



Oregon

Kate Brown, Governor

Oregon Transportation Commission

Office of the Director, MS 11

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Salem, OR 97301-3871

DATE: February 5, 2018
TO: Oregon Transportation Commission

[Original signature on file]

FROM: Matthew L. Garrett
Director

SUBJECT: **Agenda F** – House Bill 2017 (Transportation Funding), Section 11: Transportation Infrastructure Conditions

Requested Action:

Request approval to adopt uniform standards for the consistent description and reporting of bridge and pavement conditions for state, city, and county roads.

Background:

House Bill 2017 (Transportation Funding) Section 11, requires the Oregon Transportation Commission (OTC) to develop a set of uniform standards, in coordination with cities and counties, to consistently describe and report on the condition of transportation infrastructure, including pavement and bridge conditions. The bill requires cities and counties to use these standards to measure and report their infrastructure conditions to the Commission by February 1 of each odd-numbered year. The Commission must report on the state, city and county conditions to the legislature by April 1 of each odd-numbered year. ODOT must also post the reports on the new transparency, accountability and performance website required under Section 12 of HB 2017. HB 2017 requires ODOT to suspend State Highway Fund apportionments to any jurisdiction that does not file the report on time. In addition, some of the gas tax increases included in the bill will not go into effect unless these provisions are implemented.

The Oregon Department of Transportation (ODOT) staff worked with city and county designees over the past few months to develop those standards and a process for reporting. The work group proposes focusing on the Federal-aid highway system, which includes all roads that are not primarily used for local trips (such as city residential streets and low-volume rural roads that mainly serve local residents). Roads that serve businesses and commerce are almost all on the Federal-aid highway system. Federal-aid roads carry the vast majority of traffic— approximately 87% of total vehicle miles traveled and virtually all truck trips. Because of their low traffic levels, roads that are off the Federal-aid highway system are generally low priorities for investment of scarce resources, so local governments spend a significant percentage of their road resources on Federal-aid routes.

Under this approach, the focus will be on the most critical roads in the state, city and county systems and on requiring each jurisdiction to file a report to demonstrate their accountability to the legislature. Data will not be collected on low-volume roads such as gravel roads or cul-de-sacs. The

data collected will capture the information needed to fulfill the Commission's reporting requirement regarding bridge and pavement conditions from a statewide perspective.

ODOT has come to agreement with cities and counties on the scope of the data to be collected and the information ODOT will collect in reports, which are described in the attached document.

Pavement: Agencies will use three levels or categories to describe pavement conditions – good, fair, and poor. Each agency will use the relatively simple standards to collect the pavement ratings.

Bridges: As with pavement, using three levels or categories to describe bridge conditions is proposed – good, fair, and poor. ODOT inspects state and local bridges every two years. ODOT will provide data from these bridge inspections to local governments, who will use the data from these inspections to report on their conditions.

Commission approval of this proposal at this time will allow cities and counties to begin to collect the data during the summer.

In the coming months, ODOT will work to develop a web-based tool to enable cities and counties to submit their reports electronically. ODOT will continue to work out the details of the process and plan to have it fully in place by the end of the year.

Attachments:

- Attachment 1: Proposed Process for HB 2017 Section 11 Reporting –Pavement and Bridge Conditions

Copies (w/attachments) to:

Jerri Bohard	Travis Brouwer	Tom Fuller	Bob Gebhardt
Paul Mather	Mac Lynde	Leah Horner	Kat Silva
Lynn Averbeck			

Proposed Process for HB 2017 Section 11 Reporting – Pavement and Bridge Conditions January 8, 2018

Background

Section 11 of House Bill 2017 requires the Oregon Transportation Commission (OTC) to develop a set of uniform standards, in coordination with counties and cities, for the consistent description and reporting of the condition of the transportation infrastructure owned by the state, counties, and cities. The infrastructure described must include pavement and bridges. Every city and county must submit the report by February 1 of each odd-numbered year. The reports are to be posted on an OTC developed website. Any city or county failing to file a report under this section may not receive any payments from the State Highway Fund until the report is filed. The OTC must submit a report by April 1 of each odd-numbered year to the legislature on the state of the transportation infrastructure.

Pavement Conditions

Universe of Roads

Every city and county will need to report pavement conditions for roadways within their jurisdictional responsibility every two years. We recommend limiting the pavement condition data collection to the federal-aid system in order to focus the data collection and reporting on the routes with the highest significance. With this proposal, cities and counties will report the condition of paved federal-aid roadways within their jurisdictional responsibility. There are some local agencies with no federal-aid roadways in their jurisdiction; however, they will still be required to submit a report which documents that they don't have any federal-aid roads within their jurisdiction. Information regarding which roadways are federal-aid roadways is available at ODOT's Maps and GIS website <http://www.oregon.gov/ODOT/Data/Pages/Maps.aspx> and TransGIS website <http://gis.odot.state.or.us/transgis/>. Only paved, hard surfaced roadways consisting of Portland cement concrete, asphalt concrete or bituminous surfacing (oil mat surfacing) would be reported. Unimproved, gravel, brick, or stone roadways would be excluded from reporting requirements.

Pavement Condition Description Proposal

The proposal for pavement condition reporting is to use three levels or categories of pavement condition to describe pavement conditions – good, fair, and poor. A description of each pavement condition category with example photos is provided in Attachment A.

Each agency should use their discretion as to how they collect the pavement ratings. However, all ratings must be translated and reported using the standard “good”, “fair”, or “poor” descriptions. Agencies would be required to report the centerline mileage of federal-aid roadway in each pavement condition category within their jurisdiction. Agencies with Pavement Management Systems that use a numerical condition rating process, such as Pavement Condition Index (PCI), may wish to use those scores to determine the appropriate standard description category based on PCI ranges.

Attachment 1

Certified Road Miles

As part of this report, we are also asking jurisdictions to indicate whether they have filed their certified public road miles reports with ODOT. These are annual required federal reports and are part of the apportionment formula used to bring federal transportation dollars to Oregon.

Bridge Conditions

Universe of Bridges

ODOT currently inspects state and local bridges on the National Bridge inventory (more than 20 feet long and open to the public) every two years. ODOT will continue to inspect local agency bridges and perform other tasks such as load rating that is required as part of the National Bridge Inspection standards.

Bridge Condition Description Proposal

As for the Pavement Condition Reporting, we propose to use three levels or categories to describe bridge conditions – good, fair, and poor. The lowest condition rating for the deck, superstructure, and substructure will be used to determine if the bridge is in good, fair or poor condition, similar to the FHWA Performance Measure Rule. ODOT will provide the condition data to the local agency for reporting.

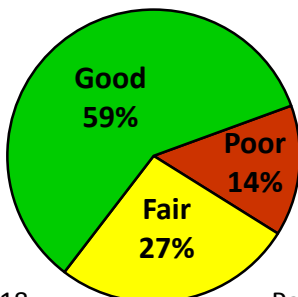
Web Reporting Form Proposal

Every city and county, and ODOT, will self-report pavement and bridge condition information on the web site required to be established under Section 12 of House Bill 2017. The web site will ask for total centerline mileage of paved federal-aid roadway within the agency’s jurisdiction, and a breakdown of that mileage by the standard “good”, “fair”, and “poor” categorical condition descriptions. Attachment B shows a suggested mock-up of the pavement and bridge reporting web page.

Proposed Display of Reported Data

We anticipate that the reported information gathered from the web reporting form in Attachment B be used to prepare tabular and graphical summaries for the OTC and public review. Summary statistics for each agency, such as percentage of good, fair, and poor pavement and bridge; or percent fair-or-better pavement and bridge conditions could be automatically calculated by the reporting web tool. Mock-ups of examples are shown on the next page.

Agency	% Good	% Fair	% Poor	% Fair-or-Better
A	59%	27%	14%	86%
B	72%	16%	12%	88%
C	48%	46%	6%	94%



Example: **Agency A**

230 Total Paved Federal-Aid Miles

Good

Bituminous or Asphalt Concrete Surfaced

Pavement is stable. New or lightly worn appearance. Minor cracking may be present, but cracks are generally less than ¼" wide or are well sealed. May have sporadic cracking in the wheel paths with no or only a few interconnecting cracks and no spalling or pumping. Minor patching and possibly some minor deformation evident. Good riding qualities. Rutting may be present but is generally less than ½".



Jointed Concrete Surfaced

Ride qualities are good. Original surface texture may be worn in wheel tracks exposing coarse aggregate. An occasional concrete panel may have transverse cracks or longitudinal cracks, but cracks are tight and there is no spalling or faulting at the crack. Minor joint faulting may be evident but is less than ⅛". Rutting may be present but is generally less than ½".



Fair

Bituminous or Asphalt Concrete Surfaced

Pavement structure is generally stable with only minor areas of structural weakness or pavement deterioration evident. Cracks, if present, have widths generally less than $\frac{3}{4}$ ". Wheel paths may have widespread, but not continuous, cracking with no or only a few interconnecting cracks and no spalling or pumping. Interconnected cracks forming complete patterns, or with spalling or pumping, are very small localized areas and are not representative of the rest of the section. The pavement may be patched but not excessively. Although riding qualities are good, deformation is more pronounced and easily noticed. Rutting may be present but is less than $\frac{3}{4}$ ".

Jointed Concrete Surfaced

Ride qualities are good. A few concrete panels may have cracks, corner breaks, or divided (shattered) slabs with no more than minor spalling or faulting at the cracks. Patches made of concrete material may be present and are in good condition. Joint faulting, if present, is noticeable but ride quality is still good. Rutting may be present but is less than $\frac{3}{4}$ ".



Poor

Bituminous or Asphalt Concrete Surfaced

Areas of instability, structural deficiency, or advanced pavement deterioration are frequent. Large crack patterns (alligatoring), heavy and numerous patches, potholes, or deformation is very noticeable. Riding qualities range from acceptable to poor. Rutting, if present, is generally greater than $\frac{3}{4}$ ".



Jointed Concrete Surfaced

Ride qualities range from acceptable to poor. Many concrete panels exhibit spalled cracks, corner breaks, or divided (shattered) slabs. Some joints and cracks show loss of base support. Patches may be present and are deteriorated or made of non-concrete material. Joint faulting, if present, has a major effect on ride quality. Rutting, if present, is generally greater than $\frac{3}{4}$ ".



Pavement and Bridge Condition Reporting Template (DRAFT)

As of Reporting Period: January 1, 20xx to December 31, 20xx

Report Due: February 1, 20xx

1. Agency Name _____

2. Centerline Mileage of Paved Federal-aid Roads in Agency Jurisdiction

_____ miles (round to nearest mile or enter zero if there are none to report). If zero, skip to #4 below.

3. Pavement Conditions* (round to nearest mile)

a. "Good" Condition _____ miles

b. "Fair" Condition _____ miles

c. "Poor" Condition _____ miles

Note: total miles of Lines a, b, and c should be the same as Line 2

* Use Standard Pavement Condition Descriptions (Attachment A) for reporting.

Answer the following only if the mileage entered in #2 is zero.

4. My agency has submitted Certified Public Road miles to ODOT. Yes No

(click here to see list of agencies that have reported Certified Public Road miles) – Note: ODOT RICS unit is working on a web link with this information

5. Bridge Conditions

a. "Good" Condition _____ (number of bridges)

b. "Fair" Condition _____ (number of bridges)

c. "Poor" Condition _____ (number of bridges)

6. Agency Contact Info:

Prepared by: _____

Title: _____

Email: _____

Phone No.: _____

HB 2017 Section 11 Reporting – Federal Aid System Frequently Asked Questions (FAQ) January 8, 2018

What is the “Federal Aid System”?

The Federal Aid System is made up of public roads with federally-assigned Federal Functional Classifications of:

- Urban Minor Collector
- Major Collector
- Minor Arterial
- Principal Arterial
- Interstate

The Federal Aid System is shown on ODOT’s [City and County Map PDFs](#) and on ODOT’s interactive mapping tool, [TransGIS](#). ODOT Road Inventory and Classification Services Unit staff are available to answer questions at 503-986-4149.

My agency doesn’t own any roads on the Federal Aid System. Do we still have to report?

Agencies that do not own Federal Aid roads must report that they own zero miles AND that they have submitted their public road mileage totals to ODOT. ODOT will maintain a web listing of the agencies that have reported public road mileage.

My agency’s Transportation Systems Plan (TSP) shows functional classification on our roads. Is this the same as the Federal Aid System?

Most agencies in Oregon use a localized version of functional classification in their TSP that is customized for their specific needs. This is not the same as Federal Functional Classification (FFC). FHWA administers the categories and definitions of FFC. In addition, each FFC designation must be approved by FHWA.

Can a county have more miles of Federal Aid eligible roads than we have paved roads?

Yes, several of our more rural counties have gravel roads that are classified as Major Collectors.

Resources

- [Oregon Mileage Report](#)
- Listing of Federal Aid Mileage Totals by City and County (To be created.)
- [PDF Maps Showing Federal Aid Status](#)
- Interactive GIS Map Showing Federal Aid Status (To be created.)
- [Request changes to the Federal Aid System](#)