



Transportation Concept Report

State Route 9

District 4



SR 9 near 3rd Street in Saratoga, looking west

Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 4 Division of Transportation Planning and Local Assistance makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

California Department of Transportation
Caltrans Improves Mobility Across California

Approvals:

Lee Taubeneck 9/6/13
 Lee Taubeneck Date
 District 4 Deputy District Director
 Transportation Planning and Local Assistance

Bijan Sartipi 9-10-13
 Bijan Sartipi Date
 District 4 Director

Stakeholder Acknowledgement

District 4 is pleased to acknowledge the time and contributions of stakeholders and partner agencies to this TCR. Development of System Planning documents such as this one is dependent upon the participation and cooperation of key stakeholders. This TCR represents a cooperative planning effort for State Route 9. Representatives of the Santa Clara County Valley Transportation Authority (VTA), the Town of Los Gatos, the City of Monte Sereno, the City of Saratoga and the County of Santa Clara provided essential information, advice and feedback for the preparation of this document.

This TCR will be posted on the Caltrans District 4 System Planning website at:

<http://www.dot.ca.gov/dist4/systemplanning>

Document Preparation

This SR 9 Transportation Concept Report was prepared by:

ZHONGPING "JOHN" XU, AICP
Associate Transportation Planner
Office of System and Regional Planning
System Planning East Bay/Santa Clara County Branch

CAMERON OAKES
District Branch Chief
Office of System and Regional Planning
System Planning East Bay/Santa Clara County Branch

Please contact below for any questions about this TCR:

Caltrans District 4
Division of Transportation Planning and Local Assistance
P.O. Box 23660, Oakland, CA 94623-0660
<http://www.dot.ca.gov/dist4/systemplanning>

TABLE OF CONTENTS

About the Transportation Concept Report	3
Stakeholder Participation	3
EXECUTIVE SUMMARY	4
Concept Summary	4
Concept Rationale	4
Proposed Projects and Strategies.....	5
CORRIDOR OVERVIEW	6
Route Segmentation.....	6
Route Description.....	7
Community Characteristics	9
Land Use	10
System Characteristics.....	13
Bicycle Facility.....	14
Pedestrian Facility	15
Transit Facility.....	17
Freight.....	18
Environmental Considerations	19
CORRIDOR PERFORMANCE	22
KEY CORRIDOR ISSUES.....	24
Complete Streets.....	24
Relinquishment.....	24
Corridor Operations.....	24
Road Diet	24
Saratoga-Los Gatos Road East.....	25
CORRIDOR CONCEPT	25
Concept Rationale	25
Planned and Programmed Projects and Strategies.....	26
Projects and Strategies to Achieve Concept.....	26
Appendices	27
APPENDIX A	27
APPENDIX B	32
APPENDIX C	34

LIST OF TABLES

Table 1. Corridor Concept Summary	4
Table 2. Proposed Projects to Help Achieve Route Concept.....	5
Table 3. SR 9 Segments.....	6
Table 4. Route Description by Segment	8
Table 5. Saratoga, Monte Sereno and Los Gatos Demographics Compared to Santa Clara County.....	9
Table 6. Smart Mobility Framework Place Type by Segment.....	12
Table 7. Existing and Future System Characteristics by Segment	13
Table 8. Bicycle Facilities by Segment	15
Table 9. Pedestrian Facilities by Segment	16
Table 10. Freight Facilities	19
Table 11. Environmental Factors.....	20
Table 12. Corridor Performance by Segment	23
Table 13. Planned or Programmed Projects along SR 9	26
Table 14. Future Projects along SR 9	26

LIST OF FIGURES

Figure 1. SR 9 Segment Map.....	6
Figure 2. Major Roadways near SR 9	10
Figure 3. Transit Routes around SR 9	17
Figure 4. Environmental Factors Map	21

ABOUT THE TRANSPORTATION CONCEPT REPORT

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans' statutory responsibility as owner/operator of the State Highway System (SHS) (Gov. Code §65086) by evaluating conditions and proposing enhancements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of safety, mobility, delivery, stewardship, and service.

The System Planning process is primarily composed of four parts: the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP), and the DSMP Project List. The district-wide **DSMP** is strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The **TCR** is a planning document that identifies the existing and future route conditions as well as future needs for each route on the SHS. The **CSMP** is a complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The CSMP serves as a TCR for segments covered by the CSMP. The **DSMP Project List** is a list of planned and partially programmed transportation projects used to recommend projects for funding. These System Planning products are also intended as resources for stakeholders, the public, and partner, regional, and local agencies.

TCR Purpose

California's State Highway System needs long range planning documents to guide the logical development of transportation systems as required by CA Gov. Code §65086 and as necessitated by the public, stakeholders, and system users. The purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The TCR is developed with the goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

STAKEHOLDER PARTICIPATION

Stakeholder participation was sought throughout the development of the State Route 9 TCR. Outreach involved internal and external stakeholders including District 4 functional units, the Santa Clara Valley Transportation Authority (VTA), City of Saratoga, City of Monte Sereno, Town of Los Gatos and County of Santa Clara. Initial outreach meeting was conducted to verify information and collect ideas from stakeholders. As the document was finalized, stakeholders were asked to review the document for comments and for consistency with the intent of existing plans, policies, and procedures. The final document was presented to stakeholder groups as a method of information sharing. Stakeholders have provided valuable inputs that have been incorporated into the TCR to help build consensus and strengthen public support.

EXECUTIVE SUMMARY

CONCEPT SUMMARY

Table 1. Corridor Concept Summary

Segment	Sub-Segment	Segment Description	Existing Facility	20-25 Year Capital Facility Concept	20-25 Year System Operations and Management Concept*
1 (PM 0.000-7.090)	1(a) (PM 0.000-5.653)	State Route 35 to Saratoga city limits	2C**	2C	<ul style="list-style-type: none"> • Maintain • Monitor for operational improvement needs
	1(b) (PM 5.653-7.090)	Saratoga city limits to 6 th Street	2C	Relinquish	<ul style="list-style-type: none"> • Maintain • Multimodal improvement needs
2 (PM 7.090-7.551)	N/A	6 th Street to Oak Place in Saratoga	2C	Relinquish	<ul style="list-style-type: none"> • Maintain • Multimodal improvement needs
3 (PM 7.551-10.830)	N/A	Oak Place to Monte Sereno/Los Gatos city limits	2-4C	Relinquish	<ul style="list-style-type: none"> • Maintain • Multimodal improvement needs
4 (PM 10.830-11.448)	N/A	Monte Sereno/Los Gatos city limits to State Route 17	3-4C	Relinquish	<ul style="list-style-type: none"> • Maintain • Multimodal and operational improvement needs

* The 20-25 Year System Operations and Management Concept for segments 1(b), 2, 3 and 4 was developed in anticipation of the potential uncertainty posed by the relinquishment process.

** "C" stands for conventional highway.

The State Route 9 (SR 9) corridor discussed in this report is located entirely in southwest Santa Clara County. Starting at Post Mile (PM) 0.000 from the Santa Clara/Santa Cruz County line and SR 9/SR 35 junction, the route proceeds in an east/southeast direction for over 11 miles and terminates at the SR 9/SR 17 interchange (PM 11.448). The western portion of SR 9 is rural, surrounded by open space and recreational land uses in a mostly mountainous area. Between 6th Street and just beyond the Big Basin Way/South Saratoga-Sunnyvale Road intersection, SR 9 serves as the main street for downtown Saratoga, also known as the Saratoga Village. Further east, the route travels through suburban residential areas within the City of Saratoga, unincorporated Santa Clara County and the City of Monte Sereno, followed by the commercial areas within Downtown Los Gatos. With the exception of Segment 1, which mainly serves interregional traffic, the route largely provides for local traffic in adjacent communities. SR 9 serves a substantial amount of recreational traffic, and is also a popular choice for motorcyclists and bicyclists. The base year and horizon year for this TCR are 2010 and 2035, respectively. The future concept represents a 25-year planning horizon.

CONCEPT RATIONALE

District 4 is generally supportive of recent relinquishment inquiries for some portions of the route. Segments 2, 3 and 4 mainly carry local traffic, and there are no major developments expected along these segments. As a result, the future concept for Segments 2, 3, and 4 is relinquishment. While Saratoga and Monte Sereno have expressed interest in route relinquishment within their respective city boundaries, discussion still needs to occur with Los Gatos and Santa Clara County. For relinquishment purposes, Segment 1 has been divided into two sub-segments: Segment 1(a) in unincorporated Santa Clara County and Segment 1(b) in Saratoga. While Segment 1(b) may be relinquished to Saratoga, Segment 1(a) may be retained under Caltrans' ownership and operation. This is due to Segment 1(a) serving an important interregional link between the Bay Area and the Santa Cruz

region, and traffic on this sub-segment being more interregional in nature. Segment 1(a) will remain a two-lane conventional highway. Continuous monitoring and study should be performed to evaluate if additional passing lanes and turnouts are needed to help facilitate the operation of the road and to accommodate bicycle travel.

PROPOSED PROJECTS AND STRATEGIES

The future concept for Segments 1(b), 2, 3 and 4 is relinquishment to the respective local jurisdiction. However, relinquishment, to a great extent, is a locally driven process and implementation may not happen immediately. Caltrans will continue to maintain, operate and manage all segments of the corridor while they remain under State ownership. The future corridor management strategies are focused on maintenance, operational improvements and additional multimodal infrastructure development. No roadway capacity increasing projects are programmed, planned or proposed for SR 9. A new bus service is proposed along Segments 3, 4 and possibly 2, based on demand for transit service. VTA is responsible for the planning, implementation and operations of bus services in Santa Clara County. Coordination will need to occur between Caltrans, VTA and local jurisdictions along the route to bring transit service to the SR 9 corridor. A SR 9/SR 17 interchange reconstruction project has also been proposed in this TCR, which would help reduce vehicle/pedestrian/bicycle conflict points within the interchange and promote a better environment for walking and biking along SR 9. This is consistent with other non-motorized modes of transportation improvements proposed in the corridor. The interchange reconstruction project may have the added benefits of improving traffic operations on SR 17.

Table 2. Proposed Projects to Help Achieve Route Concept

Segment	Description	Location
1(a)	Passing lanes and turnouts as needed	PM* 0.000-5.653
1(b),2,3,4	Route relinquishment	PM 5.653-11.448
2,3,4	Develop bus service along SR 9 (based on demand for transit)	PM 7.09-11.448
3	Improve/develop pedestrian crossings	PM 7.551-10.830
3, 4	Provide continuous pedestrian paths on both sides of the road	PM 7.551-11.448
4	SR 9/SR 17 Interchange Reconstruction	PM 11.448

*PM = Post Mile.

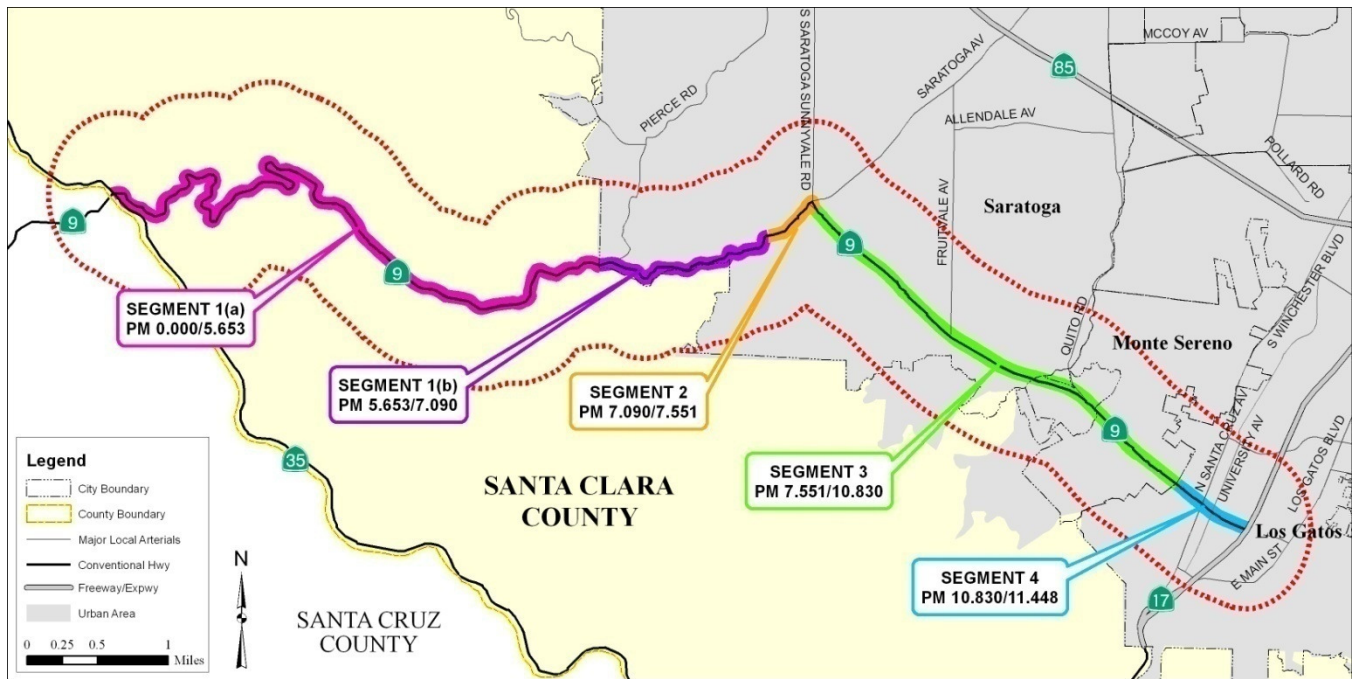
CORRIDOR OVERVIEW

ROUTE SEGMENTATION

Table 3. SR 9 Segments

Segment #	Location Description	County_Route_Beg. PM	County_Route_End PM
1	Santa Clara/Santa Cruz County line to 6 th Street in Saratoga	SCL_009_0.000	SCL_009_7.090
2	6 th Street to Oak Place in Saratoga	SCL_009_7.090	SCL_009_7.551
3	Oak Place to Monte Sereno/Los Gatos city limits	SCL_009_7.551	SCL_009_10.830
4	Monte Sereno/Los Gatos city limits to State Route 17	SCL_009_10.830	SCL_009_11.448

Figure 1. SR 9 Segment Map



Source: District 4 GIS and Technical Support Branch, Jan 2013.

ROUTE DESCRIPTION



SR 9 at South Saratoga-Sunnyvale Road, looking east .

State Route 9 (SR 9) begins in Caltrans District 5 in the City of Santa Cruz near SR-1. It winds through the Santa Cruz Mountains and continues into District 4 for over 11 miles until terminating at SR 17 in the Town of Los Gatos in Santa Clara County. A section of SR 9 also meanders in and out of the Santa Cruz and San Mateo County line. Agreement has been reached between District 4 and District 5 that the San Mateo portion will be covered in District 5's SR 9 TCR. For the purpose of this TCR, the SR 9 corridor is located entirely in southwest Santa Clara County, traveling from the junction of SR 9/SR 35 (PM 0.000) to SR 9/SR 17 interchange (PM 11.448). The corridor is divided into four segments for the purpose of analysis and concept development. Table 3 and Figure 1 on page 6 show the limits and post mile of each segment.

SR 9 is Congress Spring Road between the Santa Cruz County line and downtown Saratoga, the Saratoga Village. In Saratoga Village, it is known as Big Basin Way. After Big Basin Way/South Saratoga-Sunnyvale Road intersection, SR 9 becomes Saratoga-Los Gatos Road and continues until the SR 9/SR 17 interchange. Locally, SR 9 is also referred to as "Highway 9".

Although officially designated as a south-north route, SR 9 travels mainly in an east-west direction traversing the open space and recreational areas in unincorporated Santa Clara County and southwest Saratoga. The mostly mountainous terrain then descends and transitions into more flat lands as the route enters developed urban areas. Between 6th Street and Oak Place, SR 9 serves as the main street of historic Saratoga Village. The route turns southeast at Big Basin Way/South Saratoga-Sunnyvale Road intersection and then travels through predominantly semi-rural/suburban residential areas in southeast portion of Saratoga, unincorporated Santa Clara County and Monte Sereno. The last section of the route travels through downtown Los Gatos. SR 9 terminates at SR 9/SR 17 interchange, a full cloverleaf interchange with SR 9 traveling over SR 17.

In 1998 Caltrans developed the first Interregional Transportation Strategic Plan (ITSP) to recommend improvements to the Interregional Road System (IRRS) originally identified by the following Statutes: Assembly Bill (AB) 471, Senate Bill (SB) 300 and AB 973. The ITSP identifies SR 9 as one of the 93 Basic IRRS routes in the State, as the route (especially Segment 1) provides an interregional link between the Bay Area and Santa Cruz County. The route is not currently classified as one of the IRRS High Emphasis or Focus Routes, which are routes of critical interregional importance and are considered most eligible for Interregional Transportation Improvement Program (ITIP) funding. For people who commute in their cars, SR 9 mainly accommodates local traffic movements heading to and from adjacent communities. SR 9 also serves a substantial amount of recreational traffic. The route not only provides access to recreational uses in the Santa Cruz Mountains and attractions further south, but also serves as a recreational destination that draws motorists and bicyclists to its scenic and winding mountain road in Segment 1. SR 9 is officially designated as a California Scenic Highway.¹ Please see Table 4 below for a description of each segment.

Table 4. Route Description by Segment

Segment #	1	2	3	4
Freeway & Expressway	No	No	No	No
National Highway System	No	No	Yes	Yes
Strategic Highway Network	No	No	No	No
Scenic Highway	Officially Designated	Officially Designated	Officially Designated	Officially Designated
Interregional Road System	Yes	Yes	Yes	Yes
High Emphasis	No	No	No	No
Focus Route	No	No	No	No
Federal Functional Classification	Major Collector [1(a)], Minor Arterial[1(b)]	Minor Arterial/Other Principal Arterial	Other Principal Arterial	Other Principal Arterial
Goods Movement Route	Yes	Yes	Yes	Yes
Truck Designation*	CA Legal Advisory	CA Legal Advisory	CA Legal Advisory	CA Legal Advisory
Rural/Urban/Urbanized	Rural/Urbanized	Urbanized	Urbanized	Urbanized
Metropolitan Planning Organization	Metropolitan Transportation Commission (MTC)	MTC	MTC	MTC
Regional Transportation Planning Agency	MTC	MTC	MTC	MTC
Congestion Management Agency	Santa Clara Valley Transportation Authority (VTA)	VTA	VTA	VTA
Local Agency	Santa Clara County, City of Saratoga	City of Saratoga	City of Saratoga, Santa Clara County, City of Monte Sereno	Town of Los Gatos
Tribes	N/A	N/A	N/A	N/A
Air District	Bay Area Air Quality Management District	Bay Area Air Quality Management District	Bay Area Air Quality Management District	Bay Area Air Quality Management District
Terrain	Mountainous/Rolling	Rolling	Rolling	Rolling

* Please see "Freight" section on page 18 for explanation.

¹ California Scenic Highway Program: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm, accessed Oct 2012

COMMUNITY CHARACTERISTICS

SR 9 travels through three incorporated communities: the City of Saratoga, the City of Monte Sereno, and the Town of Los Gatos. Please see Table 5 below for more demographic information. Compared to the county average, these three communities have higher household median income but smaller household size. This may also explain why there is higher home ownership rate and more people who drive alone to work.

Saratoga, Monte Sereno and Los Gatos value their small-town/semi-rural character and have all adopted policies in their General Plans to protect and preserve such charm. No major population increase or employment growth is expected in these communities as they are mostly built-out. In the Circulation Elements of their respective General Plans, all three jurisdictions have recognized how a balanced, well planned transportation network can help preserve community character while meeting existing and future mobility needs. They all have adopted policies to promote walking, bicycling and public transportation as alternative modes to driving a car.²

A few unincorporated pockets exist along the corridor that fall within the Sphere of Influence of one of these three jurisdictions. Most of these areas share similar characteristics with adjacent communities and could be annexed into adjacent jurisdictions someday in the future.

Table 5. Saratoga, Monte Sereno and Los Gatos Demographics Compared to Santa Clara County

	Saratoga	Monte Sereno	Los Gatos	Santa Clara County
Total Population	29,926 (100%)	3,341 (100%)	29,413 (100%)	1,781,642 (100%)
Non-Hispanic White	15,431 (51.6%)	2,578 (77.2%)	22,657 (77.0%)	626,909 (35.2%)
Non-Hispanic Asian	12,331 (41.2%)	462 (13.8%)	3,177 (10.8%)	565,466 (31.7%)
Hispanic or Latino	1,034 (3.5%)	162 (4.8%)	2,120 (7.2%)	479,210 (26.9%)
Other	1,130 (3.8%)	139 (4.2%)	1459 (5.0%)	110,057 (6.2%)
Language Spoken at Home – English Only	59.80%	82.40%	79.20%	49.30%
Population Density (people/square mile)	2,417	2,068	2,636	1,400
Number of Household	10,734	1,211	12,355	604,204
Average Household Size	2.77	2.76	2.35	2.90
Number of Housing Unit	11,123	1,287	13,050	631,920
Owner-Occupied Housing Unit	86.2%	90.0%	63.0%	57.6%
Median Household Income (Estimate, 2006-2010 American Community Survey)	\$145,023	\$139,145	\$120,971	\$86,850
Drive Alone to Work	84.60%	82.20%	83.20%	76.80%
Mean Travel Time to Work (min)	25	25.1	23.4	24.2

Source: Data compiled from the U.S. Census Bureau. <http://www.census.gov>, accessed July 2012.

² The City of Monte Sereno, General Plan, adopted 2009, Housing Element 2010
<http://www.montesereno.org/clientuploads/Online%20Documents/Planning/FinalGeneralPlan032010.pdf>
 The City of Saratoga, General Plan, Housing Element 2007, Circulation and Scenic Highway Element 2010
http://www.saratoga.ca.us/cityhall/cd/general_plan.asp
 The Town of Los Gatos, 2020 General Plan, adopted 2010
<http://www.losgatosca.gov/index.aspx?nid=27>

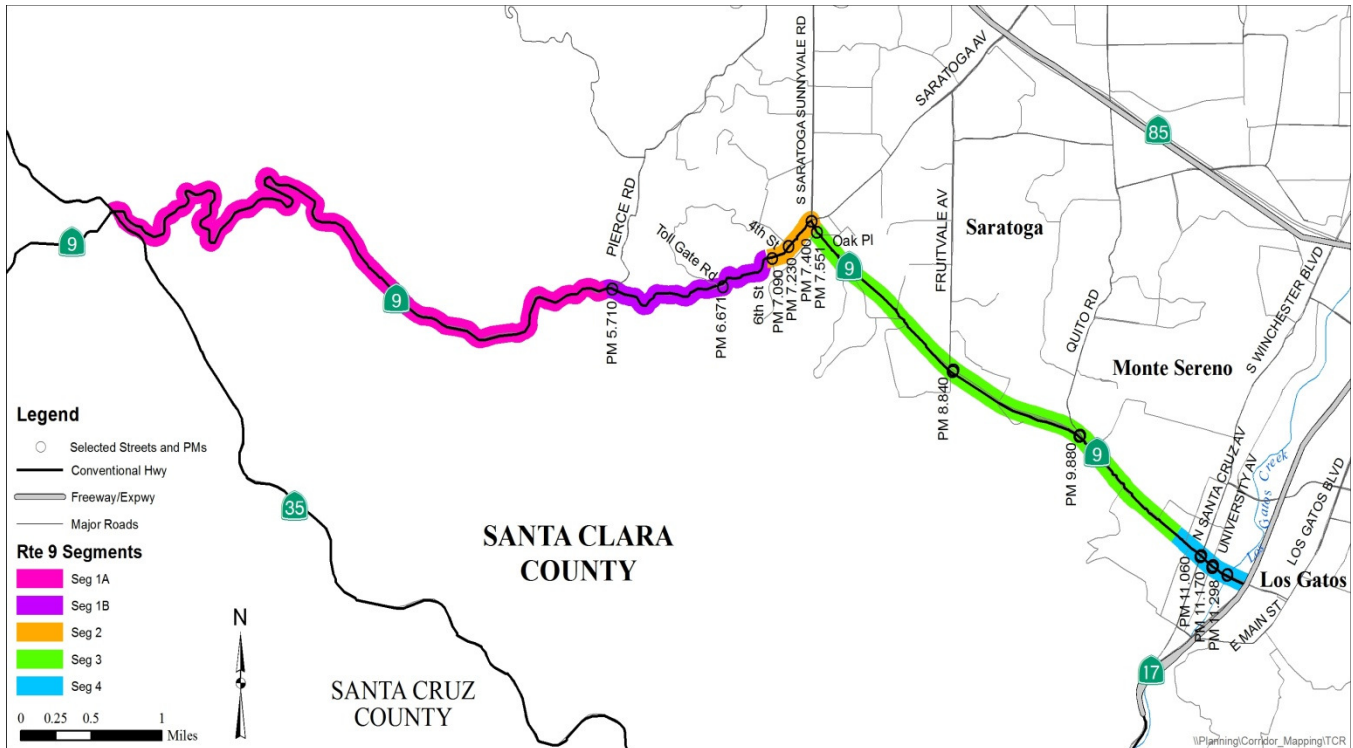
LAND USE

Segment 1 is mainly surrounded by open space and recreational areas including Castle Rock State Park, Saratoga Gap Open Space Preserve and Sanborn-Skyline County Park. Low density residential areas are scattered around in a few hillside pockets. The Mountain Winery, located off of Pierce Road and 0.4 miles north of Segment 1, is a cultural activity venue that hosts concerts mostly during the summer. Segment 2 represents the main street in Saratoga Village. The village is of historic importance to Saratoga, as this is where the early development occurred in the city. Today, the village is the city's economic center and attracts people from both within and outside the city to a variety of shops and restaurants. Land use along Segment 3 is predominantly suburban/semi-rural residential. West Valley College is located about a mile north of Segment 3 along Fruitvale Avenue. Segment 4 bisects downtown Los Gatos near the SR 9/SR 17 interchange. Most businesses and offices are clustered along Main Street south of SR 9 and North Santa Cruz Avenue which intersects with SR 9.

SR 85 is a freeway route located approximately 2 miles north of SR 9. SR 85 begins at US 101 in South San Jose and ends at US 101 in Mountain View. It has junctions with SR 17, SR 82, SR 87, I-280 and SR 237. SR 85 is generally parallel to Segments 3 and 4, which helps divert traffic away from the SR 9 corridor. Between Saratoga Village and SR 17, several north-south arterials intersect SR 9 and provide access to SR 85, Silicon Valley and other employment centers to the north. These arterials include South Saratoga-Sunnyvale Road (PM 7.400), Saratoga Avenue (PM 7.400), Fruitvale Avenue (PM 8.840), Quito Road (PM 9.880), North Santa Cruz Avenue/Winchester Boulevard (PM 11.060) and SR 17 (PM 11.448). SR 17 also provides access to Santa Cruz County to the south. Figure 2 below shows the location of these roadway facilities.

There are no major development projects proposed along or in the vicinity of SR 9. Population and employment growth is expected to be moderate in areas surrounding the route. Traffic volumes along SR 9 are not expected to increase significantly in the future and there is no need for major capacity increasing projects. Further information on traffic data is provided in the "Corridor Performance" section on page 21.

Figure 2. Major Roadways near SR 9



Source: District 4 GIS and Technical Support Branch, July 2013.

Priority Development Areas and Priority Conservation Areas

Beginning in 2006, the Bay Area’s four regional agencies (the Bay Area Air Quality Management District (BAAQMD), the Association of Bay Area Governments (ABAG), the Metropolitan Transportation Commission (MTC), and the Bay Conservation and Development Commission (BCDC)) jointly sponsored a regional planning program called “FOCUS”³. FOCUS is a regional development and conservation strategy that links land use and transportation by encouraging the development of complete, livable communities in areas served by transit, and promotes conservation of the region’s most significant resource lands. The program directs existing and future incentives to Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs). PDAs are defined as locally-identified, infill development opportunity areas within existing communities that are near existing or planned fixed transit or served by comparable bus service. PCAs are defined as areas of regional significance that have broad community support and an urgent need for protection. PCAs provide important agricultural, natural resource, historical, scenic, cultural, recreational, and/or ecological values and ecosystem functions.

Saratoga Village in Segment 1 and a portion of downtown Los Gatos north of Segment 4 have both been identified as a PDA. In Segment 1, most of the land areas surrounding the three parks have been identified as PCAs. Figure 3 - Environmental Factors Map on page 20 illustrates where these locally identified PDAs and PCAs are currently located.

Sustainable Communities Strategy

In support of linking land use with transportation, 2008’s Senate Bill 375 (SB 375) was passed and signed by then Governor Schwarzenegger. The bill requires the State’s Metropolitan Transportation Organizations (MPO) to meet State-mandated greenhouse gas emission targets for automobiles and light trucks for years 2020 and 2050. MPO’s must accurately account for the environmental benefits of more compact development and reduced vehicle miles traveled. If regions develop integrated land use, housing and transportation plans that meet the emission reduction targets, new projects in these regions can be relieved of certain review requirements of the California Environmental Quality Act (CEQA). The emission reduction targets apply to the 18 designated MPO regions in the State.

³ See <http://www.bayareavision.org/>

The recently approved Regional Transportation Plan (RTP), also known as Plan Bay Area (adopted July 18, 2013) by the Metropolitan Transportation Commission (MTC) includes a Sustainable Community Strategy (SCS) as required by SB 375. The legislation synchronizes the Regional Housing Needs Assessment (RHNA) process with the RTP process, requires local governments to rezone their general plans consistent with the updated housing element within three years of adoption, and provides that RHNA allocations must be consistent with the development pattern in the SCS. The SCS lays out how Greenhouse Gas (GHG) emissions reduction targets will be met for cars and light trucks. This represents a dramatic change in how land use, transportation and future project selection will be prioritized.

California Transportation Plan

2009’s Senate Bill 391 (SB 391) requires Caltrans to update the statewide California Transportation Plan (CTP) by December 31, 2015 and every five years thereafter. The CTP shall identify the integrated multimodal transportation system needed to achieve maximum feasible greenhouse gas emissions reductions to 1990 levels by 2050 and 80 percent below 1990 levels by 2050 (as required by AB 32). In addition, SB 391 requires the CTP to incorporate transportation policies and system performance objectives from approved Regional Transportation Plans produced by the MPOs. Caltrans must also consult, coordinate, and make drafts of the CTP available for review and comment to the: California Transportation Commission, Strategic Growth Council, State Air Resources Board, State Energy Resources Conservation and Development Commission, air quality management districts, public transit operators, and Regional Transportation Planning Agencies.

Smart Mobility Framework

In 2010 Caltrans introduced the concept of smart mobility to its transportation planning process and established the Smart Mobility Framework (SMF) in the State⁴. Smart Mobility is defined by moving people and freight while enhancing California’s economic, environmental and human resources by emphasizing convenient and safe multi-modal travel, speed suitability, accessibility, management of the circulation network, and efficient use of land. The SMF is built on six principles: Location Efficiency, Reliable Mobility, Health and Safety, Environmental Stewardship, Social Equity, and Robust Economy. SMF is essentially a tool for planners to respond to the mobility needs of all users while balancing economic prosperity, environmental quality and social equity. It helps achieve the goals of reducing per capita vehicle miles traveled and addressing climate change challenges presented in AB 32 and SB 375.

Based on the Location Efficiency principle, the SMF introduces seven “Place Types” to help inform transportation decision making. Each of the seven place types represent a distinct context where implementation of certain transportation investments, along with planning and management strategies, will help improve location efficiency and achieve Smart Mobility benefits. Table 6 below identifies the Place Types for each segment along the SR 9 Corridor and offers potential transportation programs and appropriate project ideas for each of them.

Table 6. Smart Mobility Framework Place Type by Segment

Segment	Place Type	Transportation Programs and Projects
1	Protected Lands	<ul style="list-style-type: none"> Capacity and connectivity increase only when required Bicycle facility and trail projects where public access and recreational use is permitted
	Suburban Communities-Neighborhoods	<ul style="list-style-type: none"> Investments that improve operational efficiency of existing arterials Connectivity improvements leading to shorter trip lengths and increased non-auto mode share Investments in Complete Streets
2	Compact Communities	<ul style="list-style-type: none"> Pedestrian facilities with high amenity levels Extensive network of bicycle facilities

⁴ Smart Mobility 2010 – A Call to Action for the New Decade, Caltrans, 2010

		<ul style="list-style-type: none"> • Convenient multi-modal transfers and transit transfers • On-going reinvestment in existing facilities
3	Suburban Communities-Neighborhoods	<ul style="list-style-type: none"> • Investments that improve operational efficiency of existing arterials • Connectivity improvements leading to shorter trip lengths and increased non-auto mode share • Investments in complete street
4	Close-in Compact Communities-Centers	<ul style="list-style-type: none"> • Complete Streets projects • On-going reinvestment in existing facilities • High capacity transit linking neighborhoods to employment centers • Local transit with excellent coverage providing connections to high capacity transit lines

SYSTEM CHARACTERISTICS

The following sections will discuss various system characteristics of the SR 9 corridor, including physical characteristics, bicycle facilities, pedestrian facilities, transit facilities, freight facilities and environmental considerations. Table 7 on the following page presents existing and future physical characteristics of SR 9. The future concept of each segment of the corridor is briefly discussed in this section. Please see the “Corridor Concept” section on page 24 for further information and conceptual vision for the corridor.

Segment 1 is currently a two-lane undivided conventional highway. Passing lanes in the uphill (westbound) direction are found at several locations in this segment, but no truck climbing lanes currently exist. According to the Caltrans Pavement Condition Report (2009), Segment 1 is the only segment where distressed pavement conditions are found. Distressed pavement length is 14 percent of the lane miles in the segment and the distress level is considered Minor. The future concept subdivides this segment into two parts, with Sub-Segment 1(a) remaining under State ownership and 1(b) relinquished to Saratoga. Caltrans will continue to monitor and study Sub-Segment 1(a) for potential operational improvement opportunities including additional passing lanes and turnouts.

Segment 2 in Saratoga Village is also a 2-lane conventional highway. The segment is characterized by short block length, closely spaced intersections, clearly delineated crosswalks and on street parking. No traffic signals exist except at the Big Basin Way/South Saratoga-Sunnyvale Road intersection. Side streets intersecting SR 9 are stop sign controlled and there are also multiple driveways leading to adjacent residential properties or parking lots for local business. Pedestrian infrastructure and amenities are available along Segment 2. See “Pedestrian Facilities” on page 15 for further information. Segment 2 is anticipated to be relinquished to Saratoga in the future.

Segments 3 and 4 are two- to four-lane conventional highway segments. These two segments vary in roadway width, lane configuration, posted speed limit and median characteristics. For the three-lane highway sections, a two-way left turn lane is provided in the roadway median. At other locations the median varies in both width and configuration. Left turn pockets are found at most intersections. Major intersections are controlled by traffic signals, while smaller side streets are controlled by stop signs. Saratoga and Monte Sereno have both expressed interest in taking ownership of the route within their respective city boundaries. District 4 in general is supportive of this idea. However, sections within unincorporated Santa Clara County and Los Gatos should also be relinquished to local jurisdictions to avoid excessive route fragmentation.

Table 7. Existing and Future System Characteristics by Segment

Segment #	1	2	3	4
Existing Facility				
Facility Type	C*	C	C	C
General Purpose Lanes	2	2	2-4	3-4

Lane Miles	14.18	0.922	12.22	2.472	
Centerline Miles	7.09	0.461	3.43	0.468	
Median Width	n/a	n/a	0-40 ft	0-20 ft	
Median Characteristics	Undivided	Undivided	vary	Vary	
BRT Lanes	0	0	0	0	
Passing Lanes	2%	0	0	0	
Truck Climbing Lanes	0	0	0	0	
Distressed Pavement ⁵	14%	0%	0%	0%	
ROW ⁶	60 ft	60 ft	53-200 ft	110-240 ft	
Concept Facility					
Segment #	1(a)	1(b)	2	3	4
Facility Type	C	Relinquish	Relinquish	Relinquish	Relinquish
General Purpose Lanes	2	N/A	N/A	N/A	N/A
Lane Miles	11.306	N/A	N/A	N/A	N/A
Centerline Miles	5.653	N/A	N/A	N/A	N/A
BRT Lanes	0	N/A	N/A	N/A	N/A
Passing Lanes	5%	N/A	N/A	N/A	N/A
Truck Climbing Lanes	0	N/A	N/A	N/A	N/A

* "C": conventional highway.

BICYCLE FACILITY

Table 8 on the next page lists bicycle facilities on SR-9. For discussion purposes, the SR 9 corridor is divided into four bicycle facility segments which correspond to the four roadway segments respectively. Segments 1A and 2B are not designated bike routes, but bicycles are permitted to share the road with other vehicles. Segment 1A draws bicyclists to its winding hilly highway. Strategically located passing lanes and turnouts provide room for vehicles to pass slower moving traffic. Segment 2B provides amenities such as bike racks on the sidewalks to bicyclists. Vehicle speeds in this segment are slower and the commercial rich setting serves as a destination for many bicyclists. In Segment 2B, bicyclists share the travel lane with motor vehicles and have to negotiate with parked cars on both sides of the road. For Segments 3C and 4D, Saratoga, Monte Sereno, and Los Gatos are all working together on the "Highway 9 Pedestrian/Bicycle Safety Improvement Project", a multi-phase project to provide a safe and continuous facility for pedestrians and bicyclists.⁷ Phase I of the project installed Class II striped bike lanes on both sides of the road in 2009, while bicycle detection devices at signalized intersections were added



⁵ Caltrans Pavement Condition Reporting software PCR5.1, run in Ju

⁶ Right of Way Data Center on District 4 Intranet, <http://d4web/d4->

⁷ <http://www.saratoga.ca.us/cityhall/pw/projects/hwy9.asp>, access

as part of the Phase III in 2012. Phase II and Phase IV of the project are currently under development. Both phases focus on pedestrian facility improvements, which will be discussed in the “Pedestrian Facility” section on the following page.

SR 9 has been identified as part of the Cross County Bicycle Corridors in VTA’s Countywide Bicycle Plan.⁸ Most of Segments 1A and 2B (PM 0.000 - 7.400) are part of Corridor 13 - Bowers/Kiely/Saratoga Corridor, while the remaining Segment 2B, Segments 3C and 4D are part of Corridor 7 - Old Highway 9 Corridor.

Saratoga has also identified two bicycle improvement projects in their General Plan⁹: a) A multi-use path south of and parallel to SR 9 from city west to Toll Gate Road (PM 5.653-6.671), and b) A bike facility (possibly Class III designated bike route) on SR 9 from Toll Gate Road to 4th Street (PM 6.671-7.230). Segment 4D crosses over the Los Gatos Creek Trail (PM 11.298), which is a Bicycle Path on VTA’s Countywide Bicycle Plan. There is currently no access point between SR 9 and the Los Gatos Creek Trail. A connector to link these two facilities has been included in VTA’s Valley Transportation Plan, VTP 2040¹⁰. There is no parallel bicycle facility in the vicinity of SR 9.

SR 9 approaching SR 35, looking west.

Table 8. Bicycle Facilities by Segment

Roadway Seg	State Bicycle Facility										
	Bike Seg ID	Post Mile	Location Description	Bicycle Access Prohibited	Facility Type	Outside Paved Shoulder Width	Facility Description	Distressed Shoulder Pavement	Vol.	Role	Posted Speed Limit
1	A	0.000-7.090	Santa Cruz County line/SR 35 to 6th Street	No	Shared Roadway	0-8 ft	Mountainous	n/a	n/a	Cross County Bike Corridor	30 mph
2	B	7.090-7.551	6th Street to Oak Place	No	Shared Roadway	>5 ft. On street parking	Downtown ped/bike friendly environ with bike racks.	n/a	n/a	Cross County Bike Corridor	25 mph
3	C	7.551-10.830	Oak Place to Monte Sereno/Los Gatos city limits	No	Class II Bike Lane	0-4 ft	Recently developed bike lanes	n/a	n/a	Cross County Bike Corridor	30-50 mph
4	D	10.830-11.448	Monte Sereno/Los Gatos city limits to SR 17	No	Class II Bike Lane	0-8 ft	Recently developed bike lanes	n/a	n/a	Cross County Bike Corridor	35 mph

PEDESTRIAN FACILITY

Table 9 on the next page lists the pedestrian facilities along SR 9. Similar to the Bicycle Facility section, pedestrian facilities are also divided into four segments. There is currently no parallel pedestrian facility in the vicinity of SR 9. Mountainous Segment 1E is less conducive to pedestrian travel, as there are no paved sidewalks

⁸ http://www.vta.org/schedules/bikeways_plan.html, accessed Jan 2013

⁹ http://www.saratoga.ca.us/cityhall/cd/general_plan.asp, accessed Sept 2012

¹⁰ <http://www.vta.org/vtp/projectmap/index.html>, accessed Feb 2013

or marked crosswalks. Outside shoulders are missing at several locations along Segment 1E with the shoulder width ranging from 0 to 8 feet. The intersection of SR 9 and SR 35 has no marked crosswalks in front of any of the four stop signs, with wide corner radii and dedicated right turn lanes at all four corners. Given the physical constraints of the segment and lower pedestrian usage, no additional future pedestrian facilities are proposed beyond what has been planned for this segment. Please see Table 13 on page 25 for planned projects.

In Segment 2F the sidewalks have been relinquished to Saratoga. As discussed earlier, this segment is located within the Saratoga Village which has extensive pedestrian amenities such as well-delineated crosswalks, public sitting areas on sidewalks, shorter block length, and numerous activities/destinations for pedestrians to access.

Segment 3G has a mostly flat terrain, and both sides of the road are landscaped. Local jurisdictions along the corridor have indicated pedestrian needs along this segment during outreach meetings. Meanwhile, a significant portion of the segment lacks pedestrian facilities and the shoulder width (ranging from 0 to 8 feet) at some locations are not pedestrian friendly. When a pedestrian path does exist, the facility is often unpaved or available only on one side of the road or the other. These obstacles may discourage increased pedestrian use in Segment 3G. Phases II and IV of the Highway 9 Pedestrian/Bicycle Safety Improvement Project will develop a continuous pedestrian



SR 9 near 4th Street in Saratoga, looking east.

path on one side of the road and provide crossing opportunities when the path alternates sides. Phase II is currently under construction and is expected to complete in October 2013. Phase IV is currently unfunded and the construction schedule has yet to be determined.

In Segment 4H sidewalks are available on both sides of the road at most locations. Sidewalks in this segment are often sheltered from the travel lanes by trees, which provide pedestrians with shade and a buffer from vehicular traffic. There are frequent driveways on both sides of the road, however, creating multiple potential conflicting points between motor vehicles and pedestrians. As mentioned earlier, SR 9 crosses over the Los Gatos Creek Trail at PM 11.298, which is a bicycle and pedestrian shared path parallel to the Los Gatos Creek and SR 17. However, connections need to be developed to allow access between Segment 4H and the Los Gatos Creek Trail. A sidewalk gap exists on the south side of SR 9 from Los Gatos Creek to the SR 9/SR 17 interchange, and pedestrians have to use sidewalks on the north side to travel through the interchange. The interchange is a full cloverleaf interchange with SR 9 traveling over SR 17. Pedestrians are required to cross multiple ramps and negotiate with higher speed vehicles resulting from large turning radii. Improvements such as reconstructing the interchange can help alleviate this issue. There is strong local support for the consideration of a SR 9/SR 17 Interchange project to address current conflict points for bicyclists and pedestrians, thereby promoting a better environment for walking and biking, consistent with Caltrans Complete Streets Directive. For more pedestrian facility information please see Table 9 below.

Table 9. Pedestrian Facilities by Segment

Seg	Seg ID	Post mile	Location Description	Ped. Access Prohibited	Sidewalk Present	Sidewalk Width	Crossing Distance	Facility Description	Junction			
									Location	Role	Type	Large Corner Radii

1	E	0.000-7.090	SR 35 to 6th Street	No	No	-	30 ft.	No sidewalks. Varying/unpaved shoulder	SR 35	Minor	At grade, stop sign-controlled	Yes
2	F	7.090-7.551	6th Street to Oak Place	No	Yes/Relinquished	4-8 ft	30 ft.	No obstacles. Plenty of pedestrian amenities/attractions	No Interchange	N/A	N/A	N/A
3	G	7.551-10.830	Oak Place to Monte Sereno/Los Gatos city limits	No	Yes, with gaps	0-8 ft	30-200 ft	Many obstacles: unpaved sidewalks, multiple gaps in sidewalks, sidewalk alternating sides.	No Interchange	N/A	N/A	N/A
4	H	10.830-11.448	Monte Sereno/Los Gatos city limits to SR 17	No	Yes, with gaps	4-8 ft	42-120 ft	A Few obstacles, including driveways, and facility gaps	SR 17	Minor	Grade separated, not signalized	Yes

TRANSIT FACILITY

There is no public transportation service running along SR 9. VTA Community Bus Line #48 runs mainly on North Santa Cruz Avenue. There is a southbound bus stop on North Santa Cruz Avenue just north of SR 9, and a northbound bus stop on SR 9 between University Avenue and North Santa Cruz Avenue. In addition, VTA Regular Bus Line #53 runs on South Saratoga-Sunnyvale Road and Saratoga Avenue and makes a turn at the intersection of Big Basin Way and South Saratoga-Sunnyvale Road. There is a pair of bus stops in both directions located on Saratoga Avenue northeast of the above mentioned intersection. Figure 3 below illustrates where these transit services are located.

The SR 9 corridor is not located in the vicinity of the VTA Light Rail, Caltrain, ACE, BART or the proposed California High Speed Rail. There are no Park-and-Ride lots available along the corridor either. VTA is interested in bringing transit service to the SR 9 corridor, although no such projects have been proposed in current adopted plans.

Figure 3. Transit Routes around SR 9¹¹

¹¹ http://www.vta.org/schedules/schedules_bymap.html, accessed Sept 2012



Source: District 4 GIS and Technical Support Branch, July 2013.

FREIGHT

SR 9 has been designated as a CA Legal Advisory Route which represents highways which allow California Legal Trucks, defined as a maximum Kingpin-to-Rear-Axle distance (KPR) of 40 feet, to use these highways. However, it is recommended that truckers not use advisory routes unless their KPR is less than the posted advisory length. For SR 9, the KPR advisory length is 30 feet. Regarding traffic, trucks accounted for less than 5% of the Average Annual Daily Traffic (AADT) volume on the SR 9 Corridor. The majority of the truck traffic was smaller trucks for goods and service related delivery to local residences and business. Heavy truck (5+ axle) percentage is minimal. SR 9 connects to two other freight movement facilities, SR 35 and SR 17. SR 35 is also a CA Legal Advisory Route with a 30-foot KPR advisory length, while SR 17 is considered a Terminal Access Route.

Terminal Access Routes are portions of State routes or local roads that can accommodate larger trucks designated by the Surface Transportation Assistance Act of 1982.¹² Table 10 below summarizes the freight facilities on or near SR 9. Additional truck traffic data is provided in the Corridor Performance Section on page 21.

Table 10. Freight Facilities¹³

Facility Type/Freight Generator	Location	Mode	Name
Highway	SR 9	Truck	SR 9 (CA Legal Advisory Route)
Highway	SR 35	Truck	SR 35 (CA Legal Advisory Route)
Highway	SR 17	Truck	SR 17 (Terminal Access [STAA])

ENVIRONMENTAL CONSIDERATIONS

Table 11 on page 19 summarizes environmental resources and potential issues along the corridor. Figure 4 on page 20 also shows where these resources are located. Below is a brief discussion of where environmental factors have a higher concentration and where potential problems are found within the corridor.

- Segment 1 of the SR 9 corridor is largely surrounded by potential Section 4(f) land and the Region’s Priority Conservation Areas (PCAs). No major development is expected along this segment, and the segment is anticipated to remain in its current state.
- SR 9 is an Officially Designated Scenic Route in California. Local jurisdictions along the route have all adopted programs/policies to protect the scenic quality of the corridor.
- There are three historic bridges in Segment 1.
- SR 9 is located within a seismically active-area and crosses the San Andreas Fault, a major north-south fault in California. Several smaller faults are also found near or along Segments 2, 3 and 4.
- Multiple underground storage tanks are located along or near Segments 2, 3 and 4, especially near the North Santa Cruz Ave in Segment 4.
- The robust spineflower, a species of concern, is found in Segments 3 and 4.
- Several creeks/streams run either along or across SR 9, but none of them have been identified as wild and scenic rivers.
- Steelhead trout are found in the water bodies around SR 9. There is a total barrier for fish passage near PM 6.000 in Segment 1, a partial barrier at Los Gatos Creek (PM 11.298) and a few other locations along the corridor where fish passage status is unknown.
- For habitat connectivity, Caltrans and California Department of Fish and Wildlife jointly sponsored the California Essential Habitat Connectivity Project. The project identified all Essential Connectivity Areas (ECAs) in the state, which are important areas for maintaining connectivity between large blocks of habitat. Segment 1 and sections of Segments 2 and 3 have been identified as within ECAs. Segment 1

¹² See <http://www.dot.ca.gov/hq/traffops/trucks/routes/truck-routes.htm> for complete Truck Size and Route definitions

¹³ Information retrieved from District 4 Truck Networks on California State Highways Map: <http://www.dot.ca.gov/hq/traffops/trucks/truckmap/truckmap-d04.pdf>

poses less connectivity threat due to its narrow configuration and lower traffic demand. Areas of Segments 2 and 3 are more challenging for wildlife to cross due to a wider roadway, greater traffic demand and higher vehicle speeds.

- The entire corridor is within Santa Clara County and is designated as a non-attainment area for ozone and Particulate Matter (PM) 2.5 by both State and federal air quality resource management agencies. Additionally, PM 10 levels in the area are classified as non-attainment by the State.

Table 11. Environmental Factors

Seg	Section 4(f) Land	Coastal Zone	Farmland/ Timberland	Env. Justice	Cultural Resources	Visual Aesthetics	Geology/Soils/ Seismic ¹⁴	Floodplain ¹⁵	Climate Change and Sea Level Rise Vulnerability	Hazardous Materials	Naturally Occurring Asbestos ¹⁶	Air Quality ¹⁷			Noise	Waters and Wetlands ¹⁸	Wild and Scenic Rivers ¹⁹	Special Status Species	Fish Passage	Habitat Connectivity ²⁰
												Ozone	2.5 PM	10 PM						
1	High				Med					Low		Non-Attainment	Non-Attainment	Non-Attainment/Un-Classified	Attainment/Unclassifiable	Low			Low	Med
2		No	Low	Low		High	Med	500 yr.	N/A	Med	Low	Non-Attainment	Non-Attainment	Non-Attainment/Un-Classified	Med	Med	N/A	Low	High	High
3	Low				Low							Non-Attainment	Non-Attainment	Non-Attainment/Un-Classified	Low	Med		High	Low	High
4										High		Non-Attainment	Non-Attainment	Non-Attainment/Un-Classified	Med	Med		Med	N/A	N/A

¹⁴ 2010 Fault Activity Map of California <http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html>

¹⁵ FEMA Flood Insurance Rate Map <http://msc.fema.gov>

¹⁶ Areas Likely to Contain Naturally Occurring Asbestos: http://onramp.dot.ca.gov/hq/maint/roadway_rehab/gis/nao.htm

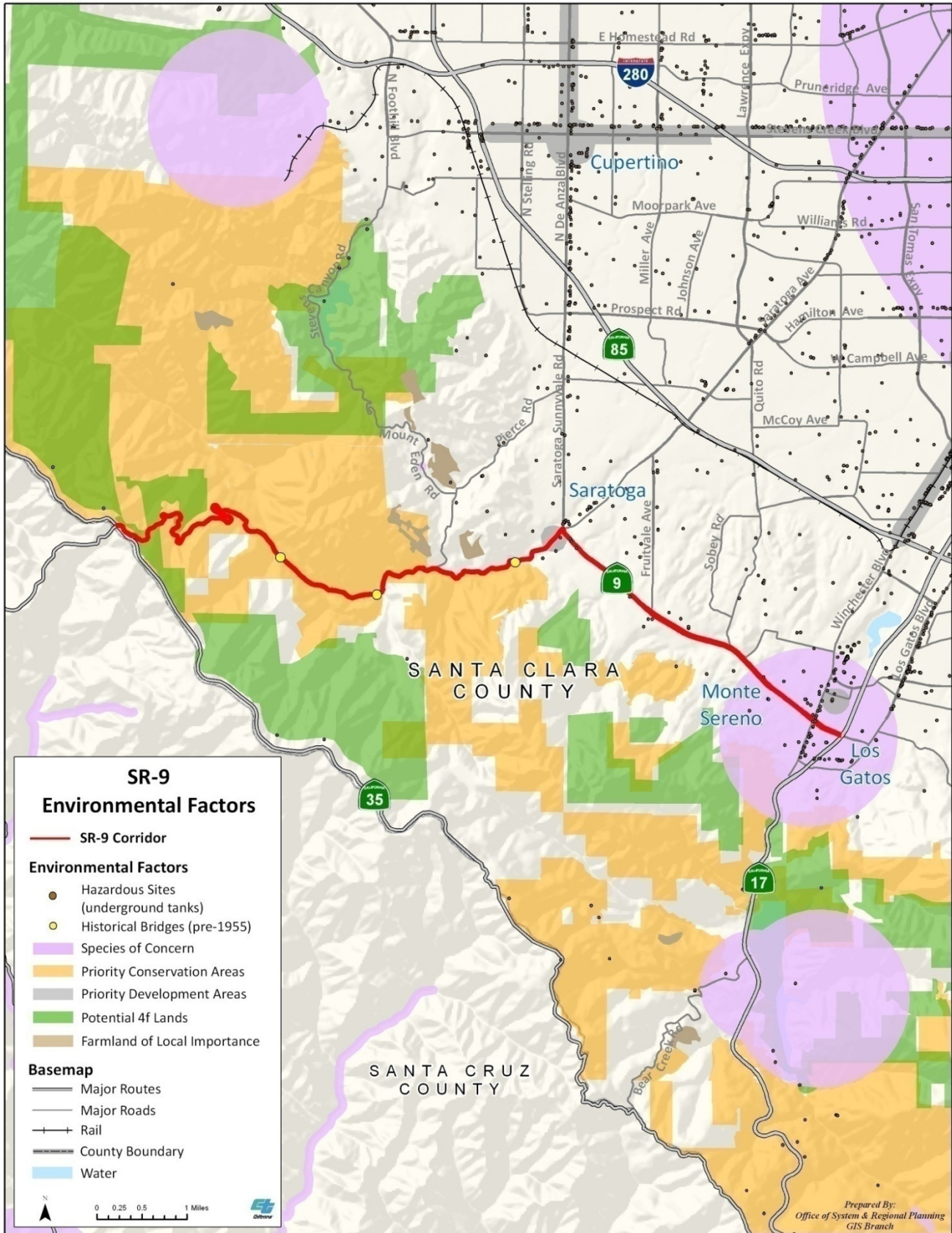
¹⁷ Air Resources Board, Area Designation Map: <http://arbis.arb.ca.gov/desig/adm/adm.htm>

¹⁸ Biogeographic Information and Observation System (BIOS): <http://imaps.dfg.ca.gov/viewers/biospublic/app.asp>

¹⁹ Wild and Scenic Rivers: <http://www.dot.ca.gov/ser/vol1/sec3/special/ch19wsrivers/chap19.htm#WildAgencies>

²⁰ BIOS, Essential Habitat Connectivity layer: <http://imaps.dfg.ca.gov/viewers/biospublic/app.asp>

Figure 4. Environmental Factors Map



Source: District 4 GIS and Technical Support Branch, Jan 2013.

CORRIDOR PERFORMANCE

The VTA Travel Demand Model²¹ was used to obtain vehicle traffic performance data for the SR 9 corridor. The VTA model uses roadway network links as the unit of analysis, which do not match the segments used in this TCR. Therefore, link data was first converted into segment data either by aggregation (for Vehicle Miles Traveled) or by average (for Annual Average Daily Traffic [AADT] and peak hour volumes) and then reported in Table 12 on the next page.

Among the four segments, Segment 4 carried the most AADT in the Base Year (BY) 2010 and is expected to carry the most traffic in the Horizon Year (HY) 2035. However, Segment 1 is forecasted to see the largest growth in AADT, a 133% increase over the same time period. This is due to the model assuming a higher rate of growth in population and jobs in Santa Cruz County. The VTA model does not provide annual traffic growth rate directly. Instead, land use data from ABAG, local jurisdictions, and the Association of Monterey Bay Area Governments (AMBAG) are used for existing conditions in the base year 2010 and for projections in future years. Land use data mainly includes population and employment information that can be used to generate and assign trips to the roadway network. Annual trip growth rates shown in Table 12 on page 22 were calculated based on existing and forecast volumes, using the following formula:

$$\text{Annual Trip Growth Rate} = (\text{Horizon Year [HY]} \text{ AADT} / \text{Base Year [BY]} \text{ AADT})^{(1/\text{Number of Years})}$$

As mentioned earlier in the Freight section, SR 9 does not carry a very high volume of truck traffic. In 2010, there was no heavy truck traffic (5+ axles) measured in Segment 1, and heavy truck volumes on other segments were minimal at only about 0.3%.

SR 9 did not experience high volumes of traffic during AM and PM peaks in 2010. The general commute pattern is that people travel from both ends of the corridor toward the middle and then onto one of the major arterials going north in the morning (such as South Saratoga-Sunnyvale Road, Saratoga Ave, and Fruitvale Ave), and reverse their directions in the evening. This commute pattern will change from 2010 to 2035. As a result of faster employment growth in Santa Cruz County, it is forecast that more people will be traveling toward both ends of the corridor and going south toward Santa Cruz County in the morning, then return home in the afternoon. Therefore, the directional split during peak hours on segments 2, 3 and 4 will generally be less prominent. Segment 1, on the other hand, will see a significant increase in WB AM traffic (from 498 in 2010 to 1308 in 2035) and in EB PM traffic (from 522 in 2010 to 1277 in 2035).

Neither the VTA model nor Caltrans' travel demand forecasting model calculates roadway Level of Service (LOS) for SR 9. Alternative ways can be used to examine the traffic conditions of the road, however. For example, according to the Highway Capacity Manual 2010, two-lane highways have a theoretical capacity of 1,700 vehicles per hour (vph) in one direction, with a limit of 3,200 vph for the total of both directions.²² Under these capacity assumptions, the two-lane rural roadway in Segment 1 is operating well below capacity in both 2010 and 2035, resulting in no significant needs for road widening. Additionally, according to VTA's 2012 Congestion Management Program (CMP) Monitoring Report²³, sections of SR 9 east of Big Basin (PM 7.400 - 11.448) have been identified as a rural highway. The CMP uses the Highway Capacity Manual 2000 to analyze rural highways. Based on the Percent Time Spent Following (PTSF) other vehicles and average travel speed, this section of SR 9 operated at LOS D with a volume of 1,342 vph for both directions in 2012. Also, all CMP intersections along SR 9 (Big Basin Way/South Saratoga-Sunnyvale Road, SR 9/Quito Road, SR 9/North Santa Cruz Avenue and SR 9/University Avenue) were at LOS D or better in 2012. However, these operational analyses are not suitable for

²¹ Communication with VTA's modeling group occurred Dec 2012 to May 2013

²² Highway Capacity Manual 2010, Volume 2, page 15-5

²³ <http://www.vta.org/cmp/>, accessed Feb to June 2013

long term (25-year) projections and forecasts, so there is no LOS calculation available for these segments in the horizon year 2035.

Overall, SR 9 is forecast to have a moderate growth, although some segments (such as eastbound Segment 1 and eastbound Segment 4) may see a more substantial increase in traffic than other segments. Given the fact that both the existing and forecast volumes are within roadway capacity, no major capacity increasing project is recommended in the corridor. Meanwhile, the corridor management strategies should focus on maintenance and operational improvements. Timely maintenance can help preserve roadway capacity, and operational improvements can help maximize operational efficiency and reliability. Additional multimodal projects including transit service and non-motorized facilities will also help provide more transportation alternatives and alleviate impacts associated with increases in vehicular traffic.

Table 12. Corridor Performance by Segment

Segment #	1	2	3	4
Basic System Operations				
AADT (Base Year 2010 [BY])	7,259	12,587	12,631	20,793
AADT (Horizon Year 2035 [HY])	16,936	15,156	17,522	25,255
AADT: Growth Rate/Year	3.4%	0.7%	1.3%	0.8%
VMT (BY) per day	37,344	3321	36,686	7,075
VMT (HY) per day	90,212	5136	51986	9386
Truck Traffic				
Total Average Annual Daily Truck Traffic (AADTT) (BY)	101	378	598	934
Total Trucks (% of AADT) (BY)	1.39%	3.00%	4.73%	4.49%
5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	0	8	33	67
5+ Axle Trucks (as % of AADT)(BY)	0%	0.06%	0.26%	0.32%
Peak Hour Traffic Data				
EB AM Peak Hour Vol (BY)	638	528	552	800
WB AM Peak Hour Vol (BY)	498	701	994	1,093
AM Peak Hour Directional Split (BY)	56/44	43/57	36/64	42/58
EB PM Peak Hour Vol (BY)	522	696	1,049	1,207
WB PM Peak Hour Vol (BY)	771	605	782	928
PM Peak Hour Directional Split (BY)	40/60	53/47	57/43	57/43
EB AM Peak Hour Vol (HY)	620	702	1,091	1,483
WB AM Peak Hour Vol (HY)	1,308	852	1202	1,374
AM Peak Hour Directional Split (HY)	32/68	45/55	48/52	52/48
EB PM Peak Hour Vol (HY)	1,277	853	1,295	1,554
WB PM Peak Hour Vol (HY)	951	721	1,217	1,348
PM Peak Hour Directional Split (HY)	57/43	54/46	52/48	54/46

KEY CORRIDOR ISSUES

COMPLETE STREETS

Caltrans' Deputy Directive DD-64-R1 calls for Complete Streets to address the safety and mobility needs of all users in all planning, programming, design, construction, operations, and maintenance activities and products on the State Highway System. Assembly Bill 1358 (2008) also requires cities and counties to incorporate Complete Streets concept into the development and update of local general plans. Additional multimodal projects in the SR 9 Corridor are needed to ensure a complete streets environment. For example, there is a potential need for transit service along the corridor to aid travelers who do not or are not permitted to drive. No continuous sidewalks or pathways are currently present in much of Segment 3 and portions of Segment 4, and there are only limited pedestrian crossings, both creating obstacles for pedestrians. While dedicated bike lanes have recently been developed in Segments 3 and 4, bicyclists in Segments 1 and 2 still have to share the road with motor vehicles. The needs of all travelers represent a key issue when determining future improvements in the corridor.

RELINQUISHMENT

In Segment 2, sidewalks and gutters on both sides of the road were relinquished to the City of Saratoga in 2005. Saratoga has also contacted Caltrans concerning relinquishment opportunities along the entire route within their jurisdiction. Meanwhile, the City of Monte Sereno is exploring the possibilities of route relinquishment within their city limits. Caltrans in principle is supportive of these relinquishment requests, given the fact that SR 9 within these jurisdictions mainly serves local traffic. However, relinquishment has to be implemented with system continuity considerations to avoid route fragmentation. As part of the discussion, local jurisdictions would need to better understand how the ongoing operational costs would be covered, both for pavement maintenance and signal operations.

CORRIDOR OPERATIONS

Corridor operations were raised as an issue during communications with stakeholders. More specifically, local jurisdictions have voiced access related concerns for vehicles seeking to turn left onto SR 9 from side streets at unsignalized intersections. Additionally, issues relating to varying speed limits in Segment 3, potentially affecting access, were also raised. Future monitoring and communication with local jurisdictions should be carried out to determine whether operational improvements are warranted to ensure full mobility and accessibility for all users along the SR 9 corridor.

ROAD DIET

Road Diet is a roadway reconfiguration technique to reduce the number of lanes and/or the effective width of the travel lanes to achieve systematic improvements. According to the Federal Highway Administration, the typical application of road diet involves converting an undivided four-lane roadway into three lanes made up of two through lanes and a center two-way left turn lane. The reduction of lanes allows for additional multimodal facilities and/or on street parking spaces. Road diets can help improve safety and provide room for multimodal improvements.²⁴ The road diet concept was raised as a possible future consideration for Segments 3 and 4 during Caltrans meetings with local jurisdictions. Additional study is needed to help determine if these segments are good candidates for a road diet.

²⁴ Federal Highway Administration, Proven Safety Counter Measures: Road Diet.
http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_013.htm, accessed June 2013.

SARATOGA-LOS GATOS ROAD EAST

Saratoga-Los Gatos Road is SR 9 between Saratoga Avenue and SR 17. After SR 9 terminates at SR 17, Saratoga-Los Gatos Road continues eastward for approximately 1,000 ft and ends at Los Gatos Boulevard. Although not part of the State Highway System (SHS), this eastern segment of roadway serves as an extension of the SR 9 corridor and helps connect Los Gatos to the regional roadway network including SR 9 and SR 17. Saratoga-Los Gatos Road is considered a high-priority bicycle/pedestrian safety improvement corridor by Saratoga, Monte Sereno, and Los Gatos. There have been several joint bicycle/pedestrian improvement projects including the aforementioned segment. Improvement projects proposed in Los Gatos' General Plan also include the installation of bike lanes across the SR 17 bridge which connects to Los Gatos Boulevard and where bike lanes have already been developed. Future Caltrans projects near SR 9/SR 17 interchange need to take into consideration this east segment to ensure system connectivity.

CORRIDOR CONCEPT

CONCEPT RATIONALE

As discussed above, District 4 is generally supportive of recent relinquishment requests for some portions of the route. Segments 2, 3 and 4 mainly carry local traffic and will continue to play the same role in the future. No major development is planned along these segments and the Interregional traffic is not expected to increase significantly. As a result, the future concept for Segments 2, 3, and 4 is relinquishment. While Saratoga and Monte Sereno are both expressed interest in route relinquishment within their respective city boundaries, discussion still needs to occur with Los Gatos, Santa Clara County and VTA.

Meanwhile, it is recognized that relinquishment to a great extent is a locally driven process and implementation may not happen immediately. District 4 will continue to maintain, operate and manage these segments while they remain under the State ownership. The management strategies of Segments 2, 3 and 4 mainly focus on maintenance, operational improvements and addressing multimodal transportation needs.

For relinquishment purposes, Segment 1 has been divided into two sub-segments: Segment 1(a) in unincorporated Santa Clara County and Segment 1(b) in Saratoga. While Segment 1(b) may be relinquished to Saratoga, Segment 1(a) may be retained under Caltrans' ownership and operation. This is due to Segment 1(a) serving an important interregional link between the Bay Area and the Santa Cruz region, and traffic on this sub-segment being interregional in nature. Segment 1(a) will remain a two-lane conventional highway. Continuous monitoring and study should be performed to evaluate if additional passing lanes and turnouts are needed to help facilitate the operation of the road and to accommodate bicycle travel.

Table 13 on next page lists planned and programmed projects along SR 9 found in existing plans or programming documents and Table 14 proposes future projects and strategies to help achieve corridor concept. For Segment 1(a), the strategies focus on maintenance and operational improvements. For Segments 1(b), 2, 3 and 4, these newly proposed projects may help close existing gaps in multimodal infrastructure, address a major obstacle to pedestrian movement at SR 9/SR 17 interchange, and contribute to transforming SR 9 into a complete street.

PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

Table 13. Planned or Programmed Projects along SR 9²⁵

Seg.	Description	Planned or Programmed	Location	Source
1	Improve sight distance & update existing lanes & shoulders	Programmed	PM 2.5-7.0	District 4 2012 SHOPP Program
1	Bridge rail replacement	Programmed	PM 0.0-3.6	District 4 2012 SHOPP Program
1	Construct tie-back wall	Programmed	PM 0.0-4.2	District 4 2012 SHOPP Program
1	Construct soldier pile wall	Programmed	PM 4.6-4.7	District 4 2012 SHOPP Program
1	Replace Saratoga Creek Bridge	Planned	PM 4.75-5.0	District 4 PSSR Document (2013)
1	Widen paved shoulders	Programmed	PM 0.0-7.1	District 4 2012 SHOPP Program
1	Multi-use path south of and parallel to SR 9 from city west to Toll Gate Road in Saratoga	Planned/Conceptual	PM 5.653-6.671	Saratoga General Plan Circulation and Scenic Highway Element 2010
1	Bike Facility on SR 9 between Toll Gate Rd and 4 th Street	Planned/Conceptual	PM 6.671-7.230	Saratoga General Plan Circulation and Scenic Highway Element 2010
2,3,4	Implement pedestrian safety improvements on Route 9 (Phase II and IV of the Highway 9 Pedestrian/Bicycle Safety Improvement Project)	Programmed	PM 7.09-11.448	Phase II: Plan Bay Area/2013 TIP (RTP ID 240427) Phase IV: Planned
4	Highway 9 Gateway Enhancement at North Santa Cruz Avenue and at University Avenue	Programmed	PM 11.06 PM 11.17	VTA Valley Transportation Plan 2035
4	Highway 9 – Los Gatos Creek Trail Connector	Programmed	PM 11.298	VTA Valley Transportation Plan 2040 (VTP ID B19)

PROJECTS AND STRATEGIES TO ACHIEVE CONCEPT

Table 14. Future Projects along SR 9

Segment	Description	Location
1(a)	Passing lanes and turnouts as needed	PM 0.000-5.653
1(b),2,3,4	Route relinquishment	PM 5.653-11.448
2,3,4	Develop bus service along SR 9 (based on demand for transit)	PM 7.09-11.448
3	Improve/develop pedestrian crossings	PM 7.551-10.830
3, 4	Provide continuous pedestrian paths on both sides of the road	PM 7.551-11.448
4	SR 9/SR 17 Interchange Reconstruction	PM 11.448

²⁵ Project information obtained from the “Santa Clara County SR 9 Projects” map, Feb 2013

APPENDICES

APPENDIX A GLOSSARY OF ACRONYMS AND TERMS

Acronyms

AADT- Annual Average Daily Traffic
AADTT – Annual Average Daily Truck Traffic
AB – Assembly Bill
ABAG – Association of Bay Area Governments
ADA – Americans with Disabilities Act of 1990
ADT- Average Daily Traffic
BAAQMD – Bay Area Air Quality Management District
BCDC – Bay Conservation and Development Commission
BY- Base Year
Caltrans – California Department of Transportation
CMA- Congestion Management Agencies
CMP – Congestion Management Plan
CSMP – Corridor System Management Plan
CEQA- California Environmental Quality Act
CSS – Context Sensitive Solutions
CTP – California Transportation Plan
DD – Deputy Directive
DSMP – District System Management Plan
ECA – Essential Connectivity Areas
FHWA – Federal highway Administration
FSR – Feasibility Study Report
FSTIP- Federal Statewide Transportation Improvement Program
FTIP – Federal Transportation Improvement Program
GHG- Greenhouse Gas
GIS – Geographic Information System
HCP- Habitat Conservation Plan
HOT-High occupancy toll lane
HOV-High occupancy vehicle lane
HY- Horizon Year
IGR-Intergovernmental Review
ITIP – Interregional Transportation Improvement Program
ITS – Intelligent Transportation System
ITSP – Interregional Transportation Strategic Plan
KPRA – Kingpin-to-Rear-Axle
LOS – Level of Service
MPO- Metropolitan Planning Organizations
MTC – Metropolitan Transportation Commission
NOA – Naturally Occurring Asbestos
NCCP- Natural Community Conservation Plan
NEPA- National Environmental Policy Act
PCA – Priority Conservation Area

PDA – Priority Development Area
PID-Project Initiation Document
PM – Post Mile
PSR- Project Study Report
PTSF – Percent Time Spent Following
RHNA- Regional Housing Needs Allocation
RTP- Regional Transportation Plan
RTIP – Regional Transportation Improvement Program
RTPA- Regional Transportation Planning Agencies
SAFETEA-LU - Safe, Accountable, Flexible and Efficient Transportation Equity Act, a Legacy for Users
SB – Senate Bill
SCS- Sustainable Community Strategies
SHOPP- State Highway Operation Protection Program
SHS – State Highway System
SMF – Smart Mobility Framework
SR – State Route
STIP – State Transportation Improvement Program
TEA-21 Transportation Equity Act for the 21st Century
TCR – Transportation Concept Report
TDM – Transportation Demand Management
TMS – Transportation Management System
TSN- Transportation System Network
VMT – Vehicle Miles Traveled
VTA – Santa Clara Valley Transportation Authority
VPH – Vehicles per Hour

Definitions

AADT – Annual Average Daily Traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Traffic counting is generally performed by electronic counting instruments moved from location throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present. Annual ADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways and other purposes.

Base Year – The year that the most current data is available to the Districts

Bikeway Class I (Bike Path) – Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

Bikeway Class II (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.

Bikeway Class III (Bike Route) – Provides for shared use with pedestrian or motor vehicle traffic.

Bottlenecks – A bottleneck is a location where traffic demand exceeds the effective carrying capacity of the roadway. In most cases, the cause of a bottleneck relates to a sudden reduction in capacity, such as a lane drop, merging and weaving, driver distractions, a surge in demand, or a combination of factors.

Capacity – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.

Capital Facility Concept – The 20-25 year vision of future development on the route to the capital facility. The capital facility can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility (Intercity Passenger Rail, Mass Transit Guideway etc.), grade separation, and new managed lanes.

Conceptual Project– A conceptual improvement or action is a project that is needed to maintain mobility or serve multimodal users, but is not currently included in a fiscally constrained plan and is not currently programmed. It could be included in a General Plan or in the unconstrained section of a long-term plan.

Corridor – A broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways, bicycle, pedestrian, and transit route alignments. Off system facilities are included as informational purposes and not analyzed in the TCR.

Facility Concept – Describe the Facility and strategies that may be needed within 20-25 years. This can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility, Non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, Transportation Demand Management and Incident Management.

Facility Type – The facility type describes the State Highway facility type. The facility could be freeway, expressway, conventional, or one-way city street.

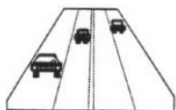
Freight Generator – Any facility, business, manufacturing plant, distribution center, industrial development, or other location (convergence of commodity and transportation system) that produces significant commodity flow, measured in tonnage, weight, carload, or truck volume.

Horizon Year – The year that the future (20-25 years) data is based on.

Intermodal Freight Facility – Intermodal transport requires more than one mode of transportation. An intermodal freight facility is a location where different transportation modes and networks connect and freight is transferred (or “transloaded”) from one mode, such as rail, to another, such as truck.

ITS – Intelligent Transportation System improves transportation safety and mobility and enhances productivity through the integration of advanced communications technologies into the transportation infrastructure and in vehicles. Intelligent transportation systems encompass a broad range of wireless and wire line communications-based information and electronics technologies to collect information, process it, and take appropriate actions.

LOS – Level of Service is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. Six levels of LOS can generally be categorized as follows:



LOS A describes free flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway.



LOS B is also indicative of free-flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.



LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the presence of other vehicles.



LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.



LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.



LOS F a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle. This level, considered by most drivers unacceptable often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection.

Multi-modal – The availability of transportation options using different modes within a system or corridor, such as automobile, subway, bus, rail, or air.

System Operations and Management Concept – Describe the system operations and management elements that may be needed within 20-25 years. This can include Non-capacity increasing operational improvements (Aux. lanes, channelization's, turnouts, etc.), conversion of existing managed lanes to another managed lane type or characteristic (e.g. HOV land to HOT lane), TMS Field Elements, Transportation Demand Management, and Incident Management.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between 6 percent and 10 percent of the ADT. The lower values are generally found on roadways with low volumes.

Planned Project– A planned improvement or action is a project in a fiscally constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

Post Mile – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route within a count to the next county line. The milepost values start over again at each county line. Milepost values usually increase from south to north or west to east depending upon the [general direction](#) the route follows within the state. The milepost at a given location will remain the same year after year. When a section of road is relocated, new milepost (usually noted by an alphabetical prefix such as "R" or "M") are established for it. If relocation results in a change in length, "milepost equations" are introduced at the

end of each relocated portion so that mileposts on the remainder of the route within the county will remain unchanged.

Programmed Project– A programmed improvement or action is a project in a near-term programming document identifying funding amounts by year, such as the State Transportation Improvement Program or the State Highway Operations and Protection Program.

Route Designation –A route’s designation is adopted through legislation and identifies what system the route is associated with on the State Highway System. A designation denotes what design standards should apply during project development and design. Typical designations include but not limited to National Highway System (NHS), Interregional Route System (IRRS), Scenic Highway System,

Rural – Fewer than 5,000 in population designates a rural area. Limits are based upon population density as determined by the U.S. Census Bureau

Segment – A portion of a facility between two points.

TDM – Transportation Demand Management programs designed to reduce or shift demand for transportation through various means, such as the use of public transportation, carpooling, telework, and alternative work hours. Transportation Demand Management strategies can be used to manage congestion during peak periods and mitigate environmental impacts.

TMS – Transportation Management System is the business processes and associated tools, field elements and communications systems that help maximize the productivity of the transportation system. TMS includes, but is not limited to, advanced operational hardware, software, communications systems and infrastructure, for integrated Advanced Transportation Management Systems and Information Systems, and for Electronic Toll Collection System.

Urban – 5,000 to 49,999 in population designates an urban area. Limits are based upon population density as determined by the U.S. Census Bureau.

Urbanized – Over 50,000 in population designates an urbanized area. Limits are based upon population density as determined by the U.S. Census Bureau.

VMT – Is the total number of miles traveled by motor vehicles on a road or highway segments.

APPENDIX B FACT SHEET FOR THE INITIAL OUTREACH MEETING



SR-9 Fact Sheet

Transportation Concept Report (TCR) is a Caltrans System Planning Document that:

- Evaluates current and projected conditions along a route
- Provides a long range 25-year concept or vision for a route
- Communicates that vision for future development of a route

State Route 9 TCR:

For the purpose of this TCR, SR-9 begins at Santa Clara/Santa Cruz County line at the junction of SR-9/SR-35 and ends at SR-9/SR-17 junction. The southern (western) portion of SR-9 is a two-lane facility that travels generally in easterly direction, wandering through the mountainous area in unincorporated Santa Clara County before entering more urbanized area. Shortly after entering the city limit, the two-lane facility serves as the main street in historic Saratoga Village within the City of Saratoga. At the intersection of SR-9/Saratoga Sunnyvale Rd/Saratoga Ave, or Post Mile 7.40, SR-9 turns south-east. It continues as a two to four lane facility through the City of Saratoga, the City of Monte Sereno and the town of Los Gatos before terminating at SR-17. SR-9 is a California Designated Scenic Route and is also a CA Legal Advisory truck route.

Proposed Route Segmentation

Segment #	Begin PM and Street	End PM and Street
1	0.00 SCL/SCZ County line/SR-35	7.09 6th St. in Saratoga
2	7.09 6th St. in Saratoga	7.55 Oak Pl. in Saratoga
3	7.55 Oak Pl. in Saratoga	11.45 SR-17

Existing Conditions – 2011 Traffic Volumes*

Post Mile	Description	Back		
		Peak Hour	Peak Month	AADT
0.00	Jct. SR-35	-	-	-
4.89	Sanborn Rd.	320	3100	2700
5.71	Pierce Rd.	380	3950	3800
7.09	Sixth St.	640	7000	6700
7.40	Saratoga Sunnyvale Rd.	1350	14400	13800
8.84	Fruitvale Ave.	780	10100	9800
9.88	Quito Rd.	1050	13300	12900
11.06	Santa Cruz Ave.	2100	27000	26000
11.45	Jct. SR-17	2700	34500	33500

* Caltrans Traffic Data Branch

continued on the back

SR-9 Fact Sheet



Planned Projects

VTP 2035 Local Street Program

Los Gatos: Hwy 9 Gateway Enhancements at University Ave and North Santa Cruz Ave

VTP 2035 Bicycle Program

Saratoga, Los Gatos: Hwy 9 Bicycle and Pedestrian Safety Improvements

Los Gatos: Hwy 9 – Los Gatos Creek Trail connector

Saratoga General Plan

Bike

Hwy 9/Congress Springs Rd (west of Toll Gate Rd) – Multi-use path extending south of and parallel to Hwy 9 and providing an east-west connection along Hwy 9 to the west of the Village

Hwy 9/Saratoga-Los Gatos Rd – Modify the existing striping to provide continuous bike lanes through the City of Saratoga

Hwy 9/Big Basin Way (4th St to Toll Gate Rd) – Provide an additional east-west bike facility on Hwy 9 that provides access to the Village area and connect to points west

Pedestrian

Hwy 9/Congress Springs Rd (west of Toll Gate Rd) – Multi-use path extending south of and parallel to Hwy 9 and providing an east-west connection along Hwy 9 to the west of the Village

Proposed City Trail along SR-9, from Fruitvale Ave to City limit, Los Gatos

Los Gatos General Plan

Intersection

Hwy 9 and University Ave: Widen University Ave to add a SB right-turn lane and extend NB right-turn lane to Boyer Ln, install protected left-turn signal phases, modify intersection corners, close the median opening, and reconstruct the intersection as a Downtown gateway. HSIP project.

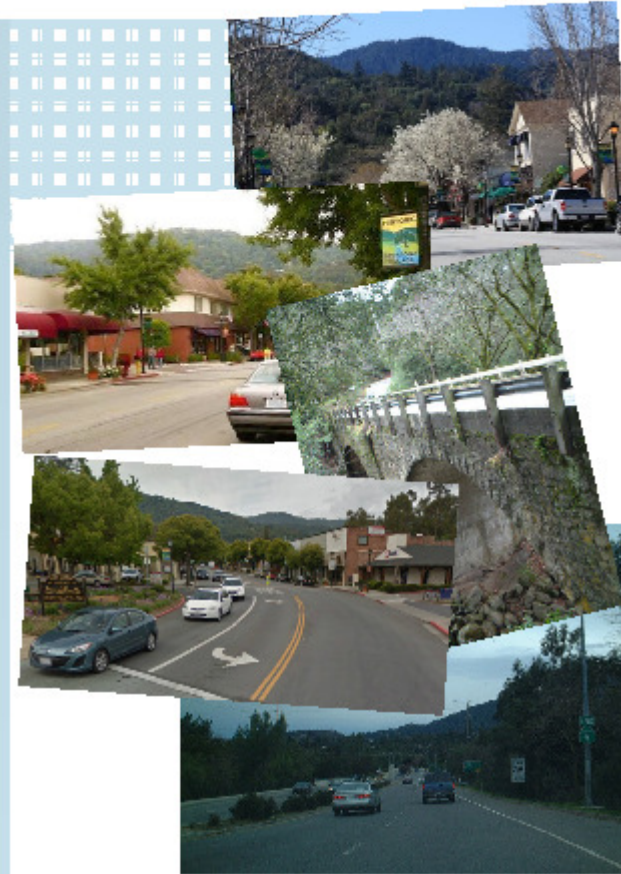
Hwy 9 and N. Santa Cruz Ave: Add a SB right turn overlap phase and prohibit the EB U-turn movement. Reconstruct as a Downtown gateway.

Roadway

University Ave to Los Gatos Blvd: Construct a ped/bike bridge connecting to the Los Gatos Creek Trail. If feasible, install a bike lane across the Hwy 17 bridge connecting to Los Gatos Blvd.

Bike Lane

Class II bike lanes, if feasible, on Hwy 9 from Los Gatos Blvd to westerly Town limits (Existing between University Avenue and westerly Town limits)



Corridor Specific Issues

- Narrow and curvy road in mountain area, resulting in road sharing challenges between motor vehicles, motorcycles and bikes
- Gaps in bicycle and pedestrian facilities along the corridor

For questions regarding the SR-9 TCR, please contact D4 Associate Transportation Planner **John Xu** at 510-286-5577 or email at zhongping_xu@dot.ca.gov

APPENDIX C RESOURCES

- Association of Bay Area Governments, FOCUS
<http://www.bayareavision.org/initiatives/index.html>
- Bay Conservancy & Development Commission
<http://www.bcdc.ca.gov>
- California Department of Fish and Game, California Natural Diversity Database, Quickviewer
http://imaps.dfg.ca.gov/viewers/cnddb_quickviewer/app.asp
- California Department of Fish and Game, Biogeographic Information and Observation System (BIOS)
<http://imaps.dfg.ca.gov/viewers/biospublic/app.asp>
- California Natural Diversity Database (CNDD)
<http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEAnimals.pdf>
- California Department of Transportation, 2010 Smart Mobility Handbook, Ch 3: Applying the Smart Mobility to Place Types
http://www.dot.ca.gov/hq/tpp/offices/ocp/smf_files/SmMblty_v6-3.22.10_150DPI.pdf
- California Department of Transportation District 4, Highway Operations Division, Park and ride
http://www.dot.ca.gov/dist4/highwayops/parkandride/documents/park_ride_lots_master_list_12_14_09.pdf
- California Department of Transportation, Division of Transportation System Information, California Road System (CRS) Maps 05M34, 05M35, 05M45 and 06M41
http://dot.ca.gov/hq/tsip/hseb/crs_maps/
- California Department of Transportation, Interregional Transportation Strategic Plan (ITSP), June 1998
<http://www.dot.ca.gov/hq/transprog/ocip/te/itsp.pdf>
- California Department of Transportation, California Scenic Highway Program
http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm
- California Department of Transportation, Traffic Noise Protocol dated March 2011
http://www.dot.ca.gov/hq/env/noise/pub/ca_tnap_may2011.pdf
- California, Department of Transportation, Traffic Operations Division, Traffic Data Branch, Traffic Volumes and Truck Traffic
<http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm>
- California Department of Transportation, Truck Network on California State Highways, District 4 Map 1 of 1,
<http://www.dot.ca.gov/hq/traffops/trucks/truckmap/truckmap-d04.pdf>
- California Department of Transportation, Truck Map Legend Truck Lengths and Routes,
<http://www.dot.ca.gov/hq/traffops/trucks/truckmap/truck-legend.pdf>
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) State Area Designation Maps: Maps, Ozone: http://www.arb.ca.gov/desig/adm/2011/state_o3.pdf
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) State Area Designation Maps, PM2.5: http://www.arb.ca.gov/desig/adm/2011/state_pm25.pdf
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) State Area Designation Maps, PM 10: http://www.arb.ca.gov/desig/adm/2011/state_pm10.pdf
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) State Area Designation Maps, Carbon Monoxide: http://www.arb.ca.gov/desig/adm/2011/state_co.pdf
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) National Area Designation Maps, 8 Hour Ozone: http://www.arb.ca.gov/desig/adm/2011/fed_o3.pdf
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) National Area Designation Maps, PM 2.5: http://www.arb.ca.gov/desig/adm/2011/fed_pm25.pdf
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) National Area Designation Maps, PM 10: http://www.arb.ca.gov/desig/adm/2011/fed_pm10.pdf
- The California Environmental Protection Agency (CEPA), Air Resources Board (ARB) National Area Designation Maps, Carbon Monoxide: http://www.arb.ca.gov/desig/adm/2011/fed_co.pdf
- The California Streets and Highways Code, Division 1, Chapter 2, Article 3; The State Highway Routes, Section 309
<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=00001-01000&file=300-635>
- California Sea-Level Rise Interim Guidance Document
http://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20110311/12.SLR_Resolution/SLR-Guidance-Document.pdf
- The City of Monte Sereno, General Plan
<http://www.montesereno.org/clientuploads/Online%20Documents/Planning/FinalGeneralPlan032010.pdf>
- The City of Saratoga, General Plan

http://www.saratoga.ca.us/cityhall/cd/general_plan.asp
The City of Saratoga, Highway 9 Safety Project
<http://www.saratoga.ca.us/cityhall/pw/projects/hwy9.asp>
The Santa Clara Valley Transportation Authority, Bus and Rail Map
http://www.vta.org/schedules/schedules_bymap.html
The Santa Clara Valley Transportation Authority, Congestion Management Program
<http://www.vta.org/cmp/>
The Santa Clara Valley Transportation Authority, Countywide Bicycle Plan
http://www.vta.org/schedules/bikeways_plan.html
The Santa Clara Valley Transportation Authority, Valley Transportation Plan 2040
<http://www.vta.org/vtp/index.html>
The Town of Los Gatos, General Plan
<http://www.losgatosca.gov/index.aspx?nid=27>
U.S. Census Bureau, United States Census 2010, State & County Quickfacts
<http://quickfacts.census.gov/qfd/states/06000.html>
U.S. Census Bureau, United States Census 2010, Community Facts
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>
United State Geological Survey, Liquefaction Hazard Map,
<http://earthquake.usgs.gov/regional/nca/qmap/>