

MAP-21 FACT SHEET

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SUBJECT: MAP-21: Infrastructure Condition - Pavement

PROBLEM STATEMENT:

MAP-21 requires an Asset Management Plan for Pavement under Section 1106 "National Highway Performance Program". Section 1106(f) "Interstate System and NHS Bridge Conditions" requires each state to develop an asset management plan for the National Highway System (NHS), to improve or preserve conditions and performance of the NHS. The asset management plan should develop a summary of pavement assets on the NHS and provide:

- Asset management objectives and measures
- Life cycle cost and risk management analysis
- Financial plan
- Investment strategies

The federal share for that fiscal year shall be reduced to 65% upon failure to comply.

Section 1203 "National Goals and Performance Management Measures" includes measures such as:

- Minimum standards for pavement management systems
- The condition of pavements on the Interstate System and the NHS
- The performance of the Interstate System and the NHS
- Minimum levels for the condition of pavement on the Interstate System
- The standardized data elements that are necessary to carry out a performance-based approach

Section 1507 "Maintenance"

This section defines Pavement Preservation Program, eligible activities and projects including construction, reconstruction, resurfacing, restoration, rehabilitation or operational improvement of segments of NHS. This program enhances pavement performance by using an integrated, cost-effective set of practices that extend pavement life, improve safety, and meet road user expectations.

RECOMMENDATION:

For Section 1106, Caltrans will use the Ten-Year State Highway Operation and Protection Program (SHOPP) Plan, the SHOPP Pavement Tool and the State of the Pavement (SOP) as the basis for the Asset Management Plan for the NHS. The Ten-Year SHOPP Plan is biennial and the SOP is available on a 24 to 36 month timeline and measures the pavement condition of the Interstate System and NHS.

For Section 1203, Caltrans will implement the Pavement Management System (PaveM). PaveM provides the minimum pavement management standards and provides performance based approach for system performance. Also the Life Cycle Cost Analysis will be used for project cost effectiveness and developing cost effective project alternatives.

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For Section 1507, Caltrans will provide the Five-Year Maintenance Plan biennially and the Ten-Year SHOPP Plan as the Asset Management Plan effectively integrated with the Life Cycle Cost Analysis. These tools extend the pavement life using lower cost preventive maintenance treatments. In addition, Caltrans will participate with AASHTO in pavement condition and asset management criteria.

\$5 million per year of additional effort has been estimated for collecting, analyzing data and determining the types of pavement distresses to meet the requirements of MAP-21.

BACKGROUND:**Ten Year SHOPP Plan**

In accordance with Streets and Highways (S&H) Code Section 164.6, Caltrans prepares a ten-year state rehabilitation plan every 2 years that identifies the rehabilitation and reconstruction needs of all highways and bridges on the State Highway System.

Five Year Maintenance Plan

In accordance with Streets and Highways (S&H) Code Section 164.6, Caltrans prepares a five-year maintenance plan that addresses the pavement maintenance needs of the State Highway System.

State of Pavement Report:

The California State Highway System consists of over 15,000 center line miles of highway, about 50,000 lane miles of pavement. The Division of Maintenance conducts a Pavement Condition Survey (PCS) of the entire pavement inventory. The State of the Pavement Report summarizes the results of the PCS once every 2- 3 years.

ALTERNATIVES:

Alternative 1: Develop the mandated Asset Management Plan on the NHS by following Section 1106. Partner with FHWA and participate in the upcoming rulemaking process for the establishment of Performance Measures and Standards in the next 18 months. Provide FHWA the “2013 Ten-Year SHOPP Plan” and the “[2011 State of the Pavement Report](#)” as a status report with future reports to FHWA on a 24 to 36 months basis.

Pros: Meets the MAP-21 mandates and prevents the 65% lowering of the federal share for the state on NHS for that fiscal year. Give State input in the rulemaking process for the establishment of Performance Measures and Standards. Achieves one of the seven National Goals by maintaining the highway infrastructure asset system in a state of good repair.

Cons: May not meet MAP-21 requirements, as FHWA has not yet established data requirements.

PROPOSED IMPLEMENTATION SCHEDULE:

As directed in Sections 1106, 1203 & 1507 for MAP-21.