SHOPP Asset Management Pilot Request Form

Division of Transportation Programming
State Highway Operation and Protection Program (SHOPP)

Project Manager: Grace Magsayo
Phone: 209-948-7976

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☑ Includes Multiple Locations (Complete Page 2 of this Form)

MPO: Non-MPO

Project Location/Description (Include the nearest city, town or landmark)

In Calaveras County from approximately 2.6 miles east of Copperopolis (near Bonanza Mine Way) to approximately 1.6 miles west of the State Route 4/49 junction (near Stockton Road). The project is proposing to realign a non-engineered roadway providing standard lane widths, shoulders, design speed and sight distances. In an effort to manage the SHOPP needs within the project limits, an AC overlay is being proposed (121 program code), along with slope repair (150 program code) and the upgrade of existing 700' metal beam guardrail, installation of barrier to protect a historical water trough and the extension of an existing culvert (015 program code).

Need for project and proposed improvements (Elaborate using PID language)

The proposed project is needed due to the narrow lanes and no adjacent shoulders that exist within the project area. The horizontal and vertical alignments follow the existing rolling topography, resulting in numerous curves and limited sight distance. The width and geometry of the roadway, combined with the high traffic volumes, increases the number of accidents throughout the project. Currently, there is uncontrolled access to State Route 4. The project proposes to enhance safety by providing a standard pavement width of 40-feet with an additional 12-feet to provide turn pockets where needed. The project will also improve the sight distance through engineered alignments that reduce the number of curves, and increase curve radii with longer smoother curves; and limit access to State Route 4 by reducing the number of access points and utilizing frontage roads to consolidate private driveways.

| PA&ED / M200 | 04/01/2016 |
| PS&E / M380  | 08/01/2017 |
| RW Cert / M410 | 08/01/2017 |
| RTL / M460   | 10/01/2017 |
| CCA / M600   | 06/01/2020 |
| END Project / M800 | 04/01/2023 |

Support ($1,000)

(Escalated to FY of Programming)

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Legislative District Numbers
(Separate multiple Districts with a comma)

- State Assembly: 25
- State Senate: 1
- Congressional: 3

Capital Construction Cost Escalation Rate: 3.5%

Approved □ | Denied □

District SFP (Print): Samuel Jordan
District SFP (Sign): [Signature]
Phone: 209-942-6492

District Director (Print): Dennis T. Agar
District Director (Sign): [Signature]
Phone: 209-948-7972

SHOPP Exec. (Print): 
SHOPP Exec. (Sign): [Signature]
Phone: 209-948-7973
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Asset Management Pilot Project Nomination
For State Route 4 (Wagon Trail) Realignment
10–CAL–4–PM R10.3/R16.4
August 13, 2015

Executive Summary

This proposed pilot project to realign State Route (SR) 4 in Calaveras County, will improve physical assets and address a number of strategic objectives as identified in the 2015-2020 Caltrans Strategic Management Plan. Based on the SHOOPP Asset Management Program Eligibility Criteria, the proposed project meets the following criteria:

Criteria #1: Project includes any combination of work on three or more types of physical assets OR strategic objectives on State owned assets associated with the State Highway System.

Eligibility: The existing section of SR 4 is a non-standard alignment with narrow lanes, no shoulders and limited sight distance that brings the operations speeds down to 25-35 mph. The eligible physical assets that would be addressed with this project pertain to planned maintenance projects and activities detailed in the Stewardship and Efficiency Needs section. In addition to this, the proposed project meets other strategic objectives such as: Safety and Health, Sustainability, Livability and Economy, System Performance and Organizational Excellence.

Criteria #2: The Project can be delivered in the 2018 SHOOPP cycle.

Eligibility: The proposed project is currently completing the Project Approval and Environmental Documentation (PA&ED) phase as a STIP project. The draft document will be released to the public in September 2015 and completion of PA&ED is expected to occur in Spring 2016. The Design and Right-of-Way phases will immediately follow the completion of PA&ED with and the earliest Ready to List (RTL) being in the Fall of 2017.

Criteria #3: Projects with a total cost of between $2 - $20 million.

Eligibility: The SHOOPP eligible projects listed under the Stewardship and Efficiency Needs section total to $3,530,000 including support costs and are within the Pilot Program’s eligible range. This request is proposing to fund 50% of the construction capital needs for the western segment of the STIP project in the amount of $10,325,000.

Project Background

SR 4 offers a direct route from the Central Valley and Bay Area to Calaveras County, the Stanislaus National Forest, the Ebbetts Pass National Scenic Byway and other recreational areas in the high
Sierra. This Federal Aid Primary Route serves high volumes of recreational traffic and serves as the gateway for tourism and recreation in Calaveras County. The existing facility consists of a non-engineered alignment with no adjacent shoulders. The alignment follows the rolling mountainous topography resulting in numerous tight curves, limited sight distance, and reduced operating speeds, 25-35 mph. Realignment is necessary to reduce accidents, improve operational efficiency and relieve current and future traffic congestion.

The STIP project that is currently in the Project Approval and Environmental Documentation (PA&ED) phase will provide for the realignment of the 6.1 mile non-standard segment of SR 4 between Copperopolis and Angels Camp. Improvements include the realignment of a non-engineered roadway providing standard lane widths, shoulders, design speed and sight distances. The proposed improvements will provide a safer and more traversable route.

**Caltrans Strategic Management Plan (2015-2020)**

As stated in the pilot program’s eligibility criteria, the proposed project must meet a combination of at least three physical assets or strategic objectives based on the latest Caltrans Strategic Management Plan. The proposed realignment of SR 4 meets the following strategic objectives:
**Stewardship and Efficiency Needs**

The following SHOPP related needs exist within the project limits of 10–CAL–4–PM R10.3/R16.4:

**Project #1:** The existing pavement condition is good but will trigger for a Highway Maintenance (HM) strategy within the next four years as it continues to deteriorate. By planning for a future HM strategy while the pavement is still in good condition, the life of the existing pavement will be extended approximately five to ten years and reduce costly rehabilitation costs. The performance measure for this project is 12.2 lane-miles. (Program Code 201.121 Pavement Rehabilitation)

**Project #2:** The shoulders on the eastbound segment of highway 4, from Hunt Road to 0.2 mile of Poole Station Road have been eroded. It is proposed to restore the original embankment section and install rock slope protection or retaining. This will prevent further slope erosion. The performance measure for this project is 1 location. (Program Code 201.150 Roadway Protective Betterments HA42)

**Project #3:** To reduce the severity of accidents within the project limits, the existing metal beam guard railing at PM R10.3 requires upgrading. Protection for appurtenances within the clear recovery zone, the installation of a barrier to protect historical water through at PM R14.0 and the extension of an existing culvert PM R16.1 is also proposed. The performance measure for this project is 24 collision reduction. (Program Code 201.015 Collision Severity Reduction HB1).

This request is to fund the entire construction capital needs for the western segment of the project (see Attachment 3). The 6.1 miles of SR 4 in the project limits is the only segment that does not meet Surface Transportation Assistance Act (STAA) standards. Even with the three projects listed above, the overall needs of the highway will not be met. The STIP project re-aligns 12.2 lane miles of highway. The western segment will re-align approximately 6 lane miles and upgrade the highway features to standard. By constructing the western segment of the STIP project, the Department will eliminate the need for future SHOPP projects and greatly improve goods movement to the mountain communities in the Region.

The delivery of the PA&ED phase of this project has also demonstrated efficiencies as described in the Caltrans Strategic Management Plan. The plan states that:

“Success in project delivery is determined by many factors. To increase our success, Caltrans will focus on better communication methods and earlier stakeholder involvement. Caltrans has also moved decision making closer to the issues by increasing delegation to the districts. This will improve timely decision making on projects and increase effective communication with our local partners.” The SR 4 Realignment project has been a true collaboration of Caltrans and local agency staff. Stakeholders have been communicated with early on and throughout the process which
included numerous one-on-one meetings with property owners, Caltrans and local agency staff. This collaboration has resulted in an efficient delivery of the PA&ED phase of the project.”

**Sustainability, Livability and Economy**

The following defines the elements of the project that improve the resiliency of the system, freight efficiency and connectivity for people:

SR 4 is the only direct access to areas beyond the City of Angels Camp. An alternate route to reach SR 4 from Stockton or the Bay Area would be from SR 99 to SR 120 to SR 49. This alternate route is approximately 30 miles longer than the more direct SR 4. Similarly, SR 12 from the Central Valley would be from SR 99, this alternate route is on average 22 minutes longer that the more direct SR 4.

Because of the narrow lane widths and lack of roadway shoulders, any accident on SR 4 in this section requires emergency crews to shut down the roadway in both directions and detour traffic for hours. With an accident rate that is 73% higher than the state average, this creates inefficiencies for freight carriers and people. The proposed project will provide standard lane widths and 8 foot paved shoulders. There will be a significant reduction in accidents but it is anticipated that the accidents that do occur can be moved to the shoulders and a complete closure of SR 4 will not be necessary.

**System Performance**

The proposed project will reduce vehicle delay by 11.9% and emissions by 7.7% in the PM peak hour for the design year. The project will also eliminate the bottleneck areas of SR 4 where the operational speeds drop to 25 mph.

As mentioned in the previous section, the reduction of accidents and associated detours and closures of SR 4 will improve the travel time reliability and travel delays.

**Organizational Excellence**

The delivery of the PA&ED phase is an excellent example of collaboration with multiple local agencies. The implementing agency for the PA&ED phase is the Calaveras Council of Governments (CalCOG). CalCOG is working collaboratively with Calaveras County, the City of Angels Camp, and Caltrans District 10 to deliver the phase. Property owner meetings have been a team effort with a combination of local agency and Caltrans staff which has improved communication and demonstrated a professional team to the public.
## Funding Plan

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<th>Required Funds</th>
<th>Currently Programmed in the STIP</th>
<th>Currently Unprogrammed SHOPP Needs</th>
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*Estimated support cost provides enough funding to complete the work required for the entire project limits.

**Estimated capital cost provides enough funding to construct the western segment of the STIP project (Phase A & Phase B).

## Recommendation

It is proposed that $10,575,000 are programmed in the SHOPP for 18/49 FY. This project is currently on track to be delivered during the 17/18 Fiscal Year.

Attachments:

Attachment #1: Vicinity Map

Attachment #2: Project #2 Location

Attachment #3: Phasing of Project to Match Funding
Attachment 1: Vicinity Map

- **BEGIN PROJECT PM R10.3**
- **END PROJECT PM R16.4**
- **PROJECT LOCATION**
- **ANGELS CAMP**
- **COPPEROPOLIS**
- **POOLS STATION ROAD**
- **HUNT ROAD**
- **WAGON TRAIL**
- **STALLION WAY**
- **APALOOSA ROAD**
- **STOCKTON ROAD**