REVIEW OF HOW WSDOT Assesses Highway Preservation and Maintenance Needs

SCOPE AND OBJECTIVES

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STATE OF WASHINGTON



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Why a JLARC Study of How WSDOT Assesses Highway Preservation and Maintenance Needs?

The Washington State Department of Transportation (WSDOT) is responsible for maintaining and preserving a statewide highway system of more than 20,000 lane miles of pavement, over 3,400 bridges and structures, and numerous other supporting assets such as signal systems and drainage ditches.

The 2013-15 Transportation Budget (ESSB 5024) directs the Joint Legislative Audit and Review Committee (JLARC) to conduct a review of the methods and systems used by WSDOT to develop asset condition and maintenance service level needs and subsequent funding requests for highway preservation and maintenance programs.

Maintaining and Preserving Highways Is an Ongoing Responsibility

"Maintenance" and "preservation" represent the activities needed to keep the highway system functioning. Maintenance begins when a highway asset such as a pavement surface, is placed in service and includes activities that keep the asset in service over its lifetime. For example, routine pavement maintenance includes filling potholes, sealing cracks, and restoring traffic markings. Crews from the six WSDOT regional offices perform these routine activities. The 2013-15 Transportation Budget appropriates \$407 million to WSDOT for highway maintenance.

In contrast, preservation occurs at the end of the asset's service life when, even with the best routine maintenance, the asset must be replaced. For example, asphalt pavement typically has a service life of 15 years after which it can no longer provide a smooth and safe driving surface and prevent failure of the underlying substructure. A preservation project would replace the asphalt on a stretch of highway. Preservation work is performed by private contractors. The 2013-15 Transportation Budget appropriates \$699 million to WSDOT for highway preservation.

WSDOT is responsible for identifying highway maintenance and preservation needs. WSDOT also estimates the costs of meeting these needs.

Study Scope

The Legislature directed JLARC to conduct this review in two parts. Phase 1 will provide an overview of the methods and systems used by WSDOT to estimate highway maintenance and preservation needs and costs. Phase 2 will examine whether the methods and systems WSDOT uses for estimating highway preservation and maintenance needs and costs are consistent with industry practices and other appropriate standards.

Study Objectives

Phase 1 of this review will address the following questions:

- What methods and systems does WSDOT use to develop estimates of highway maintenance and preservation needs and costs?
- 2) Is each stage in the estimating process fully documented?

Phase 2 will address the remaining questions of the mandate:

- 3) Are the methods and systems WSDOT uses consistent with industry practices and other appropriate standards?
- 4) Are practices in place to minimize life-cycle preservation and maintenance costs?
- 5) How does WSDOT quantify risks to its need and cost estimates?
- 6) What steps are in place to ensure that requests are not unduly impacted by outside pressures?

Timeframe for the Study

Staff will present the Phase 1 report at the January 2014 JLARC meeting. Staff will present the Phase 2 report at the December 2014 JLARC meeting.

JLARC Staff Contacts for the Study

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JLARC Study Process



- Is this an area of significant fiscal or program impact, a major policy issue facing the state, or otherwise of compelling public interest?
- Will there likely be substantive findings and recommendations?
- Is this the best use of JLARC resources? For example:
 - Is JLARC the most appropriate agency to perform the work?
 - Would the study be nonduplicating?
 - Would this study be costeffective compared to other projects (e.g., larger, more substantive studies take longer and cost more, but might also yield more useful results)?
- Is funding available to carry out the project?