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November 10, 2021

Mr. Keenan Konopaski, Legislative Auditor  
Joint Legislative Audit and Review Committee  
106 11<sup>th</sup> Ave SW Suite 2500  
PO Box 40910  
Olympia, WA 98504-0910

Dear Mr. Konopaski:

Thank you for the opportunity to provide another update and the Department's actions to address recommendations from the 2019 audit on the Follow-Up on WSDOT's Long-Term Estimates of Bridge Preservation Needs audit (Report No. 19-07). The audit contained two recommendations, to which you will find the current status and a brief statement.

The Department values an independent review of its operations, which includes the work done by the Joint Legislative Audit and Review Committee. If you have any questions or need anything further in connection with the recommendation follow up, please call me at 360-705-7054, or Steve McKerney at 360-705-7004.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Millar', written over a light blue horizontal line.

Roger Millar, PE, FASCE, FAICP  
Secretary of Transportation

RM: jd  
Attachments

cc: Amy Scarton, WSDOT  
Marshall Elizer, WSDOT  
Doug Vaughn, WSDOT  
Steve Roark, WSDOT  
Mark Gaines, WSDOT  
Jay Alexander, WSDOT  
Tim Rydholm, WSDOT  
Travis Snell, WSDOT

Steven Breaux, WSDOT  
Allison Camden, WSDOT  
Steve McKerney, WSDOT  
Jesse Daniels, WSDOT  
Eric Thomas, JLARC  
Valerie Whitener, JLARC  
Aaron Cavin, JLARC

## Outstanding JLARC Recommendation for: Department of Transportation

### Report: Follow-Up on WSDOT's Long-Term Estimates of Bridge Preservation Needs

**Recommendation 19-07(1):** WSDOT should report to the Legislature on its progress with implementing its bridge management system.

These reports must provide clear timelines and anticipated completion dates for implementing deterioration models, analyzing life cycle costs for the bridge network, and evaluating the impact of different funding scenarios on its bridge conditions.

**Implementation Due Date** (if any): 9/30/2020.

**Hyperlink:** [http://leg.wa.gov/jlarc/reports/2019/WSDOT/f\\_ii/default.html](http://leg.wa.gov/jlarc/reports/2019/WSDOT/f_ii/default.html)

### For each recommendation, please complete these steps:

1. Review the “most recent status” and agency comment (if any).
2. Select the appropriate current status from the drop-down list. (See number 2 below.)
3. If the status of a recommendation has changed, please provide a brief comment supporting the change.

Implementation Status Categories Definitions	
<b>No Change to Current Status</b>	The last reported status is correct.
<b>Implemented</b>	Recommendation has been fully implemented.
<b>Underlying Issue Addressed</b>	Agency addressed the underlying issue raised in a JLARC recommendation in a different manner than suggested by the recommendation, but satisfies the concerns raised.
<b>Action In Progress</b>	Agency is taking steps towards implementing the recommendation and/or implementation of recommendation requires long-term or ongoing efforts.
<b>Partially Implemented</b>	Agency has implemented some, but not all, portions of a recommendation.
<b>Not Implemented to Date</b>	Agency has not implemented recommendation as of July 2020.

### 1. Review most recent status and comments.

This is your agency's most recent status and comment (if any) that JLARC has on file.

### 3. Action in Progress

WSDOT reported the status of implementing its bridge management software (BrM) to the legislature on October 9, 2020. WSDOT will follow up with legislative staff to determine the frequency of future reporting. As indicated during the audit, implementing the BrM system is a perpetual process. Regular bridge inspection data and new information about the effectiveness of preservation treatments will continue to refine the deterioration modeling and life cycle cost analysis calculations. Software updates effect our use of the BrM system as well.

### 2. Select current status.

May or may not reflect a change from the most recent status.

No Change to Current Status

### 3. Fill In agency comment supporting status change, if applicable.

Only necessary if the recommendation status has changed.

Please see attached

## Outstanding JLARC Recommendation for: Department of Transportation

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### Report: Follow-Up on WSDOT's Long-Term Estimates of Bridge Preservation Needs

**Recommendation 19-07(2):** WSDOT and OFM should develop and implement a plan to communicate long-term bridge preservation needs accurately, reliably, and transparently.

WSDOT and OFM should seek input from legislative transportation committee staff to ensure that the plan meets legislative needs. At a minimum, the plan should:

Ensure that bridge preservation estimates are consistent across WSDOT's public reports and presentations. When the figures vary, provide an explanation for the differences.

Include the assumptions, decisions, and timeframes that underlie the estimates, and identify which preservation activities are not included in the estimates. Be explicit in the limitations or uncertainties behind the estimates.

Explain how the investment plans proposed in budget requests will affect future bridge conditions.

**Implementation Due Date** (if any): 09/30/2020

**Hyperlink:** [http://leg.wa.gov/jlarc/reports/2019/WSDOT/f\\_ii/default.html](http://leg.wa.gov/jlarc/reports/2019/WSDOT/f_ii/default.html)

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2. Select the appropriate current status from the drop-down list. (See number 2 below.)
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<b>Partially Implemented</b>	Agency has implemented some, but not all, portions of a recommendation.
<b>Not Implemented to Date</b>	Agency has not implemented recommendation as of July 2020.

### 1. Review most recent status and comments.

This is your agency's most recent status and comment (if any) that JLARC has on file.

### 3. Action in Progress

WSDOT and OFM agreed that long-term bridge preservation needs will be primarily communicated to the Legislature as part of the Capital Preservation and Improvement Program (CIPP) document that accompanies the agency budget submittal. The first CIPP that includes this information was transmitted in September 2020. This plan was communicated to legislative transportation committee staff (staff) and they agreed with its concept. Legislative staff asked to review this most recent budget submittal before concluding whether staff need long-term bridge preservation needs estimates annually or biennially.

During Legislative sessions where WSDOT is submitting a supplemental budget that includes updates to the CIPP, WSDOT will include an update to the long-term bridge preservation needs as part of a smaller CIPP document that accompanies the supplemental budget submittal.

The bridge needs submitted will explicitly state the types of activities included in the estimate and those that are not. Limitations and uncertainties in the estimate will also be explicitly stated. A forecast of overall bridge conditions based on proposed budget request will also be included.

Other agency publications, such as the Gray Notebook and the federally submitted Transportation Asset Management Plan (TAMP), will communicate the same information for bridge preservation needs as the most recent submission of the CIPP and will include the same notations as to types of activities included and those that are not.

2. Select current status.

May or may not reflect a change from the most recent status.

No Change to Current Status

3. Fill In agency comment supporting status change, if applicable.

Only necessary if the recommendation status has changed.

Please see attached

JLARC Audit: *Follow-Up on WSDOT's Long-Term Estimates of Bridge Preservation Needs*  
Status of Audit Recommendations as of November 10, 2021

**Recommendation 19-07(1)**

**Current Status:** No Change in Current Status (In Progress)

WSDOT has been working to implement AASHTO's bridge management software (BrM) to comply with the Federal MAP-21 Act requiring a data driven and performance-based approach to bridge asset management, and to address JLARC's audit recommendation. After considerable time spent translating inspection and asset management data to populate BrM and efforts to begin using the software, we encountered a number of problems. We found significant issues with BrM's optimization functionality that is supposed to account for trade-offs between important performance criteria and help make balanced preservation investment decisions. We also encountered issues with regular software updates that rendered the software unusable for weeks and months at a time. As a result of these and other issues, we will discontinue implementing BrM and pursue other options for bridge asset management. We are finalizing plans to develop our own asset management tool. We will provide our next annual update to the legislature on our plans moving forward by December 31, 2021.

**Recommendation 19-07(2)**

**Current Status:** No Change in Current Status (In Progress)

WSDOT and OFM agreed that long-term bridge preservation needs will be primarily communicated to the Legislature as part of the Capital Preservation and Improvement Program (CIPP) document that accompanies the agency budget submittal. The first CIPP that included this information was transmitted in September 2020. This plan was communicated to legislative transportation committee staff, and they agreed with its concept. We plan to provide an update to the Legislature by November 30, 2021, however there were no changes regarding information on the long-term bridge preservation needs that changed from the CIPP provided last year.

The bridge needs submitted will continue to explicitly state the types of activities included in the estimate and those that are not. Limitations and uncertainties in the estimate will also be explicitly stated. A forecast of overall bridge conditions based on proposed budget request will also be included.

Other agency publications, such as the Gray Notebook and the federally required Transportation Asset Management Plan (TAMP), will communicate the same information for bridge preservation needs as the most recent submission of the CIPP and will include the same notations as to types of activities included and those that are not.