

CHAPTER 9 – Project Initiation

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CHAPTER 9 – Project Initiation

ARTICLE 1 Introduction and Definitions

Reference Information

Some of the references found in this chapter have hyperlinks that connect to Caltrans intranet pages which are not displayable to the general public. Until such time that the specific reference becomes available on the internet, the user will have to contact their district liaison, Caltrans project manager, or the appropriate Headquarters division to inquire about the availability of the reference.

General

The project initiation phase is the first formal project phase in developing a solution for a specific transportation problem. The project initiation phase is subsequent to the system and regional planning process. The outcome of the project initiation process is a project initiation document (PID) that establishes a well-defined purpose-and-need statement, proposed project scope tied to a reliable cost estimate and schedule. The use of State funds for capital improvements on the State Highway System (SHS) requires an approved PID. Any major work on the State Highway System regardless of how it is funded requires an approved PID.

The PID records Caltrans’:

- Approval of the project (as defined by the scope, cost and schedule) to compete for State Transportation Improvement Program (STIP) or State Highway Operation and Protection Program (SHOPP) funds; or
- Conceptual approval (as defined in this chapter) of projects-funded-by-others.

A project study report-project development support (PSR-PDS) provides scope approval of projects-funded-by-others (as defined in this chapter), since the PSR-PDS does not provide conceptual approval. With direction from the project development team (PDT) and project sponsors, the PDT:

- Defines the purpose-and-need for the project,
- Gets input from stakeholders,
- Systematically collects and analyzes existing information,

- Identifies alternatives,
- Develops a plan of action to deliver the project, and
- Estimates the project cost and schedule.

This chapter discusses the statutes, definitions, policies, and procedures that apply to the project initiation phase. This chapter should be used in conjunction with Appendices A-X. The appendices contain additional guidance on the preparation of PIDs, commonly used PID formats, input forms, and checklists.

Definitions

Conceptual approval – is an assessment that the project alternatives meet all design standards or have approved exceptions and have had a traffic operational analysis. Adequate information must be provided in the PID for Caltrans to make this assessment. Conceptual approval is not final approval of a project alternative.

Implementing agency – is that entity charged with successful completion of each project component as follows:

1. Project initiation document
2. Completion of all permits and environmental studies
3. Preparation of plans, specifications, and estimate
4. Acquisition of rights-of-way, including, but not limited to, support activities
5. Construction, construction management and engineering, including surveys and inspection

There could be a different implementing agency for each component of a project. To ensure clear lines of responsibility, only one agency can be the implementing agency for a single component. Contract advertisement, award and administration shall be completed by the same implementing agency.

Independent quality assurance – activities performed by Caltrans, as the owner-operator of the State Highway System, to ensure that quality management practices are in place, functioning and effective, resulting in projects being developed in accordance with Caltrans standards, policies, and practices.

Owner-operator – is that entity ultimately responsible for the operation, maintenance and tort liability of a facility. Caltrans is the owner-operator of the State Highway System.

Programming – a process that prioritizes projects for State and federal funding. The two major State programming documents are the State Transportation Improvement Program (STIP) and the State Highway Operation and Protection Program (SHOPP). The major federal programming documents are the Federal Statewide Transportation Improvement Program (FSTIP) and Federal Transportation Improvement Program (FTIP).

Project initiation document (PID) – an engineering document or technical report that documents the scope, cost, and schedule of a project. The PID is an outcome of the project scoping effort. The PID is a record of the purpose-and-need for the project, and the approach that will be taken to meet or reduce transportation deficiencies. It is a record of the existing information, initial assumptions, identified risks, and constraints that drove the development of the project work plan. A PID is used to obtain approval for inclusion of a project into a programming document or to get conceptual approval of a project-funded-by-others.

Project initiation document phase work plan – a work plan that identifies tasks, resources, and the schedule required to complete the PID. The project manager is responsible for the development of the PID phase work plan. A high-level PID phase work plan is used to obtain, allocate, and manage resources used by various functional units. Refer to the Headquarters Division of Transportation Planning, Office of Program and Project Planning for more information about work plan development.

Project scope – identifies the significant aspects of a project that are necessary to meet the project purpose-and-need. The scope is tied to realistic cost estimates and schedules. Ultimately the alternative recommended for programming or the proposal from an external entity must have a high probability of obtaining the various approvals required during the project development process. It is essential that all work incidental to the project be identified and included in the cost estimate. Examples of incidental work may be safety elements, upgrades, mitigation, and rehabilitation of existing features.

Project sponsor – secures funding for the project and serves as the project advocate. The project sponsor chooses an implementing agency for each project component and is the customer of the implementing agency. Caltrans is the sponsor for all projects funded solely from the SHOPP and most projects funded from the Interregional Improvement Program.

Purpose-and-need statement – a statement of the transportation problem that will be met by the construction of the project. The statement has two major components:

- Need – States the transportation deficiency.
- Purpose – States the objectives that will be met to address the transportation deficiency.

Project study report (PSR) – a type of PID. The PSR is a format that meets statutory, California Transportation Commission (CTC), and Caltrans requirements for STIP candidate projects. The PSR format is the model for other PIDs.

Projects-funded-by-others – projects that are sponsored by a local agency or private developer, and do not use any funds that are programmed into the STIP or SHOPP.

Scope approval – indicates agreement between the project sponsor and Caltrans, as owner-operator of the State Highway System, of the following:

1. The purpose-and-need statement of the project, and
2. Range of alternatives and their associated risks to be studied during the Project Approval and Environmental document (PA&ED) phase.

With scope approval, the sponsor may proceed with the formal studies. Scope approval is not final approval of a project alternative.

Support – the personnel costs of performing project work.

Transportation planning –

1. A continuing, comprehensive, and collaborative process that helps identify current and future transportation deficiencies, and that provides recommendations to meet mobility goals, or
2. The district unit that performs transportation planning.

ARTICLE 2 Laws

General

By way of legislation, the Legislature provides Caltrans and the CTC with its expectations for managing projects on the State Highway System. This section lists key laws that apply to the project initiation process. Although much of the legislation specifically addresses the requirements for the STIP, Caltrans has incorporated similar procedures for scoping and managing the SHOPP.

California Statutes

California Government Code, Section 65086.5

Section 65086.5 describes Caltrans' role with respect to the preparation, review, and approval of PIDs. The text is as follows:

- (a) To the extent that the work does not jeopardize the delivery of the projects in the adopted state transportation improvement program, the Department of Transportation may prepare a project studies report for capacity-increasing state highway projects that are not included in the state transportation improvement program. Preparation of the project studies report shall be limited by the resources available to the department for that work, supplemented, as appropriate, by regional or local resources. The project studies report shall include the project-related factors of limits, description, scope, costs, and the amount of time needed for initiating construction.
- (b) Whenever project studies reports are performed by an entity other than the Department of Transportation, the department shall review and approve the report.
- (c) The Department of Transportation may be requested to prepare a project studies report for a capacity-increasing state highway project which is being proposed for inclusion in a future state transportation improvement program. The department shall have 30 days to determine whether it can complete the requested report in a timely fashion. If the department determines that it cannot complete the report in a timely fashion, the requesting entity may prepare the report. Upon submission of a project studies report to the department by the entity, the department shall complete its review and provide its comments to that entity within 60 days from the date of submission. The department shall complete its review and final determination of a report which has been revised to address the department's comments within 30 days following submission of the revised report.

(d) The Department of Transportation, in consultation with representatives of cities, counties, and regional transportation planning agencies, shall prepare draft guidelines for the preparation of project studies reports by all entities. The guidelines shall address the development of reliable cost estimates. The department shall submit the draft guidelines to the California Transportation Commission not later than July 1, 1991. The commission shall adopt the final guidelines not later than October 1, 1991. Guidelines adopted by the commission shall apply only to project studies reports commenced after October 1, 1991.

California Government Code, Section 14526(c)

Section 14526(c) states:

(c) Projects may not be included in the draft interregional transportation improvement program without a project study report or major investment study.

California Government Code, Section 14527(g)

Section 14527(g) states:

(g) Projects may not be included in the regional transportation improvement program without a complete project study report or, for a project that is not on a state highway, a project study report equivalent or major investment study.

California Government Code, Section 14529

Section 14529 establishes the STIP as a resource management document. The statute requires that each project in the STIP identify the allocation or expenditure amount and year for the following four components:

- (1) Completion of all permits and environmental studies.
- (2) Preparation of plans, specifications, and estimates.
- (3) The acquisition of rights-of-way, including, but not limited to, support activities.
- (4) Construction and construction management and engineering, including surveys and inspection.

Additionally, funding for right-of-way acquisition and construction for a project may be included in the program only if the commission makes a finding that the sponsoring agency will complete the environmental process and can proceed with

right-of-way acquisition or construction within the five-year period. No allocation for right-of-way acquisition or construction shall be made until the completion of the environmental studies and the selection of a preferred alternative.

California Government Code, Section 14530.1

Section 14530.1 requires the California Transportation Commission to adopt guidelines for the development of the STIP.

ARTICLE 3 Policies

General

Projects shall be adequately scoped prior to approval for funding. The basis for scope, cost, and schedule shall be documented in a PID for all major projects on the State Highway System. The District Director is not authorized to approve a PID unless all alternatives are considered geometrically feasible for study as described in [Chapter 21](#) – Exceptions to Design Standards. To ensure feasibility, PIDs will have a full explanation and declaration of the risks of the project.

State Transportation Improvement Program

A PSR or PSR-PDS shall be approved by the District Director prior to listing any project in the STIP.

The [CTC STIP Guidelines](#) state that for each project proposed for programming in the Regional Transportation Improvement Program (RTIP) or the Interregional Transportation Improvement Program (ITIP), the PID shall list costs separately for each of four project components. In addition, right-of-way and construction components on Caltrans projects shall be further broken down into the costs for Caltrans capital outlay support and capital outlay project. Therefore, a total of six project cost components are required in a PID for projects on the State Highway System to be programmed in the Regional Transportation Improvement Program or Interregional Transportation Improvement Program. The STIP components relate to the programming phases as follows in Figure 9-1:

Figure 9-1 State Transportation Improvement Program Components and Corresponding Project Development Programming Phases

California Transportation Commission State Transportation Improvement Program Components	Corresponding Project Development Programming Phases
Support costs for environmental studies and permits	Project Approval and Environmental Document (PA&ED)
Support costs for preparation of plans, specifications, and estimates	Plans, Specifications, and Estimates (PS&E)
Support costs for right-of-way acquisition	Right-of-Way – Support
Capital costs for acquisition of right-of-way	Right-of-Way – Capital
Support costs for construction	Construction Project – Support
Capital costs for construction	Construction Project – Capital

Legislation requires that each STIP component, as identified in Figure 9-1, must be programmed and that the components may be programmed sequentially. To implement the legislation, Caltrans developed the PSR-PDS template to program support costs and capital costs separately. The PSR-PDS allows Caltrans and local agencies to:

1. Program only the support costs if the project life-cycle is longer than the STIP programming period.
2. Maximize the use of finite PID resources by beginning detailed environmental studies and engineering studies without performing preliminary studies.
3. Proceed with engineering and environmental studies and evaluate the merits and feasibility of alternatives before a preferred alternative is selected for programming right-of-way and construction costs.
4. Accurately plan resources needed to complete the environmental document - project approval process.
5. To advance the programming of PA&ED elements of future STIP projects, if there are adequate funds in the State Highway Account.

It is Caltrans policy that a PSR-PDS shall be completed prior to listing any project in the STIP.

This policy was implemented to ensure appropriate use of limited PID resources and that project teams have sufficient information on project alternatives to develop reliable costs and schedules prior to programming funds necessary for construction and the purchase of right-of-way. The information needed to firmly establish permit, right-of-way, and environmental requirements is generally not available until after the detailed studies are completed.

If a STIP project can be accelerated and construction can begin during the proposed STIP programming period, it may be appropriate to use the PSR format and program right-of-way and construction dollars at the end of the PID phase. Only a District Director with a request from a project sponsor can approve the use of the PSR format. Districts should work with their local partners to carefully consider the ability to deliver the project within the STIP programming period. When using the PSR format, districts must submit a “Fact Sheet Exception to the PSR-PDS Requirement” to the Chief of the Headquarters Division of Project Management and Chief of Office of Program and Project Planning within the Headquarters Division of Transportation Planning. A copy of the fact sheet is located at:

http://www.dot.ca.gov/hq/tpp/offices/opsc/psr-pds_guidance.html

When a District Director approves a PID, that action approves the project as a candidate project but does not ensure that the candidate will successfully compete with other projects for programming.

When a PSR-PDS is used to initiate the project, a project report (PR) will be used to program the remaining support, right-of-way, and construction costs. In some rare cases, a supplemental PID following the format of a PSR may be used.

Refer to [Appendix L](#) – Preparation Guidelines for Project Study Report and [Appendix S](#) – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document for more information.

This chapter, Appendix L and Appendix S were developed to be consistent with the [*CTC Guidelines for the Preparation of Project Study Reports.*](#)

State Highway Operation and Protection Program

Caltrans requires development of a PID prior to:

1. Inclusion of a project’s capital right-of-way and construction costs into the SHOPP, or
2. Approval to commence work on the PA&ED phase when the timetable for the project exceeds the SHOPP programming period. In this case, the PR, not the PID will program the capital right-of-way and construction costs.

The Headquarters SHOPP program managers establish the PID formats used. Refer to Figure 9-3 in Article 4 for a list of the appropriate PID format for each program in the SHOPP.

All SHOPP projects must include a list of project outputs in the PID. Contact the individual Headquarters SHOPP program manager for the most current SHOPP project output format. The Headquarters SHOPP program manager organizational chart is located at:

http://10.56.3.8/pirs/TenYrShopp/SHOPP_programs_and_managers.pdf

For further discussion of SHOPP PIDs see Article 4 – Essential Procedures and Article 5 – Additional State Highway Operation and Protection Program Procedures.

Protection of Public Investment

It is Caltrans' responsibility to protect the public's investment in the State Highway System; therefore a PID is required for any major project that is on the State Highway System regardless of the funding.

Whether Caltrans or entities other than Caltrans staff prepare the PID, Caltrans policy and procedures must be followed. Caltrans staff shall perform independent quality assurance and shall retain approval authority over those PIDs that are prepared by other entities. Further discussion of projects-funded-by-others can be found in the Article 4 – Essential Procedures and Article 8 – Project Initiation Process for Projects-funded-by-others section of this chapter.

ARTICLE 4 Essential Procedures

General

This article is a discussion of the essential procedures to complete a PID. They follow the order for common problem solving steps, project selection, project personnel, project statement, alternative development, mandatory reviews, estimating resource needs, securing funds, and starting capital work.

Project Selection

District Directors have discretion in prioritizing district projects for PID development. They also have the responsibility to ensure that the projects are consistent with planning procedures and programming criteria. District Directors have authority to approve PIDs.

Annually, the districts identify projects that will require resources to develop PIDs. A list of proposed projects is submitted to the Headquarters Division of Transportation

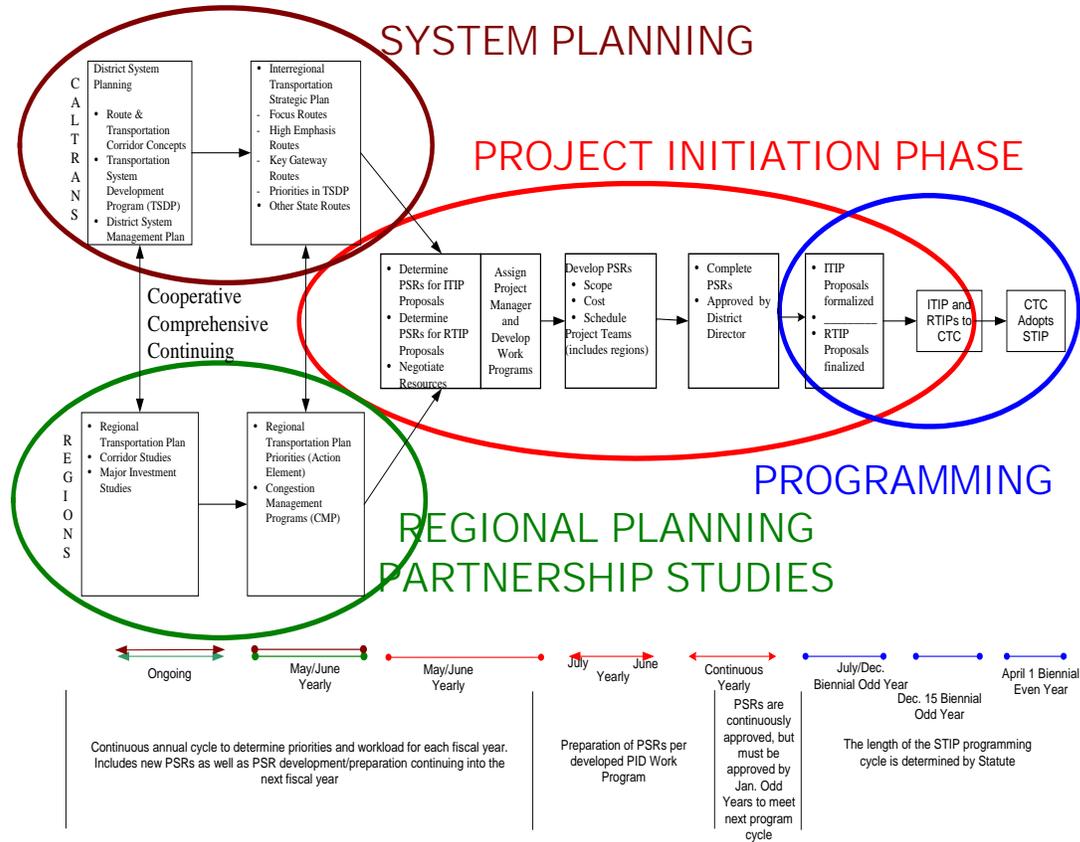
Planning, Office of Program and Project Planning, in the form of a proposed work program. Constrained by the budgeted PID support allocation, an annual PID work program includes a list of those PIDs that will be developed by district/region staff and a list of projects requiring independent quality assurance. Work can commence on a PID when a K-phase expenditure authorization (EA) has been issued. The PID work program is managed by the Office of Program and Project Planning. Refer to the Office of Program and Project Planning for information about work program development and K-phase authorizations.

Except for district Minor projects, the costs of the PID preparation should be charged to K-phase EA. The K-phase is used until the project is programmed, or for a project-funded-by-others when the Caltrans project manager requests the capital EA.

Candidate Projects for the State Transportation Improvement Program

The CTC and Caltrans are required to program, budget, and expend the funds in the State Highway Account in accordance with long-range transportation planning. Figure 9-2 provides an overview of the transition from long-range transportation planning to a project's initiation and ending with the programming of funds for a project. This chapter does not contain a discussion of all of the long-range planning elements shown in the Figure 9-2, however the graphic establishes the relationship between district system planning (in brown oval) and regional transportation planning (in green oval) and how long-range planning processes influence the selection of projects for funding. The following paragraphs provide brief descriptions of district system planning and regional transportation planning. A brief description of the STIP and the federal programming process follows the discussion of transportation planning processes. The PID is the key point of linkage between planning and programming.

Figure 9-2 Project Initiation Links Planning to Programming



District System Planning

California Government Code, Section 65086 specifies that Caltrans shall carry out long-term State Highway System planning to identify future highway improvements in consultation with transportation planning agencies, county transportation commissions, and counties and cities. Caltrans district planning units work with local and regional agencies to identify long-range system and corridor needs. The system needs are determined by evaluating:

- Existing transportation facilities, including multi-modal transit, pedestrian and bicycle facilities.
- Existing and future deficiencies based on transportation system performance measures.

- Present operating conditions, such as the annual average daily traffic (AADT), peak hour volume, and level of service (LOS).
- Pedestrian needs at controlled and uncontrolled crosswalks.
- Current land use.
- 20-year concept for land use, operational trends, and modal trends.

Information is compiled into a transportation concept report (TCR) or a route concept report (RCR). Project selection is based on the system plans and broader statewide planning efforts such as the Interregional Transportation Strategic Plan (ITSP) and the overall policy framework established by the California Transportation Plan.

For a more in-depth discussion of this topic see [Chapter 1](#) – Introduction, Section 4 – Transportation Planning Leads to Project Development.

Regional Transportation Plans

Like system planning within Caltrans, the Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) perform analyses on multi-modal segments, corridors, and the system to identify projects for long-range transportation plans. The long-range plans that are prepared and cyclically updated by Metropolitan Planning Organizations and Regional Transportation Planning Agencies are known as regional transportation plans (RTPs). Regional transportation plans consist of policy, action, and financial elements, all leading to identification of projects. Regional transportation plans are federally mandated plans. Any project that receives federal funding must be in a long-range plan that is fiscally constrained and is consistent with the goals and guidelines of a regional air quality plan.

For a more in-depth discussion of this topic see [Chapter 1](#) – Introduction, Section 4 – Transportation Planning Leads to Project Development.

State Transportation Improvement Program

Transportation programming is the public decision-making process that sets priorities, balances system performance outcomes, and funds projects envisioned in the long-range transportation plans. The STIP consists of two broad programs: (1) the Interregional Transportation Improvement Program that is funded from 25 percent of the new funds in the STIP and (2) the Regional Transportation Improvement Program that is funded from 75 percent of the new funds in the STIP. Caltrans submits the Interregional Transportation Improvement Program and Regional Transportation

Planning Agencies submit the Regional Transportation Improvement Program to the CTC biennially. The CTC is responsible for adoption of the STIP.

The PID provides the required information that transforms transportation planning activities to project specific details for programming decisions. The district transportation planning unit has a key role in ensuring that the community needs and long-term transportation objectives are incorporated into the PIDs.

An approved PSR-PDS will be used to program only the “environmental document and permit” component for any STIP project. An approved PR will be used to program STIP support and capital components for right-of-way and construction. With the approval of the Headquarters Division of Transportation Programming, and if there is sufficient detail to firmly establish permit requirements, right-of-way requirements, and environmental impacts, a PSR may be used to program the right-of-way and construction components prior to approval of the PR.

For additional information on the requirements of the STIP, see:

<http://www.dot.ca.gov/hq/transprog/ocip.htm>.

Federal Program

Projects receiving federal transportation funds or are of regional significance must be programmed in the appropriate federal programming document. Metropolitan Planning Organizations are responsible for developing and adopting the Federal Transportation Improvement Program's. Caltrans is responsible for preparing the Federal Statewide Transportation Improvement Program.

Refer to [Chapter 4](#) – Programming, for additional information on federal programs.

Candidate Projects for the State Highway Operation and Protection Program

The CTC and Caltrans program, budget, and expend the funds in the State Highway Account in accordance with the [2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)](#).

Ten-Year State Highway Operation and Protection Program Plan

California Streets and Highways Code, Section 164.6 requires that Caltrans prepare a 10-year rehabilitation plan for the rehabilitation and reconstruction, or the combination thereof, of all State highways and bridges owned by the State. The plan

shall include specific milestones and quantifiable accomplishments, such as miles of highways to be repaved and number of bridges to be retrofitted. The plan is updated every two years and is submitted to the CTC for review and comment prior to submittal to the Governor and Legislature.

The plan, known as the [*2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)*](#), contains a compilation of statewide needs, performance goals, and a long-term schedule for meeting the goals. The plan is a tool to identify funding needs and prioritize projects within funding constraints.

The [*2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)*](#) has the following major categories:

- Major Damage Restoration
- Collision Reduction
- Bridge Preservation
- Roadway Preservation
- Roadside Preservation
- Mandates
- Mobility Improvement
- Facility Improvement

The Headquarters SHOPP program managers work with the districts to develop the [*2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)*](#). Biennially, each district is assigned district program target goals for the statewide [*2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)*](#). The district uses this information to identify specific projects that contribute to meeting the district's target goals. If a district has identified program needs that are not within the prescribed goals, that district may provide justification for including the project as part of the district's submittal. The district's list is submitted to the Headquarters SHOPP program managers. Once approved by the Headquarters SHOPP program managers, the district's projects are added to the statewide [*2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)*](#).

State Highway Operation and Protection Program

Biennially, Caltrans submits a list of projects to the CTC that meets the goals of the SHOPP. The SHOPP is a list of projects that has been approved for delivery by the

CTC for the four-year SHOPP timeframe. The Caltrans delivery commitment is defined by the scope, cost, and schedule presented by the PID. The program categories in the SHOPP are an extension of the program categories in the [2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)](#). A description of the program qualifications for each category is located at: http://onramp.dot.ca.gov/hq/maint/SHOPP/SHOPP_Decision.shtml

Projects are selected from the [2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)](#) and the districts/regions are resourced for PID development through the PID work program. The PID defines the project scope, cost, and schedule. The project competes with other SHOPP needs for inclusion in the SHOPP. The PID provides the decision-making link between the [2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)](#) and commitment for the delivery of capital improvement through the SHOPP.

Federal Program

SHOPP projects that either receive federal funds or are regionally significant must be programmed into the Federal Transportation Improvement Program. Projects that need to be in the region's air quality conformity model must be programmed in the Federal Transportation Improvement Program. Refer to [Chapter 4 – Programming](#), for additional information on federal programs.

Project Initiation Document Templates

The funding source, the complexity, the issues, and the type of work will determine what type of information must be included in the PID.

The appendices provide guidance and templates for various PIDs.

[Appendix L](#) – Preparation Guidelines for Project Study Report, provides basic information applicable to all PIDs and should be read in conjunction with any of the program-specific appendices. Appendix L includes the following information:

- Preparation guidelines.
- Description of information that should be included in a PSR.
- Scoping tools.
- Standard templates.

[Appendix S](#) – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document provides information applicable to a PSR-PDS, including the template and should be read in conjunction with Appendix L.

Appendix S includes the following information:

- Preparation guidelines.
- Description of information that should be included in a PSR-PDS.
- Scoping tools.
- Standard templates.

The PSR and PSR-PDS are the most common documents to initiate a project. A standard outline has been developed for these documents. Templates using these standard outlines and some fill-in-the-blank tables have been developed for the PSR and PSR-PDS.

In addition to the PSR, there are modified templates that have been tailored to meet the information needs of specific State programs or funding sponsors. Tables from any of specialty PIDs may be used to improve the presentation of project information.

State Transportation Improvement Program Projects

There are two major PID types that are used to program projects into the STIP.

- The PSR-PDS is used only to program the support costs needed to achieve project approval.
- The PSR is used to program all support, right-of-way acquisition, and construction costs.

Both the PSR and PSR-PDS use a similar outline, however, the PSR-PDS does not require the same level of engineering detail as a PSR. The level of engineering detail and effort for developing a PSR-PDS shall be limited to that effort needed to develop the work plan for the PA&ED phase, and to develop a “ballpark” estimate of the construction cost. When using a PSR-PDS, careful consideration of resources needed to complete the PA&ED phase is warranted since the level of information in the PSR-PDS is substantially less than the level of information required in a PSR. In addition, certain project approvals may need to be obtained during the PA&ED phase that would normally be done during the project initiation phase, such as any needed Federal Highway Administration (FHWA) approvals. The construction estimate in a

PSR-PDS is not a programming commitment; rather it is used to forecast long-range funding needs.

A project programming request (PPR) as described in the STIP Guidelines shall be included as an attachment. The template for this request is located on the Headquarters Division of Transportation Programming website at:

<http://www.dot.ca.gov/hq/transprog/ocip.htm>

State Highway Operation and Protection Program Projects

Caltrans has developed fill-in-the-blank type PID templates for specific programs in the SHOPP to fulfill either urgency needs, such as emergency projects, or for programs that have well defined purpose-and-need and project scope. In the cases where solutions are not complex, activities during the project initiation phase are often sufficient to meet both the requirements for a PID and a PR. In addition, there may be programs that have specific PID requirements that must be incorporated into the document. Each specialty template contains a modified cost estimate table tailored for the specific program. Figure 9-3 identifies the appropriate template for each program in the SHOPP. In addition, Article 5 – Additional State Highway Operation and Protection Program Procedures, discusses specific requirements for SHOPP projects.

As discussed in “Project Selection” of this article, projects for the SHOPP are planned and selected based on meeting program specific qualifications. A description of the program qualifications can be obtained from the Headquarters SHOPP program manager.

Figure 9-3 Project Initiation Document Templates for the State Highway Operation and Protection Program

PROGRAM¹	ACCOUNTING CODE¹	TYPE OF PROJECT INITIATION DOCUMENT²	REFERENCES TO OTHER CHAPTERS AND APPENDICES
Major Damage Restoration			
Major Damage (Emergency Opening)	20.XX.201.130	DO/DAF ³	
Major Damage (Permanent Restoration)	20.XX.201.131	DAF ⁴ , SCVP, PSR-PR or PSR	Appendices R , A & L
Roadway Protective Betterments	20.XX.201.150	PSR	Appendix L
Collision Reduction			
Safety Improvements	20.XX.201.010	PSR-PR ⁵ , PSR, or SCVP	Appendices A , L & R
Collision Severity Reduction	20.XX.201.015	PSR or SCVP	Appendices L & R
Bridge Preservation			
Bridge Rehabilitation	20.XX.201.110	PSSR or PSR	Appendices P & L
Bridge Scour Mitigation	20.XX.201.111	PSSR or PSR	Appendices P & L
Bridge Rail Replacement and Upgrade	20.XX.201.112	PSSR, SCVP or PSR	Appendices P , R & L
Bridge Seismic Restoration	20.XX.201.113	PSSR or PSR	Appendices P & L
Capital Bridge Preventative Maintenance Program	20.XX.201.119	PSSR	Appendices T & L
Transportation Permit Requirements for Bridges	20.XX.201.322	PSSR or PSR	Appendices P & L
Roadway Preservation			
Roadway Rehabilitation 3R – DIB 79	20.XX.201.120	PSSR or PSR	Appendix G & L
Pavement Rehabilitation – DIB 81	20.XX.201.121	CAPM-PR	Appendix H
Pavement Preservation 2R – DIB 79-03	20.XX.201.122	PSSR or PSR	Appendix G & L
Long-Life Pavement Rehabilitation	20.XX.201.125	PSR	Appendix L
Drainage System Restoration	20.XX.201.151	PSR	Appendix L
Signs and Lighting Rehabilitation	20.XX.201.170	PSR or SCVP	Appendices L & R
Roadside Preservation			
Roadside Rehabilitation	20.XX.201.210	PSR Data Sheet HPR	Chapter 29 , Appendix E
New Highway Planting	20.XX.201.220	Contact SHOPP Program Manager	Chapter 29 , Appendix E
Roadside Safety Improvements	20.XX.201.235	PSSR or SCVP	Appendix Q & R
Roadside Protection and Restoration	20.XX.201.240	PSR	Chapter 29 , Appendix L
Safety Roadside Rest Area Rehabilitation	20.XX.201.250	PSR	Chapter 29 , Appendix X
New Safety Roadside Rest Areas	20.XX.201.260	PSR	Chapter 29 , Appendix X
Mandates			
Relinquishments	20.XX.201.160	PSSR	Appendix G
Railroad/Highway At-Grade Crossing	20.XX.201.325	PSR or SCVP	Appendix L & R
Hazardous Waste Mitigation	20.XX.201.330	PSR	Appendix L
Storm Water Mitigation	20.XX.201.335	PSR	Appendix L

PROGRAM¹	ACCOUNTING CODE¹	TYPE OF PROJECT INITIATION DOCUMENT²	REFERENCES TO OTHER CHAPTERS AND APPENDICES
ADA Curb Ramps	20.XX.201.361	PSR or SCVP	Appendices L & R
ADA Pedestrian Infrastructure	20.XX.201.378	PSR or SCVP	Appendices L & R
Mobility			
Operational Improvements	20.XX.201.310	PSR	Appendix L
Transportation Management Systems	20.XX.201.315	PSR	Appendix L
Weigh Stations & Weigh-In-Motion Facilities	20.XX.201.321	PSR	Appendix L
Facilities			
Equipment Facilities	20.XX.201.351	Facility PSR	Chapter 32 , Appendices C & L
Maintenance Facilities	20.XX.201.352	Facility PSR	Chapter 32 , Appendices C & L , <i>Maintenance Station Design Manual</i>
Office Buildings	20.XX.201.353	Facility PSR	Chapter 32 , Appendices C & L
Materials Labs	20.XX.201.354	Facility PSR	Chapter 32 , Appendices C & L

DAF	Damage Assessment Form
DO	Director’s Order
PSR	Project Study Report
PSR-PR	Project Study Report-Project Report
SCVP	Small Capital Value Projects
PSSR	Project Scope Summary Report
CAPM-PR	Capital Preventive Maintenance Project Report
PSR Data Sheet HPR	Project Study Report Data Sheet Highway Planting Restoration

Footnotes:

1. The program names and accounting codes are from the [Coding Manual](#). See the Headquarters Division of Maintenance-SHOPP website for a description of each SHOPP program.
2. The project initiation document for the Minor B program is an EA-PR and the project initiation document for the Minor A program is a PR.
3. The Director’s Order with a DAF is used for initiation, programming and approval of projects in the Major Damage (Emergency Opening) Program as discussed in Article 5, Sub-article “Damage Assessment Form.” Contact the Major Damage Restoration Program Manager in the Headquarters Division of Maintenance for instructions.
4. The DAF is used for initiation, programming and approval of projects in the Major Damage (Permanent Restoration) Program subject to the conditions enumerated in Article 5, Sub-article “Damage Assessment Form.” When the complexity of the project exceeds the conditions for using the DAF, the SCVP format, PSR-PR, or PSR will be used for project initiation with the DAF as an attachment, followed by a PR for project approval as needed.
5. If a Safety Improvement project exceeds the \$3,000,000 combined capital and support cost threshold or is not eligible to use the SCVP format as determined by the Safety Improvements Program Manager, use the PSR-PR format. If the complexity of the project exceeds the conditions for using the PSR-PR format, the district safety coordinator can grant an exception to use the PSR format.

Small Capital Value State Highway Operation and Protection Program Projects

The small capital value projects (SCVP) PID was developed to minimize the effort needed to program projects, equivalent to Minor A projects, using SHOPP Reservation funds. The Headquarters SHOPP program managers have expanded the use of the SCVP PID; it is now the standard PID for SHOPP projects with a total combined capital and support cost of \$3,000,000 or less, but more than the Minor B contract limit.

Use of the SCVP PID template should be based on project specific risks, constraints, and complexities when planning, scoping, and programming SCVP. The SCVP PID must provide Headquarters SHOPP program managers with sufficient information about the project's purpose-and-need, scope, cost, and schedule to make sound a programming commitment. Note that the SCVP PID does not provide conceptual approval of the project because of the simplicity of the report format. The project engineer should discuss any issues with the appropriate Headquarters SHOPP program manager.

While SCVP are typically low risk and single alternative projects, the district has discretion to choose another type of PID to scope a project for programming commitments when a small capital value project is too complex and presents funding or scheduling risks. The determination to use a different type of PID does not require approval from the Headquarters SHOPP program managers or Office of Program and Project Planning, but discussion with the Headquarters SHOPP program managers is recommended.

Upon completion and approval of the SCVP PID, projects will be amended into the SHOPP and receive a planning program number (PPNO).

See [Appendix R](#) – Small Capital Value Projects Project Initiation Document for an outline for SCVP PIDs.

State Highway Operation and Protection Program Minor A Projects

The Minor A project construction cost limit is defined by the CTC in terms of State (including federal) funds used.

The Minor Program allows districts to be responsive to low cost transportation needs, and therefore, Minor Program projects are not individually programmed.

Projects originally conceived as minor projects that have increased in cost to exceed the limit for Minor A projects must be reviewed by the Headquarters SHOPP program manager and compete with other candidates for SHOPP funds.

Under special circumstances, local funds may be combined with SHOPP funds (for example: a local project and a SHOPP project are combined for either construction efficiencies or coordination). In this case the local funds are not included in the calculation to determine if the construction cost exceeds the minor limit.

The PR functions as the initiation document and the project approval for projects that meet the Minor A limit. Refer to [Appendix K](#) – Preparation Guidelines for Project Report for an outline and preparation guidelines for project reports.

Contact the Headquarters SHOPP Minor Program program manager for the most current Minor A limit.

State Highway Operation and Protection Program Minor B Projects

The Minor B level is established to be consistent with the lower limit of the State Contract Act which is reviewed each even numbered year by the Department of Finance.

Contact the Headquarters SHOPP Minor Program program manager for the most current Minor B limit.

An expenditure authorization-project report (EA-PR) facilitates opening an EA and serves as the PR for a Minor B project. Refer to Article 7 of this chapter and [Appendix B](#) – Preparation Guidelines for Expenditure Authorization Project Report for additional information.

Projects-funded-by-others

Projects-funded-by-others will require an encroachment permit and either a permit engineering evaluation report (PEER) or a PID using the PSR-PDS template. Projects that have State Highway Account funds, as well as funds from other sponsors, will follow the Project Development Procedures Manual (PDPM) procedures and meet the expectations of the program manager. See Article 8 – Project Initiation Process for Projects-funded-by-others of this chapter for further information.

Purpose and Need - Defining the Transportation Problem

All PIDs shall contain a statement of purpose-and-need for the transportation improvement. This statement of purpose-and-need must be based on needs and objectives identified in the planning process. The statement should be developed by and have the consensus of the project sponsor and members of the PDT. The PID must present information in an organized manner to support the purpose-and-need statement. Supporting information to the purpose-and-need statement includes the background of the transportation problem, system and corridor planning, and data on transportation deficiencies that validate the need for the project.

A clear, well-justified purpose-and-need statement explains to the public and decision makers that the expenditure of funds is necessary and worthwhile, and that the priority of the project, relative to other transportation needs, is warranted. The purpose-and-need statement is the foundation of any project regardless of the funding source. The purpose-and-need drives the process for consideration of the range of alternatives to be studied, the analysis, and ultimate selection. The statement should be written so that the consequences of the No Build Alternative are self-evident.

A project “need” is an identified transportation deficiency. Typical transportation deficiencies are related to safety, congestion relief, connectivity of the highway system, multi-modal connectivity, access, operation, facility preservation, and legal mandates. A need must be supported by evidence that a problem exists.

A project’s “purpose” is the objectives that will be met to address the transportation deficiency. Objectives should be quantified during the project initiation phase and measures should be used to develop, evaluate, and compare reasonable solutions.

The project’s purpose-and-need statement must be as comprehensive and as specific as possible. Establishment of the appropriate breadth for the purpose-and-need promotes a suitable range of alternatives. If a statement is too vague, such as “provide a connection between city A and city B,” then the range of alternatives could be very broad. The previous statement could imply that alternatives for air transportation be considered when that alternative may be outside of the funding criteria. On the other hand, the purpose-and-need statements must not be so narrow that it precludes studying reasonable alternatives that meet the underlying need.

The purpose statement should clearly describe both planned expectations for the State’s transportation system and sponsor’s goals. An example of providing

specificity is to include a statement that identifies the purpose as “completion of the California Freeway and Expressway portion of a route for interregional truck traffic with a connection to the existing rail system and to improve the level of service.”

This is a positive statement (compared to “provide a connection between cities A & B”) that addresses a specific need for truck traffic capacity, the continuity with the freight system and an unacceptable level of service.

The purpose-and-need statement may need to be refined, as appropriate, until approval of the project. A key factor in the refinement of a purpose-and-need statement is the participation of a broad range of Caltrans functional units, community representatives, and public stakeholders. As information is gathered about the project and corridor, one may find more information about the underlying cause of a problem. For example, it may be assumed that the cause of congestion is the commuter traffic to and from the downtown area; however, follow-up studies indicate that additional housing also generates numerous trips to and from the university within a specific segment of the commuter corridor. New information may lead to a refinement of the purpose-and-need statement so that it can include the improved connectivity to transit, pedestrians, and bicycles in the corridor.

The final design reflected in the construction documents and any modification to the design during construction must be consistent with the approved purpose-and-need of the project.

Additional information and resources on purpose-and-need statement development is located at: http://www.dot.ca.gov/hq/env/emo/purpose_need.htm.

The project scope may be refined as the project progresses through to project approval. The project scope shall remain consistent with the purpose-and-need of the project. Any changes to the programmed project scope will require a project change request (PCR) and supporting engineering documentation. A program change request alone is not sufficient to adequately document the engineering decision to change the scope of a project and provide for design immunity protection in tort liability.

Additional information on scope changes can be found in [Chapter 6](#) – Project Cost, Scope, and Schedule Changes.

Design Concept and Design Scope

The PDT must establish consensus on the design concept and the design scope.

Design Concept

The design concept defines the type of highway project; such as, freeway, expressway, conventional highway, major arterial, or mixed highway-rail transit facility. For highway facilities this is refined to freeway, expressway, or conventional highway. The design concept is an updated and more refined version of the planning concept developed during the system and regional planning process.

The establishment of the design concept will include a review of the transportation concept report or a route concept report, existing route adoption documents, and freeway agreements. In addition, an evaluation of general plans, current land uses, and intergovernmental reviews of proposed developments should be performed to determine the appropriate design concept.

The development of the design concept shall reflect the appropriate functional classification of the facility as it relates to the transportation objectives of the corridor. To assess the appropriate functional classification one must consider the following questions:

- Does this facility serve a rural, urban, or urbanizing area?
- Does the facility primarily serve inter-regional, intra-regional, or intra-community travel?
- Does the facility provide system continuity?

Design Scope

The design scope describes aspects of the project that meet the project purpose-and-need. The design scope is an update of the planning scope that is used to assess how the project will impact the regional air quality emissions. Some of the features that relate to the people or vehicle carrying capacity of the facility and therefore may impact air quality include:

- The number of lanes including lanes for high-occupancy vehicle, pockets, and through lanes.
- The location and length of the project.
- Design standards.
- Right-of-way requirements.

- Interchange locations.

Examples of where the design scope may be considered neutral with respect to impact on air quality include:

- Pavement rehabilitation.
- Highway planting requirements.
- Roadside management features.
- Stormwater management requirements.
- Seismic retrofit.

If applicable, the design scope of at least one viable alternative in the PID must match the regional transportation plan and the Federal Transportation Improvement Program project listing.

Refer to the Caltrans [Standard Environmental Reference \(SER\)](#) for additional guidance on project compliance with federal regulations on air quality conformity.

Scoping Tools

There are several scoping tools used by various functional areas to aid the project team in scoping the project.

Upon receiving a request for project information, each functional unit completes the appropriate scoping tool and transmits the information to the unit responsible for developing the PID.

Most scoping tools that apply to all PIDs are located in Appendix L. Scoping tools specific to the PSR-PDS are located in Appendix S. The following is a list of the scoping tools and their locations:

- Design Scoping Index (All PIDs - Appendix L).
- Stormwater Documentation (PSR-PDS only - Appendix S).
- Transportation Planning Scoping Information Sheet (All PIDs - Appendix L).
- Preliminary Traffic Engineering Assessment (PSR-PDS only - Appendix S).
- Traffic Forecasting, Analysis and Operations (PSR only - Appendix L).
- Preliminary Environmental Analysis Report (All PIDs - <http://www.dot.ca.gov/ser/pear.htm>).
- Right-of-Way Component for PSR-PDS (PSR-PDS only - Appendix S).
 - Conceptual Cost Estimate Request.

- Conceptual Cost Estimate.
- PSR-PDS Survey Mapping Needs for PSR-PDS Questionnaire (PSR-PDS only - Appendix S).
- Project Quality Control Plan (PSR-PDS only - Appendix S).
- Risk Register (PSR-PDS only - Appendix S).
- Division of Engineering Services Scoping Index (PSR-PDS only - Appendix S).

The tools not contained in the previous list can be obtained from the appropriate functional unit.

Project Initiation Document Alternative Formulation Strategies

The PDT shall develop viable alternative solutions that meet the project purpose-and-need. Alternatives need to be context sensitive and address other constraints such as funding. It is Caltrans' policy to evaluate alternatives that avoid, minimize, or mitigate adverse environmental impacts. In the development of alternatives, the team should consider the following:

Context Sensitive Solutions

Caltrans shall use context-sensitive-solutions (CSS) as an approach to plan, design, construct, maintain, and operate its transportation system. Steps shall be taken to ensure early recognition of the context of the facility by the PDT. Such steps promote the use of innovative and inclusive approaches to integrate and balance community aesthetic, historic, cultural, social, and other environmental values with transportation safety, maintenance, and performance goals. Context-sensitive-solutions is a collaborative, interdisciplinary approach involving all stakeholders.

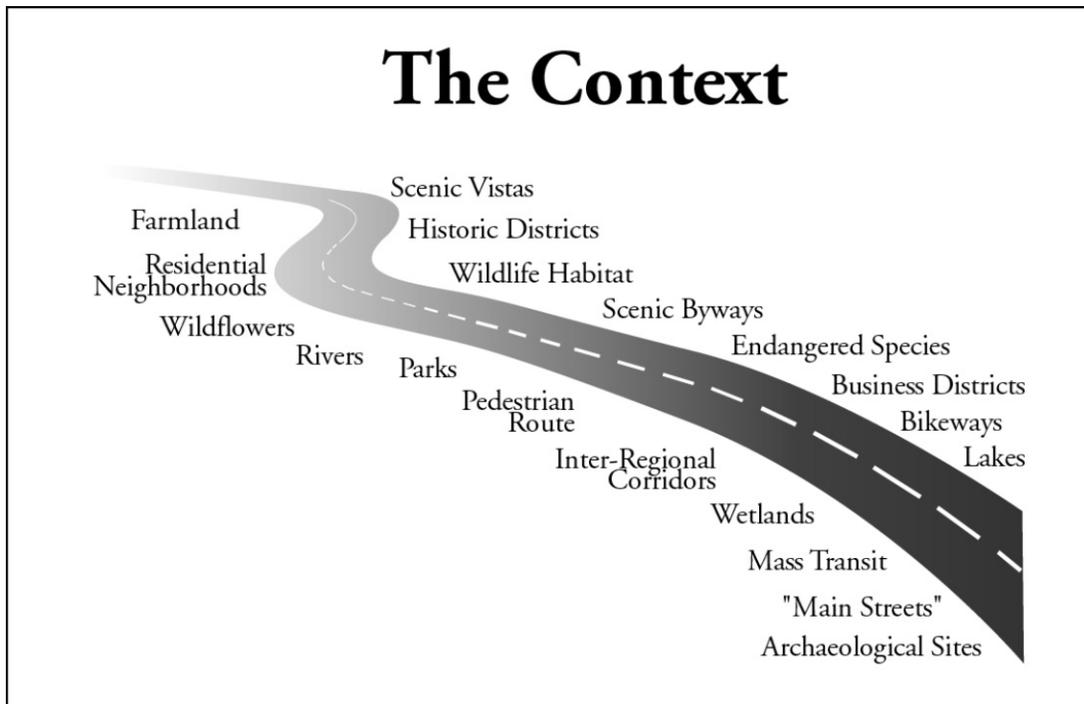
The context of all projects and activities to obtain public input are key factors in reaching project decisions. Context is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, address issues including funding and maintenance feasibility, traffic demand, impact on alternate routes and safety, and relevant laws, rules, and regulations.

Figure 9-4 emphasizes that State highways are located within communities and provides some examples of the features and resources that a community may value. Each community will have its own characteristic features and values attached to those

features. The PDT should work with the stakeholders to ensure these characteristics are considered when developing project alternatives.

Figure 9-4 The Context

Based on graphic created by SRF Consulting Group Inc.
University of Minnesota Center for Transportation Studies



Following are a few examples of questions that help the team establish the context of the project:

- Are all stakeholders identified?
- How does the transportation system “fit” into its physical and cultural context?
- Is the highway appropriately classified?
- What are the economic values and concerns of the community?
- What are the physical characteristics of the corridor? Is it in an urban, urbanizing, or rural setting?
- Are there important view-sheds from the road?
- What type of vegetation exists along the corridor?
- Are there historic resources, animal habitats, or other environmentally sensitive features?

- Are there particular features or characteristics of the area that the community wants to change or preserve?
- How do the current traffic demands impact various users of the transportation system?
- Are pedestrian and bicycle users safely, efficiently, and comfortably accommodated? What are their needs?
- What are the transit demands?
- What are the vehicular and goods movement demands?

See [Chapter 1](#) – Introduction, Section 5 for more information on the project development philosophy. See [Chapter 22](#) – Community Involvement, for issues related to partnering with communities to get their input on projects as an integral part of the project development process.

See the [Highway Design Manual \(HDM\)](#) and [Main Street, California](#) for additional information on context-sensitive-solutions.

For information about developing an effective public participation plan to gain public support on a project to meet the context-sensitive-solutions goals of partnering, see Caltrans’ Office of Sustainable Community Planning website at: <http://www.dot.ca.gov/hq/tpp/offices/ocp/>

See the [Project Communication Handbook](#) for information regarding assisting the project team in identifying internal and external stakeholders, and enhancing communication among all parties involved on a project.

Minimum Project Alternative

All PIDs that will compete for SHOPP or STIP funds linked to California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) documents need to include a minimum project alternative. This alternative must meet the project purpose-and-need. District program management unit should work with the project manager to establish a realistic funding expectation. The project manager should ensure that an alternative that fits funding constraints and addresses the most severe transportation problems outlined in the project purpose-and-need is developed.

The minimum project alternative must stand alone and must not depend on successive projects. The minimum project alternative need not contribute to the ultimate project and must not constitute a commitment to the ultimate project. A good illustration would be a corridor with an expressway as the ultimate project where significant

interim relief could be achieved with strategically located passing lanes on a conventional highway. Another example would be a desired interchange on an expressway where interim improvement could be achieved by intersection signalization.

Stageable Alternatives

Special emphasis should be placed on development of alternatives with staging characteristics. By developing alternatives with components of varying priorities, it is possible to stage the ultimate project or scale it back. The flexibility to quickly and logically adjust the scope of projects is most important at initial programming, but is necessary throughout the project development process.

Districts have a higher probability of getting a project programmed and of meeting at least some of the project needs if the PID includes stageable alternatives. Projects that may be rejected on an “all or nothing” basis are more likely to be completed over a period of years if packaged in more reasonably sized increments. A good project for such an approach would be a rehabilitation project proposed for a long corridor. To be competitive, large projects should be packaged into a series of reasonably sized projects with independent utility.

No Build Alternative

The No Build Alternative must explain the need for the project. The No Build Alternative shall always be included in the PID.

Alternative Identified to Program Project Cost

If there is more than one Build Alternative, the PDT shall identify one viable project alternative to be used to estimate and program the project cost. The project schedule should be based on the timeline needed to study all viable project alternatives. The identification of the programmable project alternative does not predetermine the identification of a preferred alternative during the environmental process.

Life-Cycle Cost Analysis

Life-cycle cost analysis shall be completed as discussed in [Chapter 8](#) – Overview of Project Development.

Consensus on the Study Area

The study area defines the boundary for any formal study of the project alternatives. Defining the study area boundary is key to forming a systematic approach for developing and evaluating alternatives, and can prevent unexpected project rework. The boundary of the study area is derived from the purpose-and-need of the project, alternatives, and logical termini. Constraints identified in previous technical studies, legal requirements, design standards, community input, funding limitations, and natural or man-made elements assist in the delineation of the study area. Consensus on the definition of the boundary of the study areas is the responsibility of the PDT.

The boundary of the study area shall be broad enough to ensure that all the viable alternatives can be evaluated. The boundary of the study area may delineate individual alternatives or delineate one area for the development of multiple alternatives. The study area should include anticipated route detours, material haul roads, and other areas that are indirectly impacted as a result of the project. Risk management activities can be incorporated into the development of the boundary of the study area and used to effectively sequence activities. For example, if there are alternatives that have a high potential for design issues, the boundary of the study area map should identify locations that have the high risk features and flag those areas to be studied first. Early verification of high-risk elements may eliminate the need to extensively study alternatives that are ultimately not viable. Early verification of high-risk elements also ensures that adequate resources are obtained and accurate schedules are established. The boundary of the study area may be refined as information is gathered.

Identify Anticipated Environmental Determination/Document and Compliance

The preliminary environmental analysis report (PEAR) identifies the anticipated environmental determination/document, the need for preliminary environmental studies, and identification of known environmental constraints. The preliminary environmental analysis report also includes estimates of the schedule and costs associated with completing environmental compliance. The information contained in the preliminary environmental analysis report serves as the foundation for the environmental team to begin studies in the PA&ED phase, facilitating early consultation with federal and State resource agencies. For additional information regarding the preliminary environmental analysis report, see <http://www.dot.ca.gov/ser/pear.htm>.

Value Analysis

Currently, *Title 23 United States Code*, Section 106 requires a value engineering analysis on all federally funded National Highway System projects with a total project cost (right-of-way, construction, and support) of \$50 million or more, regardless of whether Caltrans employees, local agencies, consultants, or others are accomplishing the work. In addition, a value engineering analysis is mandated on all federally funded National Highway System bridge projects with a total project cost of \$40 million or more. The requirements for performing a value engineering analysis or value analysis (VA) study can be found in [Chapter 19](#) – Value Analysis.

The PDT should establish the timing of the analysis once it has been determined that a value analysis study is appropriate and/or required. The PDT should focus on the work plan, identify the information critical for effective analysis, set a study schedule, and allocate sufficient resources for staff participation during the value analysis study.

The formal value analysis should be completed as early in the process as possible, but only after adequate information has been generated to complete a high level evaluation of various alternatives.

Ideally, value analysis is performed to analyze proposed corridor improvements prior to narrowing the suite of alternatives (or phasing of project improvements) for further development. The intent of the federal legislation is to use value analysis to identify the solution with the best value for the majority of the project stakeholders. The value analysis study provides a quantitative and qualitative assessment to compare the performance attributes and costs of competing alternatives.

Exceptions to Design Standards

During development of projects, various constraints often require deviation from design standards. Identify and document known exceptions to mandatory and advisory design standards as discussed in [Chapter 21](#) – Exceptions to Design Standards.

Resurfacing, Restoration and Rehabilitation Projects

SHOPP projects that address resurfacing, restoration, and rehabilitation (RRR), and certain safety, storm damage, protective betterment, and operational improvement shall be consistent with the design criteria described in [Design Information Bulletin 79](#) – Design Guidance and Standards for Roadway Rehabilitation Projects.

Capital Preventive Maintenance Projects

Capital preventive maintenance (CAPM) projects that are consistent with the scope and intent of the capital preventive maintenance program rarely require a Fact Sheet for Exceptions to Mandatory Design Standards. All newly constructed project features are to be in conformance with current design and safety standards, policies, and practices.

For further policy and procedures on design exceptions, see [Chapter 21](#) – Exceptions to Design Standards and [Appendix BB](#) – Fact sheets for Exceptions to Mandatory Design Standards.

Safety Review

All projects must be reviewed by the District Safety Review Committee prior to the approval of the PSR. The PID must incorporate the safety concepts that were identified during the safety review process unless deletion is substantiated, documented, and approved by the District Director. See [Chapter 8](#) – Overview of Project Development, Section 7 and [Highway Design Manual](#) Index 110.8 – Safety Reviews, for more detailed information on Safety Reviews.

Constructability Review

Perform constructability reviews on all projects that exceed the Minor A project limit as defined by the CTC. The PID will summarize the results of the constructability review. See [Chapter 8](#) – Overview of Project Development, for information on meeting constructability review requirements.

Assessment of Federal Highway Administration Involvement

Documenting Federal Involvement

All PIDs, including PSR-PDS' must be assessed to determine the level of federal involvement needed to approve the design and construction products. See the latest [Stewardship and Oversight Agreement on Project Assumption and Program Oversight](#) between the Federal Highway Administration, California Division and Caltrans for the project actions assumed by Caltrans and the project actions where FHWA has retained their authority as well as the detail associated with the various oversight responsibilities.

Other Types of Federal Involvement

In addition to assessing the FHWA's involvement in approval of the plans, specifications, and estimate, other project features may require the FHWA involvement or the involvement of other federal agencies. Examples of other federal agencies are: U.S. Army Corps of Engineers, U.S. Department of the Interior Bureau of Land Management, U.S. Department of the Interior Bureau of Indian Affairs and/or tribal governments, or U.S. Department of Agriculture Forest Service. Each functional unit must be involved in assessing the amount of federal involvement for their delivery product.

The PID should identify all federal required involvement.

[Chapter 2](#) – Roles and Responsibilities, Section 7 provides the policies and guidance regarding FHWA involvement.

Federal Highway Administration Determination of Engineering and Operational Acceptability for New or Modified Access on the Interstate System

New or modified Interstate access requires approval by both Caltrans and FHWA. Obtaining FHWA approval is a two-step process. The first step in this process is obtaining FHWA Determination of Engineering and Operational Acceptability. For most projects, FHWA Determination of Engineering and Operational Acceptability is obtained during the PID phase. The second step occurs once the NEPA process is completed. FHWA will concurrently provide approval of the environmental document and Final Approval for the new or modified Interstate access.

Caltrans evaluates the project proposal for impacts on the level of service of the Interstate in terms of safety and mobility.

As discussed in [Chapter 2](#) – Roles and Responsibilities, Caltrans shall keep the FHWA liaison engineer informed of all proposed new or modified access on the Interstate System as they are being developed.

Caltrans shall submit a formal request for a FHWA Determination of Engineering and Operational Acceptability. If the FHWA Determination of Engineering and Operational Acceptability is submitted at the PID phase, an unsigned draft PID and supporting documentation must be attached to the request. The evaluation, FHWA

Determination of Engineering and Operational Acceptability and Caltrans' conceptual approval is documented in the approved PID.

For a project that is initiated with a PID that does not provide conceptual approval, FHWA Determination of Engineering and Operational Acceptability occurs during the PA&ED phase because the level of project detail in the PID is not sufficient for FHWA to make this determination. The PID shall identify the target schedule for the FHWA Determination of Engineering and Operational Acceptability and the schedule shall be discussed with and agreed to by the FHWA liaison engineer prior to determining the target schedule. An unsigned supplemental PID or an unsigned draft project report (DPR) and supporting documentation must be attached to the request. FHWA Determination of Engineering and Operational Acceptability must be obtained prior to circulation of the draft environmental document. The evaluation, FHWA Determination of Engineering and Operational Acceptability and Caltrans' conceptual approval is documented in the approved DPR.

An unsigned PID (or other report as described previously) and the supporting documents for projects that propose new or modified interchanges shall contain sufficient information to allow FHWA to independently evaluate the request and ensure that all pertinent factors have been appropriately considered and must meet the requirements identified in [Chapter 27](#) – New Public Road Connections.

Federal Aid Reimbursement - Local Agency Implementation

If federal dollars are used on any portion of the project and local agency support costs are considered a soft match for federal reimbursement, then the PID or PR must identify and discuss the local agency support cost.

Work Plan Development

All projects shall have work plans that describe the amount of and the schedule for Caltrans resource needs following project initiation. Work plans shall be developed with input from all appropriate functional units. The PID contains a summary of the information needed to explain the work plan (such as: assumptions, critical path activities, summary of the risk management plan). A copy of the work plan is submitted to Headquarters Division of Project Management.

For further information about the development of work plans, refer to the Headquarters Division of Project Management, Office of Project Management Application Systems.

Cooperative Features for Capital Improvements

A cooperative agreement shall be required if the PA&ED phase, or another future phase will involve the exchange of funds, effort, or materials between Caltrans and another public entity. The PID will be the authorizing document for the execution of a cooperative agreement and therefore must address:

- Why the agreement is in the best interest of the State.
- If the cooperative features are within Caltrans policy/procedure. If not, obtain and attach an exception to that policy from the appropriate policyholder.
- The work plan for the cooperative features:
 - Roles, responsibilities and funding commitments.
- Functional unit review and concurrence.
- Who is the CEQA lead agency? The decision must conform to Caltrans policy “[*Department as CEQA Lead Agency for Projects on the State Highway System*](#)” dated June 24, 2004.
- Funding limitations, if any.
- Assumptions and high-risk elements.

See [Chapter 16](#) – Cooperative Agreements, and the [Cooperative Agreement Manual](#) for additional information on cooperative agreements, cooperative agreement reports, and the cooperative features that are to be included in a PID and the cooperative agreement.

Additional information on roles and responsibilities can be found in [Chapter 2](#) – Roles and Responsibilities.

Federal Funding Requirements

To qualify for federal funding, projects must meet FHWA and Federal Transit Administration requirements with respect to planning and programming. Projects must be:

- Included in a fiscally constrained plan that meets air quality conformity such as the regional transportation plan.
- Programmed into a fiscally constrained Federal Statewide Transportation Improvement Program/Federal Transportation Improvement Program.

Fiscal constraint is a demonstration that there will be sufficient funds to implement proposed improvements, and to operate and maintain the entire system, by comparing costs with available financial resources.

If the scope of the project is not consistent with the air quality analysis completed for the regional transportation plan, the air quality analysis must be revised before the project can be programmed.

All projects funded with federal funds must be incorporated into the Federal Transportation Improvement Program and Federal Statewide Transportation Improvement Program, as appropriate, whether programmed through the a State programming document such as the STIP or SHOPP or through the regional Surface Transportation Program or the Congestion Mitigation and Air Quality Program.

The PID shall include a discussion on the long-range planning document, reasonable and reliable funding sources, and if appropriate, the actions necessary to include the project in the Federal Statewide Transportation Improvement Program and Federal Transportation Improvement Program. FHWA provides additional guidance on expectations regarding fiscal constraints and identifying “reasonably available” future funds at: http://www.fhwa.dot.gov/planning/guidfinconstr_qa.cfm

Throughout the project development process, there must be consistency between the federally required planning and programming documents.

For additional information on federal programming, see [Chapter 4](#) – Programming and <http://www.dot.ca.gov/hq/transprog/oftmp.htm>.

Project Initiation Document Approval

When a PSR is completed and approved by the District Director, the project initiation phase is complete and the project is eligible to compete for funds from the appropriate State and federal funding program.

When a PSR-PDS is completed and approved by the District Director, the project initiation phase is complete and the project is eligible to compete for the support costs of performing the PA&ED phase from the appropriate State and federal funding program. Once adequate information is available to reasonably estimate the construction and right-of-way cost and project schedule, a PR will be used to program the remaining phases of the project. In some rare cases, a supplemental PID following the format of a PSR may be used. A DPR must be completed to authorize

circulation of the draft environmental document. For further guidance on the DPR, see [Chapter 10](#) – Formal Project Studies. A PR is required to document Caltrans’ final approval of the project. For further guidance on the PR, see [Chapter 12](#) – Project Approvals and Changes to Approved Projects.

The approval process for other types of PIDs is discussed in subsequent articles.

Starting Next Phase

Major Projects Start

Authorization to begin working on the PA&ED phase of a major project is its inclusion in the appropriate State and federal programming document or approval of a PID that specifically authorizes commencing to the next phase.

Minor Projects Start

Authority to proceed with the project development process of minor projects rests with the District Director. Each district is responsible for developing a process for identifying the needs of the district Minor Program and ensuring that those needs are aligned with the goals of the [2015 Ten-Year State Highway Operation and Protection Program Plan \(SHOPP Plan\)](#) that is administered by various Headquarters program advisors.

ARTICLE 5 Additional State Highway Operation and Protection Program Procedures

General

This section describes additional procedures that are specific to projects that are funded from the SHOPP. The SHOPP is a structured process that is focused on identification of facility needs with respect to the performance measures for operation and preservation of the existing facility.

Scoping Team Field Review

All candidate resurfacing, restoration, and rehabilitation projects and capital preventive maintenance projects as described in [Design Information Bulletin 79](#) – Design Guidance and Standards for Roadway Rehabilitation Projects and [Design Information Bulletin 81](#) – Capital Preventive Maintenance Guidelines, shall have a “scoping team field review” after initial development of an unsigned PID. The

composition of the team will vary in accordance with the complexity of the project. Attendance on the reviews is mandatory for the Headquarters program advisors and the district program advisor.

Safety Analysis

All rehabilitation projects must include a safety analysis. The analysis should be performed early in the project development process to identify safety problems that should be considered in development of the rehabilitation project. The analysis must include both an accident record review and a safety field review. The analysis is to be documented in a separate report.

The date of the safety field review should be noted in the PID. The safety field review should be a joint effort between the district's design unit and traffic unit. The district maintenance, construction, survey, and safety units must also provide safety reviews for the project, as specified in [Chapter 8](#) – Overview of Project Development, Section 4.

The safety analyses should be scheduled for traffic staff efficiency and consistent with the scope of the project and general condition of the existing facility.

Content of the Safety Analysis

The Safety Analysis should address such items as:

- Pavement condition.
- Existing geometrics.
- Traffic volumes.
- Accident data (typically the most recent 3-year accident history by type). Include an analysis of the causes of accidents.
- Traffic Safety devices and hardware.
- Roadside obstructions.
- Drainage features.
- Structurally deficient or functionally obsolete bridges.
- Other pertinent factors.

Alternative Safety Solutions

Where accident rates are high or there are concentrations, a determination should be made as to alternative improvements that can be accomplished within the parameters of a resurfacing, restoration, and rehabilitation project.

The safety field review report is not to be attached to the PID. The report should be briefly summarized under “Traffic Data” and should include proposals for safety enhancement. Safety enhancements not included in the project should be noted, with an explanation for their exclusion. The safety field review report may make suggestions, but the decision to include them in the project will be the responsibility of the project engineer.

While the analysis may discuss a range of possible solutions to demonstrated problems, there should be no specific project recommendations made in the analysis. Project recommendations or proposals will be decided by the scoping team after considering whether the recommendation or proposal is consistent with the degree of the safety problem, is reasonable from a cost effectiveness standpoint, and is of the type that can be accomplished within the parameters of a resurfacing, restoration, and rehabilitation project.

Safety Upgrading

Special emphasis should be placed on implementing cost-effective solutions recognizing, however, that certain upgrading for safety and operational purposes are desirable and others are necessary. Recommendations and decisions on safety improvements should be consistent with the degree of the safety problem and the reasonableness from a cost standpoint.

Maintenance Considerations

Cost-effective maintenance improvements should be considered, as appropriate, particularly if they improve safety for maintenance operations. There may be low cost improvements that will provide significant safety benefits to maintenance personnel.

Documentation

The safety analysis must be documented in writing and should be retained in the project file.

Approval of Project Scope Summary Report

Each program in the SHOPP has a specific objective and the majority of projects have adequate information at the PID phase to approve an alternative. These two factors resulted in the development of project scope summary report (PSSR) templates that combine the project initiation and project approval documentation requirements into one report. The PDT shall determine if the phases can be combined. Each template has an estimate that has been customized to meet the specific program need. Figure 9-3 in Article 4 of this chapter identifies the type of PID for each program.

The PSSR format was developed to combine the project initiation and project approval phases and satisfies the requirements for both the PID and the PR depending on the environmental approval criteria as follows:

- The PSSR serves as a PID when a preliminary environmental analysis report is attached and subsequently:
 - A supplemental PSSR serves as a PR for project approval when an approved Categorical Exemption/Categorical Exclusion Determination Form is attached.
 - A supplemental PSSR serves as a DPR to approve circulation of a draft environmental document. Project approval is documented in a second supplemental PSSR.
- The PSSR serves as a PID and a PR when an approved Categorical Exemption/Categorical Exclusion Determination Form is attached.
- The PSSR serves as a PID and the approving document for circulation of the draft environmental document when a draft environmental document is attached. Project approval is documented in a supplemental PSSR.

[Appendix L](#) – Preparation Guidelines for Project Study Report provides guidance that is applicable to all PIDs. See [Appendix K](#) – Preparation Guidelines for Project Report, for discussion of the DPR requirements. Other appendices cover guidance for PSSR templates used for the various programs in the SHOPP. If the project scope corrects deficiencies not included in the template, refer to Appendix L to ensure that information in the report is complete and modify the PSSR template appropriately. Supplemental PSSRs shall follow the same requirements described in “Content of Supplemental PR,” in [Chapter 12](#) – Project Approvals and Changes to Approved Projects, Section 6.

Approval of Capital Preventive Maintenance Project Report

The capital preventive maintenance project report (CAPM-PR), when completed and approved by the District Director and the Categorical Exemption/Categorical Exclusion Determination Form is attached, will serve as the PID and also as the project approval document.

Damage Assessment Form

General

The Damage Assessment Form (DAF) is a federal form used for the FHWA Emergency Relief (ER) Program. Caltrans uses the DAF to collect information that helps define the scope of projects for both the Major Damage (Emergency Opening) Program and the Major Damage (Permanent Restoration) Program.

Damage to highway facilities that are neither Federal-aid highways nor roads on federal lands may be eligible for other federal funds authorized by the Stafford Act, administered by the Federal Emergency Management Agency (FEMA). Contact the Major Damage Restoration Program Manager in the Headquarters Division of Maintenance for instructions.

The DAF is used for project initiation and project approval for Major Damage (Permanent Restoration) Program projects when the proposed project meets all of the following conditions or at the discretion of the Headquarters SHOPP Major Damage Restoration Program Manager:

- Construction cost estimate is less than \$1,000,000
- Structure (bridge, retaining walls, etcetera) accounts for less than one-third of the construction cost estimate
- Scope of work does not trigger requirement for roadway rehabilitation project standards as discussed in [Design Information Bulletin 79](#) – Design Guidance and Standards for Roadway Rehabilitation Projects
- Environmental clearance is a categorical exemption (CE) under CEQA and a categorical exclusion (CE) under NEPA
- Minimal regulatory permit requirements (see [Chapter 13](#) – Project Related Permits, Licenses, Agreements, Certifications, and Approvals for types of regulatory involvement)
- Minimal right-of-way requirements (no property acquisition)
- No utility relocation by encroachment permit

- SHOPP amendment request must be submitted within 3 months of incident date
- Ready to List milestone must be within 18 months of incident date

When the complexity of the project exceeds the conditions for using the DAF, the SCVP format, PSR-PR, or PSR will be used for project initiation with the DAF as an attachment, followed by a PR for project approval as needed.

The Damage Assessment Form (DAF), form (DLA-0001), is located at:

<http://onramp.dot.ca.gov/hq/maint/orway/ha23/index.htm>

Time Limits

FHWA Emergency Relief (ER) Program project development work must be completed by the end of the second full federal fiscal year after the declared disaster. For those projects eligible for the Federal Emergency Management Agency (FEMA) Stafford Act funding, construction must be completed within four years of the date of disaster declaration.

Major Damage Restoration Program projects, regardless of funding source, are considered to be emergency-related high priority work. Project development for these projects should be completed in a timely manner to prevent the loss of federal funds due to exceeding the required time limits.

Federal Highway Administration Review

Federal participation for the Major Damage Restoration Program requires that the FHWA liaison engineer review the major damage site as soon as possible after occurrence, in order to determine eligibility for FHWA Emergency Relief (ER) Program participation. In the event of a finding of eligibility for the FHWA Emergency Relief (ER) Program, the FHWA will approve a DAF for eligible work. Contact the Major Damage Restoration Program Manager in the Headquarters Division of Maintenance for assistance with questions.

ARTICLE 6 Director's Order for Urgent Projects

The Director's Order is a formal document approving the use of special authority granted to the Director by State law to set aside normal procedures for the advertising, bidding and award of certain types of contracts when there is an

emergency or other urgent need to protect the health and safety of the traveling public. Examples would be repairing a bridge or roadway failure or making repairs to prevent a failure.

The Director's Order with a DAF is used for initiation, programming, and approval of projects in the Major Damage (Emergency Opening) Program.

A Director's Order is administered by using the Director's Order Request - Funds Request form (MTC-0130). For additional information about Director's Orders, including the Director's Order Guidelines, see:

<http://onramp.dot.ca.gov/hq/maint/orway/ha23/index.htm>

ARTICLE 7 Expenditure Authorization Project Report for Minor B and Maintenance Projects

Minor B

For very simple projects that fall under the dollar limit for Minor B projects, the completed (EA-PR) serves as the PID and the PR. See [Appendix B](#) – Preparation Guidelines for Expenditure Authorization Project Report for the EA-PR.

Maintenance Projects

For maintenance projects, the completed EA-PR serves as the PID and the PR.

Traffic Signal Projects

Although Minor B projects normally are not required to have a formal PR, the [California Manual on Uniform Traffic Control Devices](#) (*California MUTCD*), specifically requires a PR to investigate the conditions at locations where a new traffic signal is to be installed, an existing traffic signal is to be modified, or an existing traffic signal is to be removed.

A written summary of the investigation and justification for the installation, modification, or removal of a traffic signal is required when any portion of the intersection is within the State Highway System. The PR shall include the information outlined in the *California MUTCD, Part 4, Section 4B.102(CA)*. The purpose of this written report is to provide the technical justification for the traffic signal work and may be an abbreviated report in a cover letter format instead of a formal PR.

The district may establish its own level of approval authority while also indicating the professional engineer in responsible charge of the work.

Traffic signal projects that include restriping or other geometric changes that introduce or perpetuate nonstandard conditions for lane widths, shoulder widths, disabled access, etcetera, will require approval of a Fact Sheet for Exceptions to Mandatory Design Standards even though the PR is reduced to this cover letter format. See [Chapter 21](#) – Exceptions to Design Standards and [Appendix BB](#) – Fact Sheets for Exceptions to Mandatory Design Standards for more information.

This cover letter and attachments must be maintained on file as a part of the historical background of that portion of the State Highway System within the district's jurisdiction.

ARTICLE 8 Project Initiation Process for Projects-funded-by-others

General

A project-funded-by-others is a highway improvement project that is sponsored by a local agency or private developer and does not use any funds that are programmed into the STIP or SHOPP. Because Caltrans is responsible for protecting the public's investment in the State Highway System, Caltrans must review all proposed highway improvements that are funded by others. When a local agency or a developer funds a project, it is imperative for the sponsor to have early and continual discussions with Caltrans to establish the viability of the proposal, procedural requirements, and the schedule for various project deliverables. This article discusses the processes that apply to projects-funded-by-others.

Types of Project Initiation Documents for Projects-funded-by-others

Based on the complexity of the project, the impacts, and the cost of the project on the State Highway System, a project will require a permit application review, the development of a PEER or a PSR-PDS.

If a project-funded-by-others can be accelerated and construction can begin during the proposed programming period, it may be appropriate to use the PSR format and program right-of-way and construction dollars at the end of the PID phase. Only a district director with a request from a project sponsor can approve the use of the PSR

format. Districts should work with their local partners to carefully consider the ability to deliver the project within the STIP programming period.

Encroachment Permit Process

District Permit Engineer Initiates Procedure

Upon receiving the permit application, the district permit engineer will determine the appropriate level of documentation. In addition to the permit application information, the permit engineer may require either a PEER or a PSR-PDS to obtain permit approval. If a PEER is determined to be the appropriate level of documentation, the district permit engineer will use the Encroachment Permit Application Review form (TR-0110) to designate a responsible unit (design, traffic operations, etcetera) for possible PEER preparation. If a PSR-PDS is determined to be the appropriate document for scope approval, then see PID process for projects-funded-by others in Article 8 of this chapter.

Permit Application Review

Project sponsors or their representative shall sign and submit an encroachment request to enter the right-of-way and build the improvements approved by Caltrans. For further information on an encroachment permit application see: <http://www.dot.ca.gov/hq/traffops/developserv/permits/applications/index.html>.

The permit engineer, in consultation with other functional units, decides whether or not the project should be considered an encroachment permit project if the project meets the complex project definition as defined by the encroachment permit policy in the [*Manual for Encroachment Permits on California Highways*](#) or if the construction cost is greater than \$1,000,000.

Permit Engineering Evaluation Report

If a project is considered to be a non-complex project and the construction cost for the project is less than \$1,000,000, then the review and approval of the project is completed under the encroachment permit process. Caltrans determines the complexity of the project through the permit application review. The dollar limit represents the estimated value of permit work improvements within the existing State highway right-of-way. The dollar limit does not include the value of routine drainage or utility work or the value of dedicated right-of-way. For additional information about this process see [Appendix I](#) – Preparation Guidelines for Permit Engineering

Evaluation Report and the *Manual for Encroachment Permits on California Highways*.

If the project is considered to be a non-complex project and the construction cost of the project is less than \$3,000,000, then review and approval of the project can be completed through the PEER process. Caltrans determines the complexity of the project during a processing assessment as discussed in [Chapter 2](#) – Roles and Responsibilities, Section 5.

Project Study Report-Project Development Support

If the project meets the complex project definition as defined by the encroachment permit policy in the *Manual for Encroachment Permits on California Highways* or if the construction cost is greater than \$3,000,000, the project proponent shall submit a PSR-PDS as described in [Appendix S](#) – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document. Caltrans staff will provide independent quality assurance for the PSR-PDS and will work with the sponsor to execute a cooperative agreement (CA) or highway improvement agreement (HIA) for cooperative elements identified in the approved PSR-PDS. [Chapter 2](#) – Roles and Responsibilities discusses the roles and responsibilities of both Caltrans staff and other sponsors of projects on the State Highway System. Information on cooperative agreements can be found in [Chapter 16](#) – Cooperative Agreements.

Approval of a New Public Road Connection Requires a Project Initiation Document

The PEER process cannot be used for a project that requires a new public road connection to a freeway or expressway. The new public road connection process is complex in that it requires Caltrans to make an assessment that the operations of the facilities has been protected and that the connection is in the best interest of the State. This recommendation must be formally submitted to the CTC, and if applicable, to FHWA for approval.

Early Confirmation Required

Prior to making commitments to the requesting party, early written confirmation of the concept from the District Director is required for a proposed new connection to an expressway (controlled access highway). Early written confirmation is given only after consideration of access control policy and engineering aspects such as

connection spacing, fit with local general plans, and the feasibility of potential ultimate conversion of the State highway into a full freeway. A request for a proposed new public road connection to an expressway (controlled access highway) is made by submitting to the District Director an unsigned PID that contains, at a minimum, the information required in [Chapter 27](#) – New Public Road Connections.

Determining if a Permit Engineering Evaluation Report is Required for Projects Under \$1,000,000

The responsible district unit will review and determine whether or not a PEER is required. If the unit determines that there will be no adverse impact on highway operations, maintenance, and tort liability, it must indicate so in the appropriate box shown on the Encroachment Permit Application Review form (TR-0110) with the signature by at least a senior level person. The unit then does their usual permit review, fills out the rest of the form, and returns it to the district permit engineer. If the responsible district unit determines that there will be impacts, a PEER is required and the unit will be responsible for the preparation, review, and approval of the PEER. See [Appendix I](#) for more information.

A PEER is not required for projects that involve only routine utility and drainage encroachment work within the right-of-way. The normal encroachment permit process handles this work.

The PEER melds engineering review of permit proposals into the normal encroachment permit application review to eliminate any separate processing of a PID. The responsible unit for PEER preparation will usually be design or traffic operations, depending upon type of work. Other district units involved, such as environmental, right-of-way, utilities, maintenance, etcetera, will review the permit application as appropriate. Other district units will not be involved in the PEER unless requested by the responsible unit.

A Permit Engineering Evaluation Report Evaluates Impacts on State Highway for Projects Under \$1,000,000

The responsible unit will evaluate the impacts of the permit proposal upon the State highway, determine its geometric and functional adequacy, and summarize the findings in a PEER, which should contain the information needed to justify (or reject) the proposed work.

As a general rule, a PEER should be prepared when the traffic or other actions generated by the permittee adversely affect operation and/or maintenance of the highway or there is potential to expose Caltrans to tort liability suits. The primary purpose of the PEER is to document the engineering rationale for Caltrans' decision in a permit action.

A PEER should always be prepared when new operating improvements are constructed by the permittee that become part of the State highway. These include signalization, channelization, left-turn pockets, widening, realignment, public road connections, and bike paths and lanes. Commercial road approaches would not usually require a PEER when grades are flat and there are no sight distance restrictions; otherwise a PEER should be prepared. Any widening by adding lanes should require a PEER, unless it is part of a precise plan for the highway adopted by the local agency and has been previously concurred by Caltrans.

Preparation Timing

The time needed to prepare, evaluate, and finalize a PEER will depend upon the scope and complexity of the work. When the preparation, evaluation, and finalization of a PEER can be completed within the review deadline, the PEER should be attached to the Encroachment Permit Application Review form (TR-0110) and returned to the district permit engineer. When additional time is required, the responsible unit should return the Encroachment Permit Application Review form (TR-0110) immediately to the district permit engineer, with notification of the estimated date that the PEER will be completed and whether or not additional information is needed.

Nonstandard Feature Approval

When nonstandard design features are proposed by an encroachment permit applicant, fact sheets are prepared by the applicant's registered civil engineer. The Caltrans functional unit responsible for preparation of the PEER will facilitate the coordination with the Headquarters Project Delivery Coordinator for draft fact sheet review. If a PEER is not required, the fact sheet processing will be facilitated by the functional unit assisting the district permit engineer. See [Chapter 21](#) – Exceptions to Design Standards and [Appendix BB](#) – Fact Sheets for Exceptions to Mandatory Design Standards for more information.

Access Control Change Procedures

If the permit proposal involves a reduction in or crossing of access control or the transfer of Caltrans right-of-way to the applicant see Chapters [17](#), [26](#) and [27](#) for processing instructions. This work is normally done during preliminary negotiations with the permit applicant before the applicant formally submits the permit to Caltrans. FHWA approval is required for proposals on the Interstate System and may be required for non-Interstate System projects. After approval is received, the right-of-way transaction is executed and the encroachment permit is processed. A PEER would cover the permit work where applicable.

Right-of-Way Dedication Procedures

If the permit work involves dedication of additional rights of way along the access control line without any reduction in access restrictions, separate District Director concurrence is not needed. The involvement of the Headquarters Project Delivery Coordinators should be sought when substantial modifications to access control position are proposed. In all cases, it is important that the dedication specifically provides for access control and that right-of-way record maps be updated. A map or paper shifting of the access control line is not legally binding—the restriction must be contained in a deed or quit claim.

California Environmental Quality Act /Traffic Mitigation

On more complex permit proposals involving CEQA and traffic mitigation approvals by a local agency, it is expected that the responsible unit would have been involved in preliminary negotiations prior to final PEER preparation. If this has not been done, the permittee should be called for an immediate meeting to resolve these issues.

All Permit Proposals Need Evaluation

The fact that a PEER is not prepared does not in any way diminish the need for the responsible unit to thoroughly evaluate the permit proposal and summarize conclusions in the “Remarks” area of the Encroachment Permit Application Review form (TR-0110).

Approval

The District Director is responsible for approval of the PEER. One copy of the approved PEER is to be sent to Office of Project Development Procedures.

Permit Review Charges

PEER preparation is considered part of the permit review process, with costs to be charged to the EA assigned by the district permit engineer. Charges should be reasonable. Excessive hours should be charged to the unit's overhead EA. Prior staff work not directly associated with actual permit processing or PEER preparation, even though later constructed by permit, should be charged to the unit's overhead EA, and not to the permit review EA.

Permit Engineering Evaluation Report Process for Projects with Construction Costs from \$1,000,000 to \$3,000,000

Caltrans Point of Contact Initiates Procedure

Upon receiving contact by a local entity or developer, the Caltrans point of contact will set up an initial meeting to make a determination on which process the project will undergo. If the project is non-complex and construction cost of the project is less than \$3,000,000 then the project is eligible to follow the PEER process. If the project does not meet the eligibility requirements for processing as a combined project study report-project report (PSR-PR), it is not eligible for processing as a PEER.

The PEER process is intended to streamline the processing of projects-funded-by-others by reducing the steps in the project development process. This is not intended to relieve the project sponsor from meeting all other Caltrans policies, standards, and practices. Caltrans may increase the level of documentation and processing for those projects that are deemed complex.

The PEER will document both concept approval and project approval eliminating the need for separate processing of a PID. The project sponsor is responsible for preparation of the PEER and providing all supporting documentation. The Caltrans point of contact will ensure that the appropriate district units, such as design, environmental, right-of-way, utilities, maintenance, etcetera, review the project as needed. Other district units will not be involved in the PEER unless requested by the Caltrans point of contact.

A Permit Engineering Evaluation Report Evaluates Impacts on State Highway

The project sponsor will evaluate the impacts of the project upon the State highway, determine its geometric and functional adequacy, and summarize the findings in a

PEER, which should contain the information needed to justify (or reject) the proposed work.

As a general rule, a PEER should evaluate and document the impacts of the project on the operations and/or maintenance of the highway. The primary purpose of the PEER is to document the engineering rationale for Caltrans' decision in a permit action.

Preparation Timing

The time needed to prepare, evaluate, and finalize a PEER will depend upon the scope and complexity of the work. Once the PEER is complete and the oversight engineer has approved the final plans and specifications, the project is then submitted to the permit engineer for processing by submittal of an encroachment permit application by the project sponsor. When the district permits office receives the completed encroachment permit application, the statutory 60-day review limit begins.

Nonstandard Feature Approval

When nonstandard design features are proposed by a project sponsor, fact sheets are prepared by the sponsor's registered civil engineer. The Caltrans functional unit responsible for oversight of the PEER will facilitate the coordination with the Headquarters Project Delivery Coordinator for draft fact sheet review. See [Chapter 21](#) – Exceptions to Design Standards and [Appendix BB](#) – Fact Sheets for Exceptions to Mandatory Design Standards for more information.

Cooperative Agreements

A cooperative agreement will normally not be required for projects processed via the PEER process. However, a cooperative agreement will be required if there is an exchange of effort, funding, or materials between Caltrans and a local agency regardless of the capital outlay project cost. Projects sponsored by private entities will require a highway improvement agreement.

All projects-funded-by-others, not just those that are called “encroachment permit projects,” require an encroachment permit whenever the project sponsor, its consultants, or its contractors work within the existing State highway right-of-way.

Approval

The District Director is responsible for approval of the PEER. One copy of the approved PEER is to be sent to the Office Project Development Procedures.

Project Initiation Document Process for Projects-funded-by-others

The project development procedures for projects-funded-by-others are generally the same as those procedures for projects that are funded through a State-programming document. Additional procedures however, are necessary to approve cooperative elements through a cooperative agreement or highway improvement agreement. Caltrans retains stewardship responsibility for FHWA requirements and as such makes the arrangements for project development documents to be reviewed by FHWA. Caltrans performs independent quality assurance on projects-funded-by-others to ensure that the completed project conforms to established standards and policies.

The district responsible unit assigned by the district permit engineer will be notified so that a project manager will be assigned to coordinate the project approval. Communication between the project manager, the district permit engineer, the applicant, applicable FHWA units, and appropriate district functional units, such as the environmental, structures, and traffic units, is essential to expedite this process.

A meeting of the applicant and all involved units shall be held to determine the type of PID, the appropriate approval process, and environmental documentation needed to complete the project. The project manager will provide a copy of the PID outline, the PR outline, and any appropriate draft language for inclusion in the cooperative agreement or highway improvement agreement. The project manager shall document this meeting with a letter to the applicant.

Once the applicant completes and submits the PID and draft cooperative agreement or highway improvement agreement, the project manager should distribute the document for review by all involved Caltrans and FHWA units. The time needed to review and approve engineering documents will depend on the completeness, scope, and complexity of the work. The project manager will notify the applicant of the expected completion date for the review and whether additional information is needed.

Once the PID is found to be satisfactory, the project manager recommends the PID for approval by the District Director.

The District Director’s signature signifies approval of the project concept and that reasonable estimates and time frames are reflected in the report. The District Director shall not approve a PSR unless there is an executable cooperative agreement or highway improvement agreement attached.

The individual in responsible charge, a registered engineer if it is an engineering report, or the appropriate licensed professional in the State of California signs the report. The appropriate stamp or seal shall be applied to the report.

After approval, a copy of the final document and all associated scoping documents shall be kept in the project history files.

The approved PID is the authorization to enter into a cooperative agreement or highway improvement agreement for the study, design, and construction of the State highway. For information on combining the project initiation phase and the project approval phase see following article.

ARTICLE 9 Combined Project Study Report- Project Report

General

Proposals that have the consensus of key stakeholders and a clear understanding of the requirements to complete the project can be scoped early in the project development process. As such, the PDT may recommend consolidation of the PID and PR into a combined PSR-PR if a project has a well-defined purpose-and-need and a well-defined project scope. The District Director retains the authority to use a combined PSR-PR.

The combined PSR-PR is an engineering document and must meet the requirements for both a PID and a PR. See [Appendix K](#) – Preparation Guidelines for Project Report and [Appendix L](#) – Preparation Guidelines for Project Study Report, for further guidance on developing PIDs and PRs. See [Appendix A](#) – Preparation Guidelines for Combined Project Study Report-Project Report for a template of the combined PSR-PR.

Ineligible for a Combined Project Study Report-Project Report

If a project has any of the following features, the project cannot use the combined PSR-PR process:

- New or modified Interstate access, as FHWA approval is a two-step process.
- Approval of a route adoption by the CTC.
- An environmental impact report to comply with CEQA and/or requiring an environmental impact statement to comply with NEPA.
- A Clean Water Act, Section 404 Individual Permit.
- A Coastal Development Permit.
- A San Francisco Bay Conservation and Development Commission Permit.
- A Tahoe Regional Planning Agency Permit.
- Formal consultation under the Federal Endangered Species Act.

Considerations for a Combined Project Study Report-Project Report

Once it is determined that the project is not specifically ineligible from using a combined PSR-PR, the PDT shall perform a focused risk assessment to identify factors that can affect project scope and estimate the degree of uncertainty that these factors pose. At a minimum the PDT shall consider:

- Consensus of key stakeholders on the project purpose-and-need.
- Consensus of key stakeholders on the project scope. Stakeholders may include, but not be limited to, the project sponsor, Caltrans as the owner-operator of the State Highway System, CTC, federal agencies that have approval authority, railroad entities, and other regulatory agencies.
- Impacts to the State Highway System as identified by traffic studies.
- Impacts to the environment and community. The district environmental generalist shall provide factors to make this evaluation.
- Availability of Caltrans project initiation and capital support resources to provide delivery products and/or independent quality assurance.
- Geometric feasibility of the proposed alternatives (see Exceptions to Design Standards, Article 4 of this chapter).
- A reasonable funding source.

State Highway Operation and Protection Program Programs

The PDT may recommend using the combined PSR-PR process and template for a SHOPP project after performing a focused risk assessment on factors that affect the project purpose-and-need, and project scope.

State Highway Operation and Protection Program Safety Improvement Program

Because of the high priority and importance of an expedited delivery of safety improvements, a combined PSR-PR is the preferred document for the SHOPP Safety Improvement Program.

However, if high risk factors are identified in the focused risk assessment safety improvement project, a PSR may be the appropriate document to ensure that there are adequate resources to identify and resolve issues for project approval. The PDT focused risk assessment shall be documented. The district safety coordinator has the authority to grant an exception to the combined PSR-PR requirement for safety improvement projects.

Projects-funded-by-others

The PDT may recommend the use of the combined PSR-PR process and template for projects-funded-by-others after performing a focused risk assessment on factors that affect the project purpose-and-need, and the project scope. The District Director retains the authority to approve the use of the combined PSR-PR.

The combined PSR-PR eliminates the separate processing of a PID and a PR. Although one report is prepared, it is expected that the PSR-PR will address issues affecting operations, maintenance, and any potential tort liability on the State highway, and that the proposed work will conform to current Caltrans policies, practices, and standards. All technical information required for normal PID processing must be identified and included in the PSR-PR. Projects must follow the process identified in Article 8, Project Initiation Process for Projects-funded-by-others.

For projects-funded-by-others a combined PSR-PR documents agreement on:

- The purpose-and-need,
- Project-scope,
- Estimated cost,
- Conceptual approval, and
- Cooperative elements.

The approved PSR-PR with an approved environmental document is the authorization to enter into a cooperative agreement or highway improvement agreement for the design and construction of the State highway project. A cooperative agreement, ready to sign, must be attached to the combined PSR-PR.

If the project is sponsored by a local entity, the local entity must understand that there is a risk involved by preparing a combined PSR-PR. The focused risk assessment ensures that all parties be aware of risks. Early and continual consultation with Caltrans can reduce the need for additional project work and project delays.

Project Approvals

The combined PSR-PR, when completed and approved by the District Director, will serve as an approved PR when the environmental determination/documentation is attached. Without these items, it functions as a document to approve circulation of the environmental document. A supplemental PSR-PR will need to be completed once the environmental document is finalized to approve the project for design. The supplemental PSR-PR shall follow the same requirements as described in “Content of the Supplemental PR,” Section 6, [Chapter 12](#) – Project Approvals and Changes to Approved Projects.

ARTICLE 10 Ceasing Work on Programmed Projects

Request Process

District requests for approval to cease work on programmed projects should be submitted via a memorandum to the Headquarters Division of Transportation Programming. The memorandum should explain the factors warranting deletion of the project and should specify the resources in personnel years (PYs) and dollars that will be made available by deletion of the project. Where applicable, the

memorandum should indicate if the deletion has the concurrence of local and regional agencies.

Note: This process was commonly known as the UNPAR process, derived from the Project Authorization Request (PAR), which is a report format that has been discontinued.

Approval Process

Before the request can be approved, the Headquarters program advisors for the appropriate programs must review and approve the district's memorandum.

The Headquarters program advisors, in cooperation with the Headquarters Division of Transportation Programming, may also initiate deletion of programmed projects because of a change in program priority.

Cease Work at Agreed Milestone

The Division of Transportation Programming will notify the Division of Design Division Chief, Division of Budgets, Division of Administration, and the district of the action taken. Project activities will cease at an agreed upon milestone.