

CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF TRANSPORTATION PLANNING

STRATEGIC PLAN

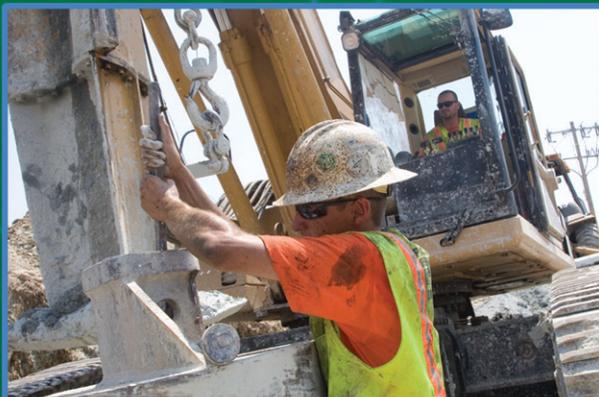
A THREE-YEAR PLAN FOR  
PROJECT INITIATION DOCUMENTS AND  
FOR STREAMLINING THE PID PROCESS



JANUARY 2011



FISCAL YEARS 2011-12 THROUGH 2013-14





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AND FOR STREAMLINING THE PID PROCESS**

**FISCAL YEARS 2011-12 THROUGH 2013-14**

**CINDY MCKIM, DIRECTOR  
CALIFORNIA DEPARTMENT OF TRANSPORTATION**

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## EXECUTIVE SUMMARY

The Division of Transportation Planning's Strategic Plan (Plan) for Project Initiation Documents (PIDs) represents the California Department of Transportation's (Caltrans) commitment to managing its PID program and addresses the issues raised by the Legislative Analyst's Office's (LAO) February 3, 2009, Budget Analysis Report. The Legislature requested that Caltrans collaborate with external stakeholders in identifying ways to streamline the PID development process by investigating the potential of cost-sharing and streamlining the PID process to reduce costs and delays. The LAO's report discussed the management of the PID program, with recommendations to base staffing on workload, to employ criteria for developing PIDs, and the need to include information regarding the viability of PIDs being developed. This document addresses these concerns.

Based on consultation with regional transportation agencies and other local partners, Caltrans has established that:

***"The goal for the Project Initiation Document (PID) Strategic Plan is to create a consistent, transparent, and fiscally-efficient process for delivering highway improvement projects identified in long-range transportation plans."***

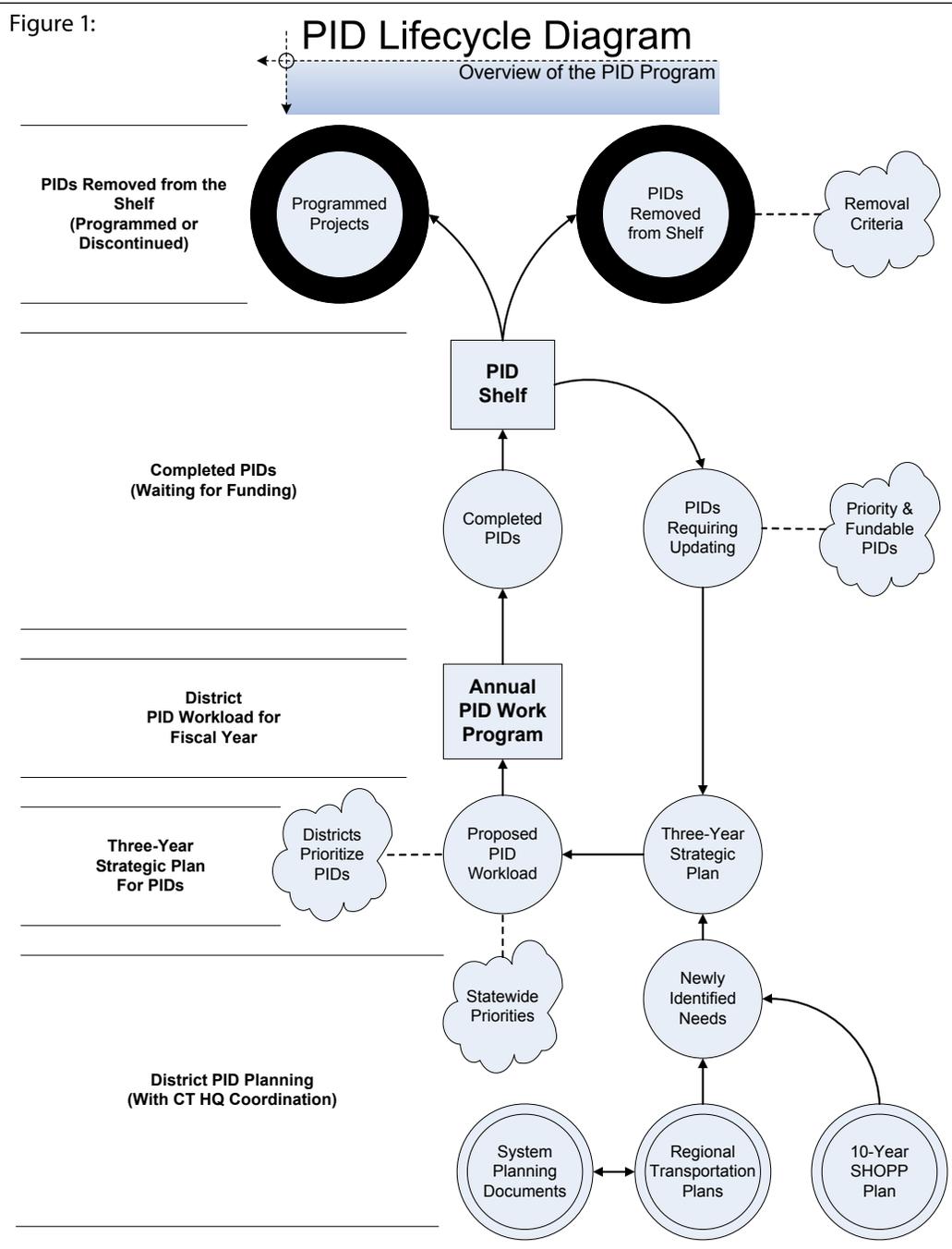
The Plan adopts an overarching principle:

***"Redundant work or unnecessary efforts will be safely and appropriately eliminated. A project-specific guideline allowing the flexibility to appropriately defer some studies and an implementation plan can reduce delays and increase efficiency in the PID development process."***

The Plan offers approaches for improving the management of the PID by presenting recommendations and strategies for Caltrans and other agencies to streamline the current process for developing PIDs. It also addresses cost-sharing and the reduction of costs and delays. Additionally, it speaks to three main concepts discussed in the 2009 LAO Budget Analysis report: 1) Reduce staffing for project planning; 2) Base staffing on workload beginning in FY 2011-12; 3) Improve management of PID activities. The Plan is composed of three sections: Program Management, Program Improvement, and Plan Implementation.

The first important component of the PID Strategic Plan is the active management of the viable PID "shelf," i.e., those PIDs 100 percent complete but not programmed. A PID shelf, comprised of a strategic mix of viable PID projects, is necessary for the orderly implementation of projects identified in long-range constrained plans, and also for taking advantage of unpredictable funding opportunities, such as Proposition 1B, American Recovery and Reinvestment Act of 2009 economic stimulus funds, and the upcoming federal transportation bill, that will provide funding to move projects through all phases of the project development process. Over the

next year, Congress will be working on a new multi-year federal transportation bill that is widely expected to authorize higher levels of funding for the next four to six years. The PID Strategic Plan recommends that the PID shelf be reviewed annually, or more often, as needed. The Plan provides criteria to assess and determine which projects should remain on the PID shelf. To have a variety and the right mix of PIDs, ready for funding opportunities, the Plan defines criteria for selecting and managing PID workload and recommends reviewing the SHOPP PID workload annually as part of the update of the 10-year SHOPP. An overview of the PID Program is shown in Figure 1.



In addition to managing the inventory of PIDs, this Plan seeks PID program improvements. In an effort to fully utilize the existing PID processes and procedures, Caltrans intends to better educate PID stakeholders and clarify the processes within the *Project Development Procedures Manual* (PDPM). Clearer communication between the Project Development Team (PDT) and stakeholders, in the form of pre-PID meetings, is a crucial element in identifying early project alternatives, and for defining the appropriate amount of work for each PID.

This Strategic Plan also proposes cost-sharing in developing PIDs on the State Highway System (SHS) via reimbursement to Caltrans for developing those PIDs. The Plan studies the risk management process and recommends developing a PID charter to document any constraints, assumptions, potential fatal flaws, applicable cost-sharing terms, and risks in developing PIDs. Caltrans will establish a committee to examine and update its PDPM. The PID guidance in the PDPM should clarify when it is appropriate to use *ballpark* cost estimates. This section also discusses: conflict resolution, Caltrans' PID oversight, separate guidelines for SHOPP and State Transportation Improvement Program (STIP) PIDs, and performance measures.

Caltrans focused its efforts on implementing key recommendations identified within the Plan, particularly those outlined in the LAO's report. Specifically, that the PID program must become more transparent by addressing issues related to staffing levels, base workload, and management of PID activities. Caltrans will continue to pursue ways to streamline PID scopes of work and extend cost-sharing opportunities. In doing this, Caltrans will: a) establish a pilot program for cost-sharing; b) further educate internal/external staff on guidance and procedures; and c) form a PID Improvement Committee (PID Committee) that will continuously evaluate the effectiveness of the Plan. These findings will be reported as part of the Plan's annual updates.

As a part of this Strategic Plan, Caltrans has identified an inventory of 97 STIP shelf PIDs. This represents a total of \$8.8 billion\* of improvements over the three-year period of this Plan (see Appendix E). For SHOPP projects, this Strategic Plan identifies an inventory of 270 fundable shelf PIDs for the next three years estimated at \$ 3.7 billion\* (see Appendix D).

The Plan proposes a total of 357 STIP projects estimated at \$38.1 billion\* over the three-year period of this Plan (see Appendix B-1). Of the 357 STIP projects listed, 185 projects (\$21.8 billion\*) are proposed to be funded partially or exclusively from STIP dollars. The value of PIDs proposed for development in the SHOPP total 1063 projects at \$7.4 billion (Capital Outlay [Right-of-Way + Construction + Environmental Mitigation] plus Capital Outlay support [Support Staff]) over the three-year period of this Plan (see Appendix A-1). Projects identified in the Plan represent the need

for statewide transportation improvements and the actual yearly workplan will be adjusted, based upon district allocation levels.

In addition, the Plan identifies 62 studies, including major investment studies, feasibility studies, special studies, etc. Because studies are not engineering scoping documents, they are not included in the statewide PID summary report. For resource planning purposes, they are included in the three-year Plan to ensure they are budgeted and accounted for.

The following key recommendations are identified to support the goal of the Plan and to respond to issues raised by the LAO and other stakeholders, while being mindful of future trends and challenges:

**KR KEY RECOMMENDATION #1:**

Develop a three-year PID Strategic Plan to be updated annually by Caltrans by January 10 of every year, in coordination with the California Transportation Commission (CTC), Caltrans' Office of Projects and Plans Coordination, and the regional agencies (see page 16).

**KR KEY RECOMMENDATION #2:**

Caltrans and regional agencies will collaborate using defined criteria to maintain a shelf inventory that supports the level of available funding. A careful review of the existing shelf will determine which projects should remain; looking at:

- Validity of the original purpose and need.
- Strategy and prospects for funding the project.
- If not imminently fundable, whether the project is a regional priority. (see page 16).

**KR KEY RECOMMENDATION #3:**

The number of PIDs should not be limited to near-term STIP or SHOPP programming capacity, in order to be ready for funding opportunities, to build a long-term programming strategy, and to be responsive to developer or local-fee program proposals. Criteria for selecting new projects and developing PID workload includes:

- Correlate PIDs developed to likely funding sources.
- Project addresses deficiencies identified on the transportation system (including Safety and Mandates).
- Project included in a long-range plan (see page 18).

**KR KEY RECOMMENDATION #6:**

For internal and external stakeholders, enhance PID outreach activities for existing guidance and procedures that can be used to streamline the PID development process and reduce costs and delays. Caltrans is working with other State Department of Transportations (DOTs) to do a comparison of PIDs and reimbursement. Information and ideas on how other DOTs develop PIDs or other similar documents will be investigated, specifically, how to better streamline the PID process, and implement PID reimbursement.

**KR KEY RECOMMENDATION #8:**

If project sponsors concur with the risk analysis, they must accept ownership and ramifications for the risks associated with their respective projects. All identified risks and risk owners should be documented in the project's risk register\* (see page 18).

**KR KEY RECOMMENDATION #9:**

Project sponsors must document the purpose and need, funding strategy, project deliverables, known constraints, assumptions, potential fatal flaws, applicable cost-sharing terms, and risks in the project charter developed in concurrence between Caltrans and the project sponsor at the pre-PID meeting. This provides the necessary framework for developing a clear and concise PID scope of work (see page 21).

**KR KEY RECOMMENDATION #10:**

A Caltrans district director will convene an Executive Review Committee if conflict over the necessary content of the PID arises. The members of the Committee shall include Caltrans' headquarters (HQ) Capital Design Coordinator, the HQ Project Management Liaison, the district's deputy director responsible for PIDs, and a local agency representative. The Committee will make a final recommendation to the district director (see page 22).

**KR KEY RECOMMENDATION #14:**

As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program beginning FY 2011-12 whereby regional and local agencies would reimburse Caltrans for developing streamlined PID documents. Caltrans will use the existing Project Study Report-Project Development Support (PSR-PDS) document as the basis for the streamlined document until Caltrans and the regions agree on an approach to streamline PID documents for STIP candidate projects. The project sponsor and Caltrans district staff may negotiate cost-sharing terms for any additional work that may be agreed to at the pre-PID meeting (or may become necessary later) (see page 27).

**KR KEY RECOMMENDATION #15:**

As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program for PID oversight and pre-PID activities beginning FY 2011-12. Under the program, project sponsors will reimburse Caltrans districts for all of the costs associated with Independent Quality Assurance (IQA), and the development of feasibility studies, major investment studies, and technical studies. In regards to studies, reimbursement will only apply to studies that Caltrans develops on behalf of regional and local agencies. Districts and project sponsors should have early and continual discussions to establish the viability of the project proposals, procedural requirements, and the schedule for various project deliverables. All agreements between Caltrans districts and the project sponsors should clearly identify cost-sharing terms and procedures (see page 27).

**KR KEY RECOMMENDATION #16:**

Caltrans will proceed to use the Project Study Report-Project Development Support (PSR-PDS) to move locally-funded STIP candidate projects into the environmental phase. Amend Chapter 9 (Project Initiation) and Appendix L (Project Study Report) of the *Project Development Procedures Manual* (PDPM) to clarify the appropriate level of detail necessary to develop PIDs. The guidance should also clarify the appropriate use of ballpark or order of magnitude estimates and discuss the need to regularly update cost estimates prior to approval of the project report (see page 29).

**KR KEY RECOMMENDATION #18:**

Caltrans intends to streamline PID review procedures for PID oversight activities. Caltrans is working in-house to develop a process that will standardize the review and approval of PIDs. The process will include a pilot program that will be implemented FY 2011-12 with full implementation FY 2012-13 (see page 30).

**KR KEY RECOMMENDATION #21:**

Caltrans has formed a PID Committee, including internal and external stakeholders, to continuously evaluate the effectiveness of the PID Program and the PID Strategic Plan. The PID Committee will also recommend further improvements related to cost-sharing, reducing costs and delays, and streamlining procedures associated with the development and oversight of PIDs. The PID Committee will meet quarterly, or as needed, and report its findings in annual January 10 updates of the PID Strategic Plan (see page 31).

*(End of Executive Summary)*

## BACKGROUND

### ORIGINS & LEGISLATIVE REQUIREMENTS

In 1990, the California State Legislature (Legislature) placed the Project Study Report (PSR) requirement into State statute as part of the Blueprint package that redefined state programs, increased the gas tax, and provided bond funds for transit programming. It also required that Caltrans prepare PSR guidelines for CTC review and adoption.

The project initiation phase is the first formal stage in developing a solution for a specific transportation deficiency. The project initiation phase occurs after the system and regional planning process. The outcome produces a Project Initiation Document (PID) that establishes a well-defined purpose and need statement and a proposed project scope tied to a reliable cost estimate and schedule.<sup>1</sup> A PID is required when using State funds for capital improvements on the State Highway System (SHS) or for any major work. All projects on the SHS require an approved PID or equivalent document to construct within the State's right-of-way. Proposed projects on the State's Interstate System that involve modifications or changes to access may require a Project Study Report (PSR) from the districts for Federal Highway Administration (FHWA) approval.

California Government Code section 65086.5 defines the requirements for PIDs:

- PIDs shall address project limits, description, scope, costs, and amount of time needed for initiating construction.
- Caltrans shall review PIDs prepared by others.
- Caltrans may be requested to prepare a PID. If it is unable to complete the PID in a timely manner, the requesting entity may prepare the report.
- Caltrans shall prepare guidelines for PIDs, which shall address "reliable cost estimates."
- California Transportation Commission (CTC) shall review and adopt PID guidelines by October 1, 1991.
- California Government Code sections (Code) 14526(b) and 14527(g) require regional agencies and Caltrans to prepare PIDs (or equivalent documents) for all local projects nominated for the State Transportation Improvement Program (STIP).

## PURPOSE AND OBJECTIVES OF PIDS

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### A PID SHOULD ACCOMPLISH SEVERAL OBJECTIVES:

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#### I. Define Improvements

- Define purpose and need clearly enough to start an environmental document and to understand the project intent and scope allowing for a logical termini of the intended project.
- Lay out the project scope, and use it to derive *ballpark* estimates of delivery schedule and cost for the next project development phase.
- Develop project alternatives, and eliminate any that do not meet the purpose and need.

#### II. Facilitate Communication

- Provide local agencies with Caltrans' input when they propose a development or transportation project in the near or medium future so they can plan for SHS improvements, right-of-way preservation, project phasing, and fair share contributions.
- Provide program managers and programming agencies with sufficient information (scope, schedule, and cost) to assess whether, how, and when they may be able to program and fund a project, or fund stages of a project.
- Provide project cost estimates to accurately plan for the project's short- or long-term delivery plan using either an *order of magnitude* estimate or project construction-level estimate.
- Provide the FHWA with project information for FHWA approval for changes on the interstate system.

#### III. Minimize Risks

- Ensure the potential fatal flaws of the project alternatives have been identified.
- Consider whether and how the project might be segmented into more easily fundable segments allowing for logical termini or implementation stages.
- Consider what significant risks the project may face and assess those risks in more detail utilizing a Risk Management Plan.

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### PID IMPROVEMENT LANGUAGE FROM THE FEBRUARY 20, 2009 BUDGET ACT

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*"... the Department shall convene a working group in partnership with local agencies to identify options to share costs, lower costs, streamline procedures, and reduce delays associated with project initiation documents."*

### **QUESTIONS RAISED BY LEGISLATIVE ANALYST'S OFFICE**

The Legislative Analyst's Office (LAO), in its annual budget report of February 2009, provided findings and recommendations on Caltrans' PID program. The report suggested that PID resources should be tied to workload needs; this includes early estimates for the workload. Criteria included in the Plan will be used to determine the level of effort required for the development of PIDs for the State Highway Operation and Protection Program (SHOPP) and STIP projects. In addition, the PID program will establish clear criteria, data, and other information to determine the viability of PID projects and the PID shelf.

#### **The LAO, in its annual budget report (February 2009), raised three key issues:**

- Should staffing for PID activities be based on workload?
- What is the criteria for selecting PID projects?
- How do you assess and determine the viability of the PID shelf?

#### **The LAO recommended that:**

- Caltrans tie PID resources to workload needed to develop and update PIDs and demonstrate how it estimates that workload.
- Caltrans should provide criteria for selecting SHOPP PID projects in its PID guidance documents.
- Caltrans should improve its management of PID resources and report back to the Legislature.
- Caltrans should increase reimbursed work for PID quality assurance.

### **THE PID STRATEGIC PLAN WORKGROUP**

Caltrans and several regional and local partners collaborated to develop a Strategic Plan framework for PIDs and to streamline the PID process. The Strategic Plan workgroup first convened July 28, 2009, and the Streamlining workgroup first met August 18, 2009. The Strategic Plan workgroup met weekly, with a total of 12 meetings. The Streamlining workgroup was a parallel effort, which met weekly for six weeks with many hours of effort devoted to the discussion of potential streamlining measures.

The Streamlining workgroup formed and convened five subgroups covering the topics:

- Preliminary Environmental Assessment Report (PEAR)
- Scope of Work
- Cost-sharing/Reimbursement
- Stormwater
- Risk Management

The Strategic Plan framework includes a proposed workplan for a three-year program designed to link PID development with potential transportation funding. All projects included in this workplan must be included in either a Regional Transportation Plan (RTP) if they are STIP projects or the 10-Year SHOPP if they are SHOPP projects (excluding projects within the Collision Reduction Safety Improvement or Emergency programs, which are developed as needs arise). The workgroup's recommendations focus on the efficient fiscal management of state highway projects. The overarching principle for the recommended streamlining measures is that we safely and appropriately eliminate unnecessary or redundant effort.

## EXISTING POLICIES AND PROCEDURES

Chapter 9 (Project Initiation) and Appendix L (Project Study Report) in Caltrans' *Project Development Procedures Manual* (PDPM) provides guidance for PID development. The Project Study Report (PSR) is one type of PID and, since they are defined in statute, serves as the model. The other nine types of PIDs are generally modified and specialized versions for specific kinds of projects or situations, mostly aimed at state highway rehabilitation, safety, damage repair, non-highway, and minor projects for the SHOPP.

The SHOPP program comprises the system needs for ten major categories of funding and 41 separate funding programs:

- Emergency Response (3 programs)
- Emergency Response (3 programs)
- Collision Reduction (4 programs)
- Legal and Regulatory Mandates (6 programs)
- Bridge Preservation (7 programs)
- Roadway Preservation (6 programs)
- Mobility (3 programs)
- Roadside Preservation (4 programs)
- Facilities (4 programs)
- Minor B Program (1 program)

Chapter 9 in the PDPM focuses on items that a PID must consider: project purpose and need, design scope including engineering standards, alternatives, project context, environmental studies, safety, constructability, and requirements for federal projects. Appendix L lays out the process and format outline to be followed in preparing a PID: pre-PID meeting, Project Development Team (PDT), purpose and need consensus, field review, existing reports and data, need for new information, initial studies, cost estimates, reviews, and approval. It also contains outlines, checklists, and templates for various kinds of PIDs and associated studies.

The PDPM notes connections between work done for a PID and the need for various studies, including: value analysis, risk assessment, traffic studies, geotechnical studies, surveying, floodplain mapping, hazardous materials studies, and storm-water reports. The PDPM generally allows the flexibility to perform these studies when deemed appropriate, but it leaves the impression that they should be considered as normal work for a PID.

Caltrans has a long-term interest in the preservation of the State Highway System (SHS). Local agencies make decisions to invest their transportation funds on the SHS and partner with Caltrans and other stakeholders to determine how these funds are invested on the system. The State Transportation Improvement Program is divided into two parts with the regions receiving 75 percent of the funding through the Regional Transportation Improvement Program (RTIP) and Caltrans receiving 25 percent of the funding through the Interregional Transportation Improvement Program (ITIP).

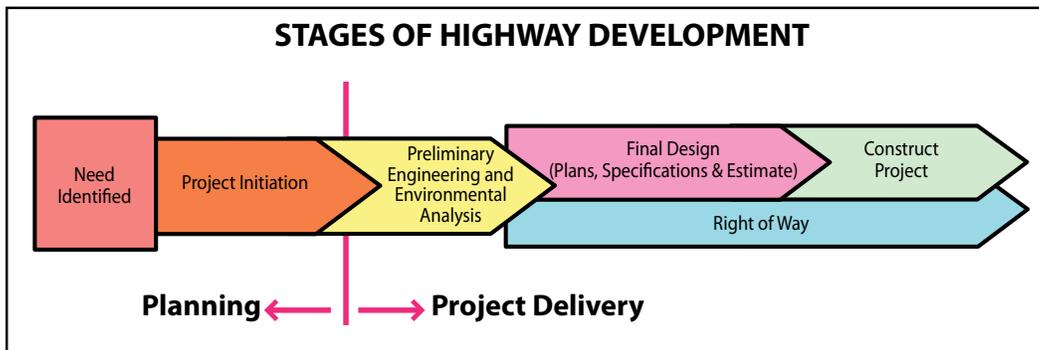
Caltrans usually prepares PIDs for STIP projects in collaboration with local agencies and when resources are available. For projects from regional and state long-range plans funded through the RTIP and ITIP, local agencies prepare the PID. Caltrans performs Quality Assurance (QA) after the local agency performs the Quality Control (QC) aspects. Caltrans also reviews PIDs, performing QA after local agencies perform QC for local and developer-funded projects. These PIDs are typically prepared by consultants. Caltrans' efforts may also require both QC/QA for outside agencies because of a lack of verifiable QC efforts which significantly increases Caltrans' staff efforts for PID approval. Caltrans prepares PIDs in its 12 districts and then their Division of Engineering Services circulates and reviews the PIDs within the district office, headquarters, and external stakeholders. Some matters are discussed with headquarters staff, particularly Mandatory and Advisory Highway Exceptions according to the requirements of the Caltrans Highway Design Manual for design exceptions.

For PIDs completed by others, California Government Code mandates that Caltrans completes their review within 60 days, which requires some degree of standby resources for PIDs that are submitted throughout the fiscal year. PIDs can take anywhere from a few months to several years to prepare. A PID for a SHOPP pavement rehabilitation project, similar to a STIP left turn pocket project, might need a few months to complete, while a SHOPP PID for major bridge replacement or a STIP PID for a highway, expressway, or freeway project on new alignment can take several years.

## THE PLANNING, PROGRAMMING, AND PROJECT DEVELOPMENT SPECTRUM

In essence, the PID serves as a bridge from the long-range plan to programming and funding the project. Once programmed and funded, project work proceeds with project approval and the environmental document, followed by design (plans, specifications, and estimates), right-of-way, and construction (see Figure 2 below).

Figure 2: Project Delivery Spectrum



Programming represents the dividing line between planning and project development, and the PID clearly falls on the planning side of that line. Caltrans has recognized that fact by centralizing the PID management office in the Division of Transportation Planning. The Division of Transportation Planning also coordinates with other Caltrans divisions. PIDs are intended to serve as a prerequisite to programming, and not a new project phase to be programmed and funded.

For PIDs, the key is an appropriate level of preliminary studies and cost estimation to determine:

1. What is the transportation deficiency?
2. What features must the project include?
3. What other features would be desirable?
4. What is affordable?
5. Given the purpose and need and collateral interests, what alternatives should be considered? What other alternatives may be brought forward but would not meet purpose and need?
6. Have any feasible multimodal features and alternatives been identified?

Those preparing the PID must carefully consider what programming components are expected next, e.g., environmental studies and preliminary engineering, so the next phase can be accurately programmed. The findings of the PID can also indicate a project's feasibility or if the project is too costly to program. It is important to understand, as early as possible, how much programming capacity a project may need for completion. Most complex projects are not programmed for construction

until the environmental phase has been completed or is nearly completed. The Project Study Report-Project Development Support (PSR-PDS) is a type of streamlined PID for STIP candidate projects and is used only to program the support costs needed to achieve project approval and does not require the same level of detail as a PSR.

## **PID PROGRAM MANAGEMENT**

### **SHELF MANAGEMENT**

#### BACKGROUND

Historically, transportation funding has tended to occur in “boom-bust” cycles, and circumstances and priorities can quickly change. Caltrans needs to review its PID shelf inventory and update its PID workplans to ensure that it contains a relevant lineup of viable and needed shelf projects in order to take advantage of future programming opportunities.

Examples of triggers to indicate a review of the PID shelf may be necessary can include:

- Updates of the long-range plans from which PIDs are taken (e.g., Transportation Concept Reports (TCR), Corridor System Management Plan (CSMP), Regional Transportation Plan (RTP), and Interregional Blueprint).
- Changes in:
  - Design standards (e.g., American Disabilities Act of 1990).
  - Funding programs (e.g., new Resurfacing and Restoration pavement rehabilitation program).
  - Policy requirements (e.g., Pavement Life Cycle Cost Analysis).
  - Selection criteria for projects (e.g., funding becomes available for Roadway Preservation projects and is removed/reduced from Pavement Rehabilitation Program).
- Projects programmed from the PID shelf inventory.
- Changes in physical conditions, such as large new local developments or new truck routing patterns, or political priorities in the region.
- Tax measures or other referendum passed into law.
- Updates of the 10-year SHOPP.
- The need to prepare PIDs for strategic reasons, not in response to variations in current funding.
- The annual review of the PID shelf inventory, removing those that have come to construction, designating a few (if funding is available) to move forward into the environmental phase, and identify new ones to continue Plan implementation and respond to recent programming.
- Changes in the needs, priorities, or external conditions (consider removal).

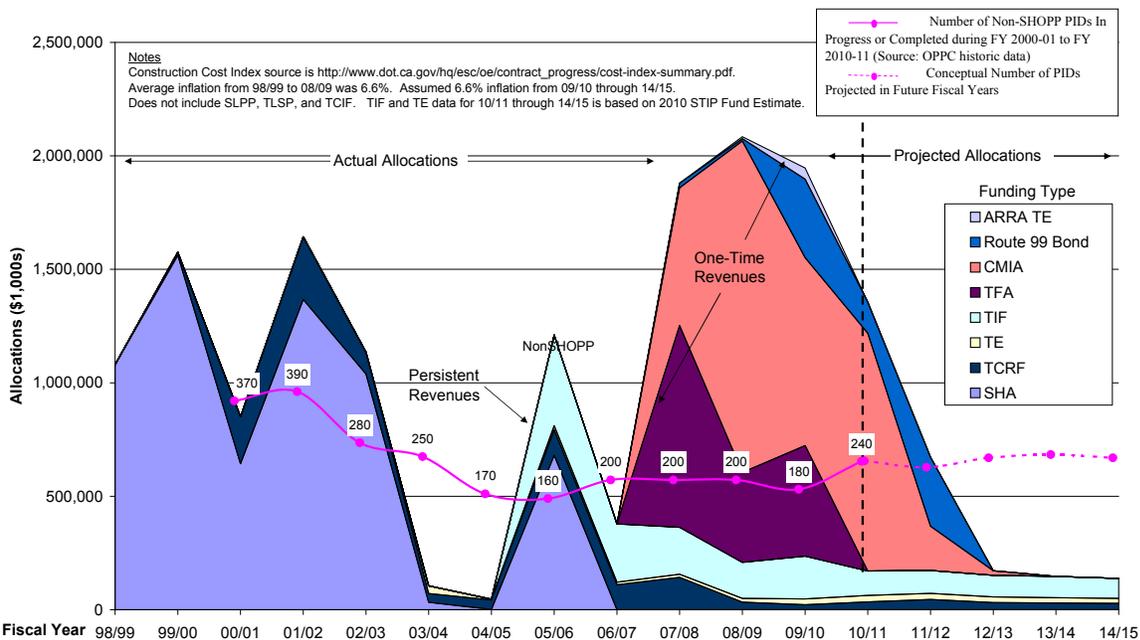
**MANAGING THE SHELF**

Management of the PID shelf requires good judgment, accountability, and transparency. Caltrans should perform assessments of the PID shelf annually, or more often, as necessitated by the previously identified triggers. Caltrans and regional and local agencies should be prepared to update the PID shelf upon the update of their RTPs or upon an influx of unforeseen local, state or federal funds. Urban regions must, by law, update their RTPs at least every four years and rural regions every five years. Both near-term and long-term priorities can change with the updates of these plans.

The identification of viable shelf PIDs is critical to managing the PID program. Completed PIDs that have been on the shelf for more than five years should be assessed at least once a year. Each PID should be assessed for viability of future programming, using agreed upon removal criteria. The criteria should be flexible, while adhering to the intent of the Strategic Plan. Application of the criteria should occur as a high-level review of the document, which does not require a full-scale review of all aspects of the PID to make the decision. The decision-making process should lean towards a removal of five-year-old PIDs from the shelf, unless the preponderance of the following remains valid: availability of funding; validity of traffic analysis; purpose and need; priority ranking; and/or private development involvement. Funding availability is probably one of the most important issues. Since the RTPs are federally required to be fully-funded, financially constrained, and conforming to Air Quality requirements, Caltrans needs to review the Tier 1 (constrained for funding) listing of projects for viable, fundable non-SHOPP projects.

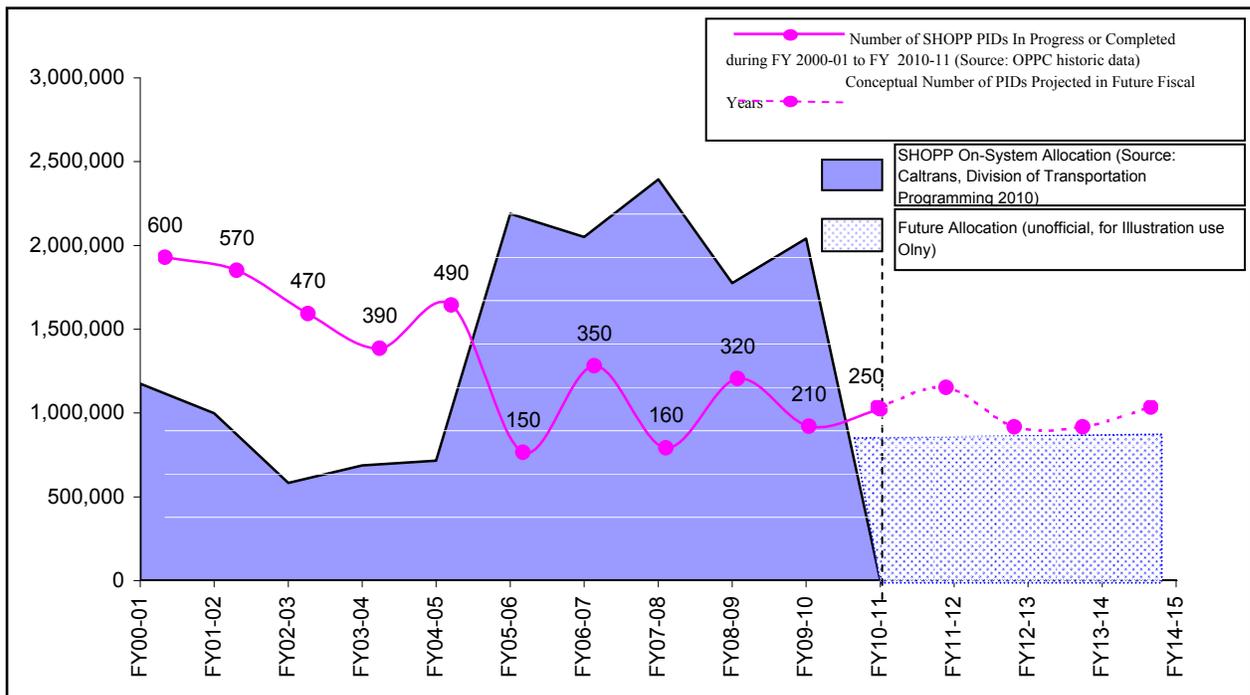
**Non-SHOPP On-System Allocations and Projected Allocations  
(Adjusted for Construction Costs Index, in 2005/2010 dollars)**

Figure 3:



With a history of “boom-bust” cycles (see non-SHOPP and SHOPP On-System Allocations in Figures 3 and Figure 4), it is strategic to not restrict the number of PIDs developed to programming capacity. The value and type of PIDs on the shelf should be driven by the investments Caltrans, regional agencies, and other local stakeholders agree are the right improvements considering historic and foreseeable funding levels, to be made on state highways in the next five or more years. PIDs should represent a consistent and orderly flow of projects, from long-range plans to readiness for programming. Contrary to what one might think, the lower the amount of funding available for current programming, the greater the need to prepare for scenarios involving additional funding. Congress and the Legislature typically respond to a period of low investment in transportation by providing more funding, and that is the time when an adequate shelf of PIDs may facilitate the programming of new projects, those consistent with regional and state priorities. The demand for new projects (and thus the preparation of PIDs) needs to be balanced with established priorities, to deliver the existing program of projects. Caltrans, together with its partners, need to be able to manage if and when potential funding would necessitate the development of PIDs for new projects or whether it would be directed to programmed projects that are not fully funded through construction.

Figure 4: SHOPP On-System Allocations<sup>1</sup>



Source: Caltrans Transportation Programming

<sup>1</sup>Does not include Support Costs.

A strategic inventory of PIDs, for both the SHOPP and STIP, set by priority needs, reasonable funding expectations, and not being reactionary to the “boom-bust” cycle would tend to level out “boom-bust” cycles rather than exacerbating them. This inventory should include PIDs in development and those PIDs completed and on the shelf. Should additional resources become available through the next federal authorization, a new State bond act, a second federal recovery act, cost savings, or increases through the Fund Estimate, PIDs on shelf are available for programming.

As displayed in Figure 3 on page 18, the number of non-SHOPP PIDs prepared between Fiscal Year (FY) 2000-2001 and FY 2004-2005 was positively related to the “boom-bust” cycle. In recent years, the number of non-SHOPP PIDs has shown the trend to level-out the cycle, and Caltrans expects the trend to continue over the next few years. Figure 4 shows that the number of SHOPP PIDs developed corresponds with the available funding from FY 2000-2001 to FY 2004-2005, while from FY 2005-2006, the *number* goes up and down and is expected to assume a more level path in the future.

In addition to the number of shelf PIDs, the *variety* of PIDs must be considered. The viable PID shelf must be flexible enough to fulfill programming needs as new funding and priorities are identified. In order to ensure the PID shelf inventory has a variety of PIDs ready to be programmed, the shelf inventory needs to be assessed annually as a part of preparing each year’s Strategic Plan, which will be discussed in the next section.

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## RECOMMENDATIONS

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- KR** 1. Develop a three-year Strategic Plan to be updated annually, January 10, by Caltrans in coordination with the California Transportation Commission (CTC), Caltrans’ Office of Projects and Plans Coordination, and the regional agencies.
- KR** 2. Use established removal criteria to maintain a shelf inventory that supports the available level of funding. Criteria for assessing and determining the viability of the PID Shelf includes:
  - a) Validity of the original Purpose and Need.
  - b) Strategy and prospects for funding the project.
  - c) If not imminently fundable, whether the project is a regional priority.

## WORKLOAD MANAGEMENT

State Transportation Improvement Program (STIP) projects, especially high-cost ones, are typically funded from multiple sources. Caltrans, together with the regional agencies, should consider whether additional PIDs are necessary to fund new projects ready for the next round(s) of programming. All projects selected by Caltrans and the regions for PID development must originate from a long-range plan, such as the Regional Transportation Plan or the 10-Year SHOPP. The regions

should propose potential projects that have a reasonable chance of being fully-funded and “ready to go.” The timing of PID development should coincide with the desired target for programming, in order to support an orderly flow of PIDs into programming. Caltrans should coordinate and consult with regional agencies to capture the region’s projected PID workload over the next three years. The STIP PID project listing needs to be coordinated annually with Caltrans and regional and local partners. The STIP PID project listings will be used as a basis for developing the PID workplan, consistent with the districts’ allocation levels.

Self-help counties with large, very-high-cost interregional projects present special cases where a region may have an even greater numbers of PIDs under development at a given time. Currently, there are 19 counties with local sales tax programs extending out for the next 20 to 40 years that fund transportation programs and projects. In FY 2008-2009, these self-help counties generated an estimated \$1.967 billion in sales tax revenue.<sup>1</sup> Some of these revenues will fund areas such a transit service and local transportation projects. Other portions of the revenue will fund PIDs and other project development phases for interregional projects and projects on the State Highway System (SHS). Caltrans and the regional and local agencies need the appropriate PIDs available to deliver the projects on the SHS that are funded through local sale tax measures. Self-help counties have specific expenditure plans and, in partnership with Caltrans, must manage the PID and project delivery process accordingly. Whether the primary funding source is STIP or sales tax, the transportation partners should strive for an order flow of PIDs in preparation for future programming cycles.

In small urban or rural counties, large and very-high-cost interregional projects, in the range of \$100 million or more, present the opposite challenge. In these situations, the State must provide most of the funding. In deciding to prepare a PID for these types of projects, Caltrans must verify that the project is a high priority in the RTP and also a significant priority from a statewide perspective.

Because funding opportunities for transportation projects come along intermittently, Caltrans and the regions need to agree on the priorities for future programming, including whether PIDs should be developed for new projects so they can proceed into the environmental phase. Criteria for selection and development of PIDs include projects that address:

1. Can be tied to a reasonably funding source.
2. Projects identified State, regional, or local deficiencies in the transportation system (including Safety and Mandates).
3. Come from in a long-range transportation plan (e.g., RTP, 10-Year SHOPP, etc.).

<sup>1</sup>December 9, 2009 Report to the CTC: Report on Investments to SHS by outside funding sources  
\*Source: see Appendix F

Other factors to consider when selecting and developing PIDs include:

4. Developing and maintaining a system that provides safe, reliable transportation and mobility for people, goods, and services in the State.
5. Availability of right-of-way.
6. Political or strategic reasons.

The challenges to managing STIP PIDs includes, but is not limited to, insufficient coordination, lack of an annual STIP PID assessment and that regions have the majority of STIP funding (75 percent). This can lead to an unreliable inventory of STIP PIDs. Caltrans' districts and regional agencies should coordinate quarterly, or as necessary, to review and update the STIP PID workplan.

The funding levels for FY 2011-12 allows Caltrans to meet the minimal and basic needs of PID development to address the safety and mandated needs of the State Highway System (SHS). Given the funding constraints associated with PIDs, project sponsors may want to consider developing more feasibility studies as a way to achieve certain objectives, such as preserving right-of-way or supporting a fee collection program. Feasibility studies are considered a bridge between planning and PIDs and can be used to conduct certain pre-programming activities until funding becomes available to develop PIDs. These studies can be used to define or refine the project purpose and need, analyze project alternatives; document "ballpark" cost estimates, and build political and/or local and regional support.

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## RECOMMENDATIONS

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- KR 3. The number of PIDs should not be limited to near-term STIP or SHOPP programming capacity, rather, a reasonable level of reserve, in order to be ready for funding opportunities and to build a long-term programming strategy, and be responsive to developer or local-fee program proposals. Criteria for selecting new projects and developing PID workload includes:
  - a) Correlate PIDs developed to likely funding sources.
  - b) Identify projects that mitigate deficiencies in the transportation system (including Safety and Mandates).
  - c) Verify that the projects are included in a long-range plan.
4. Caltrans should review the SHOPP PID inventory annually as part of the update of the 10-Year SHOPP.
5. Caltrans districts and regional agencies work together to prepare a variety of STIP candidate projects to be ready for programming opportunities.

## PID PROGRAM IMPROVEMENTS

### EDUCATION AND OUTREACH ON EXISTING PID PROCESSES AND PROCEDURES

Caltrans will dedicate more effort engaging PID stakeholders (e.g., regional and local agencies, consulting firms, Caltrans staff, etc.) and clarify the guidance language for PIDs in the PDPM, including existing processes and procedures.

The development of the PID Strategic Plan has shown, in many respects, that existing processes and procedures related to PIDs are being underutilized by some Caltrans districts. One example of a process being underutilized is the Project Study Report-Project Development Support (PSR-PDS). As previously stated, the PSR-PDS is a type of streamlined PID for STIP candidate projects and is only used to program the support costs needed to achieve the environmental document and project approval. The PSR-PDS does not require the same level of detail as a PSR. Some Caltrans districts embrace this streamlined PID document and use it (almost exclusively) to develop PIDs because it is more efficient and cheaper to produce than a PSR used to program phases beyond Project Approval and the Environmental Document (PA/ED). Conversely, other districts strongly feel that detailed preliminary studies are necessary and choose to (mostly) develop these PSRs. Many argue the need to have a streamlined PID that provides enough detail to move potential projects forward into the environmental phase without spending resources to prepare a PSR that also programs right-of-way and construction phases. The PSR-PDS was developed for this very purpose – to provide only the effort necessary to develop a workplan for the project approval and environmental document phase. The PSR-PDS also enables Caltrans and project sponsors to develop *ballpark* estimates of construction costs for the purposes of forecasting long-range funding needs.

The PSR-PDS also helps shift baseline costs for Project, Specifications, and Estimates, right-of-way, and construction phases from the PID document to the Project Report. The level of preliminary studies and effort for developing a PSR-PDS should be limited to that effort needed to develop the workplan for the project approval and environmental document phase, and to develop a *ballpark* estimate of the construction cost. The construction estimate in a PSR-PDS is not a programming commitment; rather it is used to forecast long-range funding needs. As a general rule, project sponsors should be able to refine cost estimates as projects progress and more information becomes available. Project sponsors will revisit their cost estimates and establish better baseline costs for programming once the Project Report is approved. Along with other factors (e.g., risk management, PID charter, etc.), this will enable project sponsors to defer the preliminary studies needed to program the right-of-way and construction phases. Another example of an existing process in the PDPM that can be used to streamline the development of projects is building

stageable alternatives into the PID. The PDPM suggests that districts and project sponsors have a higher probability of getting a project programmed and meeting at least some of the project needs if the PID includes stageable alternatives. Moreover, the PDPM states that large projects should be packaged into a series of reasonably sized projects that can be developed individually.

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## RECOMMENDATIONS

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- KR** 6. Enhance PID outreach activities for existing guidance and procedures that can be used to streamline the PID development process and reduce costs and delays. Caltrans is working with other State DOTs to do a comparison of PIDs and reimbursement. Information and ideas on how other DOTs develop PIDs or other similar documents will be investigated, specifically, how to better streamline the PID process, and implement PID reimbursement.
- 7. Hold a statewide PID training program. The training will be available for all PID stakeholders. The conference will be designed to educate all PID stakeholders on existing PID policies and procedures and developing more effective PIDs, including the expanded use of the PSR-PDS.

## RISK MANAGEMENT PROCESS

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### OVERVIEW

Risk management is a tool to help identify issues that effect cost, schedule, and scope of work for a project. It also helps PIDs be more efficiently and effectively developed as it helps balance technical and stakeholder issues driven by programming cycles and information needs with cost and schedule concerns. Risks can be defined as uncertain events or conditions that, if they occur, have a positive or a negative effect on a project objective. Any analysis of risks should consider purpose and need, sponsor goals, project context, potential fatal flaws, and ramifications if the risks materialize. These factors influence the PID scope of work.

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### CHALLENGE FOR CALTRANS AND PROJECT SPONSORS

Project stakeholders and implementing agencies must balance the benefits, costs, and delays associated with applying risk management to the PID development process. Although a streamlined PID document may result in cost and schedule efficiencies within the PID development process, the lack of detail in PID documents may lead to less accurate project budgets, proposed project schedules, and potentially more project change requests, which may lead to a greater chance of cost overruns and project delays.

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### HOW TO IMPLEMENT

Caltrans and project sponsors need to document the purpose and need consensus via a project charter (or alternative method). The purpose and need is the vision

statement for the PID scope of work. The project charter (or alternative method) documents the agreement between the district director and the project sponsor regarding the purpose and need, funding strategy through construction, potential fatal flaws, any applicable cost-sharing terms, and other project related documents. The documented purpose and need will provide the project manager and the project team with boundaries for negotiating the scope of PID development work with the project sponsor and the programming and implementing agencies.

Documenting the purpose and need in the project charter is a valuable tool that guides the project manager and team through the PID development process by defining the project sponsor's expectations and key elements of the project. The project charter should include, at a minimum, the purpose and need, funding strategy through construction, project deliverables, potential fatal flaws, applicable cost-sharing terms, known constraints, assumptions, and risks.

Once a project has an approved charter, the next phase of the PID is the development of the PID scope of work. There are many aspects of the project charter that will influence the development of the PID scope of work. Risk management is one area in particular. The charter should list obvious risk issues. Any identified risks in the charter would be incorporated into the Risk Management Plan which contains a more thorough analysis of risks and plans for mitigating those risks.

Depending on the purpose and need, risks that are identified, how the project sponsor chooses to address the identified risks, and other relevant factors (e.g., project deliverables, potential fatal flaws, known constraints, assumptions, etc.), the PID scope of work may call for more or less detailed studies. However, there needs to be enough detail to allow the project sponsor, project manager, and the project team to determine the appropriate level of detail and analysis that need to be incorporated into the PID, such that the ramifications of risk occurring are understood and acceptable to the project sponsor and Caltrans.

Each project sponsor and team will have different approaches to managing risks. Whether the approach is aggressive or conservative, project sponsors should consider risk management when working with project managers and projects teams to develop PID scopes of work. If a sponsor concurs with the results of the risk analysis, they must accept and deal with the risks that may follow in later phases of the project.

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#### RECOMMENDATIONS

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- 8. If project sponsors concur with the risk analysis, they must accept ownership and the ramifications for the risks associated with their projects. All identified risks and risk owners should be documented in the project's risk register.

- KR 9. Project sponsors must document the purpose and need, funding strategy, project deliverables, potential fatal flaws PIDs scope of work, any applicable cost-sharing terms, known constraints, assumptions, and risks in the project charter in concurrence between Caltrans and the project sponsor at the pre-PID meeting. This provides the necessary framework for developing a clear and concise PID scope of work.

## CONFLICT RESOLUTION

At times, an implementing agency and Caltrans may have conflicting interests in determining the amount and type of work needed during the PID phase. These conflicts may arise at the pre-PID meeting or during the development of the PID. Caltrans does not have a conflict resolution process in the PDPM, but there are processes for specific issues like cooperative agreements and relinquishments that can serve as models. The conflict resolution process would begin with the PID Development Team (PDT) disagreeing on which work items are necessary to study the purpose and need. The implementing agency's project manager and Caltrans' project manager would present the issues to an Executive Review Committee which would consist of the Caltrans' headquarters (HQ) Design Coordinator, the HQ Project Management Liaison, the District's Deputy director responsible for PIDs, and a local agency representative. This Committee would make a recommendation to the district director, who would decide on the scope of work. The district director has final authority for the decision.

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### RECOMMENDATIONS

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- KR 10. Convene an Executive Review Committee in the event that conflict over the necessary content of the PID arises. The members of the Committee shall include the Caltrans' headquarters (HQ) Design Coordinator, the HQ Project Management Liaison, the District's Deputy director responsible for PIDs, and a local agency representative. The Committee will make a final recommendation to the district director. This activity will be coordinated with the PID Committee.
- 11. Develop a conflict resolution process that incorporates Caltrans and project sponsor concurrence on purpose and need, and update the PDPM and policy documents to include conflict resolution.

## PRE-PID AND PRE-PEAR MEETINGS AND AGREEMENTS

The *Project Development Procedures Manual* (PDPM) encourages pre-PID meetings to get all stakeholders together to gain early consensus on the approach to preparing the PID. Input from all parties is required at the earliest possible date and continues throughout the process. The project manager is responsible for taking the lead in coordinating the activities.

The purpose of the pre-PID meeting is to communicate a shared view of the project and to establish an understanding of the procedures, and roles and responsibilities

(Caltrans' Deputy Directive 23) before the project initiation process begins. The pre-PID meeting should assess where data is missing and propose how to acquire them. It should document the roles and responsibilities and provide a general understanding of the work needed, and the proposed timeframe. The pre-PID meeting sets a tone of collaboration and communication. After the meeting, the project manager or Project Development Team (PDT) should clearly document any agreement or consensus reached during the meeting. A cooperative agreement should be prepared immediately (after the meeting and before work begins) and document any cost-sharing or reimbursement terms. The cooperative agreement should include the expectations of all stakeholders, including any terms for cost-sharing reimbursement.

Pre-PID meetings could also be used to document streamlining opportunities and appropriate funding strategies necessary to develop the PID scope of work and to move each particular project forward while meeting the needs of project sponsors and implementing and programming agencies looking to streamline the PID documents. All risks associated with streamlining must be documented in the risk register. Identifying streamlining opportunities in the pre-PID meetings will mostly apply to PSRs, since the PSR-PDS document is already considered a formal streamlined document.

For projects requiring a Preliminary Environmental Analysis Report (PEAR), the pre-PID meeting should identify project alternatives to be considered. Caltrans' Environmental Division prepares PEARs for inclusion in the PID which covers all alternatives or alternatives with maximum environmental impact. This report identifies potential impacts and issues to study further and provides an idea on the type of environmental document to be prepared and the permits that are appropriate. Other divisions within Caltrans also provide deliverables, information, and/or data.

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## RECOMMENDATIONS

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12. Hold pre-PID meeting with stakeholders. For project sponsor(s) and implementing and programming agencies looking to streamline the PID document, the pre-PID meeting should focus on documenting streamlining opportunities and any appropriate funding strategies necessary to develop the PID scope of work and to move the project forward. The Project Development Team (PDT) should assess the quality of existing data, any potential fatal flaws, any applicable cost-sharing terms, document the project's purpose and need, discuss the scope of the PID, and determine roles and responsibilities. All of this information should be documented in the project charter. Checklists for risk management and other technical issues (e.g., geotechnical, stormwater, etc.) should be used to help assess the need to report or investigate potentially significant and likely risks and prescribe specific studies for the PID. All discussions should be documented and used as a basis for any future agreements.

13. When appropriate, hold a pre-PEAR meeting to review the PEAR checklist, focus environmental work, improve communications, define expectations, and estimate environmental work schedules.

## **COST-SHARING AND REIMBURSEMENT**

### **BACKGROUND**

Given the economic outlook for FY 2011-12 and beyond, the LAO, the Legislature, and the Administration have recommended that Caltrans explore the potential for sharing costs with the regions in developing PIDs. The transportation community continues to debate the need for a policy that requires regional and local agencies, who have their own budget challenges, to reimburse Caltrans, partly or wholly, for the majority of PIDs for state highway projects. Some argue that suddenly shifting the costs of PIDs from Caltrans to project sponsors will present local and regional agencies with additional budget challenges. Until local and regional agencies can identify reliable alternative funding sources to fund the development of PIDs, the implementation of a PID reimbursement program may restrict regional and local agencies' ability to fund the development of STIP PIDs in the near term.

Even though PID cost-sharing and reimbursement will be an added expense for regional and local agencies, these entities will still benefit from investing on the SHS. Through these investments, everyone experiences the benefits of increased mobility and reduced congestion. The regional and local agencies also experience benefits such as increased economic development; increased access to a higher standard system for moving people and goods; improved air quality due to less congestion; and decreased expenses associated with wear and tear and the need to add capacity on their respective local systems.

An important point to note is that, under the existing PID funding system, the regional and local agencies already have the option and flexibility to participate in cost-sharing by using their local funds to develop PIDs while Caltrans oversees the process and approves the final PID documents. In fact, many regional agencies representing self-help counties fund the development of PIDs by preparing their own PIDs. This is typically the case when Caltrans does not have the resources to develop a PID or the project sponsors want to expedite the development of a PID.

The regional and local agencies generally agree that the existing funding system for PIDs has worked well and should continue. The regions continue to argue that Caltrans should continue to fund and prepare most PIDs for the state highway projects. Caltrans has historically been able to marshal experienced staff for PID work, and has been able to manage PID work among other engineering activities. The regions also agree that Caltrans, as owner and operator of the SHS, carries liability for state highways and thus should be able to control non-negotiable items (e.g. adhering to design standard, etc.) that may come up in PIDs.

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**IMPLEMENTING COST-SHARING AND REIMBURSEMENT  
FOR STIP PIDS**

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For STIP PIDs that are developed by Caltrans districts on behalf of project sponsors, Caltrans' Division of Transportation Planning will develop guidelines for implementing a formal PID reimbursement program as stated in the Governor's January 2011 proposed budget for FY 2011-12. The reimbursement program will be implemented by the districts and will begin FY 2011-12. Under the reimbursement program, regional and local agencies will reimburse Caltrans districts for streamlined PIDs. Until Caltrans can initiate an effort to work with the regions to revise its PID guidance and develop a streamlined PID that is specially suited to meet the needs of project sponsors, the Project Study Report-Project Development Support (PSR-PDS) will represent the streamlined PID. The PSR-PDS does not require the same level of engineering detail as the standard PSR document. The level of engineering detail and effort for developing a PSR-PDS should be limited to the effort needed to develop the workplan for the project approval and environmental document phase, and to develop a ballpark estimate of the construction cost. The construction estimate in a PSR-PDS is not a programming commitment; rather it is used to forecast long-range funding needs. When a PSR-PDS is used to initiate a project, the project report, not the PID, will be used to program the remaining support, right-of-way, and construction costs. The project sponsor and Caltrans' district staff may negotiate cost-sharing terms for any additional work that may be agreed to at the pre-PID meeting (or may become necessary later).

An important point to note about PID reimbursement is that the regional agencies representing non-self help counties may be under-resourced to fund PID development. Under the existing funding system, rural regions have few funding mechanisms to fund PIDs. These agencies could use their Planning, Programming, and Monitoring (PPM) Fund to fund PID activities. According to the 2008 Fund Estimate, up to 5 percent of a county's share of STIP funds may be used for PPM. Many rural agencies use PPM to pay for salaries and fund activities such as development of Regional Transportation Plans (RTP) and planning studies. Since the STIP county shares are calculated based on population and lane road miles, PPM funding levels for rural counties are much lower compared to larger and more urbanized counties. Regional agencies are already using very limited resources to fund existing planning activities and other regional commitments. If Caltrans requires that regional agencies shoulder the responsibility of funding the development of PIDs, rural regions may lack the ability to adequately fund their planning activities. In addition to the lack of resources to fund PIDs, most regions lack staff expertise to prepare PIDs internally, especially if preliminary engineering work is included.

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**IMPLEMENTING REIMBURSEMENT FOR OTHER CALTRANS  
PID ACTIVITIES**

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It is Caltrans' responsibility to protect the public's investment in the SHS; therefore a PID is required for any major project that is on the SHS regardless of the funding. As such, when entities other than Caltrans staff prepare PIDs, Caltrans policy and procedures must be followed. Caltrans staff shall perform Independent Quality Assurance (IQA) and shall retain approval authority over those PIDs that are prepared by other entities.

As stated in the Governor's January 2011 proposed budget for FY 2011-12, project sponsors will be required to reimburse Caltrans districts for all of the costs associated with IQA beginning FY 2011-12. As outlined in the PDPM, districts and project sponsors should have early and continual discussions to establish the viability of project proposals, procedural requirements, and the schedule for various project deliverables. All agreements between Caltrans districts and the project sponsors should clearly identify cost-sharing terms, procedures, and terms and definitions of standard oversight activities such as IQA. Caltrans Deputy Directives 23 (Roles and Responsibilities for Development of Projects on the State Highway System) and Directive 90 (Funding of Quality Management Work on State Highway Projects) must be the basis of any agreement related to PIDs.

In addition to reimbursement for IQA, project sponsors will also be required to reimburse Caltrans districts for all of the costs associated with the development of various studies such as feasibility studies, major investment studies, and technical studies. Reimbursement will only apply to studies that Caltrans develops on behalf of regional and local agencies. Project sponsors may want to consider working with Caltrans to develop more of these studies given the funding constraints associated with PIDs. As previously stated, districts and project sponsors should have early and continual discussions to establish the viability of project and study proposals, procedural requirements, and the schedule for various project deliverables. All agreements between Caltrans districts and the project sponsors should clearly identify cost-sharing terms, schedules, and deliverables.

While Caltrans supports cost-sharing and reimbursement for PID oversight activities, the regions have voiced strong opposition to this proposal. The regions continue to advocate that the cost of PID oversight and review be the responsibility of Caltrans, so that the scope, cost, and management of PID oversight and review does not become subject to negotiation. The regions have expressed the desire that Caltrans pursue a more balanced and equitable approach to cost-sharing and reimbursement. Various agencies have cited examples of cost-sharing under the current system. These examples demonstrate, especially for self-help counties, that

there are regions that are willing to fund the preparation of PIDs while Caltrans uses its resources to fund IQA activities.

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**RECOMMENDATIONS**

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- KR** 14. As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program beginning FY 2011-12 whereby regional and local agencies would reimburse Caltrans for developing streamlined PID documents. Caltrans will use the existing Project Study Report-Project Development Support (PSR-PDS) document as the basis for the streamlined document until Caltrans and the regions agree on an approach to streamline PID documents for STIP candidate projects. The project sponsor and Caltrans district staff may negotiate cost-sharing terms for any additional work that may be agreed to at the pre-PID meeting (or may become necessary later).
- KR** 15. As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program for PID oversight and pre-PID activities beginning FY 2010-11. Under the program, project sponsors will reimburse Caltrans districts for all of the costs associated with Independent Quality Assurance (IQA), and the development of feasibility studies, major investment studies, and technical studies. In regards to studies, reimbursement will only apply to studies that Caltrans develops on behalf of regional and local agencies. Districts and project sponsors should have early and continual discussions to establish the viability of the project proposals, procedural requirements, and the schedule for various project deliverables. All agreements between Caltrans districts and the project sponsors should clearly identify cost-sharing terms and procedures.

## IMPROVING PID GUIDANCE AND ESTIMATING COSTS

### PROJECT DEVELOPMENT PROCEDURES MANUAL (PDPM)

Caltrans' PDPM provides guidelines for the preparation of PIDs and provides flexibility to allow engineers to use their judgment when developing PIDs. In the current manual, there are a number of PID formats used to program projects into the STIP and SHOPP. The Project Study Report (PSR) and Project Study Report-Project Development Support (PSR-PDS) are the most common documents used to initiate STIP candidate projects. In addition, there are modified templates that have been tailored to meet the information needs of specific State programs or project sponsors.

To achieve the goal of streamlining PID efforts, Chapter 9 (Project Initiation) and Appendix L (Project Study Report) of the PDPM need to be reorganized and clarified to make it "user friendly." The 1999 CTC's PSR guidelines call for PIDs to be "simple, timely, and workable." This policy should form the framework for PDPM PID guidance. At a minimum, a PID must define parameters to move forward into the subsequent phases. The PID must provide enough information about scope, schedule, and cost to help strategize fitting a project into a competing group of projects that are seeking a share of limited resources. The checklists in the PDPM appendix can serve as an excellent guide as to what factors the PDT needs to consider.

### ESTIMATING COSTS

Another factor in STIP PID streamlining concerns the effort needed to estimate costs. The PDPM calls for cost estimates to be "as accurate as possible" for some PIDs, and an *order of magnitude* estimate for others. There is a difference among *order of magnitude* cost estimates and detailed cost estimates. Planning documents may use *order of magnitude* cost, but that is not sufficient for programming. Detailed cost estimates require calculation of quantities based on detailed scope and become necessary as part of complete final plans for allocating funds and soliciting contractor bids. The CTC guideline states, "in preparing the capital cost estimates, the degree of effort and detail for each study is expected to vary depending on the complexity and sensitivity of the issues." Generally, a contingency factor of 25 percent is acceptable. However, a higher or lower percentage may be used, if justified. It also specifies that "the accuracy of cost estimates is usually less for PSRs which involve project development support (also known as "PSR-PDS") than it is for standard PSRs or PSR equivalents."

In defining the project scope for a PID, the PDT should be able to estimate unit amounts for major components, assess whether and to what degree the particular project site will yield easier, about average, or more difficult construction conditions for those components, and adjust the unit costs within a range for that proj-

ect's conditions. Caltrans' Office Engineer already collects extensive data on unit costs, which it uses to calculate the Construction Cost Index and examine contractor's bids; it could easily repackage this data into ranges of unit costs for use in PID cost estimating.

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#### RECOMMENDATION

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- KR** 16. Caltrans will proceed to use the Project Study Report-Project Development Support (PSR-PDS) to move locally-funded STIP candidate projects into the environmental phase. Amend Chapter 9 (Project Initiation) and Appendix L (Project Study Report) of the *Project Development Procedures Manual* (PDPM) to clarify the appropriate level of detail necessary to develop PIDs. The guidance should also clarify the use of *ballpark* or *order of magnitude* estimates and discuss the need to regularly update cost estimates prior to approval of the project report.

### DIFFERENT GUIDELINES FOR SHOPP AND STIP PIDS

The *Project Development Procedures Manual* (PDPM) specifies different kinds of PIDs, some for STIP projects, but most of them for SHOPP projects. The guidance for STIP and SHOPP PIDs in Chapter 9 (Project Initiation) of the PDPM are intermingled, and the regions find the guidance to be unclear. The regions are advocating that Caltrans amend the PDPM to provide distinct sections for STIP and SHOPP PIDs.

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#### RECOMMENDATION

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17. Evaluate the feasibility of maintaining separate procedures and guidance for STIP and SHOPP projects.

### CALTRANS PID OVERSIGHT

Caltrans is responsible for protecting the public's investment in the SHS and 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 and the programming agency to establish the viability of the proposal, procedural requirements, and the schedule for various project deliverables. The transportation partners should agree on the purpose and need, the funding strategy for transportation improvements, the timing for the development of their respective PIDs, and the implementation of the program delivery schedules.

The review of PIDs developed by regional or local agencies or private developers should be coordinated by well-trained, Caltrans district staff. The review process of the draft PID begins when submitted by the project sponsor. State statute requires Caltrans to complete its review within 60 days.\*\* If the draft PID is incomplete, only the completed PID sections will be reviewed by Caltrans.

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## RECOMMENDATIONS

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- KR** 18. Caltrans intends to streamline PID review procedures for PID oversight activities. Caltrans is working in-house to develop a process that will standardize the review and approval of PIDs. The process will include a pilot program that will be implemented FY 2011-12 with full implementation FY 2012-13.
19. Ensure that each Caltrans district has well-trained staff to guide the work of PID oversight activities.

## PERFORMANCE MEASURES

Performance measures should be used as a basis for evaluating the effectiveness of the statewide PID program and for assessing the performance of various recommendations identified in the PID Strategic Plan. A PID Committee (Recommendation #21) will identify any appropriate performance measures and the steps necessary for implementation.

Examples of performance measures are:

- Average hours spent on PID preparation, from pre-PID meeting to completed PID, as a measure of process streamlining by project type.
- Estimated timeline for environmental studies (to PA&ED) in PIDs compared to actual time lines to complete the environmental phase, as a measure of the effectiveness of schedule estimating.
- Percentage of PIDs in each county that become programmed projects within one, three, and five years of PID completion, as a measure of the number of PIDs compared against a county's commitment to implement them; normalized by dollar amount.
- Number of PIDs that become programmed projects within one, three, and five years within each category of projects, as a measure of whether the right mixture of PIDs is being prepared by the STIP and SHOPP.

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## RECOMMENDATION

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20. Caltrans should develop and use performance measures to manage the PID Program and reassess the PID Strategic Plan on a continuous basis.

## UNRESOLVED ITEMS

During the development of the PID Strategic Plan, there were several items that could not be resolved. Some represented ideas where a consensus could not be reached while other items represented ideas that were introduced late in the process and could not be evaluated.

The following list represents these ideas:

- Continue to seek ways to streamline PIDs. Caltrans should work with regional agencies to develop guidance and a template for a streamlined Project Study Report (PSR) for STIP candidate projects.

- Use the value analysis study approach for pre-PID meetings. Deputy level staff should attend the pre-PID meeting to ensure sufficient experience and decision-making capability. Fatal flaws should be identified early to avoid extensive work on alternatives that are not viable.
- Incorporate a risk management discussion into Chapter 9 (Project Initiation) of the *Project Development Procedures Manual* (PDPM).
- Provide a greater voice in the conflict resolution process for agencies funding the development of PIDs. The regions are concerned that conflict resolution process might delay the development of their PIDs.
- Streamline the development and approval of the Project Charter.
- Alternatives identified in PIDs should contain cost/benefit analyses.
- Examine other ways for regions to fund PIDs. Regions representing non-self help counties may be under-resourced to fund the development of reimbursed PIDs. The Planning, Programming, and Monitoring funds funded through the STIP are not sufficient for these agencies to fund the development of PIDs. Legislation would be needed for STIP funds to be used to fund PIDs.
- Approach the California Transportation Commission (CTC) and obtain guidance on developing streamlined Project Study Reports.

A PID Committee has been formed to evaluate and, if appropriate, implement the aforementioned ideas and continuously evaluate the effectiveness of the PID Program and the formal recommendations in the PID Strategic Plan. The PID Committee will also recommend further improvements for cost-sharing, reducing costs and delays, and streamlining procedures associated with the development and oversight of PIDs.

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#### RECOMMENDATION

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21. Caltrans has formed a PID Committee, including internal and external stakeholders, to continuously evaluate the effectiveness of the PID Program and the PID Strategic Plan. The PID Committee will also recommend further improvements related to cost-sharing, reducing costs and delays, and streamlining procedures associated with the development and oversight of PIDs. The PID Committee will meet quarterly, or as needed, and report its findings in annual January 10 updates of the PID Strategic Plan.

## IMPLEMENTATION OF THE RECOMMENDATIONS

### NEXT STEPS: IMPLEMENTATION OF THE RECOMMENDATIONS

The Division of Transportation Planning will coordinate with the PID Committee and the appropriate Caltrans headquarters and district functions to fully implement the recommendations. Some of the key recommendations will be fairly straightforward and will be implemented in the next three to six months, while more complex recommendations will require a significant level of effort and coordination. Table 1 contains general information related to the implementation of the key recommendations and Appendix "F" contains additional detail on the implementation of all of the recommendations outlined in the Strategic Plan.

**Table 1** Implementation of the Key Recommendations

Key Recommendations	Planned Implementation
<p><b>KR RECOMMENDATION #1:</b>  <b>PID Program Management: Shelf Management</b>            Three-Year Strategic Plan should be updated annually, January 10, by Caltrans district staff in coordination with the California Transportation Commission (CTC), Caltrans' Office of Projects and Plans Coordination, and the regional agencies. (See page 16)</p>	<p>Completed May 2010</p> <p>Next Scheduled Update January 10, 2011</p>
<p><b>KR RECOMMENDATION #2:</b>  <b>PID Program Management: Shelf Management</b>            Use established removal criteria to maintain a shelf inventory that supports the available level at funding. Criteria for assessing and determining the viability of the PID Shelf includes:</p> <ul style="list-style-type: none"> <li>• Validity of the original purpose and need.</li> <li>• Strategy and prospects for funding the project.</li> <li>• If imminently unfundable, whether the project is a regional priority.</li> </ul> <p>(See page 16)</p>	<p>Completed August 2010</p> <p>January 10, 2011</p>
<p><b>KR RECOMMENDATION #3:</b>  <b>PID Program Management: Workload Management</b>            The number of PIDs should not be limited to near-term STIP or SHOPP programming capacity, in order to be ready for funding opportunities and to build a long-term programming strategy, and be responsive to developer or local-fee program proposals. Criteria for selecting new projects and developing PID workload includes</p> <ol style="list-style-type: none"> <li>a) Correlate PIDs developed to likely funding sources.</li> <li>b) Identify projects that mitigate deficiencies in the transportation system (including safety and mandates).</li> <li>c) Verify that projects are included in a long-range plan.</li> </ol> <p>(See page 18)</p>	<p>Completed June 2010</p>

**Table 1** Implementation of the Key Recommendations

Key Recommendations	Planned Implementation
<p><b>KR RECOMMENDATION #6:</b>  <b>PID Program Improvements: Education and Outreach on Existing PID Processes and Procedures</b>            For internal and external stakeholders, enhance PID outreach activities for existing guidance and procedures that can be used to streamline the PID development process and reduce costs and delays. Caltrans is working with other State DOTs to do a comparison of PIDs and reimbursement. Information and ideas on how other DOTs develop PIDs or other similar documents will be investigated, specifically, how to better streamline the PID process, and implement PID reimbursement. (See page 20)</p>	September 2010 to August 2011
<p><b>KR RECOMMENDATION #8:</b>  <b>PID Program Improvements: Risk Management Process</b>            If project sponsors concur with the risk analysis, they must accept ownership and the ramifications for the risks associated with their projects. All identified risks and risk owners should be documented in the project's risk register. (see page 21)</p>	March 2011
<p><b>KR RECOMMENDATION #9:</b>  <b>PID Program Improvements: Risk Management Process</b>            Project sponsors must document the purpose and need, funding strategy, project deliverables, known constraints, potential fatal flaws, applicable cost-sharing terms, PID scope of work, assumptions, and risks in the project charter with concurrence of Caltrans, the project sponsor, the implementing agency, and the programming agency. This provides the necessary framework for developing a clear and concise PID scope of work. (see page 21)</p>	October 2010
<p><b>KR RECOMMENDATION #10:</b>  <b>PID Program Improvements: Conflict Resolution</b>            Caltrans' district director will convene an Executive Review Committee (Committee) in the event that conflict over the necessary content of the PID arises. The members of the Committee shall include Caltrans' headquarters (HQ) Design Coordinator, the HQ Project Management Liaison, the district's deputy director responsible for PIDs, and a local agency representative. The Committee will make a final recommendation to the district director. This activity will be coordinated with the PID Committee. (See page 22)</p>	March 2011
<p><b>KR RECOMMENDATION #14:</b>  <b>PID Program Improvements: Conflict Resolution</b>            As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program beginning FY 2011-12 whereby regional and local agencies would reimburse Caltrans for developing streamlined PID documents. Caltrans will use the existing Project Study Report-Project Development Support (PSR-PDS) document as the basis for the streamlined document until Caltrans and the regions agree on an approach to streamline PID documents for STIP candidate projects. The project sponsor and Caltrans district staff may negotiate cost-sharing terms for any additional work that may be agreed to at the pre-PID meeting (or may become necessary later). (See page 27)</p>	July 2011

**Table 1** Implementation of the Key Recommendations (continued)

Key Recommendations	Planned Implementation
<p><b>KR RECOMMENDATION #15:</b>  <b>PID Program Improvements: Cost-sharing and Reimbursement</b>            As stated in the Governor’s January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program for PID oversight and pre-PID activities beginning FY 2011-12. Under the program, project sponsors will reimburse Caltrans districts for all of the costs associated with Independent Quality Assurance (IQA), and the development of feasibility studies, major investment studies, and technical studies. In regards to studies, reimbursement will only apply to studies that Caltrans develops on behalf of regional and local agencies. Districts and project sponsors should have early and continual discussions to establish the viability of the project proposals, procedural requirements, and the schedule for various project deliverables. All agreements between Caltrans districts and the project sponsors should clearly identify cost-sharing terms and procedures. (See page 27)</p>	July 2011
<p><b>KR RECOMMENDATION #16:</b>  <b>PID Program Improvements: Improving PID Guidance and Estimating Costs</b>            Caltrans will proceed to use the Project Study Report-Project Development Support (PSR-PDS) to move locally-funded STIP candidate projects into the environmental phase. Amend Chapter 9 (Project Initiation) and Appendix L (Project Study Report) of the <i>Project Development Procedures Manual</i> (PDPM) to clarify the appropriate level of detail necessary to develop PIDs. The guidance should also clarify the use of <i>ball-park</i> or <i>order of magnitude</i> estimates and discuss the need to regularly update cost estimates prior to approval of the project report. (See page 29)</p>	December 2010
<p><b>KR RECOMMENDATION #18:</b>  <b>PID Program Improvements: Caltrans PID Oversight</b>            Caltrans intends to streamline PID review procedures for PID oversight activities. Caltrans is working in-house to develop a process that will standardize the review and approval of PIDs. The process will include a pilot program that will be implemented FY 2011-12 with full implementation FY 2012-13. (See page 30)</p>	July 2011
<p><b>KR RECOMMENDATION #21:</b>  <b>PID Program Improvements: Performance Measures/PID Improvement Committee</b>            Caltrans has formed a PID Committee, including internal and external stakeholders, to continuously evaluate the effectiveness of the PID Program and the PID Strategic Plan. The PID Committee will also recommend further improvements related to cost-sharing, reducing costs and delays, and streamlining procedures associated with the development and oversight of PIDs. The PID Committee will meet quarterly, or as needed, and report its findings in annual January 10 updates of the PID Strategic Plan. (See page 31)</p>	October 2011

## ADDRESSING THE LEGISLATIVE ANALYST OFFICE RECOMMENDATIONS

The LAO made several recommendations in its February 3, 2009, transportation report that apply to the Strategic Plan. Over the last several months, Caltrans has taken the following steps to address their recommendations

### BASE STAFFING ON WORKLOAD

Caltrans began using baseline funding levels in 2010-11 to fund high priority projects and vital PID program technical engineering support activities using selection criteria. This effort addresses the recommendation from the LAO that calls for Caltrans to align staffing for PID activities with workload. Examples of these activities include scoping documents for responding to emergencies; addressing collision reductions; complying with mandates; preserving over 12,559 of state highway bridges and 49,677 lane miles of state highways and 205,000 drainage culverts); conducting oversight activities on PIDs developed by regional and local agencies; and carrying out PID program technical engineering support activities.

### NO CRITERIA FOR SELECTING SHOPP PIDS

The LAO concluded that Caltrans had no established criteria for selecting SHOPP projects for which PIDs would be developed. Recommendations #3 and #4 address this recommendation and states that Caltrans will review its SHOPP PID inventory as part of the update of the 10-Year SHOPP. This process will help Caltrans tie the preparation of SHOPP PIDs with high statewide priorities.

### SIGNIFICANT GAPS IN DETERMINING AND MANAGING PID WORK

In its report, the LAO stated that Caltrans should have 1) criteria for determining the SHOPP projects for which PIDs should be prepared and 2) information about the viability of the projects on the PID shelf. The following PID Strategic Plan recommendations address these areas:

**Recommendation #1:** Develop a three-year PID Strategic Plan to be updated annually, by January 10 of every year, by Caltrans in coordination with the California Transportation Commission (CTC), Caltrans' Office of Projects and Plans Coordination, and the regional agencies.

**Recommendation #2:** Caltrans and regional agencies will collaborate using defined criteria to maintain a shelf inventory that supports the level of available funding. They will carefully review the existing shelf to determine which projects should remain; looking at :

- Validity of the original purpose and need.
- Strategy and prospects for funding the project.
- If imminently unfundable, whether the project is a regional priority.

**Recommendation #3:** The number of PIDs should not be limited to near-term STIP or SHOPP programming capacity, in order to be ready for funding opportunities and to build a long-term programming strategy, and be responsive to developer or local-fee program proposals. Criteria for selecting new projects and developing PID workload includes:

- a) Correlate PIDs developed to likely funding sources.
- b) Projects address deficiencies identified on the transportation system (including Safety and Mandates.
- c) Included in a long-range plan.

**Recommendation #4:** Review the SHOPP PID inventory annually as part of the update of the 10-Year SHOPP.

**Recommendation #5:** Caltrans districts and regional agencies work together to prepare a variety of STIP candidate projects to be ready for programming opportunities.

## ADDRESSING THE PID IMPROVEMENTS IN THE FEBRUARY 20, 2009 BUDGET ACT

The February 20, 2009, Budget Act required that Caltrans, no later than October 1, 2009, "...convene a working group in partnership with local agencies to identify options to share costs, lower costs, streamline procedures, and reduce delays associated with project development documents." In August 2009, Caltrans formed a PID Committee to investigate these issues in response to the budget language. Over the course of six weeks, five subgroups deliberated various topics related to the PID such as PID scopes of work, cost-sharing, and risk management, and environmental issues.

After undergoing this process, all of the PID stakeholders recognized that additional discussions and analyses will be required for some of the more complex topics such as PID scopes of work and cost-sharing. Over the course of six weeks, the subgroups discussing these topics could not reach a consensus on how to move forward. This might be explained by the fact that PID program requires the involvement and cooperation of Caltrans HQ staff, 12 Caltrans district offices, several regional and local agencies, and numerous private consulting firms. Furthermore, the PID documents represent planning for the development of several billions of dollars in capi-

tal improvement projects. Any changes to the program could adversely impact these projects and how they are programmed, timed, and redelivered.

Caltrans supports improving the PID Program. However, as owner and operator of the SHS, Caltrans firmly believes that any changes to the PID Program must be thoroughly vetted and carefully evaluated prior to implementation to ensure that its future liability is not negatively impacted and the changes do, in fact, improve the effectiveness of the program.

Caltrans is recommending the following measures to ensure that the language related to improving PIDs in the 2009 Budget Bill language are met: 1) establish a pilot program that implements complex issues such as cost-sharing and use performance measures to monitor the effectiveness of the program over time, 2) educate Caltrans' district staff, regional and local agencies, and the private sector on existing underutilized guidance and procedures that can lower costs and reduce delays associated with the PID development, and 3) form a PID Committee that will continuously evaluate the effectiveness of the recommendations in the Strategic Plan and recommend further improvements related to sharing costs, lowering costs, streamlining procedures, and reducing delays associated with PIDs. The PID Committee will report its findings in annual updates of the PID Strategic Plan.

Table 2 on page 42 illustrates the recommendations that are intended to address the language related to improving PIDs in the 2009 Budget Bill. Please keep in mind that Caltrans could not conduct any formal analysis on the cost savings and reduction in delays of these recommendations. Analysis of potential cost and time savings could not be performed because 1) there are no established performance measures or existing data that will enable Caltrans to adequately analyze the effectiveness of the recommendations and 2) the effectiveness of the recommendations have to be measured over time using performance measures. The Caltrans PID Program is currently working to implement performance measures to evaluate the effectiveness of the program.

**Table 2 Recommendations that Address the PID Improvements in the February 20, 2009 Budget Act**

Recommendations	Streamline	Reducing Delays	Reducing Cost	Sharing Costs
<p>6. <b>KR</b> For internal and external stakeholders, enhance PID outreach activities for existing guidance and procedures that can be used to streamline the PID development process and reduce costs and delays. Caltrans is working with other State DOTs to do a comparison of PIDs and reimbursement. Information and ideas on how other DOTs develop PIDs or other similar documents will be investigated, specifically, how to better streamline the PID process, and implement PID reimbursement.</p>	X	X	X	
<p>7. Hold a series of statewide PID training program. The training will be available for all PID stakeholders. The conferences will be designed to educate all PID stakeholders on existing PID policies and procedures and developing more effective PIDs.</p>	X	X	X	
<p>8. <b>KR</b> If the project sponsors concur with the risk analysis, project sponsors must accept ownership and the ramifications for the risks associated with their projects. All identified risks and risk owners should be documented in the project’s risk register.</p>	X	X	X	
<p>9. <b>KR</b> Project sponsors must document the purpose and need, funding strategy, potential fatal flaws, applicable cost-sharing terms, PID scope of work, project deliverables, known constraints, assumptions, and risks in the PID charter in concurrence with Caltrans and the project sponsor at the pre-PID. This provides the necessary framework for developing a clear and concise PID scope of work.</p>	X	X	X	
<p>10. <b>KR</b> A Caltrans district director will convene an Executive Review Committee if conflict over the necessary content of the PID arises. The members of the Committee shall include Caltrans’ headquarters (HQ) Capital Design Coordinator, the HQ Project Management Liaison, the district’s deputy director responsible for PIDs, and a local agency representative. The Committee will make a final recommendation to the district director. This activity will be coordinated with the PID Committee.</p>	X	X	X	
<p>11. Develop a conflict resolution process that incorporates Caltrans and project sponsor concurrence on purpose and need, and update the PDPM and policy documents to include conflict resolution.</p>	X	X	X	
<p>12. Hold pre-PID meeting with stakeholders. The Project Development Team (PDT) should assess the quality of existing data, document the project’s purpose and need, discuss the scope of the PID, and determine roles and responsibilities. All of this information should be documented in the project charter. Checklists for risk management and other technical issues (e.g., geotechnical, stormwater, etc.) should be used to help assess the need to report or investigate potentially significant and likely risks and prescribe specific studies for the PID. All discussions should be documented and used as a basis for any future agreements.</p>	X	X	X	

**Table 2** Recommendations that Address the PID Improvements in the February 20, 2009 Budget Act (Continued)

Recommendations	Streamline	Reducing Delays	Reducing Cost	Sharing Costs
13. When appropriate, hold a pre-PEAR meeting to review the PEAR checklist, focus environmental work, improve communications, define expectations, and estimate environmental work schedules.	X	X	X	
<b>KR</b> 14. As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program beginning FY 2011-12 whereby regional and local agencies would reimburse Caltrans for developing streamlined PID documents. Caltrans will use the existing Project Study Report-Project Development Support (PSR-PDS) document as the basis for the streamlined document until Caltrans and the regions agree on an approach to streamline PID documents for STIP candidate projects. The project sponsor and Caltrans district staff may negotiate cost-sharing terms for any additional work that may be agreed to at the pre-PID meeting (or may become necessary later).		X	X	
<b>KR</b> 15. As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program for PID oversight and pre-PID activities beginning FY 2010-11. Under the program, project sponsors will reimburse Caltrans districts for all of the costs associated with Independent Quality Assurance (IQA), and the development of feasibility studies, major investment studies, and technical studies. In regards to studies, reimbursement will only apply to studies that Caltrans develops on behalf of regional and local agencies. Districts and project sponsors should have early and continual discussions to establish the viability of the project proposals, procedural requirements, and the schedule for various project deliverables. All agreements between Caltrans districts and the project sponsors should clearly identify cost-sharing terms and procedures.		X		X
<b>KR</b> 16. Caltrans will proceed to use the Project Study Report-Project Development Support (PSR-PDS) to move locally-funded STIP candidate projects into the environmental phase. Amend Chapter 9 (Project Initiation) and Appendix L (Project Study Report) of the <i>Project Development Procedures Manual</i> (PDPM) to clarify the appropriate level of detail necessary to develop PIDs. The guidance should also clarify the use of <i>ballpark</i> and <i>order of magnitude</i> estimates and discuss the need to regularly update cost estimates prior to approval of the project report.	X	X	X	
17. Evaluate the feasibility of maintaining separate procedures and guidance for STIP and SHOPP projects.	X			
<b>KR</b> 18. Caltrans intends to streamline PID review procedures for PID oversight activities. Caltrans is working in-house to develop a process that will standardize the review and approval of PIDs. The process will include a pilot program that will be implemented FY 2011-12 with full implementation FY 2012-13 for PID oversight activities.	X	X		

**Table 2** Recommendations that Address the PID Improvements in the February 20, 2009 Budget Act (Continued)

Recommendations	Streamline	Reducing Delays	Reducing Cost	Sharing Costs
19. Ensure that each Caltrans district has well-trained staff to guide the work of PID oversight activities.	X	X		
20. Caltrans should develop and use performance measures to manage the PID program and reassess the PID Strategic Plan on a continuous basis.	X	X	X	
<b>KR</b> 21. Caltrans has formed a PID Committee, including internal and external stakeholders, to continuously evaluate the effectiveness of the PID Program and the PID Strategic Plan. The PID Committee will also recommend further improvements related to cost-sharing, reducing costs and delays, and streamlining procedures associated with the development and oversight of PIDs. The PID Committee will meet quarterly, or as needed, and report its findings in annual January 10 updates of the PID Strategic Plan.	X	X	X	X

## CONCLUSION

Caltrans' response to the LAO's concerns was immediate. A workgroup, comprised of internal and external stakeholders, was assembled to develop the framework for the PID Strategic Plan. In this process, Caltrans' goal is to effectively deploy and manage planning resources.

A strategic approach was undertaken to:

- Maximize funding opportunities.
- Manage the risks and opportunities with dynamic funding.
- Actively and strategically manage the completed PIDs on the shelf.
- Ensure an efficient use of resources in PID development.
- Align resources and staffing needs with current and future PID workload.

The three primary components of the PID Strategic and Streamlining effort are:

1. Establish a transparent process where we identify, document, and manage the PID program.
2. Generate a three-year PID Strategic Plan to be updated annually, or more often, as needed.
3. Target and link all PIDs to potential funding sources.

The Strategic Plan workgroup has identified several improvements for PID preparation: PEAR, scope of work, stormwater, cost-sharing and reimbursement, and risk management. The commitment of our efforts, to identify measures for streamlining the PID development and ensuring efficiencies, is demonstrated by the formation of a PID Committee, dedicated to both the continual implementation of recommendations found within this report, and in identifying additional efficiencies in the PID development process.

To preserve and continue the momentum developed, it is essential that we measure the effectiveness of this Strategic Plan and streamlining efforts through the use of annual performance measures. The PID Committee will implement a PID pilot program in FY 2011-12 with full implementation in FY 2012-13. Once data from the PID pilot program can be analyzed, the PID Committee will review the performance measures process at regular intervals. If course corrections are necessary, the PID Committee will identify them and present them to the Caltrans' Office of Projects/Plans Coordination and other PIDs stakeholders at the annual review, by January 10, of each year.

Caltrans is dedicated to ensure the transparency and efficiency of our stewardship of all State resources. This PID Strategic Plan demonstrates our commitment and strategy in achieving these goals.

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**APPENDICES**

**APPENDIX A-1**

**THREE-YEAR SHOPP PROJECT LISTING SUMMARY  
FOR PROPOSED PID DEVELOPMENT**

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Appendix A-1: Three-Year SHOPP Project Summary for Proposed PID Development During FY 2011-12 Through 2013-14

District	1	2	3	4	5	6	7	8	9	10	11	12	Grand Total
FY 2011-12	24	21	18	105	67	17	94	8	6	33	22	38	453
Estimated Total PY Cost	14.37	8.2	9.3	73.05	34.7	15.5	103.8	8.65	3.9	12.1	28.2	30.4	342.17
Project Cost with Support (\$M)	\$84.10	\$174.08	\$120.20	\$570.26	\$311.55	\$449.43	\$1,141.57	\$250.80	\$15.60	\$282.48	\$56.69	\$82.82	\$3,539.58
FY 2012-13	17	19	14	74	56	16	23	24	4	39	25	17	328
Estimated Total PY Cost	11.86	17.6	9.6	69.65	38.95	11.9	71.8	29	2.85	26.6	42.4	31.5	363.71
Project Cost with Support (\$M)	\$68.26	\$64.90	\$97.74	\$541.00	\$291.87	\$113.90	\$267.51	\$388.40	\$11.80	\$150.15	\$45.40	\$43.06	\$2,083.98
FY 2013-14	17	8	19	83	10	21	6	20	3	42	4	49	282
Estimated Total PY Cost	12	10.9	11.6	69.85	16.75	18.8	26	6.7	1.85	27.9	20.6	47.4	270.35
Project Cost with Support (\$M)	\$91.66	\$41.02	\$127.38	\$442.55	\$19.70	\$138.17	\$75.50	\$250.70	\$4.00	\$223.09	\$9.30	\$320.07	\$1,743.13
<b>Total Number of Projects</b>	<b>58</b>	<b>48</b>	<b>51</b>	<b>262</b>	<b>133</b>	<b>54</b>	<b>123</b>	<b>52</b>	<b>13</b>	<b>114</b>	<b>51</b>	<b>104</b>	<b>1063</b>
<b>Total PY Cost</b>	<b>38.23</b>	<b>36.7</b>	<b>30.5</b>	<b>212.55</b>	<b>90.4</b>	<b>46.2</b>	<b>201.6</b>	<b>44.35</b>	<b>8.6</b>	<b>66.6</b>	<b>91.2</b>	<b>109.3</b>	<b>976.23</b>
<b>Total Cost with Support (\$M)</b>	<b>\$244.02</b>	<b>\$280.00</b>	<b>\$345.32</b>	<b>\$1,553.81</b>	<b>\$623.12</b>	<b>\$701.50</b>	<b>\$1,484.58</b>	<b>\$889.90</b>	<b>\$31.40</b>	<b>\$655.72</b>	<b>\$111.39</b>	<b>\$445.95</b>	<b>\$7,366.70</b>

Note: For projects that carryover, project count and cost will be captured in the first year. Actual PY cost may be spread over multiple FYs through the life of the project. Projects without estimated costs are given a default value of \$1 million.

Note: Projects carried over from year to year will only be captured once. Projects without estimated costs are given a default value of \$1 million.

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**APPENDICES**

**APPENDIX A-2**

**THREE-YEAR SHOPP PROJECT LISTING  
FOR PROPOSED PID DEVELOPMENT**

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**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During  
FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
1	HUM	101	77.27	77.64	Intersection Improvement	TBD	TBD	0.6			\$1.70	Collision Reduction	PSR
1	HUM	299	23.2	23.55	Curve Improvement	TBD	TBD	0.4			\$2.50	Collision Reduction	PSR
1	HUM	299	31.32	31.82	Superelevation Improvement	TBD	TBD	0.4			\$1.30	Collision Reduction	PR/PSR
1	HUM	299	21.10	21.40	Curve Improvement	TBD	TBD	0.4			\$2.50	Collision Reduction	PSR
1	HUM	96	8.40	8.80	Curve Improvement	TBD	TBD	0.5			\$2.90	Collision Reduction	PSR
1	HUM	96	3.80	4.30	Curve Improvement	TBD	TBD	0.5			\$2.20	Collision Reduction	PSR
1	DN	101	35.9	46.49	Various Safety Improvements	TBD	TBD	0.8			\$8.00	Collision Reduction	PSR
1	DN	101	43.56		Intersection Improvement	TBD	TBD	0.5			\$2.00	Collision Reduction	PSR
1	LAK	29	9.87		Intersection Improvement	TBD	TBD	0.5			\$2.00	Collision Reduction	PSR
1	DN	199	0.75		Intersection Improvement	TBD	TBD	0.5			\$3.00	Collision Reduction	PSR
1	HUM	101	VAR	VAR	ADA Curb Improvements	TBD	TBD	0.4			\$1.60	Mandates	PR/PSR
1	VAR	VAR	VAR	VAR	Hazardous Waste Mitigation Project Placeholder	TBD	TBD	0.4			\$1.00	Mandates	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD	0.5			\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD	0.5			\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD	0.5			\$4.00	Collision Reduction	PSR
1	DN	199	0.14	24.47	015 MBGR Project	TBD	TBD	0.5			\$2.50	Collision Reduction	PR/PSR
1	HUM	299	0.0	42.30	015 MBGR Project	TBD	TBD	0.5			\$3.50	Collision Reduction	PSR
1	MEN	VAR	VAR	VAR	015 MBGR Project	TBD	TBD	0.5			\$2.50	Collision Reduction	PSR
1	MEN	101	99.0	100.0	015 Pedestrian Fencing	TBD	TBD	0.3			\$1.00	Collision Reduction	SCVP
1	DN	101 199	VAR	VAR	Bridge Seismic Retrofit	TBD	TBD	1.2			\$5.08	Bridge	PSSR
1	HUM	101	VAR	VAR	Bridge Seismic Retrofit	TBD	TBD	1.1			\$6.74	Bridge	PSSR
1	HUM	299	R11.1	R11.4	Realign Highway	TBD	TBD	0.9			\$3.70	Roadway	PSR
1	HUM	299	R28.0	R29.0	Stabilize Roadway (repair push-up)	TBD	TBD	1.0			\$8.10	Roadway	PSR
1	LAK	20	16.5	19.1	Reconstruct Subgrade and Roadbed	TBD	TBD	1.0			\$8.28	Roadway	PSR
1	HUM	96	10.50	10.70	Curve Improvement	TBD	TBD		0.5		\$2.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD		0.5		\$4.00	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	Hazardous Waste Mitigation Project Placeholder	TBD	TBD		0.4		\$1.00	Mandates	PSR
1	VAR	VAR	VAR	VAR	ADA Curb Improvements	TBD	TBD		0.4		\$1.60	Mandates	PSR
1	VAR	VAR	VAR	VAR	015 Safety Project Placeholder	TBD	TBD		0.8		\$1.30	Collision	PSR
1	VAR	VAR	VAR	VAR	015 Safety Project Placeholder	TBD	TBD		0.8		\$1.30	Collision	PSR
1	HUM	283	0.1	0.1	Bridge Seismic Retrofit	TBD	TBD		1.5		\$4.35	Bridge	PSSR
1	MEN	1 271 101	VAR	VAR	Bridge Seismic Retrofit	TBD	TBD		1.7		\$3.11	Bridge	PSSR
1	MEN	253	0.0	17.2	CAPM	TBD	TBD		0.8		\$13.40	Roadway	PSSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
1	DN	101	15.7	26.2	CAPM AC- Overlay	TBD	TBD		0.8		\$9.10	Roadway	PSSR
1	HUM	101 299	60.3	98.5	Increase Vertical Clearance	TBD	TBD		0.7		\$3.10	Mobility	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	010 Safety Project Placeholder	TBD	TBD			0.5	\$4.00	Collision	PSR
1	VAR	VAR	VAR	VAR	Hazardous Waste Mitigation Project Placeholder	TBD	TBD			0.4	\$1.00	Mandates	PSR
1	VAR	VAR	VAR	VAR	ADA Curb Improvements	TBD	TBD			0.4	\$1.60	Mandates	PSR
1	VAR	VAR	VAR	VAR	015 Safety Project Placeholder	TBD	TBD			0.8	\$1.30	Collision Reduction	PSR
1	VAR	VAR	VAR	VAR	015 Safety Project Placeholder	TBD	TBD			0.8	\$1.30	Collision Reduction	PSR
1	HUM	96 101	VAR	VAR	Bridge Seismic Retrofit	TBD	TBD			1.9	\$5.17	Bridge	PSSR
1	MEN	101 162	VAR	VAR	Bridge Seismic Retrofit	TBD	TBD			1.2	\$4.29	Bridge	PSSR
1	DN	101	31.2	46.5	Roadway Rehab and Bridge Replacement	TBD	TBD			0.9	\$40.90	Roadway	PSSR
1	HUM	101	R16.1	R17.6	Remove Slides and Place Buttress	TBD	TBD			0.7	\$2.60	Roadway	PSR
1	LAK	20	26.0	27.0	Construct Retaining Wall	TBD	TBD			1.0	\$1.50	Roadway	PSR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.2	0		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.4	0.0		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.8	0.8		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.8	0.8		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.8	0.8		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.8	0.8		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.8	0.8		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.8	0.8		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.8	0.8		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.6	0.2		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.4	0.4		\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.2	0.6	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.4	0.4	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.8	0.8	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.8	0.8	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.8	0.8	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.8	0.8	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.8	0.8	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.6	0.2	\$1.00	Collision Reduction	PSR-PR
2	TBD	TBD	TBD	TBD	TBD	TBD	TBD		0.4	0.4	\$1.00	Collision Reduction	PSR-PR
2	SIS	5	0	69.3	Collision Severity Reduction	TBD	2012	0.2			\$9.00	Roadway	PSR
2	SHA	44	3	6.9	Soft Median	TBD	2014		0.8	0.2	\$1.00	Collision Reduction	PSR
2	PLU	70	0.1	35.1	Upgrade and add MBGR or BAGR	TBD	2014		0.8	0.2	\$1.00	Roadway	PSSR
2	PLU	36	6.4	12.8	Extend Life of Pavement and Improve Ride	TBD	2012	0.2			\$11.00	Roadway	PSSR
2	Sis	5	19	25.3	Pavement Rehabilitaton	TBD	2012	0.2			\$25.00	Roadway	PSSR
2	TBD	TBD	TBD	TBD	Extend Life of Pavement and Improve Ride	TBD	2012	0.2			\$2.00	Roadway	PSSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total IPY Cost for PID for FY 11/12	Estimated Total IPY Cost for PID for FY 12/13	Estimated Total IPY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
2	LAS	299	18.5	25.6	Pavement Rehabilitation	TBD	2012	0.2			\$9.37	Roadway	PSSR
2	TEH	36,99	41.0/44.0	24.9/24.9	Extend Life of Pavement and Improve Ride	TBD	2012	0.2			\$7.00	Roadway	PR
2	SHA	299	6.5	18.5	Extend Life of Pavement and Improve Ride	TBD	2012	0.2			\$20.00	Roadway	PSSR
2	SHA	273	4.3, 11.0	7.1, 12.5	Extend Life of Pavement and Improve Ride	TBD	2012	0.2			\$15.00	Roadway	PSSR
2	SIS	5	51.2	58	Extend Life of Pavement and Improve Ride	TBD	2012	0.2	0.5		\$40.00	Roadway	PSSR
2	Sha	151	3.4	6.7	Improve ride and reduce maintenance	TBD	2012	0.2			\$8.71	Roadway	PR
2	TRI	299	36.9	53.5	Improve ride and reduce maintenance	TBD	2014	0.2	0.6	0.1	\$21.91	Roadway	PR
2	LAS/SIE	395	0/0	5.6/3.1	Improve ride and reduce maintenance	TBD	2014		0.5	0.1	\$11.48	Roadway	PR
2	Sha	44	7.5	14.5	Improve ride and reduce maintenance	TBD	2016			0.2	\$4.62	Roadway	PR
2	Las	139	0	40	Improve ride and reduce maintenance	TBD	2016			0.2	\$26.40	Roadway	PR
2	TEH	5	25.4	-	Seismic Retrofit	TBD	2016			0.4	\$1.00	Bridge	PSSR
2	SIS	5	58.18	-	Seismic Retrofit	TBD	2016			0.4	\$1.00	Bridge	PSSR
2	SIS	263	57.07		Bridge Replacement	TBD	2012	0.2			\$16.00	Bridge	PSSR
2	PLU	147	8.98		Deck has deteriorated. Deck integrity needs to be improved.	TBD	2012	0.2			\$2.00	Bridge	PSSR
2	SIS	5	68.33		Bridge	TBD	2014		0.9	0.1	\$1.50	Bridge	PSSR
2	TRI	3	15	50	Drainage	TBD	2014		0.8	0.2	\$4.00	Roadway	PSR
2	SIS	96	VAR	VAR	Address Substandard Rail Issue	TBD	2014		0.1	0.2	\$6.00	Bridge	PSSR
2	Mod	299	0.51		Replace Deck (Or replace bridge per future APS)	TBD	2014		0.8	0.2	\$4.00	Bridge	PSSR
2	Mod	299	1.02		Replace Deck (Or replace bridge per future APS)	TBD	2014		0.8	0.2	\$4.00	Bridge	PSSR
2	Sis	89	21.08		Replace Bridge	TBD	2016			0.8	\$2.00	Bridge	PSSR
2	Sha	5	57.41		Replace Superstructure (or Replece Bridge)	TBD	2016			0.8	\$4.00	Bridge	PSSR
2	TRI	299	0	72	Safety Device Paving/vehicle pullouts	TBD	2016			0.4	\$1.00	Roadside	TBD
2	TBD	TBD	TBD	TBD	ADA	TBD	2014		0.8	0.2	\$1.00	Mandates	PSR
2	TBD	TBD	TBD	TBD	ADA	TBD	2016			0.4	\$1.00	Mandates	PSR
3	SAC	99	7.36	8.40	Rail Upgrade	TBD	2014/15			1.00	\$3.00	Bridge	PSSR
3	NEV	80	28	28	Bridge Preservation (paint)	TBD	2013/14		1.00		\$2.60	Bridge	PSSR
3	COL	5	R2.3	R13.8	Modify Structure VC	TBD	2014/15			1.00	\$2.00	Bridge	PSSR
3	SAC	Var	Var	Var	ITS / Detection / Cameras	TBD	2014/15			0.40	\$1.00	Mobility	PSR
3	SAC	Var	Var	Var	Ramp meters	TBD	2014/15			1.00	\$3.00	Mobility	PSR
3	PLA	80	33.00	45.00	Drainage Rehab	TBD	2012/13	0.20			\$3.50	Roadway	PSSR
3	ED	49	9.50	12.80	Drainage Rehab	TBD	2013/14	0.60			\$3.50	Roadway	PSSR
3	PLA	80	22.00	33.00	Drainage Rehab	TBD	2013/14	0.60			\$3.50	Roadway	PSSR
3	PLA	267	0.25	6.70	Drainage Rehab	TBD	2014/15	0.60			\$3.00	Roadway	PSSR
3	ED	50	24.00	32.00	Drainage Rehab	TBD	2014/15		0.60		\$3.00	Roadway	PSSR
3	NEV	49	15.00	32.60	Drainage Rehab	TBD	2014/15			0.60	\$4.00	Roadway	PSSR
3	ED	50	39.00	54.00	Drainage Rehab	TBD	2014/15			0.60	\$3.00	Roadway	PSSR
3	YUB	20	R18.0	21.70	Roadway Rehab	TBD	2011/12	0.50			\$30.00	Roadway	PSSR
3	PLA	89	13.50	21.67	Roadway Rehab	TBD	2011/12	0.50			\$6.00	Roadway	PSSR
3	PLA	267	0.00	6.80	Roadway Rehab - Cold Foam Recycle	TBD	2012/13	0.50			\$11.00	Roadway	PSSR
3	BUT	70	9.20	17.00	Roadway Rehab	TBD	2014/15		0.50		\$10.00	Roadway	PSSR
3	SAC	12	0.38	6.07	Roadway Rehab	TBD	2015/16			0.50	\$6.00	Roadway	PSSR
3	SAC	160	L1.2	L10.8	Roadway Rehab	TBD	2014/15		0.50		\$19.20	Roadway	PSSR
3	SUT	20	5.40	11.10	Roadway Rehab	TBD	2014/15			0.50	\$11.00	Roadway	PSSR
3	COL	20	31.00	33.10	Roadway Rehab	TBD	2014/15			0.50	\$8.00	Roadway	PSSR
3	YUB	20	13.30	R17.80	Roadway Rehab	TBD	2015/16			0.50	\$13.80	Roadway	PSSR
3	YUB	20	8.00	10.20	Roadway Rehab	TBD	2014/15			0.50	\$5.00	Roadway	PSSR
3	ED	49	23.90	35.00	Roadway Rehab	TBD	2015/16			0.50	\$22.00	Roadway	PSSR
3	NEV	20	R12.4	R17.5	Roadway Rehab	TBD	2015/16			0.50	\$16.00	Roadway	PSSR
3	SAC	104	1.50	17.70	CIR w/AC Overlay	TBD	2015/16	0.30			\$8.10	Roadway	CAPM PR
3	PLA	193	3.30	10.40	AC Overlay	TBD	2015/16	0.30			\$4.30	Roadway	CAPM PR
3	YOL	128	0.00	9.80	AC Overlay	TBD	2015/16	0.30			\$6.00	Roadway	CAPM PR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
3	NEV	174	0.00	10.21	AC Overlay	TBD	2015/16	0.30			\$6.20	Roadway	CAPM PR
3	SIE	89	0.00	15.06	CIR w/AC Overlay	TBD	2014/15	0.30			\$7.60	Roadway	CAPM PR
3	YUB	49	0.00	9.40	CIR w/AC Overlay	TBD	2014/15		0.30		\$4.70	Roadway	CAPM PR
3	YOL	84	0.00	15.69	AC Overlay	TBD	2015/16		0.30		\$9.40	Roadway	CAPM PR
3	YOL	45	0.00	12.90	CIR w/AC Overlay	TBD	2015/16		0.30		\$6.50	Roadway	CAPM PR
3	COL	45	0.00	19.84	CIR w/AC Overlay	TBD	2015/16		0.30		\$10.00	Roadway	CAPM PR
3	GLE	162	65.50	84.60	CIR w/AC Overlay	TBD	2015/16		0.30		\$10.20	Roadway	CAPM PR
3	GLE	45	0.00	17.20	CIR w/AC Overlay	TBD	2014/15		0.30		\$8.60	Roadway	CAPM PR
3	NEV	49	15.00	R32.6	AC Overlay	TBD	2014/15		0.30		\$10.60	Roadway	CAPM PR
3	SAC	51	4.5	6	Highway Planting/Irrigation Restoration	#####	2011/12	0.20			\$4.10	Roadside	PSR
3	BUT	99	R33.9	R35.3	Highway Planting/Irrigation Restoration	9/4/2007	2011/12	0.20			\$5.75	Roadside	PSSR
3	Var	5,50,51, 80,99	Var	Var	Construct MVPs, install/replace stairways for access, repair fencing, repair gates, install access gates, install access roads.	TBD	2012/13	1.00			\$3.20	Roadside	PSSR
3	SAC	5	2	2.5	Private Enterprise Partnership New Roadside Rest Area	TBD	2012/13	1.50			\$7.25	Roadside	PSR
3	SAC	99	21.75	22.2	Highway Planting/Irrigation Restoration	TBD	2012/13	0.50			\$3.75	Roadside	PSR
3	BUT	32	10.1	11.1	Highway Planting/Irrigation Restoration	TBD	2012/13	0.30			\$3.45	Roadside	PSR
3	SAC	5	2	30.2	Gore Point and MVP Paving	TBD	2013/14		1.00		\$3.75	Roadside	PSR
3	Yol	5	5.3	25.7	Gore Point and MVP Paving	TBD	2013/14		1.00		\$3.00	Roadside	PSR
3	PLA	80	60		Private Enterprise Partnership New Roadside Rest Area	TBD	2013/14		1.50		\$6.25	Roadside	PSR
3	SAC	99			Highway Planting/Irrigation Restoration	TBD	2014/15			0.50	\$2.90	Roadside	PSR
3	BUT	70	8.3	15.5	Highway Planting/Irrigation Restoration	TBD	2014/15			0.50	\$2.98	Roadside	PSR
3	Var	50	2.4	9.5	Gore Point and MVP Paving	TBD	2014/15			1.00	\$3.35	Roadside	PSR
3	NEV	80	15		Private Enterprise Partnership New Roadside Rest Area	TBD	2014/15			1.50	\$6.25	Roadside	PSR
3	NEV	80	19.10	19.40	Station Upgrades	TBD	2015/16	0.30	0.70		\$1.32	Mobility	PSSR
3	SAC	5	25.70	26.40	Gore Paving and MVP Locations	TBD	2014/15	0.30	0.70		\$2.72	Roadside	PSSR
4	SCL	9	4.9	4.9	Replace bridge (Listed on the national registry)	2014/15	2012	0.60	0.40		\$10.20	Bridge	PSSR
4	SF	101	2.0	2.0	Deck replacement	2014/15	2012	0.60	0.40		\$16.00	Bridge	PSSR
4	SM	101	7.1	7.1	Replace bridge	TBD	TBD		1.2		\$4.70	Bridge	PSSR
4	ALA	580	44.3	44.3	Deck Rehab	TBD	TBD		0.8		\$8.80	Bridge	PSSR
4	SCL	237	R0.61	R0.61	Superstructure rehab	TBD	TBD		0.8		\$3.50	Bridge	PSSR
4	ALA	680	11.0	11.0	Deck Rehab/ Paint	TBD	TBD		0.8		\$4.70	Bridge	PSSR
4	CC	242	R1.6	R1.6	Bridge Rehabilitation	TBD	TBD		1.0		\$13.00	Bridge	PSSR
4	NAP	121	18.6	18.6	Replace bridge	TBD	TBD		1.2		\$8.00	Bridge	PSSR
4	ALA	580	R27	R27	Deck Rehab/Replace	TBD	TBD			0.8	\$6.00	Bridge	PSSR
4	SON	121	6.5	8.4	Replace Bridge	TBD	TBD			1.2	\$6.80	Bridge	PSSR
4	MRN	1	22.8	22.8	Replace bridge	TBD	TBD			1.2	\$5.50	Bridge	PSSR
4	ALA	880	11.8	11.8	Bridge deck replacement	TBD	TBD			0.8	\$10.80	Bridge	PSSR
4	NAP	128	18.6	20.2	Replace bridge	TBD	TBD			1.2	\$19.00	Bridge	PSSR
4	SCL	85	R20.02	R20.02	Deck Replacement	TBD	TBD			0.8	\$3.00	Bridge	PSSR
4	SM	1	44.0	44.0	Replace bridge	TBD	TBD			1.2	\$4.00	Bridge	PSSR
4	SON	12	33.3	33.3	Scour Replace Bridge	2014/15	2012	0.60	0.40		\$5.50	Bridge	PSSR
4	NAP	29	37.0	37.0	Scour Replace Bridge	2014/15	2012	0.60	0.40		\$6.80	Bridge	PSSR
4	SCL	101	0.0	4.2	Bridge Rail Replacement/Upgrade	TBD	TBD			0.6	\$2.10	Bridge	PSSR
4	NAP	29	0.5	39.1	Bridge Rail Replacement/Upgrade	TBD	TBD			0.6	\$2.50	Bridge	PSSR
4	ALA	13	6.5	13.9	Bridge Rail Replacement/Upgrade	TBD	TBD			0.6	\$5.10	Bridge	PSSR
4	ALA	80	4.5	5.8	Bridge Rail Replacement/Upgrade	TBD	TBD			0.6	\$2.50	Bridge	PSSR
4	SM	101	14.7	16.6	Bridge Rail Replacement/Upgrade	TBD	TBD			0.6	\$3.60	Bridge	PSSR
4	ALA CC	880	10.7	10.7	Seismic retrofit	2014/15	2012	0.60	0.40		\$5.00	Bridge	PSSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
4	ALA	80	5.8	EB	Raise the O/C- Sub Standard VC	2015/16	2012	0.60	0.40		\$5.50	Bridge	PSSR
4	SOL	80	4.4	EB	Raise the O/C- Sub Standard VC	2015/16	2012	0.60	0.40		\$5.50	Bridge	PSSR
4	ALA	80	2.8	EB	Raise the O/C- Sub Standard VC	TBD	TBD		0.8		\$5.00	Bridge	PSSR
4	SOL	80	1.1	1.5	Strengthen the Bridge	TBD	TBD		0.8		\$5.00	Bridge	PSSR
4	SOL	80	3.2	WB	Raise the O/C- Sub Standard VC	TBD	TBD			0.8	\$3.00	Bridge	PSSR
4	ALA	80	4.6	EB	Raise the O/C- Sub Standard VC	TBD	TBD			0.8	\$3.00	Bridge	PSSR
4	SM	TBD	TBD	TBD	extend soft median barrier	2012/13	2010	0.50			\$1.30	Collision Reduction	PSR/PR
4	Son	TBD	TBD	TBD	construct left turn lane	2015/16	2012	0.50			\$1.17	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	Install rumble strip barrier	2012/13	2010	0.50			\$0.91	Collision Reduction	PSR/PR
4	Sol SM	TBD	TBD	TBD	signalize intersection	2015/16	2012	0.50			\$1.43	Collision Reduction	PSR/PR
4	SM	TBD	TBD	TBD	install left turn channelization	2012/13	2010	0.50			\$1.44	Collision Reduction	TBD
4	SCL	82	14.8	17.0	Upgrade Existing Drainage System	2012/13	2012	0.5			\$1.00	Collision Reduction	PSR-PR
4	SCL	152	13.8	14.7	Traversify the Existing Drainage Ditch and Widen the Paved Shoulders	2013/14	2010	0.5			\$1.00	Collision Reduction	PSR
4	SCL	101	38.8	38.8	Construct Concrete Barrier and Improve Superelevation	2012/13	2012	0.5			\$1.00	Collision Reduction	PSR-PR
4	SON	12	18.0	18.2	Extend of the existing metal beam guardrail (MBGR) by about 1200 feet	2014/15	2012	0.2			\$1.00	Collision Reduction	PSR
4	SCL	280	18.6	18.6	Install Signal	2012/13	2012	0.2			\$1.00	Collision Reduction	PSR-PR
4	SCL	85	8.0	8.0	Improve Superelevation	2012/13	2012	0.5			\$1.00	Collision Reduction	PSR-PR
4	SM	TBD	TBD	TBD	install left turn channelization	TBD	TBD	0.75	0.10		\$3.50	Collision Reduction	TBD
4	SOL SM	TBD	TBD	TBD	Install soft median barrier	TBD	TBD	0.75	0.30		\$4.50	Collision Reduction	PSR/PR
4	MRN NAP	TBD	TBD	TBD	construct left turn lane	TBD	TBD	0.80			\$4.00	Collision Reduction	PSR/PR
4	SF SCL	TBD	TBD	TBD	upgrade intersection	TBD	TBD	1.00			\$4.50	Collision Reduction	PSR/PR
4	ALA	TBD	TBD	TBD	Shoulder Widening	TBD	TBD	0.80	0.20		\$4.00	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	Install thrie beam median barrier	TBD	TBD	0.75			\$3.80	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Install soft median barrier	TBD	TBD	0.80			\$3.00	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Shoulder Widening	TBD	TBD	0.60	0.30		\$5.00	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Install thrie beam median barrier	TBD	TBD	0.75			\$4.80	Collision Reduction	PSR/PR
4	NAP	TBD	TBD	TBD	Upgrade shoulder and construct retaining wall	TBD	TBD	0.80			\$4.20	Collision Reduction	PSR/PR
4	MRN	TBD	TBD	TBD	Install soft median barrier	TBD	TBD	0.50	0.40		\$4.00	Collision Reduction	PSR/PR
4	SON	TBD	TBD	TBD	install left turn channelization	TBD	TBD	8.00	0.10		\$3.80	Collision Reduction	PSR/PR
4	ALA	TBD	TBD	TBD	Install soft median barrier	TBD	TBD		0.75	0.20	\$4.50	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	Shoulder Widening	TBD	TBD		0.80	0.30	\$3.80	Collision Reduction	PSR/PR
4	SM	TBD	TBD	TBD	Install thrie beam median barrier	TBD	TBD		0.90		\$3.60	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Left turn lane	TBD	TBD		0.70	0.20	\$4.50	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Upgrade shoulder and construct retaining wall	TBD	TBD		0.60	0.40	\$4.00	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Install traffic signals	TBD	TBD		0.85		\$3.40	Collision Reduction	PSR/PR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
4	NAP	TBD	TBD	TBD	Install soft median barrier	TBD	TBD		1.00		\$3.40	Collision Reduction	PSR/PR
4	MRN	TBD	TBD	TBD	install left turn channelization	TBD	TBD		0.50	0.40	\$3.00	Collision Reduction	PSR/PR
4	SON	TBD	TBD	TBD	Install soft median barrier	TBD	TBD		0.80		\$4.50	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Left turn lane	TBD	TBD		0.80	0.20	\$3.80	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Upgrade shoulder and construct retaining wall	TBD	TBD		0.50	0.20	\$4.60	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Install traffic signals	TBD	TBD		0.70		\$3.90	Collision Reduction	PSR/PR
4	ALA	TBD	TBD	TBD	Upgrade shoulder and construct retaining wall	TBD	TBD			0.75	\$4.00	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	Install soft median barrier	TBD	TBD			1.00	\$4.20	Collision Reduction	PSR/PR
4	SM	TBD	TBD	TBD	install left turn channelization	TBD	TBD			0.75	\$3.80	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Install soft median barrier	TBD	TBD			1.00	\$4.50	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Shoulder Widening	TBD	TBD			0.80	\$5.00	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Install thrie beam median barrier	TBD	TBD			0.75	\$4.50	Collision Reduction	PSR/PR
4	NAP	TBD	TBD	TBD	Left turn lane	TBD	TBD			0.75	\$4.30	Collision Reduction	PSR/PR
4	MRN	TBD	TBD	TBD	Shoulder Widening	TBD	TBD			1.20	\$3.80	Collision Reduction	PSR/PR
4	SON	TBD	TBD	TBD	Install thrie beam median barrier	TBD	TBD			0.80	\$3.60	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Upgrade shoulder and construct retaining wall	TBD	TBD			0.75	\$4.30	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Install traffic signals	TBD	TBD			0.70	\$4.50	Collision Reduction	PSR/PR
4	Ala CC	TBD	TBD	TBD	install MBGR	2014/15	2012	0.50			\$3.00	Collision Reduction	PSR/PR
4	ALA	Var	var	var	Upgrade bridge railing end connections	2013/14	2010	0.5			\$2.34	Collision Reduction	PSR
4	CC	Var	var	var	Upgrade bridge railing end connections	2012/13	2010	0.5			\$0.52	Collision Reduction	PSR
4	SM, SOL	92 780	5.4 1.4	6.2 2.4	install MBGR	2014/15	2012	0.2			\$1.00	Collision Reduction	TBD
4	ALA	680	R20.0 R20.3	R20.0 R20.3	replace MBGR with concrete barrier	2014/15	2012	0.2			\$1.00	Collision Reduction	TBD
4	SM	92, 280	Var	var	var	2014/15	2012	0.2			\$1.00	Collision Reduction	TBD
4	SCL	880	1.284	1.361	Construct Concrete Barrier and Improve Superelevation	2012/13	2012	0.2			\$1.00	Collision Reduction	PSR-PR
4	SON	TBD	TBD	TBD	Upgrade MBGR end treatment & MBGR connection to bridge rail.	2014/15	2012	0.5			\$3.00	Collision Reduction	TBD
4	SOL SM	TBD	TBD	TBD	extend metal beam guardrail	TBD	TBD	0.20	0.80		\$4.50	Collision Reduction	PSR/PR
4	ALA	TBD	TBD	TBD	Construct Concrete Barrier and Improve Superelevation	TBD	TBD	0.80			\$3.00	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	install MBGR	TBD	TBD	0.80	0.20		\$3.50	Collision Reduction	PSR/PR
4	SM	TBD	TBD	TBD	replace MBGR with concrete barrier	TBD	TBD	0.80			\$4.20	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD	0.80			\$4.20	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD	0.60	0.50		\$4.20	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	replace MBGR with concrete barrier	TBD	TBD	0.80			\$3.80	Collision Reduction	PSR/PR
4	NAP	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD	0.70	0.40		\$3.50	Collision Reduction	PSR/PR
4	MRN	TBD	TBD	TBD	Construct Concrete Barrier and Improve Superelevation	TBD	TBD	1.00	0.10		\$3.80	Collision Reduction	PSR/PR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
4	SON	TBD	TBD	TBD	install MBGR	TBD	TBD	0.80			\$3.80	Collision Reduction	PSR/PR
4	ALA	TBD	TBD	TBD	replace MBGR with concrete barrier	TBD	TBD	0.20	0.90		\$4.00	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD		0.50	0.50	\$4.00	Collision Reduction	PSR/PR
4	SM	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD		0.80		\$4.00	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Improve Superelevation	TBD	TBD		1.10		\$4.00	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD		0.80	0.20	\$4.50	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD		0.80		\$4.50	Collision Reduction	PSR/PR
4	NAP	TBD	TBD	TBD	Construct Barrier and Improve Superelevation	TBD	TBD		0.80	0.40	\$4.50	Collision Reduction	PSR/PR
4	MRN	TBD	TBD	TBD	install MBGR	TBD	TBD		0.85		\$4.50	Collision Reduction	PSR/PR
4	SON	TBD	TBD	TBD	replace MBGR with concrete barrier	TBD	TBD		0.80		\$4.50	Collision Reduction	PSR/PR
4	ALA	TBD	TBD	TBD	Construct Concrete Barrier and Improve Superelevation	TBD	TBD		0.70	0.50	\$3.80	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	install MBGR	TBD	TBD		0.80		\$3.50	Collision Reduction	PSR/PR
4	SM	TBD	TBD	TBD	replace MBGR with concrete barrier	TBD	TBD		0.40	0.60	\$3.30	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD			0.80	\$5.00	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD			0.80	\$4.50	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Construct Concrete Barrier and Improve Superelevation	TBD	TBD			0.80	\$4.20	Collision Reduction	PSR/PR
4	NAP	TBD	TBD	TBD	install MBGR	TBD	TBD			0.80	\$4.20	Collision Reduction	PSR/PR
4	MRN	TBD	TBD	TBD	install MBGR	TBD	TBD			0.80	\$4.20	Collision Reduction	PSR/PR
4	SON	TBD	TBD	TBD	replace MBGR with concrete barrier	TBD	TBD			0.80	\$3.50	Collision Reduction	PSR/PR
4	ALA	TBD	TBD	TBD	replace MBGR with concrete barrier	TBD	TBD			0.80	\$3.80	Collision Reduction	PSR/PR
4	CC	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD			0.80	\$3.80	Collision Reduction	PSR
4	SM	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD			0.80	\$3.80	Collision Reduction	PSR/PR
4	SOL	TBD	TBD	TBD	Improve Superelevation	TBD	TBD			0.80	\$4.60	Collision Reduction	PSR/PR
4	SCL	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD			0.80	\$4.50	Collision Reduction	PSR/PR
4	SF	TBD	TBD	TBD	Upgrade bridge railing end connections	TBD	TBD			0.80	\$4.00	Collision Reduction	PSR/PR
4	SON	12	35.3	36.3	Replace bridge, realign creek	TBD	TBD		1.2		\$6.90	Emergency	PSSR
4	SON	101	53.4	54.1	Construct tieback wall	TBD	TBD		0.7		\$13.50	Emergency	PSSR
4	SCL	82	N/A	N/A	Relinquish SR 82 within City of San Jose	2014/15	2012	0.2			\$1.00	Mandated	PSSR
4	ALA	84	6.92	10.83	Relinquish SR 84 within City of Fremont	2014/15	2012	0.2			\$1.00	Mandated	PSSR
4	MRN	TBD	TBD	TBD	ADA curb ramps	TBD	TBD	0.50	0.20		\$0.95	Mandated	TBD
4	SON	TBD	TBD	TBD	ADA curb ramps	TBD	TBD	0.50	0.20		\$1.10	Mandated	TBD
4	NAP	TBD	TBD	TBD	ADA curb ramps	TBD	TBD	0.80			\$0.95	Mandated	TBD
4	MRN	TBD	TBD	TBD	ADA curb ramps	TBD	TBD	0.80			\$0.75	Mandated	TBD
4	SON	TBD	TBD	TBD	ADA curb ramps	TBD	TBD	1.00			\$1.00	Mandated	TBD
4	ALA	TBD	TBD	TBD	ADA curb ramps	TBD	TBD	0.50	0.50		\$0.90	Mandated	TBD
4	CC	TBD	TBD	TBD	ADA curb ramps	TBD	TBD		0.80		\$0.90	Mandated	TBD
4	SM	TBD	TBD	TBD	ADA curb ramps	TBD	TBD		0.40	0.30	\$0.80	Mandated	TBD
4	SOL	TBD	TBD	TBD	ADA curb ramps	TBD	TBD		1.00		\$0.90	Mandated	TBD
4	SCL	TBD	TBD	TBD	ADA curb ramps	TBD	TBD		0.40	0.40	\$1.50	Mandated	TBD
4	SF	TBD	TBD	TBD	ADA curb ramps	TBD	TBD		0.80		\$0.90	Mandated	TBD
4	NAP	TBD	TBD	TBD	ADA curb ramps	TBD	TBD		0.70	0.20	\$0.80	Mandated	TBD
4	MRN	TBD	TBD	TBD	ADA curb ramps	TBD	TBD			0.90	\$0.90	Mandated	TBD
4	SON	TBD	TBD	TBD	ADA curb ramps	TBD	TBD			0.80	\$1.50	Mandated	TBD

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
4	NAP	TBD	TBD	TBD	ADA curb ramps	TBD	TBD			0.20	\$0.95	Mandated	TBD
4	MRN	TBD	TBD	TBD	ADA curb ramps	TBD	TBD			0.40	\$0.90	Mandated	TBD
4	SON	TBD	TBD	TBD	ADA curb ramps	TBD	TBD			0.50	\$0.80	Mandated	TBD
4	ALA	TBD	TBD	TBD	ADA curb ramps	TBD	TBD			0.90	\$0.90	Mandated	TBD
4	Ala CC SF SCL	TBD	TBD	TBD	spot improvements	2014/15	2012	0.50	0.20		\$0.80	Mandated	PSSR
4	CC ALA	123	1.9	3.4	Upgrade curb ramps and sidewalk	2013/14	2010	1.0			\$1.00	Mandated	PSR
4	ALA	185 238	var	var	Upgrade curb ramps and sidewalk	2012/13	2010	0.5			\$1.00	Mandated	PSR
4	ALA	13	11.1	12.3	Upgrade curb ramps and sidewalk	2012/13	2010	1.0			\$1.00	Mandated	PSR
4	ALA	13	12.3	13.4	Upgrade curb ramps and sidewalk	2012/13	2010	1.0			\$1.00	Mandated	PSR
4	ALA	13	10.0	11.1	Upgrade curb ramps and sidewalk	2013/14	2010	1.0			\$1.00	Mandated	PSR
4	ALA	92	6.8	8.2	Upgrade curb ramps and sidewalk	2012/13	2010	0.5			\$1.00	Mandated	PSR
4	CC ALA	123 680 185	var	var	Upgrade curb ramps and sidewalk	2013/14	2010	0.5			\$1.50	Mandated	PSR
4	SON	116	var	var	35 items to be upgraded	2013/14	2010	0.5			\$1.30	Mandated	PSR
4	SON	101	4.6	4.6	rebuild pedestrian ramp system	2014/15	2012	0.5			\$1.80	Mandated	PSR
4	SCL	82	18.3	26.4	Construct ADA Improvements	2014/15	2012	0.5			\$1.00	Mandated	PSR
4	SF	101	5.9	8.1	Construct ADA Improvements	2014/15	2012	0.5			\$1.50	Mandated	PSR
4	SM	82	13.4	16.0	Fix sidewalk to meet ADA std.	2013/14	2010	0.5			\$1.30	Mandated	TBD
4	MRN NAP	TBD	TBD	TBD	spot improvements	TBD	TBD	0.50			\$3.00	Mandated	PSR
4	ALA	TBD	TBD	TBD	spot improvements	TBD	TBD	1.00			\$3.50	Mandated	PSR
4	CC	TBD	TBD	TBD	spot improvements	TBD	TBD	0.85	0.10		\$4.00	Mandated	PSR
4	SM	TBD	TBD	TBD	spot improvements	TBD	TBD	1.00			\$4.20	Mandated	PSR
4	SOL	TBD	TBD	TBD	spot improvements	TBD	TBD	0.85	0.20		\$3.80	Mandated	PSR
4	SCL	TBD	TBD	TBD	spot improvements	TBD	TBD	1.00			\$2.90	Mandated	PSR
4	SF	TBD	TBD	TBD	spot improvements	TBD	TBD	1.00			\$3.50	Mandated	PSR
4	NAP	TBD	TBD	TBD	spot improvements	TBD	TBD	0.20	0.70		\$3.00	Mandated	PSR
4	MRN	TBD	TBD	TBD	spot improvements	TBD	TBD	1.00	0.10		\$4.50	Mandated	PSR
4	SON	TBD	TBD	TBD	spot improvements	TBD	TBD	0.90			\$4.00	Mandated	PSR
4	ALA	TBD	TBD	TBD	spot improvements	TBD	TBD	0.90	0.20		\$5.00	Mandated	PSR
4	CC	TBD	TBD	TBD	spot improvements	TBD	TBD	0.90			\$3.10	Mandated	PSR
4	SM	TBD	TBD	TBD	spot improvements	TBD	TBD	0.75	0.30		\$3.50	Mandated	PSR
4	SOL	TBD	TBD	TBD	spot improvements	TBD	TBD	0.50			\$4.00	Mandated	PSR
4	SCL	TBD	TBD	TBD	spot improvements	TBD	TBD	0.60	0.50		\$3.50	Mandated	PSR
4	SF	TBD	TBD	TBD	spot improvements	TBD	TBD	0.70	0.10		\$4.00	Mandated	PSR
4	NAP	TBD	TBD	TBD	spot improvements	TBD	TBD	0.60	0.20		\$4.50	Mandated	PSR
4	MRN	TBD	TBD	TBD	spot improvements	TBD	TBD		1.00		\$4.10	Mandated	PSR
4	SON	TBD	TBD	TBD	spot improvements	TBD	TBD		1.00		\$3.80	Mandated	PSR
4	ALA	TBD	TBD	TBD	spot improvements	TBD	TBD		0.50	0.40	\$3.60	Mandated	PSR
4	CC	TBD	TBD	TBD	spot improvements	TBD	TBD		0.70	0.60	\$4.00	Mandated	PSR
4	SM	TBD	TBD	TBD	spot improvements	TBD	TBD		0.60	0.30	\$4.00	Mandated	PSR
4	SOL	TBD	TBD	TBD	spot improvements	TBD	TBD		0.80		\$4.20	Mandated	PSR
4	SCL	TBD	TBD	TBD	spot improvements	TBD	TBD		0.20	0.80	\$4.20	Mandated	PSR
4	SF	TBD	TBD	TBD	spot improvements	TBD	TBD		0.70	0.20	\$4.10	Mandated	PSR
4	NAP	TBD	TBD	TBD	spot improvements	TBD	TBD		1.00		\$4.00	Mandated	PSR
4	MRN	TBD	TBD	TBD	spot improvements	TBD	TBD		1.00		\$3.60	Mandated	PSR
4	SON	TBD	TBD	TBD	spot improvements	TBD	TBD		0.60	0.60	\$3.00	Mandated	PSR
4	ALA	TBD	TBD	TBD	spot improvements	TBD	TBD		0.90		\$3.00	Mandated	PSR
4	CC	TBD	TBD	TBD	spot improvements	TBD	TBD		0.90		\$3.50	Mandated	PSR
4	SM	TBD	TBD	TBD	spot improvements	TBD	TBD		1.00		\$4.20	Mandated	PSR
4	SOL	TBD	TBD	TBD	spot improvements	TBD	TBD		0.50	0.50	\$4.50	Mandated	PSR
4	SCL	TBD	TBD	TBD	spot improvements	TBD	TBD		0.40	0.50	\$4.50	Mandated	PSR
4	SF	TBD	TBD	TBD	spot improvements	TBD	TBD			0.90	\$4.50	Mandated	PSR
4	NAP	TBD	TBD	TBD	spot improvements	TBD	TBD			0.90	\$4.10	Mandated	PSR
4	MRN	TBD	TBD	TBD	spot improvements	TBD	TBD			1.00	\$4.10	Mandated	PSR
4	SON	TBD	TBD	TBD	spot improvements	TBD	TBD			0.50	\$3.50	Mandated	PSR
4	ALA	TBD	TBD	TBD	spot improvements	TBD	TBD			0.40	\$3.00	Mandated	PSR
4	CC	TBD	TBD	TBD	spot improvements	TBD	TBD			0.80	\$4.00	Mandated	PSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
4	SM	TBD	TBD	TBD	spot improvements	TBD	TBD			0.20	\$3.80	Mandated	PSR
4	SOL	TBD	TBD	TBD	spot improvements	TBD	TBD			0.70	\$3.80	Mandated	PSR
4	SCL	TBD	TBD	TBD	spot improvements	TBD	TBD			1.00	\$3.50	Mandated	PSR
4	SF	TBD	TBD	TBD	spot improvements	TBD	TBD			1.00	\$4.10	Mandated	PSR
4	NAP	TBD	TBD	TBD	spot improvements	TBD	TBD			0.60	\$4.50	Mandated	PSR
4	MRN	TBD	TBD	TBD	spot improvements	TBD	TBD			0.50	\$3.50	Mandated	PSR
4	SON	TBD	TBD	TBD	spot improvements	TBD	TBD			0.20	\$3.50	Mandated	PSR
4	ALA	TBD	TBD	TBD	spot improvements	TBD	TBD			1.00	\$3.60	Mandated	PSR
4	CC	TBD	TBD	TBD	spot improvements	TBD	TBD			1.00	\$2.90	Mandated	PSR
4	SM	TBD	TBD	TBD	spot improvements	TBD	TBD			1.00	\$2.90	Mandated	PSR
4	SOL	TBD	TBD	TBD	spot improvements	TBD	TBD			1.00	\$3.40	Mandated	PSR
4	ALA	TBD	TBD	TBD	Operational Improvements	TBD	TBD	0.80	0.20		\$3.00	Mobility	TBD
4	SCL	TBD	TBD	TBD	Operational Improvements	TBD	TBD	1.00			\$3.20	Mobility	TBD
4	NAP	TBD	TBD	TBD	Operational Improvements	TBD	TBD	0.80	0.20		\$3.50	Mobility	TBD
4	SOL	TBD	TBD	TBD	Operational Improvements	TBD	TBD	1.00			\$4.80	Mobility	TBD
4	CC	TBD	TBD	TBD	Operational Improvements	TBD	TBD		1.00		\$4.60	Mobility	TBD
4	SF	TBD	TBD	TBD	Operational Improvements	TBD	TBD		0.90		\$4.50	Mobility	TBD
4	SOL	TBD	TBD	TBD	Operational Improvements	TBD	TBD		0.20	0.80	\$4.20	Mobility	TBD
4	SM	TBD	TBD	TBD	Operational Improvements	TBD	TBD		0.30	0.70	\$3.50	Mobility	TBD
4	ALA	TBD	TBD	TBD	Operational Improvements	TBD	TBD			1.00	\$3.80	Mobility	TBD
4	SF	TBD	TBD	TBD	Operational Improvements	TBD	TBD			0.30	\$4.80	Mobility	TBD
4	NAP	TBD	TBD	TBD	Operational Improvements	TBD	TBD			0.80	\$4.50	Mobility	TBD
4	SM	TBD	TBD	TBD	Operational Improvements	TBD	TBD			1.00	\$4.00	Mobility	TBD
4	SOL	80	0.0	44.7	Install TOS/RM Elements	2012/13	2012	0.80	0.80		\$66.90	Mobility	PSR
4	SF	001	0.90	5.90	Modify Traffic Signals	2014/15	2012	0.2			\$3.60	Mobility	PSR
4	MRN	101	0.0	27.6	Install TOS/RM Elements	2012/13	2012	0.5			\$32.00	Mobility	PSR
4	SON	101	0.0	27.6	Install TOS/RM Elements	TBD	TBD		0.8		\$48.00	Mobility	PSR
4	NAP	29	0.0	36.9	Install TOS/RM Elements	TBD	TBD		0.8		\$12.50	Mobility	PSR
4	ALA CC SOL	680 580 780	20.0 0.0 18.8	0.0 0.0 0.0	21.7 25.4 0.83	Install TOS/RM Elements	TBD	TBD		0.8	\$26.70	Mobility	PSR
4	Ala CC SF SCL	TBD	TBD	TBD	Weight Stations & WIM Facilities	2013/14	2010	0.50	0.50		\$1.00	Mobility	PSR
4	Mrn Nap Son Sol SM	TBD	TBD	TBD	Weight Stations & WIM Facilities	2012/13	2010	0.50	0.50		\$1.00	Mobility	PSR
4	NAP	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD	0.60			\$0.75	Mobility	TBD
4	MRN	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD	0.60			\$0.85	Mobility	TBD
4	SON	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD	0.70	0.20		\$1.00	Mobility	TBD
4	ALA	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD	0.70	0.20		\$0.90	Mobility	TBD
4	CC	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD		0.80		\$0.90	Mobility	TBD
4	SM	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD		0.90		\$0.80	Mobility	TBD
4	SOL	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD		0.40	0.50	\$0.90	Mobility	TBD
4	SCL	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD		0.30	0.40	\$1.50	Mobility	TBD
4	SF	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD			0.20	\$1.20	Mobility	TBD
4	NAP	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD			0.50	\$1.10	Mobility	TBD
4	MRN	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD			1.00	\$0.95	Mobility	TBD
4	SON	TBD	TBD	TBD	Weigh Stations & WIM Facilities	TBD	TBD			0.80	\$0.75	Mobility	TBD
4	SOL	780	1.20	2.40	Highway Planting Restoration	2013/14	2012	0.20			\$3.00	Roadside	PSR
4	CC	024	R3.8	R4.9	Highway Planting Restoration	2014/15	2012	0.20			\$2.90	Roadside	PSR
4	SOL	780	2.4	3.4	Highway Planting Restoration	TBD	TBD			0.4	\$1.90	Roadside	PSR
4	CC	024	R6.5	R8.3	Highway Planting Restoration	TBD	TBD			0.3	\$2.40	Roadside	PSR
4	CC	024	4.9	6.5	Highway Planting Restoration	TBD	TBD			0.5	\$2.40	Roadside	PSR
4	SM	380, 280, 82	4.8	5.2	Roadside Safety Improvements	2014/15	2012	0.30			\$1.30	Roadside	PSR
4	ALA	080	2.5	2.5	New Safety Roadside Rest Area	TBD	TBD			1.0	\$22.00	Roadside	PSSR
4	ALA	580	6.5	7.5	New Safety Roadside Rest Area	TBD	TBD			1.0	\$21.00	Roadside	PSSR
4	ALA	580	0.0	8.2	Roadway Rehabilitation	2015/16	2012	0.40	0.30		\$55.00	Roadway	PSSR
4	NAP	029 128	36.8 04.5	38.1 04.6	Roadway Rehabilitation	2015/16	2012	0.30			\$10.00	Roadway	PSSR
4	SOL	113	0.0	19.0	Roadway Rehabilitation	2015/16	2012	0.40	0.30		\$55.00	Roadway	PSSR
4	ALA	580	30.8	41.5	Roadway Rehabilitation	2015/16	2012	0.30			\$49.00	Roadway	PSSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
4	CC	242	0.00	3.40	Roadway Rehabilitation	2015/16	2012	0.30			\$25.00	Roadway	PSSR
4	ALA	880	28.2	30.0	Roadway Rehabilitation	TBD	TBD		0.60		\$37.00	Roadway	PSSR
4	SOL	080	30.6	38.7	Pavement Rehabilitation	TBD	TBD		0.60		\$81.00	Roadway	PSSR
4	CC	242	0.0	3.4	Roadway Rehabilitation	TBD	TBD		0.40		\$13.00	Roadway	CAPM/PR
4	Ala	680	0.0	12.5	Roadway Rehab	TBD	TBD			0.60	\$55.00	Roadway	PSSR
4	SF	101	5.3	7.8	CAPM	TBD	TBD		0.30		\$12.00	Roadway	CAPM/PR
4	CC	4	40.9	48.4	CAPM	TBD	TBD		0.40		\$9.00	Roadway	PSSR
4	SOL	80	38.7	44.7	CAPM	TBD	TBD		0.50		\$33.00	Roadway	CAPM/PR
4	SCL	85	18.0	24.1	CAPM	TBD	TBD		0.40		\$18.00	Roadway	CAPM/PR
4	SF	1	0.0	7.1	CAPM	TBD	TBD		0.40		\$17.00	Roadway	CAPM/PR
4	SCL	880	0.0	4.3	Resurfacing	TBD	TBD			0.40	\$14.00	Roadway	CAPM/PR
4	SCL	017	6.9	9.1	CAPM	TBD	TBD			0.40	\$9.00	Roadway	CAPM/PR
4	SM	280	9.1	10.3	Rehabilitate culverts	TBD	TBD		0.9		\$3.90	Roadway	PSSR
4	SOL	80	10.0	11.2	Rehabilitate culverts	TBD	TBD		0.7		\$3.30	Roadway	PSSR
4	ALA	880	11.8		replace culvert	TBD	TBD			1.0	\$2.50	Roadway	PSSR
4	MRN	1	0.0	45.0	rehabilitate culverts	TBD	TBD			1.3	\$10.00	Roadway	PSSR
5	SB	246	33.40		Left Turn Channelization	2013/14	2010A	0.25			\$2.00	Collision Reduction	PSR
5	SB	Var	Var	Var	Safety Improvements	2011/12	2010A	0.50			\$2.00	Collision Reduction	PSR
5	SLO	Var	Var	Var	Safety Improvements	2011/12	2010A	0.75			\$2.00	Collision Reduction	PSR
5	MON	Var	Var	Var	Safety Improvements	TBD	TBD	0.75			\$2.00	Collision Reduction	PSR
5	Sbt	Var	Var	Var	Safety Improvements	TBD	TBD	0.75			\$2.00	Collision Reduction	PSR
5	SCr	Var	Var	Var	Safety Improvements	TBD	TBD	0.75			\$2.00	Collision Reduction	PSR
5	SB	Var	Var	Var	Safety Improvements	TBD	TBD	1.00	0.25		\$2.00	Collision Reduction	PSR
5	SLO	Var	Var	Var	Safety Improvements	TBD	TBD	1.00	0.25		\$2.00	Collision Reduction	PSR
5	MON	Var	Var	Var	Safety Improvements	TBD	TBD	1.00	0.25		\$2.00	Collision Reduction	PSR
5	Sbt	Var	Var	Var	Safety Improvements	TBD	TBD	1.00	0.25		\$2.00	Collision Reduction	PSR
5	SCr	Var	Var	Var	Safety Improvements	TBD	TBD	1.00	0.25		\$2.00	Collision Reduction	PSR
5	SB	Var	Var	Var	Safety Improvements	TBD	TBD		1.00	0.25	\$2.00	Collision Reduction	PSR
5	SLO	Var	Var	Var	Safety Improvements	TBD	TBD		1.00	0.25	\$2.00	Collision Reduction	PSR
5	MON	Var	Var	Var	Safety Improvements	TBD	TBD		1.00	0.25	\$2.00	Collision Reduction	PSR
5	Sbt	Var	Var	Var	Safety Improvements	TBD	TBD		1.00	0.25	\$2.00	Collision Reduction	PSR
5	SCr	Var	Var	Var	Safety Improvements	TBD	TBD		1.00	0.25	\$2.00	Collision Reduction	PSR
5	SB	Var	Var	Var	Safety Improvements	TBD	TBD			1.00	\$2.00	Collision Reduction	PSR
5	SLO	Var	Var	Var	Safety Improvements	TBD	TBD			1.00	\$2.00	Collision Reduction	PSR
5	MON	Var	Var	Var	Safety Improvements	TBD	TBD			1.00	\$2.00	Collision Reduction	PSR
5	Sbt	Var	Var	Var	Safety Improvements	TBD	TBD			1.00	\$2.00	Collision Reduction	PSR
5	SCr	Var	Var	Var	Safety Improvements	TBD	TBD			1.00	\$2.00	Collision Reduction	PSR
5	SCr	17	8.50	11.30	ROR Shdr Widening/Concrete Rail	TBD	TBD	0.75	0.25		\$1.00	Collision Reduction	PSR
5	SLO	101	Var	Var	Guardrail	TBD	TBD	0.75	0.25		\$1.00	Collision Reduction	PSR
5	MON	1	58.00	60.00	ROR Guardrail	TBD	TBD	0.50	0.25		\$1.00	Collision Reduction	PSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
5	SB	101	var	var	Guardrail	TBD	TBD	0.25	0.75		\$1.00	Collision Reduction	PSR
5	SCR	9	22.00	24.00	ROR Shdr Widening/ Rumble Strip	TBD	TBD	0.50	0.25		\$1.00	Collision Reduction	PSR
5	SCR	17	8.90	9.20	ROR Shdr Widening/ Concrete Rail	TBD	TBD	0.50	0.25		\$1.00	Collision Reduction	PSR
5	SCR	17	9.50	9.60	ROR Shdr Widening/ Concrete Rail	TBD	TBD	0.25			\$1.00	Collision Reduction	PSR
5	SLO	1	17.00	59.00	ROR-Shlr Rumble Strip	TBD	TBD	0.50	0.25		\$1.00	Collision Reduction	PSR
5	MON	var	Var	Var	Guardrail	TBD	TBD	0.50	0.25		\$1.00	Collision Reduction	PSR
5	SCR	Var	var	var	Guardrail	TBD	TBD	0.50	0.25		\$1.00	Collision Reduction	PSR
5	SBt	Var	Var	Var	Safety Improvements	TBD	TBD	0.50	0.25		\$2.00	Collision Reduction	PSR
5	var	Var	Var	Var	Safety Improvements	TBD	TBD		0.30	0.45	\$2.00	Collision Reduction	PSR
5	var	Var	Var	Var	Safety Improvements	TBD	TBD		0.45	0.30	\$2.00	Collision Reduction	PSR
5	var	Var	Var	Var	Safety Improvements	TBD	TBD		0.30	0.45	\$2.00	Collision Reduction	PSR
5	var	Var	Var	Var	Safety Improvements	TBD	TBD		0.75		\$2.00	Collision Reduction	PSR
5	var	Var	Var	Var	Safety Improvements	TBD	TBD		0.75		\$2.00	Collision Reduction	PSR
5	var	Var	Var	Var	Safety Improvements	TBD	TBD		0.75		\$2.00	Collision Reduction	PSR
5	MON	156	R1.1	R2.1	Replace W/B Castroville OH	TBD	TBD	0.50	0.10		\$8.70	Bridge	PSSR
5	MON	101	62.7		Bridge Replacement	TBD	TBD		0.50	0.25	\$18.00	Bridge	PSSR
5	SB	101	39.4	40.1	Realign S/B Lanes into Median and Bypass Bridge	TBD	TBD	0.40	0.20		\$5.30	Bridge	PSSR
5	SB	101	R14.2		Bridge Rehab--Replace Seal Slab	TBD	TBD		0.50	0.25	\$22.60	Bridge	PSR
5	SB	217	1.0		Replace Bridge	TBD	TBD	0.50	0.25		\$4.80	Bridge	PSSR
5	SB	154	R2.6		Scour Mitigation	TBD	TBD	0.50	0.25		\$1.00	Bridge	PSSR
5	SLO	46	50.7		Scour Mitigation	TBD	TBD		0.30	0.45	\$1.00	Bridge	PSSR
5	SLO	101	16.4		Scour Mitigation	TBD	TBD	0.50	0.25		\$3.00	Bridge	PSSR
5	SB	1	M33.1		Scour Mitigation	TBD	TBD	0.50	0.25		\$3.00	Bridge	PSSR
5	SB	1	15.6		Scour Mitigation	TBD	TBD	0.50	0.25		\$2.00	Bridge	PSSR
5	SLO	46	48.3		Scour Mitigation	TBD	TBD		0.50	0.25	\$2.00	Bridge	PSSR
5	SB	166	64.2		Scour Mitigation	TBD	TBD		0.45	0.30	\$1.00	Bridge	PSSR
5	SB	101	10.0	18.1	Bridge Rail Replacement (5 bridges)	TBD	TBD	0.50	0.25		\$7.00	Bridge	PSSR
5	SB	113 52 46	var		Bridge Rail	TBD	TBD	0.75	0.25		\$10.00	Bridge	PSSR
5	SB	101	var		Bridge Rail Replacement (7 bridges)	TBD	TBD	0.50	0.25		\$7.00	Bridge	PSSR
5	SB	1	22.5		Seismic Retrofit. Short Bearing, Unrestrained Abut Seats	TBD	TBD	0.50	0.25		\$3.50	Bridge	PSSR
5	SCR	1	R6.7		Abutment strengthening	TBD	TBD	0.50	0.25		\$1.00	Bridge	PSSR
5	SB	135	R7.2		Construct column shells	TBD	2013/14		0.30	0.45	\$2.00	Bridge	PSSR
5	MON	68	1.9	3.8	Roadway Rehab	TBD	2013/14		0.20	0.40	\$2.70	Roadway	PSSR
5	SB	1	19.3	20.6	Rehabilitate Roadway	TBD	2013/14	0.30	0.30		\$7.00	Roadway	PSSR
5	MON	101	R91.5	98.8	Roadway Rehab	TBD	2013/14	0.50	0.25		\$19.50	Roadway	PSSR
5	SB	101	21.2	24.8	Rehabilitate Roadway	TBD	2013/14	0.75	0.25		\$14.00	Roadway	PSSR
5	Mon	101	87.3	R91.6	Rehabilitate Roadway	TBD	2013/14	0.75	0.25		\$1.00	Roadway	PSSR
5	SB	1	41.7	49.2	Roadway Rehab--AC Overlay and Widen Shoulders Changed to Rehab--CAPM project	TBD	2013/14		0.40		\$4.18	Roadway	PSSR
5	MON	1	R34.5	R42.3	Roadway Rehab--CAPM	TBD	2014/15		0.40		\$4.33	Roadway	PSSR
5	SB	154	21.4	32.2	Roadway Rehab--CAPM	TBD	2013/14		0.40		\$8.49	Roadway	PSSR
5	MON	183	2	8.4	Roadway Rehab -- CAP M	TBD	2014/15		0.40		\$1.00	Roadway	CAPM PR
5	SCR	1	R0.04	10.2	Pavement Rehab	TBD	2015/16	0.25	0.25		\$24.00	Roadway	PSSR
5	SBT	25	0	47.4	CAPM	TBD	2015/16		0.40		\$22.60	Roadway	CAPM PR
5	SLO	46	45.9	51	CAPM	TBD	2010/11		0.40		\$7.20	Roadway	PSR
5	SBT	156	2.3	7.3	CAPM	TBD	2013/14		0.40		\$5.20	Roadway	PSSR
5	MON	68	R3.95	R10.8	Roadway Rehab (CAPM)	39261	2013/14		0.40		\$4.40	Roadway	PSSR
5	SBt	156	0.00	2.30	Pavement Preservation	TBD	2013/14	0.40	0.20		\$4.00	Roadway	PSSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID	
5	SBt	156	R15.7	R18.4	Pavement Preservation	TBD	2014/15	0.40	0.20		\$2.00	Roadway	PSSR	
5	SLO	101	21.5	23.4	Pavement Preservation	TBD	2012/13	0.25	0.25		\$3.00	Roadway	PSSR	
5	SLO	166	R70.14	74.7	Pavement Preservation	TBD	2012/13		0.40	0.10		\$3.00	Roadway	PSSR
5	Mon	1	R78.1	R85.1	Pavement Preservation	TBD	2012/13	0.30	0.20		\$11.00	Roadway	PSSR	
5	SB	101	12.7	21	Roadway Rehab--CAPM	TBD	2013/14		0.25	0.25	\$14.00	Roadway	PSSR	
5	SCR	1	R0.9	R1.4	Embankment Reconstruction	TBD	2014/15		0.25	0.25	\$8.30	Roadway	PSR	
5	MON	1	21.1		Protect Bridge Abutment	TBD	2013/14		0.40	0.10	\$7.00	Roadway	PSR	
5	MON	1	18.5	18.6	Construct Retaining Wall, Move Highway Laterally, or Construct Viaduct	TBD	2013/14		0.25	0.25	\$1.20	Roadway	PSR	
5	MON	1	7.1	7.7	Stabilize Rockfall area	TBD	2012/13		0.40	0.10	\$10.80	Roadway	PSR	
5	MON	1	21.7	21.9	Embankment Repair	TBD	2010/11		0.50	0.25	\$15.00	Roadway	PSR	
5	MON	198	18.5	18.7	Realignment	TBD	2014/15		0.40	0.10	\$1.96	Roadway	PSR	
5	SLO	46	4.1	4.5	Embankment Repair	TBD	2012/13		0.25	0.25	\$2.58	Roadway	PSR	
5	SCR	1	31.9	35.7	Replace Culverts	TBD	2015/16	0.40	0.10		\$1.90	Roadway	PSR	
5	SCR	129	3.5		Bridge Culvert Replacement	TBD	2014/15	0.40	0.10		\$1.30	Roadway	PSR	
5	SB	101	45.5		Replace Culvert	TBD	2012/13	0.40	0.10		\$2.10	Roadway	PSR	
5	SLO	1	58	73.5	Repair Culverts	TBD	2012/13		0.40	0.10	\$6.40	Roadway	PSSR	
5	MON	1	0.1	43.8	Replace Culverts	TBD	2012/13	0.40	0.10		\$8.00	Roadway	PSR	
5	SLO	1 & 46	0		Repair Replace Drainage Systems	TBD	2013/14	0.40	0.10		\$2.00	Roadway	PSR	
5	MON	1	22.3	31.9	Replace Culverts	TBD	2013/14		0.25	0.25	\$5.10	Roadway	PSR	
5	MON	1	20.40		Replace Culvert and Repair Erosion	TBD	2013/201	0.10			\$1.20	Roadway	PSR	
5	SLO	41	41.10	43.80	Route Transfer/Relinquishment	TBD	2014/15	0.10			\$0.15	Mandates	PSSR	
5	Var	Var	Var	Var	Exit Sign Retrofit (686 Total in the District)	TBD	2014/15		0.40	0.10	\$2.80	Roadway	PSR	
5	SLO	1	27.6	32	Highway Planting Restoration	TBD	2014/15		0.25	0.25	\$1.60	Roadside	PSR	
5	SB	101	70	90.9	Replacement Planting	TBD	2014/15		0.40	0.10	\$1.70	Roadside	PSR	
5	SLO	101	R24.1	29.4	Highway Planting Restoration, South SLO	TBD	2014/15	0.40	0.10		\$3.10	Roadside	PSR	
5	SLO	101	29.1	30.2	Highway Planting Restoration, North SLO	TBD	2013/14		0.40	0.10	\$1.60	Roadside	PSR	
5	SB	101	12.8	26.7	Roadside Safety Improvements	TBD	2013/14		0.50	0.25	\$2.00	Roadside		
5	MON	1	72.3	89.1	Beautification & Modernization	TBD	2013/14		0.25	0.25	\$6.00	Roadside	PSR	
5	SLO	101	26.9	27.4	Construct N/B Auxiliary Lane (Prado to Madonna)	TBD	2013/14		0.30	0.20	\$2.97	Mobility	PSR	
5	SCR	17	0	12.5	TOS	TBD	2012/13		0.30	0.20	\$5.90	Mobility	PSR	
5	SLO	101	11.83	30.36	Construct TMS - Vehicle Detection Stations	TBD	2012/13	0.40	0.10		\$6.00	Mobility	PSR	
5	MON	68	4	18.1	TMS	TBD	2013/14		0.30	0.20	\$1.80	Mobility	PSR	
5	MON	101	82	101.3	TMS	TBD	2012/13		0.25	0.25	\$2.85	Mobility	PSR	
5	SLO	101	30.3	59	TMS	TBD	2011/12		0.30	0.20	\$4.60	Mobility	PSR	
5	MON	156	0	5.4	TMS	TBD	2013/14		0.25	0.25	\$1.32	Mobility	PSR	
5	SBT	25	51.4	60	TMS	TBD	2013/14		0.30	0.20	\$1.29	Mobility	PSR	
5	SCR	17	0.70	12.50	Storm Water Mitigation	TBD	2013/14	0.25	0.25		\$12.00	Mandates	PSSR	
5	SB	154	1.5	16.4	Install source control measures to control erosion	TBD	2013/14	0.40	0.20		\$6.00	Mandates	PSR	
5	SB	154	26.2	30.9	Install source control measures to control erosion	TBD	2013/14		0.30	0.30	\$4.00	Mandates	PSR	
5	SB	246	13.5	31	Install source control measures to control erosion	TBD	2013/14	0.40	0.20		\$4.00	Mandates	PSR	
5	SB	101	71	73	Install source control measures to control erosion	TBD	2013/14		0.30	0.30	\$2.00	Mandates	PSR	
5	SLO	1	32	71	Install source control measures to control erosion	TBD	2013/14	0.75	0.25		\$27.00	Mandates	PSR	
5	MON	1	1	73	Install source control measures to control erosion	TBD	2011/12	0.50	0.50		\$23.00	Mandates	PSR	
5	MON	25	1.5	10.5	Install source control measures to control erosion	TBD	2011/12	0.40	0.20		\$5.00	Mandates	PSR	
5	SCR	1	3	14	Install source control measures to control erosion	TBD	2011/12	0.40	0.20		\$6.00	Mandates	PSR	
5	SCR	152	6.7	7.5	Install source control measures to control erosion	TBD	2011/12		0.30	0.30	\$1.60	Mandates	PSR	
5	SCR	129	6	8.2	Install source control measures to control erosion	TBD	2013/14		0.30	0.30	\$3.00	Mandates	PSR	
5	SBt	25	0.5	34.5	Install source control measures to control erosion	TBD	2013/14		0.30	0.30	\$12.00	Mandates	PSR	
5	SB	135	9	10	Install source control measures to control erosion	TBD	2013/14		0.30	0.30	\$3.00	Mandates	PSR	
5	SB	166	32	48	Install source control measures to control erosion	TBD	2013/14		0.30	0.30	\$17.00	Mandates	PSR	

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
5	SLO	227	3.5	6.5	Install source control measures to control erosion	TBD	2013/14		0.30	0.30	\$2.50	Mandates	PSR
5	SLO		L5714		Construct Maintenance Station	TBD	2013/14	0.40	0.20		\$16.00	Facilities	FPSR
5	SBT		L5706		Construct Maintenance Station	TBD	2013/14	0.40	0.20		\$4.00	Facilities	FPSR
5	var	var	var	var	Ped Infrastruct	TBD	2015/16	0.25			\$7.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2015/16	0.25			\$2.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2015/16	0.50	0.25		\$2.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2012/13	0.25	0.50		\$2.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2012/13	0.50	0.25		\$2.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2012/13	0.25	0.50		\$2.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2012/13	0.50	0.25		\$2.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2012/13	0.50	0.25		\$2.00	Mandates	PSR
5	var	var	var	var	Ped Infrastruct	TBD	2013/14	0.50	0.25		\$2.00	Mandates	PSR
6	KER	178	9.61	9.61	Signalize Intersection	TBD	2011/12	0.3			\$0.80	Collision Reduction	PSSR
6	FRE	168	T30.2	T30.2	Intersection Improvement	TBD	2011/12	0.4			\$1.33	Collision Reduction	PSSR
6	Ker	99	57.5	57.8	Bridge Replacement	TBD	2012/13	1.2			\$70.00	Bridge	PSR
6	Ker	5	0	1	Bridge Replacement	TBD	2013/14	1.2			\$24.50	Bridge	PSR
6	Ker	119	19.9	31.2	Pavement Rehabilitation	TBD	2013/14	0.8			\$25.50	Roadway	PSR
6	Ker	5	62	73	Rehabilitate Roadway (2R)	TBD	2013/14	1			\$53.00	Roadway	PSR
6	Kin	5	0	16.2	Rehabilitate Roadway	TBD	2014/15	1			\$37.00	Roadway	PSR
6	Fre/Kin	198	34.3	7.2	Rehabilitate Roadway	TBD	2012/13	1			\$21.00	Roadway	PSSR
6	Ker	99	28.4	44.3	Rehabilitate Roadway (2R)	TBD	2011/12	1			\$90.00	Roadway	PSR
6	FRE	168	57.8	65.45	Replace, reline Culverts	TBD	2011/12	0.5			\$2.70	Roadway	PSR
6	TUL	190	34.7	39.4	Replace, reline Culverts	TBD	2014/15	0.5			\$1.80	Roadway	PSR
6	FRE	168	T32.18	57.6	Replace, reline Culverts	TBD	2014/15	0.5			\$2.60	Roadway	PSR
6	Fre	168	0	6.3	Freeway Maintenance Access	TBD	2011/12	0.1	0.2		\$1.70	Roadside	
6	MAD	41	3	27	Construct Passing Lanes	TBD	2011/12	1.2			\$18.90	Collision Reduction	PSSR
6	FRE	41	R24.8	R24.8	Install Ramp Metering System	TBD	2011/12	1.5			\$4.20	Mobility	PSR
6	MAD	41	9.2	40.7	Shoulder Widening on Narrow Two lane Roads	TBD	2012/13	1.5			\$33.30	Collision Reduction	PSSR
6	MAD	41	9.2	R40.7	Truck Climbing lane for two lane Road	TBD	2012/13	1.2			\$60.80	Collision Reduction	PSSR
6	VAR	VAR	VAR	VAR	Future ADA	TBD	2012/13	0.6			\$2.00	Mandate	PSR
6	VAR	VAR	VAR	VAR	Safety Reserve	TBD	2012/13		1.2		\$3.00	Collision Reduction	PSSR
6	Fre	145	25.1	34.1	Rehabilitate Roadway	TBD	2013/14		1		\$8.00	Roadway	PSR
6	Kin/Fre	33	14.1	14.8	Pavement Rehabilitation	TBD	2012/13		1		\$9.00	Roadway	PSSR
6	MAD	41	3.2	9.3	Rehabilitate Roadway and Raise Grade	TBD	2012/13		1		\$6.70	Roadway	PSR
6	MAD	145	6.6	11	Pavement Rehabilitation	TBD	2014/15		0.5		\$15.90	Roadway	PSR
6	MPA	41	1.97	4.9	Replace, reline Culverts	TBD	2013/14		0.5		\$1.90	Roadway	PSR
6	TUL	99	19.8L	25.0L	Rehabilitate Roadway (2R)	TBD	2012/13		0.5		\$17.80	Roadway	PSSR
6	FRE	33	10.8	10.8	Replace Bridge	TBD	2013/14		0.6		\$6.90	Bridge	PSSR
6	MAD	41	27.8	28	Upgrade Bridge Rails and Widen	TBD	2013/14		0.6		\$3.50	Bridge	PSSR
6	Ker	99	21.6	25.4	Roadside Safety Improvement	TBD	2013/14		0.1	0.2	\$1.90	Roadside	PSR
6	FRE	168S	R9.4	R12.2	Construct Concrete Median Barrier	TBD	2013/14		0.8		\$2.70	Collision Reduction	PSSR
6	FRE	168S	R6.9	R9.4	Construct Concrete Median Barrier	TBD	2013/14		0.8		\$3.10	Collision Reduction	PSSR
6	FRE	180S	R63.6	R67.6	Construct Concrete Median Barrier	TBD	2013/14		0.8		\$3.70	Collision Reduction	PSSR
6	FRE	99	23.2	30.3	Install Ramp Metering System	TBD	2013/14		0.5		\$26.00	Mobility	PSR
6	VAR	VAR	VAR	VAR	Future ADA	TBD	2013/14		0.6		\$2.00	Mandate	PSR
6	VAR	VAR	VAR	VAR	Safety Reserve	TBD	2013/14		1.2		\$2.00	Collision Reduction	PSSR
6	KER	5	73	82.3	Pavement Rehabilitation	TBD	TBD			1	\$17.00	Roadway	PSR
6	TUL	65	36.7	39.57	Pavement Rehabilitation	TBD	TBD			0.5	\$8.70	Roadway	PSR
6	MAD	99	1	9.5	Pavement Rehabilitation	TBD	TBD			0.5	\$12.90	Roadway	PSR
6	FRE	33	16.3	24.3	Pavement Rehabilitation	TBD	TBD			1	\$4.90	Roadway	PSR
6	FRE	145	0	25.1	CAPM	TBD	TBD			0.5	\$18.70	Roadway	PSSR
6	KER	202	1.47	8.9	Pavement Rehabilitation	TBD	TBD			1	\$6.60	Roadway	PSR
6	FRE	41	M6.0	R21.6	Construct Concrete Median Barrier	TBD	TBD			0.8	\$10.50	Collision Reduction	PSSR
6	KIN	41	15	31	Shoulder Widening on Narrow Two lane Roads	TBD	TBD			1.5	\$8.10	Collision Reduction	PSSR
6	KER	58	65.08	69.75	Construct Concrete Median Barrier	TBD	TBD			0.8	\$4.10	Collision Reduction	PSSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
6	KER	58	19.2	77.2	Construct Shoulders and Upgrade/Install Guardrails	TBD	TBD			1.5	\$4.30	Collision Reduction	PSSR
6	KER	58	19.2	77.2	Construct Shoulders and Upgrade/Install Guardrails	TBD	TBD			1.4	\$4.30	Collision Reduction	PSSR
6	KER	58	57.41	59.42	Construct Thrie Beam Median Barrier	TBD	TBD			0.7	\$2.00	Collision Reduction	PSSR
6	KER	58	R99.50	R99.50	Replace Bridge	TBD	TBD			1.5	\$10.00	Bridge	PSR
6	FRE	198	35.4	35.4	Replace Bridge	TBD	TBD			1.5	\$5.00	Bridge	PSR
6	VAR	VAR	VAR	VAR	Future ADA	TBD	TBD			0.6	\$2.00	Mandate	PSR
6	VAR	VAR	VAR	VAR	Safety Reserve	TBD	TBD			1.2	\$2.00	Collision Reduction	PSSR
6	Fre	168	1.7	9	Install Fiber Optic System	TBD	TBD			0.4	\$2.34	Mobility	PSR
6	Tul	198	3.5	12	Install Fiber Optic System	TBD	TBD			0.7	\$4.12	Mobility	PSR
6	Ker	58	51.7	59.5	Install Fiber Optic System	TBD	TBD			0.7	\$3.75	Mobility	PSR
6	ker	99	19.5	30.5	Install Fiber Optic System	TBD	TBD			0.8	\$4.96	Mobility	PSR
7	VEN	033	7.00	8.00	Modify Structure- it has also bridge rails	TBD	TBD	2.0	1.0		\$4.35	Bridge	PSSR
7	LA	VAR	0.50	2.5	seismic retrofit (9 bridge)	TBD	TBD	2.0	1.0		\$7.00	Bridge	PSSR
7	LA	VAR	VAR	VAR	seismic retrofit	TBD	TBD	2.0	1.0		6.0	Bridge	PSSR
7	VEN	VAR	VAR	VAR	seismic retrofit	TBD	TBD	2.0	1.0		\$4.00	Bridge	PSSR
7	VEN	VAR	0.00	36	upgrade bridge rail	TBD	TBD	2.0	1.0		\$8.10	Bridge	PSSR
7	LA	VAR	VAR	VAR	seismic retrofit	TBD	TBD	2.0	1.0		\$5.00	Bridge	PSSR
7	LA	210	36.00	38	bridge rehab	TBD	TBD	2.0	1.0		\$1.50	Bridge	PSSR
7	LA	5	35.5	36.5	bridge rehab	TBD	TBD		1.5	0.5	\$4.20	Bridge	PSSR
7	LA	91	16	18	bridge rehab	TBD	TBD		1.5	0.5	\$3.00	Bridge	PSSR
7	LA	VAR	0.00	8	upgrade bridge rails	TBD	TBD	2.0	1.0		\$4.05	Bridge	PSSR
7	LA	39	15	18	upgrade bridge rail	TBD	TBD		1.5	0.5	\$4.00	Bridge	PSSR
7	LA	39	17	19	SEISMIC RETROFIT	TBD	TBD		2.0	1.0	\$2.61	Bridge	PSSR
7	LA	101	8.4	9.22	Install safety lighting with concrete barrier and MBGR	TBD	TBD	0.5			\$1.90	Collision Reduction	PSR/PR
7	LA	001	3.40	3.9	Modify Traffic Circle by restriping ( Traffic worked with Consultants)	TBD	TBD		1.0		\$1.80	Collision Reduction	PSR
7	LA	405	34.37	34.65	Add Aux. Ln(s)	TBD	TBD		0.5		\$2.70	Collision Reduction	PSR/PR
7	LA	002	VAR	VAR	Construct Ultimate vehicle escape ramp	TBD	TBD		1.5		\$5.70	Collision Reduction	PSR
7	VEN	023	0.00	8.90	Lt/Rt turn channelization various locations	TBD	TBD	2.0			\$1.50	Collision Reduction	PSR/PR
7	LA	5	25.20	25.852	Median Barrier/Curve correction	TBD	TBD	1.5			\$2.50	Collision Reduction	PSR/PR
7	LA	605	17.60	19.2	Modify ramp/ Deceleration lane	TBD	TBD	1.5			\$2.50	Collision Reduction	PSR/PR
7	LA	605	17.60	19.2	Modify ramp/ Acceleration	TBD	TBD	1.5			\$2.50	Collision Reduction	PSR/PR
7	LA	138	14.16		Increase corner sight distance	TBD	TBD		2.0		\$1.10	Collision Reduction	PSR/PR
7	LA	039	34.00	35.50	curve correction and install concrete barrier	TBD	TBD			2.0	\$10.00	Collision Reduction	PSR/PR
7	LA	101	0.32	0.32	Install concrete barrier and flashing beacon	TBD	TBD	0.5			\$1.80	Collision Reduction	PSR/PR
7	LA	405	9.80	10.10	Install Concrete Guardrail	TBD	TBD	1.5	0.5		\$4.00	Collision Reduction	PSR/PR
7	LA	var	Var	Var	Gore area clean-up & Ungrades	TBD	TBD	0.3			\$5.50	Collision Reduction	PSR/PR
7	LA	210	R5.762	R5.762	Install concrete barrier, safety lighting, improve pavement friction and upgrade sign panel	TBD	TBD	1.0			\$1.20	Collision Reduction	PSR/PR
7	LA	023	8.90	At various locations along LA-23	L/T & R/T Lane Channelization - various locations	TBD	TBD	1.0	0.5		\$5.00	Collision Reduction	PSR/PR
7	LA	134	0.00	13.34	Install MBGR	TBD	TBD	0.5			\$2.30	Collision Reduction	PSR/PR
7	LA	039	18.36	38.15	Install MBGR at various locations	TBD	TBD	1.5	0.5		\$7.00	Collision Reduction	PSR/PR
7	LA	710	6.06	27.11	Install concrete railing	TBD	TBD	1.5	0.5		\$5.00	Collision Reduction	PSR/PR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During  
FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
7	LA	005	16.70	39.40	Install MBGR	TBD	TBD	0.5			\$3.90	Collision Reduction	PSR/PR
7	LA	210	24.69		Upgrade Tunnel Safety Lighting	TBD	TBD	1.5			\$1.90	Collision Reduction	PSR/PR
7	LA	1	48.49	51.76	Refurbish median	TBD	TBD	1.5	0.5		\$3.00	Collision Reduction	PSR/PR
7	LA	014	68.96	77.00	Install Median Barrier	TBD	TBD		2.0		\$5.00	Collision Reduction	PSR/PR
7	LA	47	0.00	2.30	Widen ramp & connector	TBD	TBD		2.0		\$2.60	Collision Reduction	PSR/PR
7	LA	14	R66.526		Widen ramp and improve intersection	TBD	TBD		2.0		\$3.00	Collision Reduction	PSR/PR
7	LA	60	8.50	9.3	Modify ramp	TBD	TBD		2.0		\$4.00	Collision Reduction	PSR/PR
7	LA	110	2.50	8.37	Remove & Inconstruct inside shoulder	TBD	TBD			2.0	\$4.50	Collision Reduction	PSR/PR
7	LA	105	16.38	16.89	Modify ramp	TBD	TBD			2.0	\$3.00	Collision Reduction	PSR/PR
7	VEN	34	4.30	17.7	Add pre-emption time @ Rrxings	TBD	TBD			2.0	\$3.00	Collision Reduction	PSR/PR
7	VEN	126	22.00	34.60	Median Barrier	TBD	TBD			2.0	\$15.00	Collision Reduction	PSR/PR
7	VEN	126	0.00	5	Median Barrier	TBD	TBD			2.0	\$40.00	Collision Reduction	PSR/PR
7	LA	002	12.80	14.40	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2		\$3.00	Mandates	PSSR
7	LA	002	2.30	3.60	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2		\$3.00	Mandates	PSSR
7	LA	002	10.60	12.7	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2		\$3.00	Mandates	PSSR
7	VEN	001	15.00	21.08	Rehab Roadway to Relinquish	TBD	TBD	0.4	0.2		\$2.50	Mandates	PSSR
7	LA	005	45.6	46.2	Rehab Roadway & Drainage to Relinquish	TBD	TBD	0.2	0.2		\$2.50	Mandates	PSSR
7	LA	001	33.3	34.6	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2		\$3.00	Mandates	PSSR
7	LA	107	0.00	4.80	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2		\$10.00	Mandates	PSSR
7	LA	001	14.20	18.10	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2		\$8.00	Mandates	PSSR
7	LA	019	7.80	8.40	Rehab Roadway to Relinquish	TBD	TBD	0.1	0.2		\$1.00	Mandates	PSSR
7	LA	066	3.2	5.3	Rehab Roadway to Relinquish	TBD	TBD	0.4	0.4		\$3.00	Mandates	PSSR
7	LA	019	3.98	5.49	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.4	0.2	\$1.00	Mandates	PSSR
7	LA	001	20.60	21.90	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2	0.2	\$3.00	Mandates	PSSR
7	LA	164	3.98	4.97	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2	0.2	\$1.00	Mandates	PSSR
7	LA	164	4.97	5.63	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2	0.2	\$1.00	Mandates	PSSR
7	LA	164	5.02	6.88	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2	0.2	\$1.00	Mandates	PSSR
7	LA	170	11.70		Rehab Roadway to Relinquish	TBD	TBD	0.2	0.2	0.2	\$1.00	Mandates	PSSR
7	LA	066	0	2.4	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.4	0.2	\$3.00	Mandates	PSSR
7	LA	066	2.1	3.2	Rehab Roadway to Relinquish	TBD	TBD	0.2	0.4	0.2	\$3.00	Mandates	PSSR
7	LA	134	TBD	TBD	Source Control	TBD	TBD	0.3			\$1.00	Mandates	PSR
7	LA	060	0.20	1.9	Source Control	TBD	TBD	0.3			\$3.50	Mandates	PSR
7	LA	134	TBD	TBD	Source Control	TBD	TBD	0.3			\$1.00	Mandates	PSR
7	LA	710	18.70	21	Source Control	TBD	TBD	0.3			\$2.20	Mandates	PSR
7	LA	210	35.90	39.8	Source Control	TBD	TBD	0.7	0.3		\$1.00	Mandates	PSR
7	LA	210	39.80	41	Source Control	TBD	TBD	0.7	0.3		\$1.00	Mandates	PSR
7	VEN	101	30.20	31	Source Control	TBD	TBD	0.7	0.3		\$1.00	Mandates	PSR
7	LA	105	R11.4	R12.9	Source Control	TBD	TBD	0.7	0.3		\$1.20	Mandates	PSR
7	LA	710	12.00	13.95	Source Control	TBD	TBD	0.7	0.3		\$3.50	Mandates	PSR
7	LA	60	R1.9	2.7	Source Control	TBD	TBD	0.7	0.3		\$2.50	Mandates	PSR
7	LA	60	2.70	R3.7	Source Control	TBD	TBD	0.7	0.3		\$3.50	Mandates	PSR
7	LA	710	23.40	24.4	Source Control	TBD	TBD		0.7	0.3	\$2.50	Mandates	PSR
7	LA	710	24.40	25.2	Source Control	TBD	TBD		0.7	0.3	\$3.50	Mandates	PSR
7	LA	105	R7.8	R8.7	Source Control	TBD	TBD		0.7	0.3	\$1.30	Mandates	PSR
7	LA	var	Var	Var	Install infiltration basin,media filters detention basin at the drainage outfalls	TBD	TBD	1.0			\$10.00	Mandates	PSSR
7	LA	001	1.82	2.74	Colorado Lagoon - Install infiltration basin,media filters detention basin at the drainage outfalls	TBD	TBD	0.5			\$5.00	Mandates	PSR/PR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
7	LA	var	Var	Var	Los Cerritos Channel Toxics TMDL adopted by EPA March 2010, Various State Routes are in the watershed and are subject to the TMDL requirements. Install infiltration basin,media filters detention basin at the drainage outfalls	TBD	TBD	2.0	1.0		\$1.00	Mandates	PSSR
7	LA	001	1.85	3.96	Colorado lagoon toxic tmdl is anticipated to become effective in the near future, Install infiltration basin,media filters detention basin at the drainage outfalls	TBD	TBD	2.0	1.0		\$1.00	Mandates	PSSR
7	LA	var	Var	Var	Various TMDLs in Dominguez Channel+LA/LB Harbors watersheds anticipated to be adopted by EPA by 2012, various State Routes are in the watersheds and subject to compliance, Install infiltration basin,media filters detention basin at the drainage outfalls	TBD	TBD	2.0	1.0		\$1.00	Mandates	PSSR
7	LA	var	Var	Var	Various TMDLs in several small lakes in the Los angeles county to be adopted by EPA in the near future ( <a href="http://www.epa.gov/region9/water/tmdl/los-angeles/LA-LakesTMDLs-May2010-full.pdf">http://www.epa.gov/region9/water/tmdl/los-angeles/LA-LakesTMDLs-May2010-full.pdf</a> )	TBD	TBD	0.5	1.5	1.0	\$1.00	Mandates	PSSR
7	LA	var	Var		Storm Water LA	TBD	TBD	0.5	1.5	1.0	\$1.00	Mandates	PSSR
7	LA	005	16.34	63.40	ADA - Missing Curb Ramps (S/E LA County)	TBD	TBD	0.5			\$5.60	Mandates	PSR/PR
7	LA	002	Var	Var	ADA - Missing Curb Ramps (N/E LA County)	TBD	TBD	0.4			\$1.00	Mandates	PSR/PR
7	VEN	023	Var	Var	ADA - Missing Curb Ramps (Ven County)	TBD	TBD	0.5			\$0.65	Mandates	PSR/PR
7	LA	001	40.79	48.49	Adaptive Signal Control System	TBD	TBD	0.3			\$6.75	Mobility	PSR/PR
7	LA	5, 710	R57.7, 6.8	R88.1, 8.5	Vehicle Detection Stations	TBD	TBD	1.0			\$4.45	Mobility	PSR/PR
7	LA	var	Varies	Varies	Changeable Message Slgns	TBD	TBD	1.0			\$2.70	Mobility	PSR/PR
7	LA/VEN	var	Varies	Varies	Model 2070 Controller Conversion	TBD	TBD	1.0			\$6.82	Mobility	PSR/PR
7	LA	060	11.80	23.5	Roadway rehab & Ramps	TBD	TBD	3.0	1.0		\$70.00	Roadway	PSSR
7	LA	005	73.70	80.8	Roadway rehab & Ramps	TBD	TBD	2.5	1.0		\$60.00	Roadway	PSR
7	LA	005	80.80	85.8	Roadway rehab & Ramps	TBD	TBD	2.5	1.0		\$60.00	Roadway	PSR
7	LA	005	85.80	88.6	Roadway rehab & Ramps	TBD	TBD	2.5	1.0		\$50.00	Roadway	PSR
7	LA	210	10.00	16.1	Roadway rehab & Ramps	TBD	TBD	2.0	1.0	1.0	\$80.00	Roadway	PSSR
7	LA	210	16.10	19.5	Modify Ramps & Rehab	TBD	TBD	1.0	2.0	1.0	\$60.00	Roadway	PSSR
7	LA	210	19.50	24.8	Modify Ramps & Rehab	TBD	TBD	1.0	2.0	1.0	\$100.00	Roadway	PSSR
7	LA	405	21.10	34.3	SLAB REPLACEMENT AND AC OL	TBD	TBD		3.0	2.0	\$200.00	Roadway	PSSR
7	LA	405	0.00	12.6	SLAB REPLACEMENT AND AC OL	TBD	TBD	2.0	1.0		\$40.00	Roadway	CAPM -PR
7	LA	405	12.90	21.2	SLAB REPLACEMENT AND AC OL	TBD	TBD	2.0	1.0		\$40.00	Roadway	PSSR
7	LA	5	0.00	8.3	SLAB REPLACEMENT AND GRIND AC OL ON RAMPS	TBD	TBD	2.0	1.0		\$35.00	Roadway	PSSR
7	VEN	023	22.80	23.50	REPLACE EARTH CHANNEL WITH CONCRETE	TBD	TBD	0.5			\$2.10	Roadway	PSSR
7	LA	027	2.30	4	CHANNEL LINING RESTORATION	TBD	TBD	0.5			\$2.60	Roadway	PSSR
7	VEN	126	16.00	23	cold plane and overlay	TBD	TBD	2.0	1.0		\$20.00	Roadway	PSSR
7	LA	10	37.50	48.3	SLAB REPLACEMENT AND GRINDING	TBD	TBD	2.0	1.0		\$40.00	Roadway	PSSR
7	LA	5	19.50	25.9	SLAB REPLACEMENT, COLD PLANE & OL, SHLD, RAMPS	TBD	TBD	2.0	1.0		\$60.00	Roadway	PSSR
7	LA	14	59.00	68.9	SLAB REPLACEMENT, COLD PLANE & OL, SHLD, RAMPS	TBD	TBD	2.0	1.0		\$40.00	Roadway	PSSR
7	LA	14	68.90	77	SLAB REPLACEMENT, COLD PLANE & OL, SHLD, RAMPS	TBD	TBD	2.0	1.0		\$40.00	Roadway	PSSR
7	VEN	33	8.40	11.2	cold plane and overlay	TBD	TBD	0.7	0.3		\$5.00	Roadway	PSSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
7	LA	134	0.00	13.3	SLAB REPLACEMENT, COLD PLANE & OL, SHLD, RAMPS	TBD	TBD	1.0	1.0		\$40.00	Roadway	PSSR
7	LA	22	0.00	1.7	cold plane and overlay	TBD	TBD	1.0	0.5		\$10.00	Roadway	PSSR
7	LA	001	30.10	30.90	SLAB REPLACEMENT AND AC OL	TBD	TBD	1.0	0.5	0.5	\$3.00	Roadway	PSSR
7	LA	187	3.50	8.90	Cold plane and Overlay AC	TBD	TBD	1.0	0.5	0.5	\$5.00	Roadway	PSSR
7	LA	110	13.50	21.50	SLAB REPLACEMENT AND AC OL	TBD	TBD	2.0	1.0		\$20.00	Roadway	PSSR
7	LA	138	48.96	51.41	COLD PLANE & OL	TBD	TBD		2.0	1.0	\$10.50	Roadway	CAPM-PR
7	LA	405	11.7	12.16	Reconstruct Truck Scales	TBD	TBD	1.0	0.5		\$5.00	Mobility	PSR/PR
7	LA	101, 134, 170	11.5; 0.0; 14.5	11.8; 0.5;	Maintenance Safety	TBD	TBD	0.7	0.3		\$1.00	Roadside	PSSR
7	LA	2, 134	18.6; 8.8	19.6; 9.5	Maintenance Safety	TBD	TBD	0.7	0.3		\$1.00	Roadside	PSSR
7	LA				Construct Equipment Shop	TBD	TBD	0.5			\$28.00	Facilities	FPSR
7	VEN				Construct Maint. Station	TBD	TBD	0.5			\$5.00	Facilities	FPSR
7	LA				Construct Maint. Station	TBD	TBD	1.0			\$5.00	Facilities	FPSR
7	LA				Construct Maint. Station	TBD	TBD	1.0			\$5.00	Facilities	FPSR
7	LA				Construct Maint. Station	TBD	TBD	1.0			\$5.00	Facilities	FPSR
7	LA				Construct Maint. Station	TBD	TBD	1.0			\$5.00	Facilities	FPSR
7	LA	60,605	11.5-12.0; 17.0-18.0	19.6; 9.5	Maintenance Safety	TBD	TBD	0.7	0.3		\$1.00	Roadside	PSSR
8	RIV	60	126.90		CORRIDOR MASTERPLAN ('K' PHASE ONLY)	TBD	TBD	0.75			\$0.40	Roadway	PSR/PR
8	RIV	37	44.70		INSTALL & CONNECT CCTV, VDS & RMS.	TBD	TBD	0.70			\$1.50	Mobility	PSR/PR
8	RIV	60	1.50	10.00	Construct Aux lanes, widen connector, widen ramps	TBD	TBD	1.50			\$185.30	Mobility	PSR
8	RIV	79	4.70	4.90	Construct Two Climbing Lanes	TBD	TBD	2.50			\$1.90	Mobility	PSR
8	RIV	371			Construct one truck climbing lane & add shoulders in both direction	TBD	TBD	1.50			\$27.60	Mobility	PSR
8	RIV	91	0.80	9.20	INSTALL & CONNECT CCTV, VDS & RMS TO FIBER OPTIC SYSTEM.	TBD	TBD	1.00			\$6.50	Mobility	PSR
8	RIV	60	0.00	12.20	TRAFFIC OPERATIONS SYSTEM (CCTV, CMS, VDS, ESU & FOC SYSTEM)	TBD	TBD	0.20			\$27.10	Mobility	PSR
8	SBN	40	18.03		REGRADE & PLACE ROCK SLOPE PROTECTION (RSP)	TBD	TBD	0.50			\$0.50	Bridge	PSR/PR
8	SBN	330	32.50	33.70	Replace Bridge Rail & approach rail	TBD	TBD		1.00		\$2.50	Bridge	PSR
8	SBN	Var			Construct new BR railing	TBD	TBD		1.00		\$2.50	Bridge	PSR
8	SBN	74	13.20	33.90	Upgrade Bridge Rail	TBD	TBD		1.00		\$4.50	Bridge	PSR
8	SBN	15	135.10	136.20	Replace Bridges & widen shoulders	TBD	TBD		1.00		\$14.10	Bridge	PSR
8	SBN	38	46.60	56.10	Pavement Rehab	TBD	TBD		1.50		\$3.40	Roadway	PSR
8	SBN	62	0.00	6.70	Pavement Rehab (phase 2)	TBD	TBD		1.50		\$127.50	Roadway	PSR
8	RIV	10	74.00	105.00	Cold plane .2 ft & place .2 ft rubberized AC Type G	TBD	TBD		1.50		\$32.30	Roadway	PSR
8	SBN	62	131.00	142.70	Grind 45 MM, overlay 60mm DGAC (Type A)	TBD	TBD		1.50		\$9.60	Roadway	PSR
8	RIV	10	8.20	16.30	PCC Grinding & replace slabs & mill overlay ramps	TBD	TBD		1.00		\$22.40	Roadway	PSR
8	SBN	10	30.90	39.10	PCC Grinding & replace slabs	TBD	TBD		1.00		\$8.40	Roadway	PSR
8	SBN	15	123.90	137.70	Grind and overlay pavement	TBD	TBD		1.00		\$7.40	Roadway	PSR
8	RIV	79	35.40	37.50	Replace RSP Drainage Facilities	TBD	TBD		1.00		\$2.50	Roadway	PSR
8	SBN	215	17.60		Rehab drainage system	TBD	TBD		1.00		\$2.50	Roadway	PSR
8	SBN	10	6.20	9.20	Install landscaping & upgrade irrigation	TBD	TBD		1.50		\$4.30	Roadside	PSR/PR
8	RIV	10	134.00	138.00	Upgrade SRRA	TBD	TBD		1.50		\$7.60	Roadside	PSR/PR
8	RIV	95	20.50	26.00	Widen shoulders & rehab (D-11 173900)	TBD	TBD		1.50		\$2.20	Mobility	PSR/PR
8	SBN	15	16.20	26.50	Fiber optic backbone commo system, CCTV, VDS & TOS cabinets	TBD	TBD		1.50		\$20.40	Mobility	PSR
8	SBN	215	7.00	17.80	Install FOC backbone, RMS, CMS, CCTV, VDS, ESU, TOS, HUB & widen on-ramps	TBD	TBD		1.50		\$8.40	Mobility	PSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
8	RIV	15	0.00	12.20	Install RMS, CCTV, CMS, VDS, HAR, ESU, RAMP widening, HUB TOS Cabinet & Fiber Optic Comm Sys	TBD	TBD		1.50		\$36.70	Mobility	PSR
8	RIV	15	26.00	41.80	Install RMS, CCTV, CMS, VDS, HAR, ESU, RAMP widening, HUB TOS Cabinet & Fiber Optic Comm Sys	TBD	TBD		2.00		\$27.60	Mobility	PSR
8	SBN	15	26.40	48.00	Install TMS, vehicle detection stations (VDS'S)	TBD	TBD		1.50		\$6.50	Mobility	PSR
8	SBN	247	2.20	13.80	PAVEMENT REHABILITATION & WIDEN	TBD	TBD		0.25		\$5.50	Roadway	PSR
8	SBN	15	26.00	48.00	Install TMS, Ramp meter stations (RMS'S)	TBD	TBD		0.50		\$26.70	Mobility	PSR
8	RIV	62	0.00	6.50	GRIND 45 MM OVERLAY 45 MM RUBBERIZED ASPHALT CONCRETE TYPE G	TBD	TBD		0.75		\$2.90	Roadway	PSR
8	SBN	62	13.60	18.50	AC OVERLAY, WIDEN SHOULDER, STRIPE TWLTL	TBD	TBD			0.30	\$23.00	Roadway	PSR
8	SBN	178	5.00	14.30	DRAINAGE IMPROVEMENTS	TBD	TBD			0.30	\$6.00	Roadway	PSR
8	RIV	74	62.70	63.30	Replace Bridge	TBD	TBD			0.30	\$4.70	Bridge	PSR
8	RIV	VAR			Upgrade guardrail & end treatments	TBD	TBD			0.30	\$7.80	Collision Reduction	PSR
8	SBN	38	26.60		Replace Bridge Deck, UPGR BR Rail & BR approach Rail	TBD	TBD			0.30	\$3.60	Bridge	PSR
8	SBN	247	1.80	9.60	CONSTRUCT SHOULDER	TBD	TBD			0.30	\$23.50	Collision Reduction	PSR
8	SBN	38	15.00	49.50	GRIND 30MM & OVERLAY 50MM DGAC TYPE A	TBD	TBD			0.30	\$13.80	Roadway	PSR
8	RIV	215	43.90	45.30	COLD PLANE 0.15 FT AND PLACE 0.15 FT RUBBERIZED AC TYPE G	TBD	TBD			0.30	\$10.10	Roadway	PSR
8	SBN	138	R24.1		Replace Bridge	TBD	TBD			0.30	\$8.30	Bridge	PR/PSR
8	RIV	10	57.60	60.90	PCC Grinding & replace slabs	TBD	TBD			0.30	\$7.40	Roadway	PSR
8	SBN	40	73.03	R89	GRIND 45 MM AND OVERLAY 60 MM AC	TBD	TBD			0.30	\$25.30	Roadway	PSR
8	RIV	15	R.5	R2.6	PCC SLABS Replacement & grinding	TBD	TBD			0.30	\$7.90	Roadway	PSR
8	SBN	15	172.10	173.80	Replace two Bridges	TBD	TBD			0.30	\$19.10	Bridge	PSR/PR
8	SBN	111	1.10	1.90	Replace Bridge	TBD	TBD			0.30	\$9.90	Bridge	PSR/PDS
8	RIV	62	0.00	6.70	Pavement Rehabilitation	TBD	TBD			0.30	\$18.40	Roadway	PSR
8	RIV	15	1.00		Install automated detection & warning , repair/replace exhaust hods sytem, over-high indicator sys, repair exist. Off ramp pull boxes	TBD	TBD			1.00	\$1.10	Mobility	PSR/PR
8	RIV	10	44.50	52.30	Pavement Rehabilitation	TBD	TBD			0.30	\$34.10	Roadway	PSR
8	SBN	15	107.30		Upgrade SRRA	TBD	TBD			0.30	\$18.80	Roadside	PSR
8	SBN	15	147.60		Rehab Bridge; construct continuous footing at bents, infill walls & upstream nose protection	TBD	TBD			0.30	\$2.30	Bridge	PSR
8	SBN	18	49.10	51.60	Replace and repair damaged sidewalks, curbs & gutters	TBD	TBD			0.30	\$5.60	Mandates	PSR
9	INY	190	69.2	69.6	Curve Correction	TBD	TBD	0.75			\$6.40	Collision Reduction	PSR/PR
9	INY	395	117.6	117.7	Ped Bridge	TBD	TBD	0.6			\$1.20	Mandates	PSR/PR
9	INY	190	71.1	71.2		TBD	TBD	0.5			\$1.00	Roadway	PSR
9	INY	190	47.2	47.6	Turn Pocket	TBD	TBD	0.5			\$1.00	Mobility	PSR
9	MNO	395	80.4	91.5	Shoulder Widening	TBD	TBD	0.8			\$4.00	Collision Reduction	PSR/PR
9						TBD	TBD	0.75			\$2.00	Collision Reduction	
9	MNO	395	59	63.5	Install RWIS	TBD	TBD		0.5		\$2.00	Mobility	PSR
9	MNO	5705			Upgrade maintenance facility	TBD	TBD		1		\$5.80	Facilities	PSR
9	INY	190/136	11,14.5	36.1,17.5	Rehab and replace culverts	TBD	TBD		0.6		\$2.00	Roadway	PSR
9						TBD	TBD		0.75		\$2.00	Collision Reduction	
9	KER	58	106.5	118.5	Install CMS	TBD	TBD			0.5	\$1.00	Mobility	PSR
9	MNO	395	94	95.6	Shoulder Widening	TBD	TBD			0.6	\$1.00	Collision Reduction	PSR/PR

Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
9						TBD	TBD			0.75	\$2.00	Collision Reduction	
10	Sta	99	0	24.8	Pavement Rehab.	TBD	TBD	0.2			\$75.00	Roadway	
10	SJ	88	5.20	11.90	Cap M	TBD	TBD	0.3			\$6.00	Roadway	
10	Sta	Var	Var	Var	Install Traffic Monitoring Stations	TBD	TBD	0.2			\$7.00	Mobility	PSR
10	Sta	99	13.40	13.80	Construct NB Auxiliary Lane	TBD	TBD	0.2			\$1.70	Mobility	
10	Mer	5	17.6	17.6	Girder Diaphragm Retrofit	TBD	TBD	0.3			\$2.50	Bridge	
10	Tuo	120	R19.61		Resurface Bridge Deck	TBD	TBD	0.3			\$7.00	Bridge	PSSR
10	Tuo	49	13.80	14.40	Construct two-way left turn lane	TBD	TBD	0.5			\$4.40	Mobility	PSR
10	Tuo	120	R44.8		Replace Bridge Deck	TBD	TBD	1.0			\$1.50	Bridge	
10	SJ	580	5	9	Cap M	TBD	TBD	0.40			\$6.00	Roadway	PSSR
10	Ama	88	5.5	14.3	Cap M	TBD	TBD	0.40			\$7.00	Roadway	PSSR
10	Ama	88	46.9	R54.7	Cap M	TBD	TBD	0.80			\$6.00	Roadway	PSSR
10	SJ	5.4	Var	Var	Seismic Retrofit Project	TBD	TBD	1.0			\$16.00	Bridge	PSSR
10	Sta	99	R11.8	R24.5	TMS Electrical	TBD	TBD	0.2			\$9.40	Mobility	PSR
10	Mer	99	17.60	24.50	AC Overlay & Widen Shoulders	TBD	TBD	0.2			\$10.60	Roadway	
10	SJ	580	0.00	5.00	Pavement Repair & Widen Shoulders	TBD	TBD	0.2			\$12.20	Roadway	
10	SJ	132	0.00	7.10	Rehab	TBD	TBD	0.2			\$11.80	Roadway	
10	Mer	59	10.40	14.80	Rehab	TBD	TBD	0.2			\$12.00	Roadway	
10	Ama	49	4.00	6.70	Rehab	TBD	TBD	0.2			\$10.70	Roadway	
10	Sta	120	0.00	4.30	Rehab	TBD	TBD	0.2			\$5.20	Roadway	
10	SJ	12	5.00	9.50	Structural Section Repair	TBD	TBD	0.2			\$4.00	Roadway	
10	Alp	88	0.00	6.00	Rehab	TBD	TBD	0.2			\$12.60	Roadway	
10	Mer	140	34.50	35.80	AC Overlay & Widen Shoulders	TBD	TBD	0.2			\$1.00	Roadway	
10	Ama	88	54.70	60.80	Rehab	TBD	TBD	0.2			\$10.70	Roadway	
10	Ama	88	66.60	71.60	Rheab	TBD	TBD	0.1			\$5.00	Roadway	
10	Tuo	120	R32.9	R41.5	Rehab	TBD	TBD	0.2			\$7.60	Roadway	
10	SJ	4	0	8.2	Pavement Rehab	TBD	TBD	0.90			\$10.00	Roadway	PSSR
10	Mer	140	11.32		Bridge scour mitigation	TBD	TBD	0.2			\$1.50	Bridge	PSSR
10	Mer	59	15.2	16.3	Replace & Widen Bridges	TBD	TBD	0.8			\$8.30	Bridge	
10	Tuo	49	2.50	2.80	Creek Slip-out Repair	TBD	TBD	0.5			\$2.70	Roadway	
10	SJ	99, var	TBD	TBD	Ramp Metering	TBD	TBD	0.2			\$1.50	Mobility	PSR
10	SJ	4.5,99	var	var	Highway Planting Restoration	TBD	TBD	0.5			\$1.10	Roadside	PSR
10	Mer	99	12.80	16.50	Highway Planting Restoration	TBD	TBD	0.5			\$3.10	Roadside	
10	Mer	99	13.00	34.40	Construct stairways	TBD	TBD	0.4			\$1.38	Roadside	PSR
10					TBD (010 SHOPP)	TBD	TBD		0.8		\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD		0.8		\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD		0.8		\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD		0.8		\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD		1.0		\$2.00	Collision Reduction	PSR
10					TBD (010 SHOPP)	TBD	TBD		1.0		\$2.00	Collision Reduction	PSR
10					TBD (010 SHOPP)	TBD	TBD		1.0		\$2.00	Collision Reduction	PSR
10					TBD (010 SHOPP)	TBD	TBD		1.0		\$2.00	Collision Reduction	PSR
10					TBD (015 SHOPP)	TBD	TBD		1.0		\$2.00	Collision Reduction	PSR
10					TBD (015 SHOPP)	TBD	TBD		1.0		\$2.00	Collision Reduction	PSR
10					TBD (361 SHOPP)	TBD	TBD	0.5			\$0.50	Mandates	PSR/PR
10					TBD (361 SHOPP)	TBD	TBD	0.5			\$0.50	Mandates	PSR/PR
10					TBD (361 SHOPP)	TBD	TBD	0.5			\$0.50	Mandates	PSR/PR
10					TBD (378 SHOPP)	TBD	TBD	0.5			\$0.50	Mandates	PSR/PR
10					TBD (378 SHOPP)	TBD	TBD	0.5			\$0.50	Mandates	PSR/PR
10					TBD (378 SHOPP)	TBD	TBD	0.5			\$0.50	Mandates	PSR/PR
10	Mpa	140	22	25.3	Rehab	TBD	TBD	0.80			\$4.70	Roadway	PSSR
10	Tuo	120	9.5	12.1	A/C Overlay & Widen	TBD	TBD	0.90			\$22.40	Roadway	PSSR
10	Mer	5	31.8	32.5	Ramp Rehabilitation	TBD	TBD	0.60			\$28.00	Roadway	PSSR
10	Tuo	120	16.2	24.1	A/C Overlay & Widen Shoulders	TBD	TBD	0.80			\$2.60	Roadway	PSSR
10	Tuo	120	12.1	16.3	Rehab/Widen Shoulders & A/C Overlay	TBD	TBD	0.60			\$7.00	Roadway	PSSR
10	SJ	26	15.3		Upgrade Bridge Rails & Widen	TBD	TBD	0.80			\$1.20	Bridge	PSSR
10	SJ	4	0.1		Rail Upgrade & Widening	TBD	TBD	1.00			\$7.50	Bridge	
10	Var	Var	Var	Var	DWR Bridge Seismic Retrofit Project	TBD	TBD		0.70		\$5.00	Bridge	PSSR

Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
10	Var	Var	Var	Var	Seismic Retrofit Project	TBD	TBD		0.60		\$2.50	Bridge	PSSR
10	Var	Var	Var	Var	Seismic Restoration	TBD	TBD		1.00		\$6.00	Bridge	
10	Var	Var	Var	Var	Seismic Restoration	TBD	TBD		1.00		\$4.50	Bridge	
10	Mpa	140	50.9	51.2	Repair Concrete Rock Slope	TBD	TBD		0.80		\$4.90	Roadway	PSSR
10	STA	99	20.2	20.2	Extend NB and SB off-ramp deceleration lanes	TBD	TBD		0.5		\$1.00	Mobility	PSR
10	SJ	99	28.3	32	Highway Planting Restoration	TBD	TBD		0.50		\$3.10	Roadside	PSR
10	SJ	99	R5.9	R8.2	Highway Planting Restoration	TBD	TBD		0.20		\$1.70	Roadside	PSR
10	SJ	99	0.2	1.8	Highway Planting Restoration	TBD	TBD		0.20		\$1.40	Roadside	PSR
10	Sta	99	15.00	22.70	Construct stairways	TBD	TBD		0.4		\$1.26	Roadside	PSR
10	various	various	0.10	61.30	Maintenance vehicle pullouts	TBD	TBD		0.4		\$1.69	Roadside	PSR
10	Sta	5	27.2		Safety Roadside Rest Area Restoration	TBD	TBD		0.8		\$14.30	Roadside	FS/PSR
10	Ama	104	0	2.8	Shoulder Widening	TBD	TBD		0.2		\$3.40	Mobility	PSR/PDS
10	Mer	140	0.3	4.19	Shoulder Widening	TBD	TBD		0.2		\$4.10	Mobility	PSR
10	Mpa	140	22.30	22.50	Construct left turn lane	TBD	TBD		0.9		\$1.20	Mobility	PSR
10	Cal	26	38.2	38.3	Erosion Control, Retaining Wall	TBD	TBD		0.5		\$3.70	Mandates	
10	Tuo	108	1.9	4.6	Sediment Control	TBD	TBD			0.5	\$4.00	Mandates	
10					TBD (010 SHOPP)	TBD	TBD			0.8	\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD			0.8	\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD			0.8	\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD			0.8	\$0.50	Collision Reduction	PSR/PR
10					TBD (010 SHOPP)	TBD	TBD			1.0	\$2.00	Collision Reduction	PSR
10					TBD (010 SHOPP)	TBD	TBD			1.0	\$2.00	Collision Reduction	PSR
10					TBD (010 SHOPP)	TBD	TBD			1.0	\$2.00	Collision Reduction	PSR
10					TBD (010 SHOPP)	TBD	TBD			1.0	\$2.00	Collision Reduction	PSR
10					TBD (015 SHOPP)	TBD	TBD			1.0	\$2.00	Collision Reduction	PSR
10					TBD (015 SHOPP)	TBD	TBD			1.0	\$2.00	Collision Reduction	PSR
10					TBD (361 SHOPP)	TBD	TBD			0.5	\$0.50	Mandates	PSR/PR
10					TBD (361 SHOPP)	TBD	TBD			0.5	\$0.50	Mandates	PSR/PR
10					TBD (361 SHOPP)	TBD	TBD			0.5	\$0.50	Mandates	PSR/PR
10					TBD (378 SHOPP)	TBD	TBD			0.5	\$0.50	Mandates	PSR/PR
10					TBD (378 SHOPP)	TBD	TBD			0.5	\$0.50	Mandates	PSR/PR
10					TBD (378 SHOPP)	TBD	TBD			0.5	\$0.50	Mandates	PSR/PR
10	SJ	99	10.00	14.00	Cap M	TBD	TBD			0.3	\$5.60	Roadway	
10	Tuo	108	R16.1	R18.9	A/C Overlay	TBD	TBD			0.90	\$3.20	Roadway	PSSR
10	Tuo	108	R18.9	R24.5	Rehab & Shoulder Widening	TBD	TBD			0.90	\$11.00	Roadway	PSSR
10	Mer	140	4.3	11.7	Structural Section Repair & Widen Three Bridges	TBD	TBD			1.00	\$7.00	Roadway	PSSR
10	SJ	88	5.1	12.3	Roadway Rehab	TBD	TBD			1.00	\$16.90	Roadway	PSSR
10	Mer	165	0	11.7	Rehab Existing Asphalt	TBD	TBD			0.70	\$26.40	Roadway	PSSR
10	Alp	4	0	3.2	Cap M	TBD	TBD			0.60	\$1.20	Roadway	PR
10	SJ	99	1.7	5.8	Cap M	TBD	TBD			0.50	\$9.00	Roadway	PSSR
10	SJ	88	19.2	25.4	Cap M	TBD	TBD			0.50	\$4.60	Roadway	PSSR
10	Var	Var	Var		POC ADA Compliance	TBD	TBD			0.30	\$3.00	Bridge	PSSR
10	Mpa	49	17.2		Rail Upgrade	TBD	TBD			1.00	\$3.00	Bridge	
10	Sta	132	30.3	51		TBD	TBD			0.80	\$21.00	Roadway	
10	Cal	4	42.8	43.6	Curve Improvement	TBD	TBD			0.3	\$4.00	Mobility	PSR
10	SJ	99	34.6	---	STAA trucks turning radius improvement	TBD	TBD			0.5	\$1.00	Mobility	PSR
10	SJ	99	10.9	12.5	Structure Rehab, Bridge Rail Upgrade	TBD	TBD			0.80	\$21.20	Bridge	
10	SJ	4	15.10	17.70	Highway Planting Restoration	TBD	TBD			0.5	\$3.12	Roadside	PSR
10	SJ	5	23.90	26.50	Highway Planting Restoration	TBD	TBD			0.5	\$3.10	Roadside	PSR
10	SJ	99	16.70	18.10	Highway Planting Restoration	TBD	TBD			0.5	\$2.47	Roadside	PSR
10	Sta	99	R1.6	R4.7	Highway Planting Restoration	TBD	TBD			0.5	\$2.60	Roadside	PSR
10	Mer	99	20.00	23.40	Highway Planting Restoration	TBD	TBD			0.5	\$2.70	Roadside	PSR
10	Sta	99	0.3		Safety Roadside Rest Area Restoration	TBD	TBD			0.8	\$16.90	Roadside	FS/PSR
10	Mer	5	0.6		Safety Roadside Rest Area Restoration	TBD	TBD			0.8	\$16.90	Roadside	FS/PSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During  
FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
10	SJ	26	17.1	17.9	Curve Improvement	TBD	TBD			0.2	\$4.00	Mobility	PSR
10	SJ	5	R14.5	R17.1	Install ITS Connectors, Closed Circuit TV Cameras, CMS, fiber optics	TBD	TBD			0.3	\$3.10	Mobility	PSR
10	SJ	4	14.10	26.20	Install CMS & Weather Station	TBD	TBD			0.5	\$9.10	Mobility	
11	SD	79	var	var	Upgrade Bridge Rails	TBD	TBD	0.3	0.3	0.4	\$1.80	Bridge	PSR
11	SD	94	var	var	Upgrade Bridge Rails	TBD	TBD	0.3	0.3	0.4	\$2.10	Bridge	PSR
11	SD	76	var	var	Upgrade Bridge Rails	TBD	TBD	0.3	0.3	0.4	\$1.30	Bridge	PSR
11	SD	15	5.6	6.1	Pavement Rehabilitation	TBD	TBD	0.7	0.3	0.5	\$1.00	Roadway	PSR
11	SD	125	10	13	Pavement Rehabilitation	TBD	TBD	0.7	0.3	0.5	\$1.00	Roadway	PSR
11	SD	78	50.1	80.7	Pavement Rehabilitation.	TBD	TBD	0.7	0.3	0.6	\$1.00	Roadway	PSR
11	SD	5	4	R22.3	Roadside Safety Improvments (re-scope existing PID to new program)	TBD	TBD			0.8	\$2.80	Roadside	PSR/PR
11	SD	5,15,805	var	var	Slope Stabilization to address sediment TMDL	TBD	TBD			1	\$3.50	Roadside	PSR/PR
11	SD	5,78	var	var	Slope Stabilization to address sediment TMDL	TBD	TBD			1	\$2.00	Roadside	PSR/PR
11	SD	Various			Future Safety Projects	TBD	TBD			8	\$1.00	Collision Reduction	PSR/PR
11	SD	8	6.6	11.6	Pavement Rehabilitation	TBD	TBD	0.7	0.3		\$13.44	Roadway	PSR
11	SD	5	R22.26	R22.26	Bridge Rehabilitation	TBD	TBD		1.5		\$1.00	Bridge	PSR
11	SD	5	R61.5	R62.0	Shoulder improvements	TBD	TBD	1	0.5		\$1.70	Collision Reduction	PSR
11	SD	8	22.2	R23.4	Shoulder improvements	TBD	TBD	1	0.5		\$1.70	Collision Reduction	PSR
11	SD	8	R24.7	R25.2	Shoulder improvements	TBD	TBD	1	0.5		\$1.70	Collision Reduction	PSR
11	SD	805	23.5	23.8	On SD-805	TBD	TBD	1	0.5		\$1.70	Collision Reduction	PSR
11	SD	Var	var	var	Various Locations	TBD	TBD	1	0.5		\$1.70	Collision Reduction	PSR
11	SD	15	44.24	44.24	Seismic Retrofit	TBD	TBD	1	0.5		\$3.85	Roadway	PSR
11	SD	76	32.9	33.9	Rumble strips, signing	TBD	TBD		0.5		\$1.00	Collision Reduction	PSR/PR
11	SD	78	52.2	54.1	Rumble strips, signing	TBD	TBD		0.5		\$1.00	Collision Reduction	PSR/PR
11	SD	78	75.9	76.7	Rumble strips, signing	TBD	TBD		0.5		\$1.00	Collision Reduction	PSR/PR
11	SD	52	5	6.2	Pavement Rehabilitation Long Term Solution	TBD	TBD	0.7	0.8		\$1.00	Roadway	PSSR
11	SD	8	R26.6	R28.9	Shoulder improvements	TBD	TBD		1		\$1.00	Collision Reduction	PSR/PR
11	SD	8	R65.4	R65.9	Shoulder improvements, guardrail, signing	TBD	TBD		1		\$1.00	Collision Reduction	PSR/PR
11	SD	8	R30.8	R31.2	Shoulder improvements, signing	TBD	TBD		1		\$1.00	Collision Reduction	PSR/PR
11	SD	67	R18.6	R18.7	Signal Improve	TBD	TBD		1		\$1.00	Collision Reduction	PSR/PR
11	SD	163	2.8	3.5	Shoulder improvements,rumble strips	TBD	TBD		1		\$1.00	Collision Reduction	PSR/PR
11	SD	805	23.267	25.758	Add Aux. Ln(s)	TBD	TBD		1		\$3.70	Mobility	PSR
11	SD	805	23.3	24.4	Add Aux. Ln(s)	TBD	TBD		1		\$5.50	Mobility	PSR
11	SD	805	21.2	27.8	Modify Structure	TBD	TBD		1		\$8.40	Mobility	PSR
11	SD	805	25.4	26.3	Reconstruct Interchange	TBD	TBD		1		\$1.00	Mobility	PSR
11	SD	805	20.2		Modify Structure	TBD	TBD		1		\$0.20	Mobility	PSR
11	SD	805	19.85		Modify Ramp	TBD	TBD		1		\$3.60	Mobility	PSR
11	SD	905	12		Modify Structure	TBD	TBD		1		\$1.00	Mobility	PSR
11	SD	905	11.9	12	Add Truck Climb Ln(s)	TBD	TBD		1		\$5.00	Mobility	PSR
11	SD	8,94	VAR	VAR	Seismic Retrofit	TBD	TBD		1.5		\$1.00	Bridge	PSR
11	SD	8	VAR	VAR	Bridge Rehabilitation	TBD	TBD		1.5		\$1.00	Bridge	PSR
11	IMP	86	var	var	Construct missing ADA Curb ramps	TBD	TBD		1.7		\$1.00	Mandates	PSR
11	SD	52	var	var	Construct ADA missing Sidewalk	TBD	TBD		1.8		\$1.00	Mandates	PSR
11	SD	Various			Future Safety Projects	TBD	TBD		2		\$1.00	Collision Reduction	PSR/PR
11	SD	805	var	var	Construct missing ADA Curb ramps	TBD	TBD		2		\$1.00	Mandates	PSR
11	IMP	Var				TBD	TBD		3		\$1.00	Collision Reduction	PSR/PR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
11	SD	76	32.8	32.8	Signal Improve	TBD	TBD	0.5			\$4.00	Collision Reduction	PSR/PR
11	SD	8	7	8	Upgrade metal guardrail to current standards	TBD	TBD	0.5			\$9.00	Collision Reduction	PSR/PR
11	SD	94	59.6	60.3	Curve Realignment	TBD	TBD	1			\$2.00	Collision Reduction	PSR/PR
11	SD	78	var	var	Construct missing ADA sidewalk	TBD	TBD	1.5			\$1.00	Mandates	PSR
11	SD	163	5.8	8.8	Outer Separation Barrier (2 locations)	TBD	TBD	1.6			\$2.00	Collision Reduction	PSR/PR
11	SD	94	var	var	Construct missing ADA Curb ramps	TBD	TBD	1.7			\$1.00	Mandates	PSR
11	SD	94	13.8	14.4	Median barrier	TBD	TBD	1.8			\$1.70	Collision Reduction	PSR/PR
11	SD	75	var	var	Construct missing ADA Curb ramps	TBD	TBD	2.2			\$1.00	Mandates	PSR
11	SD	Var			SHOPP Safety Improvements various 010 project placeholder	TBD	TBD	7	7	7	\$1.00	Collision Reduction	PSR/PR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD	0.2			\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD	0.2			\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD	0.2			\$1.75	Mandates	PR/PSR
12	ORA	142	3.81	4.01	Slope failure repair followup project to Safety project. Needs additional Geotechnical recommendations implemented in order to prevent continued sediment transport and road closures.	TBD	TBD	0.2			\$2.33	Mandates	PSR
12	ORA	55	4.6	5.9	Slope Revegetation for source control	TBD	TBD	0.2			\$2.57	Mandates	PSR
12	ORA	55	9.6,28.4	12.0,31	Slope Revegetation for source control	TBD	TBD	0.2			\$3.27	Mandates	PSR
12	ORA	133	7.8	10.8	Slope Revegetation for source control	TBD	TBD	0.2			\$1.75	Mandates	PSR
12	ORA	133	10.8	13.7	Slope Revegetation for source control	TBD	TBD	0.5			\$1.98	Mandates	PSR
12	ORA	5	14.79	35.1	Seismic Work	TBD	TBD	0.5	0.5		\$1.28	Bridge	PSR
12	ORA	VAR	VAR	VAR	Bridge Preservation	TBD	TBD	0.5	0.5		\$0.93	Bridge	PSR
12	ORA	VAR	VAR	VAR	Bridge Rehabilitation	TBD	TBD	0.5	0.5		\$1.05	Bridge	PSR
12	ORA	55	5.9	10.5	Ac Overlay	TBD	TBD	0.5	0.5		\$3.50	Roadway	PSSR
12	ORA	5	0	3.7	Ac Overlay	TBD	TBD	0.5	0.5		\$2.50	Roadway	PSSR
12	ORA	405	0	9	Replace slabs due to failing dowel bars	TBD	TBD	0.5	0.5		\$4.00	Roadway	PSSR
12	ORA	5	12.25	21.1	Ac Overlay and Grind PCC	TBD	TBD	0.5	0.5		\$4.00	Roadway	PSSR
12	ORA	VAR	VAR	VAR	Convert all exiting HOV bypass lanes (52) to metered HOV lanes	TBD	TBD	0.5	0.5		\$3.00	Mobility	PSR
12	ORA	VAR	VAR	VAR	Upgrade Video Walls	TBD	TBD	0.5	0.5		\$3.20	Mobility	PSR
12	ORA	VAR	VAR	VAR	Upgrade 170 Controller to 2070 For Traffic Signals in OC	TBD	TBD	0.5	0.5		\$1.10	Mobility	PSR
12	ORA	VAR	VAR	VAR	Upgrade 170 Controller to 2070 For Ramp Metering and TMS	TBD	TBD	0.5	0.5		\$1.40	Mobility	PSR
12	ORA	55	11.74	12.03	Remove SB tangent Off & re-construct SB Loop off-ramp	TBD	TBD	0.5	0.5		\$2.10	Mobility	PSR
12	ORA	39	15.57	20.72	Signal Improvement	TBD	TBD	0.5	0.5		\$2.00	Mobility	PSR
12	ORA	VAR	VAR	VAR	Relinquishment	TBD	TBD	1	0.25		\$3.50	Mandates	PSR
12	ORA	VAR	VAR	VAR	Relinquishment	TBD	TBD	1	0.25		\$3.50	Mandates	PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD	1	0.5		\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD	1	0.5		\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD	1	0.5		\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	Relinquishment	TBD	TBD	1	0.25		\$3.50	Mandates	PSR
12	ORA	VAR	VAR	VAR	Relinquishment	TBD	TBD	1	0.25		\$3.50	Mandates	PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During  
FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD	1.5			\$0.58	Collision Reduction	PR/PSR
12	ORA	73	10	19.2	Replace Steel blocks with wood blocks on Metal beam guard rail	TBD	TBD	1.5	1.5		\$5.84	Collision Reduction	PR/PSR
12	ORA	73	19.2	27.76	Replace Steel blocks with wood blocks on Metal beam guard rail	TBD	TBD	1.5			\$5.84	Collision Reduction	PR/PSR
12	ORA	5	21.54	21.54	Add Aux. Lane and widen ramp	TBD	TBD			0.5	\$1.00	Mobility	PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD		1.5		\$0.58	Collision Reduction	PR/PSR
12	ORA	5	30.28	33.22	Replace Steel blocks with wood blocks on Metal beam guard rail	TBD	TBD		1.5		\$5.84	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Bridge Rehabilitation	TBD	TBD		0.5	0.5	\$1.05	Bridge	PSR
12	ORA	55	2	6	In the Costa Mesa, NB/SB from 19th to 405	TBD	TBD		1	0.25	\$8.05	Roadway	PSSR
12	ORA	55	6	11	In Costa Mesa, Santa Ana, Tustin, NB/SB from 405 to 4th St.	TBD	TBD		1	0.25	\$11.20	Roadway	PSSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD		1	0.5	\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD		1	0.5	\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD		1	0.5	\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	Relinquishment	TBD	TBD		1	0.25	\$3.50	Mandates	PSR
12	ORA	VAR	VAR	VAR	Relinquishment	TBD	TBD		1	0.25	\$3.50	Mandates	PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Safety Improvement	TBD	TBD			1.5	\$0.58	Collision Reduction	PR/PSR
12	ORA	VAR	VAR	VAR	Bridge Rehabilitation	TBD	TBD			0.5	\$1.05	Bridge	PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD			0.3	\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD			0.3	\$1.75	Mandates	PR/PSR
12	ORA	VAR	VAR	VAR	ADA Curb Ramps	TBD	TBD			0.3	\$1.75	Mandates	PR/PSR
12	ORA	55	10.8	10.8	Realign Modify Left Turn Lane (Merge between 4th St. to SB 5 traffic with SR-55 to SB-5 traffic).	TBD	TBD			1	\$1.00	Mobility	PSR
12	ORA	55	15.1	15.1	Realign Modify Left Turn Lane	TBD	TBD			1	\$1.00	Mobility	PSR
12	ORA	90	0.5	5.1	Remove and Replace AC pavement	TBD	TBD			1	\$6.70	Roadway	CAPM
12	ORA	261	0	6.3	Remove and Replace AC pavement	TBD	TBD			1	\$7.60	Roadway	CAPM
12	ORA	5	0	6.8	Remove and Replace AC pavement	TBD	TBD			1	\$12.60	Roadway	CAPM

**Appendix A-2: Three-Year SHOPP Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	SHOPP Programming Cycle	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	SHOPP Program Category	Type of PID
12	ORA	1	4.6	14.1	Remove and Replace AC pavement	TBD	TBD			1	\$10.40	Roadway	CAPM
12	ORA	1	21.6	25.9	Remove and Replace AC pavement	TBD	TBD			1	\$9.50	Roadway	CAPM
12	ORA	90	5.1,11.8	8.1,12.8	Remove and Replace AC pavement	TBD	TBD			1	\$5.70	Roadway	CAPM
12	ORA	73	10.3	26.6	Remove and replace OGAC	TBD	TBD			1	\$25.40	Roadway	CAPM
12	ORA	241	14.6	25	Remove and Replace AC pavement	TBD	TBD			1	\$12.10	Roadway	CAPM
12	ORA	241	25	39	Remove and Replace AC pavement	TBD	TBD			1	\$22.30	Roadway	CAPM
12	ORA	57	11	22.6	Slab replacement, and grinding	TBD	TBD			1	\$22.60	Roadway	CAPM
12	ORA	405	0.2	11.4	Slab replacement, and grinding	TBD	TBD			1	\$31.50	Roadway	CAPM
12	ORA	405	11.4	16.9	Slab replacement, and grinding	TBD	TBD			1	\$12.90	Roadway	CAPM
12	ORA	5	31.4	42.4	Slab replacement, and grinding	TBD	TBD			1	\$25.30	Roadway	CAPM
12	ORA	22	0.6	13.2	Slab replacement, and grinding	TBD	TBD			1	\$25.00	Roadway	CAPM
12	ORA	133	4.1	8.5	Remove and Replace AC pavement	TBD	TBD			1	\$4.20	Roadway	CAPM
12	ORA	133	.3/8.1	4.1/13.6	Remove and Replace AC pavement	TBD	TBD			1	\$8.70	Roadway	CAPM
12	ORA	91	0	3	Highway Planting Rehabilitation	TBD	TBD			0.5	\$2.10	Roadside	PSR
12	ORA	91	5.2	6.4	Highway Planting Rehabilitation	TBD	TBD			0.5	\$2.20	Roadside	PSR
12	ORA	55	13.2	17.8	Highway Planting Rehabilitation	TBD	TBD			0.5	\$3.00	Roadside	PSR
12	ORA	55	11.7	13.2	Highway Planting Rehabilitation	TBD	TBD			0.5	\$2.30	Roadside	PSR
12	ORA	5	31	34	Highway Planting Rehabilitation	TBD	TBD			0.5	\$2.80	Roadside	PSR
12	ORA	55	R3.98	R4.42	Braid Fair Drive NB on-ramp with 73	TBD	TBD			1	\$15.00	Mobility	PSR
12	ORA	91	6.15	7.39	Braid Weaving movements	TBD	TBD			1	\$25.00	Mobility	PSR
12	ORA	55	10.835	10.835	Realign Modify Left Turn Lane	TBD	TBD			0.5	\$1.00	Mobility	PSR
12	ORA	55	15.108	15.108	Realign Modify Left Turn Lane	TBD	TBD			0.5	\$1.00	Mobility	PSR
12	ORA	405	5.405	5.405	Add Aux. Lane and widen ramp	TBD	TBD			1	\$1.00	Mobility	PSR
12	ORA	5	var	var	Upgrade traffic signal	TBD	TBD			0.5	\$1.00	Mobility	PSR
12	ORA	405	VAR	VAR	Interconnect the signals	TBD	TBD			1	\$1.00	Mobility	PSR
12	ORA	405	5.7	5.7	Widen the On-ramp to 3 lanes	TBD	TBD			1	\$1.20	Mobility	PSR
12	ORA	405	3.873	3.873	Widen the On-ramp to 3 lanes	TBD	TBD			1	\$1.00	Mobility	PSR
12	ORA	VAR	VAR	VAR	Convert HOV bypass to metered	TBD	TBD			0.5	\$1.00	Mobility	PSR
12	ORA	5&405	VAR	VAR	Convert to Continuous HOV lane	TBD	TBD			1	\$1.00	Mobility	PSR
12	ORA	55	10.835	10.8	Realign Modify Left Turn Lane (Merge between 4th St. to SB 5 traffic with SR-55 to SB-5 traffic).	TBD	TBD			0.5	\$1.00	Mobility	PSR
12	ORA	55	15.108	15.1	Realign Modify Left Turn Lane	TBD	TBD			0.5	\$1.00	Mobility	PSR

**APPENDICES**

**APPENDIX B-1**

**THREE-YEAR NON-SHOPP UNCONSTRAINED  
NEEDS PROJECT SUMMARY FOR PID DEVELOPMENT**

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**Appendix B-1: Three-Year Non-SHOPP Unconstrained Needs Project Summary for Proposed PID Development During FY 2011-12 Through 2013-14**

District	Fiscal Year	Data	STIP	MIXED	OTHER	TBD	Grand Total
1	2011/12	Sum of Number of Projects	3	2	2		7
		Sum of Actual PY Cost	1.00	0.40	0.45		1.85
		Sum of Project Cost with Support (\$M)	\$7.74	\$18.55	\$4.00		\$30.29
	2012/13	Sum of Number of Projects	7		2		9
		Sum of Actual PY Cost	3.30		0.45		3.75
		Sum of Project Cost with Support (\$M)	\$11.50		\$4.50		\$16.00
	2013/14	Sum of Number of Projects	2	1	1		4
		Sum of Actual PY Cost	0.80	0.20	0.25		1.25
		Sum of Project Cost with Support (\$M)	\$3.50	\$3.00	\$3.00		\$9.50
District 1 Sum of Number of Projects		12	3	5		20	
District 1 Sum of Actual PY Cost		5.10	0.60	1.15		6.85	
District 1 Sum of Project Cost with Support (\$M)		\$22.74	\$21.55	\$11.50		\$55.79	
2	2011/12	Sum of Number of Projects	12	5			17
		Sum of Actual PY Cost	4.00	2.20			6.20
		Sum of Project Cost with Support (\$M)	\$169.00	\$57.00			\$226.00
	2012/13	Sum of Number of Projects	14	2			16
		Sum of Actual PY Cost	5.70	1.40			7.10
		Sum of Project Cost with Support (\$M)	\$101.50	\$27.00			\$128.50
	2013/14	Sum of Number of Projects	3	2			5
		Sum of Actual PY Cost	5.50	1.10			6.60
		Sum of Project Cost with Support (\$M)	\$72.00	\$38.00			\$110.00
District 2 Sum of Number of Projects		29	9			38	
District 2 Sum of Actual PY Cost		15.20	4.70			19.90	
District 2 Sum of Project Cost with Support (\$M)		\$342.50	\$122.00			\$464.50	
3	2011/12	Sum of Number of Projects		10			10
		Sum of Actual PY Cost		12.30			12.30
		Sum of Project Cost with Support (\$M)		\$50.00			\$50.00
	2012/13	Sum of Number of Projects		5			5
		Sum of Actual PY Cost		7.00			7.00
		Sum of Project Cost with Support (\$M)		\$18.40			\$18.40
	2013/14	Sum of Number of Projects		4			4
		Sum of Actual PY Cost		7.00			7.00
		Sum of Project Cost with Support (\$M)		\$19.60			\$19.60
District 3 Sum of Number of Projects			19			19	
District 3 Sum of Actual PY Cost			26.30			26.30	
District 3 Sum of Project Cost with Support (\$M)			\$88.00			\$88.00	
4	2011/12	Sum of Number of Projects	2	8	35	1	46
		Sum of Actual PY Cost	1.00	3.70	18.30	0.50	23.50
		Sum of Project Cost with Support (\$M)	\$2.00	\$675.30	\$1,543.60	\$1.00	\$2,221.90
	2012/13	Sum of Number of Projects		2	13	8	23
		Sum of Actual PY Cost	0.60	2.80	13.60	3.90	20.90
		Sum of Project Cost with Support (\$M)		\$91.70	\$121.70	\$104.10	\$317.50
	2013/14	Sum of Number of Projects		2	8		10
		Sum of Actual PY Cost		1.80	6.60	3.10	11.50
		Sum of Project Cost with Support (\$M)		\$129.50	\$36.00		\$165.50
District 4 Sum of Number of Projects		2	12	56	9	79	
District 4 Sum of Actual PY Cost		1.60	8.30	38.50	7.50	55.90	
District 4 Sum of Project Cost with Support (\$M)		\$2.00	\$896.50	\$1,701.30	\$105.10	\$2,704.90	
5	2011/12	Sum of Number of Projects	3	5	9	2	19
		Sum of Actual PY Cost	0.75	2.15	2.70	0.60	6.20
		Sum of Project Cost with Support (\$M)	\$33.80	\$93.50	\$107.20	\$2.00	\$236.50
	2012/13	Sum of Number of Projects		1		3	4
		Sum of Actual PY Cost		1.90	0.70	1.30	3.90
		Sum of Project Cost with Support (\$M)		\$0.00		\$3.00	\$3.00
	2013/14	Sum of Number of Projects				2	2
		Sum of Actual PY Cost		1.10		1.20	2.30
		Sum of Project Cost with Support (\$M)				\$13.27	\$13.27
District 5 Sum of Number of Projects		3	6	9	7	25	
District 5 Sum of Actual PY Cost		0.75	5.15	3.40	3.10	12.40	
District 5 Sum of Project Cost with Support (\$M)		\$33.80	\$93.50	\$107.20	\$18.27	\$252.77	
6	2011/12	Sum of Number of Projects		3	7		10
		Sum of Actual PY Cost		2.70	4.75		7.45
		Sum of Project Cost with Support (\$M)		\$77.00	\$88.91		\$165.91
	2012/13	Sum of Number of Projects		5	3		8
		Sum of Actual PY Cost		4.00	2.80		6.80
		Sum of Project Cost with Support (\$M)		\$25.30	\$43.00		\$68.30
	2013/14	Sum of Number of Projects		4			4
		Sum of Actual PY Cost		5.60			5.60
		Sum of Project Cost with Support (\$M)		\$43.00			\$43.00
District 6 Sum of Number of Projects			12	10		22	
District 6 Sum of Actual PY Cost			12.30	7.55		19.85	
District 6 Sum of Project Cost with Support (\$M)			\$145.30	\$131.91		\$277.21	

**Appendix B-1: Three-Year Non-SHOPP Unconstrained Needs Project Summary for Proposed PID Development During FY 2011-12 Through 2013-14**

District	Fiscal Year	Data	STIP	MIXED	OTHER	TBD	Grand Total	
7	2011/12	Sum of Number of Projects	9	2	12	11	34	
		Sum of Actual PY Cost	11.30	3.00	16.70	16.00	47.00	
		Sum of Project Cost with Support (\$M)	\$1,031.60	\$10.00	\$823.80	\$799.00	\$2,664.40	
	2012/13	Sum of Number of Projects	1		1	2	4	
		Sum of Actual PY Cost	7.00	1.00	10.00	13.40	31.40	
		Sum of Project Cost with Support (\$M)	\$300.00		\$4.00	\$6,280.00	\$6,584.00	
	2013/14	Sum of Number of Projects		2.50		4.00	9.00	15.50
		Sum of Actual PY Cost						
		Sum of Project Cost with Support (\$M)						
District 7 Sum of Number of Projects			10	2	13	13	38	
District 7 Sum of Actual PY Cost			20.80	4.00	30.70	38.40	93.90	
District 7 Sum of Project Cost with Support (\$M)			\$1,331.60	\$10.00	\$827.80	\$7,079.00	\$9,248.40	
8	2011/12	Sum of Number of Projects		7	11		18	
		Sum of Actual PY Cost		4.10	8.80		12.90	
		Sum of Project Cost with Support (\$M)		\$220.00	\$1,457.13		\$1,677.13	
	2012/13	Sum of Number of Projects		1	2		3	
		Sum of Actual PY Cost		8.10	9.90		18.00	
		Sum of Project Cost with Support (\$M)		\$1.00	\$55.00		\$56.00	
	2013/14	Sum of Number of Projects		6	5		11	
		Sum of Actual PY Cost		5.60	6.90		12.50	
		Sum of Project Cost with Support (\$M)		\$13,007.80	\$300.00		\$13,307.80	
District 8 Sum of Number of Projects			14	18		32		
District 8 Sum of Actual PY Cost			17.80	25.60		43.40		
District 8 Sum of Project Cost with Support (\$M)			\$13,228.80	\$1,812.13		\$15,040.93		
9	2011/12	Sum of Number of Projects				1	1	
		Sum of Actual PY Cost				0.10	0.10	
		Sum of Project Cost with Support (\$M)				\$1.00	\$1.00	
	2012/13	Sum of Number of Projects		1			1	
		Sum of Actual PY Cost		0.50			0.50	
		Sum of Project Cost with Support (\$M)		\$6.30			\$6.30	
	2013/14	Sum of Number of Projects				2	2	
		Sum of Actual PY Cost				0.90	0.90	
		Sum of Project Cost with Support (\$M)				\$3.00	\$3.00	
District 9 Sum of Number of Projects			1		3	4		
District 9 Sum of Actual PY Cost			0.50		1.00	1.50		
District 9 Sum of Project Cost with Support (\$M)			\$6.30		\$4.00	\$10.30		
10	2011/12	Sum of Number of Projects		2			2	
		Sum of Actual PY Cost		1.90			1.90	
		Sum of Project Cost with Support (\$M)		\$2.00			\$2.00	
	2012/13	Sum of Number of Projects		4			4	
		Sum of Actual PY Cost		2.60			2.60	
		Sum of Project Cost with Support (\$M)		\$432.00			\$432.00	
	2013/14	Sum of Number of Projects		2			2	
		Sum of Actual PY Cost		2.00			2.00	
		Sum of Project Cost with Support (\$M)		\$2.00			\$2.00	
District 10 Sum of Number of Projects			8			8		
District 10 Sum of Actual PY Cost			6.50			6.50		
District 10 Sum of Project Cost with Support (\$M)			\$436.00			\$436.00		
11	2011/12	Sum of Number of Projects	2	32			34	
		Sum of Actual PY Cost	0.60	35.40			36.00	
		Sum of Project Cost with Support (\$M)	\$2.00	\$4,514.15			\$4,516.15	
	2012/13	Sum of Number of Projects		1			1	
		Sum of Actual PY Cost		25.00			25.00	
		Sum of Project Cost with Support (\$M)		\$1.00			\$1.00	
	2013/14	Sum of Number of Projects	2				2	
		Sum of Actual PY Cost	0.60	13.40			14.00	
		Sum of Project Cost with Support (\$M)	\$2.00				\$2.00	
District 11 Sum of Number of Projects			4	33		37		
District 11 Sum of Actual PY Cost			1.20	73.80		75.00		
District 11 Sum of Project Cost with Support (\$M)			\$4.00	\$4,515.15		\$4,519.15		
12	2011/12	Sum of Number of Projects	1	5	14		20	
		Sum of Actual PY Cost	1.69	2.45	12.57		16.71	
		Sum of Project Cost with Support (\$M)	\$250.33	\$206.53	\$3,011.72		\$3,468.59	
	2012/13	Sum of Number of Projects			15		15	
		Sum of Actual PY Cost			12.80		12.80	
		Sum of Project Cost with Support (\$M)			\$1,527.27		\$1,527.27	
	2013/14	Sum of Number of Projects			8.00		8.00	
		Sum of Actual PY Cost						
		Sum of Project Cost with Support (\$M)						
District 12 Sum of Number of Projects			1	5	29	35		
District 12 Sum of Actual PY Cost			1.69	2.45	33.37	37.51		
District 12 Sum of Project Cost with Support (\$M)			\$250.33	\$206.53	\$4,538.99	\$4,995.86		
Total Sum of Number of Projects			62	123	140	32	357	
Total Sum of Actual PY Cost			46.84	161.90	140.27	50.00	399.01	
Total Sum of Project Cost with Support (\$M)			\$1,993.27	\$19,763.33	\$9,130.82	\$7,206.37	\$38,093.80	

For those projects that carryover, project count and cost will be captured in the first year. Actual PY cost may be spread over multiple FYs through the life of the project. Projects without estimated costs are given a default value of \$1 million.

**APPENDICES**

**APPENDIX B-2**

**THREE-YEAR NON-SHOPP UNCONSTRAINED  
NEEDS PROJECT LISTING FOR PID DEVELOPMENT**

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**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
1	LAK	020	27.90	28.8	Sidewalks, bulb-outs, crosswalks, bike lanes, decorative lighting and landscaping	TBD		0.20		\$1.50	OTHER	Permit Engineering Evaluation Report
1	VAR	VAR	VAR	VAR	Oversight of County/City Projects (PEER Review).	TBD		0.25		\$3.00	OTHER	Permit Engineering Evaluation Report
1	LAK	020	13.40	14.6	Traffic Calming, Bike/Ped Improvements, Sidewalks, Beautification/ Landscaping	TBD		0.40		\$1.50	STIP	TE Application
1	LAK	020	27.60	28.08	Traffic Calming, Bike/Ped Improvements, Sidewalks, Beautification/ Landscaping	TBD		0.40		\$1.50	STIP	TE Application
1	MEN	001	16.16	16.94	Pedestrian Improvements	TBD		0.40		\$1.50	STIP	TE Application
1	MEN	20	32.76		Intersection Improvements	TBD		0.50		\$2.00	STIP	TE Application
1	MEN	101	68.74	69.51	Traffic Calming	TBD		0.50		\$1.50	STIP	TE Application
1	LAK	020	16.55	17.94	Traffic Calming, Bike/Ped Improvements, Sidewalks, Beautification/ Landscaping	TBD		0.50		\$1.50	STIP	TE Application
1	MEN	001	59.85	62.36	Community Improvements	TBD		0.60		\$2.00	STIP	TE Application
1	HUM	101	108.25		Channelization	TBD			0.20	\$3.00	MIXED	PSR
1	VAR	VAR	VAR	VAR	Oversight of County/City Projects (PEER Review).	TBD			0.25	\$3.00	OTHER	Permit Engineering Evaluation Report
1	MEN	101	65.61		Vista Point	TBD			0.40	\$1.50	STIP	TE Application
1	DN	101	23.85		Traffic Calming, Bike/Ped Improvements	TBD			0.40	\$2.00	STIP	TE Application
1	MEN	101	99.30	99.30	Overlook	TBD	0.10			\$1.00	MIXED	Environmental Mitigation Enhancement
1	LAK	029	9.73	11.12	Roadway Improvements	TBD	0.20			\$1.00	OTHER	PSR
1	VAR	VAR	VAR	VAR	Oversight of County/City Projects (PEER Review).	TBD	0.25			\$3.00	OTHER	Permit Engineering Evaluation Report
1	HUM	101	98.35	100.70	New Interchange	TBD	0.30			\$17.55	MIXED	PSR
1	HUM	255	1.70	5.40	Traffic Calming, Bike/Ped Improvements, Beautification/Landscaping	TBD	0.30			\$1.95	STIP	TE Application
1	MEN	001	0.59	1.02	Pedestrian Improvements	TBD	0.30			\$4.29	STIP	TE Application
1	LAK	175	19.28	19.50	Traffic Calming	TBD	0.40			\$1.50	STIP	TE Application
2	SHA	44	3.63	3.63	Interchange Improvements	TBD	0.50	0.10		\$8.00	MIXED	PSR
2	LAS	299	10	15	2014 TE Candidate	TBD		0.10	0.30	\$2.00	STIP	PSR
2	MOD	299	20	22	2014 TE Candidate	TBD		0.10	0.30	\$2.00	STIP	PSR

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
2	TEH	36	42.5	44	Complete Streets TE	TBD		0.10	0.30	\$2.00	STIP	PSR
2	TRI	299	30.9	31.3	Complete Streets TE	TBD		0.10	0.30	\$2.00	STIP	PSR
2	TEH	99	10.5	12.5	Follow up complete streets	TBD	0.10	0.20		\$4.00	STIP	PSR
2	TRI	299	51	52.5	Middle Weaverville TE	TBD	0.20	0.20		\$4.00	STIP	PSR
2	LAS	36	24.4	25.8	Downtown TE	TBD	0.20	0.20		\$2.00	STIP	PSR
2	SHA	273	0	14	Construct Bicycle Lanes phase 1	TBD	0.20	0.20		\$5.00	STIP	PSR
2	SHA	5	19	19.8	Interchange Improvements - Specific Plan buildout	TBD	0.40	0.20		\$30.00	MIXED	PSR
2	SHA	5	6.74	6.74	Interchange Improvements	TBD	0.50	0.20		\$5.00	MIXED	PSR
2	TRI	299	12	20	Construct passing lane	TBD	0.70	0.20		\$4.00	STIP	PSR
2	PLU	70	42.5	46	2014 TE Candidate	TBD		0.20	0.20	\$2.00	STIP	PSR
2	MOD	299/395	22/40	25/40.63	Alturas complete streets	TBD	0.50	0.20	0.50	\$50.00	STIP	PSR
2	MOD	299	37.5	40	Add TWLTL and Shoulders (Phase 2)	TBD	0.30	0.30		\$3.00	STIP	PSR
2	SHA	299	15	18.5	Widen Pvmnt for Bike Lanes	TBD	0.40	0.30		\$6.00	STIP	PSR
2	SIS	3	47	49	Complete Streets Project	TBD		0.30	0.10	\$1.50	STIP	PSR
2	PLU	89	3	7	Complete Streets	TBD		0.30	0.20	\$5.00	STIP	PSR
2	LAS	36	22.5	24.5	Operational Improvement	TBD		0.30	0.30	\$4.00	STIP	PSR
2	TRI	299	0	72.25	Various Passing Lane Extensions	TBD		0.30	0.30	\$5.00	STIP	PSR
2	SHA	5	15.3	18.9	Widen from 4 to 6 lanes	TBD		0.30	0.50	\$25.00	STIP	PSR
2	MOD	299	11.5	14.5	Construct Truck Climbing Ln	TBD		0.40	0.20	\$4.00	STIP	PSR
2	TEH	5	38.72	38.72	Interchange Improvements	TBD		0.40	0.20	\$8.00	MIXED	PSR
2	TRI	3	17	19	Passing Lane	TBD		0.40	0.20	\$3.00	STIP	PSR
2	PLU	89	19	21	Operational Improvement - Intersection	TBD		0.40	0.30	\$4.00	STIP	PSR
2	LAS	36	23	27	Relief Route follow up PID	TBD		0.50	0.20	\$19.00	MIXED	PSR

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
2	LAS	36	26	29.4	2C to 4E - Construct Divided Expressway	TBD		0.60	0.50	\$40.00	STIP	PSR
2	SIS	3	38.5	44.7	Install CCTV	TBD	0.20			\$1.00	STIP	PSR
2	SHA	5	4	12.2	Widen from 4 to 6 Lanes	TBD	0.30			\$60.00	STIP	PSR
2	PLU	36	7.5	9.5	Complete Streets and extend TWLTL	TBD	0.30			\$5.00	STIP	PSR
2	SHA	5	9.77	9.77	Interchange Improvements	TBD	0.40			\$7.00	MIXED	PSR
2	TEH	5	41.53	41.53	Interchange Improvements	TBD	0.40			\$7.00	MIXED	PSR
2	TEH	5	36	42.1	Widen from 4 to 6 Lanes	TBD	0.60			\$25.00	STIP	PSR
2	SIS	5	10.8	10.8	Intersection/Ramp Improvements	TBD			0.20	\$2.00	STIP	PSR
2	TEH	5	25	28.5	Widen from 4 to 6 lanes	TBD			0.30	\$30.00	STIP	PSR
2	SHA	5	0.5	4.2	Interchange Improvements - South County Study	TBD			0.30	\$18.00	MIXED	PSR
2	SHA	5	17.8	18.9	Interchange Improvements - Specific Plan buildout	TBD			0.40	\$20.00	MIXED	PSR
2	SHA	5	15.5	15.5	Operational Improvements (CRI revisited)	TBD			0.50	\$40.00	STIP	PSR
3	SUT	99	TBD	TBD	Ops. Improvem.	2014-15	1.00	1.00		\$20.00	MIXED	PSR
3	SAC	5	20.50	22.60	Add Aux. Ln(s)	2014/15		1.00		\$2.50	MIXED	PSR
3	SAC	5	22.60	23.20	Extend lane	2014/15		1.00		\$8.00	MIXED	PSR
3	SAC/ SUT	VAR	12.89	14.1	ITS Elements	2014/15		1.00		\$1.20	MIXED	PSR
3	SAC/ ED	50	16.80	3.20	ITS Elements	2014/15		1.00		\$1.70	MIXED	PSR
3	SAC	5	25.90	33.20	Add Aux. Ln(s)	2014/15		2.00		\$5.00	MIXED	PSR
3	ED	50	3.20	24.00	ITS Elements	2015/16			1.00	\$2.10	MIXED	PSR
3	SAC	99	20.80	24.30	Widen lanes and shoulders.	2015/16			2.00	\$8.00	MIXED	PSR
3	SAC	51	5.50	8.00	Add Aux. Ln(s)	2015/16			2.00	\$7.00	MIXED	PSR
3	SAC	51	3.00	3.70	Add Aux. Ln(s)	2015/16			2.00	\$2.50	MIXED	PSR
3	SAC	50	12.30	12.70	Add Aux. Ln(s)	2013/14	0.80			\$2.50	MIXED	PSR

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
3	SAC	5	24.80	25.80	Add Aux. Ln(s)	2013/14	1.00			\$2.50	MIXED	PSR
3	SAC	99	19.60	20.80	Add Aux. Ln(s)	2013/14	1.00			\$2.50	MIXED	PSR
3	SAC	99	20.80	21.80	Add Aux. Ln(s)	2013/14	1.00			\$2.50	MIXED	PSR
3	SAC	99	20.80	21.70	Add Aux. Ln(s)	2013/14	1.00			\$2.50	MIXED	PSR
3	SAC	VAR			Ramp meter installation at Various locations	2013/14	1.00			\$7.00	MIXED	PSR
3	SAC	50	12.50	18.40	Extend Outside Lanes/Add Aux Lanes	2013/14	2.50			\$2.50	MIXED	PSR
3	SAC	50	3.10	21.50	Extend lanes	2013/14	3.00			\$8.00	MIXED	PSR
4	SCL	680	TBD	TBD	Modify interchange	TBD	0.50	0.20		\$18.00	OTHER	PSR
4	SM	1	45	45.2	I/C modification	TBD	0.50	0.20		\$13.00	OTHER	PSR
4	SM	101	TBD	TBD	Interchange area improvement	TBD	0.50	0.30		\$30.00	MIXED	PSR
4	CC	80	TBD	TBD	Modify Ramp	TBD		0.30		\$2.00	OTHER	PSR
4	MRN	101	5.5	5.9	Improve U.S. 101/Tiburon Blvd. interchange, including circulation and signal improvements to nearby intersections	TBD		0.30		\$21.80	OTHER	PSR
4	SF	280	1.6	1.8	Reconstruct Interchange	TBD	0.50	0.40	0.20	\$1.00	OTHER	PSR
4	SCL	101 152	TBD	TBD	Modify interchange	TBD		0.40	0.20	\$3.60	TBD	TBD
4	SON	121 116	TBD	TBD	Reconstruct Interchange	TBD	0.50	0.40		\$21.80	OTHER	PSR
4	CC	680	TBD	TBD	Operational improvements	TBD		0.40		\$5.00	OTHER	PSR
4	MRN	101	15.4	15.9	SB Ramp I/S signalization	TBD		0.40		\$1.40	OTHER	PSR
4	SCL	87	1.3	1.3	Modify interchange	TBD		0.50	0.30	\$10.00	TBD	TBD
4	SCL	280	TBD	TBD	Modify interchange	TBD		0.50	0.30	\$9.50	TBD	TBD
4	ALA	880	TBD	TBD	I-880 auxiliary lanes, Dixon Landing to Alvarado-Niles	TBD		0.50	0.40	\$1.00	TBD	TBD
4	SCL	101	TBD	TBD	Modify interchange	TBD		0.50	0.40	\$27.00	TBD	PSR
4	ALA	580	9.7	9.7	I/C modification	TBD		0.50	0.50	\$55.00	OTHER	PSR
4	ALA	680	TBD	TBD	SB HOV/HOT lane from Alcosta Blvd. to SR-84.	TBD		0.50	0.50	\$1.00	OTHER	TBD

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
4	ALA	680	TBD	TBD	NB HOV/HOT lane from SR-84 to Alcosta Blvd.	TBD		0.50	0.50	\$1.00	OTHER	TBD
4	NAP	128	TBD	TBD	Intersection Improvement	TBD		0.50	0.50	\$4.00	OTHER	PSR
4	NAP	121 121 29	TBD	TBD	Intersection Improvement	TBD		0.50	0.50	\$4.00	MIXED	PSR
4	SCL	880	TBD	TBD	Extend Charcot Avenue	TBD		0.50	0.50	\$38.00	TBD	TBD
4	SCL	880	TBD	TBD	Modify interchange	TBD		0.50	0.50	\$12.00	TBD	TBD
4	SM	280			Add Aux. Ln(s)	TBD		0.50	0.50	\$87.70	MIXED	PSR
4	SOL	80	TBD	TBD	Reconstruct Interchange	TBD		0.50	0.50	\$1.00	OTHER	PSR
4	SOL	505	1.05	1.85	Widen the existing overcrossing to 2 lanes in each direction and modify existing spread diamond to provide partial cloverleaf design.	TBD		0.50	0.50	\$3.00	TBD	PSR/PR
4	ALA	92	TBD	TBD	Clawiter I/C modification	TBD	0.50	0.50		\$52.00	OTHER	PSR
4	ALA	238	TBD	TBD	Widen connector to NB 880	TBD	0.50	0.50		\$31.00	OTHER	PSR
4	ALA	680	TBD	TBD	Construct HOV/HOT lane and auxiliary lanes on northbound I-680 between Santa Clara County line and SR-84	TBD	0.50	0.50		\$1.00	OTHER	TBD
4	ALA	880	TBD	TBD	Industrial Parkway West I/C	TBD	0.50	0.50		\$41.00	OTHER	PSR
4	ALA	880	TBD	TBD	Extend NB HOV lanes from Hacienda to north of Washington and north of Washington to Hegenberger	TBD	0.50	0.50		\$155.00	OTHER	PSR
4	ALA	880	TBD	TBD	Washington to Lewelling I/C reconstruction	TBD	0.50	0.50		\$31.00	OTHER	PSR
4	CC	239	NA	NA	Construct new Route 239	TBD	0.50	0.50		\$1.00	OTHER	PSR
4	NAP	121	TBD	TBD	Intersection Re-alignment/Reconfiguration	TBD	0.50	0.50		\$4.00	OTHER	PSR
4	SCL	101 101	0 17.8	6.6 45.2	Convert HOV lanes to HOT lanes	TBD	0.50	0.50		\$416.00	MIXED	PSR
4	SCL	101	TBD	TBD	Modify interchange	TBD	0.50	0.50		\$28.00	OTHER	PSR
4	SCL	237	2.99	8.02	Convert HOV lanes to HOT lanes	TBD	0.50	0.50		\$20.00	MIXED	PSR
4	SCL	101 237	TBD	TBD	Modify interchange	TBD	0.50	0.50		\$74.10	OTHER	PSR
4	SF	1	0.6	1.7	Change light rail track configuration along 19th Avenue	TBD	0.50	0.50		\$1.00	OTHER	TBD
4	SM	101	TBD	TBD	New Interchange	TBD	0.50	0.50		\$16.40	OTHER	PSR
4	SM	101	TBD	TBD	Reconstruct Interchange	TBD	0.50	0.50		\$53.20	MIXED	PSR

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
4	SOL	80	TBD	TBD	Reconstruct Interchange	TBD	0.50	0.50		\$1.00	OTHER	PSR
4	ALA	84	17.3	17.3	New roundabout	TBD		0.50		\$1.10	OTHER	PSR
4	ALA	580	TBD	TBD	Construct Noise Barrier along I-580 between 108th Ave and MacArthur Blvd in San Leandro / Oakland	TBD		0.50		\$1.00	OTHER	NBSSR
4	SON	101	10.67	TBD	Reconstruct Interchange	TBD		0.50		\$7.40	OTHER	PSR
4	SON	116	30.4	32.7	New Bypass	TBD		0.50		\$20.00	OTHER	PSR
4	SOL	80	17.5	19.2	New EB and WB auxiliary lanes	TBD	0.60	0.60		\$1.00	STIP	PSR
4	MRN	101	14.5	14.9	Improve Lucas Valley Rd. and Smith Ranch Rd I/C, including bicycle and pedestrian circulation	TBD			0.30	\$29.50	MIXED	Update exist. PSR dated 6/7/2003
4	SM	92	TBD	TBD	Modify Ramp	TBD			0.40	\$3.00	OTHER	PSR/PR
4	CC	680	TBD	TBD	Interchange Modification	TBD			0.50	\$8.00	OTHER	PSR
4	MRN	101	13.5	13.9	Interchange Improvements Hwy 101 / Freitas Pkway	TBD			0.50	\$3.00	OTHER	PSR
4	MRN	101	9.6	10.1	Construct freeway-to-freeway direct connector from NB101 to EB 580	TBD			0.50	\$8.00	OTHER	PSR
4	MRN	101	Var	Var	Construct auxiliary lane along Hwy 101 and provide bus on shoulder where feasible	TBD			0.50	\$5.00	OTHER	PSR
4	MRN	101	Var	Var	Park & Ride Lot development	TBD			0.50	\$5.00	OTHER	PSR
4	MRN	580	2.9	3.1	Signal Andersen Dr/E. Sir Francis Drake Intersection	TBD			0.50	\$3.00	OTHER	PSR
4	SM	92	TBD	TBD	Add Aux. Lanes	TBD			0.50	\$100.00	MIXED	PSR
4	SON	12	TBD	TBD	Future Road Improvements for Highway 12 connector R/W	TBD			0.50	\$1.00	OTHER	PSR
4	SM	101	8.1	8.6	Interchange improvement	TBD	0.30			\$10.50	OTHER	PSR
4	ALA	580	39.8	39.9	Construct Noise Barrier along I-580 between MacArthur Blvd. and Kingsland Place in Oakland	TBD	0.40			\$1.00	STIP	NBSSR
4	MRN	101	4.6	27.6	Convert HOV Lane to Express Lanes - add new Express Lanes	TBD	0.40			\$45.00	MIXED	PSR
4	MRN	101	0	27.6	Install Ramp Metering (FPI)	TBD	0.40			\$45.00	OTHER	PSR
4	MRN	101	Var	Var	(pedestrian activated ramp crossing signals, transit signal priority, and bus pad access reconfiguration)	TBD	0.40			\$30.00	MIXED	PSR
4	SM	101	6.6	26.1	Convert HOV lanes to HOT lanes	TBD	0.40			\$35.00	MIXED	PSR
4	SOL	80	11.1	R28.5	Express Lanes (HOT lanes)	TBD	0.40			\$1.00	OTHER	PSR/PR

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
4	SOL	780	TBD	TBD	Construct Transit Center at Curtola Parkway and Lemon St.	TBD	0.40			\$66.00	OTHER	PR/PSR
4	ALA	80	3.5	4	Widen I-80 Eastbound Powell Street Off-ramp	TBD	0.50			\$1.80	OTHER	PSR
4	ALA	92	TBD	TBD	Industrial Blvd I/C reconstruction	TBD	0.50			\$6.00	OTHER	PSR
4	ALA	580	39.9	TBD	Construct Noise Barrier along I-580 between 98th Ave. and Foothill Blvd.	TBD	0.50			\$1.00	OTHER	NBSSR
4	ALA	880	TBD	TBD	I-880 / Whipple Road Interchange	TBD	0.50			\$13.50	OTHER	PSR
4	ALA	84 680	TBD	TBD	Widening for auxiliary lanes, HOV/HOT lane	TBD	0.50			\$1.00	TBD	PSR
4	CC	4	TBD	TBD	Modify ramps at the Bailey Rd intersection	TBD	0.50			\$7.00	OTHER	PSR
4	CC	242	TBD	TBD	Reconstruct Interchange	TBD	0.50			\$41.00	OTHER	PSR
4	SCL	82	N/A	N/A	Implement BRT	TBD	0.50			\$233.40	OTHER	PSR
4	SCL	101	36.1	40.7	New interchange	TBD	0.50			\$59.10	OTHER	PSR
4	SCL	130	TBD	TBD	Implement BRT	TBD	0.50			\$132.00	OTHER	PSR/PR
4	SM	101	20.25	26	NB and SB Aux lanes	TBD	0.50			\$46.10	MIXED	PSR
4	SON	101	TBD	TBD	Bike/pedestrian O/C	TBD	0.50			\$9.00	OTHER	PSR
4	SON	12	TBD	TBD	Highway Modifications	TBD	0.50			\$1.00	OTHER	PSR
4	ALA	880	TBD	TBD	Winton I/C reconstruction	TBD	0.60			\$25.00	OTHER	PSR
4	SF ALA	80	5.6	7.7	SFOBB West Span Bike/Pedestrian Path	TBD	1.00			\$400.00	OTHER	PSR
4	Var	Var	Var	Var	HOT Lane Network	TBD	1.20			\$1.00	OTHER	PSR
5	SB	101	25.4	26.0	Construct New Overcrossing	TBD	0.15	0.15		\$45.00	OTHER	PSR
5	SCR	001	12.2	13.2	Construct Auxiliary Lanes	TBD	0.30	0.20		\$1.00	TBD	
5	SCR	001	13.6	14.9	Construct Auxiliary Lanes	TBD	0.30	0.20		\$1.00	TBD	
5	SLO	101	4.8		Modify Interchange	2015/16	0.35	0.20		\$6.20	OTHER	PSR
5	SBT	025	47.4	49.7	Widen to Four Lanes	TBD		0.30	0.20	\$1.00	TBD	
5	SCR	009	5.8	8.1	Construct bicycle lanes and sidewalks	TBD		0.30	0.20	\$1.00	TBD	

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
5	SLO	101			Lengthen acceleration lane	TBD		0.30	0.20	\$1.00	TBD	
5	SB	101	0.8	2.2	Operational Improvements and Ramp Modifications	TBD	0.35	0.35		\$1.00	OTHER	PSR
5	SLO	046	31.8		New Interchange	2015/16	0.50	0.40		\$30.00	MIXED	PSR
5	MON	101	81.0	83.0	New Interchnage	TBD	0.20	0.50	0.30	\$40.00	MIXED	PSR/PDS
5	MON	101	81.0	83.0	Frontage Roads	TBD	0.20	0.50	0.30	\$1.00	MIXED	PSR/PDS
5	MON	001	84.5		Reconstruct Interchange	TBD		0.50	0.50	TBD	MIXED	
5	SLO	1			Add Capacity and/or operational improvemets - CEN-HWTS-004	TBD			0.30	\$12.27	TBD	PSR
5	SLO	41			Extend Existing NB Passing Lane	TBD			0.30	\$1.00	TBD	
5	MON	101	69.4		Interchange Improvements	2013/14	0.05			\$20.00	STIP	PSR
5	SCR	152	T2.5		Intersection Improvements	2011/12	0.05			\$1.00	OTHER	PSR
5	SLO	001	16.8	16.9	Right-turn Channelization	2014/15	0.20			\$2.60	STIP	PSR
5	MON	101	62.7		Interchange Modification, Operational Improvements	2013/14	0.30			\$20.00	OTHER	PSR
5	MON	183/1	var	var	Local Road Realignment	2015/16	0.30			\$10.00	OTHER	PSR
5	SB	217	0.8	2.2	Construct Bike Lane	2015/16	0.35			\$2.00	OTHER	PSR
5	SB	225	1.7		Intersection Improvements	2015/16	0.35			\$2.50	MIXED	PSR
5	SLO	101	52.4		Reconfigure Interchange	2015/16	0.35			\$7.00	OTHER	PSR/PDS
5	SCR	001	17.2	18.2	Replace/Widen Bridge	2013/14	0.50			\$15.00	OTHER	PSR
5	SB	166	27.0	69.1	Operational Improvements (Passing lanes)	TBD	0.50			\$11.20	STIP	PSR/PDS
5	MON	101	86.1		Improve Existing Interchange and Operational Improvements along Sanborn Road	2015/16	0.90			\$20.00	MIXED	PSR
6	FRE	99	26.3	26.3	Add Lane on NB Ramp	N/A		0.60	0.60	\$1.00	MIXED	PSR
6	TUL	198	5.7	5.7	Improve Interchange	2013/14		0.70		\$7.00	OTHER	PSR/PR
6	KIN	41	TBD	TBD	Modify Interchange	2013/14		0.80		\$5.00	MIXED	TBD
6	FRE	41	R22.9	R26.5	Add Lane/Aux in Median	2012/13		0.80	0.40	\$17.30	MIXED	PSR

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
6	FRE	99	17.4	30.2	Meter NB Ramps, possibly widen	N/A		0.80	0.80	\$1.00	MIXED	PSR
6	VAR	VAR	TBD	TBD	Developer Mitigation Projects	N/A		1.00		\$1.00	OTHER	PSR
6	VAR	VAR	VAR	VAR	PID Refreshers	N/A		1.00		\$1.00	MIXED	PSR
6	MAD	99	R13.5	R15.0	Modify Interchange	2013/14	0.40	1.10		\$35.00	OTHER	PSR
6	FRE	99	30.7	30.7	Closing Ramp	2011/12	0.15			\$4.66	OTHER	PSR-PR
6	FRE	180	35.0	38.6	Add Passing lanes	2012/13	1.00			\$5.10	OTHER	PSR
6	KER	99	49.7	50.66	Improve Interchange	N/A			0.80	\$1.00	MIXED	PSR
6	MAD	41	1.9	3.2	At-Grade Intersection and Widen from 2C to 4E	2011/12	0.70			\$4.66	OTHER	PSR
6	TUL	99	27.6	27.6	Modify Paige Ave I/C	2012/13	0.50			\$50.00	OTHER	PSR
6	TUL	198	R11.5	R11.9	Improve Interchange	2011/12	0.60			\$25.00	MIXED	PSR
6	TUL	198	6.7	6.7	Minor widening & safety improvements	2012/13	0.50			\$3.50	OTHER	PSR/PR
6	VAR	VAR	TBD	TBD	Developer Mitigation Projects	VAR	0.50			\$1.00	OTHER	TBD
6	KER	65	0.0	2.9	Widen to 4 Lanes	N/A			1.00	\$1.00	MIXED	PSR
6	KER	99	23.7	24.7	Add Aux Lane(s)	N/A			0.80	\$1.00	MIXED	PSR
6	KIN	198	TBD	TBD	Modify Interchange	N/A			1.20	\$40.00	MIXED	FS
6	MAD	41	3.2	9.3	Widen to 4 Lanes	2013/14	1.00			\$20.00	OTHER	PSR
6	TUL	99	37.3	41.3	Widen existing roadway	2012/13	1.10			\$51.00	MIXED	PSR
6	VAR	VAR	VAR	VAR	PID Refreshers	N/A	1.00			\$1.00	MIXED	Refresh PSR
7	LA	57/60	2.997/2 2.796	4.518/2 4.552	reconstruct IC	TBD	0.60	0.90		\$5.00	TBD	TBD
7	LA	047			Modify Ramp	2012/13	1.00	1.00	1.00	\$20.00	OTHER	TBD
7	LA	014	29.68	29.68	Other - Modify the north and south bound ramps and widen the overpass Golden Valley Road Bridge over the freeway	2011/12	1.00	1.00		\$9.00	MIXED	TBD
7	LA	001	22.40	22.40	Add Aux. Ln(s)	2012/13		1.00		\$4.00	OTHER	TBD
7	LA	010	12.30	14.30	Collector Distributor Improvement West Of I-10/110 IC	TBD	1.50	1.50		\$1.00	OTHER	PSR/PDS

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
7	LA	010	2.16	14.80	Add HOV Lane in the EB & WB	2010/11	2.00	2.00		\$765.00	STIP	PSR/PDS
7	LA	405	39.44	39.44		2011/12	2.00	2.00	1.00	\$200.00	TBD	TBD
7	LA	605	R5.05	R5.05	Add Lane to Connector, Add Lane to IC	2010/11	2.50	2.00	1.00	\$210.00	OTHER	PSR/PDS
7	LA	605	R17.4	17.40	Once the 60 HOV is Complete the HOV Will End East of the 60/605 IC Where a Bottleneck Will Occur.	2012/13	2.50	2.00	1.00	\$220.00	OTHER	PSR/PDS
7	LA	005	41.60	45.73	Construct Viaduct. Reconstruct fwy With 8 to 9 MF Lanes + 2 HOV Each Direction	2013/14	2.00	2.00		\$400.00	TBD	PSR/PDS
7	LA	605	R0.0	R0.0	Add Lane to Connector, Add Lane to IC	2012/13	2.00	2.50	1.00	\$280.00	OTHER	PSR/PDS
7	LA	005	18.45	22.55	Add 1 HOV lane in each direction	2012/13		2.50	2.50	\$300.00	STIP	PSR/PDS
7	LA	405	17.56	R21.18		2012/13	2.50	2.50		\$253.00	STIP	TBD
7	LA	405	18.23	19.21		2012/13	2.50	2.50		\$120.00	TBD	TBD
7	LA	710	R26.6	30.95	Gap Closure	2012/13		3.00	4.00	\$5,280.00	TBD	TBD
7	LA	138	51.41	74.97	Widen to 4 Lanes	2012/13		3.00	4.00	\$1,000.00	TBD	TBD
7	LA	110	20.58	20.90	Modify Ramp	2012/13	0.50			\$40.00	OTHER	PSR
7	LA	101			Modify Structure	2011/12	0.60			\$30.00	STIP	PSR
7	LA	210	30.80	32.20	Soundwall Baldwin Ave to Santa Anita Ave	2011/12	0.70			\$10.00	TBD	NBSSR
7	LA	005	29.00	29.40	New Bypass	2011/12	0.70			\$1.00	STIP	TBD
7	VEN	118	14.00		grade separation	TBD	1.00			\$1.00	TBD	PSR
7	LA	010	27.60	28.60	El Monte Transit Connector	2013/14	1.00			\$1.00	TBD	PSR/PDS
7	LA	var	var	var	High Speed Rail	TBD	1.00			\$1.00	OTHER	CT HSR Concept Report
7	LA	001	22.90	22.90	Add Aux. Ln(s)	2011/12	1.00			\$2.60	STIP	TBD
7	LA	101			Modify Ramp	2012/13	1.00			\$2.00	STIP	TBD
7	LA	210			Modify Ramp	2012/13	1.00			\$3.00	STIP	TBD
7	LA	101			Modify Ramp	2010/11	1.00			\$1.50	OTHER	TBD
7	LA	005			Modify Ramp	TBD	1.00			\$2.00	OTHER	TBD

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
7	LA	210			Modify Ramp	2011/12	1.00			\$3.00	STIP	TBD
7	LA	605	R19.39	R19.39	Modify Ramps	TBD	1.00			\$30.00	OTHER	PSR
7	LA	001	8.24	8.62	Replace Bridge and Ramp Modification	2012/13	1.20			\$30.00	TBD	PSR
7	LA	001	23.70	23.90	Modify Structure	2011/12	1.20			\$17.30	OTHER	TBD
7	LA	101	6.15	6.65	Park Cap on Hollywood Freeway	TBD	1.50			\$1.00	TBD	PSR
7	LA	010			Capping I-10	TBD	1.50			\$1.00	TBD	PSR
7	LA	010	7.50	8.50	Modify Ramp	2011/12	1.50			\$2.00	STIP	PSR/PDS
7	LA	var	var	var	High Speed Rail	TBD	1.50			\$1.00	OTHER	PSR/PDS
7	LA	101	1.70	2.70	Add Aux. Ln(s)	TBD	2.00			\$1.00	MIXED	PSR/PDS
7	LA	101	11.60	11.70	add lane on 101 SB to 134 EB and 101 NB /134 WB to 101 NB	2013/14	2.00			\$30.00	TBD	PSR/PDS
8	SBN	060	5.80	5.80	Widen ramps, construct aux lanes	2012/13	0.3	0.2		\$3.40	OTHER	PSR/PDS
8	RIV	15			Construct new Eastern Bypass/I-15 IC & ramps & 4 Lns	2012/13	0.3	1.2		\$30.00	MIXED	PSR
8	RIV	10			Add HOV Ln(s)	2012/13	0.4	0.8		\$1.00	MIXED	PSR
8	RIV	10	0.0	24.0	Construct High Speed Rail Line	2012/13	0.5	0.7		\$404.00	OTHER	PSR/PDS
8	SBN	10			Reconstruct Interchange	2012/13	0.5	0.8		\$25.00	MIXED	PSR/PDS
8	RIV	10	17.30	19.30	Construct new Morongo PKWY OC (4 through lanes)	2012/13	0.5	0.8		\$40.00	MIXED	PSR
8	SBN	10	20.1	22.0	Reconstruct Interchange	2012/13	0.6	0.9		\$34.00	MIXED	PSR/PDS
8	RIV	10	0.00	6.7S	Construct EB Trk climbing lane	2012/13	0.6	0.9		\$26.00	MIXED	PSR
8	SBN	015			Add HOV Ln(s)	2012/13	0.7	0.8		\$890.00	OTHER	PSR
8	SBN	210			Reconstruct Interchange	2012/13	0.7	0.8		\$18.00	OTHER	PSR/PDS
8	SBN	15	34.9	35.9	Reconstruct Interchange	2012/13	0.8	0.5		\$20.00	OTHER	PSR/PR
8	SBN	60			Reconstruct Interchange	2012/13	0.8	0.6		\$6.00	OTHER	PSR/PDS
8	SBN	10	17.8	19.3	Reconstruct Interchange	2012/13	0.8	0.7		\$20.00	OTHER	PSR/PDS

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
8	SBN	215			Reconstruct Interchange	2012/13	0.8	0.7		\$51.00	OTHER	PSR/PDS
8	SBN	210			Reconstruct Interchange	2012/13	0.9	0.5		\$6.00	OTHER	PSR/PDS
8	RIV	79S	3.10	4.15	Construct 2 passing lanes for N/B & S/B Traffic	2012/13	1.0	1.2		\$3.73	OTHER	PSR
8	RIV	10	138.9	156.5	Construct JVCE and AIF	2012/13	1.2	1.8		\$64.00	MIXED	PSR
8	RIV	10	9.31		Reconstruct Interchange	2014/15	1.5	1.5		\$35.00	OTHER	PSR
8	RIV	215	23.54		Modify Ramp	2013/14			0.3	\$8,000.00	MIXED	PSR/PR
8	RIV	215	29.50		New IC	2013/14			0.4	\$0.90	MIXED	PSR/PR
8	SBN	215			Add Mix Flow Ln(s)	2013/14			0.9	\$140.00	OTHER	PSR/PDS
8	RIV	215	27.89		Additional WB left to SB on-ramp may necessitate bridge widening	2013/14			1.0	\$5,000.00	MIXED	PSR/PR
8	SBN	210			Add HOV Ln(s)	2013/14			1.1	\$1.00	MIXED	PSR
8	RIV	79			New Corridor	2013/14			1.3	\$1.00	MIXED	PSR
8	RIV	215	14.50		New IC	2013/14			1.5	\$21.00	OTHER	PSR
8	SBN	15			Reconstruct IC	2013/14			1.5	\$20.00	OTHER	PSR
8	SBN	10	5.9	6.4	Reconstruct Interchange	2013/14			1.5	\$74.00	OTHER	PSR/PDS
8	SBN	60			Reconstruct Interchange	2013/14			1.5	\$45.00	OTHER	PSR/PDS
8	SBN	215	6.4	7.6	REPLACE LANDSCAPING & IRRIGATION	2013/14			1.5	\$4.90	MIXED	PSR
8	SBN	10	23.6	24.6	ADD ON AND OFF RAMP (PSR/PDS)	2010/11		0.9		\$49.00	OTHER	PSR
8	SBN	62			Roadway Improvements	2012/13		0.8		\$6.00	OTHER	PSR
8	SBN	247			Turn Pockets	2012/13		0.9		\$1.00	MIXED	PSR/PDS
9	MNO	395	57.80	60.20	Passing Lane	TBD		0.50		\$6.30	STIP	PSSR
9	INY	190	109	110.5	Bike Lanes	TBD			0.20	\$2.00	TBD	TE APP
9	MNO, INY, KRE				CMS	TBD			0.70	\$1.00	TBD	FS
9	MNO	120	13.30	58.90	FS	TBD	0.10			\$1.00	TBD	FS

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
10	AMA	88	3.50	6.50	In Jackson, from Jackson St. to Martell, Widen 2C to 4c	2012/13		0.50		\$247.00	MIXED	PSR/PDS
10	AMA	88	TBD	TBD	Highway widening to four lanes	2013/14		0.50		\$1.00	MIXED	PSR
10	STA	132	7.50	11.40	Widen to four lane expressway on new alignment	2012/13		0.60		\$80.00	MIXED	PSR
10	STA	132	2.40	7.10	Widen to four lane expressway	2012/13		1.00		\$104.00	MIXED	PSR
10	SJ	005	22.34	25.50	8 lane widening in south Stockton	2013/14			1.00	\$1.00	MIXED	PSR
10	SJ	99	28.50	35.60	6 lane widening in Lodi	2013/14			1.00	\$1.00	MIXED	PSR
10	STA	132	11.40	15.30	Expressway on new alignment	TBD	0.40			\$1.00	MIXED	PSR/PDS
10	MER	099	12.72	19.26	Widen from four to six lanes	2013/14	1.50			\$1.00	MIXED	PSR
11	SD	163			Reconstruct Interchange	2011/12	1.00	0.30		\$1.00	MIXED	PSR
11		78	14	16.5	Add Lanes	TBD	1.00	0.50	0.50	\$1.00	MIXED	
11		78	14	16.5	Add Lanes	TBD	1.00	0.50	0.50	\$1.00	MIXED	
11	SD	15	31.5	54.3	Construct Rail	2012/13	2.00	0.50	0.50	\$1.00	MIXED	PSR
11	SD	8			Reconstruct Interchange	TBD	0.50	0.50		\$1.00	MIXED	
11	SD	15			Reconstruct Interchange	2011/12	0.80	0.50		\$1.00	MIXED	PSR
11	SD	52			Modify Ramp	2011/12	0.80	0.50		\$1.00	MIXED	PSR
11	SD	15			Modify Ramp	TBD	1.00	1.00	0.50	\$1.00	MIXED	
11	SD	188	0		Add Lanes	TBD	1.00	1.00	0.50	\$20.00	MIXED	
11	SD	5	19.5	30.6	Add HOV Ln(s)- From I-8 to I-5	2012/13	2.00	1.00	0.50	\$750.00	MIXED	PSR
11	SD	5	16.9	25.9	Construct Rail	2012/13	1.20	1.00	0.70	\$1.00	MIXED	PSR
11	SD	56			Freeway crossing	2012/13	1.40	1.00	0.70	\$25.00	MIXED	PSR
11	SD	805			Add Aux. Ln(s)	TBD	1.00	1.00	1.00	\$1.00	MIXED	
11	SD	76			Modify Ramp	TBD	1.00	1.00	1.00	\$5.00	MIXED	
11	SD	76	18.7	22.1	Realign	TBD	1.00	1.00	1.00	\$25.00	MIXED	

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
11	SD	5	20.5	21.3	Reconstruct Interchange	TBD	1.00	1.00	1.00	\$60.00	MIXED	
11	SD	805	2.897	9.483	Add Aux. Ln(s)	TBD	1.00	1.00	1.00	\$83.15	MIXED	
11	SD	78	0	16.5	Add HOV Ln(s)	TBD	1.00	1.00	1.00	\$600.00	MIXED	
11	SD	8	0.0	2.4	Add Mix Flow Ln(s)	TBD	1.00	1.00	1.00	\$800.00	MIXED	
11	SD	54	var	var	Add Aux. Ln(s)	TBD		1.00	1.50	\$1.00	MIXED	
11	SD	8			Realign	2012/13	0.80	1.00		\$8.00	MIXED	PSR
11	IMP	86				2012/13	1.00	1.00		\$1.00	MIXED	PSR
11	SD	56			Add Mix Flow Ln(s)	2012/13	1.00	1.00		\$100.00	MIXED	PSR
11	SD	15	36.3	37.3	Modify Ramp	TBD	1.00	1.00		\$15.00	MIXED	
11	SD	15	15.037	31.5	Construct Rail	2012/13	1.10	1.00		\$1.00	MIXED	PSR
11	SD	8	5.6	11.1	Add mainline capacity, improve ramps and add aux. Lanes	2012/13	1.40	1.00		\$103.00	MIXED	PSR
11	SD	125	4	6	Construct Interchanges	2012/13	1.70	1.20		\$50.00	MIXED	PSR
11	SD	15	31.5	54.3	Construct managed lanes on I-15 from SR-78 to SD/Riverside County line	2012/13	1.50	1.50	0.50	\$500.00	MIXED	PSR
11	SD	var	var	var	Transportation Enhancement	16/17			0.30	\$1.00	STIP	TE Application
11	IMP	var	var	var	Transportation Enhancement	16/17			0.30	\$1.00	STIP	TE Application
11	SD	var	var	var	Transportation Enhancement	14/15	0.30			\$1.00	STIP	TE Application
11	IMP	var	var	var	Transportation Enhancement	14/15	0.30			\$1.00	STIP	TE Application
11	SD	15/78	R30.66 6	R31.80 1	Add HOV Ln(s)	2012/13	1.00			\$170.00	MIXED	PSR
11	SD	5	12.6	19.5	Adding 2 HOV Lanes	2012/13	1.00			\$300.00	MIXED	PSR
11	SD	5	1.3	9.6	Add HOV Ln(s)	2012/13	1.00			\$722.00	MIXED	PSR

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
11	SD	76	22.2	23.2	Reconstruct Interchange	TBD	1.00			\$16.00	MIXED	
11	SD	5	50	52	Add Pass Ln(s)	2011/12	1.20			\$150.00	MIXED	PSR
12	ORA	605	0	1.643	Improve freeway access and arterial connection to I-605 serving the communities of Los Alamitos and Cypress	2013/14	0.70	0.30		\$20.17	OTHER	PSR/PDS
12	ORA	5	6.5	12.7	Add new GP lanes and aux lanes	2015/16		0.50	0.50	\$240.17	OTHER	PSR/PDS
12	ORA	5	0	6.5	Add new lanes and aux lanes	2015/16		0.50	0.50	\$260.17	OTHER	PSR/PDS
12	ORA	57	20.6	22.55	Add new GP lanes and aux lanes	2015/16		0.50	0.50	\$80.17	OTHER	PSR/PDS
12	ORA	57	10.5	15.6	Add new GP lanes and aux lanes	2015/16		0.50	0.50	\$200.17	OTHER	PSR/PDS
12	ORA	22	13.16	13.16	Metered Fwy-to-Fwy Connector	2015/16		0.50	0.50	\$75.17	OTHER	PSR/PDS
12	ORA	133	8.2	8.2	Metered Fwy-to-Fwy Connector	2015/16		0.50	0.50	\$75.17	OTHER	PSR/PDS
12	ORA	405	9.6	10.3	Construct HOV Drop Ramps	2015/16		0.50	0.50	\$19.77	OTHER	PSR/PDS
12	ORA	5	22	23	Construct HOV Drop Ramps	2015/16		0.50	0.50	\$56.17	OTHER	PSR/PDS
12	ORA	22	TBD	TBD	Interchange Improvements	2015/16		0.50	0.50	\$35.00	OTHER	PSR/PDS
12	ORA	22	TBD	TBD	Proposed new East-West Connector	2015/16		0.50	0.50	\$35.00	OTHER	PSR/PDS
12	ORA	22	TBD	TBD	Proposed new East-West Connector	2015/16		0.50	0.50	\$35.00	OTHER	PSR/PDS
12	ORA	22	TBD	TBD	Proposed new East-West Connector	2015/16		0.50	0.50	\$35.00	OTHER	PSR/PDS
12	ORA	5	22.3	22.7	Interchange Improvements	2013/14	1.00	0.50		\$40.00	OTHER	PSR/PDS

**Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
12	ORA	5	6.1	6.6	Interchange Improvements	2015/16		1.00	0.50	\$40.00	OTHER	PSR/PDS
12	ORA	5	10.2	11.2	Interchange Improvements	2015/16		1.00	0.50	\$40.00	OTHER	PSR/PDS
12	ORA	TBD	TBD	TBD	Proposed new East-West Connector	2015/16		1.00	1.00	\$300.33	OTHER	PSR/PDS
12	ORA	5	18.1	18.7	Interchange Improvements	2011/12	1.00	1.00		\$200.17	OTHER	PSR/PDS
12	ORA	5	15.4	17	Interchange Improvements	2011/12	1.00	1.00		\$200.17	OTHER	PSR/PDS
12	ORA	5	29.6	30.4	Interchange Improvements	2013/14	1.00	1.00		\$250.33	OTHER	PSR/PDS
12	ORA	39	TBD	TBD	Bridge modification for High Speed Rail Authority	2011/12	0.96			\$50.17	OTHER	PSR/PDS
12	ORA	57	12.2	12.2	Anaheim Street Car	2011/12	0.19			\$10.08	MIXED	PSR/PDS
12	ORA	57	12.2	12.2	Transportation gateway and mixed-use activity center	2011/12	0.19			\$178.80	MIXED	PSR/PDS
12	ORA	55	16	16.5	Interchange Improvements	2011/12	0.59			\$200.17	OTHER	PSR/PDS
12	ORA	5	35.5	35.5	Anaheim Street Car	2011/12	0.69			\$10.08	MIXED	PSR/PDS
12	ORA	5	21.2	31.1	Provide new lanes on NB/SB I-5 and interchange improvement at El Toro Road	2011/12	0.69			\$215.33	OTHER	PSR/PDS
12	ORA	57	12	12.4	Bridge modification for ARTIC	2011/12	0.69			\$4.50	MIXED	PSR/PDS
12	ORA	91	15	18.9	Construct Direct Connector between SR-241 and SR-91	2011/12	0.69			\$925.33	OTHER	PSR/PDS
12	ORA	5	23.58	23.58	Extend Technology Drive from Irvine OH west of Barrance Parkway to Laguna Canyon road	2009/10	0.69			\$3.07	MIXED	PSR/PR
12	ORA	133	9.5	11	Construct Interchange at Trabuco Road	2012/13	0.79			\$71.88	OTHER	PSR/PDS
12	ORA	57	TBD	TBD	Bridge modification for High Speed Rail Authority	2011/12	0.96			\$50.17	OTHER	PSR/PDS
12	ORA	91	TBD	TBD	Bridge modification for High Speed Rail Authority	2011/12	0.96			\$50.17	OTHER	PSR/PDS
12	ORA	91	6	9.3	Improve complex interchanges, including nearby local interchanges such as Tustin Avenue and Lakeview	2015/16	1.04			\$417.33	OTHER	PSR/PDS
12	ORA	405	0	8.7	Add GP lanes from SR-55 to I-5	2015/16	1.19			\$320.33	OTHER	PSR/PDS

Appendix B-2: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed PID Development During FY 2011-12 Through 2013-14

District	County	Route	Begin Postmile	End Postmile	Improvement Description	Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
12	ORA	55	0	2.4	Develop and evaluate alternative condition and access concepts	2011/12	1.69			\$250.33	STIP	PSR/PDS

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**APPENDICES**

**APPENDIX B-3**

**THREE-YEAR NON-SHOPP UNCONSTRAINED  
NEEDS PROJECT SUMMARY FOR PROPOSED  
PRE-PID DEVELOPMENT**

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**Appendix B-3: Three-Year Non-SHOPP Unconstrained Needs Project Summary for Proposed Pre-PID Development During FY 2011-12 Through 2013-14**

District	Fiscal Year	Data	STIP	MIXED	OTHER	TBD	Grand Total
1	2011/12	Sum of Number of Projects		4			4
		Sum of Actual PY Cost		3.70			3.70
		Sum of Project Cost with Support (\$M)		\$2.30			\$2.30
	2012/13	Sum of Number of Projects		4			4
		Sum of Actual PY Cost		3.10			3.10
		Sum of Project Cost with Support (\$M)		\$23.00			\$23.00
	2013/14	Sum of Number of Projects		9			9
		Sum of Actual PY Cost		5.90			5.90
		Sum of Project Cost with Support (\$M)		\$34.50			\$34.50
District 1 Sum of Number of Projects				17			17
District 1 Sum of Actual PY Cost				12.70			12.70
District 1 Sum of Project Cost with Support (\$M)				\$59.80			\$59.80
2	2011/12	Sum of Number of Projects	2				2
		Sum of Actual PY Cost	34.00				34.00
		Sum of Project Cost with Support (\$M)	\$0.90				\$0.90
	2012/13	Sum of Number of Projects		0.60			0.60
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2013/14	Sum of Number of Projects			1		1
		Sum of Actual PY Cost	0.40	0.50			0.90
		Sum of Project Cost with Support (\$M)		\$15.00			\$15.00
District 2 Sum of Number of Projects			2	1			3
District 2 Sum of Actual PY Cost			35.00	0.50			35.50
District 2 Sum of Project Cost with Support (\$M)			\$0.90	\$15.00			\$15.90
3	2011/12	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2012/13	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2013/14	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
District 3 Sum of Number of Projects							
District 3 Sum of Actual PY Cost							
District 3 Sum of Project Cost with Support (\$M)							
4	2011/12	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2012/13	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2013/14	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
District 4 Sum of Number of Projects							
District 4 Sum of Actual PY Cost							
District 4 Sum of Project Cost with Support (\$M)							

**Appendix B-3: Three-Year Non-SHOPP Unconstrained Needs Project Summary for Proposed Pre-PID Development During FY 2011-12 Through 2013-14**

District	Fiscal Year	Data	STIP	MIXED	OTHER	TBD	Grand Total	
5	2011/12	Sum of Number of Projects				3	3	
		Sum of Actual PY Cost				3.00	3.00	
		Sum of Project Cost with Support (\$M)				\$1.80	\$1.80	
	2012/13	Sum of Number of Projects						
		Sum of Actual PY Cost				2.00	2.00	
		Sum of Project Cost with Support (\$M)						
	2013/14	Sum of Number of Projects						
		Sum of Actual PY Cost				2.00	2.00	
		Sum of Project Cost with Support (\$M)						
District 5 Sum of Number of Projects						3	3	
District 5 Sum of Actual PY Cost						7.00	7.00	
District 5 Sum of Project Cost with Support (\$M)						\$1.80	\$1.80	
6	2011/12	Sum of Number of Projects		4		2	6	
		Sum of Actual PY Cost		113.00		101.50	214.50	
		Sum of Project Cost with Support (\$M)		\$4.00		\$1.40	\$5.40	
	2012/13	Sum of Number of Projects		5			5	
		Sum of Actual PY Cost		4.60			4.60	
		Sum of Project Cost with Support (\$M)		\$114.00			\$114.00	
	2013/14	Sum of Number of Projects		1			1	
		Sum of Actual PY Cost		1.20			1.20	
		Sum of Project Cost with Support (\$M)		\$1.00			\$1.00	
District 6 Sum of Number of Projects						10	12	
District 6 Sum of Actual PY Cost						118.80	220.30	
District 6 Sum of Project Cost with Support (\$M)						\$119.00	\$120.40	
7	2011/12	Sum of Number of Projects				1	1	
		Sum of Actual PY Cost				1.00	1.00	
		Sum of Project Cost with Support (\$M)				\$1.00	\$1.00	
	2012/13	Sum of Number of Projects						
		Sum of Actual PY Cost				1.00	1.00	
		Sum of Project Cost with Support (\$M)						
	2013/14	Sum of Number of Projects						
		Sum of Actual PY Cost						
		Sum of Project Cost with Support (\$M)						
District 7 Sum of Number of Projects						1	1	
District 7 Sum of Actual PY Cost						2.00	2.00	
District 7 Sum of Project Cost with Support (\$M)						\$1.00	\$1.00	
8	2011/12	Sum of Number of Projects						
		Sum of Actual PY Cost						
		Sum of Project Cost with Support (\$M)						
	2012/13	Sum of Number of Projects						
		Sum of Actual PY Cost						
		Sum of Project Cost with Support (\$M)						
	2013/14	Sum of Number of Projects						
		Sum of Actual PY Cost						
		Sum of Project Cost with Support (\$M)						
District 8 Sum of Number of Projects								
District 8 Sum of Actual PY Cost								
District 8 Sum of Project Cost with Support (\$M)								

### Appendix B-3: Three-Year Non-SHOPP Unconstrained Needs Project Summary for Proposed Pre-PID Development During FY 2011-12 Through 2013-14

District	Fiscal Year	Data	STIP	MIXED	OTHER	TBD	Grand Total
9	2011/12	Sum of Number of Projects				4	4
		Sum of Actual PY Cost				4.00	4.00
		Sum of Project Cost with Support (\$M)				\$2.50	\$2.50
	2012/13	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2013/14	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
District 9 Sum of Number of Projects						4	4
District 9 Sum of Actual PY Cost						4.00	4.00
District 9 Sum of Project Cost with Support (\$M)						\$2.50	\$2.50
10	2011/12	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2012/13	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2013/14	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
District 10 Sum of Number of Projects							
District 10 Sum of Actual PY Cost							
District 10 Sum of Project Cost with Support (\$M)							
11	2011/12	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2012/13	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
	2013/14	Sum of Number of Projects					
		Sum of Actual PY Cost					
		Sum of Project Cost with Support (\$M)					
District 11 Sum of Number of Projects							
District 11 Sum of Actual PY Cost							
District 11 Sum of Project Cost with Support (\$M)							
12	2011/12	Sum of Number of Projects	8		3		11
		Sum of Actual PY Cost	307.63		340.33		647.97
		Sum of Project Cost with Support (\$M)	\$6.10		\$2.23		\$8.33
	2012/13	Sum of Number of Projects	5		1		6
		Sum of Actual PY Cost	4.50		1.00		5.50
		Sum of Project Cost with Support (\$M)	\$375.00		\$22.07		\$397.07
	2013/14	Sum of Number of Projects	5				5
		Sum of Actual PY Cost	5.50		0.50		6.00
		Sum of Project Cost with Support (\$M)	\$375.00				\$375.00
District 12 Sum of Number of Projects			18		4	22	
District 12 Sum of Actual PY Cost			317.63		341.83	659.47	
District 12 Sum of Project Cost with Support (\$M)			\$756.10		\$24.30	\$780.40	
Total Sum of Number of Projects			20	28	4	10	62
Total Sum of Actual PY Cost			352.63	132.00	341.83	114.50	940.97
Total Sum of Project Cost with Support (\$M)			\$757.00	\$193.80	\$24.30	\$6.70	\$981.80

For those projects that carryover, project count and cost will be captured in the first year. Actual PY cost may be spread over multiple FYs through the life of the project. Projects without estimated costs are given a default value of \$1 million.

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**APPENDICES**

**APPENDIX B-4**

**THREE-YEAR NON-SHOPP UNCONSTRAINED  
NEEDS PROJECT LISTING FOR PROPOSED  
PRE-PID DEVELOPMENT**

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Appendix B-4: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed Pre-PID Development During FY 2011-12 Through 2013-14

District	County	Route	Begin Postmile	End Postmile	Improvement Description	(26) Proposed Program Year	Estimated Total FY Cost for PID for FY 11/12	Estimated Total FY Cost for PID for FY 12/13	Estimated Total FY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
1	MEN	128	22.6	23.8	Pedestrian Improvements	TBD		0.50		\$1.50	MIXED	STUDY (MIS-FS-SS)
1	MEN	128	26.8	29.5	Pedestrian Improvements	TBD		0.60		\$1.50	MIXED	STUDY (MIS-FS-SS)
1	MEN	001	40.27	105.58	PCBR/CCT Engineering Feasibility Analysis-Phase 1	TBD		1.00		\$10.00	MIXED	STUDY (MIS-FS-SS)
1	MEN	001	0.00	40.27	PCBR/CCT Engineering Feasibility Analysis-Phase 2	TBD		1.00		\$10.00	MIXED	STUDY (MIS-FS-SS)
1	MEN	101	10.6	11.2	Pedestrian Improvements	TBD			0.50	\$1.50	MIXED	STUDY (MIS-FS-SS)
1	DN	169	0.0	3.52	Bike/Ped, Shoulder Improvements	TBD			0.60	\$4.00	MIXED	STUDY (MIS-FS-SS)
1	HUM	200	0.0	2.68	Bike/Ped, Shoulder Improvements	TBD			0.60	\$4.00	MIXED	STUDY (MIS-FS-SS)
1	HUM	101	120.017	121.7	Traffic Calming, Bike/Ped Improvements, Beautification	TBD			0.60	\$2.00	MIXED	STUDY (MIS-FS-SS)
1	MEN	222	0.0	2.2	Pedestrian Improvements/Relinquishment Improvements	TBD			0.60	\$3.00	MIXED	STUDY (MIS-FS-SS)
1	HUM	36	2.51	3.16	Traffic Calming	TBD			0.60	\$1.00	MIXED	STUDY (MIS-FS-SS)
1	HUM	255	8.56	8.80	Engineering Feasibility Study	TBD			0.70	\$4.00	MIXED	STUDY (MIS-FS-SS)
1	LAK	281	14.0	17.0	Shoulder Widening	TBD			0.70	\$5.00	MIXED	STUDY (MIS-FS-SS)
1	HUM DN	101 101	0.0 0.0	R137.1 46.49	PCBR/CCT Engineering Feasibility Gap Analysis	TBD			1.00	\$10.00	MIXED	STUDY (MIS-FS-SS)
1	LAK	053	0.00	7.43	Route 53 Feasibility Study	TBD	0.40			\$0.20	MIXED	STUDY (MIS-FS-SS)
1	LAK	029	5.12	6.37	Operational, Intersection & Safety Improvements	TBD	0.50			\$1.00	MIXED	STUDY (MIS-FS-SS)
1	DN	101	23.81	27.90	Traffic Calming, Bike/Ped Improvements	TBD	0.70			\$1.00	MIXED	STUDY (MIS-FS-SS)
1	HUM	96	37.87	38.57	Pedestrian Improvements	TBD	0.70			\$1.50	MIXED	STUDY (MIS-FS-SS)
2	TEH	99	0	24	Alignment Study	TBD	0.50	0.60	0.40	\$30.00	STIP	SS
2	SHA	273	0	18	SR 273 Bike Study	TBD	0.40			\$4.00	STIP	SS
2	TEH	5	4.5	6.2	Interchange Improvements	TBD			0.50		MIXED	SS
5	SLO	101			MIS	TBD	0.30	0.50	0.50	\$1.00	TBD	STUDY(MIS-FS-SS)
5	ScCR TC, M ON,	101			Traffic Study - Ramp Metering	TBD	0.50	0.50	0.50	\$1.00	TBD	STUDY (MIS-FS-SS)
5	MON	001	0.0	70.0	Landslide and Stabilization Study	TBD	1.00	1.00	1.00	\$1.00	TBD	STUDY(MIS-FS-SS)

Appendix B-4: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed Pre-PID Development During FY 2011-12 Through 2013-14

District	County	Route	Begin Postmile	End Postmile	Improvement Description	(26) Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
6	FRE	41	TBD	TBD	Auxilliary Lanes - Various Locations	N/A		0.80		\$8.00	MIXED	FS
6	KER	99	TBD	TBD	Auxilliary Lanes	N/A		0.80		\$35.00	MIXED	FS
6	FRE	99	20.7	24.4	Auxilliary Lanes - Various Locations	N/A		0.80		\$1.00	MIXED	FS
6	MAD	152	22.6	23.0	NB Loop onto SR 99	N/A		1.00		\$30.00	MIXED	FS
6	KIN	198	TBD	TBD	Modify Interchange	N/A		1.20		\$40.00	MIXED	FS
9	INY	168	28.50	29.00	FS	TBD	0.50				TBD	FS
6	FRE	41	TBD	TBD	Auxilliary Lanes - Various Locations	N/A	1.00			\$8.00	MIXED	FS
6	FRE	99	TBD	TBD	Auxilliary Lanes - Various Locations	N/A	1.00			\$20.00	MIXED	FS
6	KER	99	TBD	TBD	Auxilliary Lanes - Various Locations	N/A	1.00			\$40.00	MIXED	FS
6	TUL	198	TBD	TBD	Improve Interchange	2012/13	1.00			\$45.00	MIXED	FS
6	FRE	99	14.10	14.90	Improve Interchange	N/A	0.60			\$35.00	TBD	FS
6	FRE	99	16.70	17.50	Construct Interchange	N/A	0.80			\$66.50	TBD	FS
6	FRE	41	TBD	TBD	Auxilliary Lanes - Various Locations	N/A			1.20	\$1.00	MIXED	PSR
7	LA	605	0.00	18.00	Several FS at 91/605/405 by Gateway Cities	TBD	1.00	1.00		\$1.00	TBD	STUDY (MIS-FS-SS)
9	KRE	202	4.8	12.09	Signal Plan	TBD	0.50			\$1.00	TBD	Study
9	KRE	178	89.2	93.2	Signal Plan	TBD	0.50			\$1.00	TBD	Study
9	MNO, INY, KRE	395			FS	TBD	1.00			\$1.00	TBD	Study
12	ORA	405	7.2	7.5	Construct HOV Drop Ramps	2015/16		0.50	0.50	\$22.07	OTHER	PSR/PDS
12	ORA	91	5.5	10	Add GP lanes and aux lanes	2013/14	1.00	0.50		\$35.00	OTHER	PSR/PDS
12	ORA	5	3.8	5.8	Retrofit Soundwall	2011/12	0.40			\$1.53	STIP	STUDY(MIS-FS-SS)
12	ORA	405	16.2	17.8	Retrofit Soundwall	2003/14	0.40			\$1.53	STIP	STUDY(MIS-FS-SS)
12	ORA	405	12.47	14.05	Retrofit Soundwall	2003/14	0.40			\$1.53	STIP	STUDY(MIS-FS-SS)
12	ORA	5	11	13.5	Interchange Improvements	2011/12	0.64			\$200.17	OTHER	PSR/PDS
12	ORA	5	29.7	30.3	Retrofit Soundwall	2012/13	0.90			\$3.03	STIP	NBSSR

**Appendix B-4: Three-Year Non-SHOPP Unconstrained Needs Project Listing for Proposed Pre-PID Development During FY 2011-12 Through 2013-14**

District	County	Route	Begin Postmile	End Postmile	Improvement Description	(26) Proposed Program Year	Estimated Total PY Cost for PID for FY 11/12	Estimated Total PY Cost for PID for FY 12/13	Estimated Total PY Cost for PID for FY 13/14	Project Cost with Support (\$M)	STIP, Mixed, or Exclusively Other?	Type of PID
12	ORA	1	VAR	VAR	Conventional highways improvements per MPAH	2015/16		0.50	0.50	\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	90	VAR	VAR	Conventional highways improvements per MPAH	2015/16		1.00		\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	74	VAR	VAR	Conventional highways improvements per MPAH	2015/16		1.00		\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	39	VAR	VAR	Conventional highways improvements per MPAH	2015/16		1.00		\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	142	VAR	VAR	Conventional highways improvements per MPAH	2015/16		1.00		\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	90	VAR	VAR	Conventional highways improvements per MPAH	2015/16			1.00	\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	74	VAR	VAR	Conventional highways improvements per MPAH	2015/16			1.00	\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	39	VAR	VAR	Conventional highways improvements per MPAH	2015/16			1.00	\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	142	VAR	VAR	Conventional highways improvements per MPAH	2015/16			1.00	\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	1	VAR	VAR	Conventional highways improvements per MPAH	2015/16			1.00	\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	90	VAR	VAR	Conventional highways improvements per MPAH	2013/14	1.00			\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	39	VAR	VAR	Conventional highways improvements per MPAH	2013/14	1.00			\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	142	VAR	VAR	Conventional highways improvements per MPAH	2013/14	1.00			\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	1	VAR	VAR	Conventional highways improvements per MPAH	2013/14	1.00			\$75.00	STIP	STUDY (MIS-FS-SS)
12	ORA	55	10.2	11.3	Add new GP lanes and aux lanes	2015/16	0.59			\$105.17	OTHER	STUDY (MIS-FS-SS)

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**APPENDICES**

**APPENDIX C-1**

**SUMMARY OF PROGRAM 40.50  
PY NEEDS FOR FY 2011-12**

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## Appendix C-1: Summary of Program 40.50 PY Needs for FY 2011-12

Description	SHA Positions	SHA Reimbursed Positions	Summary of Positions
<b>SHOPP</b>			
Lead	186	0	186
<b>Subtotal</b>	186	0	186
<b>Non-SHOPP</b>			
Lead	40	16	56
QA	0	62	62
<b>Subtotal</b>	40	78	118
<b>PID Program Technical Engineering Support</b>			
Lead	11	0	11
QA	0	5	5
<b>Subtotal</b>	11	5	16
<b>High-Speed Rail</b>			
Lead	0	0	0
QA	0	10	10
<b>Subtotal</b>	0	10	10
<b>Indirect Costs</b>			
Districts <sup>1</sup>	30	10	40
Headquarters <sup>2</sup>	15	0	15
<b>Subtotal</b>	45	10	55
<b>Total</b>	282	103	<b>385</b>

<sup>1</sup> District indirect cost is approx 12.5% of actual PID development work funded through the State Highway Account. District indirect cost is approx 10% of actual PID development work funded through reimbursement. This activity is allocated to districts based on the level of PYs for SHOPP and NonSHOPP work. They are for project management duties associated with PID development. Examples of activities include developing workplans for individual PIDs, tracking the PIDs progress, reporting information to HQs, holding PID status meetings, preparing Expenditure Authorization (EA) request for PIDs, budgeting and monitoring PID expenditures, and responding to the public and externals about PIDs.

<sup>2</sup> HQ indirect cost includes PID management, Programming, and Bridge Maintenance

(7.0 PYs) HQs Office of Projects/Plans Coordination provide statewide PID project management. Examples of activities include: review district work programs; evaluate proposed PIDs; approve PID work programs; review and coordinate the 10-Year SHOPP Plan; review Regional Transportation Plans, coordinate with HQs SHOPP Program Advisors; the Division of Engineering Services, Division of Programming, and Office of Bridge Maintenance; prepare the statewide PID allocation; develop PID work programs instructions/templates; prepare the statewide PID report, implement PID process improvements; set statewide policy; and respond to external agencies about the statewide PID program.

(3 PYs) Bridge Maintenance activities include the following: review the annual PID work plan to ensure that bridge projects proposed for planning have a chance of being funded and that the scope and costs are appropriate. Failure to perform this oversight role would lead to wasted Planning resources in the districts; review planning documents (PSSR's, Planning studies etc) to ensure that the appropriate project scope is being planned (the department benefits in saved Planning and Capital resources from this effort); provide analysis and planning documents for future projects (examples include the benefit cost analysis performed for the Stimulus projects, development of the SHOPP 10 Year Plan, etc.) These efforts provide the means for the department to begin developing high benefit cost ratio projects that reduce the overall life cycle costs to the Department.

(3 PYs) Division of Transportation Programming provides funding targets and assist districts in setting priorities based on available future funding.

(2 PYs) Division of Design will assist the Division of Transportation Planning in implementing an IQA PID pilot program beginning July 2011. The intent of the pilot program is to streamline PID IQA process.

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**APPENDICES**

**APPENDIX C-2**

**SHOPP PID CONSTRAINED WORKLOAD FOR  
FY 2011-12**

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### Appendix C-2: SHOPP PID Constrained Workload Matrix for FY 2011-12

Program Categories	Total PIDs	Program Goals	Annual Funding Targets <sup>1</sup> (\$M)	Adjusted Funding Targets <sup>2</sup> (\$M)	Number of PIDs on the Active Shelf	Value of Projects on Active PID Shelf
<b>EMERGENCY RESPONSE</b>		The goal of the emergency response is to respond to earthquakes, floods, fires, and other emergencies to restore the roadway to essential traffic within 180 days after major damage and full restoration to predisaster conditions within three years.	\$147.0	\$147.0	0	\$0.0
Number of PIDs	0					
Average Project Cost (\$M)	\$0.0					
Funding Target (\$M)	\$0.0					
Total Workload (PY)	0.0					
Workload Norm (PY)	0.0					
<b>Total Positions</b>	<b>0.0</b>					
<b>COLLISION REDUCTION</b>		The goal of the collision reduction is to reduce the number and severity of fatal and injury collisions.	\$355.0	\$390.5	5	\$43.9
Number of PIDs	118					
Average Project Cost (\$M)	\$3.3					
Funding Target (\$M)	\$390.5					
Total Workload (PY)	111.9					
Workload Average (PY)	0.9					
<b>Total Positions</b>	<b>116.5</b>					
<b>MANDATES</b>		The goal of the legal and regulatory mandates is to comply with State and federal laws and regulations such as the Clean Water Act, the Porter-Colonge Water Quality Control Act and evolving stormwater requirements, Americans with Disabilities Act (ADA), and hazardous waste remediation regulations.	\$158.0	\$173.8	10	\$76.3
Number of PIDs	52					
Average Project Cost (\$M)	\$3.3					
Funding Target (\$M)	\$173.8					
Total Workload (PY)	29.0					
Workload Norm (PY)	0.6					
<b>Total Positions</b>	<b>30.2</b>					
<b>MOBILITY IMPROVEMENT</b>		The goal of the mobility improvement is to reduce congestion and restore productivity of the SHS. Mobility improvements include operational improvements, transportation management systems, weigh stations, and weigh-in-motion (WIM) facilities.	\$66.0	\$33.0	51	\$346.5
Number of PIDs	3					
Average Project Cost (\$M)	\$12.0					
Funding Target (\$M)	\$33.0					
Total Workload (PY)	2.0					
Workload Norm (PY)	0.7					
<b>Total Positions</b>	<b>2.0</b>					
<b>BRIDGE PRESERVATION</b>		The goal of the bridge preservation is to preserve all bridges on the SHS in a safe and economic manner so that no bridge failures will occur.	\$361.0	\$180.5	51	\$429.1
Number of PIDs	36					
Average Project Cost (\$M)	\$5.0					
Funding Target (\$M)	\$180.5					
Total Workload (PY)	28.7					
Workload Norm (PY)	0.8					
<b>Total Positions</b>	<b>29.9</b>					
<b>ROADWAY PRESERVATION</b>		The goal of the roadway preservation is to keep distressed roadway lane miles at a steady managed state. The historic goal of the Department has been to reduce the number of distressed lane-miles of pavement to 5,000, or approximately 10 percent of the total system.	\$294.0	\$147.0	124	\$2,605.2
Number of PIDs	8					
Average Project Cost (\$M)	\$18.9					
Funding Target (\$M)	\$147.0					
Total Workload (PY)	5.5					
Workload Norm (PY)	0.7					
<b>Total Positions</b>	<b>5.7</b>					
<b>ROADSIDE PRESERVATION</b>		The goal of the roadside preservation is to reduce the longterm maintenance costs of roadside infrastructure, improve worker and traveler safety, reduce deficient landscaping, comply with regulatory and legal mandates, and improve operations and accessibility at safety roadside rest areas and vista points.	\$16.0	\$8.0	20	\$52.1
Number of PIDs	2					
Average Project Cost (\$M)	\$3.6					
Funding Target (\$M)	\$8.0					
Total Workload (PY)	1.0					
Workload Norm (PY)	0.4					
<b>Total Positions</b>	<b>1.0</b>					
<b>FACILITIES IMPROVEMENTS</b>		The goal of the facility improvement is to address worker safety, ADA, and the California Division of Occupational Safety and Health requirements and to improve operational efficiency.	\$10.0	\$0.0	9	\$174.3
Number of PIDs	0					
Average Project Cost (\$M)	\$0.0					
Funding Target (\$M)	\$0.0					
Total Workload (PY)	0.0					
Workload Norm (PY)	0.0					
<b>Total Positions</b>	<b>0.0</b>					
<b>ALL SHOPP PROGRAMS</b>			<b>\$1,407.0</b>	<b>\$1,079.8</b>	<b>270</b>	<b>\$3,727.4</b>
Number of PIDs	219					
Average Project Cost (\$M)	\$6					
Funding Target (\$M)	\$925					
Total Workload (PY)	178.0					
Workload Norm (PY)	0.8					
<b>Total Positions*</b>	<b>185.5</b>					

<sup>1</sup> Source: 2009 Ten-Year State Highway Operation and Protection Plan, January 31, 2009. Figures include 15 percent additional funding capacity for funding targets.

<sup>2</sup> Adjusted funding targets based on the value of the PID shelf. For the SHOPP program categories with a large shelf of PIDs, reduced funding targets by 50 percent to accommodate districts that have a small shelf of PIDs. For the SHOPP program categories with a small shelf of PIDs, increased funding targets by 10 percent to accommodate unanticipated funding in future years.

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**APPENDICES**

**APPENDIX C-3**

**LEAD (CALTRANS) NON-SHOPP PID  
WORKLOAD MATRIX FOR FY 2011-12**

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**Appendix C-3:  
Lead (Caltrans) - Non-SHOPP PID  
Workload Matrix for FY 2011-12**

<b>Fund Source</b>	<b>Activities</b>			<b>Activity Description</b>
<b>SHA</b>	<b>Lead - STIP</b>			
		Number of PIDs	33	Develop PIDs for capacity-increasing improvements that are funded exclusively through the STIP (i.e. RTIP and ITIP)
		Estimated Project Cost (\$M)	\$1,349.3	
		Total Workload (PY)	9.2	
		Workload Norm (PY)	0.3	
	<b>Total Positions</b>	<b>9.6</b>		
<b>SHA</b>	<b>Lead - Mix-Funded (STIP + Other)</b>			
		Number of PIDs	26	Develop PIDs for capacity-increasing improvements that are partially funded through the STIP (i.e. RTIP and ITIP)
		Estimated Project Cost (\$M)	\$3,752.7	
		Total Workload (PY)	28.9	
		Workload Norm (PY)	1.1	
	<b>Total Positions</b>	<b>30.1</b>		
<b>SHA Subtotal</b>	<b>Subtotal Lead Workload</b>			
		Number of PIDs	59	
		Estimated Project Cost (\$M)	\$5,102.0	
		Total Workload (PY)	38.1	
		<b>Total Positions</b>	<b>39.7</b>	
<b>SHA Reimburse</b>	<b>Lead - Other Funding (non-STIP)</b>			
		Number of PIDs	14	Develop PIDs for capacity-increasing improvements that are exclusively funded through sources outside of the STIP.
		Estimated Project Cost (\$M)	\$1,536.1	
		Total Workload (PY)	14.6	
		Workload Norm (PY)	1.0	
	<b>Total Positions</b>	<b>15.2</b>		
<b>SHA Reimburse</b>	<b>Independent Quality Assurance (QA)<sup>1</sup></b>			
		Number of PIDs	115	Review and approve PIDs developed by local agencies mandated by Government Code 65086.5.
		Estimated Project Cost (\$M)	\$7,290.1	
		Total Workload (PY) <sup>2</sup>	59.3	
		Workload Norm (PY)	0.5	
	<b>Total Positions</b>	<b>61.7</b>		
<b>SHA Reimburse Subtotal</b>	<b>Subtotal Reimbursement Workload</b>			
		Number of PIDs	129	
		Estimated Project Cost (\$M)	\$8,826.2	
		Total Workload (PY)	73.8	
		<b>Total Positions</b>	<b>76.9</b>	
<b>Total</b>	<b>Total Non-SHOPP Workload</b>			
		Number of PIDs	<b>221</b>	
		Estimated Project Cost (\$M)	<b>\$16,116.3</b>	
		Total Workload (PY)	<b>44.6</b>	
		<b>Total Positions</b>	<b>46.5</b>	

<sup>1</sup> IQA is mandated by Govt Code 65086.5.

<sup>2</sup> Total IQA workload was reduced by 25 percent, which takes into account the implementation of a QA Pilot Program beginning July 2011.

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**APPENDICES**

**APPENDIX C-4**

**PID PROGRAM TECHNICAL ENGINEERING  
SUPPORT WORKLOAD MATRIX FOR FY 2011-12**

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**Appendix C-4:  
PID Program Technical Engineering Support  
Workload Matrix for FY 2011-12**

<b>Fund Source</b>	<b>Activities</b>	<b>Total Studies</b>
<b>SHA</b>	<b>Lead - Major Investment Studies (MIS), Special Studies (SS), and Feasibility Studies (FS)<sup>1</sup></b>	
	Number of Studies	9
	Total Workload (PY)	4.3
	Workload Norm (PY)	0.5
	<b>Total Positions</b>	<b>4.5</b>
	<b>Lead - Preliminary Investigations (PI)<sup>2</sup></b>	
	Total Workload (PY)	6.0
	<b>Total Positions</b>	<b>6.3</b>
<b>SHA Reimburse</b>	<b>IQA - MIS/SS/FS Reimb Funded<sup>3</sup></b>	
	Number of Studies	8.0
	Total Workload (PY)	4.1
	Workload Norm (PY)	0.5
	<b>Total Positions</b>	<b>4.3</b>

<sup>1</sup> MIS/SS/FSs involve statewide and interregional investment studies crossing multiple jurisdictions. MIS are studies that were required under the federal Intermodal Surface Transportation Efficiency Act of 1991. The regulation has now been streamlined in National Environmental Policy Act. The Department and regions develop MISs for major investments such as construction of a new highway route, route segment or multiple major large projects. MISs are required in order to protect federal funding. FSs and SSs are a long-standing program category in the department to determine at an early stage the feasibility of proceeding further with a project concept. Typically these are studies that examine if it is feasible from an engineering standpoint to proceed. An example would be a bridge relocation in a restricted canyon environment. Soils and geologic work may be required. Special studies are similar, however, typically these would be for a highway location that has unique issues tied to the geometrics of the roadway. These studies lead to significant major projects requiring future PIDs.

<sup>2</sup> Historically, 18.2 PYs are allocated annually for PI work. PI work is performed by Engineers to assess if a project warrants a PID by determining whether a project will be a major or minor project. PI work represents a surface level investigation of a problem on the SHS. Most investigations relate to safety and emergency projects. Evaluating safety data and geometrics are covered in this category. Once a project is identified, a Project Initiation Form (PIF) is prepared to request resources for the PID. The PIF includes the purpose and need of the project as well as a planning level project scope, schedule, and cost estimates. PI resources are also used for projects proposed by local agencies. Caltrans review the PIFs to determine whether or not preparation of a PID is warranted on Department owned facilities.

<sup>3</sup> MIS-Participant: MISs where the district is a participant in MISs prepared by another agency. Typically, these will be the MPO or Rail/Transit Agency. Oversight in this context mean participation with the local and regional agency on portions of the MIS that involve technical expertise on state highway improvement, modal decisions, or modal interface.

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**APPENDICES**

**APPENDIX C-5**

**PID HIGH-SPEED RAIL WORKLOAD  
MATRIX FOR FY 2011-12**

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**Appendix C-5:  
PID High-Speed Rail Workload Matrix for FY 2011-12**

<b>Districts</b>	<b>HSR Segments</b>	<b>Total Workload<sup>1</sup> (PY)</b>
4,10	Altamont Corridor Rail Project	1.50
6,7	Bakersfield to Palmdale	1.50
4,5,6,10	Central Valley to San Jose	0
6	Fresno to Bakersfield	0
7,12	Los Angeles to Anaheim	0
7,8,11	Los Angeles to San Diego	4.35
6,10	Merced to Fresno	0
3,10	Merced to Sacramento	2.25
7	Palmdale to Los Angeles	0
4	San Francisco to San Jose	0
Total Workload (PY)		9.6
<b>Total Positions</b>		<b>10.0</b>

<sup>1</sup> Estimated by using the project milestone schedule, that is developed in partnership with the High-Speed Rail Authority (HSRA) and updated periodically, as a basis for determining where effort will be needed to be applied and for what purpose.

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## **APPENDICES**

### **APPENDIX D**

#### **SHOPP PID SHELF LISTING SUMMARY**

For the full listing of projects, please visit:

<http://www.dot.ca.gov/hq/tpp/offices/oppc/index.html>

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## Appendix D - Total Number and Project Value of Current FY 2010-11 SHOPP Shelf PIDs

		SHOPP Program Element												Grand Total	
District	Data	Bridge	Collision	Facilities	Mandates	Mobility	Roadside	Roadway							
1	Sum of Number of Projects Sum of Total Project Cost (\$M)	5	5			3		7					7	15	\$168.06
2	Sum of Number of Projects Sum of Total Project Cost (\$M)	1						12					12	13	\$148.50
3	Sum of Number of Projects Sum of Total Project Cost (\$M)	13		2	2	6	5	13					13	41	\$461.87
4	Sum of Number of Projects Sum of Total Project Cost (\$M)	7		1		4	3	7					7	22	\$393.46
5	Sum of Number of Projects Sum of Total Project Cost (\$M)	4		1		1		10					10	16	\$169.70
6	Sum of Number of Projects Sum of Total Project Cost (\$M)	3		4		11	2	26					26	46	\$341.92
7	Sum of Number of Projects Sum of Total Project Cost (\$M)	7	2		7	6	3	11					11	36	\$1,082.70
8	Sum of Number of Projects Sum of Total Project Cost (\$M)	10	3	1	1	3	2	22					22	42	\$768.29
9	Sum of Number of Projects Sum of Total Project Cost (\$M)							2					2	2	\$16.60
11	Sum of Number of Projects Sum of Total Project Cost (\$M)					4	2	5					5	11	\$55.17
12	Sum of Number of Projects Sum of Total Project Cost (\$M)	1				13	3	9					9	26	\$136.76
<b>Total Sum of Number of Projects</b>		<b>51</b>	<b>5</b>	<b>9</b>	<b>10</b>	<b>51</b>	<b>20</b>	<b>124</b>					<b>270</b>		
<b>Total Sum of Total Project Cost (\$M)</b>		<b>\$444.85</b>	<b>\$43.90</b>	<b>\$174.25</b>	<b>\$76.30</b>	<b>\$346.46</b>	<b>\$52.05</b>	<b>\$2,605.23</b>					<b>\$3,743.04</b>		

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## **APPENDICES**

### **APPENDIX E**

#### **STIP AND NON-SHOPP PID SHELF LISTING SUMMARY**

For the full listing of projects, please visit:  
<http://www.dot.ca.gov/hq/tpp/offices/oppc/index.html>

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### Appendix E - Total Number and Project Value of FY 2010-11 STIP and NonSHOPP Shelf PIDs, by Status and Funding Type

		Work Program Status		Priority but Unfundable			Grand Total
LEAD, LEAD Reimburse., or QA?	STIP, Mixed, or Exclusively Other?	Data	Fundable	Unfunded	Unfundable		
LEAD	1STIP	Sum of Number of Projects Sum of Project Cost with Support (\$M)	12 \$82.00	17 \$1,447.37	4 \$273.27	33 \$1,802.64	
	2MIXED	Sum of Number of Projects Sum of Project Cost with Support (\$M)	3 \$2,740.00	6 \$505.10		9 \$3,245.10	
	3OTHER	Sum of Number of Projects Sum of Project Cost with Support (\$M)	2 \$77.00	7 \$765.90	2 \$111.70	11 \$954.60	
<b>LEAD Sum of Number of Projects</b>			<b>17</b>	<b>30</b>	<b>6</b>	<b>53</b>	
<b>LEAD Sum of Project Cost with Support (\$M)</b>			<b>\$2,899.00</b>	<b>\$2,718.37</b>	<b>\$384.97</b>	<b>\$6,002.34</b>	
MIS/F/S/SS (QA)	3OTHER	Sum of Number of Projects Sum of Project Cost with Support (\$M)	1 \$630.00			1 \$630.00	
<b>MIS/F/S/SS (QA) Sum of Number of Projects</b>			<b>1</b>			<b>1</b>	
<b>MIS/F/S/SS (QA) Sum of Project Cost with Support (\$M)</b>			<b>\$630.00</b>			<b>\$630.00</b>	
QA	1STIP	Sum of Number of Projects Sum of Project Cost with Support (\$M)		6 \$118.60	1 \$25.00	7 \$143.60	
	2MIXED	Sum of Number of Projects Sum of Project Cost with Support (\$M)	6 \$445.05	10 \$551.30	4 \$63.80	20 \$1,060.15	
	3OTHER	Sum of Number of Projects Sum of Project Cost with Support (\$M)	5 \$88.50	11 \$897.60		16 \$986.10	
<b>QA Sum of Number of Projects</b>			<b>11</b>	<b>27</b>	<b>5</b>	<b>43</b>	
<b>QA Sum of Project Cost with Support (\$M)</b>			<b>\$533.55</b>	<b>\$1,567.50</b>	<b>\$88.80</b>	<b>\$2,189.85</b>	
<b>Total Sum of Number of Projects</b>			<b>29</b>	<b>57</b>	<b>11</b>	<b>97</b>	
<b>Total Sum of Project Cost with Support (\$M)</b>			<b>\$4,062.55</b>	<b>\$4,285.87</b>	<b>\$473.77</b>	<b>\$8,822.19</b>	

1STIP= Strictly ITIP/RTIP funded  
 2MIXED= STIP Dollars combined w/ any other monies (ie. local development)  
 3OTHER= Strictly funded from a source other than STIP

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**APPENDICES**

**APPENDIX F**

**STIP AND NON-SHOPP PID WORKLOAD-BASED  
RESOURCE ESTIMATE**

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Appendix F: Non-SHOPP PID Workload Based Resource Estimate  
 Draft - Forecast of Funding Available to On-System Projects Where Caltrans Forces Prepare PID's

County	Approximate Formula Annual State and Federal Resources (Persistent Revenues)				Other "Annualized" Ad-hoc Revenues						
	New TIF Funds (Annual \$'s in millions)	Historical On System Percentage	Actual 08/09 (Annual \$'s in millions)	Historical On System Percentage	Tally Estimate of Annual On-system Resources	Programmed Un-Funded Need (millions)	Local Sales Tax 07/08 Revenues (millions) <sup>2</sup>	Terminates	Mitigation Fees	Historical On-System Fed Earmarks (Since STEA <sup>1</sup> )	Future State Bond Proceeds
Alameda	16.3	37.7%	14.7	14.6%	13.4	384.0	116.3	2022		2.5	
Alpine	0.5	0.0%	0.1	0.0%	0.1	0.0					
Amador	1.1	89.5%	0.3	13.6%	0.4	80.8					
Butte	3.1	92.4%	2.3	21.3%	2.4	3.4			2.6	0.5	
Calaveras	1.2	94.0%	0.4	69.4%	0.5	72.6				0.1	
Colusa	0.8	26.4%	0.2	0.0%	0.2	0.2			0.1		
Contra Costa	10.6	71.1%	9.6	0.0%	8.8	8.8	74.7	2034		2.1	
Del Norte	0.8	81.0%			0.3	0.6			0	0.1	
El Dorado	2.0	96.0%	1.8	82.1%	2.7	5.2			26	0.1	
Fresno	11.3	93.0%	11.3	0.0%	9.6	10.7	59.2	2027		3.1	
Glenn	0.9	33.3%			0.3	0.3			0.1		
Humboldt	3.2	49.4%			1.5	1.6			0	0.0	
Imperial	5.3	95.0%	1.4	0.0%	1.7	5.1	3.8	2049		1.0	
Inyo	4.3	73.5%			0.7	3.1					
Kern	14.8	32.5%	8.1	0.0%	7.9	4.8				5.6	
Kings	2.2	93.5%	1.5	0.0%	1.6	2.1					
Lake	1.4	38.0%			0.7	0.5				0.0	
Lassen	2.0	15.3%			0.4	0.3			0		
Los Angeles	100.0	52.8%	138.0	47.7%	114.2	155.0	2,771.6	Never		8.3	
Madera	2.0	65.9%	1.5	5.5%	1.5	2.9	7.6	2027			
Marin	3.1	90.3%	2.5	91.2%	2.3	5.1	22.4	2025		1.6	
Mariposa	0.8	0.0%	0.2	0.0%	0.2	0.0			0.01	0.3	
Mendocino	3.0	49.1%			1.0	1.5			0	0.3	
Merced	3.6	95.4%	2.6	0.0%	2.5	3.4			1.5	0.1	
Modoc	1.1	31.1%			0.3	0.3			0		
Mono	3.2	9.9%			0.2	0.3			0.3		
Monterey	5.8	73.7%			4.8	4.3				1.3	
Napa	1.9	98.2%	1.3	100.0%	1.2	3.4					
Neuada	1.7	96.3%	0.9	54.1%	1.1	2.1			3.3	0.2	
Orange	30.2	63.3%	41.5	35.5%	34.2	46.4	264.0	2041	33.8	1.9	
Placer	3.2	82.2%	3.9	8.9%	3.1	3.0			8	2.0	
Plumas	1.2	12.2%			0.2	0.1			0		
Riverside	21.6	84.8%	27.0	69.2%	18.6	45.6	142.5	2039	38	3.3	
Sacramento	14.0	20.4%	17.5	21.6%	13.9	8.8	101.4	2039		0.3	
San Benito	1.0	58.8%			0.6	1.1				0.5	
San Bernardino	28.1	93.0%	27.3	59.7%	20.5	42.4	140.8	2040		7.3	
San Diego	33.1	83.4%	31.4	56.8%	33.8	70.1	244.4	2048		9.1	
San Francisco	8.4	50.7%	7.9	0.0%	7.2	4.2	79.6	2033		0.8	
San Joaquin	7.3	63.9%	8.5	0.0%	6.6	4.9	45.6	2041	2.2	1.8	
San Luis Obispo	5.9	77.6%			3.0	4.6	159.5			2.3	
San Mateo	8.7	79.3%	7.2	12.5%	6.6	10.3	68.7	2034		1.0	
Santa Barbara	6.7	93.0%			4.8	6.7	32.6	2040		0.1	
Santa Clara	19.1	54.7%	17.1	3.7%	34.1	16.7	323.5	2036		6.3	
Santa Cruz	3.3	56.3%			3.1	1.9	423.5			0.2	

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Transportation Programming

Appendix F: Non-SHOPP PID Workload Based Resource Estimate  
 Draft - Forecast of Funding Available to On-System Projects Where Caltrans Forces Prepare PID's

County	Approximate Formula Annual State and Federal Resources (Persistent Revenues)				Other "Annualized" Ad-hoc Revenues							
	STIP - RIP New TIF Funds (Annual \$'s in millions)	Historical On- System Percentage	CMAQ Actual 08/09 (Annual \$'s in millions)	Historical On- System Percentage	RSTP Actual 08/09 (Annual \$'s in millions)	Historical On-System Percentage	Tally Estimate of Annual On-system Resources	Programmed Un-Funded Need (millions)	Local Sales Tax 07/08 Revenues (millions) <sup>2</sup>	Terminates	Mitigation Fees	Historical Other State or Federal Earmarks (Since ISTEA <sup>1</sup> ) On-System Fed Procceeds
Shasta	3.4	81.1%			2.0	0.0%	2.8	155.2			0	0.5
Sierra	0.6	0.8%			0.1	0.0%	0.0				0	
Siskiyou	2.4	6.2%			0.7	0.0%	0.1				0	
Solano	5.0	0.7%	9.3	0.6%	3.7	0.0%	0.1	12.0				1.6
Sonoma	6.1	93.3%	4.7	72.8%	4.3	0.0%	9.1		19.0	2025		1.2
Stanislaus	5.7	91.3%	6.5	0.3%	5.5	3.0%	5.4	1,215.0			10	0.9
Sutter	1.3	97.5%	0.9	0.0%	0.7	63.2%	1.7					0.4
Tahoe RPA	0.8	20.0%	0.6	0.0%	0.6	0.0%	0.2					
Tehama	1.7	56.2%			0.7	0.0%	1.0	45.4			0	0.1
Trinity	1.2	15.0%			0.3	0.0%	0.2				0	
Tulare	7.0	40.7%	4.4	0.0%	4.4	0.0%	2.8	163.4	26.1	2037	0	1.0
Tuolumne	1.4	77.0%	0.5	0.0%	0.7	0.0%	1.3				1	
Ventura	9.9	92.1%	7.8	3.9%	9.0	21.1%	9.8	53.2				0.8
Yolo	2.7	82.7%	2.4	7.5%	1.6	30.1%	2.9	53.9				0.7
Yuba	1.0	63.5%		0.0%	0.6	0.0%	0.6					
<b>Total County</b>	<b>450</b>	<b>60.4%</b>	<b>424.8</b>	<b>22.4%</b>	<b>407.7</b>	<b>11.9%</b>	<b>544.1</b>	<b>10,105.9</b>	<b>4,543.8</b>		<b>126.91</b>	<b>71.2</b>
ITIP	150.0							2,000.0				

<sup>1</sup> The Intermodal Surface Transportation Efficiency Act of 1991

<sup>2</sup> <http://selfhelpcounties.org/salestax.html>

**APPENDICES**

**APPENDIX G**

**IMPLEMENTATION OF THE PID STRATEGIC PLAN  
RECOMMENDATIONS**

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**Appendix G**  
Implementation of the PID Strategic Plan Recommendations

#	Recommendations	Task Owner(s)	Priority	Planned Implementation Dates/Timelines
1	<p><b>Key Recommendation</b></p> <p><u>PID Program Management: Shelf Management</u></p> <p>Develop three-year PID Strategic Plan to be updated annually by Caltrans by January 10 of every year, in coordination with the California Transportation Commission (CTC), Caltrans' Office of Projects and Plans Coordination, and the regional agencies.</p> <p><u>PID Program Management: Shelf Management</u></p>	<p>HQ Planning Districts</p>	<p>High</p>	<p>Completed May 2010</p> <p>Next Scheduled Update January 10, 2011</p>
2	<p><b>Key Recommendation</b></p> <p>Caltrans and regional agencies will collaborate using defined criteria to maintain a shelf inventory that supports the level of available funding. They will carefully review the existing shelf to determine which projects should remain, looking at:</p> <ul style="list-style-type: none"> <li>• Validity of the original purpose and need.</li> <li>• Strategy and prospects for funding the project.</li> <li>• If not imminently fundable, whether the project is a regional priority.</li> </ul> <p><u>PID Program Management: Workload Management</u></p>	<p>HQ Planning Districts Regions</p>	<p>High</p>	<p>Completed August 2010</p> <p>Next Scheduled Update January 2011</p>
3	<p><b>Key Recommendation</b></p> <p><u>PID Program Management: Workload Management</u></p> <p>The number of PIDs should not necessarily be limited to near-term STIP or SHOPP programming capacity, in order to be ready for funding opportunities, to build a long-term programming strategy, and to be responsive to developer or local-fee program proposals. Criteria for selecting new projects and developing PID workload includes:</p> <ul style="list-style-type: none"> <li>• Correlate PIDs developed to likely funding sources.</li> <li>• Projects that address deficiencies identified on the transportation system (including safety and mandates).</li> <li>• Project included in a long-range plan.</li> </ul>	<p>HQ Planning Districts Regions</p>	<p>High</p>	<p>Completed June 2010</p>
6	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: Education and Outreach on Existing PID Processes and Procedures</u></p> <p>For internal and external stakeholders, enhance PID outreach activities for existing guidance and procedures that can be used to streamline the PID development process and reduce costs and delays. Caltrans is working with other State DOTs to do a comparison of PIDs and reimbursement. Information and ideas on how other DOTs develop PIDs or other similar documents will be investigated, specifically, how to better streamline the PID process, and implement PID reimbursement.</p>	<p>HQ Planning Districts</p>	<p>High</p>	<p>September 2010 - August 2011</p>

**Appendix G**  
Implementation of the PID Strategic Plan Recommendations

#	Recommendations	Task Owner(s)	Priority	Planned Implementation Dates/Timelines
8	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: Risk Management Process</u></p> <p>If project sponsors concur with the risk analysis, they must accept ownership and ramifications for the risks associated with their respective projects. All identified risks and risk owners should be documented in the project's risk register.</p>	<p>HQ Planning HQ Project Management HQ Design Project Sponsors</p>	High	March 2011
9	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: Risk Management Process</u></p> <p>Project sponsors must document the purpose and need, funding strategy, project deliverables, known constraints, assumptions, potential fatal flaws, applicable cost sharing terms, and risks in the PID charter developed by concurrence between Caltrans and the project sponsor at the pre-PID meeting. This provides the necessary framework for developing a clear and concise PID scope of work.</p>	Districts Project Sponsors	High	October 2010
10	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: Conflict Resolution</u></p> <p>Caltrans' district director will convene an Executive Review Committee in the event that conflict over the necessary content of the PID arises. The members of the Committee shall include the Caltrans headquarters (HQ) Design coordinator, the HQ Project Management Liaison, the District's Deputy Director responsible for PIDs, and a local agency representative. The Committee will make a final recommendation to the district director. This activity will be coordinated with the PID Committee.</p>	HQ Design Districts	High	March 2011
14	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: Cost Sharing &amp; Reimbursement</u></p> <p>As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program beginning FY 2011-12 whereby regional and local agencies would reimburse Caltrans for developing streamlined PID documents. Caltrans will use the existing Project Study Report-Project Development Support (PSR-PDS) document as the basis for the streamlined document until Caltrans and the regions agree on an approach to streamline PID documents for STIP candidate projects. The project sponsor and Caltrans district staff may negotiate cost-sharing terms for any additional work that may be agreed to at the pre-PID meeting (or may become necessary later).</p>	HQ Planning HQ Design	High	July 2011

**Appendix G**  
Implementation of the PID Strategic Plan Recommendations

#	Recommendations	Task Owner(s)	Priority	Planned Implementation Dates/Timelines
15	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: Cost Sharing &amp; Reimbursement</u></p> <p>As stated in the Governor's January 2011 proposed budget for FY 2011-12, Caltrans intends to develop and implement a PID reimbursement program for PID oversight and pre-PID activities beginning FY 2011-12. Under the program, project sponsors will reimburse Caltrans districts for all of the costs associated with Independent Quality Assurance (IQA), and the development of feasibility studies, major investment studies, and technical studies. In regards to studies, reimbursement will only apply to studies that Caltrans develops on behalf of regional and local agencies. Districts and project sponsors should have early and continual discussions to establish the viability of the project proposals, procedural requirements, and the schedule for various project deliverables. All agreements between Caltrans districts and the project sponsors should clearly identify cost-sharing terms and procedures.</p> <p><u>PID Program Improvements: Improving PID Guidance and Estimating Costs</u></p> <p>Caltrans will proceed to use the Project Study Report-Project Development Support (PSR-PDS) to move locally-funded STIP candidate projects into the environmental phase. Amend Chapter 9 (Project Initiation) and Appendix L (Project Study Report) of the Project Development Procedures Manual (PDDPM) to clarify the appropriate level of detail necessary to develop PIDs. The guidance should also clarify the use of "ballpark" and/or order of magnitude estimates and discuss the need to regularly update cost estimates prior to approval of the project report.</p>	<p>HQ Planning HQ Design HQ Design</p>	<p>High</p>	<p>July 2011</p>
16	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: Caltrans PID Oversight</u></p> <p>Caltrans intends to streamline PID review procedures for PID oversight activities. Caltrans is working in-house to develop a process that will standardize the review and approval of PIDs. The process will include a pilot program that will be implemented FY 2011-12 with full implementation FY 2012-13.</p>	<p>HQ Planning HQ Design PID Committee</p>	<p>High</p>	<p>December 2010</p>
18	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: PID Committee</u></p> <p>Caltrans will form a PID Committee, including internal and external stakeholders, to continuously evaluate the effectiveness of the PID Program and the PID Strategic Plan. The PID Committee will also recommend further improvements related to cost sharing, reducing costs and delays, and streamlining procedures associated with the development and oversight of PIDs. The PID Committee will meet quarterly, or as needed, and report its findings in annual December 1 updates of the PID Strategic Plan.</p>	<p>HQ Planning HQ Design</p>	<p>High</p>	<p>July 2011</p>
21	<p><b>Key Recommendation</b></p> <p><u>PID Program Improvements: PID Committee</u></p> <p>Caltrans will form a PID Committee, including internal and external stakeholders, to continuously evaluate the effectiveness of the PID Program and the PID Strategic Plan. The PID Committee will also recommend further improvements related to cost sharing, reducing costs and delays, and streamlining procedures associated with the development and oversight of PIDs. The PID Committee will meet quarterly, or as needed, and report its findings in annual December 1 updates of the PID Strategic Plan.</p>	<p>HQ Planning</p>	<p>High</p>	<p>October 2010</p>

**Appendix G**  
Implementation of the PID Strategic Plan Recommendations

#	Recommendations	Task Owner(s)	Priority	Planned Implementation Dates/Timeframes
4	<p><u>PID Program Management: Workload Management</u></p> <p>Review the SHOPP PID Inventory annually as part of the update of the 10-Year SHOPP.</p>	<p>HQ Planning Districts</p>	Medium	<p>Completed June 2010</p> <p>Next Scheduled Update June 2011</p>
5	<p><u>PID Program Management: Workload Management</u></p> <p>Caltrans districts and regional agencies work together to prepare a variety of STIP candidate projects to be ready for programming opportunities.</p> <p><u>PID Program Improvements: Education and Outreach on Existing PID Processes and Procedures</u></p>	<p>Districts Regions</p>	Medium	June 2011
7	<p>Hold a statewide PID training program. The training will be available for all PID stakeholders. The conferences will be designed to educate all PID stakeholders on existing PID policies and procedures and developing more effective PIDs.</p>	<p>HQ Planning HQ Design Districts</p>	Medium	June 2011
11	<p><u>PID Program Improvements: Conflict Resolution</u></p> <p>Develop a conflict resolution process that incorporates Caltrans and project sponsor concurrence on purpose and need, and update the PDPM and policy documents to include conflict resolution.</p>	<p>HQ Planning HQ Design</p>	Medium	March 2011
12	<p><u>PID Program Improvements: Pre-PID and Pre-PEAR Meetings</u></p> <p>Hold pre-PID meeting with stakeholders. The Project Development Team (PDT) should assess the quality of existing data, document the project's purpose and need, discuss the scope of the PID, and determine roles and responsibilities. All of this information should be documented in the project charter. Checklists for risk management and other technical issues (e.g., geotechnical, stormwater, etc.) should be used to help assess the need to report or investigate potentially significant and likely risks and prescribe specific studies for the PID. All discussions should be documented and used as a basis for any future agreements.</p>	<p>HQ Planning HQ Design</p>	Medium	June 2011
13	<p><u>PID Program Improvements: Pre-PID and Pre-PEAR Meetings</u></p> <p>When appropriate, hold a pre-PEAR meeting to review the PEAR checklist, focus environmental work, improve communications, define expectations, and estimate environmental work schedules.</p>	<p>HQ Environmental</p>	Medium	June 2011

**Appendix G**  
Implementation of the PID Strategic Plan Recommendations

#	Recommendations	Task Owner(s)	Priority	Planned Implementation Dates/Timelines
17	<p><u>PID Program Improvements: Different Guidelines for SHOPP and STIP PIDs</u></p> <p>Evaluate the feasibility of maintaining separate procedures and guidance for STIP and SHOPP projects.</p>	<p>HQ Planning HQ Design PID Committee</p>	Medium	June 2011
19	<p><u>PID Program Improvements: Caltrans PID Oversight</u></p> <p>Ensure that each Caltrans district has well-trained staff to guide the work of PID oversight activities.</p>	<p>HQ Planning HQ Design</p>	Medium	July 2012
20	<p><u>PID Program Improvements: Performance Measures</u></p> <p>Caltrans should develop and use performance measures to manage the PID Program and reassess the PID Strategic Plan on a continuous basis.</p>	<p>HQ Planning PID Committee</p>	Medium	June 2011

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**APPENDICES**

**APPENDIX H**

**TRANSPORTATION FUNDING IN CALIFORNIA**

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## APPENDIX H

### TRANSPORTATION FUNDING IN CALIFORNIA

California, like the rest of the nation, built its interstate system primarily with federal and state funds derived from per gallon gasoline and diesel fuel excise taxes, commonly called the gas tax. Being a fixed amount, the excise tax needs periodic increases to maintain buying power and to keep up with the effects of inflation, a politically difficult sell. By the 1980's it became apparent that the gas tax was not keeping up with inflation and that other revenue would be needed to continue to fund transportation improvements. The state gas tax was last raised in 1994, and the federal tax was raised in 1997. Inflation has since cut the buying power of both sources to less than 50% of their 1990-era levels.

Frustrated by the slow progress begat by low funding, Santa Clara County in 1984 became the first county to tax themselves to build a state highway (Route 85). Many counties have followed successfully in this path. In the early 1990's the state experimented with the use of bond proceeds through the initiative process to fund transportation projects. Unfortunately even though all \$3 billion worth of projects were programmed and committed for delivery, the voters later rejected \$2 billion of the bonds. During the "dot com" boom of the late 1990's the state tried diverting excess General Funds to the Transportation Congestion Relief Program (TCRP). Unfortunately the "dot com" boom ended as quickly as it began so the General Fund has never been able to meet that commitment.

Through a series of voter initiatives during the early and mid-2000s, the state now re-directs a portion of the sales tax on gasoline and diesel to transportation. However, as the price of gasoline has increased along with sales tax proceeds, the legislature has consistently kept the transfers to transportation to the legal minimum preferring to use the rest to prop up the troubled state General Fund. Lately, the state experimented again with the use of bonds (Prop 1A) for transportation. While sorely needed, these funds have primarily gone to projects started earlier, but were stalled due to lack of funds. Unfortunately the current recession is hindering the state's ability to sell bonds, again slowing down project construction.

In an environment of erratic funding levels, compounded by a plethora of funding source's each with unique rules and restrictions that limit discretion for certain policy or political aims regardless of real needs it is little wonder the logical outcome is a series of boom and bust cycles and misplaced expectations. In this environment, planning large transportation projects that typically take three to seven years to plan and design, often ends up becoming out of sync with funding. Recognizing that things aren't likely to improve, the challenge is to plan an appropriate shelf of PID's (of appropriate project characteristics) to meet the next boom cycle.

### THE SITUATION TODAY

Taxes on gasoline and diesel fuels, plus local county measures are the largest sources of persistent revenues for transportation work on the state highway system. Other sources include bond proceeds, state General Fund transfer's, federal programs and earmarks, development mitigation fees, and lately federal stimulus funds. State and federal gas tax and sales tax revenues available to the state highway programs range near \$2 billion per year. While the total revenue collected by county sales tax measures during the 2007/08 FY was about \$4.5 billion, a high percentage of those funds are earmarked to transit or local roads and unavailable for use on the state highway system.

### FUND ESTIMATE

On a biennial schedule (once every two years), the Department prepares a multi-year Fund Estimate that address state revenues. The Fund Estimate is a forward looking analysis, looking ahead by five years, which compares existing commitments to anticipated revenues. In concept the Fund Estimate is rather simple and the output is an estimate of new programming for the state's two major highway programs. California splits its share of state highway gas tax funds between two distinct highway programs, the STIP and the SHOPP.

### THE SHOPP

The SHOPP, a fiscally constrained four year program of projects dedicated to the maintenance and preservation of the state highway system, is the Department's highest priority. Starting about 2004 the needs of the SHOPP began to consume 100% of the state and federal gas tax; previously that fund source met the demands of both programs. Unfortunately, as noted above these funds are derived from a source that is not indexed to inflation and is already well below a level necessary to keep the roadway system in a good state of repair.

The 2010 Fund Estimate SHOPP program capacity for the period from FY 2010-11 to 2014-15 is \$4.3 billion dollars. This falls \$2 billion below the \$6.3 goal constrained SHOPP 10-year plan. As a result of the large shortfall, potential impacts may include delays of needed projects, an inability to fix new and/or ongoing deterioration of the highways, and possible cost increases. Due to declining funding and growing needs, existing programmed SHOPP projects will be delayed. The only new projects that will be programmed in the next four-year SHOPP document will address safety needs, emergency needs, or legal and regulatory mandates. Though insufficient to meet SHOPP needs, gas tax revenues are reasonably steady and predictable and should allow sensible PID planning.

Lately some of Proposition 1B funding and recent federal stimulus funds were made available to the SHOPP. While welcomed, because inflation continues to erode the buying power of the gas tax compounded by the downturn in the economy causing a drop, these one-time funds ultimately wound up substituting for the loss of the gas tax serving largely to maintain planned delivery. As the gas tax buying power continues to erode, other short term funding solutions are likely to be found for SHOPP leading to a boom and bust cycle that now reaches extreme proportions in the STIP.

### THE STIP

The STIP is a program of projects, across a five year time frame, that is intended to relieve congestion and improve interregional mobility primarily through construction of new freeway lanes, interchanges, and roads. Today, since 100% of the gas tax funds are now slated to the SHOPP, the STIP gets whatever funds remain. The steadiest source of revenue to the STIP is the Transportation Investment Fund (TIF). These are derived from a portion of the sales tax on the sale of gasoline and diesel. By law, TIF revenues cannot be used to fund SHOPP projects, thus they must go to the STIP and are anticipated to be in the \$450 - 500 million per year range. While somewhat certain, in a fiscal emergency the legislature can elect to suspend the transfer of TIF revenues to transportation for a year. While those funds are required to be repaid, this would cause havoc to STIP project delivery. Another source of funding to the STIP is the Public Transit Account (PTA), also derived by the sales tax on gasoline and diesel. As PTA funds cannot be utilized to fund roadwork, this fund source should be excluded when determining PID resources. Regardless, current law permits the legislature broad discretion to redirect PTA funds to non-transportation purposes with no penalty, and they have. In practice this is unreliable fund source. Historically it has worked out to be a minor fund source as well. Little to no PTA is anticipated in the near future. A very small amount of federal transportation enhancement funding is also included with the STIP resulting with some minor PID demand.

Other funding sources and program exist that largely support the same objectives of the STIP. This includes the state TCRP and Proposition 1B (CMIA, Route 99, and TCIF) programs. Local sales tax measure and specific federal programs and earmarks are also included. Most highway projects are funded with a basket of these funds, a consequence of the hodgepodge funding plans that evolved in California. Many of these funding programs are one-time in nature contributing to the booms. Figure 3 (strata chart) on page 18 illustrates this over time. For the sake of this report we will call this whole collective of programs the STIP as PIDs are generally required and developed for these programs.

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## **APPENDICES**

### **APPENDIX I**

#### **RISK MANAGEMENT**

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## APPENDIX I

### RISK MANAGEMENT

Risk management can be categorized into three areas: risk identification, risk analysis, and risk response. Risk identification is one of the initial steps in risk management. The project team collaborates with project manager and the project sponsor to identify project risks. The *Caltrans Project Risk Management Handbook* states that “risk identification is an iterative process because new risks may become known as the project progresses through its life cycle and previously identified risks may drop out.”

The next step in the risk management process is to analyze the identified risks. The project team prioritizes the identified risks based on the probability of the risks occurring and their potential impact to the project objectives. After the risks are identified and analyzed, the project team should develop methods for responding to the identified risks. This may include avoiding the risks, transferring the risks, or mitigating the risks.

All of the components of risk management, identification, analysis, and response, will eventually lead the project team to develop the risk management plan. According to the *Caltrans Project Risk Management Handbook*, the risk management plan should identify and establish the risk management activities for the project. Risk management activities may include defining roles and responsibilities, developing risk methods, identifying risk identification and analysis methods, and establishing a budget to manage risks. All of the components of the risk management plan and aspects of risk management should be further analyzed, updated, and monitored throughout the life of the project

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## **APPENDICES**

### **APPENDIX J**

#### **TERMS AND DEFINITIONS**

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**APPENDIX J****PID TERMS AND DEFINITIONS**

Project Initiation Documents (PIDs) are categorized into the following condition states:

- Approved for Capital Development - A SHOPP project that has been approved for at least some capital development work, but does not have construction funding dedicated to the project, e.g. Long-Lead projects.
- Carry-over – Projects on an approved, active work plan, resourced in a prior FY.
- Discontinued – No resources to be expended on PID.
- Fundable (Viable) – PIDS that can be programmed within three years.
- Hold – PIDs stopped due to funding or priority shift – still viable.
- New – Projects that have never been resourced, proposed to be resourced in current fiscal year (FY).
- Priority, but Unfunded – Projects still a priority, but no funding stream currently available.
- Programmed – A SHOPP project that has been approved for capital development and has dedicated funding for construction or a Non-SHOPP project that has at least one component approved for development, e.g., the environmental component.
- Refresher – PIDs 100 percent complete, but are being updated to reflect current conditions (to include funding).
- Shelf – PIDs 100 percent complete and signed by district director, but not programmed.
- Unfundable (Obsolete) – PIDs that no longer meet original purpose and need.

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## **APPENDICES**

**APPENDIX K**

**ACRONYMS**

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**APPENDIX K****ACRONYMS**

AB	Assembly Bill
ACTC	Amador County Transportation Commission
ADA	American Disabilities Act
AOG	Association of Governments
ARRA	American Recovery and Reinvestment Act of 2009
CALCOG	The California Association of Councils of Governments
CAPM	Capital Preventative Maintenance
CMIA	Corridor Mobility Improvement Account
COG	Council of Governments
CSMP	Corridor System Management Plan
CTC	California Transportation Commission
DOF	Department of Finance
DSMP	District System Management Plan
EDCTC	El Dorado County Transportation Commission
FY	Fiscal Year
IQA	Independent Quality Assurance
ITIP	Interregional Transportation Improvement Program
LAMTA	Los Angeles Metropolitan Transit Authority
LAO	Legislative Analyst Office
MTC	Metropolitan Transportation Commission
OCTA	Orange County Transportation Authority
PA&ED	Project Approval and Environmental Document
PDPM	Project Development Procedures Manual
PDT	Project Development Team
PEAR	Preliminary Environmental Analysis Report
PID	Project Initiation Document
PPM	Planning, Programming, and Monitoring Fund
PSR	Project Study Report
PSR-PDS	Project Study Report/Project Development Support
QA	Quality Assurance
QC	Quality Control
RCTC	Riverside County Transportation Commission
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency

SACOG	Sacramento Area Council of Governments
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SAMTRANS	San Mateo County Transit District
SANBAG	San Bernardino Associated Governments
SANDAG	San Diego Association of Governments
SB	Senate Bill
SBCAG	Santa Barbara County of Associated Governments
SCVTA	Santa Clara Valley Transportation Authority
SHA	State Highway Account
SHOPP	State Highway Operations and Protection Program
SHS	State Highway System
SJCOG	San Joaquin Council of Governments
STIP	State Transportation Improvement Plan
TAM	Transportation Authority of Marin
TAMC	Transportation Agency for Monterey County
TCR	Transportation Concept Reports
TCRF	Traffic Congestion Relief Fund
TE	Transportation Enhancement
TFA	Transportation Facilities Account
TIF	Transportation Investment Fund



