State of Washington
Joint Legislative Audit & Review Committee (JLARC)

State Ferry Terminals: Procedures to Account for and Request Capital Funds Have Improved but Additional Actions Are Needed

Report 11-6

May 18, 2011

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Joint Legislative Audit and Review Committee

1300 Quince St SE

PO Box 40910

Olympia, WA 98504

(360) 786-5171

(360) 786-5180 Fax

www.jlarc.leg.wa.gov

Audit Authority

The Joint Legislative Audit and Review Committee (JLARC) works to make state government operations more efficient and effective. The Committee is comprised of an equal number of House members and Senators, Democrats and Republicans.

JLARC's non-partisan staff auditors, under the direction of the Legislative Auditor, conduct performance audits, program evaluations, sunset reviews, and other analyses assigned by the Legislature and the Committee.

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Committee Approval

On May 18, 2011, this report was approved for distribution by the Joint Legislative Audit and Review Committee.

Acknowledgements

We appreciate the assistance provided by the Washington State Department of Transportation staff in conducting this study. In particular, we would like to thank the State Ferries Division staff for their availability and responsiveness during a very busy time.

State Ferry Terminals: Procedures to Account for and Request Capital Funds Have Improved but Additional Actions Are Needed

Report 11-6

May 18, 2011

STATE OF WASHINGTON

JOINT LEGISLATIVE AUDIT AND REVIEW COMMITTEE

STUDY TEAM
David Dean

PROJECT SUPERVISOR
Keenan Konopaski

LEGISLATIVE AUDITOR
Keenan Konopaski

Copies of Final Reports and Digests are available on the JLARC website at:

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or contact

Joint Legislative Audit & Review Committee
1300 Quince St SE
Olympia, WA 98504-0910
(360) 786-5171
(360) 786-5180 FAX

REPORT SUMMARY

In 2007, the Legislature Added New Statutory Requirements for Capital Planning for Ferry Terminals

In 2006, the State Ferries Division of the Washington State Department of Transportation (State Ferries) proposed a $5.6 billion long-range capital plan. In response, the Legislature directed the Joint Transportation Committee (JTC) to study ferry finances. A consultant report prepared for the JTC identified several concerns about State Ferries' capital cost accounting practices, particularly with regard to budget requests for ferry terminals.

In 2007, the Legislature passed ESHB 2358, which addressed many of the recommendations from the consultant report. The legislation also directed JLARC to assess State Ferries' progress in implementing these new statutory requirements.

The Office of Financial Management and State Ferries Have Made Progress in Implementing the 2007 Legislation

Since the Legislature's action, the Office of Financial Management (OFM) and State Ferries have made progress in implementing provisions of the 2007 legislation. Improvements include the following:

- OFM developed definitions of preservation, improvement, and maintenance for State Ferries;
- State Ferries revised its capital budget request procedures;
- State Ferries developed a new approach for allocating systemwide and administrative costs; and
- State Ferries updated its life-cycle cost model for ferry terminals.

State Ferries Has Not Fully Complied with Statutory Requirements for Requesting and Using Preservation Funding

ESHB 2358 required appropriations made for ferry terminal preservation projects be spent only on preservation and only when warranted by asset condition. SSB 6932, enacted in 2008, added a further requirement for the Department to base its ferry terminal budget requests on a required life-cycle cost model. State Ferries has not fully complied with these statutory requirements.

JLARC reviewed the condition ratings State Ferries' assigned to assets included in the life-cycle cost model for ferry terminals. Of the $46 million appropriation State Ferries received for the 2009-11 Biennium, only $13.5 million (29 percent) was for assets judged by the agency to be in poor or substandard condition. In contrast, $32.5 million (71 percent) was for work on assets in good or fair condition or not rated. State Ferries did not provide OFM or the Legislature with information in its budget request showing that some requested preservation projects included work on structures that were still in good or fair condition or that had not been rated.

State Ferries Indicates the Nature of Ferry Terminal Preservation Work Often Requires Early Asset Replacement

State Ferries provided two justifications for the replacement or renovation of assets that are still in good or fair condition or that have not been rated for condition:

- The Division maintains that early replacement is necessary when some components of a system are due for replacement but other closely related components are not.
- The Division asserts preservation work is warranted on some structures that are still in good or fair condition because allowing further deterioration could result in a structural or safety concern.

While these may be reasonable arguments, State Ferries has not documented these factors in its life-cycle cost model, nor has the Division disclosed them in its budget requests.

Overall Conclusion: Procedures to Account for and Request Capital Funds for State Ferry Terminals Have Improved, but Additional Actions Are Needed

While OFM and State Ferries have improved procedures to account for and request capital funds for state ferry terminal projects, further actions are needed to comply with statute and to enhance transparency and accountability. These actions are necessary to ensure the Legislature receives appropriately detailed information and justification when State Ferries requests funding for ferry terminal preservation projects.

Recommendation

The Washington State Department of Transportation, in collaboration with the Office of Financial Management, should develop procedures for providing more informative capital budget requests for State Ferry terminal preservation. The new procedures should require the Department to:

1. **Modify the condition categories in the life-cycle cost model to include an emergent category that would be used to explain funding requests for assets in good or fair condition that require preservation work to avoid deterioration resulting in structural or safety concerns;**
2. **Include asset condition ratings with capital budget requests; and**
3. **Provide justification for exceptions to replace or renovate assets that are not justified solely by asset condition.**

Background

Legislature Sought Improved Information on State Ferry Finances

The 2006 Legislature directed the Joint Transportation Committee (JTC) to conduct a finance study of the State Ferry system. The study was to facilitate legislative policy discussions and decisions in advance of a long-term funding solution for State Ferries. JTC contracted for this work, which focused initially on the capital needs for ferry terminals. Terminals were the focus because vessel acquisition and deployment had received considerable review in previous legislative studies. In January 2007, JTC's contractor released its first report.

Consultant Report Identified Concerns About the Capital Cost Accounting Practices of the Washington State Ferries

The 2007 consultant report found State Ferries had requested capital funds for terminals that were in good condition.

When consultants reviewed State Ferries' life-cycle cost model for ferry terminals, they identified several concerns. Specifically, the consultants found the model was not updated to reflect the actual condition of terminals based on inspection reports. The consultants found State Ferries' model did not reflect the life of steel and concrete structures used to replace older timber structures, and it included systems (e.g., water and sewer systems) that are not ordinarily replaced at the end of a standard life cycle. The consultants reviewed the actual condition of the terminals based on inspection reports and they developed a sample condition rating system. In this sample system, 84 percent of systems inspected were in a state of no deterioration and 96 percent had either no deterioration or minor deterioration in which corrective action is optional. The consultants concluded that inspections indicated that most of the terminals were in good condition and presented a different picture from the one suggested by State Ferries' life-cycle cost model. As a consequence, State Ferries was making budget requests based on inaccurate information about actual conditions.

Consultants found State Ferries' definitions of project categories overlapped and created confusion.

The consultants found State Ferries had been using capital funds for projects that did not substantially extend the life of its assets and that were essentially maintenance projects. For example, projects intended only to extend the life of an asset for a few years until a major replacement could be scheduled had been classified as capital projects. However, the consultants pointed out that under a definition developed by the Office of Financial Management for the capital budget, capital projects are either new facilities or significant long-term renewal improvements to existing facilities. Under this definition, State Ferries' category of interim preservation projects would have been considered maintenance.

The consultants also found that State Ferries had been using a very broad definition of preservation, with limited differentiation between the preservation and improvement program. The consultants pointed out that there were few differences between projects that replaced assets to "meet existing service plans," which State Ferries had been classifying as preservation, and projects that added "capacity to meet changes in demand and increase capacity," which State Ferries had been classifying as improvement. According to the consultant report, essentially any project could fall into the preservation category because State Ferries defined it as improving program efficiency and effectiveness, resulting in cost savings or cost avoidance, and/or benefiting customers and the public.

The report explained that the problems with project category definitions had led to an overstatement of the preservation work. This was important, the consultants explained, in light of a recommendation by a 2001 Legislative Task Force on Ferries that the Legislature give priority funding to preservation projects.

Consultants found all systemwide projects were allocated to preservation, overstating the true cost of the preservation program.

The consultants found State Ferries had been allocating the cost for all systemwide projects, including all of the administrative overhead expenses for terminal projects, solely to the preservation program. Examples of systemwide projects cited in the consultant report include implementation of an electronic fare system, terminal physical security infrastructure, and miscellaneous terminal projects. This was resulting in an overstatement of the amount of the budget going to preservation.

Legislature Responded by Adding New Statutory Requirements for Capital Planning for Ferry Terminals

Subsequent to the release of the consultant report, the Legislature passed ESHB 2358 (2007) that included the following changes to statute:

- The Legislature defined ferry system "maintenance costs," "preservation projects," and "improvement projects" as having the same meanings as used in budget instructions developed by the Office of Financial Management.
- The Legislature established that appropriations made for the State Ferries' capital program may not be used for maintenance costs.
- The Legislature directed State Ferries to allocate systemwide and administrative capital program costs to specific capital projects using a cost allocation plan developed by the Department. The systemwide and administrative capital program costs were required to be identifiable.
- The Legislature required State Ferries to maintain a life-cycle cost model on capital assets and specified requirements for the model. The life-cycle cost model is an inventory of ferry system assets that includes information on asset condition and the estimated life of each asset. The life of individual assets must be estimated using available industry standards or Department-adopted standards when industry standards are not available. All assets in the life-cycle cost model must be inspected and updated at least every three years.

- The Legislature specified that, "Appropriations made for preservation projects shall be spent only on preservation and only when warranted by asset condition." Preservation monies may not be spent on master plans, right-of-way acquisition, or other nonpreservation items.

The 2007 legislation also directed JLARC to assess State Ferries' progress in implementing the new statutory requirements. In 2008, the Legislature added a requirement that the life-cycle cost model be the basis for developing budget requests for ferry terminal and vessel preservation funding.

Appendix 4 of this report provides the sections of the Revised Code of Washington pertinent to this discussion.

Audit Results

The Office of Financial Management and State Ferries Have Made Progress in Implementing the 2007 Legislation

The Office of Financial Management developed definitions of preservation and improvement for State Ferries.

OFM directive 08B-03, issued in May 2008, includes definitions of preservation and improvement for use by State Ferries. OFM defined "improvement" as involving the construction of new assets, additions, or added capacity to existing assets. Generally, the purchase of right-of-way was to be considered an improvement under the new definition. OFM defined "preservation" as projects that preserve and extend the life of existing assets but do not significantly change the program use of the asset. Preservation projects also are to include replacement-in-kind of an existing asset which may include a change in the materials used to construct the asset, but without changing the existing use of the asset. OFM defined "maintenance" as a systematic day-to-day process funded by the operating budget to control the deterioration of facilities. Section 5 of the instructions provides some additional information related to these definitions.

State Ferries revised its capital budget request procedures to exclude maintenance from the capital program.

To address the new requirements of ESHB 2358, State Ferries revised its procedures for preparing capital budget requests for submission to the Legislature. One of the agency's initial steps to address the legislation was to purge its capital planning system inventory of projects that met the definition of maintenance work. State Ferries also revised its scheme for classifying capital projects as either preservation or improvement work in accordance with statutes and directions from the Office of Financial Management. State Ferries also updated its instructions for capital program managers, providing definitions that distinguish between capital projects and maintenance and between capital preservation projects and capital improvement projects.

State Ferries developed a new approach for allocating systemwide and administrative costs.

State Ferries' new approach distinguishes the two types of systemwide projects: a) projects that occur directly at individual terminal locations, and b) support projects that are not directly attributable to individual terminals. Work that previously was tracked as a "systemwide" project now is separated into direct investments at terminals and project support activities. State Ferries also provides a quarterly report to the Legislature and the Office of Financial Management showing the distribution of indirect activities expenditures. Indirect activity costs are broken out two ways:

- By type of activity (i.e., terminal project support, vessel project support, and administrative support); and
- By type of project (i.e., terminal preservation projects, vessel preservation projects, terminal improvement projects, and vessel improvement projects).

State Ferries has updated its life-cycle cost model for ferry terminals.

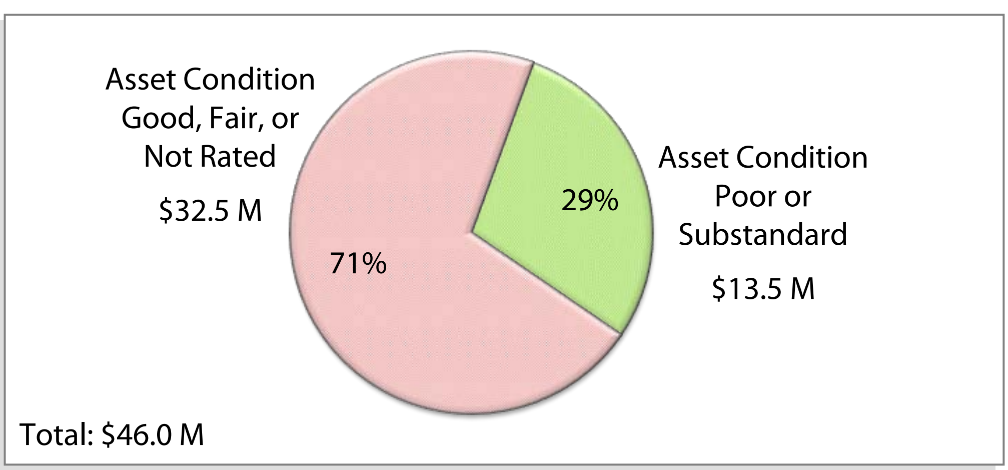
State Ferries' terminal life-cycle cost model includes information on the condition and remaining service life of more than 800 structures at the 19 terminals and a repair facility that comprise the State Ferry system. State Ferries has taken the following actions to address the new requirements in ESHB 2358:

- Reviewed asset life cycles and made adjustments where appropriate to reflect industry best practices;
- Adjusted the service lives of assets based on 2007 and 2008 inspection reports; and
- Removed utilities and assets not yet built from the updated life-cycle cost model.

State Ferries Has Not Fully Complied with Statutory Requirements for Requesting and Using Preservation Funding

ESHB 2358 §9(2) required appropriations made for preservation projects be spent only on preservation and only when warranted by asset condition. SSB 6932 §4(3), which was enacted in 2008, added a further requirement for the Department to base its ferry terminal preservation budget requests on its life-cycle cost model. However, State Ferries has not fully complied with statutory requirements to base its budget requests on the life-cycle model and only spend preservation funding when warranted by asset condition.

Exhibit 1 – 71 Percent of Appropriation Was for Assets in Good or Fair Condition or Not Rated



Source: JLARC analysis of ferry terminal preservation projects approved for 2009-2011.

Department records show State Ferries continues to request funds for assets that are in good or fair condition.

JLARC reviewed the $46 million capital appropriation that State Ferries received for the 2009-11 Biennium. As shown in Exhibit 1, of the $46 million appropriation State Ferries received, $13.5 million (29 percent) was for assets judged by the agency to be in poor or substandard condition. In contrast, $32.5 million (71 percent) was for work on assets in good or fair condition or not rated. Appendix 3 includes a complete list of assets and condition ratings included in State Ferries' terminal preservation appropriation for the 2009-2011 Biennium.

Nine of 15 projects on the 2009-11 project list included the early replacement or renovation of assets.

Ferry terminal preservation projects are made up of a package of individual assets. For example, a terminal transfer span replacement project may include replacing the transfer span itself and associated towers, bridge seat, apron, and electrical and mechanical systems. Of the 15 ferry terminal preservation projects on the 2009-11 project list, nine include assets that will be replaced or renovated an average of six years earlier than the preservation date shown in the State Ferries life-cycle cost model.

WSDOT did not provide information in its project budget requests that clearly identified the condition of the individual ferry terminal assets.

In its budget request, State Ferries did not provide OFM or the Legislature with information showing that some preservation projects included work on structures that were still in good or fair condition or that had not been rated. This is because preservation project descriptions included in the budget request did not include detailed information about the condition of individual component structures, such as the information contained in Appendix 3. Subsequent to the submission of its budget request, WSDOT provided technical inspection reports to legislative staff. However, these reports themselves do not provide adequate information to clearly translate into the condition ratings displayed in Exhibit 1 of this report.

State Ferries Indicates the Nature of Ferry Terminal Preservation Work Often Requires Early Asset Replacement

State Ferries provided two primary justifications for the replacement or renovation of assets that are still in good or fair condition or that had not been rated for condition:

- First, State Ferries explains early replacement of some structures is necessary when some components of a system are due for replacement but other closely related components are not. For example, at the Port Townsend terminal, State Ferries is replacing an existing mechanical bridge and transfer span system with a new hydraulic system. Even though five of six components of the existing mechanical system were still in fair condition, State Ferries explains the components of the existing system are not compatible with the new hydraulic system. Therefore, all of the components had to be replaced with updated compatible ones.

- Second, State Ferries asserts preservation work is warranted on some structures that are still in good or fair condition because allowing further deterioration could result in a structural or safety concern. For example, at the Seattle terminal, State Ferries is replacing the north trestle with a new concrete and steel trestle. Even though five of five areas of the existing trestle were still in fair condition, State Ferries explains replacement is needed to keep traffic on these trestles and avoid imposing weight restrictions.

However, State Ferries has not documented these factors in its life-cycle cost model, nor has it disclosed them in its budget requests. As a consequence, the majority of preservation funding requests are not based on the model and do not include information that documents asset condition warranting replacement.

Conclusions and Recommendations

Overall Conclusion: Procedures to Account for and Request Capital Funds for State Ferry Terminals Have Improved but Additional Actions Are Needed

Capital planning for terminal preservation has improved in response to legislative requirements, but additional actions are needed to comply with statute and enhance transparency and accountability. These actions are necessary to ensure the Legislature receives appropriately detailed information and justification when State Ferries requests funding for ferry terminal preservation projects.

Recommendation

The Washington State Department of Transportation, in collaboration with the Office of Financial Management, should develop procedures for providing more informative capital budget requests for State Ferry terminal preservation. The new procedures should require the Department to:

1. **Modify the condition categories in the life-cycle cost model to include an emergent category that would be used to explain funding requests for assets in good or fair condition that require preservation work to avoid deterioration resulting in structural or safety concerns.**
2. **Include asset condition ratings with capital budget requests; and**
3. **Provide justification for exceptions to replace or renovate assets that are not justified solely by asset condition.**

Legislation Required:	None
Fiscal Impact:	JLARC assumes that this can be completed within existing resources.
Implementation Date:	July 1, 2011

APPENDIX 1 – SCOPE AND OBJECTIVES

AUDIT OF CAPITAL COST ACCOUNTING PRACTICES OF THE WASHINGTON STATE FERRIES

SCOPE AND OBJECTIVES

APRIL 21, 2010

STATE OF WASHINGTON

JOINT LEGISLATIVE AUDIT AND REVIEW COMMITTEE

STUDY TEAM
David Dean

PROJECT SUPERVISOR
Keenan Konopaski

LEGISLATIVE AUDITOR
Ruta Fanning

Joint Legislative Audit & Review Committee
1300 Quince St SE
Olympia, WA 98504-0910
(360) 786-5171
(360) 786-5180 Fax

Website: www.jlarc.leg.wa.gov

e-mail: barbara.neff@leg.wa.gov

Why a JLARC Study of Capital Cost Accounting Practices of the Washington State Ferries?

The 2009-11 Transportation Budget (2009 ESSB 5352 §108(1)) directed JLARC to conduct an audit of the capital cost accounting practices of the Washington State Ferries. The assignment follows a 2006 Joint Transportation Committee study of ferry financing and 2007 legislation (ESHB 2358) addressing a broad range of State Ferries operational issues.

MVET Repeal Reduced Ferries Capital Funding

In 1999, Washington voters passed Initiative 695, repealing the Motor Vehicle Excise Tax (MVET). Although the initiative was challenged in court and ultimately ruled unconstitutional, the 2000 Legislature passed SB 6865 reinstating many of the provisions of the initiative. This resulted in a large revenue loss for State Ferries. The action came at a time when many capital assets of the State Ferry system were aging and in need of attention. The ferry system also was facing higher fuel and labor costs, creating additional funding requests at a time of decreasing revenues.

Legislature Sought Improved Information on State Ferry Finances

In the years since the repeal of MVET, no long-term replacement funding mechanism has been established to address the capital needs of State Ferries. In addition, during the intervening years members and legislative staff have raised questions about the exact size of the capital needs. To address those questions, in 2006 the Legislature directed the Joint Transportation Committee (JTC) to conduct a finance study of the State Ferry system. The study was to facilitate legislative policy discussions and decisions in advance of a long-term funding solution for State Ferries.

JTC contracted for this work, which focused initially on the capital needs for ferry terminals. Terminals were the focus because vessel acquisition and deployment had received considerable review in previous legislative studies. In January 2007, JTC's contractor released its first report identifying several concerns with ferry terminal cost accounting practices. Effective cost accounting practices are important to ensure consistent and reliable accounting and planning information to support agency budget requests. Subsequently, the Legislature passed 2007 ESHB 2358, which addressed many of the recommendations in the January report.

As directed by the Legislature in the 2009 Transportation Budget, JLARC's audit will follow up on key issues identified in the ferry financing study and requirements of ESHB 2358.

Study Scope

JLARC will audit the capital cost accounting practices of the Washington State Ferries. Consistent with the JTC work, the audit will focus on ferry terminals only. The audit will review the assignment of preservation and improvement costs for FY 2010 expenditures, progress in implementing an updated life-cycle cost model, and implementation of a statutorily required cost allocation methodology.

Study Objectives

The study will have three parts and will answer the following questions for ferry terminal projects:

Capital Cost Accounting for State Ferries

1) Are the costs assigned to capital accounts actually capital costs?
2) Are capital costs being properly categorized as either preservation or improvement costs according to the requirements of state statutes?
3) Are capital costs assigned consistent with legislative appropriations?

Life-Cycle Cost Model for State Ferries

4) Has State Ferries developed a life-cycle cost model as required by RCW 47.60.345?
5) Has State Ferries appropriately updated the model when asset inspections are made?

Cost Allocation for State Ferries

6) Did State Ferries develop a cost allocation methodology required by ESHB 2358?
7) Did State Ferries allocate costs consistent with the methodology?
8) Are sufficient controls in place, such as staff training, to ensure correct allocation in the future?

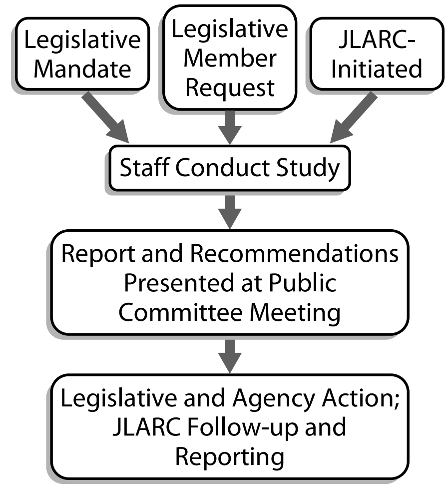
Timeframe for the Study

Staff will present the preliminary report in January 2011 and a proposed final report in February 2011.

JLARC Staff Contact for the Study

David Dean (360) 786-5293 david.dean@leg.wa.gov

JLARC Study Process



Criteria for Establishing JLARC Work Program Priorities

- Is study consistent with JLARC mission? Is it mandated?
- 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 cost-effective 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?

APPENDIX 2 – AGENCY RESPONSES

- Washington State Department of Transportation
- Office of Financial Management

Washington State
Department of Transportation
Paula J. Hammond, P.E.
Secretary of Transportation

Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300

360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

May 6, 2011

Mr. Keenan Konopaski, Legislative Auditor
Joint Legislative Audit and Review Committee
1300 Quince St SE
Olympia, WA 98504-0910

Subject: Updated Response

Dear Mr. Konopaski:

Thank you for the opportunity to respond to the Joint Legislative Audit and Review Committee's (JLARC) Audit of the *Washington State Department of Transportation's (WSDOT) Capital Cost Accounting Practices of the Washington State Ferries*. We reviewed the report with the revised recommendation, and have provided our formal response below.

We appreciate the review of our agency's work in this area, work which is vital to provide safe, secure, efficient, reliable, and environmentally sound marine transportation for people and goods throughout Puget Sound. Also, we would like to thank you and your staff for the work put into this report.

We are pleased that JLARC found the Department had made progress in complying with statutory requirements from the 2007 legislation. The report also says that State Ferries did not fully comply with all the requirements for requesting and using preservation funding for ferry terminals. It is important to recognize that State Ferries did not properly document or create a clear audit trail for compliance with statutory requirements to request preservation funds when warranted by asset condition, but did communicate detailed asset information to legislative staff to support budget requests during the budget process for 2009-2011.

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WSDOT takes pride in our work and strives for excellence and integrity in everything we do. In this light, WSDOT appreciates JLARC's recommendation on properly communicating the asset condition in future budget requests for ferry terminal preservation funding. We will continue to work with the Legislature and Office of Financial Management (OFM) to make the budget request process more transparent, having the asset conditions and project justifications at the forefront of the budgeting process. We have begun these efforts for the 2011-13 budget process.

We have developed an action plan that further addresses the audit's recommendation. Progress on our action plan will be reported through JLARC's annual recommendation tracking process.

Sincerely,

Stephen T. Reinmuth.
Chief of Staff

STR:sm

cc: Paula Hammond, MS 47316, WSDOT Secretary of Transportation
David Dye, MS 47316, WSDOT Deputy Secretary
Jerry Lenzi, MS 47315, WSDOT Assistant Secretary, Chief Engineer
Amy Arnis, MS, 47319, WSDOT Assistant Secretary, Chief Financial Officer
Bill Ford, MS 47400, WSDOT Assistant Secretary, Administration
David Moseley, MS TB-32, WSDOT Assistance Secretary, Ferries
Jean Baker, MS TB-32, WSDOT Deputy Chief, Ferries Admin and Finance
George Capacci, MS TB-32, WSDOT Deputy Chief, Ferries Construction Operations
Maureen Larson, MS TB-32, WSDOT Ferries Controller
Albert McCoy, MS TB-32, WSDOT Ferries Director of Budget
Tim Smith, MS MS TB-32, WSDOT Ferries Director Terminal Engineer
John Bernhard, MS TB-32, WSDOT Ferries Director Program Development
Bob Covington, MS 47420 WSDOT Director Accounting and Financial Services
Gary Lebow, MS 47325, WSDPT Program Development Manager, Other Modes
Dillon Auyoung, MS 47318, WSDOT Director Governmental Relations
Steve Pierce, MS 47322, WSDOT Director Communications
Steve McKerney, MS 47320, WSDOT Director Internal Audit Office
Jesse Daniels, MS 47320, WSDOT External Audit Liaison
David Dean, JLARC Audit Coordinator
Robin Rettew, OFM Senior Budget Assistant
Clint McCarthy, OFM Budget Assistant

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Recommendation:

The Washington State Department of Transportation, in collaboration with the Office of Financial Management, should develop procedures for providing more informative capital budget requests for State Ferry terminal preservation. The new procedure should require the Department to:

1. *Modify the condition categories in the life-cycle cost model to include an emergent category that would be used to explain funding requests for assets in good or fair condition that require preservation work to avoid deterioration resulting in structural or safety concerns.;*
2. *Include asset condition ratings with capital budget requests; and*
3. *Provide justification for exceptions to replace or renovate assets that are not justified solely by asset condition.*

Agency Position: Concur

Comments on Recommendation:

We concur with the audit's recommendation. For the 2011-13 budget request the Department has already made efforts to provide both asset condition ratings, and narrative justification for terminal preservation funding requests for assets in better than *Poor* condition. This builds on Department efforts in the 2009-11 budget process described further below in our comments on the audit's conclusions. We do appreciate JLARC's recommendation, as it will help ensure we provide adequate information with our initial budget request.

We agree that the Department should continue to make improvements to the Life-Cycle Cost Model (LCCM) to track major components of assets and refine its asset condition ratings, which will be valuable in the terminal capital budget process. The LCCM is important in determining whether asset condition warrants a request for preservation funds; however, it is also important to track assets at the appropriate level of detail to balance the benefits of the LCCM with costs to maintain the model. Some key points to consider follow:

- The condition of an entire asset, as it is defined and rated in the LCCM, should not always be the sole qualifier in meeting legislative intent for spending preservation funds. While an asset may have an overall rating of *Good* or *Fair*, there may be components of that same asset that are not tracked specifically in the LCCM that have a *Poor* or *Sub-Standard* condition that are in need of preservation work. For example, an electrical system of a transfer span may have a *Good* overall rating, while a component of that electrical system may still need to be repaired or replaced for continued operation of that asset. That component may need to be replaced due to its condition, or other factors such as the

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impossibility of replacing another asset without removing and replacing the component in question.

- We are open to making improvements in our LCCM including the components of assets tracked and refinements to the rating system to increase its usefulness. We continue to make sound efforts to track the appropriate assets in our LCCM based on industry standards, historic maintenance data, and best practices. Further, not every component of every asset is tracked in the LCCM, to maintain balance between cost and benefit received and its effectiveness as a budgeting tool.

- Also, at times the Department will recommend spending preservation funds in advance of the LCCM due date. For example, in a trestle replacement project the Department may need to complete extensive environmental impact studies and preliminary engineering in advance of construction. The work required in advance of construction can take several years. While the trestle may have a *Fair* condition rating at the time the Department requests funds for environmental and engineering work, it's anticipated to be in *Poor* condition by the time construction starts. This type of information will be properly reflected in justification that accompanies budget requests, and not simply in the LCCM rating.

Comments on Report Conclusions:

The audit report states that Ferries has not complied with the statute because 71% of the 2009-11 appropriation for terminal preservation was for assets rated in *Good or Fair Condition or Not Rated*. The audit focuses on what was not in the initial budget request, however, there was additional communication between Department and Legislative staff to support and explain the preservation budget request for this biennium. The Department provided information to Legislative staff to support the budget request, including information describing the asset condition. We also provided asset rating codes and documents to translate rating codes to asset conditions of *Good, Fair, Poor, and Sub-Standard*. We recognize, however, that the information we provided for the 2009-11 budget process was voluminous and could have been clearer.

To illustrate the nature of information the Department provided to Legislative staff, over 50% of the preservation appropriation request, and most of the amount in question in the audit report, included preservation work for several key reasons that aren't reflected in overall asset condition ratings but rather in supplemental communications during the budget process. Examples include:

- Continuing construction work on the Eagle Harbor Facility to meet current structural and seismic codes.
- Replacing damaged assets where damage was incurred after the triennial rating reviewed in the audit, for example when a dolphin structure was hit and damaged by a vessel.

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- Design and environmental permit requirement funding for work required on assets that are expected to degrade to *Poor* condition by the time the required advance work is completed.

WSDOT Action Steps:

- For the 2011-13 terminal preservation budget requests, the Department provided the *Condition Rating* and *Due Year* information to Legislative and OFM Staff as well as documentation justifying preservation work for assets in advance of their *Due Year*. The Asset Condition Rating is a factor in determining the *Due Year* for preservation work.

- To build on the step above already taken, the Department will work with OFM to ensure we provide the necessary information in support of future capital budget requests for terminal preservation.

- As part of the actions listed above, the Department will work to update the LCCM to track major components of terminal assets and look for refinements to its asset rating system in order to ensure the usefulness of LCCM as a budgeting tool. The Department will also work with OFM to improve the LCCM with an emergent need category and determine how assets are tracked in that category.

- The Department is also in the process of developing and implementing an "Asset Management System." This system will use best practices for providing the department with tools to help repair or replace terminal assets at their optimal time, with consideration given to lowest life cycle cost, safety, and operational and travel time impacts. We expect to have this system operating and in use for the 2013-15 terminal capital budget requests for the assets as defined and rated in the current LCCM.

STATE OF WASHINGTON
OFFICE OF FINANCIAL MANAGEMENT
Insurance Building, PO Box 43113 • Olympia, Washington 98504-3113 • (360) 902-0555

May 5, 2011

TO: Keenan Konopaski, Legislative Auditor
Joint Legislative Audit and Review Committee

FROM: Marty Brown MB
Director

SUBJECT: REVISED REVIEW OF JLARC STATE FERRY TERMINALS – PRELIMINARY REPORT

Thank you for the opportunity to respond to your preliminary report titled: "State Ferry Terminals: Procedures to Account for and Request Capital Funds Have Improved but Additional Actions Are Needed." Here are our comments on the three recommendations contained in the report.

Recommendation	**Agency Position**	**Comments**
1. Modify the condition categories in the life-cycle cost model (LCCM) to include an emergent category used to explain funding requests for assets in good or fair condition that require preservation work to avoid deterioration resulting in structural or safety concerns.	Concur	We agree that an additional category in the LCCM would be more informative and will make that change in the next budget cycle.
2. Include asset condition ratings with capital budget requests.	Concur	We agree that more comprehensive information is needed for assets rated in fair or good condition and proposed for replacement or renovation in preservation budget requests. We will update our next budget instructions to reflect this requirement. However, we caution against making this information too technical, elaborate, or expensive to report.
3. Provide justification for exceptions to replace or renovate assets that are not justified solely by asset condition.	Concur	State Ferries should provide high-level summaries for these exceptions, not detailed technical diagrams and explanations.

Again, thank you for the opportunity to comment. Please don't hesitate to contact Robin Rettew of my staff at 902-0609 with any questions.

cc: Paula Hammond, Secretary, Washington State Department of Transportation
Robin Rettew, Senior Budget Assistant, Office of Financial Management

APPENDIX 3 – ASSET CONDITION RATINGS

Exhibit 2 – 2009-2011 Ferry Terminal Preservation Project List and Condition Ratings

Note: State Ferries conducts inspections of ferry terminals and rates the condition of individual assets. The projects listed below are the ferry terminal preservation projects funded in the 2009-2011 and 2010 supplemental transportation budgets. The ratings shown below are as of 2007, which was the information used by State Ferries to prepare its 2009-2011 Biennial Budget request. Structures that were rated in good or fair condition, or not rated for condition, are highlighted below in pink; the structures that were rated in poor or substandard condition are highlighted in green.

Location/ Project #	ID	Description	Condition Rating	Amount
Eagle Harbor				
M03706A	2380	Trestle, Timber, Large, Building Foundation	Fair	$1,406,000
	2378	Trestle, Timber Pile/Concrete Deck	Fair	$1,033,000
	2381	Trestle, Heavy Timber, Former Trask Pier	Fair	$298,000
	2406	Main Terminal Building	Not Rated	$11,153,000
	7002	Slip E Transfer Span Coating Repairs	Not Rated	$134,000
	2410	Storage Buildings	Not Rated	$133,000
M03721A	2361	Towers (L & R), Timber, Slip E	Fair	$65,000
	4996	Transfer Span Electrical Systems, Slip E	Fair	$65,000
	2371	Apron, Cable, Relocated, Slip E	Fair	$21,000
	4997	Transfer Span Mechanical Systems, Slip E	Poor	$65,000
	4995	Transfer Span, Relocated Truss, Slip E pre 1981	Poor	$18,000
Edmonds				
M03819A	2415	Dolphin, Right Inner, 51 Timber	Sub-Standard	$1,587,000
Keystone				
M04112A	2544	Wingwalls, Timber	Sub-Standard	$2,705,000
Kingston				
M04212A	2605	Bulkhead, Steel Sheetpile	Poor	$350,000
Lopez				
M04312A	2640	Wingwalls, Floating	Poor	$1,438,000
Mukilteo				
M04420A	2672	Dolphin, Left Outer, Floater #18, Timber	Fair	$6,317,000
M04421A	5044	Transfer Span Electrical Systems, Slip 1	Fair	$786,000
	5045	Transfer Span Mechanical Systems, Slip 1	Poor	$1,813,000

Location/ Project #	ID	Description	Condition Rating	Amount
Port Townsend				
M04722A	2772	Dolphin, Left Outer, Floater #31, Main N 1	Fair	$1,406,000
	2773	Dolphin, Right Outer, 70 Timber, Main N 1	Fair	$1,406,000
	2771	Dolphin, Left Inner, 70 Timber, Main N 1	Fair	$832,000
M04731A	5060	Transfer Span, Girder, Main N 1	Fair	$819,000
	2778	Towers (L & R), Timber, Main N 1	Fair	$716,000
	2784	Bridge Seat, Concrete, Main N 1	Fair	$394,000
	5061	Transfer Span Electrical Systems, Slip 1	Fair	$247,000
	2782	Apron, Cable, Main N 1	Fair	$71,000
	5062	Transfer Span Mechanical Systems, Slip 1	Poor	$489,000
Seattle				
M04843A	2851	Walkway Foundations/Columns, Steel/Concrete, OHL 3	Fair	$467,000
	2852	Fixed Walkway, Steel, OHL 3	Fair	$303,000
	2856	Lift Tower, H Pile/Concrete/Steel, OHL 3	Fair	$166,000
	2853	Transfer Span, OHL 3	Fair	$104,000
	5079	Transfer Span Electrical Systems, Slip 3	Fair	$96,000
	5088	Electrical Systems, OHL 3	Fair	$71,000
	2854	Cab, OHL 3	Good	$69,000
	2855	Pedestrian Apron, Hoist-Operated, OHL 3	Good	$9,000
	7558	NEW Dolphin, Right Inner, Steel, Slip 3	Not Rated	$276,000
	2818	Towers (L & R), H Pile, Bain N 3	Poor	$310,000
	5089	Mechanical Systems, OHL 3	Poor	$283,000
	5078	Transfer Span, Girder, Bain N 3	Poor	$250,000
	5080	Transfer Span Mechanical Systems, Slip 3	Poor	$164,000
	2824	Apron, Cable, Bain N 3	Poor	$22,000
	2810	Dolphin, Right Inner, Timber (Dogleg), Aux Ctr 2	Sub-Standard	$164,000
	2812	Dolphin, Left Inner, Timber (Dogleg), Bain N 3	Sub-Standard	$164,000
	2827	Bridge Seat, Pipe Pile/Concrete, Bain N 3	Sub-Standard	$153,000
M04854A	2826	Bridge Seat, Timber, Aux Ctr 2	Fair	$112,000
	2823	Apron, Cable, Aux Ctr 2	Fair	$30,000
	2817	Towers (L & R), Pipe Pile/Concrete/Steel, Aux Ctr 2	Good	$8,000
	5077	Transfer Span Mechanical Systems, Slip 2	Poor	$119,000
	5087	Mechanical Systems, OHL 2	Poor	$39,000

Location/ Project	ID	Description	Condition Rating	Amount
Seattle *(continued)*				
M04858A	2833	Trestle, Timber, Area E, North Section	Fair	$371,000
	2830	Trestle, Timber, Area B, North Center Rectangle (on 1938 piles)	Fair	$227,000
	2832	Trestle, Timber, Area D, Northwest Section	Fair	$227,000
	2829	Trestle, Timber, Area A, East Triangle	Fair	$125,000
	2831	Trestle, Timber, Area C, South Center Rectangle	Fair	$113,000
	2835	Bulkhead, Timber (contains retained fill)	Fair	$38,000
	2865	Pavement on Timber Trestle	Fair	$29,000
	2881	Main Terminal Building	Not Rated	$355,000
	2883	Marriott Offices and Storage, WSF Crew Rooms	Not Rated	$8,000
	2837	Bulkhead, Steel Sheetpile (contains retained fill)	Poor	$38,000
Shaw				
M04904A	2888	Dolphin, Right Inner, 70 Timber	Sub-Standard	$1,259,000
	2889	Dolphin, Right Outer, 100 Timber	Sub-Standard	$1,982,000
Vashon				
M05204A	3011	Trestle, Timber, Large	Fair	$1,475,000
	3013	Trestle, Timber, Left & Right Widenings (Bus Turnaround)	Fair	$201,000
	3012	Trestle, Timber, Auxiliary & Tie-up Slips	Fair	$86,000
	3021	Pavement on Timber Trestle	Fair	$36,000
	3038	Main Terminal Building (Built 1957)	Not Rated	$178,000
	3014	Bulkhead, Timber	Poor	$49,000
			Total =	$45,943,000
		71%	Good, Fair, or Not Rated =	$32,482,000
		29%	Poor or Substandard =	$13,461,000

Source: JLARC analysis of information from Washington State Ferries.

Appendix 4 – RCW 47.60.335 and RCW 47.60.345

RCW 47.60.335

Appropriation limitations — Capital program cost allocation.

(1) Appropriations made for the Washington state ferries capital program may not be used for maintenance costs.

(2) Appropriations made for preservation projects shall be spent only on preservation and only when warranted by asset condition, and shall not be spent on master plans, right-of-way acquisition, or other nonpreservation items.

(3) Systemwide and administrative capital program costs shall be allocated to specific capital projects using a cost allocation plan developed by the department. Systemwide and administrative capital program costs shall be identifiable.

(4) The vessel emergency repair budget may not be used for planned maintenance and inspections of inactive vessels.

[2008 c 124 § 7; 2007 c 512 § 9.]

Notes:

Finding -- Intent -- 2007 c 512: See note following RCW 47.06.140.

RCW 47.60.345

Life-cycle cost model on capital assets.

(1) The department shall maintain a life-cycle cost model on capital assets such that:

(a) Available industry standards are used for estimating the life of an asset, and department-adopted standard life cycles derived from the experience of similar public and private entities are used when industry standards are not available;

(b) Standard estimated life is adjusted for asset condition when inspections are made;

(c) It does not include utilities or other systems that are not replaced on a standard life cycle; and

(d) It does not include assets not yet built.

(2) All assets in the life-cycle cost model must be inspected and updated in the life-cycle cost model for asset condition at least every three years.

(3) The life-cycle cost model shall be used when estimating future terminal and vessel preservation needs.

(4) The life-cycle cost model shall be the basis for developing the budget request for terminal and vessel preservation funding.

[2008 c 124 § 4; 2007 c 512 § 10.]

Notes:

Finding -- Intent -- 2007 c 512: See note following RCW 47.06.140.