

**Comments of DRAFT: National Performance Management Measures; Assessing Pavement Condition
for the National Highway Performance Program and Bridge Condition for the National Highway
Performance Program**

Comments from ODOT Bridge Section
February 11, 2015

- Proposed Measures for bridges are simple and based on readily available data.
- State's discretion for setting targets is appropriate.
- **Comment:** The rule sets up a point of future ongoing conflict between the state's right of project selection and the Federal interference in the state's ability to manage highway infrastructure to meet traffic demands and assure public safety. The Federal role should be limited to setting overall goals and standards, but retain the long standing position that states select where and when they expend both State and Federal funding. The rule should be clear that the line between project selection and achievement of overall goals and target will continue to be honored at the state (FHWA Division Office) level.
- The Rule contains specific dates for setting target and preparing investment plans that include a program of projects to address how the state will meet the targets.

Comment: The level of effort and coordination with local agencies, the public and other stakeholders is not a trivial undertaking. The assumption that states can revise or otherwise interrupt and fit this extremely complex and time consuming process to fit a schedule for these Federal Performance Measures that only address a small portion of the complex performance issues for a state transportation system devalues and trivializes this complex planning effort. Instead of imposing timing deadlines for setting the targets and setting investment plans, the Federal requirements should be flexible and set in cooperation between the state and the local FHWA Division office to meet the schedule as set by the state DOT and their stakeholders. Reporting at the Federal level could be based on any time frames set by the State DOT within a given calendar year of a given Federal fiscal year. The language "significant progress" should be revised to "adequate progress considering fiscal and project delivery timeframes".

- The Rule preamble discusses the bridge penalty based on an assessment of the bridge measures meeting the 10% minimum structurally deficient (Poor) bridges.

Comment: MAP21 has provisions for a penalty that requires a minimum amount of funding allocated toward reducing the percentage of structurally deficient bridges if the minimum 10% target is not met. With the adoption of the new bridge measures and requirements for investment plans aimed at meeting targets, the Legislation should be revised to eliminate any specified funding amount to be allocated. Instead the state should be required to prepare an investment plan that addresses the need to reduce the percentage in the most cost effective manner without any arbitrary investment level.

- The preamble discusses reporting on bridges owned by Federal agencies, but the Rule does not mention those bridges specifically.

Comment: States have no direct authority to collect data on Federally owned bridges. In fact there is no expectation and no requirement or mechanism for states to obtain bridge data on Federally

owned bridges. The Rule should set up a separate requirement for Federal bridge owner to report on the performance measures for those bridges. Since the funding mechanisms are different and not controlled by States, the targets and assessment of progress for Federally owned bridge should be completely separate from the state targets, assessment and investments plans to reach targets. The Rule or preamble should clarify that only Federal bridge owners will report on Federally owned bridges and that State have no requirement or expectation to report on those bridges or to address them in investment plans.

- The rule requires reporting measures for NHS bridges only.

Comment: States must consider all bridges regardless of the system when setting up maintenance, preservation or replacement programs. State plans to use available transportation funds should be developed based on priorities that consider the system, traffic volume, and condition, but non-NHS needs must also be addressed in order to maintain economic viability and mobility across an entire transportation system. If the National Measures are really intended to be used to measure system improvement resulting from investments, both NHS and non-NHS systems should be reported so a comprehensive view of a state's investment strategies will be presented.

- The consequence of failing to meet targets is that consideration is given to how to meet in the next plan cycle.

Comment: This is an appropriate level of consequences.

- The definitions of G-F-P are based on National Bridge Inventory condition ratings for deck, superstructure and substructure.

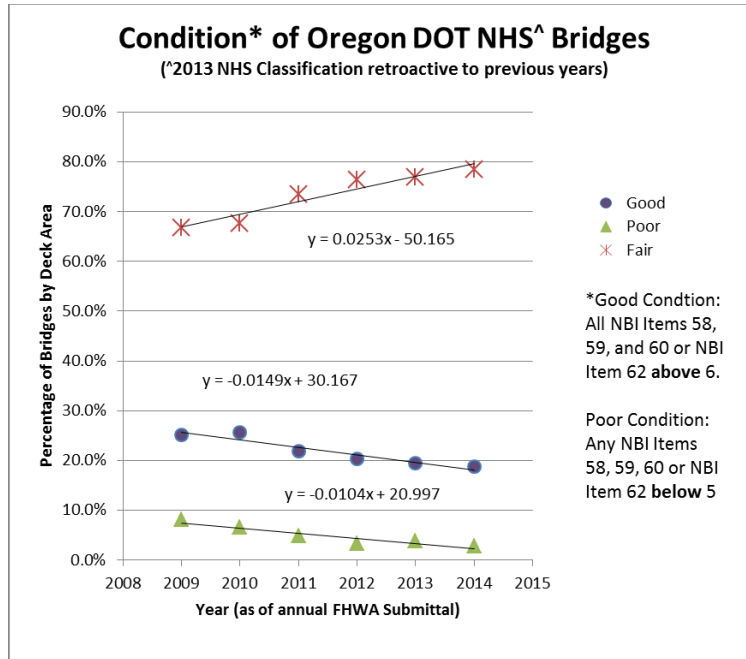
Comment: An increasing number of states are no longer collecting NBI ratings, but are now collecting the New AASHTO Element Level ratings and converting to the NBI ratings using an approximate computerized algorithm. The Rule should note that the use of NBI ratings for the definitions of the measures is temporary and will transition to the new definitions based on the new National Element Level ratings as defined by AASHTO. The Rule should state that new definitions based on element level ratings will be developed jointly by FHWA and AASHTO, or at least that AASHTO input will be considered in developing definitions of the measures based on element level ratings.

- The two performance measures included for bridge are the percentage of NHS bridges classified in good condition; the percentage of NHS bridges classified in poor condition based on deck area.

Comment: We believe the use of Good, Poor gives an imprecise view of conditions and lead to confusing interpretation of the measures. We recommend the use of Cyclic Maintenance (CM for Good), Preventive Maintenance (PM for Fair) and Replacement or Rehab (R&R for Poor), as outlined by the AASHTO SCOPM in 2014.

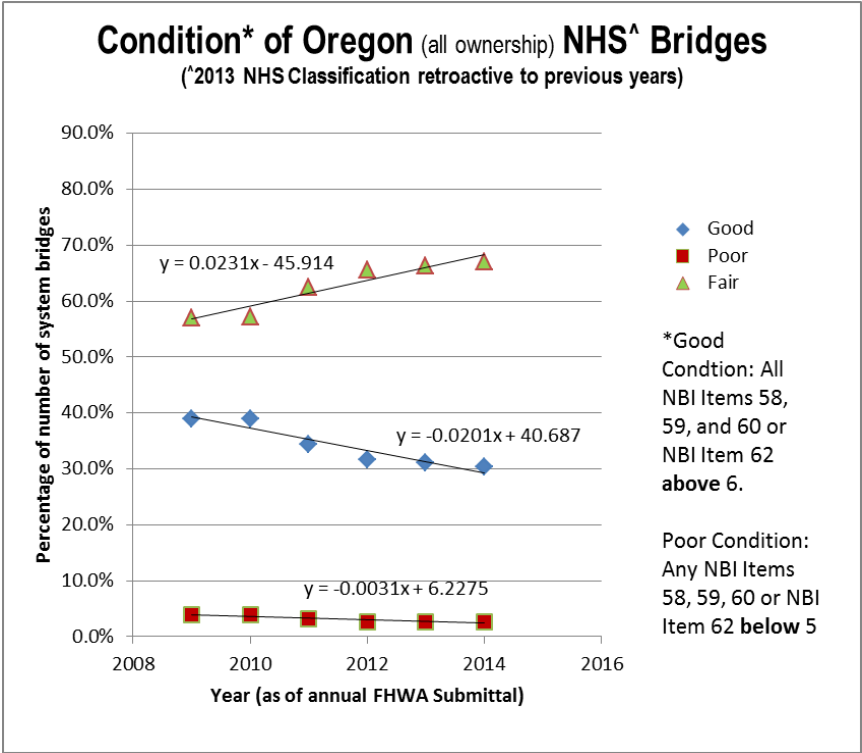
Comment: I would expect the two performance measures could be misleading as the goal is for the percentage of good bridges to increase with the percentage of poor bridges to decrease. To sustain this approach, funding would need to be spent on good bridges to keep them good and either rehabilitating or replacing poor bridges at a higher cost – like a worst first funding scenario. The missing piece is the percentage of fair bridges. It would seem that the most economical approach to maintaining the system would be to keep the fair bridges in fair condition, allowing some good bridges to go fair while

maintaining a steady state (or declining) number of poor bridges. This has been Oregon's approach for the last several years which is displayed in the graph below.



Comment: Since the DOT's are being asked to provide good and poor information, it would be useful to also include the fair information for reporting. Providing all three measures provides a clearer picture for the public to be aware that progress being made. It would be easy to calculate as the sum of good/fair/poor is 100%.

- The performance measure is based on deck area versus number of bridges which is typically what Oregon collects.



Comment: The option of using deck area seems to favor states with fewer, larger bridges. If we were to use number of bridges, our results would be significantly different as shown in the figure above. I would guess this was discussed prior to establishing the NPRMs so there isn't much chance to open this up for discussion but it is interesting to note the difference.

- The following excerpt is from the FHWA (Federal Register?) document that Bruce shared. *The FHWA is seeking comment from the public on whether the measures should reflect additional factors that could influence decision making, such as facility location, functional class, level of use, environment, or impact it may have on other aspects of transportation performance.*

Comment: With limited funding and overwhelming pending need, it seems that adding other filters to the measures might be helpful to show progress. Added measures could include functional class and progress made on other deficiencies – like painting, vertical clearing, rail. Risk is big, and could be simple to add. A bridge is either on a scour or seismic vulnerability list or not. If it is on, there are mitigation measures that could take it off.

Comment: The rule should include a plan to revamp the definition of Good and Poor in the future using element level inspection data. Element level inspection has improved granularity than the NBI Deck-super-sub ratings. Also, the statement was made that deck-super-sub ratings would no longer be taken once element level inspection was instituted, being unnecessary. It seems odd to be trying to move

forward by using concepts relegated to the past. What about sufficiency rating in all of this? Is it being dropped?

- The following excerpt is from the FHWA (Federal Register?) document that Bruce shared. *It is important to emphasize that established targets (2-year target and 4-year target) would need to be considered as interim conditions/performance levels that lead toward the accomplishment of longer-term performance expectations in the State DOT's long-range statewide transportation plan and NHS asset management plans.*
- The following excerpt is from the FHWA (Federal Register?) document that Bruce shared. *Accordingly, FHWA proposes that for each NHPP target, progress toward the achievement of the target would be considered "significant" when either of the following occur: the actual condition/performance level is equal to or better than the State DOT established target; or actual condition/performance is better than the State DOT identified baseline condition/performance. The FHWA believes that any improvement over the baseline, which represents a 0.1% improvement over 4 years, should be viewed as significant progress considering the fiscal short falls and financial uncertainties many State DOTs are faced with today.*

Question: ODOT has not developed a target for conditions/performance levels for SD bridges in the past. We use our own measure called "Distressed Bridges". We would need to establish targets for both the percentage of bridges in good condition and bridges in poor condition. We will be doing an analysis to determine the impact of our 15-18 STIP projects on bridge conditions along with a deterioration model for the non-project bridges to determine what 15-18 conditions might look like.

Comment: Also, looking at the graphs for Oregon, making a 0.1% improvement even over four years is very optimistic as we have been losing ground in our good bridges at around 1%/year. We would need to look at funding priorities differently. Also, as a side note, this gets even more convoluted given the interest in competing for preservation money with pavements. How do you establish a target when you don't know your funding levels from STIP cycle to STIP cycle?

- The following excerpt is from the Federal Register. § 490.405 Definitions. *The following definitions are only applicable to this subpart, unless otherwise provided: Bridge as used in this section, is defined in 23 CFR 650.305, the National Bridge Inspection Standards. Structurally deficient as used in §§ 490.411 and 490.413 is a classification given to a bridge which has significant load carrying elements in poor or worse condition or the adequacy of the waterway opening provided by the bridge is determined to be insufficient to the point of causing overtopping with intolerable traffic interruptions.*

Comment: The definition of structurally deficient is far more amenable to element level inspection instead of deck-super-sub, unless deck, super and sub are defined as bridge elements and if this were the case, why are the elements concerned called out as load carrying elements? Seems redundant as I can't imagine a deck, substructure or superstructure that doesn't carry load.