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May 22, 2015

U.S. Department of Transportation
Docket Operations, M-30
West Building Ground Floor, Room W12-140
1200 New Jersey Avenue SE.
Washington, DC 20590

RE: Docket Number: FHWA-2013-0053
Federal Register Number: 2014-30085
National Performance Management Measures; Assessing Pavement Condition for the
National Highway Performance Program and Bridge Condition for the National Highway
Performance Program

To Whom It May Concern:

The California Department of Transportation respectfully submits the attached comments on the Federal Highway Administration's Notice of Proposed Rulemaking issued on January 5, 2015 titled, " National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program."

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

Enclosure

California Department of Transportation's Comments on the Federal Highway Administration's Notice of Proposed Rulemaking on National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program

General Comments

In General – The California Department of Transportation (Caltrans) supported the inclusion of performance measure requirements in MAP-21 and the policy of improving Federal-aid project decision making through performance-based planning and programming. Caltrans believes performance-based decision making and performance measures are key tools for improving safety, managing our assets and making efficient and cost-effective investments. However, Caltrans would make the following observations regarding the Federal Highway Administration's Pavement and Bridge Condition proposed rule:

Costs to Implement—The costs associated with implementation of the pavement and bridge performance measures represent both a significant initial cost and ongoing annual costs. Caltrans is concerned that the additional costs associated with more data collection and reporting could be overly onerous and requests that the Federal Highway Administration recognize and resource agencies for these added costs in future transportation bills.

Importance of Preservation—The proposed rule focuses on poor pavement and bridges without mentioning the benefit of preservation efforts to extend the service life of assets in good and fair condition. Preservation efforts are cost effective and consistent with an asset management philosophy. Preservation would also reduce the number of pavement sections and bridges moving into the poor condition category. The rule should be amended to acknowledge that preservation efforts are a key component of an overall asset management strategy.

Fair Condition Assets—The proposed rule does not define the fair condition explicitly, even though a significant percentage of California's pavement miles and bridges are in fair condition. The "fair" condition criteria should be explicitly defined in the rule.

Targets Setting –The proposed rule requires that agencies set targets for performance and show "significant progress" toward meeting these targets. The proposed rule allows the Federal Highway Administration to consider extenuating circumstances documented by a State Departments of Transportation in the assessment of progress toward the achievement of targets (proposed §490.109(5)). Caltrans believes the proposed rule's construction of extenuating circumstances may be too narrow (e.g., disasters, discontinuation of Federal data, etc.), and that the final rule must be written broadly enough to include fiscal limitations and project delivery constraints as potential extenuating circumstances that the Federal Highway Administration could consider. The target setting provisions must allow for the possibility that performance targets may be lower than current levels in future years.

Target Setting Time Frames - Bridges and pavement deteriorate slowly, and projects to rehabilitate or replace them take time to develop. In light of the practical timeline for bridge and pavement deterioration and projects, it seems more appropriate for the target setting to be longer than a 4-year period with 2-year intermediate report. Caltrans recommends a 10-year target period with a 5-year intermediate reporting timeframe. This 10-year period would also make target setting consistent with the Asset Management proposed rulemaking.

Comments Specific to Bridges

Bridge Deck Area—The proposed rule calls for the bridge deck area to be calculated by multiplying the National Bridge Inventory (NBI) bridge length by the NBI bridge width. This method of determining deck area assumes that every bridge is rectangular in shape. This assumption ignores ramp area, curved configurations, and other irregular deck shapes. MAP-21 requires the submission of bridge deck area in the elements that could be used to directly report bridge deck area including all irregular configurations. Use of the element deck areas would improve the accuracy of the measure.

Culvert Area—The proposed rule uses the NBI item for bridge approach roadway width to determine the length component of a culvert area. This assumption in many cases under-represents the true culvert area. Caltrans recommends that the culvert element length be used instead of the approach roadway width to achieve accurate culvert areas.

Scour Influence—In the past, the FHWA has directed the states to lower the substructure condition rating (NBI 60) to match the scour code (NBI 113) for scour critical bridges. This policy directive was related to the Highway Bridge Program that was eliminated by MAP-21. Caltrans requests clarification in the notice if this legacy policy is still in effect. In other words, should a scour critical bridge be considered "poor" under the provisions of this rule?

Consistency of Structurally Deficient and Poor Condition Designations— To eliminate any future confusion, the criteria for a bridge classified in poor condition should be modified to include bridges with reduced load capacity and inadequate hydraulic capacity. This would make it very clear that all structurally deficient bridges would be classified in poor condition.

Seismic Vulnerability—As with bridges identified as scour critical, structures with confirmed seismic vulnerabilities should be considered to be in poor condition and included in this proposed rule.

Comments Specific to Pavement

California State and Local Coordination—The NHS pavement inventory within California has significant portions owned by local agency owners. It will take significant time and effort to coordinate with our local agency partners to collect the required data. Caltrans recommends that the implementation timeframe consider the significant coordination work required to implement the proposed rule.

Local NHS Pavement Condition Data—A number of MPO's in California are using commercial software that captures pavement condition using the Pavement Condition Index (PCI) instead of the IRI. Requiring the use of IRI represents a significant change in business practice and will cause a financial burden for the local agencies to retool their pavement condition surveys and associated software. Additionally, the IRI cannot be accurately collected by automated van on lower posted speed roadways making this measure unreliable. Caltrans recommends that the PCI be used for in lieu of IRI for all other principle arterial routes.

Pavement Data Collection Frequency Requirement—The frequency of collection of pavement cracking, rutting and faulting data on Interstate highways has been reduced from every two years to every year. Additionally, the requirement for the collection of IRI data on other principle arterials is a completely new requirement. New data collection is associated with additional costs that must be borne by Caltrans and our local partners. Caltrans requests that the Federal Highway Administration review the justification for the proposed collection frequency of pavement IRI, rutting, cracking and faulting data as it relates to expected changes in conditions and costs to collect.

International Ride Index (IRI) for Urban Highways—The proposed rule requires two International Roughness Index (IRI) measurements. The IRI for urban highways less than one million population is 170 and is 220 for urban highways greater than one million. California has a significant number of urban highways that are currently managed at an IRI of 170. The proposed rule is counter to our pavement preservation efforts on our highest volume urban highways. Caltrans recommends that the IRI threshold for all NHS routes be an IRI greater than 170.

Poor Condition Rating for Data Not Collected—Under the proposed rule, if pavement condition data is not reported, then the rating of those lane miles defaults to poor condition. Due to traffic control or highways under construction there are many highway miles where data cannot be collected. Caltrans recommends that missing data be stratified in proportion to the quantity in good, fair and poor conditions from the available data set.

Minimum Pavement Condition—The proposed rule requires a maximum of 5 percent of the pavement area to be in a poor condition category for the National Highway System (NHS). Caltrans recommends that the maximum area of poor condition pavement condition be 10 % for a period of time and slowly decrease to the desired 5% stated in the proposed rule. This stepped approach to better performance will be more realistic for California, but would likely require a funding augmentation to achieve.