

Date: April 29, 2017

To: ODOT Asset Management Executive Committee; Paul Mather, Highway Division Administrator; Jerri Bohard, Transportation Development Division Administrator; Lucy Moore, Maintenance and Operations Manager; Robert Pappe, Technical Services Interim Manager

From: Sam Haffner, TAMP Project Coordinator

CC: Bruce Johnson, ODOT Bridge Unit; John Coplantz, ODOT Pavement Unit; Nicki Nowack, Asset Management Integration Unit; Pablo Torrent; John Baker

Subject: Updated Recommendation on TAMP Scope

Summary:

This memo lays out the issues considered by ODOT leadership in determining the scope of the Transportation Asset Management Plan. It recommends that ODOT create a TAMP that is limited in scope (NHS Bridges and Pavement) and provides an overview of the decision-making process that led to this recommendation.

Background:

In October, 2016, the Final Rules for the Transportation Asset Management Plan (TAMP) were released by FHWA. Among other things, these Final Rules set minimum requirements for DOTs in developing their state TAMPs. At a minimum, states are required to include in the scope of their TAMPs, pavement and bridge assets that are on the National Highway System. With this minimum requirement set, states were also encouraged to go beyond this minimum scope, both in terms of assets considered (including assets in addition to pavement and bridge), as well as in terms of roadway jurisdiction (including roadways that are not part of the National Highway System).

In late January 2017, the National Highway Institute provided a 2-day training workshop with senior staff at ODOT on development of the agency’s Transportation Asset Management Plan. During this training workshop, a discussion was had between ODOT, NHI, and FHWA staff on the appropriate roadway jurisdictional scope of the TAMP. NHI and FHWA encouraged ODOT to consider developing a TAMP that included non-NHS assets in addition to required NHS assets.

In March 2017, the Asset Management Executive Committee met to discuss a final decision on the TAMP scope. Having already decided to limit the asset scope to Pavement and Bridge assets, AMEC weighed whether to limit the TAMP to just the NHS system [Option A], or take a more expansive approach of also including Non-NHS State Highways [Option B]. AMEC members recommended that a recommendation be finalized after a further consultation with ODOT Pavement and Bridge Unit Managers.

ODOT			Local Agency	
Interstate System	NHS (non-IS)	Non-NHS State Hwy	Locally-owned NHS	Local Non-NHS
Option A		-	Option A	-
Option B				-

The recommended actions outlined in this memo are based on input received from ODOT Pavement and Bridge Unit Managers, further consideration by the TAMP Working Group on the relative merits of pursuing one of these two options, and additional feedback from AMEC members.

Decision Process:

Following up on the AMEC meeting, TAMP Review Committee members that represent the Bridge Unit, Pavement Unit, and Asset Management Integration Unit were consulted further for their perspectives on the strengths, weaknesses, opportunities, and threats of pursuing Option A versus Option B. Their feedback can be summarized in the SWOT charts below:

Option A (meet minimum TAMP requirement):

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Consistent with PM2 targets which measure condition of NHS pavement and bridge assets • Limits additional demand for new data collection and analysis 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Would present incomplete picture of ODOT bridge and pavement assets • Inconsistent with investment priorities of the agency which focuses on the entire state highway system
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Opportunity remains for an expanded TAMP scope in the future 	<p>THREATS</p> <ul style="list-style-type: none"> • Could diminish the value of the TAMP as a guiding document for the agency • Could create confusion with parallel state KPM targets

Option B (minimum scope PLUS non-NHS state highways):

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Would provide a more complete picture of ODOT bridge and pavement assets • Would be <i>more</i> consistent with Bridge and Pavement Conditions Reports • Would be <i>more</i> consistent with investment priorities of the agency which focuses on the entire state highway system 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Pavement Unit will <i>already</i> be stretched thin processing State KPM data as well as new data processing meet PM2 standards for the NHS system • Does not fully resolve inconsistencies with Bridge and Pavement Conditions Reports (<i>inclusion of local NHS, new measurement standards, etc.</i>)
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Could make the TAMP a more useful tool in guiding agency Asset Management efforts 	<p>THREATS</p> <ul style="list-style-type: none"> • Could lead to a proliferation of expectations related to federal reporting requirements • Could create confusion with parallel PM2 targets

One of the fundamental challenges in the decision-making process between Option A and Options B is the desire for greater consistency across all sections of the TAMP. By pursuing a TAMP that just meets the minimum requirements of the NHS system, there is consistency with the PM2 performance targets, but inconsistency with agency investment priorities that focus on the entire state highway system. As the same time, a TAMP scope that also includes the NHS and non-NHS State Highways would be ‘mismatched’ from both PM2 conditions reporting, as well as from both ODOT Bridge Condition Reports and ODOT Pavement Conditions Reports (which do not include local NHS assets).

An additional challenge is the agency's capacity to conduct the data analysis necessary to accurately measure conditions to meet standards *both* for Oregon's Key Performance Measures (KPMs) as well as for new federal Performance Measures for bridges and Pavement (PM2). While the ODOT Pavement Unit currently collects and analyzes data to measure pavement conditions according to State KPM standards, a significant amount of additional staff time will be need to analyze these datasets to meet PM2 requirements just for the NHS. Including PM2 analysis of non-NHS State Highways on top of these new requirements will create additional costs, and is seen as having little practical value due to the fact that state performance measures (KPMs) are already established for pavement on the entire state highway system.

Recommendations:

Based on the requested feedback from ODOT Bridge and Pavement Units, and further assessment of the issue, it is recommended that ODOT **conduct a narrow-scope TAMP (Option A)**. At the same time, the TAMP should strive to create congruency between this narrow scope and ODOT's more expansive investment strategy and state performance measures. This approach can be summarized as follows:

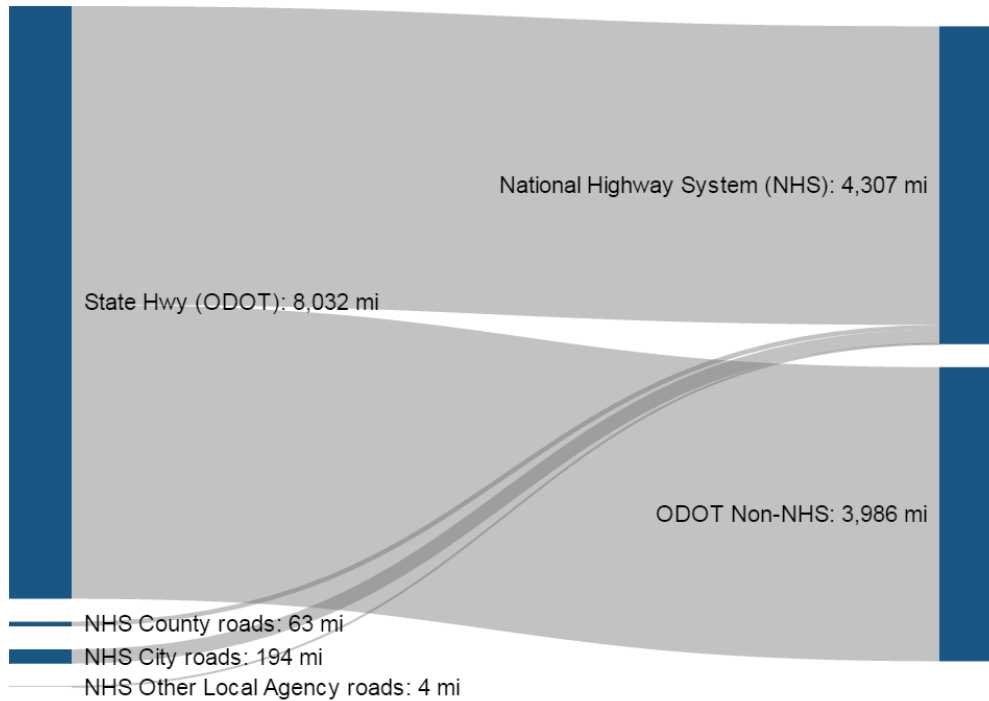
1. The assets scope of the **TAMP should be limited to pavement and bridge assets**, the two assets required by the TAMP Final Rules. Additional assets may be appropriate for inclusion in future asset management plans conducted by the agency.
2. The roadway classification scope of the **TAMP should be limited to the state and local NHS system**, the minimum scope required by the TAMP Final Rules. At the same time, non-NHS State Highways should also be considered and discussed in the context of state performance measures and the agency's investment strategies aimed at meeting performance targets for the entire state highway system (see below)
3. To keep additional asset data cost burdens in check, the agency should limit new PM2 asset data collection, analysis, and reporting for bridges and pavement to the NHS system. The agency will also continue to collect and analyze data on the entire state highway system that satisfies Oregon's Key Performance Measures (KPMs) for pavement and bridge. **Both of these asset data sets should be reported in the TAMP** with clear explanations of how they differ in terms of the roadway systems analyzed and condition measurements.
4. To address the challenge of overlapping state and federal performance measures and targets and how they impact agency decision-making, **the TAMP should emphasize the central role of state performance measures (KPMs) in shaping bridge and pavement investment decisions and project selection**. The TAMP should communicate that the ODOT process for selecting investments is aimed at achieving a more complex set of performance measures that are intended to result in a balanced program across many competing needs rather than solely meeting the limited scope of the Federal measures. This process is expected to **have the practical effect of meeting the narrow scope of the Federal performance targets** for NHS bridges and pavements.

Asset Management Executive Committee Decision:

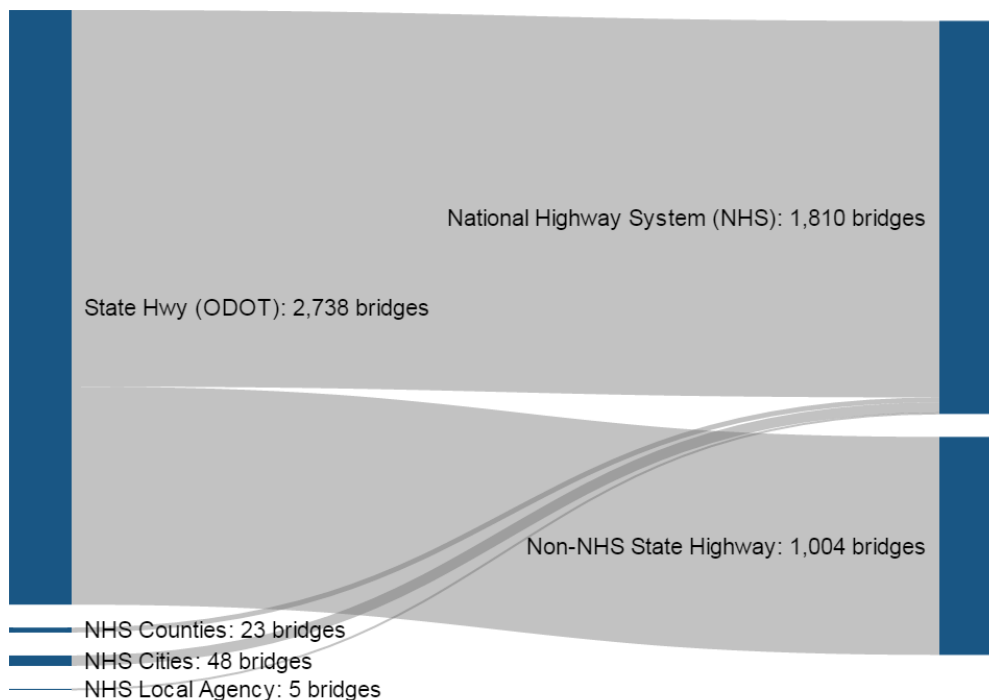
The recommendations outlined in this memo were approved unanimously by the Asset Management Executive Committee on Friday, May 12, 2017

Appendix A: Overview of State versus National Highway System

Oregon's National Highway System includes a total of 4,307 miles of roadway. Of these total miles, approximately 4,046 miles (94%) belong to ODOT, and the remaining 261 miles (6%) belong to cities, counties, and other local agencies. ODOT's total state highway portfolio totals 8,032 miles, meaning roughly 50% these state highway miles are part of the National Highway System. This mileage is summarized in the chart below:



The 1,810 bridges on Oregon's National Highway System have a similar ownership ratio; 1,734 NHS bridges (96%) belong to ODOT, and 76 NHS bridges (4%) belong to counties, cities and, other local agencies. Additionally, of the 2,738 ODOT's state highway bridges, more than 63% are part of the National Highway System:



Appendix B: Pavement and bridge performance measure targets

State Performance Measures (KPMs)

Asset Type	System	State Performance Measure	Target
Pavement	State Highway	% miles rated 'fair or better'	85%
Bridges	State Highway	% of bridges (count) not 'distressed'	78%

Anticipated* National Performance Measures (PM2)

Asset Type	System	National Performance Measure	Target	Minimum Condition (to avoid penalty)
Pavement	Interstate	% miles in Poor condition	TBD**	Less than 5% in poor condition
		% miles in Good condition	TBD	-
	Non-Interstate National Highway	% miles in Poor condition	TBD	-
		% miles in Good condition	TBD	-
Bridges	National Highway	% deck area in Poor condition	TBD**	Less than 10% structurally deficient
		% deck area in Good condition	TBD	-

*Final rules on PM2 expected on 5/20/2017

**Performance Target must at least meet Minimum Condition