January 9, 2015

The Honorable Mark Leno, Chair
Joint Legislative Budget Committee
1020 N Street, Room 553
Sacramento, CA 95814
Attention: Ms. Peggy Collins

Mr. Daniel Alvarez
Secretary of the Senate
California State Senate
State Capitol, Room 400
Sacramento, CA 95814

Dear Senator Leno and Mr. Alvarez:

Enclosed is the California Department of Transportation’s (Caltrans) Supplemental Report on Preparing a Shelf of Shovel Ready Projects. Caltrans is required to provide this report to the Senate Budget and Fiscal Review Committee, Assembly Committee on Budget, and the Legislative Analyst’s Office by January 9, 2015 based on language in the Supplemental Report of the Fiscal Year 2014-15 Budget Package (Item 2660-001-0042).

Distribution to the California State Legislature has been made by Caltrans pursuant to California Government Code section 9795. This report can also be found at www.dot.ca.gov/reports-legislature.htm.

Sincerely,

MALCOLM DOUGHERTY
Director

Enclosure
Caltrans Supplemental Report Preparing a Shelf of Shovel-Ready Projects

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"
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To enhance California’s economy and livability

"Provide a safe, sustainable, integrated and efficient transportation system
SUPPLEMENTAL REPORT

PREPARING A SHELF OF SHOVEL-READY PROJECTS

Prepared by:
California Department of Transportation

Submitted to:
Joint Legislative Budget Committee

JANUARY 9, 2015
Executive Summary

Through the Supplemental Report of the 2014–15 Budget Package (Item 2660-001-0042), the legislature requested that the Administration provide to the appropriate fiscal committees of the Legislature and the Legislative Analyst’s Office, no later than January 10, 2015, a report regarding a “shelf” of shovel-ready projects. A shelf of shovel-ready projects is a group of projects that have been fully designed, and await only funding to proceed to construction – the Administration also refers to a “shelf” project as a “queue” project. All queue projects will be constructed, but are at the end of the line. With unanticipated new construction funding, the projects can be advanced and completed sooner. The Supplemental Report requested a recommendation from Caltrans on the appropriate size of a shelf of projects, a description of the current shelf, steps required to create a shelf, the result of recent efficiency efforts and the level of resources redirected to work on a shelf of projects.

Preparation of a shelf would require a sustained, deliberate, and concentrated effort beginning with Project Initiation Documents (PID) to develop the scope, schedule, and cost estimate. Once a PID is delivered, Caltrans could proceed with Programming, Environmental, Design, and Right of Way. After completion of these steps projects would be considered shovel-ready. Since Caltrans zero-bases the Project Development budget and Planning Program’s PID budget, any resources that were not justified have been reduced, not redirected.

A shelf project must undergo all of the same normal planning and design processes as a fully funded project. A considerable amount of resources must be expended to deliver projects that may not have funding for the construction phase. The complete process takes time and would require significant additional resources to ensure existing and planned workload is not compromised. If projects remain on the shelf too long, certain parts of the project must be re-worked, incurring additional costs.

The Administration does not recommend that a shelf of shovel-ready projects be created at this time. However, if a shelf was created, approximately 500 Full-Time Equivalents would be required to complete the design of the projects. Instead, the Administration recommends that an appropriate queue of Project Initiation Documents be developed. A Project Initiation Document is an engineering document that identifies the scope, cost, and schedule for a proposed project.

The Administration recommends creating a queue of PIDS for State Highway Operations and Protection Program projects with a capital value of $500 million, over a two-year period. Creating a queue of PIDs would require only modest resources. The Administration has included a request for fourteen positions in the 2015-16 Governor’s Budget for the creation of a $500 million queue of PIDs over a two-year period.
Background
The Supplemental Report directs: “The administration, working with Caltrans, shall report to the appropriate fiscal committees of the Legislature and the Legislative Analyst’s Office (LAO) no later than January 10, 2015 regarding a “shelf” of shovel-ready projects. The report shall include: (a) recommendations on the appropriate level for a shelf of projects that balances the risk of developing projects that cannot be funded with the risk of not having projects ready in the event of unanticipated funding, (b) a description of the current shelf of shovel-ready projects, (c) the steps that would be required to develop the recommended shelf, and (d) the results of the efficiency efforts at Caltrans and the associated level of existing resources redirected to work on a shelf of projects”.

The following sections detail the responses to each specific area of information requested by the Supplemental report.

Appropriate Level of Shelf
A shelf project must undergo all of the same normal planning and design processes as a fully funded project (see “Steps to Develop a Shovel-Ready Shelf” later in this report). Consequently, a considerable amount of resources must be expended to deliver projects that may not have funding for the construction phase. If projects remain on the shelf too long, certain parts of the project must be reworked, incurring additional costs. The Administration does not recommend that a shelf of shovel-ready projects be created at this time. Instead, the Administration recommends that an appropriate queue of Project Initiation Documents be developed. A PID is an engineering document that identifies the scope, cost, and schedule for a proposed project.

The Administration recommends developing a queue of PIDs for the State Highway Operations and Protection Program (SHOPP). The SHOPP program embodies a “fix-it-first” strategy by focusing on the operation and rehabilitation of the existing transportation system. SHOPP projects are capital outlay projects, which are generally larger and more complex than maintenance projects. SHOPP projects focus on areas necessary to address the portions of the state highway system that have sustained more significant damage, either as a result of regular lifecycle, delayed maintenance, or catastrophic events.

For the SHOPP, The Administration believes that a PID queue of $500 million is a prudent level that would allow for the design and construction of projects if additional funding becomes available. The SHOPP is currently valued at $2.3 billion annually, and the recommended PID queue of $500 million represents just over 20 percent of the annual delivery. Candidate projects for inclusion in the queue would be priority projects that would not otherwise be funded until later years. Once initial efforts to create the queue are complete, the queue of PIDs could be “refreshed” by cycling the projects into the SHOPP and creating new PIDs for the queue without the need for additional resources.
Description of Current Shelf
At this time, Caltrans does not have a shelf of projects. The implementation of the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Proposition 1B), followed by the federal American Recovery and Reinvestment Act (ARRA) of 2009 required Caltrans to accelerate every possible fully- or partially-funded programmed project. The additional funding provided by Proposition 1B and by the ARRA depleted the shelf of existing projects, and also required Caltrans to accelerate projects already in the delivery pipeline. The result is increased tension at the beginning of the project pipeline, where PIDs are created to begin the process.

Steps Required to Develop a Shovel-Ready Shelf
The Administration does not recommend that a shelf of shovel-ready projects be created at this time. The Administration believes that a queue of PIDs should be developed at the planning stage, which would allow for the design of a project to proceed as soon as additional funding is identified. The remaining steps, beyond Planning, in the process shown below are for informational purposes only.

A “shovel-ready” shelf is a group of projects that are fully designed but lack the resources to begin the construction phase of the project. A considerable amount of resources must be expended to deliver projects that may not have funding for the construction phase.

A shelf of shovel-ready capital outlay projects requires three stages: planning, programming, and project development as illustrated below, and detailed in the following subsections.
Planning
The process for developing any capital project starts with project identification through a PID. A PID is an engineering document that identifies the scope, cost, and schedule for a proposed project. A PID is used to program a project, and to provide a basis for the next phases of the project. Caltrans estimates that to develop the PIDs necessary for the recommended queue of projects, 28 positions would be required over a two-year period. Because PIDs can be used to program projects as funding becomes available, there is little risk to developing a PID inventory of this size. Consequently, The Administration has included in the Zero-Based Budget request for the Planning program, fourteen additional staff in the FY 2015-16 Budget to begin producing PIDs with a project value of $500 million over the course of two years.

Examples of SHOPP-eligible projects that would be considered for shelf development include:
- Collision severity reduction
- Operational Improvements, including traffic flow improvements
- Bridge Preservation
- Pavement Rehabilitation and Reconstruction

The Administration does not recommend moving beyond the creation of a queue of PIDs at this time. The remaining steps shown in this process are for informational purposes only.

Programming
Programming in SHOPP and the Federal Statewide Transportation Improvement Plan (FSTIP) is required in order to maintain federal eligibility. PIDs developed for the shelf would be used as the basis for programming in the SHOPP and FSTIP – but only when funding becomes available for the queue of projects. The programming of the design and construction phases over and above the existing funding levels for the SHOPP would not be allowed by federal regulations until funding for the construction and construction engineering is secured. However, to keep the queue of PIDs “fresh”, projects developed for the queue would periodically be programmed for construction, and new project PIDs would take their place in the queue.

Project Development
Once programmed, projects begin a series of steps that can loosely be grouped into “project development,” after which a project can be considered “shovel-ready.” These steps include:
- Preliminary Plans and Environmental Document (PA&ED)
- Plans, Specifications and Estimate (PS&E)
- Right-of-way

Project development work cannot begin until PIDs are complete and project development phases are programmed. Caltrans estimates that it would take approximately five years to deliver a $500 million shelf of shovel-ready SHOPP projects after the first wave of PIDs are complete. The actual workload required would be refined as part of the annual zero-based budget process, once specific projects are identified. The Administration does not recommend proceeding to project development at this time.
However, if a shelf was created, approximately 500 Full-Time Equivalents would be required to complete the design of the projects.

**Efficiency efforts and Redirection of resources**

Over the past four years Caltrans has implemented several streamlining proposals in the development of PIDs. These efficiencies were achieved primarily by reducing the content and detail of the project contained in the PID. In FY 2011-12 the work effort to complete a PID ranged from .4 to .8 of a Personnel Year (PY). In the most recent budget requests, Caltrans has estimated .4 to .55 PY per PID. This represents efficiencies of as much as 30 percent.

Because the PID portion of the Planning Program is zero-based every two years, these efficiencies have already been incorporated into the Caltrans requests for resources. Until the zero-based request for PID resources included with the 2015-16 Governor’s budget, The Administration has not requested resources to develop a queue of projects. However, as mentioned previously, The Administration is requesting 14 positions for two years to develop PIDs for a queue of projects in the 2015-16 budget requests.

Project Delivery also continuously seeks to deliver projects more effectively and efficiently. Any changes in project development workload are captured in the in the annual zero-based budget request for the program. The Project Delivery program has reduced total equivalent staffing by nearly 30 percent though a combination of declining workload and increased efficiency. A Zero-Based Budget program review of the Capital Outlay Support Program project direct workload was conducted between the departments of Transportation (Caltrans), Finance (DOF) and the Legislative Analyst's Office (LAO) during the 2013-14 Fiscal Year. The outcome of the review focused on improving COS Program estimating and accountability. Specific recommendations focused on increasing flexibility over resource mix, improving annual and project budgeting estimating and accountability, and improving statewide program management. Of the twelve major recommendations, seven are complete and five are in progress.

**Conclusion**

The Administration does not recommend that a shovel-ready shelf of projects be created at this time. However, a queue of PIDs that would allow projects to proceed to design and eventually construction when funding becomes available is a prudent measure. An appropriate queue of PIDs would consist of SHOPP projects with a capital value of $500 million. The Administration has included a request for 14 positions in the 2015-16 Governor’s Budget for the creation of a $500 million queue of PIDs over a two-year period.