while working for a different employer 10 years ago, however, he could not say whether the Consortium visited work sites to monitor DBE utilization throughout the project.

Interviewee #CON6, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company in the San Diego area, had no knowledge whether the Consortium visits work sites to monitor DBE utilization throughout the project.

Interviewee #CON7, a white male co-owner of a non-DBE Native American and Caucasian owned recycling and materials supplying company, stated that, in his experience, the Consortium does not visit work sites to monitor DBE utilization throughout the project.

Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, did not believe he had ever seen the Consortium visit a worksite to monitor DBE utilization.

Interviewee #CON10, a DBE-certified African American female-owned accounting firm, did not know whether the Consortium visits worksites to monitor DBE utilization.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, stated that he did not know whether the Consortium visits work sites to monitor DBE utilization.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that he does not have experience with the Consortium visiting worksites to monitor DBE utilization.

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, did not have experience with the Consortium visiting work sites to monitor DBE utilization.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, has seen the Consortium conduct labor compliance interviews, but has not experienced visits to work sites to monitor DBE utilization throughout a project.

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, is unaware of the Consortium visiting work sites to monitor utilization — she has only seen the agencies actually involved at the point of proposal, not midstream, but she has seen review and auditing of contracts.

Interviewee #CON22, an African American female owner of a DBE/MBE-certified planning engineering firm, was not aware of the Consortium visiting work sites to monitor DBE utilization but she knows that they are supposed to.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, was not aware of Consortium efforts to monitor work sites, but stated that the prime contractors should be required to prepare reports on their DBE utilization.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that he is not aware of Consortium visits to work sites in order for them to monitor utilization of DBEs on projects, and he feels that this is something lacking in the Consortium.

Interviewee #CON 37, an African American male owner of a SBA certified architecture firm, stated that he has never known of the Consortium visiting work sites to monitor DBE utilization. He stated that he thinks it would be a good follow-up.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, was not aware of Consortium efforts to monitor DBE utilization. He stated that this is especially problematic when a prime contractor has subcontracted work to a DBE, but then does not give them the work.

CONTA #1, the President of the Latino Business Owners of America, stated that he has never heard of the Consortium visiting work sites to monitor DBE utilization.

CONTA #2, the President of the Black Contractor's Association, has no information whether the Consortium visits work sites to monitor DBE utilization throughout a project.

A few interviewees were aware of some Consortium efforts to monitor DBE utilization on work sites. [Interviewees #CON: 14, 18, 20, 21, 33, 38, 40, 42, 48, 50, 55]. Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, stated that the Consortium does not visit work sites to monitor DBE utilization although procurement will sometimes "keep track" of DBE utilization.

Interviewee #CON18, a white female owner of a DBE/WBE-certified transit planning firm, experienced a field visit regarding DBE utilization. L.A. County MTA performed field visits twice in the last decade.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, stated that the Consortium does visit work sites to monitor DBE utilization and she knows that it is hit or miss. She could not speak to how successful this is.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that on her one contract with L.A. County MTA, L.A. County MTA monitored compliance.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, stated that the Consortium rarely visits worksites to monitor DBE utilization.

Interviewee #CON40, an African American male-owned DBE/MBE/SBE-certified maintenance and supply firm, had experience with the Consortium visiting worksites to monitor DBE utilization, but stated that they should do it more often.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that she had experienced a visit from the Consortium.

Recommendations related to remedies.

Several interviewees recommended expansion of outreach efforts to encourage small business participation including: increased advertising and the coordination and notification of work opportunities as between prime contractors and subcontractors. [Interviewees #CON: 1, 15, 16, 20, 21, 23, 25, 28, 30, 42, 51, CONTA #1, 2]. Interviewee #CON1, a non-DBE Hispanic American male owner of an electrical contracting firm in the San Diego area, suggested blanket advertising of the DBE Program to contractors and offer assistance to small businesses; he stated that that would increase his desire to do work with the Consortium.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, has noticed a significant difference in outreach, and this will continue to help him out tremendously as he continues to bid as a prime contractor.

Interviewee #CON16, a Hispanic American male owner of a value-added supply and system integration firm, suggested that there are more efforts to bring small and large businesses together, to monitor those efforts, and that such efforts are not just entertained for the purpose of checking a box for a particular bid requirement.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, recommended that the Consortium continue with due diligence for small companies to have opportunities and to not just look to the low bid but to quality as well.

Interviewee #CON21, an African American female owner of a DBE/MBE/SDB/Hubzone/8(a)-certified marketing and communications firm, stated that most agencies and private companies fail to make appropriate outreach efforts to DBEs. She stated that in order to solve the problem,

the agencies and private companies must incorporate a small business set-aside for DBEs similar to the federal government's 8(a) Program.

Interviewee #CON23, an African American male owner of a DBE/MBE-certified trucking subcontractor, recommended improved outreach to African American-owned businesses. He believes that other minority-owned businesses are being utilized to the exclusion of African American-owned businesses.

Interviewee #CON25, an African American male-owned DBE/MBE/SBE-certified civil engineer, stated that there needs to be more partnering between small firms and prime contractors. He stated that there should be more face time with prime contractors in addition to the L.A. County MTA Vendor Fairs.

Interviewee #CON28, an African American male owner of a DBE/MBE/SBA-certified heavy steel product distribution and supply firm, stated the L.A. County MTA needs to increase awareness and advertising about bidding opportunities, RFPs, and education programs related to bonding and financing.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that there should be a greater push for more outreach to smaller businesses so that they can participate in the bidding process.

Interviewee #CON42, a DBE/WMBE/SBE-certified African American female owner of a commercial printing company, stated that the L.A. County MTA should offer more DBE outreach programs.

CONTA #2, the President of the Black Contractor's Association, stated that Caltrans has representatives who provide information about prime contractors who have expressed an interest in a particular RFP; he recommended that the Consortium provide this information. CONTA #2 also recommended holding workshops in collaboration with the Black Contractors Association and having the Consortium officials and staff introduce themselves and make themselves known so that people know what they do.

Several interviewees recommended changes to simplify and streamline the bidding process including the dissemination of more information at the initial stage of the process and the simplification of paperwork. [Interviewees #CON: 9, 11, 13, 14, 17, 20, 29, 33, 34, 55, 58]. Interviewee #CON9, an Asian-Pacific American male-owned transportation engineering and planning consultant firm and graduate of the DBE Program in the Los Angeles area, stated that usually the first question they ask the Consortium is whether a given project is federally-funded and whether the DBE goals are a firm requirement. He stated that sometimes the answer to that question is unknown even during the pre-proposal meeting; he stated that more knowledge on the part of the agency would be helpful. He stated this information affects the way teams are formed. Interviewee #CON9 recommended that the agencies provide more information with respect to whether a project is federally-funded; he stated that federal funding provides them with a "hint" as to whether the contract has a "hard DBE goal" as opposed to a "soft DBE goal" on those contracts without federal funding.

Interviewee #CON11, an SBE-certified white female ergonomic prime consultant, recommended making the RFP process easier including requiring "less paperwork."

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, noted that "a lot of times" Consortium responses to questions about a particular RFP come too close to the due date of the proposal and raise additional questions that could impact the proposal. He stated that he understands the cut-off for receipt of additional questions but noted that it could affect an individual's ability to respond to a proposal. Interviewee #CON13 stated that some RFPs have page limitations which can be detrimental. Interviewee #CON13 also stated that some RFPs do not provide evaluation weighting information.

Interviewee #CON14, a Latin American male owner of a DBE-certified marketing firm, recommended that the people drafting the RFPs should be more qualified in the particular field. He stated that often the RFPs are written for engineering companies and then modified or tailored for communications projects but they retain qualifications that are "ridiculous" and not applicable (e.g., an insurance requirement).

Interviewee #CON17, a Subcontinent Asian American female owner of a MBE/DBE/WBE-certified engineering management firm, reported that her recommendations deal more with the delivery side of the process. Interviewee #CON17 stated that there is a disconnect between prime consultants and agency managers. Interviewee #CON17 recommended that agencies do a better job of "in-reach" to hold personnel accountable with regard to the commitments made during the proposal and planning stages of job and team formation.

Interviewee #CON20, an African American female owner of a DBE/MBE/WBE/SBA-certified community outreach firm, recommended that the Consortium cut down on the amount of paperwork associated with the bidding process. She stated that there are a lot of redundant forms that ask questions regarding, for example, lobbying, childcare facilities, etc. which often must be resubmitted twenty (20) times a year. She stated that there should be one form that captures all of the information so that they only have to go through the process once a year.

Interviewee #CON29, an African American male-owned electrical contractor, recommended that the Consortium make the process small business-friendly. He suggested streamlining efforts to make it easier to understand the proposals as well as the qualifications for the proposals and making them obtainable goals. He would like the certification process to be simplified. He stated that if the government really wanted to help small businesses they would have a checks and balances system in place for businesses who are supposed to get a percentage of the dollars to actually get the dollars.

Interviewee #CON33, a white female-owned DBE/WBE/SBA-certified management consultant, recommended that the Consortium reduce the number of addendums to the RFPs which would simplify the process.

Interviewee #CON34, a Hispanic female-owned DBE/MBE/WBE-certified transit and labor consultant, recommended eliminating bureaucratic hurdles in the bidding process.

Interviewee #CON55, a representative from a white male-owned large construction services and program management firm, stated that the Consortium should re-write the parameters in the proposals.

Interviewee #CON58, a white male owner of an engineering consulting firm, indicated that it may take a Consortium member agency one year to put together an RFP, but when it is released they will request a response within two weeks. He noted that sometimes the deadlines conflict with national holidays, and he offered that the agencies could be more considerate of the timing.

Several interviewees recommended that the Consortium unbundle, and segment larger contracts into smaller ones in order to increase opportunities for small businesses. [Interviewees #CON: 2, 15, 30, 31, 32, 38, 43, 50, 53]. Interviewee #CON2, a DBE-certified African American male structural engineer in the San Diego area, recommended that the Consortium break larger contracts into smaller ones.

Interviewee #CON15, a Hispanic American male owner of a MBE-certified engineering and construction company, recommended that the bidding process reflect the breaking down of contracts into smaller segments. Interviewee #CON15 noted that the bidding process and the contracts are, themselves, too big. He said that he would like to see contracts broken down into more management segments so that companies his size can bid on more projects.

Interviewee #CON30, an Asian male MBE/SBE-certified owner of a construction management firm, stated that the Consortium should divide larger contracts and split them down into smaller contracts so that the smaller firms can become more competitive for contracts; this will also do a better job of ensuring more minority and small business participation in becoming prime contractors and dealing directly with the Consortium.

Interviewee #CON31, an African American male-owned DBE/MBE/SBE-certified masonry subcontractor, stated that he thinks it would be a great idea for small businesses to be able to negotiate directly with the Consortium as it relates to the bidding process. Also he thinks that there should be some sort of system in place that breaks down the requirements of projects so that a $10 million project which might have $200,000 worth of masonry can be bid out in smaller portions (which is what he would want to bid on). He stated that he can never be the prime contractor on that type of project or be able to bond for a $10 million project but if he's bidding on a $200,000 project he becomes more competitive.

Interviewee #CON32, an African American male-owned DBE-certified distributor of cleaning products, stated the Consortium should enable smaller companies to obtain smaller contracts so that they can establish a track record with a prime contractor which could lead them to getting larger contracts.

Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that the structures of the contracts should be unbundled allowing more specialized bidding. This will allow bidders to bid within their own scope of work; he stated that some of the RFPs have you locked in a crazy perimeter of work. He also said they should make it fair and closely monitor the "Good Old Boy Network."

Interviewee #CON43, a DBE/MBE/SBE-certified African American male owner of a security firm, stated that the Consortium should develop a system that allows small businesses to be truly competitive on the bidding process; this would include some form of segmenting larger contracts into smaller ones.

Interviewee #CON50, a MBE/SBE-certified Chinese American male owner of an accounting firm, stated that the awarding entity should unbundle the contract so that smaller businesses have an opportunity to bid. He stated the Consortium should stop consolidating the contracts into one large all-inclusive contract that may, due to the scope of work and price, diminish the chance of a small business to be awarded the contract.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, stated that some of the Consortium projects are too large and they are always awarded to the larger firms. He recommended that the Consortium make the contracts smaller so that a firm can realistically go after it and do the job.

Some interviewees recommended the Consortium take efforts to encourage growth of small businesses. [Interviewees #CON: 3, 27, 47, 55, CONTA #1, PF #26]. Interviewee #CON3, a non-DBE white male owner of an environmental services company in the San Diego area, made the following recommendations for improvement to the Consortium DBE Program: spend an adequate amount of money to encourage participation. For instance, spend money to allow prime contractors to mentor and work with DBEs who may be less experienced.

Interviewee #CON27, a Chinese American male owner of a DBE/MBE-certified structural engineering firm, stated that it has been more difficult to obtain business since the passage of Proposition 209. He stated that as a result he has been forced to market in other areas. He stated that since his firm is not a small business, nor a large one, he needs another stream of dependable work. He said that the Consortium should help small businesses become larger businesses so that they do not remain stagnated in the small business category.

Interviewee #CON47, a DBE/MBE/8(a)-certified African American male owner of a security firm, stated that small businesses should have the same opportunities as larger companies and the Consortium should give small companies a chance so that they can grow. He stated that if they continue to give all of the jobs to the large companies the small companies will never have the opportunity to compete. He stated that L.A. County MTA will not award a contract to a small company if it deems it to have insufficient experience or annual revenue; and, he stated the L.A. County MTA will automatically assume that to be the case if it is a small business as all of them are placed in the same category. He stated that this is a bad business model. He stated that jobs are hard to finance and it seems as though the rules are set in place to eliminate businesses as opposed to assisting them. He indicated that he has pursued the same contract year after year, but it always goes to the incumbent; it has become a waste of time and money.

Interviewee #CON55, a white male owner of a construction services and program management firm, recommended that the Consortium find a way that comports with Proposition 209 to enable small and minority-owned firms to obtain work.

CONTA #1, the President of the Latino Business Owners of America, stated the agencies should also work to create stepping stones to grow small businesses. Further, he stated that the Consortium needs to change the perception that there is no gain to doing business with Consortium agencies and that the agencies are open to working with small businesses. CONTA #1 recommended that the agencies should go back to the drawing board and change the way that they do business. He stated that the contracts should be realistic in terms of the scope of work made available to DBEs. He also suggested that the agencies focus more on growing small businesses. He stated that unless the agencies help grow small businesses, all of the project supplies, for instance, will be imported.

PF #26, an individual representing a certified MBE/DBE engineering company provided oral testimony at a public forum held on October 21, 2009. He said, "I hope that SANDAG will adopt mandatory subcontracting minimums in contracts." He also stated that, "I'm hoping that SANDAG will consider giving special preference points to small and local businesses, and not just for everybody." (Public Forum San Diego held on October 21, 2009).

Some interviewees recommended relaxation of the participation goals in certain instances and expansion of other opportunities for small businesses. [Interviewees #CONTA: 1, 53]. CONTA #1, the President of the Latino Business Owners of America, recommended that the Consortium make realistic participation goals for small businesses. The allocation of contract dollars has to be realistic in terms of availability of DBEs. If there is no availability of DBEs in a particular area, the program should be focusing on creating availability. Additionally, the agencies often want to deal exclusively with one vendor who can supply multiple products, which excludes smaller vendors. The agencies should alter their practice of hiring a one source vendor to include smaller vendors.

Interviewee #CON53, a white male owner of a traffic, transportation, and engineering consulting firm, stated that he does not believe that any group should be forced to use a particular group because of their size, race, or gender; rather, everything should be left up to a firm's work history.

Recommendations related to DBE programs.

Some interviewees recommended that the Consortium avoid eliminating race-conscious participation goals. [Interviewees #CON: 12, 13, 19, 48, 49, PF #1, 2, 11, 21]. Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that the Consortium should be "consistent" in its implementation of the DBE Program and "not do what Caltrans did …" He stated that Caltrans "went race-neutral" and left the local agencies to "do whatever they please … and to ignore DBE participation, if necessary, because they have something lined up for someone." He stated that they had a direct experience with a local panel who told them that DBE was not that important. He stated that the Consortium should continue equal treatment of all DBEs. He stated that Caltrans did not take demographics into effect and the fact that there are more Hispanic Americans in the southern California area. He stated that limiting the DBE Program to certain races would be a "mistake."

Interviewee #CON13, an Asian-Pacific American male owner of a DBE/SBA/SBE-certified engineering consulting firm, noted that many projects today do not have a DBE requirement, but

rather just encourage participation. He stated that in many instances that is reasonable because there are not DBEs that do that kind of work. Interviewee #CON13 stated that opportunities for DBEs are shrinking and many states have done away with the DBE Program altogether, which is "bad" for his ability to get work. Interviewee #CON13 stated that he understands why states are curtailing the DBE Program, but he does see value to the DBE Program too. He stated that in the "big picture," he does not know whether the DBE Program is good or bad, but it has certainly helped his company to survive. He stated that his company has done some great work for the Consortium so both he and the Consortium have benefited.

Interviewee #CON19, an MBE-certified African American male attorney, stated "the playing field should be leveled" where the minority law firms can fairly compete for business and for more desirable business.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, recommended that the Consortium bring back the requirement for the utilization of DBE and MBE firms that was in existence before Proposition 209. He stated that once the Consortium eliminated the requirements in favor of goals, his telephone stopped ringing for new work. He stated that the L.A. County MTA had one of the strongest programs, and he hopes that they would return to that in the future.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, stated that Consortium contracts should no longer be race-neutral and should require utilization of minority-owned firms.

PF #1, an African American individual representing his MBE/DBE energy company, as well as a black business association, provided oral testimony at a public forum held on October 20, 2009. Since 1990, his firm has submitted over 80 bids, however, their rate of success is very poor. He stated that without goals included on all public sector contracts, small business owners will not be treated fairly. He stated, "Without goals at Metro, in particular goals for the inclusion of African Americans, any program will be doomed." (Public Forum Los Angeles held on October 20, 2009).

PF #2, an individual representing an office products company, as well as a black business association, provided oral testimony at a public forum held on October 20, 2009. His firm has been bidding on contracts since 1980 and has had very poor results. Other members of the black business association stated that few contracts were ever awarded to minority-owned firms. He stated that there seems to always be an impediment to minority participation, even though the opportunities are there. He wants LACMTA to include goals in all of their contracts. He said, "If there are no goals, I think it's going to be quite bleak for the minority-owned businesses." (Public Forum Los Angeles held on October 20, 2009).

PF #11, a female individual representing a real estate company said, "We have noticed a difference in the way that they have represented contracts for minority and big-ticket holders." She stated that she and her company have found that there are no participation goals included in contracts. These goals are crucial to her company, and have affected their business "in a big way." (Public Forum Los Angeles held on October 20, 2009).

PF #21, an individual representing a dry utilities company stated that they are qualified as a MBE, SBA8A and woman-owned small business. He began by addressing the genuine need for dry utility work on all public agency projects. He stated that his firm was willing and able to work throughout California, and that they have been consistent in their business pursuits to secure work with prime contractors. However, he stated that they had very little contract award success. He stated that his understanding is that without federal funding attached to the project, there are no goals included on the project to hire MBEs, WBEs or DBEs. "Without such goals, WMBE's and others are not being hired, and it is a huge problem. It is a problem that permeates the entire system." (Public Forum San Diego held on October 21, 2009).

One interviewee recommended that the Consortium should be sure to update its programs to keep them current with the state of business operations. [Interviewee #CON: 54]. Some interviewees offered mixed perceptions regarding continuing the Consortium DBE Program [Interviewees #CON8, 12]. Interviewee #CON8, a white male owner of an environmental consulting firm in the San Diego area, stated that he "resents" the DBE Program and having to comply with it. He stated that on non-Consortium projects a DBE requirement will sometimes be the deciding factor as to whether he decides to bid on the project. Interviewee #CON8 stated that the DBE Program is a time-consuming added requirement.

Interviewee #CON12, a Hispanic male owner of a DBE/MBE-certified civil engineering firm, stated that based on his experience with LA County MTA and OCTA, he did not have any recommendations for improving the DBE Program "provided that it continues to exist." He stated that the Caltrans process has led to some confusion and disadvantage.

Some interviewees recommended that the Consortium return to mandatory DBE goals. [Interviewees #CON: 38, 48, 49]. Interviewee #CON38, a Native American male-owned DBE/MBE/SBE-certified closed circuit television and surveillance security business, stated that the Consortium should return to the time when the goals were mandatory and were strictly enforced. He stated that they should level the playing field where public money is spent as it relates to small businesses involvement. He recommended making the project distribution fair by allowing all qualifying firms to become part of the bidding process.

Interviewee #CON48, a DBE/MBE-certified African American male owner of an electrical contracting firm, indicated that prior to the passage of Proposition 209, 85 percent of his business was attributable to his DBE certification; now it is less than 1 percent. He stated that he would like the certification to mean something.

Interviewee #CON49, a MBE/SCRPC-certified African American male owner of a job training firm, recommended that the Consortium have an initiative based on ethnic status. He feels as though this would help fight discrimination.