
Transportation Specific Budget Submittal Requirements

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Transportation Goals

2015-17 Agency-Request Budget

Transportation Goals

The Office of Financial Management's 2015-17 Biennium transportation addendum to the operating budget instructions direct transportation agencies to identify the initiatives and investments in the base budget or proposed requests that tie to one or more of the six goals adopted by the Legislature, that are codified in RCW 47.04.280, and to specify the targeted outcomes that are expected.

Six transportation goals:

- 1) Preservation: To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services.
- 2) Safety: To provide for and improve the safety and security of transportation customers and the transportation system.
- 3) Mobility (addressing congestion): To improve the predictable movement of goods and people throughout Washington state.
- 4) Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities and protect the environment.
- 5) Stewardship: To continuously improve the quality, effectiveness and efficiency of the transportation system.
- 6) Economic Vitality: To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.

The department request was developed to advance, within current-law resources, the Governor's performance management plan, Results Washington; the agency's strategic plan, Results WSDOT; and the statutory transportation goals. Each decision package provides detail regarding how the specific request supports both Results Washington and Results WSDOT. The table below provides a crosswalk between the individual policy level request and the six transportation goals.

Background and fiscal environment

The department is starting from a deficit position for the 2015-17 Biennium. The four primary transportation accounts that support WSDOT expenditures¹ are projected to have an aggregate 2015-17 deficit of approximately \$72 million after adjusting currently approved budgets for carry-forward level changes, adding maintenance-level unavoidable cost increases, and accounting for the capital project list referenced by the 2014 enacted budget.²

While the state's economy and traveling public have benefited from the investments supported by the 2003 and 2005 transportation revenue packages, the state has not addressed the need

¹ Motor Vehicle Account, Multimodal Transportation Account, Puget Sound Ferry Operations Account, and Puget Sound Capital Construction Account.

² LEAP Transportation Document 2014-2 ALL PROJECTS as developed March 10, 2014.

for additional funding to maintain, operate, and preserve the facilities that have been constructed with these packages. Our state’s ferry system remains critically under-funded, even with recent investments in new vessels. While 99.5 percent of scheduled sailings were completed during the first half of 2014, we have seen glimpses in recent weeks of the impact that the ongoing underinvestment in ferry maintenance, operations, and preservation could have on the system as vessels break down and staff resources are stretched.

Given the fiscal challenges the state and WSDOT face, the department’s budget request makes targeted reductions to the largest operating programs and adjusts project lists and projected schedules to address the beginning deficit and allow for modest investments to address high-priority goals.

Code	Title	Preservation	Safety	Mobility	Environment	Stewardship	Economic Vitality
1A	WSF Service Reduction					X	
1B	Highway Maintenance Reduction					X	
FC	Aviation Emergency Services			X			
HA	Reforms Implementation					X	
HB	Facility Preservation and Improvements	X					
KA	Electric Highway Charging Network				X		
SC	Transformational Results Initiative					X	
TB	Statewide Model Development						X
WA	Unified Customer Accounts					X	
XH	WSF Operation Training Initiatives		X				
XI	Fleet Facility Security Officer		X				

Grant Programs

WSDOT Airport Aid Program

Aviation Division - Program F

Program purpose and restrictions

Airports are vital to our state, fueling its economy and providing critical links to the state and national transportation system. The Aviation Division's mission is to enhance Washington state aviation's system interests in ways that strengthen the transportation system, economy, and quality of life.

The Airport Aid Program provides crucial financial assistance to many of the state's airport sponsors who own or control airports available for the general use of the public. This assistance is provided through grants for the planning, acquisition, construction, improvement, preservation, and maintenance of airports.

Of Washington's 134 public-use airports, 64 are designated as significant to national air transportation and are included as part of the National Plan of Integrated Airport Systems (NPIAS). Designation in the NPIAS makes these airports eligible for grants under the Federal Aviation Administration (FAA) Airport Improvement Program (AIP). WSDOT Aviation uses state funds to leverage millions of dollars in federal funds. The remaining 70 non-NPIAS airports are primarily small-to-medium-sized airports that rely solely on local funding and state funding, which is limited by statute to \$250,000 per-grant.

Authorization

Financial assistance for the planning, acquisition, construction, improvement, preservation, and maintenance of airports is governed, in part, by RCW 47.68.090.

Entities eligible to receive grants are designated by RCW 47.68.090 and defined in RCW 47.68.020 (12) and (13). Eligible entities are cities, counties, towns, airport authorities, airport districts, political subdivisions, public corporations, federally recognized Indian tribes, any municipalities acting jointly, and any person or persons acting jointly.

The total amount available for grants in a biennium is appropriated by the Legislature in the state transportation budget.

Selection Criteria

WSDOT introduced its Statewide Capital Improvement Program (SCIP) to airport sponsors in 2012. The SCIP strategically targets state and federal resources by identifying and prioritizing aviation projects. The SCIP prioritizes airport-submitted CIP projects using an objective set of FAA and state scoring criteria. Beginning in calendar year 2014, the Airport Aid Program integrated the SCIP by using the prioritized list to award airport aid grants requested by airports.

Using the prioritized list of projects, grant funds are then allocated in two stages, first by Airport Type, and then by Project Type. With regard to Airport Type, approximately 55 percent of grant

funds are allocated to non-federal airports and those airports that are eligible to receive federal funds but have fewer than 20 based aircraft. (“Based aircraft” are operational and air worthy aircraft that are based at the facility for the majority of the year.) The remaining 45 percent is distributed to airports eligible to receive federal funding and that have 20 or more based aircraft.

Grant funds are then further allocated by project type, with 75 percent allocated to pavement projects, 15 percent for safety projects, and ten percent for maintenance, security, or planning projects. WSDOT Aviation evaluates grant applications using separate criteria for each of these project types, as well as other considerations. The prioritization criteria are spelled out in the WSDOT Airport Aid Grant Procedures Manual.

Timeline for awards

Typically, the program awards approximately half of allocated grant funds at the beginning of the biennium (July of odd-numbered years). The program then awards the other half of the funds halfway through the biennium but slightly earlier in the construction season. (March or April of even-numbered years) so that airport sponsors can take advantage of the summer construction season.

WSDOT Aviation solicits grant applications from airport sponsors after the Legislature and the Governor complete their work on the state transportation budget. After applications are submitted, Aviation staff review for completeness and work with applicants to submit any missing information. Aviation staff conducts a threshold review and scoring of eligible applications, producing a ranked list, which is submitted to the Aviation Director for final approval.

Program Issues

- A number of the airport aid grants go to very small, rural jurisdictions, or private airport sponsors that do not have staff experienced in aviation matters, or in grant administration. It is a frequent challenge to try to keep construction projects on track (that is, on time and on budget) when WSDOT Aviation does not have direct control over the project resources.
- Somewhat related to the issue above, small rural jurisdictions, and private airport sponsors, typically do not have a thorough understanding or experience with implementing all requirements under state law concerning public works construction (for example, consultant selection, environmental regulation, etc.). It is a frequent challenge to ensure that all projects meet all state legal requirements for public works construction.
- Grant awards are tied to the state’s biennial budget cycle. However, this cycle does not necessarily align with either the FAA’s federal fiscal year or the natural construction season.

Administration of the Grant Program

The administration of the grant program is included in the F2 program budget. Funding for airport aid grants in the base program budget totals \$3.5 million from the Aeronautics Account-state, and excludes program administration. The Department’s agency-request budget for the 2015-17 Biennium seeks additional federal appropriation authority of \$1.95 million.

Program Funding:

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
New Awards									
AERO - S	\$2.500	\$2.000	\$1.800	\$4.065	\$3.500				
AERO – F	\$1.500	\$1.500	\$1.000	\$2.150	\$4.100				
Reappropriations									
AERO - S	\$0.200		\$0.200	\$0	\$0.100				
AERO – F									
Total	\$4.200	\$3.500	\$3.000	\$6.215	\$7.700				

Expected cash flow by fund source:

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
AERO - S	\$2.600	\$1.900	\$2.000	\$4.065	\$3.600				
AERO - F	\$0.500	\$1.000	\$1.000	\$2.150	\$4.100				
Total	\$3.100	\$2.900	\$3.000	\$6.215	\$7.700				

Number of Completed Projects:

	03-05	05-07	07-09	09-11	11-13	13-15	15-17
Actual	104	82	93	72	47		
Planned						62	60

Rural Mobility Competitive Grant Funds

Public Transportation - Program V

Purpose and Restrictions

Rural Mobility Competitive Grant (RMG) funds improve transportation in rural areas where public transportation is limited or does not exist. Grants provide a lifeline for many rural citizens who rely on public transportation to get to jobs, medical appointments, social service programs, and maintain their independence. RMG funds will be used for operating, capital, and program development projects, providing services to individuals in rural communities.

Authorization

2013-15 Transportation Budget Section 220 (2): *“\$17,000,000 of the rural mobility grant account—state appropriation is provided solely for grants to aid small cities in rural areas as prescribed by RCW 47.66.100.” (By statute, half of the \$17,000,000 or \$8,500,000 of the appropriations is for competitive grants and half for formula grants)*

Selection Criteria

WSDOT distributes grant funds through a competitive application process that leverages state and federal funds. Projects are derived from locally developed Human Service Transportation Plans conducted by the Regional Transportation Planning Organizations (RTPO). Each RTPO submits a ranked project list that WSDOT combines with the statewide review process.

WSDOT establishes evaluation teams that review applications and make recommendations regarding project priorities. Teams include transportation planners, service providers, local governments, tribes, riders, transportation brokers, and social service agencies. These team members review applications for:

- 1) Project Component Questions: Does the project establish, preserve, or improve public transportation services in a community? Does the project address a recognized need in the community? Does the project reflect a community process of coordination and input?
- 2) Applicant Component Questions: Does the applicant report sufficient financial capability and resources to implement and successfully carry out the project? Does the applicant report a long-term commitment to the project to continue the effort beyond the availability of the requested grant resources?
- 3) Performance Component Questions: Does the project define performance measures to be used in determining the success of the project? Does the project describe an active effort aimed at improving efficiency and effectiveness?

A forced-pair method is used to compare project applications. Each project is compared to a sampling of every other project. A list of ranked projects is developed from the calculated evaluation team scores. WSDOT then adds in the RTPO ranking percentage points to create the recommended funded list.

Timeline for Awards

Funding will be awarded through the consolidated grants process. The consolidated grant applications are due in December 2014.

The applications will be evaluated using the components outlined earlier in the Selection Criteria section by the evaluation team in January 2014. The results of the evaluation team will be submitted as a recommendation to WSDOT. In March or April of 2015, WSDOT will add the RTP0 ranking percentage points and then review the recommendations. WSDOT will then make the final decision on the projects that are awarded. This process will take place in May or June of 2015

Successful applicants will start receiving award letters and grant agreements between May and July 2015. The agreements will start on July 1, 2015 and expire at the end of the biennium (June 30, 2017).

Program Issues

The main issue is budgetary. If the state rural mobility dollars are decreased, it will also decrease the department’s ability to leverage federal dollars to grantees. It will mean less mobility for people and cuts to programs that are already under strain at the local level.

Program Funding

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
New Awards									
MMA-S	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5
Total	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5

Expected cash flow by fund source

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
MMA-S	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5
Total	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5

Number of Completed Projects

	03-05	05-07	07-09	09-11	11-13	13-15
Actual	61	49	33	47	43	
Planned						42

Rural Mobility Formula Grant Funds

Public Transportation - Program V

Program purpose and restrictions (if any)

Rural Mobility Formula Grants (RMG) funds improve transportation in small cities and rural areas where sales tax revenue is less than the state average. The grants provide a lifeline for many rural citizens who rely on public transportation to get to jobs, medical appointments, social service programs, and maintain their independence. Funds will be used for operating, capital, and program development projects, providing services to individuals in rural communities. Recipients are restricted to transit organizations serving small urban and rural areas.

Authorization

2013-15 Transportation Budget Section 220: *“\$17,000,000 of the rural mobility grant account—state appropriation is provided solely for grants to aid small cities in rural areas as prescribed by RCW 47.66.100.” (By statute, half of the \$17,000,000 or \$8,500,000 of the appropriations is for formula grants and half for competitive grants).*

Selection Criteria

WSDOT distributes RMG funds to small cities and rural transit districts that collect less than the statewide average of local revenues collected. The Department of Revenue (DOR) notifies WSDOT of the exact amount to be distributed to each transit agency. The formula used by DOR is the same that was formerly used for the Sales Tax Equalization Program, and is applied each year based on the sales taxes collected in the prior year.

Timeline for Awards

The 2015-17 biennium formula funds are appropriated with the biennial budget (in April/May 2015). Funds are distributed at the beginning of each state fiscal year and will be distributed based on the method explained in the Selection Criteria section. Once the department receives notification from DOR, it notifies transit agencies of their award. In May/June 2015, WSDOT will request that transit agencies send the department notifications of their intent on use of funds. The department distributes the contracts for these projects in July 2015. This process repeats itself for the second years' funding distributed in the second year of the biennium.

Program Issues

The main issue is budgetary. If the state rural mobility dollars are decreased, it will also decrease the department's ability to leverage federal dollars to grantees. It will mean less mobility for people and cuts to programs that are already under strain at the local level.

Program Funding

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
New Awards									
MMA-S	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5
Total	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5

Expected cash flow by fund source

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
MMA-S	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5
Total	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5

Number of Completed Projects

	03-05	05-07	07-09	09-11	11-13	13-15
Actual	18	11	13	12	10	
Planned						12

Special Needs Competitive Grant Funds

Public Transportation - Program V

Program purpose and restrictions

This program benefits people with special transportation needs due to age, disability, or income that cannot provide transportation for themselves. Paratransit Special Needs Grants provide a lifeline for people who rely on public transportation to get to jobs and maintain independence. The funding will be used for operating, capital, and program development projects. Recipients are limited to non-profit organizations.

Authorization

2013-15 Transportation Budget Sec 220 (1) (a): *“\$5,500,000 of the Multimodal Transportation Account—State appropriation is provided solely for grants to nonprofit providers of special needs transportation. Grants for nonprofit providers must be based on need, including the availability of other providers of service in the area, efforts to coordinate trips among providers and riders, and the cost effectiveness of trips provided.”*

Selection Criteria

WSDOT distributes grant funds through a competitive application process that leverages state and federal funds. Projects are derived from locally developed Human Service Transportation Plans conducted by the Regional Transportation Planning Organizations (RTPO). Each RTPO submits a ranked project list that WSDOT combines with the statewide review process.

WSDOT establishes evaluation teams that review applications and make recommendations regarding project priorities. Review teams include transportation planners, service providers, local governments, tribes, riders, transportation brokers, social service agencies, and riders. Evaluation team members review the applications for the following three areas:

- 1) Project Component Question: Does the project establish, preserve, or improve public transportation services in a community? Does the project address a recognized need in the community? Does the project reflect a community process of coordination and input?
- 2) Applicant Component Question: Does the applicant report sufficient financial capability and resources to implement and successfully carry out the project? Does the applicant report a long-term commitment to the project to continue the effort beyond the availability of the requested grant resources?
- 3) Performance Component Question: Does the project define the performance measures to be used in determining the success of the project? Does the project describe an active effort aimed at improving efficiency and effectiveness?

A forced-pair method is used to compare project applications. Each project is compared to a sampling of every other project. A list of ranked projects is developed from the calculated evaluation team scores. WSDOT then adds in the RTPO ranking percentage points to create the recommended funded list.

Timeline for Awards

For the 2015-17 Biennium, the funding will be awarded through the consolidated grants process. The consolidated grant applications are due in December 2014.

The applications will be evaluated using the components outlined in the Selection Criteria section by the evaluation team in January 2015. The results of the evaluation team are submitted as a recommendation to WSDOT. In March or April of 2015, WSDOT will add the RTP0 ranking percentage points and then review the recommendations. WSDOT will then make the final decision on the projects that are awarded. This process will take place in May or June of 2015.

Successful applicants will receive award letters and grant agreements between May and July 2015. The agreements will start on July 1, 2015 and expire at the end of the biennium (June 30, 2017).

Program Issues

The main issue is budgetary. If the state rural mobility and paratransit special needs dollars are decreased, it will also decrease the department's ability to leverage federal dollars to grantees. It will mean less mobility for people with special needs and cuts to programs that are already under strain at the local level.

Program Funding

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
New Awards									
MMA-S	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5
Total	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5

Expected cash flow by fund source

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
MMA-S	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5
Total	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5

Number of Completed Projects

	03-05	05-07	07-09	09-11	11-13	13-15
Actual	36	25	21	23	33	
Planned						16

Special Needs Formula Grant Funds

Public Transportation - Program V

Program purpose and restrictions

This program benefits people with special transportation needs due to age, disability, or income. Paratransit Special Needs Grants provide a lifeline for these people to get to jobs and maintain independence. The funding will be used for operating and capital projects. Recipients are limited to Transit organizations and no agency may receive more than thirty percent of total funding.

Authorization

2013-15 Transportation Budget Section 220(1) (b): *“\$19,500,000 of the Multimodal Transportation Account--State appropriation is provided solely for grants to transit agencies to transport persons with special transportation needs. To receive a grant, the transit agency must, to the greatest extent practicable, have a maintenance of effort for special needs transportation that is no less than the previous year's maintenance of effort for special needs transportation. Grants for transit agencies shall be prorated based on the amount expended for demand response service and route deviated service in calendar year 2011 as reported in the "Summary of Public Transportation - 2011" published by the department of transportation. No transit agency may receive more than thirty percent of these distributions.”*

Selection Criteria

WSDOT prorates special needs formula grant funds to transit districts based on the amount expended for paratransit and flex route services in a historical base year.

Timeline for Awards

The biennial formula funds will be appropriated when the Governor signs the budget. These funds will be allocated based on the level of dial-a-ride and/or fixed route services provided by the transit agency during a prior year. WSDOT notifies the recipients of the funds available in Mayor June of 2015. Recipients will be required to send in a project description and budget outlining what they will use the funds for in June 2015. Contracts will be sent out for those projects in July 2015. All funds will be distributed at the beginning of the biennium so this process will not repeat itself until the following biennium.

Program Issues

The main issue is budgetary. If the state rural mobility and paratransit special needs dollars are decreased, it will also decrease the department's ability to leverage federal dollars to grantees. It will mean less mobility for people with special needs and cuts to programs that are already under strain at the local level.

Program Funding

(Dollars in Millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
New Awards									
MMA-S	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5
Total	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5

Expected cash flow by fund source

(Dollars in Millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
MMA-S	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5
Total	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5	\$19.5

Number of Completed Projects

	03-05	05-07	07-09	09-11	11-13	13-15
Actual	52	33	34	31	29	
Planned						29

Vanpool Investment Program Public Transportation – Program V

Program purpose and restrictions

The Vanpool Investment Program (VIP) was authorized by the Legislature to achieve the goal of doubling operating vanpools in the state by 2013. From FY 2003 through FY 2013, the number of public vanpools in operation in the state grew by 87 percent. The program provides capital funding to transit agencies to purchase vans and is authorized to provide incentives for employers to increase employee vanpool use.

Authorization

The program has been authorized as a budget proviso to Program V in the 2003-05, 2005-07, 2007-09, 2009-11, 2011-13, and 2013-15 biennia.

Grant Fund Awards

Capital grant fund awards are based on transit agency van requests and available VIP funds. Prior to the 2009-11 Biennium, WSDOT VIP capital funds were only available to transit agencies for expansion vans. Legislative language was added in 2009 allowing VIP grant funds to be used for the purchase of replacement vans.

2013-2105 Grant Awards

In the fall of 2013, the Public Transportation Division (PTD) issued an initial VIP grant award to seven transit agencies totaling \$5,710,500 for the purchase of vanpool vehicles to meet demand and expand the department’s revenue service vanpool fleet. Additionally, a special one-time VIP grant solicitation will occur in the fall of 2014 to award the remaining \$290,500 in VIP grant funds. In total, the PTD received requests from fourteen transit agencies for 702 vanpool vehicles (206 expansions and 496 replacements). VIP grant funds required to fulfill this request would have totaled almost \$14,000,000 (\$8,000,000 more than the \$6,000,000 authorized in the 2013-15 budget).

Long-Term Program Requirements

WSDOT staff in collaboration with transit agency general managers and vanpool managers plan to develop a new 2020 vanpool program plan. A key component of the plan will be to identify and define funding needs beyond the current biennium.

Program Funding

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
New Awards									
MMA-S	\$8.6	\$7.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0
Total	\$8.6	\$7.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0

Expected cash flow by fund source

Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
MMA-S	\$8.6	\$7.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0
Total	\$8.6	\$7.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0

Number of Completed Projects (Vans Actual/Awarded)

	03-05	05-07	07-09	09-11	11-13	13-15
Actual Funded	170	412	353*	330*	312*	
Awarded						221

*Includes both expansion and replacement vehicles which are funded at different levels

Call for Vanpool Investment Program – Capital Grants for Vanpool Purchase

The budget bill identifies funding availability and establishes the requirements of eligibility for transit agencies. In the 2013-15 Transportation Budget, the Public Transportation Division was provided a total of \$6,000,000 to support:

“...a vanpool grant program for: (a) Public transit agencies to add vanpools or replace vans; and (b) incentives for employers to increase employee vanpool use. The grant program for public transit agencies will cover capital costs only; operating costs for public transit agencies are not eligible for funding under this grant program. Additional employees may not be hired from the funds provided in this section for the vanpool grant program, and supplanting of transit funds currently funding vanpools is not allowed. The department shall encourage grant applicants and recipients to leverage funds other than state funds.”

“At least \$1,600,000 of this amount must be used for vanpool grants in congested corridors. \$520,000 of the amount provided in this subsection is provided solely for the purchase of additional vans for use by vanpools serving soldiers and civilian employees at Joint Base Lewis-McChord.”

The 2014 Supplemental budget revised the last paragraph above as follows:

“\$520,000 of the amount provided in this subsection is provided solely for the purchase of additional vans for use by vanpools serving or traveling through the Joint Base Lewis-McChord I-5 corridor between mile post 116 and 127. “

Regional Mobility Grant (RMG) Program

Public Transportation – Program V

Program purpose and restrictions

The primary goals for the program are to 1) facilitate connection and coordination of transit services and planning and 2) maximize opportunities to use public transportation to improve efficiency of regional corridors. Local governments (defined as cities, counties, ports, and public transportation benefit areas) are eligible to apply for grant funding of public transportation projects that improve connections between cities and counties, rush hour transit on congested roadways, park and ride lots and projects that reduce delay for people and goods. The program was funded with \$33.4 million in 2007-09, \$60.9 million in 2009-11, \$48.9 million in 2011-13, and \$51.1 million in 2013-15.

Authorization - RCW 47.66.030

The department shall:

1. Establish a Regional Mobility Grant (RMG) Program. The purpose of the grant program is to aid local governments in funding projects such as intercounty connectivity service, park and ride lots, rush hour transit service, and capital projects that improve the connectivity and efficiency of our transportation system. The department shall identify cost-effective projects that reduce delay for people and goods and improve connectivity between counties and regional population centers, and submit a prioritized list of projects requesting funding to the Legislature by December 1 of each year.
2. Establish an advisory committee to carry out the mandates of this chapter.
3. Report annually to the transportation committees of the legislature on the status of any grants projects funded by the program created under this section.

Selection criteria

Grant projects reviewed in the 2013-15 biennium were ranked on the following criteria:

- Demonstrated cost efficiency of the grant funds requested relative to quantitative measures of effectiveness (reduction in vehicle miles traveled, reduction of vehicle trips, and as applicable, reduction in person hours of delay);
- Readiness to proceed with the project;
- Improving transportation efficiency at the location of an identified bottleneck/chokepoint or on a congested corridor or roadway location;
- Significantly improving regional transportation congestion issues with cost efficient solutions;
- Improving system integration to multiple modes and improve system coordination/connection through regional connections or cross-jurisdictional transit services;
- Improving regional connections, system coordination, and system integration of multiple modes;
- Effectively solving a transportation problem identified in the project proposal;

- Sustaining benefits beyond the initial grant period and be considered a long-term solution to an identified transportation problem;
- Providing a financial plan, secured funding, a commitment to continue the project beyond initial grant;
- Demonstrating a local funding commitment and effective partnership(s);
- Proceeding expeditiously and/or can be accomplished expeditiously; and
- How the project and agency plan to reduce greenhouse gas emissions.

Timeline for awards

Schedule: The 2015-17 biennium call for projects began on August 4, 2014 with applications due on October 6, 2014, followed by review and analysis. The Public Transportation Division is scheduled to send the ranked list of projects to the Legislature by December 1, 2014.

Selection process: An independent scoring committee reviews and scores each submittal, with the project scoring the most points being ranked the highest and so forth. The prioritized list may be submitted for comment to the Public Transportation Advisory Committee. This Committee, which consists of executives from transit agencies, regional planning organizations, local jurisdictions, and the Commute Trip Reduction Board, accepts the list and recommends it to the WSDOT Director of Public Transportation. The Director then accepts or revises the list and recommends it to the Transportation Secretary. After consultation with the Governor's Office, the Secretary submits a proposed list to the Legislature, who may then accept or revise the list. The list is then included in the transportation budget.

Program Issues

The department is working to address the conflict between the perceived expectation that all Regional Mobility Grant projects must be completed within a single biennium and the timelines for capital construction projects, which typically take more than a single construction season. Capital construction projects are a significant majority of the projects that receive RMG funds. The most frequent reason that grant recipients ask for reappropriation is the need for additional time to complete a capital construction project.

These projects typically require more than two years to complete design, environmental documentation and permitting, real estate acquisition, and construction. Capital construction projects also generally face significant schedule and cost risks, for example, rising labor and supply costs, weather, real estate acquisition challenges, contractor bidding environment, unexpected site conditions, etc. In addition, construction is often limited to months with relatively warm, dry weather – the construction season. Grant-funded construction projects that require more than one construction season are immediately in jeopardy because the state biennium begins on July 1, midway through the first construction season in the biennium. As a result, this first season is often lost because construction cannot begin immediately on July 1; WSDOT, grant recipients, and contractors must first complete grant agreements; hire contractors; complete required environmental, historic, and archaeological documentation; acquire real estate; plan the construction work and mobilize crews.

Program Funding

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
New Awards									
RMGPA-S	40.0	44.0	40.0	40.0	40.0*	40.0	40.0	50.0	50.0
Reappropriations									
RMGP-S	17.2	21.2	11.0	11.1	10.0**				
MMA-S		3.3							
Total	57.2	68.5	51.0	51.1	50.0	40.0	40.0	50.0	50.0

*the department is requesting that the increase in program funding from \$40.0 million per biennium to \$50.0 million per biennium be delayed until the 2021-23 Biennium.

*the department is requesting that \$10.0 million be reappropriated from the 2013-15 Biennium to the 2015-17 Biennium for delayed projects.

Expected cash flow by fund source

(Dollars in millions)

	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25
RMGP-S	40.2	54.2	51.0	40.0	40.0	40.0	40.0	50.0	50.0
MMA-S		3.3							
Total	40.2	57.5	51.0	40.0	40.0	40.0	40.0	50.0	50.0

Number of Completed Projects

	09-11	11-13	13-15*
Actual	16	9	
Planned		14	12

*Four of the twelve projects are operating projects and the remaining eight are capital construction projects.

Freight Rail Assistance Program

Rail Capital - Program Y

Program purpose and restrictions

The Washington State Legislature authorized the department to provide grants to:

- Support branch lines and light density rail lines
- Provide or improve rail access to ports
- Maintain adequate mainline capacity
- Preserve or restore rail corridors and infrastructure

The state freight rail program must support the freight rail service objectives identified in the state's multimodal transportation plan.

Authorization

The program is authorized by RCW 47.76. The 2013-15 Biennium budget authorized \$4.0 million in state funds for the freight rail grant program.

Selection Criteria

Points are awarded using the following criteria:

- 1) Economic development benefits (including benefit/cost analysis) - 25 points
- 2) Viability of proposal: financial sustainability - 15 points
- 3) Financial and/or in-kind participation with other funding source - 10 points
- 4) Safety improvements and/or urgent needs - 10 points
- 5) Preservation of rail corridor - 10 points
- 6) Geographic balance - 10 points
- 7) Reduction of delays on statewide rail system - 5 points
- 8) Reduction in Greenhouse gasses (RCW 70.235.070) - 5 points
- 9) Reduced impacts on roads - 5 points
- 10) Environmental benefits - 5 points

Timeline for awards

The call for projects was issued on July 22, 2014. Submissions are due on August 29, 2014. WSDOT will review submissions based on the stated criteria above and ensure projects meet design and environmental requirements to be included in final submissions. A recommended list of projects is developed by a joint team made up of WSDOT staff and representatives from the Washington Department of Commerce, the Freight Mobility Strategic Investment Board, and the Washington Public Ports Association. The team's recommendations are reviewed by WSDOT's senior executives for submittal to OFM no later than November 1, 2014. The final list is approved by OFM.

Program Issues

N/A

Program Funding
(Dollars in millions)

	11-13	13-15	15-17	17-19	19-21	21-23	23-25	25-27	27-29
New Awards									
MMA – S	\$1.752	\$2.439	\$2.626	\$2.75 0	\$2.7 50	\$2.75 0	\$2.75 0	\$2.75 0	\$2.75 0
ERAA – S	\$1.000	\$0.311	\$0.124	\$0	\$0	\$0	\$0	\$0	\$0
TInA – S	\$0	\$1.250	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reappropriations									
MMA – S	\$0	\$0	\$0.870	\$0	\$0	\$0	\$0	\$0	\$0
ERAA – S	\$0	\$0	\$0.114	\$0	\$0	\$0	\$0	\$0	\$0
TInA – S	\$0	\$0	\$0.088	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$2.752	\$4.000	\$3.822	\$2.75 0	\$2.7 50	\$2.75 0	\$2.75 0	\$2.75 0	\$2.75 0

Legend

MMA: Multimodal Transportation Account (218)

ERAA: Essential Rail Assistance Account (02M)

TInA: Transportation Infrastructure Account (094)

Expected Cash Flow by Fund Source
(Dollars in millions)

	11-13	13-15	15-17	17-19	19-21	21-23	23-25	25-27	27-29
MMA – S	\$1.754	\$2.430	\$2.626	\$2.750	\$2.750	\$2.750	\$2.750	\$2.750	\$2.750
ERAA – S	\$1.000	\$0.310	\$0.124	\$0	\$0	\$0	\$0	\$0	\$0
TInA – S	\$0	\$1.250	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$2.750	\$4.000	\$2.750	\$2.750	\$2.750	\$2.750	\$2.750	\$2.750	\$2.750

Number of Completed Projects:

	07-09	09-11	11-13	13-15
Actual	5	7	6	
Planned				5

Freight Rail Investment Bank

Rail Capital – Program Y

Program purpose and restrictions

The Freight Rail Investment Bank (FRIB) provides loans for smaller rail capital projects to the public sector only. Loans are available for up to \$250,000 but applications are open to loans of any size within the maximum amount available. Projects must have a matching source of at least 20 percent.

Program restrictions

Loans may be provided to public sector applicants only, as the State Constitution prohibits the state from lending to the private sector. The 2013-15 enacted budget that provides the FRIB appropriation directs the department to limit the repayment period to no more than 10 years, and to apply only so much interest as is necessary to recoup the department's costs to administer the loans.

In addition, RCW 47.76.240 states that state funding for rail service, rail preservation, and corridor preservation projects must benefit the state's interests, which includes reducing public roadway maintenance and repair costs, increasing economic development opportunities, increasing domestic and international trade, preserving jobs, and enhancing safety.

Authorization

Enacted transportation budget: Chapter 222, 2014 Laws Partial Veto (ESSB 6001), Section 310 (1) (b).

Selection criteria

The following criteria are used to evaluate and prioritize proposals:

- 1) Value to the community, expressed in dollar terms. The value may be to the entire state, a portion of the state, or to the local community in which the project is located. Up to 40 points
- 2) Strategic benefit (e.g., how integral is the project to future development of the rail line, the area, or the specific business). Up to 35 points
- 3) Matching funds, scaled according to the contribution. Up to 25 points

Timeline for awards

The call for projects was issued on July 22, 2014. Projects must be submitted by August 29, 2014. A recommended list of projects is developed by a joint team made up of WSDOT staff and representatives from the Washington Department of Commerce, the Freight Mobility Strategic Investment Board, and the Washington Public Ports Association. The team's recommendations are reviewed by WSDOT's senior executives for submittal to OFM no later than November 1, 2014. The final list is approved by OFM.

Program Issues

N/A

Program funding

(Dollars in millions)

	11-13	13-15	15-17	17-19	19-21	21-23	23-25	25-27	27-29
New Awards									
TInA – S	\$2.500	\$7.330	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000
Reappropriations									
TInA – S	\$1.050	\$0.360	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$3.550	\$7.690	\$5.000						

Legend — TInA: Transportation Infrastructure Account (094)

Expected cash flow by fund source

(Dollars in millions)

	11-13	13-15	15-17	17-19	19-21	21-23	23-25	25-27	27-29
TInA – S	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$5.000	\$6.000	\$5.000	\$5.000
Rec.Loan Pay	\$0.103	\$1.034	\$1.531	\$1.744	\$1.744	\$1.744	\$0.697	\$0.229	\$0
Total	\$5.103	\$6.117	\$6.531	\$6.744	\$6.744	\$6.744	\$6.697	\$5.229	\$5.000

Number of completed projects:

	07-09	09-11	11-13	13-15
Actual	4	2	9	
Planned				11

Pedestrian & Bicycle/Safe Routes to School Program

Local Programs (Program Z)

Program purpose and restrictions

The grant programs support pedestrian and bicycle mobility projects such as pedestrian and bicycle paths, sidewalks, crossing improvement in downtown areas, safe routes from residential areas to schools and transit on state highways, city streets, and county roads. The program is two-fold: 1) Pedestrian & Bicycle funding stimulates economic revitalization and healthy communities initiatives by improving safety and reducing modal conflicts in community centers (pedestrians, transit, motor vehicles, freight, bicyclists, etc.); and 2) Safe Routes to School funding addresses pedestrian and bicycle safety and mobility near schools.

Authorization

State funds have been identified for the program beginning with the 2005 revenue package and have been authorized in each succeeding transportation budget since that time by providing appropriation authority from the Motor Vehicle Account, the Multi-Modal Account and from the Transportation Partnership Account. In addition, the 2012 legislature appropriated funds for the Safe Routes to School program from the Highway Safety Account.

Selection Criteria

All complete proposals are reviewed and evaluated by an advisory group utilizing criteria to identify projects that will help stimulate economic revitalization and healthy communities' initiatives by improving safety and reducing modal conflicts in community centers (pedestrians, transit, motor vehicles, freight, bicyclists, etc.). Local Programs staff conduct site visits to insure the proposed project addresses the issues outlined in the proposals. Projects that focus on long term solutions and can be delivered will have a higher rating.

Timeline for awards

The call for projects was issued in January 2014 with proposals due before the end of May 2014. Proposals are reviewed and prioritized from June-November 2014. A priority listing of projects is submitted to the Governor's office and legislature by December 15, 2014.

Program Issues

The Joint Transportation Committee completed a study "Efficiencies in the Delivery of Transportation Funding & Services to Local Governments" in 2011, for the legislature. The study's recommendation #9 concluded that Local Programs should be given the ability to finalize their project lists without specific legislative approval of each individual project, for the Pedestrian & Bicycle and Safe Routes to School programs. This recommendation would allow Local Programs to authorize funding earlier than currently occurs, speeding up project implementation by as much as a construction season. This approach requires a change in the attached proviso section 310(5) (6).

Performance measures, outcomes and goals

Both programs provide an opportunity to increase investments in multimodal transportation and reduce modal conflicts (pedestrians, transit, motor vehicles, freight, bicyclists, etc.). For the Safe

Routes to School program, the percent increase of children walking and biking to school is measured before and after the safety, access, and mobility improvements.

Administration of the Grant Program

Administration is not specific to the grant program but is covered through the administration funding appropriated to Local Programs.

Program Funding

(Dollars in millions)

	09-11	11-13	13-15	15-17	17-19	19-21
New Awards						
TPA-S						
MVA-F				\$3.6		
MMA-S				\$8.0		
HSF-S				\$6.8		
TOTAL				\$18.4		
Reappropriations						
TPA-S				2.4		
MVA-F				6.9		
MMA-S				6.0		
HSF-S				2.7		
TOTAL				18.0		

Expected cash flow by fund source

(Dollars in millions)

	09-11	11-13	13-15	15-17	17-19	19-21
TPA-S	\$1.8	\$3.7	\$6.5	\$2.4		
MVA-F	\$6.4	\$11.1	\$11.6	\$10.5		
MMA-S	\$10.5	\$12.8	\$10.6	\$14.0	\$8.0	\$8.0
HSF-S		\$1.0	\$6.2	\$9.5	\$6.8	\$6.8
Total	\$18.7	\$28.6	\$34.9	\$36.4	\$14.8	\$14.8

Number of Completed Projects:

	09-11	11-13	13-15	15-17	17-19	19-21
Actual	31	49	24			
Planned			20	30		

Section 310 Program Z – Capital

5 ~~((6) \$11,557,000))~~ (5) \$14,813,000 \$13,965,000 of the multimodal
6 transportation account--state appropriation, ~~((12,136,000))~~
7 \$12,804,000 \$10,527,000 of the motor vehicle account--federal appropriation, and
8 ~~((5,195,000))~~ \$6,241,000 \$2,373,000 of the transportation partnership account--
9 state appropriation and \$9,532,000 of the highway safety account—state
10 appropriation are provided solely for the pedestrian and bicycle
11 safety program projects and safe routes to schools program projects.
12 identified in: LEAP Transportation Document 2011-A, pedestrian and
13 bicycle safety program projects and safe routes to schools program
14 projects, as developed April 19, 2011; LEAP Transportation Document
15 2009-A, pedestrian and bicycle safety program projects and safe routes
16 to schools program projects, as developed March 30, 2009; LEAP
17 Transportation Document 2007-A, pedestrian and bicycle safety program
18 projects and safe routes to schools program projects, as developed
19 April 20, 2007; and LEAP Transportation Document 2006-B, pedestrian and
20 bicycle safety program projects and safe routes to schools program
21 projects, as developed March 8, 2006. Projects must be allocated
22 funding based on order of priority. The department shall review all
23 projects receiving grant awards under this program at least
24 semiannually to determine whether the projects are making satisfactory
25 progress. Any project that has been awarded funds, but does not report
26 activity on the project within one year of the grant award must be
27 reviewed by the department to determine whether the grant should be
terminated. The department shall promptly close out grants when

28 projects have been completed, and identify where unused grant funds
29 remain because actual project costs were lower than estimated in the
30 grant award.

31 ~~((7))~~ (6) Except as provided otherwise in this section, the
32 entire appropriations in this section are provided solely for the
33 projects and activities as ~~listed by project and amount in LEAP~~
34 ~~Transportation Document ((2011-2)) 2012-1 ALL PROJECTS as developed~~
35 ~~((April 19, 2011))~~ March 8, 2012, **approved by** Program - Local Program (Z).

WSDOT Airport Aid Program

WSDOT Aviation/Program F

August 29, 2014 (Anticipated WSDOT Aviation 2015-17 Project List)

New 2015-17 Grant Projects

Priority ¹	Project Title	Lead Agency	Project Description	Partners/City	Total Project Cost	Anticipated Grant Request	Cumulative Total	Biennium	Status
	Pavement Maintenance (Design Only)	WSDOT Aviation	Design Services for removal of existing markings, crack seal, slurry seal coat and new pavement markings on runway, apron and taxiways B and C. To be coordinated with RSA improvements that require changing the location of the Runway 5 numeral and addition of a threshold bar.	Lind	\$45,000	\$42,750	\$42,750	2015-17	New
	Taxiway Pavement Maintenance Crack Seal, Sealcoat, Remark	WSDOT Aviation	Project will perform pavement maintenance on all airfield pavements, including crackfill, sealcoat, and re-mark.	Omak	\$250,000	\$6,250	\$49,000	2015-17	New
	Runway Rehabilitation (2015 Construction Phase)(W)	WSDOT Aviation	Runway rehabilitation; runway shoulder, RSA, and ROFA grading; runway lighting, regulator, and vault installation	Colfax	\$2,030,000	\$50,750	\$99,750	2015-17	New
	Displace Runway 05 Threshold & RSA/ROFA improvements (Design Only)	WSDOT Aviation	Design Services for Displace Runway 5 threshold, lower fence west of the runway, repaint numeral 5 and threshold graphic, fill, grand and compact all RSA areas and ensure clearance of all ROFA areas.	Lind	\$6,000	\$5,700	\$105,450	2015-17	New
	Runway Safety Area Improvements Ph2, Design(Reconstruct RW, RW Lights, RW Signs, TW Shoulder Repair,	WSDOT Aviation	This project will include the design of the RW reconstruction and extension planned for RW 20, the associated airfield lighting/signage, repair/improvements to the existing taxiway shoulders, airfield pavement maintenance, and airfield markings.	Odessa	\$235,000	\$5,875	\$111,325	2015-17	New
	Taxiway "A" Crack Seal and Seal Coat	WSDOT Aviation	Clean and fill cracks in the taxiway pavement, apply a seal coat, repaint center-line striping.	Desert Aire	\$38,633	\$36,701	\$148,026	2015-17	New
	Obstruction Removal - Purchase Avigation/Clearing Easement	WSDOT Aviation	Purchase avigation/clearing easement.	Port Angeles	\$500,000	\$12,500	\$160,526	2015-17	New
	Pavement Maintenance (Crack Seal/Seal Coat/Remark)	WSDOT Aviation	Crack seal, seal coat, and re-mark the airfield pavements.	Grand Coulee	\$260,000	\$6,500	\$167,026	2015-17	New
	Rehabilitate Taxiway A, B, C, D, and aprons	WSDOT Aviation	Perform pavement maintenance to include Crack Sealing, Seal Coat, re-marking Taxiways A, B west, C and D, and associated connectors, FBO Apron and Circle Area Apron.	Richland	\$605,045	\$15,530	\$182,556	2015-17	New
	Runway 11/29 Lighting, Taxiway 'C' Lighting - Design	WSDOT Aviation	Installation of MIRLs on Runway 11/29 and lighting Taxiway 'C' - Design. We anticipate FAA & WSDOT funding for this project.	Arlington	\$200,000	\$10,000	\$192,556	2015-17	New
	Light/Mark/Remove Obstructions	WSDOT Aviation	Obstruction removal along the west side of the airport; repair perimeter fence.	Packwood	\$100,000	\$2,500	\$195,056	2015-17	New
	Obstruction Removal - Remove Obstructions	WSDOT Aviation	Remove obstructions in Rwy 26 approach surface.	Port Angeles	\$1,800,000	\$45,000	\$240,056	2015-17	New
	DARRINGTON MUNICIPAL AIRPORT RUNWAY RESURFACING	WSDOT Aviation	Resurface 2500 ft runway.	Darrington	\$157,500	\$142,500	\$382,556	2015-17	New
	Runway Overlay (Construction Continued)	WSDOT Aviation	Finish overlay of existing runway. Requires new pavement markings.	Moses Lake	\$100,000	\$95,000	\$477,556	2015-17	New
	REMOVE STRUCTURES FROM RPZ	WSDOT Aviation	With funding from WSDOT Aviation two buildings that lie within the RPZ have been purchased, but they still need to be removed from the obstacle-free zone.	Darrington	\$50,000	\$47,500	\$525,056	2015-17	New

New 2015-17 Grant Projects

Priority ¹	Project Title	Lead Agency	Project Description	Partners/City	Total Project Cost	Anticipated Grant Request	Cumulative Total	Biennium	Status
	Repair and Resurface Runway	WSDOT Aviation	Repair and Resurface Runway.	Walla Walla	\$200,000	\$190,000	\$715,056	2015-17	New
	Tree Removal and Clearing/Grubbing	WSDOT Aviation	Top or remove large trees near the airport that could impact sight distances or create obstacles to both approach ends of the runway.	Concrete	\$51,500	\$48,925	\$763,981	2015-17	New
	Fogseal (Construction) Taxiways A, A1, A3, and A4	WSDOT Aviation	Fogseal (Construction) Taxiways A, A1, A3, and A4	Ephrata	\$125,000	\$6,250	\$770,231	2015-17	New
	Fogseal Taxiways A, A1, A3, and A4	WSDOT Aviation	Fogseal (Design) Taxiways A, A1, A3, and A4	Ephrata	\$25,000	\$1,250	\$771,481	2015-17	New
	Taxiway Rehabilitation (2015 Construction Phase)(W)	WSDOT Aviation	Provide crack fill and slurry seal surface treatment or fog seal, as applicable.	Colfax	\$100,000	\$2,500	\$773,981	2015-17	New
	Construct Runway (Ph III)	WSDOT Aviation	Realign Runway	Pullman	\$10,500,000	\$250,000	\$1,023,981	2015-17	New
	Construct Runway (Phase I)	WSDOT Aviation	Realign Runway.	Pullman	\$15,000,000	\$250,000	\$1,273,981	2015-17	New
	Construct Runway (Phase II)	WSDOT Aviation	Realign Runway	Pullman	\$15,000,000	\$250,000	\$1,523,981	2015-17	New
	Construct Runway (Preliminary Phase)	WSDOT Aviation	Realign runway.	Pullman	\$10,000,000	\$250,000	\$1,773,981	2015-17	New
	Rehabilitate Taxiway A	WSDOT Aviation	Design only for the Taxiway A and connector taxiways rehabilitation project.	Walla Walla	\$453,000	\$22,650	\$1,796,631	2015-17	New
	Taxiway - Rehabilitate Taxiway	WSDOT Aviation	Repair taxiway pavement adjacent to the apron.	Toledo	\$50,000	\$1,250	\$1,797,881	2015-17	New
	Construct Runway (Phase II)	WSDOT Aviation	Realign Runway	Pullman	\$19,000,000	\$250,000	\$2,047,881	2015-17	New
	Conduct Environmental Assessment, Northwest Hangars Phase II	WSDOT Aviation	This project constructs a new taxiway to serve approx. 8 new executive hangars on the Northwest corner of the airport.	Friday Harbor	\$50,000	\$2,500	\$2,050,381	2015-17	New
	Overlays	WSDOT Aviation	Asphalt overlays on South Hangar Stub Taxilane #1 and Mid-Runway Exit taxiway.	Tonasket	\$27,924	\$26,528	\$2,076,909	2015-17	New
	Fog Seal	WSDOT Aviation	Crack sealing and fog sealing of the compass rose area and the west ramp area and the taxilane from the gate to the west ramp.	Arlington	\$100,000	\$50,000	\$2,126,909	2015-17	New
	Rehabilitate Taxiway E and Transient Apron	WSDOT Aviation	This project will mill and overlay the asphalt on Taxiway E and the transient parking apron.	Friday Harbor	\$600,000	\$30,000	\$2,156,909	2015-17	New
	Pavement Maneuvering Area (Construction)	WSDOT Aviation	Apply 1,500 SF of new pavement on northwest corner of west parallel taxiway.	Moses Lake	\$50,000	\$47,500	\$2,204,409	2015-17	New
	RSA Improvements Phase 1	WSDOT Aviation	This project includes the design and construction (grading, compaction and drainage) of improvements of the runway safety areas on both runway ends. A future project will address the safety issues along the sides of the runway.	Raymond	\$2,500	\$2,375	\$2,206,784	2015-17	New
	RPZ EA	WSDOT Aviation	Environmental Assessment for the proposed land acquisition to the west of the airfield.	Cle Elum	\$35,000	\$875	\$2,207,659	2015-17	New
	Apron Rehabilitation (2015 Construction Phase)(W)	WSDOT Aviation	Provide crack fill and slurry seal surface treatment or fog seal, as applicable.	Colfax	\$70,000	\$1,750	\$2,209,409	2015-17	New
	Widen runway	WSDOT Aviation	Widen runway to 60 feet. Overlay runway surface with 2 - 1/2 inches of hot-mix asphalt.	Camas	\$25,000	\$23,750	\$2,233,159	2015-17	New
	Runway Hold Position Signs (Design Only)	WSDOT Aviation	Design Services for installation of four runway hold line signs. No signs exist now.	Quincy	\$1,000	\$950	\$2,234,109	2015-17	New
	Conduct EA/EIS for Obstruction Removal	WSDOT Aviation	This project is the second step in the obstruction removal process (surveys completed). The FAA requires an EA and possible EIS for tree trimming/removal in the RWY 34 approach.	Friday Harbor	\$163,000	\$8,150	\$2,242,259	2015-17	New

New 2015-17 Grant Projects

Priority ¹	Project Title	Lead Agency	Project Description	Partners/City	Total Project Cost	Anticipated Grant Request	Cumulative Total	Biennium	Status
	Construct Taxilane to Hangars Under Construction (Airport Layout Plan A2)	WSDOT Aviation	A 300 ft. long by 200 ft. wide taxilane is necessary to serve both existing hangars and hangars under construction	Chewelah	\$35,745	\$33,958	\$2,276,217	2015-17	New
	Obstruction Survey for GPS Approach (Next Gen)	WSDOT Aviation	Obstruction Survey to lower minimums and remove night/circle restriction on existing approach.	Auburn	\$150,000	\$7,500	\$2,283,717	2015-17	New
	Master Plan Update (2015 Phase)	WSDOT Aviation	An update to the PLU Master Plan to reflect current conditions and the airport's future development plan.	Puyallup	\$270,000	\$4,000	\$2,287,717	2015-17	New
	Install security camera (Design Only)	WSDOT Aviation	Design Services for installation of security camera. Include it in the WSDOT/AD security camera system.	Quincy	\$1,000	\$950	\$2,288,667	2015-17	New
	Conduct EA Study & Construct Wetland Fill and Mitigation	WSDOT Aviation	EA-2015; Construction-2016. Includes environmental for wetland fill & mitigation (includes capital project, maintenance and operation costs not eligible).	Kelso	\$100,000	\$5,000	\$2,293,667	2015-17	New
	Master Plan Update	WSDOT Aviation	Master Plan Update, ALP update and provide the required AGIS survey.	Wilbur	\$300,000	\$15,000	\$2,308,667	2015-17	New
	Master Plan & Airport Layout Plan Update	WSDOT Aviation	Provide updates to ALP drawings and MP Narrative that was originally completed in 2008.	Moses Lake	\$50,000	\$47,500	\$2,356,167	2015-17	New
	Identify and Prepare Future Areas for Commercial Structures	WSDOT Aviation	Review existing Master Plan and ALP to determine best location for commercial structures. Prepare the site for construction.	Okanogan	\$22,000	\$20,900	\$2,377,067	2015-17	New
	Paving Projects - Taxiways	WSDOT Aviation	This project is to maintain and repair the current taxiway paving.	Sequim	\$26,000	\$24,700	\$2,401,767	2015-17	New
	Airport Layout Plan Update	WSDOT Aviation	To update the existing Airport Layout Plan.	East Wenatchee	\$40,000	\$36,000	\$2,437,767	2015-17	New
	Airport Layout Plan Update	WSDOT Aviation	To update the existing Airport Layout Plan	Waterville	\$40,000	\$36,000	\$2,473,767	2015-17	New
	Taxiway B4 Relocation (2015 Phase)	WSDOT Aviation	Correct existing Taxiway B4 non-standard alignment by moving taxiway to the south. New taxiway connector width will be fifty feet.	Gig Harbor	\$50,000	\$1,300	\$2,475,067	2015-17	New
	Tiedown Reconfiguration, Rotating Beacon, and Hangar Taxi Lanes	WSDOT Aviation	Install hangar taxi lanes and reconfigure tiedown area for safety purposes. Install rotating beacon.	Ocean Shores	\$150,000	\$5,000	\$2,480,067	2015-17	New
	Reconstruct Taxiway near Runway 05 end (Design Only)	WSDOT Aviation	Design Services for reconstruction of approximately 4,000 SY of taxiway pavement at the west end of the airport.	Lind	\$15,000	\$14,250	\$2,494,317	2015-17	New
	Design and Construct Taxilane and Apron (Old NDB site)	WSDOT Aviation	This project designs and constructs a small taxilane and apron at the old NDB site in preparation for hangar development.	Friday Harbor	\$325,000	\$16,250	\$2,510,567	2015-17	New
	Taxiway Extension (2015 Construction Phase)	WSDOT Aviation	An extension of the main parallel taxiway to the north of its existing endpoint to serve new tenants and new hangar(s).	Puyallup	\$484,000	\$12,100	\$2,522,667	2015-17	New
	Runway Lights and PAPI System	WSDOT Aviation	All work associated with planning, survey, design and construction, for the replacement of runway lights, threshold lights. Replace Visual Approach Slope Indicator (VASI) system with Approach Path Indicators (PAPI), Runway end identifier lights to clearly identify the ends of the runway and all runway light cable.	Republic	\$45,000	\$42,750	\$2,565,417	2015-17	New
	Environmental and Preliminary Design for ALP Construction Projects	WSDOT Aviation	Completes Environmental Assessment and Preliminary Design for runway expansion and partial parallel taxi projects included in ALP.	Westport	\$150,000	\$142,000	\$2,707,417	2015-17	New
	Remove Trees in Western RPZ	WSDOT Aviation	Remove Trees in Western RPZ.	Darrington	\$30,000	\$28,500	\$2,735,917	2015-17	New

New 2015-17 Grant Projects

Priority ¹	Project Title	Lead Agency	Project Description	Partners/City	Total Project Cost	Anticipated Grant Request	Cumulative Total	Biennium	Status
	Airfield Pavement Maintenance (Design Only)	WSDOT Aviation	Design Services for pavement maintenance on existing asphalt to include crack sealing, slurry seal coat and new pavement markings.	Warden	\$35,000	\$33,250	\$2,769,167	2015-17	New
	Conduct Aeronautical Obstruction Survey	WSDOT Aviation	Provide obstruction survey for IAP request for lower minimums RW, includes obstruction removal plan.	Kelso	\$150,000	\$7,500	\$2,776,667	2015-17	New
	Engineering for South Taxiway	WSDOT Aviation	Design Phase for South Taxiway	Twisp	\$60,000	\$57,000	\$2,833,667	2015-17	New
	Acquire Land - Phase 2 - Purchase Land	WSDOT Aviation	This project will be Phase 2 of 2. Phase 1 included the EA for land acquisition.	Ritzville	\$300,000	\$7,500	\$2,841,167	2015-17	New
	Fence/Land Acquisition, Ph 2 (construction) entire airfield perimeter	WSDOT Aviation	This project will construct the perimeter fence and access gates around the airfield.	Brewster	\$500,000	\$12,500	\$2,853,667	2015-17	New
	Replace Runway and Threshold Lights (Design)	WSDOT Aviation	Design services for removal of existing wiring. Install new underground wiring for runway edge and runway threshold lights. Install new light base cans and new lights.	Quincy	\$60,000	\$57,250	\$2,910,917	2015-17	New
	Fencing Improvements	WSDOT Aviation	This project includes improvements to the airport perimeter fence, to address the presence of wildlife on the airport.	Anacortes	\$100,000	\$5,000	\$2,915,917	2015-17	New
	Security Fencing	WSDOT Aviation	The addition of security fencing has been prioritized by sections. The south side of the airport (approximately 2,500 lf) is the #1 priority. A portion has been completed previously, but the remainder should be installed to eliminate vehicular access from SR 530.	Darrington	\$52,500	\$47,500	\$2,963,417	2015-17	New
	Fence South Airport Property Line	WSDOT Aviation	Install Fencing along Southern Property Line.	Shelton	\$250,000	\$6,250	\$2,969,667	2015-17	New
	Taxiway Lighting	WSDOT Aviation	The current taxiway lighting consists of only a blue turnout light on each side of where the taxiway meets the runway. This project would implement taxiway lighting on the sides of the full length of the taxiways.	Sequim	\$1,200	\$1,140	\$2,970,807	2015-17	New
	VASI	WSDOT Aviation	This project would involve installing a visual approach slope indicator to the runway ends. The would involve the installation and testing of this facility addition.	Sequim	\$50,000	\$47,500	\$3,018,307	2015-17	New

Total New Grants

\$3,018,307

¹ This is a non-prioritized list of anticipated aviation projects subject to submission of grant applications by Airport Sponsors.

Ferries (WSDOT Programs X and W)

Ferries Capital Basics

Washington State Ferries (WSF) infrastructure consists of two distinct types of assets: terminal and maintenance land-based facilities and vessels. Policy-makers have expressed interest in being able to identify investments in terminals and the maintenance facility separately from investments in vessels.

WSF Assets: WSF's infrastructure consists of land-based facilities and vessels. WSF operates 20 terminals that provide vessel reception; customer access to and clearance of terminal facilities; vehicle and passenger staging, holding, loading and unloading facilities; and connections with other modes of transportation. Also, WSF operates a major maintenance facility at Eagle Harbor. Finally, the fleet consists of 23 existing vessels and two vessels approved for construction which will replace two existing vessels. These vessels accommodate both vehicles and passengers.

The table below lists WSF's vessels and terminals and summarizes the major characteristics of these capital assets in terms of vessel carrying capacity and terminal throughput capacity.

Vessels and Characteristics			Terminals and Characteristics								
Vessel	Passenger Capacity	Auto Capacity	Terminal	Ownership	Toll Booths	Holding Capacity	Transfer Spans		Waiting Area	Overhead Loading	Public Transit
							Primary	Tie-up			
<u>Jumbo Mark II Class</u>			Anacortes	Other	4	480	2	2	Yes	Yes	Yes
MV Puyallup	2500	202	Bainbridge	WSF	4	208	2	1	Yes	Yes	Yes
MV Tacoma	2500	202	Bremerton	WSF	3	195	2	0	Yes	Yes	Yes
MV Wenatchee	2500	202	Clinton	WSF	4	190	2	0	Yes	No	Yes
<u>Jumbo Mark I Class</u>			Edmonds	WSF	3	175	1	0	Yes	Yes	Yes
MV Spokane	2000	188	Eagle Harbor	WSF	NA	NA	2	4	NA	NA	NA
MV Walla Walla	2000	188	Fauntleroy	WSF	2	84	1	0	Yes	No	Yes
<u>Super Class</u>			Friday Harbor	WSF	1	255	1	1	Yes	No	No
MV Elwha	1221	144	Keystone	Other	2	100	1	0	Yes	No	Yes
MV Hyak	2000	144	Kingston	Other	3	290	2	1	Yes	Yes	Yes
MV Kaleetan	2000	144	Lopez	WSF	1	75	1	0	Yes	No	No
MV Yakima	2000	144	Mukilteo	Other	3	216	1	0	Yes	No	Yes
<u>Olympic Class</u>			Orcas	WSF	1	150	1	0	Yes	No	No
Tokitae	1200	144	Point Defiance	Other	1	50	1	0	Yes	No	Yes
Samish*	1200	144	Port Townsend	WSF	2	90	2	0	Yes	No	Yes
3rd Olympic*	1200	144	Seattle	WSF	4	585	3	0	Yes	Yes	Yes
<u>Issaquah Class</u>			Shaw	WSF	1	15	1	0	No	No	No
MV Cathlamet	1200	124	Sidney BC	Other	1	240	1	0	Yes	No	Yes
MV Chelan	1090	124	Southworth	WSF	2	160	1	0	Yes	No	Yes
MV Issaquah	1200	124	Tahlequah	WSF	0	5	1	0	Yes	No	Yes
MV Kitsap	1200	124	Vashon	WSF	0	80	2	1	Yes	No	Yes
MV Kittitas	1200	124									
MV Sealth	1200	90									
<u>Evergreen State Class</u>											
MV Evergreen State**	983	87									
MV Klahowya	800	87									
MV Tillikum	1200	87									
<u>Kwa-di Tabil</u>											
MV Chetzemoka	750	64									
MV Kennewick	750	64									
MV Salish	750	64									
<u>Miscellaneous</u>											
MV Hiyu	200	34									
MV Rhododendron**	546	48									

* Vessels under construction or approved for construction.

** Vessels retired or expected to be retired in the 2013-2015 biennium.

Program: WSDOT makes capital investments in the Ferry System through the WSF Construction Program (W). Capital investments construct new infrastructure or make significant long-term renewal or improvements to existing infrastructure.

Sub-programs: The infrastructure of the Ferry System consists primarily of ferry terminals and vessels. This is reflected in the WSF Construction Program sub-program structure. There are sub-programs for terminal construction (W1), vessel construction (W2) and emergency repair of terminals and vessels (W3).

Program/Sub-program Budget Requests and Ten-Year Plans: The Ferries 2015-2017 Biennium budget request seeks \$262 million. \$127 million or 49% is for terminal construction; \$131 million or 50% is for vessel construction; and \$4 million or 2% is for emergency repair of terminals and vessels. (Components do not add to 100% due to rounding). The 2015-2025 ten-year plan proposes to spend \$1.279 billion on Ferry System infrastructure. \$730 million or 57% is for terminal construction; \$529 million or 41% is for vessel construction; and \$20 million or 2% is for emergency repairs.

WSF Construction Sub-programs
Terminals, Vessels and Emergency Repairs
2015-2017 Biennium Budget Request and 2015-2025 Ten-Year Plan
In Millions of Dollars

Sub-program	15-17	17-19	19-21	21-23	23-25	15-25	15-17	15-25
Terminal Construction	127	176	84	222	121	730	49%	57%
Vessel Construction	131	62	70	118	148	529	50%	41%
Emergency Repairs	4	4	4	4	4	20	2%	2%
WSF Construction	262	242	158	344	272	1279	100%	100%

Washington State Ferries

June 2014 Revenue and Ridership Forecasts — Fiscal Years 2014-2027

JUNE 2014 FORECAST NOTES

The fare revenue and ridership forecasts for Washington State Ferries (WSF) are completed in four stages. First, monthly ridership projections by seven fare categories are prepared for each route using time series analysis methods, with a forecast horizon from the present through fiscal year (FY) 2027.

The seven fare categories include: (1) passenger full fares, (2) passenger commuter discounted fares, (3) passenger other discounted fares, (4) auto full fare, (5) auto commuter discounted fares, (6) other discounted vehicle fares, and (7) oversize vehicle fares.

Stage two of the process generates system-wide ridership projections. Econometric models combine ferry fare scenarios with demographic and economic projections to produce system-wide unconstrained ridership forecasts by seven fare categories through FY 2027. Within each fare category, the individual route forecasts are then calibrated to match the system-wide forecast totals from the econometric models.

Starting with the November 2012 forecast, a series of revisions were made to the passenger and vehicle/driver commuter fare ridership models to better capture the effects of an aging population base and changing workforce demographics.

The third stage of the process consists of adjusting the calibrated passenger and vehicle ridership by route to reflect seasonal vehicle capacity constraints, changes in service hours, and/or the net impacts from adding or eliminating service.

Last, the appropriate fares and average fare realizations are applied to the calibrated, capacity-constrained ridership forecasts for each route by fare category. This yields monthly and annual revenue forecasts by route for seven fare categories.

Two scenarios differing in fare assumptions were prepared for June:

- **Baseline Forecast** – Includes fare increases of 2.0% for passengers and 2.5% for vehicles on May 1, 2014. No further fare increases are included in the Baseline Forecast, resulting in declining real fares over time from general inflation.
- **Alternative 1 Forecast** – Builds on the Baseline Forecast by adding consecutive 2.5% increases each October, from 2015 (FY 2016) through 2026 (FY 2027). This amounts to slightly increasing real fares under the current inflation projections.

The FY 2014 projections include actual ridership and revenue through May 2014.

Ridership Impacts

- The June 2014 ridership demand forecasts reflect the latest updated demographic and economic variable forecasts provided by the State and other sources.
- Forecasts for employment have been revised slightly upward in the near term, with mixed impacts longer term (FY 2017-27), depending on the employment type. This result helps boost ridership demand, primarily through FY 2016.
- Real gasoline prices are mostly unchanged through FY 2019. Thereafter, they are forecasted to be increasingly and significantly higher for the remainder of the forecast horizon. Higher real gas prices contribute to lower vehicle/driver ridership projections in the latter half of the forecast period.
- The inflation projections have been revised higher through the forecast horizon, with larger revisions moving out in time. This causes real fares to be increasingly lower, which puts upward pressure on the ridership projections.
- In addition, actual data continues to show a decrease in commuter fare ridership and an increase in other discounted passenger ridership. This shift is attributed to an October 2013 reduction in youth fares, which made it more attractive for frequent passengers age 6-18 to travel under a single discounted trip fare rather than the multi-trip commuter discounted fare.
- With 11 months of actual data, FY 2014 is projected to come in 1.1% higher than predicted in February.
- Overall, the June Baseline and Alternative 1 ridership forecasts range from 0.4% to 1.0% higher than in February.

Revenue Impacts

- For the 2013/15 biennium, the Baseline and Alternative 1 revenue forecasts total \$337.2 M, or \$1.9 M (0.6%) higher than projected in February. Actual revenue for February through May 2014 came in \$1 M higher than previously forecasted. The remaining \$0.9 M increase for the biennium is expected in FY 2015.
- The 2013/15 biennium forecast is distributed as nearly \$329.7 M in fare revenue to the operating account and \$7.5 M in surcharge revenue to the capital account.
- Beyond FY 2015, revenues under both forecast scenarios are projected to range from 0.4 to 0.5% higher in FY 2017-21, after which forecasted revenues begin to decrease relative to February, reaching 0.4% lower by FY 2027.
- Revenue is lower in the outer years despite overall higher ridership due to a decrease in vehicle ridership from higher real gas prices and a revised forecast for the shift from passenger commuter fare to the lower, other discounted fare.

Washington State Ferries

RIDERSHIP PROJECTIONS ~ BASELINE FORECAST

No Changes in Fares after May 2014¹

June 2014 Forecast – Fiscal Years 2014-2027

Fiscal Year	June 2014 Unconstrained Demand Forecast*	June 2014 Capacity Constrained Projections				February 2014 Projections	
		Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Growth	Total Ridership	Jun. % Chg from Feb.
2008²		12,926,006	10,441,798	23,367,804	(2.8%)		
2009²		12,580,511	9,917,249	22,497,760	(3.7%)		
2010²		12,453,226	10,134,311	22,587,537	0.4%		
2011²		12,242,320	9,968,973	22,211,293	(1.7%)		
2012²		12,236,081	9,983,059	22,219,140	0.0%		
2013²		12,350,126	10,045,043	22,395,169	0.8%		
2014²	22,756,000	12,620,000	10,136,000	22,756,000	1.6%	22,509,000	1.1%
2015	23,152,000	12,651,000	10,214,000	22,865,000	0.5%	22,675,000	0.8%
2016	23,536,000	12,838,000	10,407,000	23,245,000	1.7%	23,076,000	0.7%
2017	23,962,000	13,099,000	10,566,000	23,665,000	1.8%	23,511,000	0.7%
2018	24,382,000	13,363,000	10,709,000	24,072,000	1.7%	23,896,000	0.7%
2019	24,761,000	13,621,000	10,819,000	24,440,000	1.5%	24,237,000	0.8%
2020	25,112,000	13,868,000	10,912,000	24,780,000	1.4%	24,553,000	0.9%
2021	25,451,000	14,110,000	11,001,000	25,111,000	1.3%	24,905,000	0.8%
2022	25,804,000	14,355,000	11,086,000	25,441,000	1.3%	25,277,000	0.6%
2023	26,170,000	14,608,000	11,173,000	25,781,000	1.3%	25,642,000	0.5%
2024	26,549,000	14,873,000	11,262,000	26,135,000	1.4%	26,016,000	0.5%
2025	26,969,000	15,150,000	11,375,000	26,525,000	1.5%	26,421,000	0.4%
2026	27,392,000	15,428,000	11,479,000	26,907,000	1.4%	26,808,000	0.4%
2027	27,836,000	15,710,000	11,586,000	27,296,000	1.4%	27,191,000	0.4%

¹ The Baseline Forecast Forecast includes the 2.0% passenger and 2.5% vehicle fare increases on May 1, 2014, plus the effects of the 25¢ surcharge per fare sold for funding capital expenditures. However, the Baseline Forecast excludes any further changes to the nominal fares after May 2014, resulting in declining real fares over the forecast horizon. The Baseline Forecast also reflects the current programmed level of service subject to capacity constraints.

² Includes historical data through May 2014. * Excludes what would be a minor downward demand impact due to the 25¢ per fare sold capital surcharge.

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Washington State Ferries

RIDERSHIP PROJECTIONS ~ ALTERNATIVE 1 FORECAST

2.5% Annual Fare Increases FY 2016-27¹

June 2014 Forecast – Fiscal Years 2014-2027

Fiscal Year	June 2014 Unconstrained Demand Forecast*	June 2014 Capacity Constrained Projections			February 2014 Projections		
		Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Growth	Total Ridership	Jun. % Chg from Feb.
2008²		12,926,006	10,441,798	23,367,804	(2.8%)		
2009²		12,580,511	9,917,249	22,497,760	(3.7%)		
2010²		12,453,226	10,134,311	22,587,537	0.4%		
2011²		12,242,320	9,968,973	22,211,293	(1.7%)		
2012²		12,236,081	9,983,059	22,219,140	0.0%		
2013²		12,350,126	10,045,043	22,395,169	0.8%		
2014²	22,756,000	12,620,000	10,136,000	22,756,000	1.6%	22,509,000	1.1%
2015	23,152,000	12,651,000	10,214,000	22,865,000	0.5%	22,675,000	0.8%
2016	23,457,000	12,787,000	10,384,000	23,171,000	1.3%	22,991,000	0.8%
2017	23,700,000	12,936,000	10,483,000	23,419,000	1.1%	23,253,000	0.7%
2018	23,941,000	13,088,000	10,573,000	23,661,000	1.0%	23,472,000	0.8%
2019	24,138,000	13,231,000	10,629,000	23,860,000	0.8%	23,644,000	0.9%
2020	24,307,000	13,365,000	10,665,000	24,030,000	0.7%	23,790,000	1.0%
2021	24,458,000	13,489,000	10,695,000	24,184,000	0.6%	23,964,000	0.9%
2022	24,622,000	13,617,000	10,733,000	24,350,000	0.7%	24,162,000	0.8%
2023	24,794,000	13,746,000	10,778,000	24,524,000	0.7%	24,358,000	0.7%
2024	24,962,000	13,869,000	10,820,000	24,689,000	0.7%	24,547,000	0.6%
2025	25,163,000	14,002,000	10,880,000	24,882,000	0.8%	24,752,000	0.5%
2026	25,364,000	14,137,000	10,938,000	25,075,000	0.8%	24,961,000	0.5%
2027	25,585,000	14,273,000	11,009,000	25,282,000	0.8%	25,175,000	0.4%

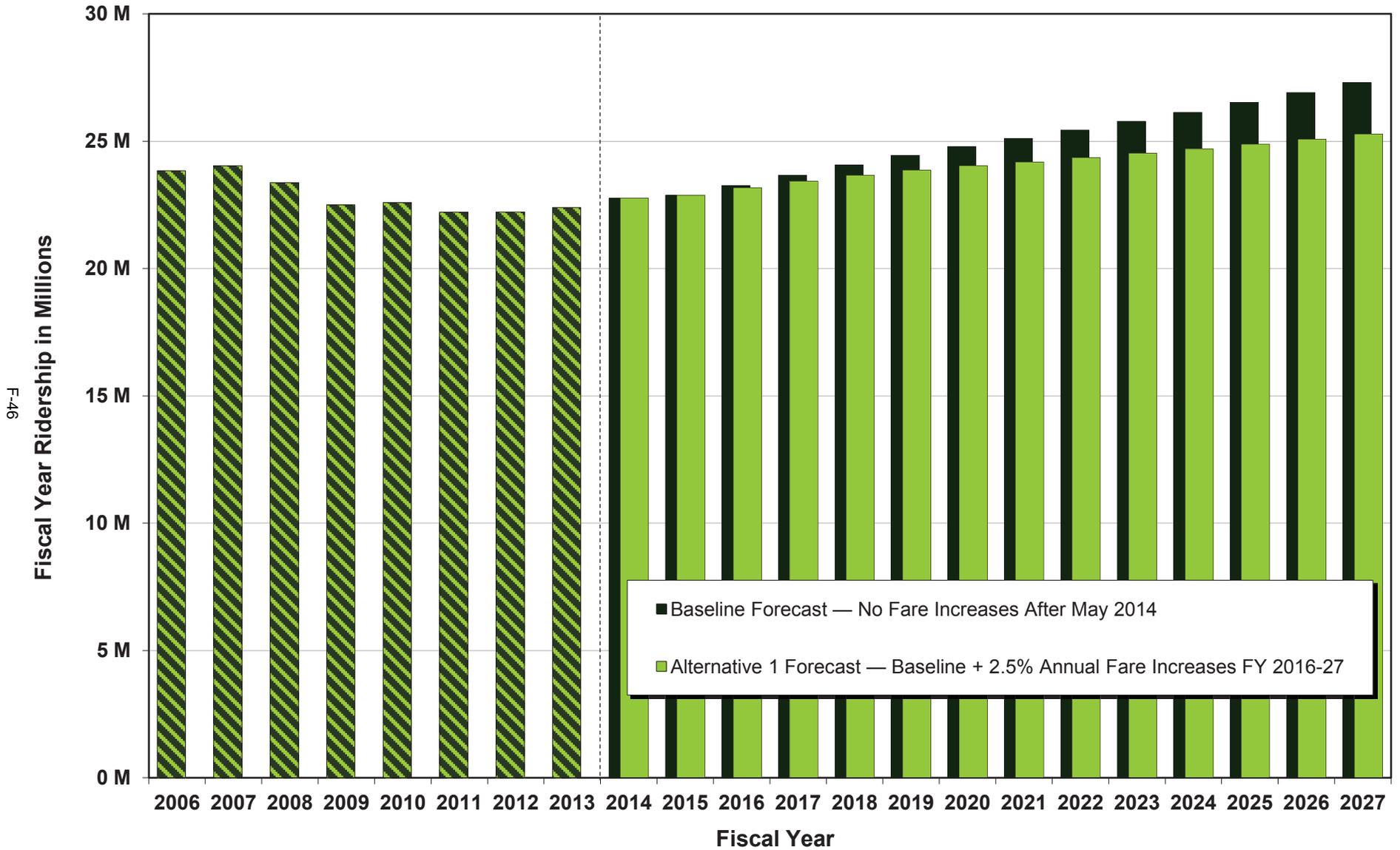
¹ The Alternative 1 Forecast includes the 2.0% passenger and 2.5% vehicle fare increases on May 1, 2014, followed by annual 2.5% fare increases each October, starting in 2015 (FY 2016), plus the 25¢ surcharge per fare sold for funding capital expenditures. Projected annual inflation is less than the 2.5%, leading to slightly increasing real fares over the forecast horizon. The Alternative 1 Forecast also reflects the current programmed level of service subject to capacity constraints.

² Includes historical data through May 2014. * Excludes what would be a minor downward demand impact due to the 25¢ per fare sold capital surcharge.

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Washington State Ferries — Ridership History and Forecast Trends

June 2014 Forecast Scenarios – Fiscal Years 2006-2027



WSDOT Ferries Division 2015-17 Capital Budget Request Level of Service Standards

In 1994, the Washington State Transportation Commission adopted level-of-service (LOS) standards for Washington State Ferries (WSF). These congestion standards were developed as part of a larger effort among local governments and modal transportation agencies to respond to requirements of Washington's Growth Management Act. WSF's LOS standards were defined in terms of a measure called "boat-wait" which focused on congestion during a four-hour peak period. The understanding was that plans for future growth would be tied to maintaining LOS standards. Exceeding LOS standards indicated the need to add capacity which would entail capital investment and additional operating costs.

In 2007, the Legislature enacted ESHB 2358 which directed WSF to re-establish its LOS measure and standards. Previous LOS standards were used to help identify when service needed to be added. The Legislature wanted to incorporate the concepts of demand management through operational and pricing strategies into the level-of-service discussion. So, it directed that the LOS measure and standards be designed to inform about two concerns: (1) when additional operational and pricing strategies might be needed to improve the customer experience or efficient utilization of existing assets and (2) when additional service might be needed, but only if existing assets are being used efficiently.

WSF's current LOS standards are defined in terms of the daily percent of sailings at vehicle capacity at the route level for the months of August, May and January. The table below displays two levels of LOS standards. The Level 1 LOS standards are used to assess whether adaptive management strategies, such as operational and pricing strategies, might be needed to spread demand and improve customer experience. Level 2 standards are used as an indicator that existing assets are being used efficiently and it may be time to consider additional service which entails capital investment and increased operating costs.

As the table below indicates, Level 1 and 2 LOS standards are tailored to the route and season. In general, standards are higher in the summer months to reflect additional recreational ridership on all routes. Standards are higher on recreational routes to reflect an increased feasibility of spreading ridership to under-utilized sailings. Other specific considerations have also been incorporated:

Level 1 Standards (Used to indicate whether there is a need for targeted strategies to spread demand and improve customer experience)

- The 25% standard reflects a situation in which all peak sailings are filled to capacity, but other sailings are not, indicating opportunities to spread demand through adaptive management strategies.
- Anacortes-San Juan Islands and Port Townsend-Keystone have standards that increase to 30% in May and 35% in August to reflect greater seasonality in recreational ridership.
- All other routes have a 30% standard in August to reflect some increased seasonal ridership.

- Anacortes-Sidney currently has only two departures per day, suggesting a 50% level 1 standard.

Level 2 Standards (Used to indicate whether assets are being used efficiently and whether additional capital investment and operating expenditures may be needed)

- Routes with very pronounced peak trends have standards at 50% in January and May, reflecting a situation in which all peak sailings are filled and demand has been spread to fill half of the sailings in time blocks surrounding the peak (essentially doubling the length of the peak period).
- Although the actual and projected performance against the proposed standard for Bremerton is much lower than other routes, Bremerton has standards consistent with other commuter routes under the assumption that a vehicle reservation system will help to shift excess demand from Bainbridge and Kingston to Bremerton.
- Routes with very pronounced peak trends have standards at 60% in August to reflect additional seasonal ridership.
- Routes that have a mix of peak and commuter traffic have standards at 65% in January and May (75% in August) to reflect an increased ability to spread demand throughout the day (due to more time flexibility amongst customers).
- Port Townsend-Keystone has January and May standards at 75% (85% in August) to maximize utilization amongst a customer base that has the greatest time flexibility.
- Anacortes-San Juan Islands standards reflect seasonality among recreational riders but have been adjusted downwards from Port Townsend-Keystone due to a unique sailing schedule that accommodates several destinations (e.g., a 50% standard could indicate that sailings to Orcas are 100% full while sailings to Friday Harbor have additional capacity).

Level-of-Service Standards

Route	Level 1 Standards			Level 2 Standards		
	(Consider Targeted Strategies to Spread Demand and Improve Customer Experience)			(Assets are Being Used Efficiently, Consider Additional Investment)		
	January	May	August	January	May	August
Pt Defiance - Tahlequah	25%	25%	30%	50%	50%	60%
Pt Townsend - Keystone	25%	30%	35%	75%	75%	85%
Mukilteo - Clinton	25%	25%	30%	65%	65%	75%
Fauntleroy - Vashon	25%	25%	30%	50%	50%	60%
Fauntleroy - Southworth	25%	25%	30%	50%	50%	60%
Seattle - Bremerton	25%	25%	30%	50%	50%	60%
Edmonds - Kingston	25%	25%	30%	65%	65%	75%
Seattle - Bainbridge	25%	25%	30%	65%	65%	75%
Anacortes - San Juan Islands	25%	30%	35%	65%	75%	85%
Anacortes - Sidney	n/a	50%	50%	n/a	100%	100%

Washington State Ferries Fuel Cost Estimates
Estimates Based on June 2014 Motor Fuel Price Forecast

ML-5W Ferry Fuel Costs

(as of June 26, 2014)

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	FY 2016	FY 2017	2015-2017 Biennium (Projected)
Fuel Approp in Section 221(4), Laws of 2014			\$113,157,000
Consumption Assumed in 2013-15 Budget	18,028,920	18,121,942	36,150,862
Added for 1st and 2nd Olympic class vessels biennialization	204,782	111,760	316,542
Reduced for Service Reductions (see Decision Pkg PL-1A)			0
Additional Gallons reduced/required over Budgeted Gallons	204,782	111,760	316,542
Total Gallons Required	18,233,702	18,233,702	36,467,404
<i>Non-Hedged</i>			
Total Gallons Not Hedged	18,233,702	18,233,702	36,467,404
<i>Average price per gallon biodiesel (B5), including fees</i>	<i>\$3.20</i>	<i>\$3.08</i>	<i>\$3.14</i>
Cost of Non-Hedged Fuel , Including Fees	58,347,846	\$56,159,802	\$114,507,649
TOTAL Fuel Costs Including Fees	58,348,000	\$56,160,000	\$114,508,000
<i>Average Cost per Gallon, Including Fees</i>	<i>\$3.20</i>	<i>\$3.08</i>	<i>\$3.14</i>
Fuel Hedging Consultant Cost	\$50,000	\$50,000	\$100,000
Total Cost of Fuel and Hedging Consultant	\$58,398,000	\$56,210,000	\$114,608,000
<i>Average Cost per Gallon Including Fees and Hedging Consultant</i>	<i>\$3.20</i>	<i>\$3.08</i>	<i>\$3.14</i>
Variance between Updated Cost Estimate and Appropriation			\$1,451,000

Note: Chapter 16, Laws of 2011 (2ESSB 5742) exempts WSF from having to pay sales tax on fuel purchased for ferries beginning in 2013-15.

(PPG from **Figure 19** Near-and Long-term Annual Fuel Price - **Page 18** of June **2014** Transportation Revenue Forecast Summary (Volume I))

Washington State Ferries Fuel Cost Estimates
Estimates Based on June 2014 Motor Fuel Price Forecast

PL-1A Service Reduction Gallons

(as of June 26, 2014)

	FY 2016	FY 2017	2015-2017 Biennium (Projected)
Fuel Approp in Section 221(4), Laws of 2014			
Consumption Assumed in 2013-15 Budget			0
Added for 1st and 2nd Olympic class vessels biennialization			0
Reduced for Service Reductions (see Decision Pkg PL-1A)	(171,718)	(181,966)	(353,684)
Additional Gallons reduced/required over Budgeted Gallons	(171,718)	(181,966)	(353,684)
Total Gallons Required	(171,718)	(181,966)	(353,684)
<i>Non-Hedged</i>			
Total Gallons Not Hedged	(171,718)	(181,966)	(353,684)
<i>Average price per gallon biodiesel (B5), including fees</i>	\$3.20	\$3.08	\$3.14
Cost of Non-Hedged Fuel , Including Fees	(549,498)	(\$560,455)	(\$1,109,953)
TOTAL Fuel Costs Including Fees	(549,000)	(\$560,000)	(\$1,110,000)
<i>Average Cost per Gallon, Including Fees</i>	\$3.20	\$3.08	\$3.14
Fuel Hedging Consultant Cost			\$0
Total Cost of Fuel and Hedging Consultant	(\$549,000)	(\$560,000)	(\$1,110,000)
<i>Average Cost per Gallon Including Fees and Hedging Consultant</i>	\$3.20	\$3.08	\$3.14
Variance between Updated Cost Estimate and Appropriation			(\$1,110,000)

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Note: Chapter 16, Laws of 2011 (2ESSB 5742) exempts WSF from having to pay sales tax on fuel purchased for ferries beginning in 2013-15.

(PPG from **Figure 19** Near-and Long-term Annual Fuel Price - **Page 18** of June **2014** Transportation Revenue Forecast Summary (Volume I))

Washington State Ferries Fuel Cost Estimates
Estimates Based on June 2014 Motor Fuel Price Forecast

All Gallons

(as of June 26, 2014)

	FY 2016	FY 2017	2015-2017 Biennium (Projected)
Fuel Approp in Section 221(4), Laws of 2014			\$113,157,000
Consumption Assumed in 2013-15 Budget	18,028,920	18,121,942	36,150,862
Added for 1st and 2nd Olympic class vessels biennialization	204,782	111,760	316,542
Reduced for Service Reductions (see Decision Pkg PL-1A)	(171,718)	(181,966)	(353,684)
Additional Gallons reduced/required over Budgeted Gallons	33,064	(70,206)	(37,142)
Total Gallons Required	18,061,984	18,051,736	36,113,720
<i>Non-Hedged</i>			
Total Gallons Not Hedged	18,061,984	18,051,736	36,113,720
<i>Average price per gallon biodiesel (B5), including fees</i>	<i>\$3.20</i>	<i>\$3.08</i>	<i>\$3.14</i>
Cost of Non-Hedged Fuel , Including Fees	57,798,349	\$55,599,347	\$113,397,696
TOTAL Fuel Costs Including Fees	57,798,000	\$55,599,000	\$113,398,000
<i>Average Cost per Gallon, Including Fees</i>	<i>\$3.20</i>	<i>\$3.08</i>	<i>\$3.14</i>
Fuel Hedging Consultant Cost	\$50,000	\$50,000	\$100,000
Total Cost of Fuel and Hedging Consultant	\$57,848,000	\$55,649,000	\$113,498,000
<i>Average Cost per Gallon Including Fees and Hedging Consultant</i>	<i>\$3.20</i>	<i>\$3.08</i>	<i>\$3.14</i>
Variance between Updated Cost Estimate and Appropriation			\$341,000

Note: Chapter 16, Laws of 2011 (2ESSB 5742) exempts WSF from having to pay sales tax on fuel purchased for ferries beginning in 2013-15.

(PPG from **Figure 19** Near-and Long-term Annual Fuel Price - **Page 18** of June **2014** Transportation Revenue Forecast Summary (Volume I))

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Ferry Preservation

Washington State Department of Transportation Ferries Life Cycle Cost Model

For 18 years, WSDOT has been using and enhancing an asset management approach for ensuring safe and reliable Ferry System terminal and vessel infrastructure.

Legislative and OFM involvement in the development of Ferries asset management:	
1996	WSDOT begins development of a life cycle cost model (LCCM).
2001	The Legislature's Joint Task Force on Ferries recommends use of the LCCM and sets preservation objectives and performance measurements in terms of the LCCM.
2001	The Legislature directs OFM to review and OFM validates the LCCM.
2007	The Legislature's Ferries Financing Study recommends improvements to the LCCM.
2007-2008	The Legislature enacts ESHB 2358 in 2007 and SSB 6932 in 2008 that require WSDOT to <ul style="list-style-type: none"> • Maintain an LCCM, • Use standard life cycles for assets that are adjusted for condition determined by periodic inspections, • Use the LCCM to project preservation needs and • Use the LCCM as the basis for preservation budget requests.
2008	OFM incorporates the LCCM into its 2009-2011 transportation budget instructions.
2008-2011	The Legislature directs improvements to the LCCM in several appropriations bills, including using asset management tools.

The Ferries asset management system consists of:

- Preservation policies, objectives, strategies and performance standards and measures,
- An inventory of the systems that make up terminals and vessels,
- Condition inspection and assessment of these systems,
- Projection of preservation needs using the LCCM,
- Performance, economic and risk assessment tools for prioritizing preservation needs, developing projects subject to funding constraints and evaluating the performance of investment scenarios,
- Capital plans and budgets based on the LCCM and
- Measurement of the delivery performance of capital plans and budgets in reducing the backlog of preservation needs.

New developments in Ferries asset management:

WSDOT is introducing new asset management tools to prioritize preservation needs and program preservation investments subject to limited financial resources.

- The Department has developed a risk assessment tool to aid in prioritizing vessel preservation. It considers the likelihood of vessel systems failing and the likely consequences of system failure on ferry operations to determine when to preserve an asset.
- WSDOT is also developing an economic-based asset management tool for terminal preservation that uses risk of failure and consequence of failure measured in terms of reactive and societal costs as the basis for prioritizing preservation of terminal systems and identifying the systems that would be more economically kept usable by additional maintenance instead of a capital preservation project.

WSDOT risk assessment matrix helps prioritize ferry vessel preservation

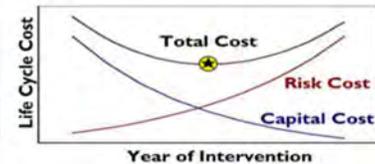
Based on the likelihood of the system failing combined with the likely consequences of the system's failure

Percent of life cycle remaining (Probability of failure factor)	Consequence of failure factor			
	Minimal impact: does not affect sailing	Marginal impact: less than 24 hours to repair	Moderate impact: one or more days to repair	Critical impact: one or more weeks to repair
Beyond life cycle (nearly certain to fail)	Condition Category 2: System is approaching the point at which replacement should occur in the		Condition Category 3: System is overdue for replacement	
0% - 9% (likely to fail)				
10% - 24% (failure possible)				
25% - 49% (unlikely to fail)	Condition Category 1: System does not currently need replacement		current or ensuing repairs	
50% - 100% (very unlikely to fail)				

Data source: WSDOT Ferries Division

WSDOT economic assessment helps prioritize ferry terminal preservation

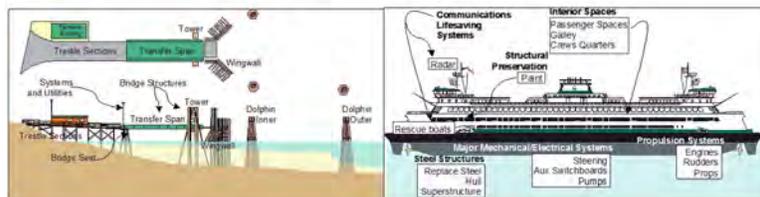
(Based on risk, cost of failure and maintenance costs)



How does Ferries asset management work?

At the heart of WSF's asset management approach to preservation is the LCCM. The foundation of the LCCM is an inventory of systems that make up WSF's vessels and terminals, some of which are illustrated below. This inventory includes condition assessment derived from periodic inspection of assets that are used to adjust the standard life cycles of systems.

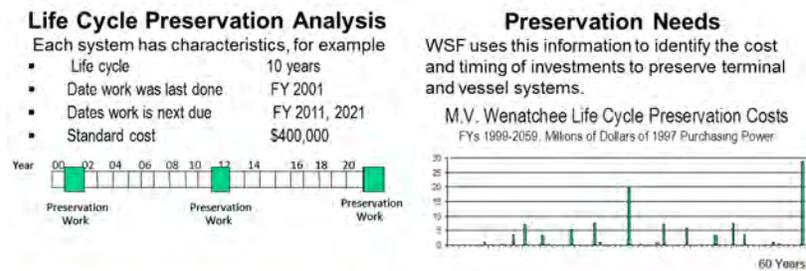
Examples of Terminal and Vessel Systems



Condition Assessment of Terminal and Vessel Systems

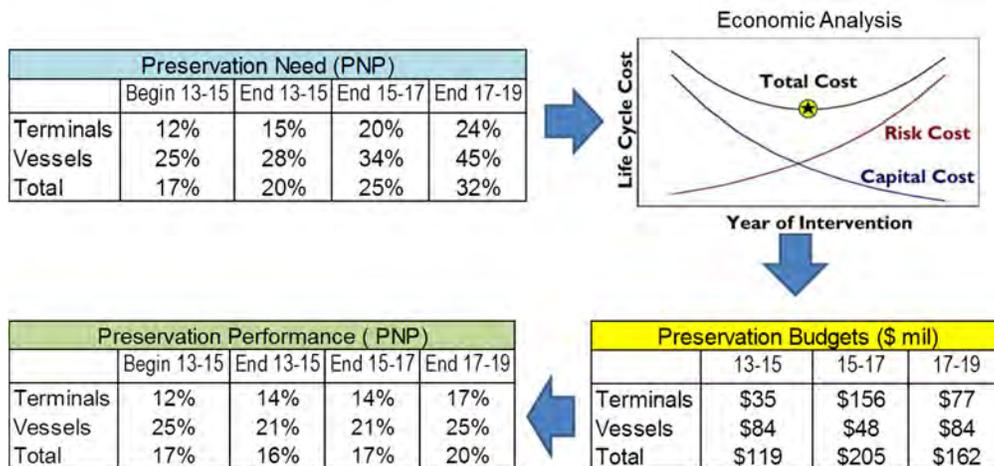
Type of Asset	No. of Systems	Condition Assessment		Major Problem		
		Good-Fair	Poor-Very Poor	Good	Problem	Problem
Terminals	752	88%	12%			
Vessels	1867			58%	35%	7%

Each vessel or terminal system has an expected life. Starting with the date the system was acquired or last preserved, WSDOT can project when the system will next need to be replaced. Given the cost of preservation, WSF can project preservation needs over time. Illustrated below is the cost of preserving the systems of the MV Wenatchee over 60 years. The LCCM is used to project preservation needs, budget for projects and assess the performance of the investments in reducing backlogs of preservation. WSF uses a measure of needs and performance developed by legislative and OFM staff called the preservation needs percent (PNP). This is the percentage of the value of systems that are beyond their condition-adjusted life cycle. This analysis is illustrated below for the MV Wenatchee which shows the vessel's preservation needs, budgets and performance results.



MV Wenatchee Preservation Need, Budget & Performance (PNP & \$mil)				
	Begin 13-15	End 13-15	End 15-17	End 17-19
Need	24%	31%	32%	51%
Budget	\$3.5	\$4.9	\$12.4	\$0.8
Performance	24%	15%	11%	11%

The approach illustrated for the MV Wenatchee is aggregated for the entire Ferry System and for all terminals and vessels. The tables below show preservation needs in terms of PNP. Economic and risk assessment tools are used to prioritize needs and preservation investments are programmed to address these needs subject to financial constraints. Finally, the performance of these investments is projected in terms of PNP. This framework also provides the basis for measuring actual delivery of the preservation backlog reduction plan.



Washington State Ferries Terminal and Vessel Preservation Condition Assessment

Summary of Terminal and Vessel Conditions

- 88% of terminal systems are in “good” or “fair” condition. 12% are in “poor” or “very poor” condition.
- 91% of vessels systems are not past due for replacement. 9% are past due for replacement.

Terminal Condition Assessment

Condition Assessment:

WSDOT places high priority on maintaining the condition of its ferry terminals and vessels in order to provide safe, reliable and efficient ferry service. It describes the condition of its ferry terminals and vessels through the use of condition assessments. At the time of the last assessments, WSDOT reviewed the condition of 22 vessels, 19 ferry terminals and a maintenance facility.

Condition of Ferry Terminals: WSDOT’s Ferries Division is responsible for maintaining the condition of the 19 terminals and the maintenance facility located in Washington State. (The 20th terminal is in Sidney, British Columbia). Terminal assets currently consist of 752 separate components, called systems. These systems are grouped into the following types: buildings, landing aids (wingwalls and dolphins), overhead loading systems, passenger-only ferry facilities, pavements, trestles and bulkheads and vehicle transfer span systems.

WSDOT is required by law to inspect and evaluate its assets for condition at least once every three years. The table below shows the current condition ratings as of February 2014 which includes 2013 inspection results. Eighty-eight percent of ferry terminal systems are currently rated in “good” or “fair” condition. Twelve percent of ferry terminal systems are currently rated in “poor” or “substandard” condition. There are only a few systems awaiting inspection and rating. The ratings do not indicate that systems are safe or unsafe, but rather how closely their condition should be monitored prior to preservation.

The condition of terminal assets has improved over the previous assessment. In the latest assessment 11.6% of terminal systems are rated in “poor” or “very poor” condition. 12.5% of systems were in these condition categories in the previous assessment.

Two types of terminal systems have a percentage of assets rated as “poor” or “very poor” that is above the system-wide average of 12%.

- 23 % of landing aids (wingwalls and dolphins) are rated as “poor” or “very poor.” Some of the landing aids are creosote-soaked, wood pilings that are deteriorating due to rot from being immersed in salt water. WSF plans to replace timber bridge assets with concrete and steel structures to increase their usable life-span and to reduce marine contamination caused by creosote.
- 13% of passenger-only facility systems are rated as “poor” or “very poor.” Seattle, Vashon, and Eagle Harbor have approximately five systems per location in “poor” or “very poor” condition, including transfer spans, floating docks, bridge seats, tollbooths, and gang planks.

Three other types of systems, while below the system-wide average, have more than 10% of their systems in “poor” or “very poor” condition.

- 11% of vehicle transfer span systems are rated as “poor” or “very poor.” Many transfer span electrical and mechanical systems have required frequent rehabilitation over the years and are functionally obsolete.
- 11% of overhead loading systems are rated as “poor” or “very poor.” Mechanical and electrical systems require multiple rehabilitations over the total life of the Overhead Loading system.
- 10% of paved areas are rated as “poor” or “very poor.” Condition ratings for paved areas have been revised based on a change in condition rating methodology more appropriate for paved areas that don’t carry vehicular traffic moving at highway speeds. Nevertheless, although inspection criteria are less rigorous, a significant number of paved areas are rated in “poor” or “very poor” condition.

Washington State Ferries
Condition Assessment of Ferry Terminal Systems

Type of Facility or System	# of Systems	Good or Fair (70-100)	Poor or Very poor (0-69)	Not Rated
Buildings	136	99%	0%	1%
Landing Aids	177	77%	23%	0%
Overhead Loading Systems	66	89%	11%	0%
Passenger Only Facilities	15	87%	13%	0%
Pavement	78	90%	10%	0%
Trestle & Bulkheads	70	91%	9%	0%
Vehicle Transfer Spans	210	89%	11%	0%
Totals/average 2013	752	88%	12%	0%

WSDOT also assesses the condition of its assets by terminal. Eight terminals have a percentage of their systems rated as “poor” or “very poor” that is above the system-wide average of 12%, including Eagle Harbor (26%), Coupeville/Keystone (23%), Anacortes (18%), Port Townsend (18%), Seattle (16%), Bremerton (16%), Vashon (15%) and Mukilteo (13%). One other terminal, Point Defiance, while below the system-wide average, has more than ten percent of its systems in “poor” or “very poor” condition.

Washington State Ferries
Condition Assessment by Ferry Terminal

Ferry Terminal	# of Systems	Good or Fair (70-100)	Poor or Very poor (0-69)	Not Rated
Anacortes	81	81%	19%	0%
Bainbridge	52	92%	8%	0%
Bremerton	45	84%	16%	0%
Clinton	42	100%	0%	0%
Edmonds	35	100%	0%	0%
Eagle Harbor	76	72%	26%	1%
Fauntleroy	24	100%	0%	0%
Friday Harbor	35	94%	6%	0%
Coupeville/Keystone	17	76%	24%	0%
Kingston	56	96%	4%	0%
Lopez	18	94%	6%	0%
Mukilteo	23	87%	13%	0%
Orcas	20	90%	10%	0%
Point Defiance	19	89%	11%	0%
Port Townsend	27	81%	19%	0%
Seattle	83	84%	16%	0%
Shaw	17	94%	6%	0%
Southworth	25	100%	0%	0%
Tahlequah	18	100%	0%	0%
Vashon	39	85%	15%	0%
Totals/average 2013	752	88.3%	11.6%	0.1%

WSF ferry terminal condition definitions:

- Good (90-100): The structure is performing as designed with all elements functioning as intended.
- Fair (70-89): All primary elements making up the structure are sound but there are some deficiencies in various elements. Examples: areas of rot, crushing, or marine borer activity in timbers; areas of corrosion for steel elements; cracking and spalling in concrete; wearing in mechanical systems; cracking and raveling in pavement systems.
- Poor (50-69): There is moderate deterioration of certain elements as defined under the “fair” condition. These deficiencies may affect the load carrying capacities or the use of the structure and require some element of repair or replacement.
- Very Poor (0-49): There is advanced deterioration throughout the structure that will require the use of the structure to be restricted. For landing aids, this means that the structure will not provide the protection to other structures. For trestles and transfer spans this means there will be load restrictions. For pavement this

means that the sub-grade, as well as the pavement, will need to be rehabilitated.

Vessel Condition Assessment

WSDOT's Ferries Division was responsible for the preservation of 22 vessels at the time of the last assessment (June 2014). The vessels preservation inventory consists of 1867 systems.

In 2012, WSDOT implemented a new approach for assessing the condition of vessels in WSF's fleet. Ferry condition ratings are based on risk categorization that considers both the probability and consequence of failure for each individual system. Each vessel system receives one of three condition ratings. Items with a condition rating of "1" do not currently need replacement. Items with a condition rating of "2" are approaching the point at which preservation should occur in the current or ensuing biennium. Items with a condition rating of "3" are overdue for replacement. Condition ratings are generated by a model and either verified or modified by periodic physical inspections. This new approach has helped prioritize spending in the face of a tight budgetary environment and an aging fleet.

There are eight types of vessel systems: communication-navigation-life saving equipment, major mechanical and electrical equipment, passenger and crew spaces, piping systems, propulsion systems, security equipment, steel structures, and structural protection systems.

In the past two years, the number of vessel system being monitored for condition has increased. Some of the additions are the result of new regulatory/legal requirements; for example, the installation of visual paging systems on several ferries. These systems provide emergency information to hearing impaired passengers. Other additions were done to better define systems needing replacement. An example of this is the creation of an "alarm and monitoring system" inventory item separate from the existing "propulsion control system." While these systems are often linked, they are separate and distinct systems with different life cycles.

The vessel condition assessment tables show the status of systems by condition category and type of system. As of June 2014, 91% of all vessel systems are in condition category 1 or 2 and not overdue for replacement. The remaining 9% of systems are in condition category 3 and are overdue for replacement. The number of systems in category 3 condition has increased from seven percent to nine percent since the previous year.

Two types of vessel systems have a percentage of assets in category 3 that is above the system-wide average of 9%. 21 % of piping systems and 18% of propulsion systems are in category 3. All of the other types of systems have less than 10% of their items in category 3.

Washington State Ferries
Condition Category Assessment of Ferry Vessel Systems

Ferry Vessel System	# of Systems	Percent by Condition Category		
		1	2	3
Piping	150	38%	41%	21%
Propulsion	274	10%	72%	19%
Communication, Navigation, Lifesaving	599	65%	28%	7%
Major Mechanical/Electrical	315	52%	40%	8%
Structural Preservation (Paint)	192	60%	38%	2%
Steel	170	64%	35%	2%
Passenger and Crew Spaces	65	54%	46%	0%
Security	102	1%	37%	0%
Totals/average 2013*	1867	51.4%	40.1%	8.5%

* - Excluding the Evergreen State's systems

WSDOT also assesses the condition of its assets by vessel. Twenty-two vessels were expected to be active in the 2013-2015 biennium. Eight of these vessels have a percentage of systems in condition category 1 that is above the system-wide average of 9%; including the MV Hiyu (36%), the MV Hyak (22%), the MV Elwha (22%), the MV Klahowya (14%), the MV Yakima (12%), the MV Kaleetan (11%), the MV Tillikum (11%), the MV Sealth (10%). The remaining 14 vessels have 10% or less of their systems in condition category 3.

Washington State Ferries
Condition Category Assessment by Ferry Vessel

Ferry Vessel System	# of Systems	Year Build/Rebuilt	Percent by Condition Category		
			1	2	3
Tacoma	96	1998	47%	49%	4%
Wenatchee	96	1998	51%	47%	2%
Puyallup	96	1999	52%	43%	5%
Spokane	90	1972	54%	39%	7%
Walla Walla	90	1973	54%	38%	8%
Hyak	90	1967	33%	44%	22%
Kaleetan	90	1967	46%	43%	11%
Yakima	89	1967	42%	46%	12%
Elwha	91	1967	30%	48%	22%
Tokitae	81	2014	90%	10%	0%
Issaquah	81	1979	46%	47%	7%
Kitsap	82	1980	48%	48%	5%
Kittitas	83	1980	43%	52%	5%
Cathlamet	83	1981	43%	52%	5%
Chelan	87	1981	48%	44%	8%
Sealth	82	1982	43%	48%	10%
Klahowya	81	1958	37%	49%	14%
Tillikum	81	1959	36%	53%	11%
Chetzemoka	81	2010	86%	14%	0%
Salish	81	2011	90%	10%	0%
Kennewick	81	2012	88%	12%	0%
Hiyu	55	1967	22%	42%	36%
Totals/average 2013*	1867		51.4%	40.1%	8.5%

* - Excluding the Evergreen State's systems

WSDOT Ferries Division 2015-17 Capital Budget Request Preservation Needs

Major Themes of Ferries Preservation Needs

- The Washington State Department of Transportation (WSDOT) is directed by statute to estimate future terminal and vessel preservation needs using a life cycle cost model (LCCM) that employs a standard life cycle for each asset in the model that is adjusted for the asset's condition determined by an inspection conducted at least once every three years.
- Without any preservation investments, 25% of the value of Ferry System assets will be beyond their standard life cycle adjusted for condition by the end of the 2015-2017 Biennium, rising to 45% by the end of the 2015-2025 ten-year period.
- Vessel preservation needs are higher than terminal needs in terms of constant dollar value and percentage of the value of vessel or terminal assets that are beyond their life cycle.
- Vessel preservation needs increase faster than terminal needs over the ten-year period.
- There are eight vessels that have more than 40% of the value of their systems past their life cycle at the end of the 2015-2017 Biennium. They are in the Super, Issaquah and Jumbo vessel classes.
- There are nine terminals that have more than 20% of the value of their systems past their life cycle at the end of the 2015-2017 Biennium. The Seattle Terminal has 43%. Terminals at Vashon, Southworth, Point Defiance, Port Townsend, Coupeville, Anacortes, Fauntleroy and Mukilteo range between 20% and 40%.

Statutory Requirement for Estimation of Future Ferries Preservation Needs

RCW 47.60.345 provides the statutory framework for estimating future terminal and vessel preservation needs. This law states that the department shall maintain a life cycle cost model on capital assets. The department will use available industry standards for estimating the life of an asset. The department may adopt standard life cycles derived from the experience of similar public and private entities when industry standards are not available. All assets in the LCCM must be inspected and updated in the model for asset condition at least once every three years. The standard estimated life is adjusted for asset condition when inspections are made. Finally, the LCCM shall be used when estimating future terminal and vessel preservation needs.

The LCCM provides the means for estimating future preservation needs. Each terminal or vessel system in the model has

- A date that it was acquired or last preserved,
- A standard life cycle interval adjusted for condition determined by inspection of the system at least once every three years and
- A cost factor expressed in constant dollars.

These three items of information are used to project the timing and cost for terminal and vessel systems needing preservation. This information is aggregated to estimate future preservation needs for an individual terminal or vessel, all terminals or all vessels, and the Ferry System as a whole.

The department is approaching the 2015-2017 Biennium with a backlog of condition-based preservation needs that must be addressed in addition to any new preservation needs coming due during the biennium. These preservation needs are greater than available funding. To deal with this situation, the Legislature has directed the department to develop asset management tools for prioritizing and selecting which needs will be addressed by available funding.

- The department has developed a risk assessment tool for vessel preservation that uses the likelihood of a vessel system failing and the likely consequences of system failure on ferry operations as the basis for prioritizing preservation of vessel systems.
- The department is also developing an economic-based asset management tool for terminal preservation that uses risk of failure and consequence of failure measured in terms of reactive and societal costs as the basis for prioritizing preservation of terminal systems and identifying the systems that would be more economically kept usable by additional maintenance instead of capital preservation investment.

In conclusion, the statutory prescription for estimating preservation needs is based on an LCCM containing terminal or vessel systems that have a standard life cycle adjusted for the condition of the system determined by inspection. This paper provides the estimate of future preservation needs in accordance with the statutory framework. Once the set of needs is identified, asset management tools will be used to determine the subset of needs that will be addressed through the preservation backlog reduction plan subject to funding constraints.

Format for Presenting Estimates of Future Preservation Needs

The description of Ferry System preservation needs is structured as follows:
Needs are expressed in two ways:

- The costs per biennium to preserve systems that have reached the end of their life cycle expressed in constant dollars of 2014 purchasing power and
- The preservation needs percent (PNP) which is the percent of the value of systems that are beyond their life cycle; i.e., the value of systems beyond their life cycle divided by the total value of all systems.

Preservation needs are reported at three levels of aggregation:

- Individual terminals and vessels,
- All terminals and all vessels and
- All Ferry System infrastructure.

The needs are shown for the following periods:

- Deferred preservation needs accumulating prior to the 2015-2017 Biennium,

- Additional preservation needs coming due in each biennium from the 2015-2017 Biennium through the 2023-2025 Biennium,
- Cumulative preservation needs through the 2015-2017 Biennium (i.e., by the end of the budget request biennium), and
- Cumulative preservation needs through the 2023-2025 Biennium (i.e., by the end of the ten-year planning period).

Preservation Needs for the Entire Ferry System and for All Terminals and All Vessels

System-wide Needs:

- The estimate of future Ferry System preservation needs focuses on the accumulation of preservation needs over two time periods: one ending with the 2015-2017 budget request biennium and one ending with the ten-year planning period (2023-2025 Biennium). These two periods overlap because both of them contain the backlog of deferred preservation carried forward into the 2015-2017 Biennium and preservation needs coming due in the 2015-2017 Biennium.
- The Ferries LCCM projects Ferry System preservation needs into the future in terms of constant dollars of 2014 purchasing power. These projections are pure needs that are not offset by preservation investments. Later in the budget development process the department programs preservation projects to reduce needs and estimates the reduction in the backlog of preservation needs expected to be realized by the preservation plan.
- The Ferry System's pre-2015-2017 Biennium backlog of preservations needs plus needs coming due in the 2015-2017 Biennium will be \$610 million. By the end of the 2023-2025 Biennium, preservation needs will rise to \$1.124 billion.
- Preservation needs are also measured in terms of the percentage of the value of systems that will be past their life cycle in the absence of preservation investments. By the end of the 2015-2017 Biennium, 25% of the value of combined terminal and vessel systems will be past their life cycle. By the end of the 2023-2025 Biennium, the percentage of the value of systems that will be past their life cycle rises to 45%.

Preservation Needs for All Vessels and All Terminals:

- The Ferry System's preservation needs can be broken down into vessel and terminal preservation needs. Vessel preservation needs will be \$327 million or 54% of the total preservation needs accumulating through the 2015-2017 Biennium. Terminal needs will be \$282 million or 46%. By the end of the 2023-2025 Biennium, vessel needs will be \$631 million or 56% of accumulating preservation needs. Terminal needs will be \$493 million or 44%.

- Vessel and terminal preservation needs are also measured in terms of the percentage of the value of vessel or terminal systems that will be past their life cycle in the absence of preservation investments. By the end of the 2015-2017 Biennium, 32% of the value of vessel systems and 20% of the value of terminal systems will be past their life cycle. This need grows as additional systems reach the end of their life cycle in succeeding biennia. By the end of the 2023-2025 Biennium, the percentage of the value of systems that will be past their life cycle rises to 58% for vessels and 34% for terminals.
- These projections indicate that vessel preservation needs start at a higher level and grow more rapidly than terminal preservation needs.

WSF Construction Program W
 Preservation Needs By Type of Asset
 Based on the Ferries Life Cycle Cost Model Sorted by Needs Through 2015-2017
 In 2014 Constant Millions of Dollars

	Backlog						Cum Thru	Cum Thru	% Thru	% Thru
	Pre 15-17	15-17	17-19	19-21	21-23	23-25	15-17	23-25	15-17	23-25
Vessels	266.4	60.8	109.2	54.4	88.3	52.3	327.1	631.5	54%	56%
Terminals	210.5	71.8	65.4	54.2	43.3	47.5	282.4	492.8	46%	44%
Terminals and Vessels	476.9	132.6	174.6	108.6	131.6	99.8	609.5	1,124.2	100%	100%

WSF Construction Program W
 Percent of the Value of Ferry Systems Beyond Their Life Cycle
 By Type of Asset
 Based on the Ferries Life Cycle Cost Model, Sorted by PNP at the End of the 2015-2017 Biennium
 In Preservation Needs Percentages (PNPs)

	13-15	15-17	17-19	19-21	21-23	23-25
	PNP	PNP	PNP	PNP	PNP	PNP
Vessels	26%	32%	40%	45%	54%	58%
Terminals	15%	20%	24%	28%	31%	34%
Ferry System	19%	25%	31%	35%	41%	45%

Individual Ferry Terminal Preservation Needs in 2014 Dollars

WSDOT operates 20 ferry terminals and the Eagle Harbor Maintenance Facility. The table below provides details about the preservation needs of individual terminals (excluding Sidney, B.C.) and the Eagle Harbor Maintenance Facility. Terminals are ranked in accordance with preservation needs through the 2015-2017 Biennium. With respect to the 2015-2017 Biennium:

- Terminal preservation needs are greatest at the Seattle Terminal which accounts for \$135 million or 48% of terminal preservation needs accumulating by the end of the 2015-2017 Biennium.
- The terminals at Vashon and Anacortes each have preservation needs between \$20 and \$30 million and account for another \$53 million or 19% of preservation needs accumulating by the end of the 2015-2017 Biennium.
- The terminals at Port Townsend, Eagle Harbor, Southworth and Fauntleroy each have preservation needs between \$10 and 20 million and account for \$53 million or 19% of preservation needs accumulating by the end of the 2015-2017 Biennium.

- The remaining 13 terminals at Bainbridge, Bremerton, Mukilteo, Point Defiance, Kingston, Coupeville, Lopez, Edmonds, Shaw, Clinton, Friday Harbor, Tahlequah and Orcas each have preservation needs less than \$10 million and account for \$41 million or 14% of preservation needs accumulating by the end of the 2015-2017 Biennium.

With respect to the end of the 2015-2025 ten-year period:

- Terminal preservation needs are greatest at the Seattle Terminal which accounts for \$166 million or 34% of terminal preservation needs accumulating by the end of the 2015-2025 ten-year period.
- The four terminals at Anacortes, Vashon, Eagle Harbor and Bainbridge each have preservation needs between \$30 and \$50 million and account for another \$158 million or 32% of preservation needs accumulating by the end of the 2015-2025 ten-year period.
- The seven terminals at Fauntleroy, Bremerton, Kingston, Southworth, Coupeville, Port Townsend and Edmonds each have preservation needs between \$10 and \$30 million and account for \$125 million or 25% of preservation needs accumulating by the end of the 2015-2025 ten-year period.
- The remaining eight terminals a Point Defiance, Friday Harbor, Tahlequah, Lopez, Orcas, Clinton, Shaw and Mukilteo each have preservation needs less than \$10 million and account for \$44 million or 9% of preservation needs accumulating by the end of the 2015-2025 ten-year period.

WSF Construction Program W
Preservation Needs By Terminal
Based on the Ferries Life Cycle Cost Model, Sorted by Needs through 2015-2017
In 2014 Constant Millions of Dollars

Terminals	Backlog						Cum Thru 15-17	Cum Thru 23-25	% Thru 15-17	% Thru 23-25
	Pre 15-17	15-17	17-19	19-21	21-23	23-25				
Seattle	101.0	34.3	22.1	0.1	7.1	1.4	135.3	165.9	48%	34%
Vashon	24.5	3.3	0.1	1.6	9.5	0.0	27.8	39.0	10%	8%
Anacortes	20.0	5.1	2.6	10.8	6.5	1.8	25.1	46.8	9%	10%
Port Townsend	15.2	0.0	0.2	0.0	0.4	0.0	15.2	15.8	5%	3%
Eagle Harbor	11.6	2.4	3.9	16.8	0.0	2.3	14.1	37.2	5%	8%
Southworth	0.1	13.0	0.1	0.0	1.8	1.0	13.1	16.0	5%	3%
Fauntleroy	10.7	0.0	2.9	0.0	0.1	12.3	10.7	26.1	4%	5%
Bainbridge	8.2	0.0	6.6	11.2	1.3	7.2	8.2	34.6	3%	7%
Bremerton	3.9	3.8	5.6	6.5	1.9	2.0	7.6	23.6	3%	5%
Mukilteo	4.1	2.2	0.2	-6.4	0.0	0.0	6.3	0.0	2%	0%
Point Defiance	3.8	2.0	0.0	0.1	0.3	2.6	5.8	8.8	2%	2%
Kingston	1.5	4.0	0.3	0.2	5.1	5.2	5.5	16.3	2%	3%
Coupeville	5.3	0.0	7.8	1.1	0.7	1.1	5.3	16.0	2%	3%
Lopez	0.0	1.1	0.0	5.6	0.0	0.4	1.1	7.0	0%	1%
Edmonds	0.3	0.6	0.2	1.1	4.5	5.0	1.0	11.8	0%	2%
Shaw	0.2	0.0	0.0	0.0	2.0	0.0	0.2	2.2	0%	0%
Clinton	0.1	0.0	0.2	3.8	0.0	1.1	0.1	5.1	0%	1%
Friday Harbor	0.0	0.0	4.5	0.0	1.9	1.5	0.0	7.9	0%	2%
Orcas	0.0	0.0	3.7	1.8	0.0	0.0	0.0	5.5	0%	1%
Tahlequah	0.0	0.0	4.4	0.0	0.0	2.7	0.0	7.1	0%	1%
All Terminals	210.5	71.8	65.4	54.2	43.3	47.5	282.4	492.8	100%	100%

Individual Vessel Preservation Needs in 2014 Dollars

WSDOT will have 22 active vessels and plans to acquire two additional vessels in the 2015-2017 Biennium. The table below provides preservation needs information for these vessels. Vessels are ranked in accordance with preservation needs through the

2015-2017 Biennium. Super Class and Jumbo Class vessels lead the way in preservation needs. With respect to the 2015-2017 Biennium:

- Three vessels, the MVs Hyak, Elwha and Wenatchee, each have preservation needs between \$30 and \$40 million and account for \$96 million or 29% of preservation needs accumulating by the end of the 2015-2017 Biennium.
- Four vessels, the MVs Kaleetan, Yakima, Spokane and Kitsap, each have preservation needs between \$20 and \$30 million and account for \$89 million or 27% of preservation needs accumulating by the end of the 2015-2017 Biennium.
- Ten vessels, the MVs Walla Walla, Cathlamet, Kittitas, Klahowya, Issaquah, Chelan, Puyallup, Tacoma, Sealth, and Tillikum, each have preservation needs between \$10 and \$20 million and account for \$139 million or 43% of preservation needs accumulating by the end of the 2015-2017 Biennium.
- The remaining seven vessels, the MVs Kennewick, Salish, Chetzemoka, Samish, Tokitae, the 3rd 144-car ferry and the 4th 144-car ferry (if built as planned), each have preservation needs less than \$10 million and account for \$3 million or 1% of preservation needs accumulating by the end of the 2015-2017 Biennium.

With respect to the end of the 2015-2025 ten-year period:

- Ten vessels, the MVs Elwha, Hyak, Wenatchee, Puyallup, Tacoma, Yakima, Kaleetan, Spokane, Walla Walla and Klahowya, each have preservation needs between \$30 and \$50 million and account for \$394 million or 62% of preservation needs accumulating by the end of the 2015-2025 ten-year period.
- Seven vessels, the MVs Sealth, Chelan, Tillikum, Cathlamet, Kitsap, Kittitas and Issaquah, each have preservation needs between \$10 and \$30 million and account for \$199 million or 32% of preservation needs accumulating by the end of the 2015-2025 ten-year period.
- The remaining seven vessels, the MVs Kennewick, Salish, Chetzemoka, Samish, Tokitae, the 3rd 144-car ferry and the 4th 144-car ferry (if built as planned), each have preservation needs less than \$10 million and account for \$38 million or 6% of preservation needs accumulating by the end of the 2015-2025 ten-year period.

**WSF Construction Program W
Preservation Needs By Vessel**
Based on the Ferries Life Cycle Cost Model, Sorted by Needs through 2015-2017
In 2014 Constant Millions of Dollars

Vessels	Backlog						Cum Thru		% Thru	
	Pre 15-17	15-17	17-19	19-21	21-23	23-25	15-17	23-25	15-17	23-25
Hyak	25.9	12.0	0.0	0.8	3.7	3.3	37.8	45.7	12%	7%
Elwha	32.4	0.6	0.7	14.0	0.4	0.6	33.0	48.7	10%	8%
Wenatchee	22.9	1.8	12.1	1.0	4.3	0.0	24.7	42.1	8%	7%
Kaleetan	21.8	1.5	6.7	2.1	1.4	4.3	23.4	37.9	7%	6%
Yakima	21.3	1.6	2.8	8.0	0.5	4.3	22.8	38.5	7%	6%
Spokane	15.1	7.5	3.1	0.9	4.5	4.6	22.6	35.7	7%	6%
Kitsap	19.2	1.3	0.6	1.6	5.1	0.2	20.5	28.0	6%	4%
Walla Walla	7.9	9.3	8.8	0.4	0.8	7.6	17.1	34.7	5%	5%
Cathlamet	15.3	1.3	1.7	1.0	8.5	0.2	16.6	28.0	5%	4%
Kittitas	9.4	7.0	2.9	3.0	3.5	2.1	16.5	27.9	5%	4%
Klahowya	15.4	0.5	1.7	0.6	5.8	6.6	16.0	30.6	5%	5%
Issaquah	12.1	1.0	1.3	0.3	11.4	0.2	13.1	26.2	4%	4%
Chelan	10.4	2.2	9.6	4.2	1.4	1.8	12.6	29.6	4%	5%
Puyallup	5.0	7.4	27.5	0.2	1.1	0.0	12.5	41.1	4%	7%
Tacoma	11.2	0.9	13.5	1.0	12.4	0.0	12.2	39.0	4%	6%
Sealth	9.6	1.8	8.6	1.0	5.0	3.9	11.5	29.9	4%	5%
Tillikum	11.1	0.2	2.8	2.8	5.8	6.8	11.3	29.5	3%	5%
Kennewick	0.0	1.4	0.0	2.3	4.4	0.2	1.4	8.4	0%	1%
Salish	0.0	1.4	2.4	4.4	0.2	0.0	1.4	8.4	0%	1%
Chetzemoka	0.2	0.1	2.3	4.4	0.2	1.0	0.3	8.3	0%	1%
3rd 144 Olympic Class	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.5	0%	0%
4th 144 Olympic Class	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.5	0%	0%
Samish	0.0	0.0	0.0	0.3	3.7	2.0	0.0	6.1	0%	1%
Tokitae	0.0	0.0	0.3	0.1	3.6	2.0	0.0	6.1	0%	1%
All Vessels	266.4	60.8	109.2	54.4	88.3	52.3	327.1	631.5	100%	100%

Individual Terminal Preservation Needs Percentages

The discussion above presents preservation needs in terms of dollars of 2014 purchasing power. However, it is useful to relate these dollar needs to the Ferry System's inventory of infrastructure. The preservation needs percent (PNP) does this. The PNP is the percentage calculated by dividing the value of systems that will exceed their life cycle by the value of the systems in the inventory of infrastructure. The table below provides PNP scores at the end of each biennium from the 2013-2015 Biennium through the 2023-2025 Biennium. Terminals are ranked in accordance with PNP scores at the end of the 2015-2017 Biennium.

The projected PNP scores for individual terminals range from 43% to 0% at the end of the 2015-2017 Biennium. With respect to the 2015-2017 Biennium,

- The Seattle terminal has a projected 2015-2017 PNP score greater than 40%.
- Eight terminals at Vashon, Southworth, Point Defiance, Port Townsend, Coupeville, Anacortes, Fauntleroy and Mukilteo have projected 2015-2017 PNP scores equal to or less than 40% but greater than 20%.
- Two facilities at Eagle Harbor and Bremerton have projected 2015-2017 PNP scores equal to or less than 20% but greater than 10%.

- Nine terminals at Bainbridge, Kingston, Lopez, Edmonds, Shaw, Clinton, Friday Harbor, Orcas and Tahlequah have projected 2015-2017 PNP scores equal to or less than 10%.

As preservation needs accumulate each biennium, PNP scores rise. They range from 72% to 0% at the end of the 2023-2025 Biennium.

- Five terminals at Coupeville, Fauntleroy, Seattle, Vashon and Anacortes have projected 2023-2025 PNP scores greater than 40%.
- Eight terminals at Southworth, Point Defiance, Bainbridge, Bremerton, Eagle Harbor, Lopez, Tahlequah and Port Townsend have projected 2023-2025 PNP scores equal to or less than 40% but greater than 20%.
- Four terminals at Orcas, Friday Harbor, Edmonds and Kingston have projected 2023-2025 PNP scores equal to or less than 20% but greater than 10%.
- Three terminals at Shaw, Clinton and Mukilteo have projected 2023-2025 PNP scores equal to or less than 10%.

WSF Construction Program W
Percent of the Value of Ferry Systems Beyond Their Life Cycle
By Terminal
Based on the Ferries Life Cycle Cost Model, Sorted by PNP at the End of the 2015-2017 Biennium
In Preservation Needs Percentages (PNPs)

Terminals	13-15 PNP	15-17 PNP	17-19 PNP	19-21 PNP	21-23 PNP	23-25 PNP
Seattle	32%	43%	50%	50%	53%	53%
Vashon	31%	35%	35%	37%	49%	49%
Southworth	0%	31%	32%	32%	36%	38%
Point Defiance	16%	25%	25%	25%	26%	37%
Port Townsend	24%	24%	25%	25%	25%	25%
Coupeville	24%	24%	59%	64%	68%	72%
Anacortes	19%	23%	26%	36%	42%	43%
Fauntleroy	22%	22%	28%	28%	28%	53%
Mukilteo	14%	22%	11%	0%	0%	0%
Eagle Harbor	10%	12%	15%	29%	29%	31%
Bremerton	5%	11%	18%	27%	30%	33%
Bainbridge	8%	8%	14%	25%	26%	33%
Kingston	2%	5%	6%	6%	11%	16%
Lopez	0%	4%	4%	27%	27%	28%
Edmonds	1%	2%	2%	3%	10%	18%
Shaw	1%	1%	1%	1%	9%	9%
Clinton	0%	0%	0%	4%	4%	5%
Friday Harbor	0%	0%	11%	11%	16%	19%
Orcas	0%	0%	13%	19%	19%	19%
Tahlequah	0%	0%	17%	17%	17%	28%
Terminals	15%	20%	24%	28%	31%	34%

Individual Vessel Preservation Needs Percentages (PNP)

The projected PNP scores for individual vessels range from 70% to 0% at the end of the 2015-2017 Biennium. The table below provides PNP score information. Vessels are ranked in accordance with PNP scores at the end of the 2015-2017 Biennium. With respect to the 2015-2017 Biennium:

- Eight vessels, including the MVs Hyak, Elwha, Kitsap, Cathlamet, Kittitas, Kaleetan, Yakima and Spokane, have projected 2015-2017 PNP scores greater than 40%.
- Seven vessels, including the MVs Wenatchee, Issaquah, Chelan, Klahowya, Sealth, Walla Walla and Tillikum, have projected 2015-2017 PNP scores equal to or less than 40% but greater than 20%.
- Two vessels, the MVs Puyallup and Tacoma, have projected 2015-2017 PNP scores equal to or less than 20% but greater than 10%.
- Seven vessels, including the MVs Kennewick, Salish, Chetzemoka, Tokitae, Samish and the 3rd and 4th Olympic Class ferries (if built as planned), have projected PNP scores of 10% or less.

As preservation needs accumulate each biennium, PNP scores rise. They range from 88% to 1% at the end of the 2023-2025 Biennium.

- Seventeen vessels have projected 2023-2025 PNP scores greater than 40%. They include the MVs Elwha, Hyak, Sealth, Chelan, Cathlamet, Kitsap, Kittitas, Yakima, Kaleetan, Issaquah, Klahowya, Spokane, Wenatchee, Puyallup, Walla Walla, Tillikum, and Tacoma.
- Three vessels, including the MVs Chetzemoka, Kennewick and Salish, have projected 2023-2025 PNP scores equal to or less than 40% but greater than 20%.
- Two vessels, the Samish and Tokitae, have projected 2023-2025 PNP scores equal to or less than 20% but greater than 10%.
- Two vessels, the 3rd and 4th 144-car ferries (if built as planned), will have projected 2023-2025 PNP scores equal to or less than 10%.

WSF Construction Program W
Percent of the Value of Ferry Systems Beyond Their Life Cycle
By Vessel
Based on the Ferries Life Cycle Cost Model, Sorted by PNP at the End of the 2015-2017 Biennium
In Preservation Needs Percentages (PNPs)

Vessels	13-15 PNP	15-17 PNP	17-19 PNP	19-21 PNP	21-23 PNP	23-25 PNP
Hyak	48%	70%	70%	71%	78%	84%
Elwha	58%	59%	61%	86%	87%	88%
Kitsap	52%	55%	57%	61%	75%	76%
Cathlamet	42%	45%	50%	53%	76%	76%
Kittitas	26%	45%	52%	60%	70%	76%
Kaleetan	41%	44%	57%	60%	63%	71%
Yakima	40%	43%	48%	63%	64%	72%
Spokane	27%	41%	46%	48%	56%	65%
Wenatchee	35%	38%	57%	58%	65%	65%
Issaquah	33%	35%	39%	40%	70%	71%
Chelan	28%	34%	59%	70%	74%	79%
Klahowya	32%	33%	37%	39%	51%	65%
Sealth	26%	31%	55%	57%	71%	81%
Walla Walla	14%	31%	47%	48%	49%	63%
Tillikum	23%	23%	29%	36%	48%	63%
Puyallup	8%	19%	61%	62%	63%	63%
Tacoma	17%	19%	39%	41%	60%	60%
Kennewick	0%	4%	4%	11%	23%	24%
Salish	0%	4%	11%	23%	24%	24%
Chetzemoka	1%	1%	8%	21%	21%	24%
3rd 144 Olympic Class	0%	0%	0%	0%	1%	1%
4th 144 Olympic Class	0%	0%	0%	0%	1%	1%
Samish	0%	0%	0%	1%	12%	18%
Tokitae	0%	0%	1%	1%	12%	18%
Vessels	26%	32%	40%	45%	54%	58%

Conclusion

The department is required by law to estimate future terminal and vessel preservation needs using the life cycle cost model. The LCCM is used to project preservation needs by biennium and to relate these dollar needs to the total infrastructure through the use of the preservation needs percent statistic. This estimate of preservation needs provides critical information used to select preservation work that will be bundled into preservation projects. The estimate of needs and the preservation project list provide the means of meeting the statutory requirement for reducing the backlog of deferred preservation.

WSDOT Ferries Division 2015-17 Capital Budget Request Preservation Backlog Reduction Plan

WSDOT manages the preservation of ferry terminal and vessel infrastructure through the Ferries Life Cycle Cost Model (LCCM). This model is used to compile an inventory of the structural, mechanical and electrical systems making up terminals and vessels; identify preservation needs; develop investment plans that address these needs; project the impact of investment plans on preservation needs; and measure the impact of work actually accomplished during the biennium compared to the plan. As such, the model provides a useful way of describing the effect of investments on the backlog of deferred preservation.

The key statistic used to describe the reduction in the backlog of deferred preservation need is the preservation needs percentage (PNP) score. The statistic is defined as the percentage of the weighted value of terminal and vessel systems that are beyond their life cycles. The weighted value of each system is the constant dollar cost to preserve the system found in the LCCM. This measure proves very useful in describing preservation need and the planned and actual results of preservation investments intended to reduce preservation need.

The PNP score is used in the following manner for backlog reduction analysis. Ferry assets start the 2015-2017 biennium with a PNP score indicating the percentage value of systems that are beyond their life cycles. The preservation need increases as additional systems reach the end of their life cycles during the biennium. If the preservation investment plan reduces the preservation need by more than the biennial increase in need, there is a reduction in the backlog of preservation need existing at the beginning of the biennium.

The Ferries preservation need backlog reduction plan is assessed in the tables below.

- Preservation Need:
 - Terminal preservation need expressed in PNP terms will reach 15% by the end of the 2013-2015 biennium (beginning of the 2015-2017 biennium).
 - If no work is done, terminal preservation need expressed in PNP terms will reach 20% by the end of the 2015-2017 biennium.
 - Vessel preservation need expressed in PNP terms will reach 26% by the end of the 2013-2015 biennium (beginning of the 2015-2017 biennium).
 - If no work is done, vessel preservation need expressed in PNP terms will reach 32% by the end of the 2015-2017 biennium.

WSF Construction Program W
Percent of the Value of Ferry Systems Beyond Their Life Cycle
By Terminal
Based on the Ferries Life Cycle Cost Model, Sorted by PNP at the End of the 2015-2017 Biennium
In Preservation Needs Percentages (PNPs)

Terminals	13-15 PNP	15-17 PNP
Seattle	32%	43%
Vashon	31%	35%
Southworth	0%	31%
Point Defiance	16%	25%
Port Townsend	24%	24%
Coupeville	24%	24%
Anacortes	19%	23%
Fauntleroy	22%	22%
Mukilteo	14%	22%
Eagle Harbor	10%	12%
Bremerton	5%	11%
Bainbridge	8%	8%
Kingston	2%	5%
Lopez	0%	4%
Edmonds	1%	2%
Shaw	1%	1%
Clinton	0%	0%
Friday Harbor	0%	0%
Orcas	0%	0%
Tahlequah	0%	0%
Terminals	15%	20%

WSF Construction Program W
Percent of the Value of Ferry Systems Beyond Their Life Cycle
By Vessel
Based on the Ferries Life Cycle Cost Model, Sorted by PNP at the End of the 2015-2017 Biennium
In Preservation Needs Percentages (PNPs)

Vessels	13-15 PNP	15-17 PNP
Hyak	48%	70%
Elwha	58%	59%
Kitsap	52%	55%
Cathlamet	42%	45%
Kittitas	26%	45%
Kaleetan	41%	44%
Yakima	40%	43%
Spokane	27%	41%
Wenatchee	35%	38%
Issaquah	33%	35%
Chelan	28%	34%
Klahowya	32%	33%
Sealth	26%	31%
Walla Walla	14%	31%
Tillikum	23%	23%
Puyallup	8%	19%
Tacoma	17%	19%
Kennewick	0%	4%
Salish	0%	4%
Chetzemoka	1%	1%
3rd 144 Olympic Class	0%	0%
Samish	0%	0%
Tokitae	0%	0%
Vessels	26%	32%

- Planned Preservation Need Reduction:
 - Planned terminal preservation investments are projected to reduce the 2015-2017 end-of biennium terminal preservation need by 3% to a PNP score of 17%. The resulting PNP score is still 2% above the PNP score at the beginning of the biennium. As a result, the plan is not able to reduce the backlog of preservation need.
 - Planned vessel preservation investments are projected to reduce the 2015-2017 end-of biennium vessel preservation need by 4% to a PNP score of 28%. The resulting PNP score is still 2% above the PNP score at the beginning of the biennium. As a result, the plan is not able to reduce the backlog of preservation need.

WSF Construction Program W
Percent of the Value of Ferry Systems Beyond Their Life Cycle
By Terminal
Based on the Ferries Life Cycle Cost Model, Sorted by PNP Using 2015-2017 Planned Investments
In Preservation Needs Percentages (PNPs)

Terminals	13-15 PNP	15-17 PNP
Seattle	32%	43%
Southworth	0%	31%
Point Defiance	16%	25%
Port Townsend	24%	24%
Fauntleroy	22%	22%
Mukilteo	14%	22%
Anacortes	19%	16%
Coupeville	24%	15%
Eagle Harbor	10%	12%
Bremerton	5%	11%
Bainbridge	8%	8%
Vashon	31%	6%
Kingston	2%	5%
Lopez	0%	4%
Edmonds	1%	2%
Shaw	1%	1%
Clinton	0%	0%
Friday Harbor	0%	0%
Orcas	0%	0%
Tahlequah	0%	0%
Terminals	15%	17%

WSF Construction Program W
Percent of the Value of Ferry Systems Beyond Their Life Cycle
By Vessel
Based on the Ferries Life Cycle Cost Model, Sorted by PNP at the End of the 2015-2017 Biennium
In Preservation Needs Percentages (PNPs)

Vessels	13-15	15-17
	PNP	PNP
Elwha	58%	57%
Kitsap	52%	55%
Hyak	48%	51%
Cathlamet	42%	44%
Kittitas	26%	44%
Yakima	40%	40%
Kaleetan	41%	39%
Wenatchee	35%	35%
Klahowya	32%	33%
Chelan	28%	33%
Issaquah	33%	31%
Walla Walla	14%	28%
Tillikum	23%	23%
Sealth	26%	19%
Puyallup	8%	19%
Tacoma	17%	18%
Spokane	27%	14%
Kennewick	0%	3%
Salish	0%	3%
Chetzemoka	1%	1%
3rd 144 Olympic Class	0%	0%
Samish	0%	0%
Tokitae	0%	0%
Vessels	26%	28%

- Conclusion:**
 The 2015-2017 biennium terminal and vessel preservation plans, if fully executed, will reduce preservation needs accumulating by the end of the biennium. However, this level of investment does not fully address the new preservation needs coming due in the biennium. As a result, it does not reduce the backlog of preservation need existing at the start of the biennium.

Plan for Vessel Major Preservation (Rebuilding the Boat), Retirement and Replacement

Vessel Rebuild and Retirement/Replacement Planning

For planning purposes, Washington State Ferries (WSF) auto-passenger ferries are assumed to be ready for

- A major rebuild 30 years after construction and
- Retirement and replacement 60 years after construction.

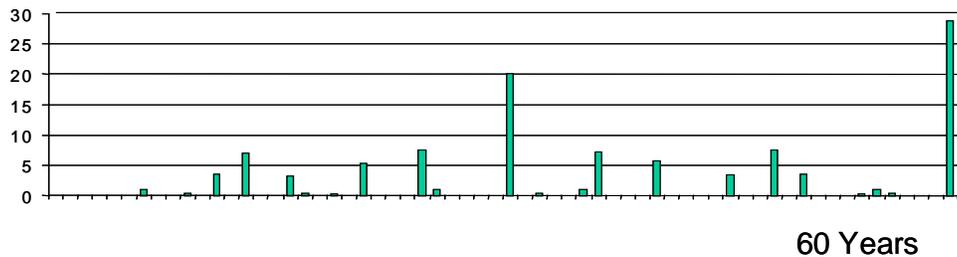
The actual decision to rebuild and retire/replace a ferry is based on economic analysis using life cycle cost methodology, availability of funding, and other factors such as the service plan.

Rebuild and Retirement/Replacement Planning Assumptions

The rebuild or retirement/replacement dates of a WSF auto-passenger ferry are based on 30 year increments. Vessel preservation expenditures are highest at the 30 and 60-year points in the vessel's life. Replacement of a large number of systems is required every 30 years due to the convergence of preservation needs of systems with five, 10, 12, 15, 20 and 30-year life cycles. The figure below illustrates life cycle preservation costs in constant dollars projected for the MV Wenatchee over a 60-year period. The highest preservation costs will occur 30 and 60 years after construction.

M.V. Wenatchee Life Cycle Preservation Costs

FYs 1999-2059, Millions of Dollars of 1997 Purchasing Power



Historic Rebuild Practice

WSF's historic practice has been to rebuild a vessel after 30 years subject to availability of funding. However, in recent years, this practice has been less visible, especially with respect to Issaquah Class vessels. Because of funding constraints, mid-life preservation of these vessels has been addressed by spreading preservation expenditures over biennia before and after the 30-year point.

Retirement/Replacement Assumption

The Federal Transit Administration has adopted an expected life for ferries of 60 years. Both WSF and Alaskan Marine Highways (AMH) agree. These two ferry systems believe that a vessel should be retired and replaced around 60 years after construction because renovation is likely to be economically impractical and the investment is likely

to be made in a vessel whose characteristics are no longer suited for service delivery demands. Factors that favor retirement and replacement of a vessel rather than a second rebuild include:

- *Systems Needing Replacement:* As the chart on the preceding page illustrates, the value of systems needing renovation or replacement is greatest at the 60-year point in a vessel's life. These costs are a dominant consideration in determining whether to do a second rebuild or to retire and replace the vessel.
- *The Economic Impact of Technological Change:* Technological change makes extension of a vessel's life beyond 60 years very expensive. At the 60-year mark, earlier technology may no longer be available or supported by the manufacturer. Replacement of worn out systems requires installation of new types of systems. The new systems may require early replacement of other systems that must be compatible with the new technology. The result is rapid escalation of the costs to keep the vessel in sound operating condition.
- *The Economic Impact of Regulatory Requirements:* Over time, the basic characteristics of a vessel may not meet emerging regulatory standards. Examples: The vessel may not meet a U.S. Coast Guard requirement for two-compartment subdivision. The vessel may have a 1950's design auto deck with car lanes too narrow for disabled persons to exit their vehicles. The vessel may be close to its stability limits and cannot accommodate regulatory improvements that add additional weight.

A major impediment to investments in older vessels is the "grandfather clause." The US Coast Guard typically requires owners to meet the regulations in existence when the vessel was built, with some exceptions for critical systems; i.e., lifesaving or structural fire protection. If the US Coast Guard determines that a vessel is undergoing a "major conversion," such as an increase in capacity or significant life extension, the vessel will have to meet the regulations in effect at the time of conversion. As a result, investments to extend the life of a vessel or improve its service capabilities often become even more expensive because "grandfathered" requirements must also be addressed.

- *Hull Integrity:* The hull is an important limiting factor for a vessel's life expectancy. The hull provides the platform for all other systems and structures. It is more vulnerable to salt-water corrosion than any other part of the vessel. At some point, the cost of maintaining the sea worthiness of the hull becomes economically impractical.
- *Lack of Resale Value:* Resale value does not significantly impact the economic calculus for determining when to retire/replace a WSF ferry. WSF ferries are not suitable for use on most other international or US ferry routes. As a result, their resale value is minimal regardless of when they are sold during their expected life span.

- *Vessel Characteristics vs. Service Delivery Requirements*: The basic characteristics of a vessel may not be adequate to deal with service delivery requirements emerging in the future. Operation characteristics of a vessel that should be considered in evaluating its ability to provide service include:
 - Vehicle capacity
 - Passenger capacity
 - Speed
 - Loading/unloading time
 - Draft
 - Traffic characteristics

Vessel Rebuild and Retirement/Replacement Plan:

The WSF plan for major rebuilding and retirement/replacement of vessels is summarized in the following two tables and one figure.

- Table 1 entitled “Vessel Rebuild and Retirement/Replacement Plan” provides the following information about vessels currently in existence or approved for new construction:
 - A list of vessels grouped by vessel class
 - The passenger and vehicle carrying capacity of each vessel
 - The year the vessel was built
 - The age of the vessel calculated from 2014
 - The year the vessel was rebuilt (eight vessels still in service have been rebuilt)
 - The estimated time for mid-life renovation (rebuilding) expressed as a period that brackets the 30-year point in the vessel’s life
 - The estimated time for retirement/replacement expressed as a period that brackets the 60-year point in the vessel’s life
 - Comments regarding exceptions to the practice of rebuilding the vessel, such as for the Issaquah Class ferries; and referral to Table 2 and Figure 3 for the cost and timing of vessel rebuilding and retirement/replacement in WSDOT’s proposed Capital Preservation and Improvement Program (CIPP) which covers the 2013-2031 biennial period.
- Table 2 entitled “Vessel Preservation, Including Major Rebuilds” displays the proposed 2015 CIPP for vessel preservation.
 - The MVs Puyallup, Tacoma, Wenatchee and Hyak are scheduled for major rebuilds during the 2013-2031 biennial time period.
 - The MVs Spokane, Walla Walla, Kaleetan, Yakima Elwha, Evergreen State, Klahowya and Tilikum have already been rebuilt.

- The six Issaquah Class vessels are being preserved using an incremental approach rather than major rebuild.
- Figure 3 entitled “Vessel Retirement/Replacement” displays the vessel retirement/ replacement plan through the 2029-2031 biennium. The Legislature has approved acquisition of three Olympic Class vessels. WSDOT will ask the 2015 Legislature to approve acquisition of a fourth vessel. These four vessels appear in the proposed 2015 CIPP. The other four vessels needed during the 2013-2031 period do not yet have a source of funding and are not included in the proposed 2015 CIPP.

Table 1
Vessel Rebuild and Retirement/Replacement Plan
(Existing Vessels and Approved New Construction)

Vessel Class	Vessel	Capacity		Year Built	Age as of 2014	Year Rebuilt	Estimated Mid-life Renovation Range	Estimated Retirement- Replacement Range	Comments
		Passengers	Vehicle Spaces						
Jumbo Mark II	Puyallup	2500	202	1999	15		2026 - 2032	2056 - 2062	See Table 2 for estimated rebuild costs.
	Wenatchee	2500	202	1998	16		2025 - 2031	2055 - 2061	See Table 2 for estimated rebuild costs.
	Tacoma	2500	202	1997	17		2024 - 2030	2054 - 2060	See Table 2 for estimated rebuild costs.
Jumbo Mark I	Spokane	2000	188	1972	42	2004		2029 - 2035	
	Walla Walla	2000	188	1973	41	2003		2030 - 2036	
Super	Elwha	1221 (SOLAS)	144	1967	47	1991		2021 - 2027	See Figure 3 for replacement vessel costs.
	Hyak	2000	144	1967	47		2012 - 2018	2024 - 2030	See Table 2 for estimated rebuild costs. See Figure 3 for replacement vessel costs.
	Kaleetan	2000	144	1967	47	1999		2022 - 2028	See Figure 3 for replacement vessel costs.
	Yakima	2000	144	1967	47	2000		2023 - 2029	See Figure 3 for replacement vessel costs.
Issaquah 130	Cathlamet	1200	124 NOTE: added upper car deck in 1993	1981	33		LNG Conversion Proposed	2038 - 2044	Rebuild of this vessel is incremental. Estimated costs are shown in Table 2.
	Chelan	1090 (SOLAS)	124 NOTE: added upper car deck in 1999	1981	33		LNG Conversion Proposed	2038 - 2044	Rebuild of this vessel is incremental. Estimated costs are shown in Table 2.
	Issaquah	1200	124 NOTE: added upper car deck in 1989	1979	35		LNG Conversion Proposed	2036 - 2042	Rebuild of this vessel is incremental. Estimated costs are shown in Table 2.
	Kitsap	1200	124 NOTE: added upper car deck in 1990	1980	34		LNG Conversion Proposed	2037 - 2043	Rebuild of this vessel is incremental. Estimated costs are shown in Table 2.
	Kittitas	1200	124 NOTE: added upper car deck in 1991	1980	34		LNG Conversion Proposed	2037 - 2043	Rebuild of this vessel is incremental. Estimated costs are shown in Table 2.
Issaquah 100	Sealth	1200	90	1982	32		LNG Conversion Proposed	2039 - 2045	Rebuild of this vessel is incremental. Estimated costs are shown in Table 2.
Evergreen State	Evergreen State	983	87	1954	60	1988		2014 - 2015	See Figure 3 for replacement vessel costs.
	Klahowya	800	87	1958	56	1995		2012 - 2018	See Figure 3 for replacement vessel costs.
	Tillikum	1200	87	1959	55	1994		2014 - 2020	See Figure 3 for replacement vessel costs.
Kwa-di Tabil	Chetzemoka	750	64	2010	4		2037 - 2043	2067 - 2073	
	Salish	750	64	2011	3		2038 - 2044	2068 - 2074	
	Kennewick	750	64	2012	2		2039 - 2045	2069 - 2075	
Misc.	Rhododendron	546	48	1947	67	1991		2012	This vessel has been retired.
	Hiyu	200	34	1967	47			2009 - 2015	See Figure 3 for replacement vessel costs.
Olympic	Tokitae	1200	144	2014	0		2041 - 2047	2071 - 2077	
	Samish	1200	144	2015			2042 - 2048	2072 - 2078	
	New 144 - Auto #3	1200	144	2016			2044- 2050	2074- 2080	

Table 2
WSF Construction Program W
Vessel Preservation Including Major Rebuilds
2013-2031 Biennia Planning Period, In Dollars
Based on the 2015 Budget Request and Project List

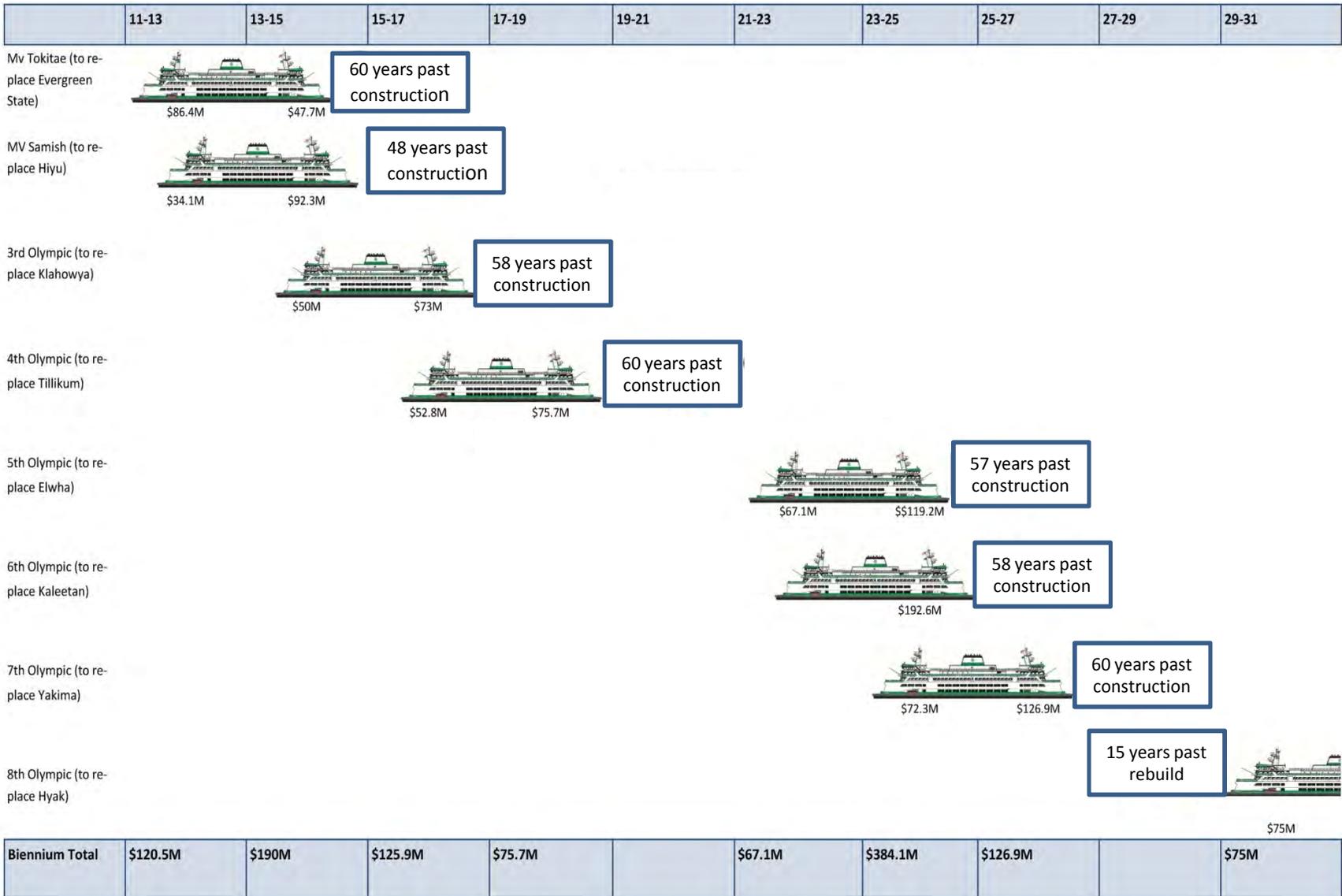
Legend: Major "Rebuilds" Scheduled in the 2013-2031 Biennial Planning Period
 Previously "Rebuilds"
 Incremental Preservation Rather than Major "Rebuild"
 Preservation Spending Programmed in Case New Vessels Following the 4th 144-car Ferry are not built

Vessel	13 - 15	15 - 17	17 - 19	19 - 21	21 - 23	23 - 25	25 - 27	27 - 29	29 - 31	13-31
MV Puyallup	4,413,048	1,235,575	10,764,236	866,421	5,711,000	973,000	694,000	30,117,000	1,381,932	56,156,212
MV Wenatchee	2,410,193	2,624,166	8,067,680	754,615	6,006,000	57,000	6,128,000	40,723,000	1,033,141	67,803,795
MV Tacoma	5,666,705	960,966	7,618,271	1,101,096	9,694,000	527,000	2,386,000	38,518,000	2,275,757	68,747,795
MV Spokane	421,020	12,363,304	952,976	1,090,822	2,879,000	9,644,000	3,201,000	467,000	22,382,376	53,401,498
MV Walla Walla	3,574,019	2,670,984	1,524,357	465,129	7,336,000	19,690,000	1,310,000	1,076,000	6,574,460	44,220,949
MV Hyak	23,737,814	6,966,630	803,315	153,892	5,677,000	12,167,000	1,379,000	3,770,000	5,300,916	59,955,567
MV Kaleetan	3,185,508	5,045,766	1,911,921	1,767,272	2,176,000	9,721,000	1,599,000	8,863,000	5,762,203	40,031,670
MV Yakima	3,935,521	1,905,280	1,012,509	7,827,885	996,000	2,844,000	2,928,000	3,611,000	21,401,001	46,461,196
MV Elwha	2,863,096	1,684,254	2,867,081	13,427,901	303,000	2,417,000	12,182,000	331,000	31,643,892	67,719,224
MV Issaquah	287,989	2,668,964	2,922,780	160,132	10,211,000	873,000	9,591,000	1,183,000	17,285,420	45,183,285
MV Kittitas	384,712	179,247	2,178,950	3,411,564	7,199,000	15,527,000	2,822,000	258,000	3,508,639	35,469,112
MV Kitsap	7,152,535	280,300	841,733	1,915,530	12,749,000	900,000	1,439,000	1,164,000	1,661,930	28,104,028
MV Cathlamet	6,676,430	566,526	300,827	2,122,737	8,425,000	4,908,000	2,089,000	4,002,000	3,146,593	32,237,113
MV Chelan	4,846,930	1,067,019	873,078	4,468,996	2,378,000	8,793,000	4,799,000	707,000	12,109,966	40,042,989
MV Sealth	522,904	7,056,256	3,489,942	2,179,568	4,050,000	3,861,000	11,897,000	2,451,000	1,400,477	36,908,147
MV Evergreen State	198,963	1,000	0	0	0	0	0	0	0	199,963
MV Klahowya	1,831,342	146,772	0	0	0	0	0	0	0	1,978,114
MV Tillikum	1,339,637	364,172	2,789,617	579,624	107,000	5,324,000	52,000	993,000	171,142	11,720,192
MV Hiyu	10,000	1,000	0	0	0	0	0	0	0	11,000
MV Tokitae	0	50,000	92,729	951,507	7,137,000	4,708,000	575,000	8,767,000	6,136,803	28,418,039
MV Samish	0	50,000	50,000	1,572,734	7,137,000	325,000	4,708,000	575,000	9,159,693	23,577,427
3rd 144-car Ferry	0	0	50,000	50,000	1,572,734	7,137,270	325,000	4,708,000	575,000	14,418,004
MV Chetzemoka	221,720	60,033	1,030,420	5,902,609	3,029,343	5,582,000	2,138,000	330,000	3,698,242	21,992,367
MV Salish	454,957	196,092	2,831,717	3,926,752	2,212,000	7,995,000	3,586,000	1,466,000	8,153,731	30,822,249
MV Kennewick	666,027	165,319	1,953,485	2,150,703	2,532,000	7,231,000	5,178,000	3,504,000	73,892	23,454,426
Total Preservation (Inflated Dollars)	74,801,070	48,309,625	54,927,623	56,847,490	109,517,077	131,204,270	81,006,000	157,584,000	164,837,206	864,616,357
Shipyard Implicit Price Deflator	0.929	1.000	1.076	1.159	1.247	1.342	1.445	1.555	1.674	
Total Preservation (15-17 Dollars)	80,516,339	48,309,625	51,028,711	49,063,539	87,811,867	97,733,427	56,057,813	101,310,597	98,451,375	670,283,293

Notes:

- The MVs Evergreen State and Hiyu are scheduled for retirement in the 2013-2015 biennium. Nominal funding is programmed in the 2015-2017 biennium in case there is a delay.
- Spending on the MVs Elwha, Yakima, Spokane and Walla Walla late in the 16-year plan would be reduced if new vessels are acquired.
- Preservation spending on the MV Tillikum will continue if a 4th 144-car vessel is not built. If a 4th 144-car vessel is acquired the MV Tillikum's preservation funding would be re-allocated to the 4th 144-car vessel subject to re-aging to fit the new vessel's life cycle cost needs.

Figure 3. Vessel Retirement/Replacement



WSDOT Ferries Division 2015-17 Capital Budget Request Preservation Budget Overview

Overview of the 2015-2017 Preservation Budget Request and Ten-Year Plan:

- Proposed preservation spending amounts to \$122 million or 47% of the total 2015-2017 Biennium budget request and \$945 million or 74% of the total 2015-2025 ten-year plan.
- \$74 million or 61% of proposed preservation spending is for terminals and \$48 million or 39% is for vessels in the 2015-2017 Biennium preservation budget request. This difference between terminals and vessels closes some over the 2015-2025 ten-year plan. Proposed terminal preservation amounts to \$545 million or 58% and vessel preservation amounts to \$401 million or 42%.
- The Seattle terminal receives \$41 million or 56% of the proposed terminal preservation funding in the 2015-2017 terminal preservation budget request and \$262 million or 48% of proposed terminal preservation funding over the 2015-2025 ten-year period.
- Also, Vashon, Anacortes, and Southworth combined are budgeted for \$30 million or 40% in the 2015-2017 terminal preservation budget request. Over the ten-year period, there are preservation spending plans ranging from \$31 to \$64 million for two terminals (Anacortes and Coupeville) that combine for 17% of the 2015-2025 ten-year plan.
- The Spokane is budgeted for \$12 million or 26% of the proposed 2015-2017 vessel preservation budget request. The Sealth, Hyak, and Kaleetan are each also budgeted between \$5-\$7 million in the 2015-2017 preservation budget request.
- The Walla Walla is budgeted for \$32 million or 8% of the 2015-2025 ten-year plan, and five vessels (the Sealth, the Hyak, the Kaleetan, the Elwha, and the Kittitas) are budgeted for between \$20 - \$29 million over the ten-year period.

Preservation Investment as a Part of the Overall Capital Program: The Legislature requires the Department to categorize the Washington State Ferries (WSF) biennial capital budget request and multi-biennial capital plan in terms of three types of expenditures. They are preservation, improvements and system-wide/administrative activities. To be classified as preservation, an expenditure must meet specific statutory requirements contained in RCW 47.60 and fall within the definition of a preservation project provided by the Office of Financial Management (OFM). Statutory requirements are discussed in an earlier section that describes the Ferries Life Cycle Cost Model.

OFM has defined a preservation project as a capital project that:

- “Extends the life of existing assets (terminals and vessels) by replacing systems of the asset that are determined to be at the end of their structural, mechanical or

electrical lives. Vessel engines, for example, are replaced when they are worn out to keep the vessel operational.

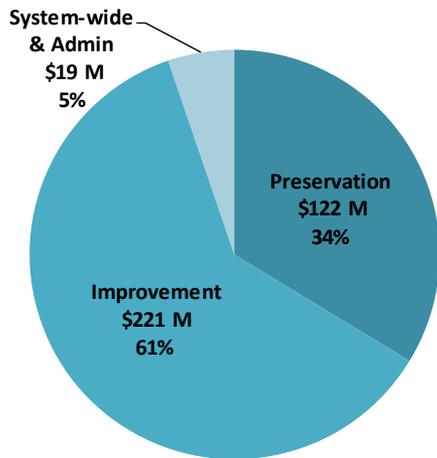
- May upgrade the systems needing to be replaced for structural, mechanical or electrical reasons so long as the replacements for existing systems do not significantly change the program use of an asset (i.e., replacing two worn-out wooden dolphins of a vessel slip at a terminal with two steel dolphins so long as the upgraded steel dolphins do not significantly change the throughput capacity of the terminal).
- Generally has little effect on future operating programs and budgets, except for reductions in maintenance costs and the deferred preservation backlog.”

OFM defines improvement projects and system-wide/administrative activities as follows:

- “Improvement projects primarily achieve a program goal, such as changing or improving the characteristics of an existing asset to meet new program requirements, or creating a new asset through construction, lease and/or purchase. This category is less concerned with life extension of an asset, and includes projects ranging from building new assets to significant renovation of existing assets. Improvement projects may also improve conditions, accommodate changes in service or clientele, or increase or maintain federal reimbursement.”
- System-wide activities are those conducted by engineering management, technical and office staff needed to ensure effective and efficient development and delivery of capital projects. Administrative activities are those performed by management, planning, budgeting, contracting, personnel, accounting, audit , purchasing, administrative and community outreach staff needed to ensure effective and efficient operation of the capital program.

Distribution of Construction Program Proposed Spending: Improvements and preservation are funded at similar levels in the 2015-2017 Biennium budget request. However, preservation dominates the 2015-2025 ten-year plan. The 2015-2017 preservation budget request is \$122 million or 47% of the total budget request. Improvements amount to \$121 million or 46% and project support and administrative activities amount to \$19 million or 8%. A majority of proposed improvement spending in the 2015-2017 Biennium is due to new vessel construction. In contrast, preservation dominates the 2015-2025 ten-year plan (including the 2015-2017 Biennium) amounting to \$945 million or 74% of the total plan. Improvements amount to \$233 million or 18% and system-wide and administrative activities amount to \$100 million or 9%.

**WSF Construction Program
2015-2017 Biennium Budget Request
Preservation, Improvements, System-wide/Administration
(\$ in Millions % Distribution)**

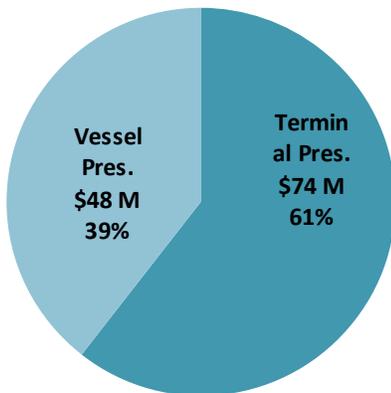


**WSF Construction Program W
2015-2017 Budget Request and 2015-2025 Ten-Year Plan
Preservation, Improvement and System-wide/Administration
(In Millions of Dollars and Percent Distribution)**

	15-17	17-19	19-21	21-23	23 - 25	15 - 25	15-17 %	15-25 %
Preservation	122	143	128	317	234	945	47%	74%
Improvement	121	80	10	7	17	233	46%	18%
System-wide & Admin	19	19	20	21	21	100	8%	9%
Total Program W	262	242	158	344	272	1,279	100%	100%

Distribution of Preservation Funding Between Terminals and Vessels: The 2015-2017 terminal preservation budget request is 1.5 times the vessel preservation budget request. The terminal request amounts to \$74 million or 61% of total preservation. The vessel request amounts to \$48 million or 39%. However, over the ten-year planning period (including the 2015-2017 Biennium), proposed terminal and vessel preservation spending requests close some. For 2015-2025, proposed terminal preservation spending amounts to \$545 million or 58% of total preservation spending and proposed vessel preservation spending amounts to \$401 million or 42%.

**WSF Construction Program
2015-2017 Biennium Budget Request
Terminal and Vessel Preservation
(\$ in Millions % Distribution)**



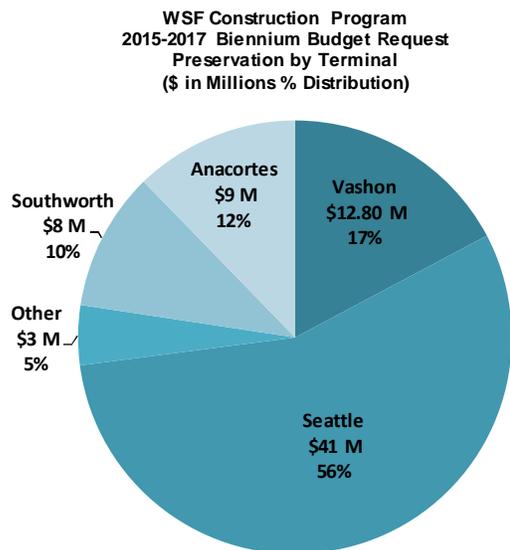
**WSF Construction Program W
2015-2017 Budget Request and 2015-2025 Ten-Year Plan
Terminal and Vessel Preservation
(In Millions of Dollars and Percent Distribution)**

	15-17	17-19	19-21	21-23	23 - 25	15 - 25	15-17 %	15-25 %
Terminal Preservation	74	88	72	208	103	545	61%	58%
Vessel Preservation	48	55	57	110	131	401	39%	42%
Total Preservation Prog.	122	143	128	317	234	945	100%	100%

Preservation by Terminal: Seattle receives \$41.3 million or 56% of the proposed 2015-2017 Biennium terminal preservation budget. Vashon Island receives \$12.8 million or

17%. Anacortes receives \$9.1 million or 12%. Southworth receives \$7.7 million or 10%. The remaining terminals receive \$3.3 million or 4%. Over the 2015-2025 ten-year planning period (including the 2015-2017 Biennium), Seattle receives \$262.0 million or 48% of proposed terminal preservation funding. Anacortes receives \$63.9 million or 12%. Coupeville and Eagle Harbor each receive over \$27 million, totaling \$58.5 million or 11% together. The remaining terminals receive \$160.3 million or 29% of the ten-year preservation plan. The table below shows the details of proposed terminal preservation spending. Terminals are ranked according to proposed spending in the 2015-2017 budget request biennium.

WSF Construction Program W
2015-2017 Budget Request and 2015-2025 Ten-Year Plan
Preservation by Terminal
(In Millions of Dollars and Percent Distribution)



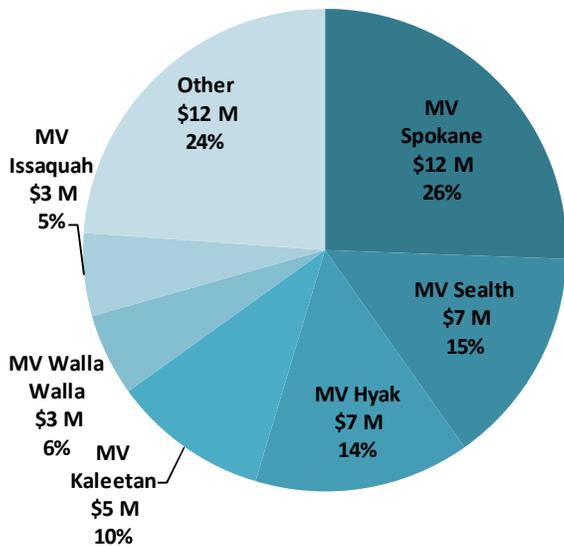
Terminals	15-17	17-19	19-21	21-23	23 - 25	15 - 25	15-17 %	15-25 %
Seattle	41.3	68.5	58.0	83.2	11.0	262.0	56%	48%
Vashon	12.8	0.1	0.4	4.1	4.3	21.6	17%	4%
Anacortes	9.1	1.9	1.7	28.5	22.8	63.9	12%	12%
Southworth	7.7	9.6	0.0	0.0	2.0	19.3	10%	4%
Bainbridge	1.9	2.7	0.0	9.7	2.0	16.2	3%	3%
Coupeville	0.8	0.8	1.1	25.8	2.5	31.0	1%	6%
Fauntleroy	0.6	0.0	0.3	2.5	10.8	14.3	1%	3%
Bremerton	0.0	0.3	0.0	0.0	0.5	0.8	0%	0%
Kingston	0.0	2.5	1.7	1.0	0.5	5.7	0%	1%
Eagle Harbor	0.0	1.1	3.7	18.1	4.6	27.5	0%	5%
Port Townsend	0.0	0.0	0.0	4.1	0.0	4.1	0%	1%
Point Defiance	0.0	0.0	0.1	5.1	13.7	18.8	0%	3%
Edmonds	0.0	0.0	0.0	2.2	6.9	9.1	0%	2%
Tahlequah	0.0	0.0	1.7	3.0	5.6	10.2	0%	2%
Systemwide	0.0	0.0	0.0	3.8	0.5	4.3	0%	1%
Lopez	0.0	0.1	0.9	1.0	0.3	2.3	0%	0%
Clinton	0.0	0.0	0.1	0.7	8.4	9.2	0%	2%
Shaw	0.0	0.4	2.1	12.6	1.9	16.9	0%	3%
Orcas	0.0	0.0	0.0	0.2	2.3	2.5	0%	0%
Friday Harbor	0.0	0.0	0.0	2.3	2.6	5.0	0%	1%
Mukilteo	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%
Total Terminals	74.1	88.1	71.6	207.6	103.2	544.7	100%	100%

Note: Totals may not add to 100% due to rounding.

Preservation by Vessel: The Spokane receives \$12.4 million or 26% of the proposed 2015-2017 Biennium vessel preservation budget. The Sealth, Hyak, and Kaleetan receive \$5-\$7 million per vessel for a total of \$19.1 million or 34%. The Walla Walla, Issaquah and Wenatchee receive \$2.5-\$3 million per vessel for a total of \$8.0 million or 17%. The remainder of the fleet receives a total of \$8.5 million or 16%. Over the 2015-2025 ten-year period (including the 2015-2017 Biennium), the request for the Walla Walla is for \$31.7 million or 8%. The Kittitas, Spokane, Hyak, Elwha, Sealth and

Kaleetan each receive between \$20 and \$29 million, and combined, they account for \$143.2 million or 36% of proposed vessel preservation spending. Proposed vessel preservation funding for the remainder of the fleet amounts to \$226.0 million or 56%. The table below shows the details of proposed vessel preservation spending. Vessels are ranked according to proposed spending in the 2015-2017 budget request biennium.

WSF Construction Program
2015-2017 Biennium Budget Request
Preservation by Vessel
(\$ in Millions % Distribution)



WSF Construction Program W
2015-2017 Budget Request and 2015-2025 Ten-Year Plan
Preservation by Vessel
(In Millions of Dollars and Percent Distribution)

Vessels	15-17	17-19	19-21	21-23	23 - 25	15 - 25	15-17 %	15-25 %
MV Spokane	12.4	1.0	1.1	2.9	9.6	26.9	26%	7%
MV Sealth	7.1	3.5	2.2	4.1	3.9	20.6	15%	5%
MV Hyak	7.0	0.8	0.2	5.7	12.2	25.8	14%	6%
MV Kaleetan	5.0	1.9	1.8	2.2	9.7	20.6	10%	5%
MV Walla Walla	2.7	1.5	0.5	7.3	19.7	31.7	6%	8%
MV Issaquah	2.7	2.9	0.2	10.2	0.9	16.8	6%	4%
MV Wenatchee	2.6	8.1	0.8	6.0	0.1	17.5	5%	4%
MV Yakima	1.9	1.0	7.8	1.0	2.8	14.6	4%	4%
MV Elwha	1.7	2.9	13.4	0.3	2.4	20.7	3%	5%
MV Puyallup	1.2	10.8	0.9	5.7	1.0	19.6	3%	5%
MV Chelan	1.1	0.9	4.5	2.4	8.8	17.6	2%	4%
MV Tacoma	1.0	7.6	1.1	9.7	0.5	19.9	2%	5%
MV Cathlamet	0.6	0.3	2.1	8.4	4.9	16.3	1%	4%
MV Tillikum	0.4	2.8	0.6	0.1	5.3	9.2	1%	2%
MV Kitsap	0.3	0.8	1.9	12.7	0.9	16.7	1%	4%
MV Salish	0.2	2.8	3.9	2.2	8.0	17.2	0%	4%
MV Kittitas	0.2	2.2	3.4	7.2	15.5	28.5	0%	7%
MV Kennewick	0.2	2.0	2.2	2.5	7.2	14.0	0%	4%
MV Klahowya	0.1	0.0	0.0	0.0	0.0	0.1	0%	0%
MV Chetzemoka	0.1	1.0	5.9	3.0	5.6	15.6	0%	4%
MV Samish	0.1	0.1	1.6	7.1	0.3	9.1	0%	2%
MV Tokitae	0.1	0.1	1.0	7.1	4.7	12.9	0%	3%
MV Evergreen State	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%
MV Hiyu	0.0	0.0	0.0	0.0	0.0	0.0	0%	0%
MV 3rd 144 Olympic Class	0.0	0.1	0.1	1.6	7.1	8.8	0%	2%
Total Vessels	48.3	54.9	56.8	109.5	131.2	400.8	100%	100%

Note: Totals may not add to 100% due to rounding.

Ferry Improvements

WSDOT Ferries Division 2015-17 Capital Budget Request Improvement Needs Assessment

The improvement needs assessment discusses what operational strategies have been considered and what their impacts would be on improvement decisions.

Legislative Direction to Pursue “Adaptive Management” Practices:”

The Legislature directed the Washington State Department of Transportation (WSDOT) to develop, and the Washington State Transportation Commission to review, operational strategies to ensure that existing assets are fully utilized and to guide future investment decisions. This initiative is intended to find alternative approaches to expensive capital investment in infrastructure for meeting current and future demand for ferry service. RCW 47.60.327 requires WSDOT to pursue “adaptive management” practices in its Ferries operating and capital programs in order to keep the costs of the Ferry System as low as possible while continuously improving the quality and timeliness of service.

There are two desired outcomes of “adaptive management.” The first desired outcome is more efficient and effective demand management. This involves maximizing the use of existing assets through operational and pricing strategies that encourage customers to shift travel times and modes. This spreads existing demand to times and modes that have excess capacity. The second desired outcome is greater operational efficiency. This involves employing operational strategies that reduce operating costs, queue length, and time spent in terminals. Both these outcomes will result in more efficient use of existing resources. This forestalls the need to address service needs through expensive investments in infrastructure.

The law specifically directs WSDOT to develop, and the WSTC to review, enumerated operational strategies that, at a minimum:

- Recognize that each travel shed is unique and might not have the same operational strategies;
- Use data from the current survey conducted under RCW 47.60.286;
- Be consistent with vehicle level of service standards;
- Choose the most efficient balance of capital and operating investments by using a life-cycle cost analysis; and
- Use methods of collecting fares that maximize efficiency and achieve revenue management control.

In developing operational strategies, the following, at a minimum, must be considered:

- The feasibility of using reservation systems;
- Methods of shifting vehicular traffic to other modes of transportation;
- Methods of improving on-dock operations to maximize efficiency and minimize operating and capital costs;
- A cost-benefit analysis of remote holding versus over-water holding;
- Methods of reorganizing holding areas and minimizing on-dock employee parking to maximize the dock size available for customer vehicles;

- Schedule modifications;
- Efficiencies in exit queuing and metering;
- Interoperability with other transportation services;
- Options for leveling vehicle peak demand; and
- Options for increasing off-peak ridership.

Finally, state law requires that operational strategies must be reevaluated periodically, and, at a minimum, before developing a new capital plan.

WSDOT and the WSTC responded to this legislation with a jointly developed evaluation and prioritization of operational strategies included in a report entitled, “Joint Recommendations on Adaptive Management Strategies,” published in 2009. This report is incorporated into the WSF Long-Range Plan in Appendix I.

WSDOT and the WSTC have considered and in many cases acted on a number of operational and pricing strategies. Below is a summary of what has been completed, is in the process of being implemented or has not been pursued.

Reservation System:

The vehicle reservation system is the keystone of WSDOT’s operational strategies to manage the demand for ferry services and make operations more efficient and effective. WSDOT has implemented Phase 1 of this new system. Phase 1 involves consolidating the existing rudimentary and inflexible reservation systems (for Port Townsend/ Coupeville, Anacortes/Sidney, B.C., and commercial carriers in the San Juan Islands) into a single flexible state of the art system. This system is the base for expansion to other routes in the system. Phase 2 is expected to be completed in early 2015. It will expand the system to all vehicles in the San Juan Islands, plus commercial carriers on all other routes. WSDOT is requesting funding in the 2015-2017 to implement Phase 3 which will expand the system to all vehicles on most of the other remaining routes in the system.

Enhanced User Information:

WSDOT has improved customer communications via the web site to make it easier for customers to plan for avoiding congested time periods. This initiative adds “best times to travel” information to each sailing schedule for each of the four seasons. It graphically depicts what the lighter and heavier traveled sailings are so that riders can adjust their travel plans accordingly. It also provides current terminal condition information.

Transit Enhancements:

Several transit initiatives are underway. The WSDOT has modified the sailing schedule on the Edmonds/Kingston route to meet a series of objectives. One is to improve connections with the Sounder commuter rail in Edmonds. Also, WSDOT is engaged in discussions with regional transit partners about improvements that will enhance ferry/bus connections at Colman Dock in downtown Seattle.

Small Car Discounts:

WSDOT proposed, and the WSTC adopted, a fare schedule which gives vehicles under 14 feet in length a favorable price compared to standard length vehicles. This fare policy encourages travelers to use smaller cars and free up vehicle deck space on the ferries during peak periods.

Differential Vehicle versus Passenger Pricing:

Differential pricing initiatives include increasing the spread between vehicle and passenger fares and lowering the youth fare. This makes it relatively more attractive financially for riders to travel as a passenger than as a vehicle driver.

Reservation System Pricing (Not Implemented):

WSDOT evaluated the concept of charging extra for vehicles with reservations during the reservation system pre-design phase. This initiative was also discussed with a community partnership group created to help define the system. The conclusion was that, in order to achieve maximum efficiency in implementing the reservations system, reservations should be available at no additional cost above what a rider would pay for the fare without reservations.

Seasonal Surcharge (Not Implemented):

The WSTC proposed a “peak of the peak” summer surcharge during the 2009 tariff outreach. The proposal was not well received by the public and was withdrawn at the final hearing.

Fuel Surcharge:

The Legislature enacted provisions for a fuel surcharge that may be triggered by certain conditions. The WSTC implemented this provision for the fall 2011 tariff cycle.

Fuel Conservation:

WSDOT instituted vessel slowdowns on selected off-peak sailings with success in reducing fuel consumption. Capital improvements are being explored that will allow vessels to reduce fuel consumption at the dock while loading and offloading.

Vessel Deployment Plan

The Office of Financial Management's 2015-2017 Transportation Budget Instructions include a requirement that WSDOT develop and maintain a vessel rebuild and replacement plan that includes several topics. These topics are addressed in WSDOT's budget request in several sections of the budget request documentation.

- The first information requirement is for a summary of the condition of all vessels, distinguishing between active and inactive vessels. This information is provided in the section entitled "Preservation Condition Assessment."
- The second information requirement is for projected rebuild dates for all vessels. This information is provided in the section entitled "Plan for Vessel Major Vessel Preservation (Rebuilding the Boat), Retirement and Replacement."
- The third information requirement is for the projected retirement dates for all vessels, distinguishing between active and inactive vessels. This information is provided in the section entitled "Plan for Vessel Major Vessel Preservation (Rebuilding the Boat), Retirement and Replacement."
- The fourth information requirement is for the timeline for vessel replacement, including business decisions, design, procurement and construction. The proposed timing for vessel replacement is provided in the section entitled "Plan for Vessel Major Vessel Preservation (Rebuilding the Boat), Retirement and Replacement." Other information requirements are provided in the Ferries Long Range Plan, statutory authorization to acquire new vessels, pre-design studies and engineering design and construction documentation.
- The fifth information requirement is for the timeline for construction of vessels that add capacity to the fleet. This information is provided in the section entitled "Vessel Improvements."
- The sixth information requirement is for a summary of the proposed vessel deployment plan that includes a table showing vessel deployments by biennium, route and class of vessel for the entire planning period. This section provides this information.

The following figures summarize the proposed vessel deployment plan for the period from FY 2015-FY2018 by route, class of vessel and vessel. This plan reflects the impacts of the three new 144-car ferries being added to the fleet and several vessel retirements. Note that the vessel changes ripple throughout the entire Ferry System impacting more than the routes the new vessels are assigned to. The proposed deployment plan is the base for future biennia. It would be subject to change if additional vessels are acquired.

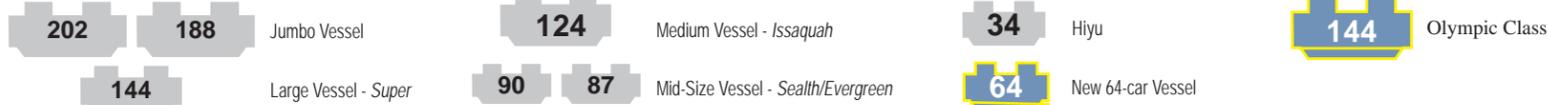
FY 2015 Vessels After Tokitae Added

FY 2016 Vessels After Samish Added - Hyak Renovation

	Summer		F/W/S		Summer		F/W/S	
Anacortes - San Juans - Sidney	144 Elwha	124 Chelan	144 Elwha	87 Klahowya	144 Elwha	144 Samish	144 Elwha	87 Tillikum
	144 Yakima		144 Yakima		144 Yakima		144 Samish	
	144 Kaleetan	87 Klahowya	90 Sealth		124 Chelan	87 Tillikum	124 ⁺³⁴ Chelan	
Port Townsend - Coupeville	64 Kennewick	64 Salish	64 Kennewick	64 Salish Shoulders season only	64 Kennewick	64 Salish	64 Kennewick	64 Salish Shoulders season only
Mukilteo - Clinton	144 ⁺²⁰ Tokitae	124 Kittitas	144 ⁺²⁰ Tokitae	124 Cathlamet	144 ⁺²⁰ Tokitae	124 Kittitas	144 ⁺²⁰ Tokitae	124 Kittitas
Edmonds - Kingston	202 Puyallup	188 Spokane	202 Puyallup	188 Spokane	202 Puyallup	188 Spokane	202 Puyallup	188 Spokane
Seattle - Bainbridge	202 Tacoma	202 Wenatchee	202 Tacoma	202 Wenatchee	202 Tacoma	202 Wenatchee	202 Tacoma	202 Wenatchee
Seattle - Bremerton	188 Walla Walla	124 Kitsap	124 Kitsap	144 Kaleetan	188 Walla Walla	124 Kitsap	124 Kitsap	144 Kaleetan
Fauntleroy - Vashon - Southworth	124 Issaquah	87 Tillikum	124 Issaquah	87 Tillikum	124 Issaquah	90 ⁺³ Sealth	124 Issaquah	90 ⁺³ Sealth
	124 ⁺³⁷ Cathlamet		124 ⁺³⁷ Cathlamet		124 ⁺³⁷ Cathlamet		124 ⁺³⁷ Cathlamet	
Pt. Defiance - Tahlequah	64 Chetzemoka		64 Chetzemoka		64 Chetzemoka		64 Chetzemoka	
Standby (emergency reserve)	34 Hiyu		34 Hiyu		87 Klahowya		87 Klahowya	
Maintenance Reserve	144 Hyak		188 Walla Walla	144 Hyak	144 Kaleetan		188 Walla Walla	144 Yakima
	90 Sealth		124 Chelan	64 Salish				64 Salish
Retired Vessels	87 Evergreen		87 Evergreen		34 Hiyu		34 Hiyu	
Renovation					144 Hyak		144 Hyak	

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Updated 4-22-14(am)

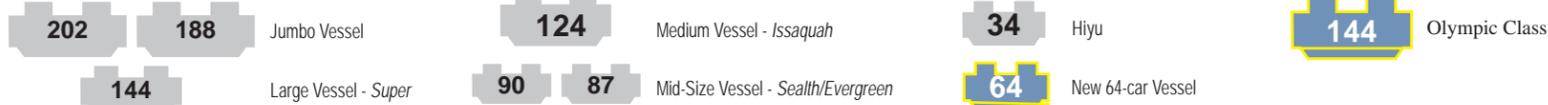
FY 2017 Vessels After Samish Added - Hyak Returns Fall, then Issaquah LNG

FY 2018 Vessels After 3rd 144 Added - Assume Issaquah Class LNG Continues

	FY 2017		FY 2018	
	Summer	F/W/S	Summer	F/W/S
Anacortes - San Juans - Sidney	144 Elwha 144 Yakima 144 Kaleetan	144 ⁺²⁰ Samish 87 Tillikum 124 ⁺³⁴ Chelan	144 Elwha 144 Samish 124 ⁺³⁴ Chelan	87 Tillikum
Port Townsend - Coupeville	64 Kennewick	64 Salish	64 Kennewick	64 Salish Shoulders season only
Mukilteo - Clinton	144 ⁺²⁰ Tokitae	124 Kittitas	144 ⁺²⁰ Tokitae	124 Kittitas
Edmonds - Kingston	202 Puyallup	188 Spokane	202 Puyallup	188 Spokane
Seattle - Bainbridge	202 Tacoma	202 Wenatchee	202 Tacoma	202 Wenatchee
Seattle - Bremerton	188 Walla Walla	124 Kitsap	144 Hyak	144 Kaleetan
Fauntleroy - Vashon - Southworth	124 Issaquah 124 ⁺³⁷ Cathlamet	90 ⁺³ Sealth	124 Kitsap 124 ⁺³⁷ Cathlamet	90 ⁺³ Sealth
Pt. Defiance - Tahlequah	64 Chetzemoka		64 Chetzemoka	
Standby (emergency reserve)	87 Klahowya		87 Klahowya	
Maintenance Reserve	124 Chelan		188 Walla Walla 64 Salish	144 Yakima
Retired Vessels	34 Hiyu		34 Hiyu	
Renovation	144 Hyak		124 Issaquah	

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Updated 4-22-14(pm)

WSDOT Ferries Division 2015-17 Capital Budget Request Capital Impacts on the Operating Budget

Capital Impacts on Operating Budget:

Capital investments may cause changes in operating and maintenance requirements. The 2015-2017 Ferries capital budget request has four projects that may result in Ferries operation and maintenance cost increases. These are the construction of a third 144-car vessel, a minimum level of preservation of terminals and vessels, the vehicle reservations system, and the visual paging system.

New Vessel:

A third new Olympic Class ferry (144-car capacity) will be built and delivered near the end of the 2015-17 Biennium. Added costs to the operating program will be addressed in the 2016 supplemental budget cycle. The increased costs are due to the addition of a new vessel which is larger than the vessel it replaces requiring a larger deck crew and higher fuel consumption. The introduction of the new vessel will result in additional service capacity in the Ferry System as a vessel with less capacity will be retired.

Minimum Level of Capital Preservation:

Due to financial constraints, the 2015-17 capital preservation program has been reduced to a minimum level. As a result, there are additional pressures on the operating program for maintenance of vessels and terminals. Additional maintenance needs may require a 2016 supplemental budget request.

Ferry Reservations System:

A new reservation system for San Juan Islands ferry routes and for the Port Townsend – Coupeville ferry route requires additional staffing at ferry terminals and additional customer information support. Decision Package XJ- WSF Reservation System Operations requests \$2.3 million and 9.7 FTEs related to the reservations project.

Visual Paging:

This project provides visual information for the hearing-impaired through visual displays at ferry terminals and on ferry vessels. In addition to the visual displays, the system includes personal computers, touch screens, input devices and wireless communication hardware. This new system will require maintenance. The system is not fully implemented and maintenance costs are still being evaluated. WSDOT will defer a funding request for maintenance until all elements of the system are installed.

WSDOT Ferries Division 2015-17 Capital Budget Request System-wide and Administrative Capital Program Costs and Cost Allocation Report on Cost Allocation for the 2011-2013 Biennium

The 2007 Legislature directed the Washington State Department of Transportation (WSDOT) to identify Washington State Ferries (WSF) system-wide and administrative capital program costs subject to cost allocation and allocate these costs to WSF capital projects.

“Systemwide and administrative capital program costs shall be allocated to specific capital projects using a cost allocation plan developed by the department. System-wide and administrative capital program costs shall be identifiable.” RCW 47.60.335(3).

Not all system-wide costs are subject to the cost allocation plan. Most Ferries capital budget items (BINs) that constitute direct investment in infrastructure are identified with a specific terminal or vessel. However, the Legislature may approve a system-wide BIN that makes direct investments in infrastructure at multiple locations. This facilitates legislative oversight and departmental administration of the BIN. The Vehicle Registration System BIN is an example. These multi-location investments in infrastructure are grouped in the legislative project list under the heading “WSF-Administrative and System-wide.” However, they are direct investments in infrastructure and are not subject to the cost allocation process required by RCW 47.60.335(3).

Traditional cost allocation methodology involves allocating indirect costs to direct costs to determine the fully allocated cost of a product or service. Within the context of the WSF capital program, indirect costs consist of system-wide capital program costs, called project support costs and administrative support costs. Direct costs consist of direct expenditures for capital infrastructure.

Indirect terminal and vessel project support costs are incurred for activities, such as:

- Engineering staff supervision and office support;
- Program planning, project development, controls and reporting, and development and operation of capital program and project management systems;
- Regulatory compliance;
- Design standards;
- Technical support;
- Engineering and environmental studies; and
- Other project support activities.

Indirect administrative support costs are incurred for activities, such as:

- Accounting, administrative, audit and miscellaneous services;
- Contract and legal services;
- Capital plans and studies;
- Human resource management;
- Program and budget development and management;
- Public involvement, community relations and information; and
- Other administrative support activities.

Direct capital project costs consist of the following activities conducted to preserve or improve capital infrastructure:

- Preliminary engineering,
- Right-of-way acquisition and
- Construction.

Policy-makers have indicated an interest in roll-ups of WSF capital program expenditures in terms of terminal and vessel costs and preservation and improvement costs. This cost allocation report displays indirect and direct costs rolled up to the following categories:

- Terminal preservation costs,
- Terminal improvement costs,
- Vessel preservation costs and
- Vessel improvement costs.

Terminal and vessel projects are identified based on their inclusion in either the Terminal Construction Sub-program (W1) or the Vessel Construction Sub-program (W2). Preservation and improvement projects are identified based on the project's classification in the Transportation Executive Information System (TEIS).

The Legislature tasked WSDOT to develop a cost allocation methodology for determining the fully allocated costs of capital projects; i.e., the summation of indirect support costs and direct capital project costs. WSDOT, the Office of Financial Management and the Transportation Committees of the Legislature agreed to the following approach:

- WSDOT budgets and accounts for indirect support costs as program item numbers (PINs) in the WSDOT project list. These PINs correspond to BINs in the legislative project list adopted in each transportation appropriations act.
- The format for showing the distribution of indirect support and direct capital project costs is a quarterly report maintained by WSDOT. Fiscal year and biennial reports are the summation of appropriate quarterly reports.

- Indirect support costs are distributed to direct capital project costs quarterly based on the relative size of each project's direct expenditures to the total direct expenditures. Terminal project support costs are assigned to the direct capital project costs of each terminal project. Vessel project support costs are assigned to the direct capital project costs of each vessel project. Administrative support costs are assigned to the direct capital project costs of each terminal and vessel project.

This report presents the distribution of indirect support costs and direct capital project costs to terminal and vessel capital projects for the 2011-2013 Biennium. This information is prepared for the entire biennium, by fiscal year and by biennial quarter. However, only the report for the entire 2011-2013 Biennium is included in the documentation for the 2015-2017 budget request. Below is the biennial summary of the distribution of indirect support costs and direct capital project costs by type of capital project.

During the 2011-2013 Biennium, the WSF Construction Program (W) expended \$234,590,480. Fully allocated terminal and vessel preservation and improvement capital project costs accounted for \$229,525,227 and emergency repairs accounted for \$5,065,253. Emergency repairs are not part of the cost allocation process.

The fully allocated capital project costs consist of direct and indirect costs. Direct capital project costs amounted to \$212,210,434 or 92% of fully allocated capital project costs, distributed as follows:

- \$20,183,762 or 10% for terminal preservations projects
- \$22,719,233 or 11% for terminal improvement projects
- \$25,037,500 or 12% for vessel preservation project.
- \$144,269,939 or 67% for vessel improvement projects
- \$212,210,434 total

Indirect support costs amounted to \$17,314,793, including:

- \$5,568,201 or 32% for terminal project support
- \$2,544,567 or 15% for vessel project support
- \$9,202,024 or 53% for administrative support
- \$17,314,793 total

These indirect support costs were allocated to the four types of capital projects as follows:

- \$3,494,936 or 20% to terminal preservations projects
- \$3,933,968 or 23% to terminal improvement projects
- \$1,461,944 or 8% to vessel preservation projects
- \$8,423,945 or 49% to vessel improvement projects
- \$17,314,793 total

The fully allocated (direct and indirect) terminal and vessel preservation and improvement capital project costs amount to:

- \$23,678,698 or 10% for terminal preservations projects.
- \$26,653,201 or 12% for terminal improvement projects.
- \$26,499,444 or 12% for vessel preservation projects.
- \$152,693,884 or 66% for vessel improvement projects.
- \$229,525,227 total.

This is the final report for the 2011-2013 Biennium. It shows only the final fully allocated costs for the biennium. Fiscal year and quarterly reports are available upon request.

Distribution of Direct and Indirect Costs to Projects
2011-2013 Biennium
In Dollars

Program-level Summary of Direct and Indirect Costs

Ferries Construction Program (W) Summary of Direct and Indirect Costs		2011-2013 Biennium				
		Biennium (July 2011- June 2013)				
Activities and Types of Projects		Direct Costs	Proj Spt Costs	Admin Spt Costs	Indirect Costs	Total Costs
Ferries Construction Program (W) Costs by Type of Activity						
Direct Project Costs		217,275,687				217,275,687
Terminal Project Support Costs			5,568,201		5,568,201	5,568,201
Vessel Project Support Costs			2,544,567		2,544,567	2,544,567
Administrative Support Costs				9,202,024	9,202,024	9,202,024
Total		217,275,687	8,112,769	9,202,024	17,314,793	234,590,480
Ferries Construction Program (W) Costs by Type of Project						
Terminal Preservation Costs		20,183,762	2,619,567	875,369	3,494,936	23,678,698
Terminal Improvement Costs		22,719,233	2,948,635	985,333	3,933,968	26,653,201
Vessel Preservation Costs		25,037,500	376,295	1,085,648	1,461,944	26,499,444
Vessel Improvements Costs		144,269,939	2,168,272	6,255,674	8,423,945	152,693,884
Emergency Repair Costs		5,065,253	0	0	0	5,065,253
Total		217,275,687	8,112,769	9,202,024	17,314,793	234,590,480
Indirect Costs						
Ferries Construction Program (W) Summary of Indirect Project and Administrative Support Costs		2011-2013 Biennium				
		Biennium (July 2011- June 2013)				
Type of Indirect Cost			Proj Spt Costs	Admin Spt Costs	Indirect Costs	
Terminal Project Support Costs			5,568,201		5,568,201	
Vessel Project Support Costs			2,544,567		2,544,567	
Administrative Support Costs				9,202,024	9,202,024	
Total Indirect Costs			8,112,769	9,202,024	17,314,793	
Direct and Indirect Project Costs						
Terminal Construction Sub-program (W1) Direct and Indirect Project Costs		2011-2013 Biennium				
		Biennium (July 2011- June 2013)				
PIN	Project Title	Direct Costs	Proj Spt Costs	Admin Spt Costs	Indirect Costs	Total Costs
903310A	Sr 20 Spur/Anacortes Tml - Main Terminal Building Replacement	962,265	124,888	41,733	166,622	1,128,887
903352A	Sr 20 Spur/Anacortes Tml Tie-Up Slips - Dolphin & Wingwall Replacement	63,820	8,283	2,768	11,051	74,871
903354A	Sr 20 Spur/Anacortes Tml Slip 1 - Bridge Seat Seismic Retrofit	100,415	13,032	4,355	17,387	117,802
903368A	Sr 20 Spur/Anacortes Tml - Security Infrastructure Improvements	28,030	3,638	1,216	4,854	32,884
903369A	Sr 20 Spur/Anacortes Tml - Terminal Building Roof Replacement	309,022	40,107	13,402	53,509	362,531
903374A	Sr 20 Spur/Anacortes Tml - Pavement And Overlay Rehabilitation	331,627	43,041	14,383	57,423	389,051
903377A	Sr 20 Spur/Anacortes Tml - Twic Card Reader Security Improvement	4,745	616	206	822	5,567
903381A	Sr 20 Spur/Anacortes Tml - Overhead Loading Rehabilitation	89,663	11,637	3,889	15,526	105,189
903443A	Sr 305/Bainbridge Island Tml - Main Building Fuse Box Replacement	60,643	7,871	2,630	10,501	71,144
903463A	Sr 305/Bainbridge Island Tml - Security Infrastructure Improvements	1,622	211	70	281	1,903
903466A	Sr 305/Bainbridge Island Tml - Main Terminal Building Rehabilitation	495,001	64,244	21,468	85,712	580,713
903469A	Sr 305/Harborview & Winslow Way - Signal Synchronization Improvement	1,824	237	79	316	2,140
903475A	Sr 305/Bainbridge Island Tml - Twic Card Reader Security Improvement	17,299	2,245	750	2,995	20,294
903508A	Sr 304/Bremerton Tml Slip 2 - Timber Wingwall Replacement	162,755	21,123	7,059	28,182	190,937
903530A	Sr 304/Bremerton Tml - Security Infrastructure Improvements	914	119	40	158	1,073
903537A	Sr 304/Bremerton Tml - Twic Card Reader Security Improvement	14,342	1,861	622	2,483	16,826
903622A	Sr 525/Clinton Tml - Security Infrastructure Improvements	25,923	3,364	1,124	4,489	30,411
903625A	Sr 525/Clinton Tml - Twic Card Reader Security Improvement	5,024	652	218	870	5,894
903706A	Sr 305/Eagle Hbr Maint Facility - Maintenance Facility Rehabilitation	131,527	17,070	5,704	22,775	154,302
903721A	Sr 305/Eagle Hbr Maint Facility Slip E - Mechanical System Replacement	375,355	48,716	16,279	64,995	440,350
903722A	Sr 305/Eagle Hbr Maint Facility Slip E - Bridge Seat Seismic Retrofit	66,813	8,671	2,898	11,569	78,382
903818A	Sr 104/Edmonds Tml - Unocal Property Environmental Monitoring	86,441	11,219	3,749	14,968	101,409
903819A	Sr 104/Edmonds Tml - Rt. Inner Timber Dolphin Replacement	650,091	84,373	28,194	112,567	762,658
903828A	Sr 104/Edmonds Tml - Security Infrastructure Improvements	17,083	2,217	741	2,958	20,041
903831A	Sr 104/Edmonds Tml - Ohl Plc/Electrical Upgrade	140,408	18,223	6,089	24,312	164,721
903835A	Sr 104/Edmonds Tml - Twic Card Reader Security Improvement	4,813	625	209	833	5,646
903925A	Sr 160/Fauntleroy Tml - Security Infrastructure Improvements	24,406	3,168	1,058	4,226	28,632
903929A	Sr 160/Fauntleroy Tml - Twic Card Reader Security Improvement	5,901	766	256	1,022	6,922
903933A	Sr 160/Fauntleroy Tml - Enterprise Security System Replacement	35,952	4,666	1,559	6,225	42,177
903934A	Sr 160/Fauntleroy Way Sw I/S - Web Cameras (Cctv) Its Improvements	115,520	14,993	5,010	20,003	135,523
No PIN	Sr 160/Fauntleroy Tml - King County Barton Street Pump Station	696,744	90,428	30,218	120,645	817,389

Terminal Construction Sub-program (W1) Direct and Indirect Project Costs		2011-2013 Biennium				
		Biennium (July 2011- June 2013)				
PIN	Project Title	Direct Costs	Proj Spt Costs	Admin Spt Costs	Indirect Costs	Total Costs
904120A	Sr 20/Coupeville Tml - Security Infrastructure Improvements	353,304	45,854	15,323	61,177	414,480
904121A	Sr 20/Coupeville Tml - Facility Ada Compliance Improvements	4,264	553	185	738	5,003
904125A	Sr 20/Coupeville Tml (Proviso) - Tollbooth Configuration Improvements	13,828	1,795	600	2,394	16,222
904134A	Sr 20/Coupeville Tml - Twic Card Reader Security Improvement	3,671	476	159	636	4,307
904137A	Sr 20/Coupeville Tml - Ada Compliance Improvements Phase 2	72,655	9,430	3,151	12,581	85,236
904212A	Sr 104/Kingston Tml - Steel Sheetpile Bulkhead Rehabilitation	162,238	21,056	7,036	28,092	190,330
904228A	Sr 104/Kingston Tml Slips - Dolphin Preservation Phase 4	92,341	11,985	4,005	15,989	108,330
904239A	Sr 104/Kingston Tml - Security Infrastructure Improvements	14,485	1,880	628	2,508	16,993
904246A	Sr 104/Kingston Tml - Twic Card Reader Security Improvement	5,261	683	228	911	6,172
904312A	Sr 20 Spur/Lopez Island Tml - Floating Wingwall Rehabilitation	2,868,472	372,287	124,406	496,693	3,365,165
904315A	Sr 20 Spur/Lopez Island Tml - Timber Trestle Pavement Rehabilitation	441,619	57,316	19,153	76,469	518,088
904327A	Sr 20 Spur/Lopez Island Tml - Facility Ada Compliance Improvements	96,876	12,573	4,201	16,775	113,650
904329A	Sr 20 Spur/Lopez Island Tml - Twic Card Reader Security Improvement	2,016	262	87	349	2,365
904421A	Sr 525/Mukilteo Tml - Transfer Span Elec/Mech Preservation	-41,380	-5,371	-1,795	-7,165	-48,545
952515O	Mukilteo Tml Preservation	0	0	0	0	0
904423A	Sr 525/Front St I/S - Signal & Rt Turn Pocket Improvement	5,426	704	235	940	6,365
904433A	Sr 525/Mukilteo Tml (Proviso) - Tml Preservation/Relocation Funding	5,134,746	666,417	222,694	889,111	6,023,857
904435A	Sr 525/Mukilteo Tml - Security Infrastructure Improvements	20,670	2,683	896	3,579	24,249
904438A	Sr 525/Front St I/S - Pedestrian Safety And Ada Improvements	15,431	2,003	669	2,672	18,103
904441A	Sr 525/Mukilteo Tml - Twic Card Reader Security Improvement	5,038	654	218	872	5,910
952515P	Mukilteo Tml Improvement	0	0	0	0	0
904511A	Sr 20 Spur/Orcas Island Tml - Timber Trestle Replacement	271	35	12	47	318
904521A	Sr 20 Spur/Orcas Island Tml - Right Inner Timber Dolphin Replacement	102,847	13,348	4,460	17,808	120,655
904523A	Sr 20 Spur/Orcas Island Tml - Bridge Seat Seismic Retrofit	69,980	9,082	3,035	12,117	82,097
904534A	Sr 20 Spur/Orcas Island Tml - Twic Card Reader Security Improvement	2,840	369	123	492	3,332
904612A	Sr 163/Point Defiance Tml - Outer Floating Dolphin Replacement	43,778	5,682	1,899	7,580	51,358
904616A	Sr 163/Point Defiance Tml - Bridge Seat Seismic Retrofit	79,826	10,360	3,462	13,822	93,648
904617A	Sr 163/Point Defiance Tml - Security Infrastructure Improvements	510,724	66,285	22,150	88,435	599,159
904629A	Sr 163/Point Defiance Tml - Twic Card Reader Security Improvement	1,813	235	79	314	2,127
904631A	Sr 163/Point Defiance Tml - Enterprise Security System Replacement	31,921	4,143	1,384	5,527	37,448
904717A	Sr 20/Port Townsend Tml - 250 Kw Emergency Generator Improvement	343,616	44,597	14,903	59,499	403,115
904726A	Sr 20/Port Townsend Tml - Security Infrastructure Improvements	418,711	54,343	18,159	72,502	491,213
904731A	Sr 20/Port Townsend Tml Slip 1 - Transfer Span Replacement	7,634,320	990,827	331,100	1,321,927	8,956,247
904737A	Sr 20/Port Townsend Tml (Proviso) - Tollbooth Configuration Improvements	66,498	8,630	2,884	11,514	78,012
904742A	Sr 20/Port Townsend Tml - Twic Card Reader Security Improvement	4,119	535	179	713	4,832
904744A	Sr 20/Port Townsend Tml Slip 2 - Bridge Seat Seismic Retrofit	57,766	7,497	2,505	10,003	67,769
904843A	Sr 519/Seattle Tml Slip 3 - Ohl & Transfer Span Replacement	205,183	26,630	8,899	35,529	240,712
904850A	Sr 519/Seattle Tml - Electrical Distribution System Upgrade	4,215,799	547,151	182,839	729,990	4,945,790
904854A	Sr 519/Seattle Tml Slip 2 - Mechanical & Electrical Rehabilitation	1,980,407	257,029	85,890	342,919	2,323,326
904856A	Sr 519/Seattle Tml - Security Infrastructure Improvements	569	74	25	98	667
904858A	Sr 519/Seattle Tml - Terminal Bldg & N. Trestle Replacement	3,252,241	422,095	141,050	563,144	3,815,385
904868A	Sr 519/Seattle Tml - Twic Card Reader Security Improvement	27,096	3,517	1,175	4,692	31,788
904869A	Sr 519/Seattle Tml Slip 1 - Ohl Plc/Electrical Upgrade	147,777	19,179	6,409	25,588	173,365
904872A	Sr 519/Seattle Tml - Enterprise Security System Replacement	7,560	981	328	1,309	8,869
904922A	Sr 20 Spur/Shaw Island Tml - Twic Card Reader Security Improvement	1,794	233	78	311	2,104
905003A	Sr 160/Southworth Tml - Timber Trestle & Terminal Replacement	326,348	42,355	14,154	56,509	382,857
905024A	Sr 160/Southworth Tml - Bridge Tower Seismic Retrofit	433	56	19	75	507
905025A	Sr 160/Southworth Tml - Exit Lanes Luminaire Replacement	228,711	29,684	9,919	39,603	268,314
905032A	Sr 160/Southworth Tml - Security Infrastructure Improvements	25,979	3,372	1,127	4,498	30,478
905034A	Sr 160/Southworth Tml - Upland Parking Luminaire Replacement	11,113	1,442	482	1,924	13,038
905035A	Sr 160/Southworth Tml - Twic Card Reader Security Improvement	5,516	716	239	955	6,471
905112A	Sr 163/Tahlequah Tml - Twic Card Reader Security Improvement	1,024	133	44	177	1,201
905113A	Sr 163/Tahlequah Tml - Bridge Seat Seismic Retrofit	62,117	8,062	2,694	10,756	72,873
905114A	Sr 163/Tahlequah Tml - Security Infrastructure Improvements	195,712	25,401	8,488	33,889	229,601
905123A	Sr 163/Tahlequah Tml - Enterprise Security System Replacement	27,320	3,546	1,185	4,731	32,051
905204A	Sr 160/Vashon Tml - Timber Trestle Rehabilitation	631,831	82,003	27,403	109,405	741,237
905226A	Sr 160/Vashon Tml - Security Infrastructure Improvements	35,930	4,663	1,558	6,221	42,151
905229A	Sr 160/Vashon Tml Slip 2 - Bridge Seat Seismic Retrofit	73,402	9,526	3,183	12,710	86,112
905230A	Sr 160/Vashon Tml - Pof Turnstile & Ada Gate Installation	1,812	235	79	314	2,125
905233A	Sr 160/Vashon Tml - Twic Card Reader Security Improvement	3,616	469	157	626	4,245
905302A	Wsf/2901 Bldg (Hq) - Enterprise Security System Replacement	2,094,250	271,804	90,828	362,632	2,456,882
998949A	Wsf/Systemwide - Reservation System Improvements	3,094,984	401,685	134,229	535,914	3,630,898
998949B	Wsf/Systemwide - Its Communication System Improvements	1,529,951	198,566	66,354	264,920	1,794,870
Total Terminal Construction (W1) Costs		42,902,995	5,568,201	1,860,702	7,428,904	50,331,899
Preservation Costs		20,183,762	2,619,567	875,369	3,494,936	23,678,698
Improvement Costs		22,719,233	2,948,635	985,333	3,933,968	26,653,201
Total		42,902,995	5,568,201	1,860,702	7,428,904	50,331,899

Vessel Construction Sub-program (W2) Direct and Indirect Project Costs		2011-2013 Biennium				
		Biennium (July 2011- June 2013)				
PIN	Project Title	Direct Costs	Proj Spt Costs	Admin Spt Costs	Indirect Costs	Total Costs
No PIN		0	0	0	0	0
981010C	Mv Spokane Preservation (11-13)	607,105	9,124	26,325	35,449	642,554
981011C	Mv Spokane Improvement (11-13)	36,780	553	1,595	2,148	38,928
981020B	Mv Walla Walla Preservation (11-13)	8,267,387	124,253	358,481	482,734	8,750,121
981021B	Mv Walla Walla Improvement (11-13)	406,090	6,103	17,608	23,712	429,801
981030A	Mv Tacoma Preservation (09-11)	0	0	0	0	0
944499D	Mv Tacoma Preservation	0	0	0	0	0
981030C	Mv Tacoma Preservation (11-13)	1,689,017	25,385	73,237	98,622	1,787,639
981031A	Mv Tacoma Impr Dockside (09-11)	0	0	0	0	0
981031C	Mv Tacoma Improvement (11-13)	588,401	8,843	25,514	34,357	622,758
981040C	Mv Wenatchee Preservation (11-13)	3,274,533	49,214	141,987	191,201	3,465,733
981041C	Mv Wenatchee Improvement (11-13)	188,611	2,835	8,178	11,013	199,624
981050C	Mv Puyallup Preservation (11-13)	538,760	8,097	23,361	31,458	570,218
944499C	Mv Puyallup Preservation	0	0	0	0	0
981051C	Mv Puyallup Improvement (11-13)	238,241	3,581	10,330	13,911	252,152
982010B	Mv Hyak Preservation (11-13)	1,248,350	18,762	54,130	72,891	1,321,242
982011C	Mv Hyak Improvement (11-13)	516,311	7,760	22,388	30,147	546,458
944431E	Mv Hyak Improvement	0	0	0	0	0
982020C	Mv Kaleetan Preservation (11-13)	2,611,158	39,244	113,222	152,466	2,763,624
982021A	Mv Kaleetan Impr (09-11)	-2	0	0	0	-2
982021C	Mv Kaleetan Improvement (11-13)	808,897	12,157	35,074	47,232	856,128
944433E	Mv Kaleetan Improvement	0	0	0	0	0
982030C	Mv Yakima Preservation (11-13)	1,491,309	22,413	64,664	87,078	1,578,386
982031C	Mv Yakima Improvement (11-13)	93,058	1,399	4,035	5,434	98,491
982040C	Mv Elwha Preservation (11-13)	758,108	11,394	32,872	44,266	802,374
982041C	Mv Elwha Improvement (11-13)	17,212	259	746	1,005	18,217
983010C	Mv Issaquah Pres (11-13)	640,848	9,631	27,788	37,419	678,267
944401D	Mv Issaquah Preservation	0	0	0	0	0
983011C	Mv Issaquah Improvement (11-13)	71,835	1,080	3,115	4,194	76,030
983020A	Mv Kittitas Pres Dockside (09-11)	0	0	0	0	0
983020C	Mv Kittitas Preservation (11-13)	467,327	7,024	20,264	27,287	494,615
944402D	Mv Kittitas Preservation	0	0	0	0	0
983021A	Mv Kittitas Impr Dockside (09-11)	0	0	0	0	0
983021C	Mv Kittitas Improvement (11-13)	129,397	1,945	5,611	7,556	136,953
983030C	Mv Kitsap Preservation (11-13)	183,514	2,758	7,957	10,715	194,229
944403D	Mv Kitsap Preservation	0	0	0	0	0
983031C	Mv Kitsap Improvement (11-13)	246,924	3,711	10,707	14,418	261,342
983040C	Mv Cathlamet Preservation (11-13)	439,356	6,603	19,051	25,654	465,010
983041C	Mv Cathlamet Improvement (11-13)	157,609	2,369	6,834	9,203	166,812
983050C	Mv Chelan Preservation (11-13)	421,695	6,338	18,285	24,623	446,318
944405D	Mv Chelan Preservation	0	0	0	0	0
983051C	Mv Chelan Improvement (11-13)	108,258	1,627	4,694	6,321	114,580
944405F	Mv Chelan Improvement	0	0	0	0	0
983060A	Mv Sealth Preservation (09-11)	-4	0	0	0	-4
983060C	Mv Sealth Preservation (11-13)	1,058,464	15,908	45,896	61,804	1,120,267
944406D	Mv Sealth Preservation	0	0	0	0	0
983061C	Mv Sealth Improvement (11-13)	161,420	2,426	6,999	9,425	170,845
984011C	Mv Evergreen State Improvement (11-13)	29,977	451	1,300	1,750	31,728
984020C	Mv Klahowya Preservation (11-13)	575,839	8,654	24,969	33,623	609,462
984021C	Mv Klahowya Improvement (11-13)	325,184	4,887	14,100	18,988	344,171
984030C	Mv Tillikum Preservation (11-13)	764,735	11,493	33,160	44,653	809,388
984031C	Mv Tillikum Improvement (11-13)	74,652	1,122	3,237	4,359	79,011
987011C	Mv Hiyu Improvement (11-13)	3,600	54	156	210	3,810
990010Y	144 Auto Ferries Design-Build	539,001	8,101	23,372	31,472	570,474
990020A	#1 - 144 Auto Ferry_(11-13) (13-15)	86,431,732	1,299,006	3,747,757	5,046,763	91,478,495
990030A	#2 - 144-Auto Ferry_(13-15)	34,108,054	512,619	1,478,956	1,991,575	36,099,629
992010B	64 Auto Ferries Construction Of The 2nd And 3rd Vessels	14,222,464	213,753	616,699	830,452	15,052,916
992010C	64 Auto New Vessel Capital Spares	2,138,796	32,145	92,740	124,885	2,263,681
992011B	Mv Chetzemoka Improvement (11-13)	900,415	13,533	39,043	52,575	952,991
992020A	Mv Salish Improvement (11-13)	324,153	4,872	14,056	18,927	343,080
992030A	Mv Kennewick Improvement (11-13)	125,455	1,885	5,440	7,325	132,780
998951D	Lng Security Planning And Outreach	375,263	5,640	16,272	21,912	397,175
998951E	Ada Visual Paging For Wsf Vessels	902,149	13,559	39,118	52,677	954,826
Total Vessel Construction (W2) Costs		169,307,439	2,544,567	7,341,322	9,885,889	179,193,328
Preservation Costs		25,037,500	376,295	1,085,648	1,461,944	26,499,444
Improvement Costs		144,269,939	2,168,272	6,255,674	8,423,945	152,693,884
Total		169,307,439	2,544,567	7,341,322	9,885,889	179,193,328

Emergency Repair Sub-program (W3)		2011-2013 Biennium				
Direct Costs Only		Biennium (July 2011- June 2013)				
BIN	BIN Title	Direct Costs	Proj Spt Costs	Admin Spt Costs	Indirect Costs	Total Costs
999910K	Emergency Repairs	5,065,253				5,065,253

WSDOT Ferries Division 2015-17 Capital Budget Request Administrative Overhead Decision Packages

Administrative overhead includes the following zero-based budget decision packages:

- Terminal Project Support
- Vessel Project Support
- Administrative Support

15-17 Transportation Budget Decision Package

Agency:	405 Department of Transportation
Decision Package Code/Title:	T – Terminal Project Support Package
Budget Period:	2015-17
Budget Level:	Zero-based

Program:	W – WSF Construction
Sub-Program:	W1 Terminal Construction

Recommendation Summary Text:

This is the zero-based budget request for decision package T – Terminal Project Support for WSF Construction Program to support the WSDOT Ferries Division (WSF) Terminals Construction Sub-Program (W1). It funds the following activities in the 2015-17 biennium:

- T-1 – Terminal Engineering Project Controls: project controls and reporting, program management & planning, scoping and biennial book-building, and implementation of asset management system.
- T-2 – Terminal Engineering Technical Support: steel pile inventory, imaging support, data collection and terminal base-map updates.
- T-3 – Terminal Program Planning and Design Standards: terminal design standards revisions.
- T-4 – Terminal Engineering Studies: terminal structures seismic evaluations for 2015-17 biennium.
- T-5 – Regulatory Compliance and Inspections: Bridge load ratings, bridge and underwater inspections, scour monitoring and landing aid inspections, mechanical and electrical inspections, paving and building inspection, terminal maritime security inspections, environmental support, and overweight vehicle evaluation program.
- T-6 – Terminal Engineering Supervision, Office Support and Supplies.
- T-7 – Terminal Engineering PMRS/Primavera Implementation.

Consolidated Fiscal Detail: Below is the consolidated fiscal detail and FTE detail for the budget activity packages included in T – Terminal Project Support for WSF Construction Program. WSF will prepare a new zero-based budget request in each succeeding budget development cycle that will replace the out-biennium placeholders established by the 14LEGFIN budget. Details of individual budget activity packages follow.

T - Terminal Project Support for the WSF Construction Program

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction – State	3,067,636	3,166,973	6,234,609
Total by Fund	3,067,636	3,166,973	6,234,609

Objects of Expenditure:

T - Terminal Project Support for the WSF Construction Program

Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	1,875,998	1,881,449	3,757,447
B - Benefits	568,301	569,286	1,137,586
C - Personal Service Contracts	15,000	140,000	155,000
E - Goods and Services	300,143	260,222	560,365
G - Travel	8,712	8,785	17,497
J - Capital Outlay	217,732	217,732	435,464
T - Intraagency Reimbursements	81,750	89,500	171,250
Total by Object	3,067,636	3,166,973	6,234,609

Salary and FTE Details:

T - Terminal Project Support for the WSF Construction Program

Salary and FTE Detail						
Budget Activity Packages	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
T-1 - Terminal Engr Project Controls	5.60	5.60	5.60	413,106	415,630	828,736
T-2 - Terminal Engr Technical Support	0.48	0.48	0.48	30,005	30,144	60,149
T-3 - Terminal Planning & Design Standards	0.50	0.50	0.50	41,366	41,634	83,000
T-4 - Terminal Engineering Studies	1.12	1.12	1.12	97,311	97,311	194,622
T-5 - Regulatory Compliance & Inspections	6.38	6.38	6.38	489,730	491,745	981,475
T-6 - TE Supervision, Office Support & Supplies	8.25	8.25	8.25	719,580	720,086	1,439,666
T-7 - PMRS/ Primavera Implementation	1.00	1.00	1.00	84,900	84,900	169,800
Total Staff Dollars and FTEs	23.33	23.33	23.33	1,875,998	1,881,449	3,757,447

Budget Activity Package: T-1 – Terminal Engineering Project Controls
PIN: 998901A
WIN: M05482D and M05483D

Recommendation Summary Text:

This budget activity package funds asset management (M05482D); project controls and reporting, scoping and program planning (M05483D). Project controls tasks include: asset management plan implementation, scoping, cost estimating, Capital Book building, life-cycle analysis and life-cycle cost model management, legislative and executive reporting and response, and monitoring and control of funding and expenditures through administration of work order/task processes and change requests.

Asset management, project controls and reporting, scoping and program planning will be distributed to all preservation and improvement projects.

Fiscal Detail:

T-1 - Terminal Engineering Project Controls

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction - State	576,897	574,374	1,151,271
Total by Fund	576,897	574,374	1,151,271

Objects of Expenditure:

T-1 - Terminal Engineering Project Controls

Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	413,106	415,630	828,736
B - Benefits	129,704	130,157	259,861
E - Goods and Services	34,087	28,587	62,674
Total by Object	576,897	574,374	1,151,271

Salary and FTE Details:

T-1 - Terminal Engineering Project Controls

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 7	0.30	0.30	0.30	31,029	31,029	62,058
MARINE MECHANICAL ENGINEER	0.10	0.10	0.10	9,377	9,471	18,848
MARINE PROJECT ENGINEER	0.20	0.20	0.20	18,754	18,942	37,696
TRANSPORTATION ENGINEER 2	3.00	3.00	3.00	189,432	191,326	380,758
TRANSPORTATION ENGINEER 3	0.50	0.50	0.50	34,806	35,154	69,960
TRANSPORTATION TECHNICAL ENGINEER 5	1.40	1.40	1.40	118,860	118,860	237,720
WMS BAND 3	0.10	0.10	0.10	10,848	10,848	21,696
Total Staff Dollars and FTEs	5.60	5.60	5.60	413,106	415,630	828,736

Package Description:

Terminal Asset Management (M05482D)

Objects of Expenditure:

**T-1 - Terminal Engineering Project Controls
Terminal Asset Management (M05482D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	103,968	104,249	208,217
B - Benefits	29,594	29,645	59,239
E - Goods and Services	12,226	6,726	18,952
Total by Object	145,788	140,620	286,409

Salary and FTE Details:

**T-1 - Terminal Engineering Project Controls
Terminal Asset Management (M05482D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
MARINE PROJECT ENGINEER	0.20	0.20	0.20	18,754	18,942	37,696
BRIDGE ENGINEER 7	0.20	0.20	0.20	20,686	20,686	41,372
TRANSPORTATION TECHNICAL ENGINEER 5	0.40	0.40	0.40	33,960	33,960	67,920
WMS BAND 3	0.10	0.10	0.10	10,848	10,848	21,696
MARINE MECHANICAL ENGINEER	0.10	0.10	0.10	9,377	9,471	18,848
BRIDGE ENGINEER 7	0.10	0.10	0.10	10,343	10,343	20,686
Total Staff Dollars and Data Entry	1.10	1.10	1.10	103,968	104,249	208,217

The Terminal Engineering asset management plan was developed in the 2009-2011 and 2011-2013 bienniums in accordance with ESHB 1094 and included the development of asset plans for the major asset groups in the Life Cycle Cost Model (LCCM) to identify the least life-cycle cost optimization for capital spending needs within the organization. This was the result of recommendations from the Terminal Engineering Asset Management Study. The asset management plan development project has resulted in a standardized business case process for evaluation of spending needs within Terminal Engineering and includes the modified LCCM which incorporates ridership impacts into the risk-based economic analysis of assets. This analysis includes evaluation of the age and condition of assets to calculate failure probability, and also considers the costs associated with the failure of an asset, including emergency repairs and ridership delays, to calculate the consequences of failure. The result is a prioritized spending program for capital budgeting.

The following asset management elements will be performed in 2015-17:

The asset management plan efforts for 2015-17 will involve implementation of the continuous improvement recommendations resulting from the 2009-2015 development effort. Efforts will include updating of life cycle information such as age, condition, ridership, and asset improvements. Changes in failure scenarios will be evaluated.

Project Controls and Reporting & Scoping and Program Planning (M05483D)

Objects of Expenditure:

**T-1 - Terminal Engineering Project Controls
Scoping & Planning / Project Controls (M05483D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	309,138	311,380	620,518
B - Benefits	100,109	100,513	200,622
E - Goods and Services	21,861	21,861	43,722
Total by Object	431,108	433,754	864,862

Salary and FTE Details:

**T-1 - Terminal Engineering Project Controls
Scoping & Planning / Project Controls (M05483D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
TRANSPORTATION ENGINEER 2	1.00	1.00	1.00	63,144	63,775	126,919
TRANSPORTATION ENGINEER 2	1.00	1.00	1.00	63,144	63,775	126,919
TRANSPORTATION ENGINEER 3	0.50	0.50	0.50	34,806	35,154	69,960
TRANSPORTATION TECHNICAL ENGINEER 5	1.00	1.00	1.00	84,900	84,900	169,800
TRANSPORTATION ENGINEER 2	1.00	1.00	1.00	63,144	63,775	126,919
Total Staff Dollars and Data Entry	4.50	4.50	4.50	309,138	311,380	620,518

Project controls and reporting, and scoping and program planning includes the following efforts:

- Manage and control the biennial scoping and cost estimating process for Terminal Engineering.
- For activities not directly attributable to specific projects, estimate construction project costs and analyze unit bid prices specific to terminals.
- Organize and conduct biennial budget development and book building for subprogram W1. Prepare related documentation (white papers, decision packages, etc.).
- Identify current and future preservation projects using the Life Cycle Cost Model (LCCM), TEIS project list, and CPMS.
- Use life-cycle analyses to evaluate the economic efficiency between competing alternative improvement options.
- Maintain and utilize LCCM tools to answer legislative queries on biennial preservation and maintenance needs.
- Report Terminal Engineering’s budget and performance execution, through the development of Quarterly Project Reviews, Confidence Reports, schedule quality measures, earned value and other such tools.
- Respond to legislative and executive queries on Terminal Engineering project delivery and program planning.
- Control funding and expenditures through the work order and task management processes.
- Administer change management processes, such as journal vouchers and project change request forms (PCRF).

Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

WSDOT has refined its project management process for delivering its Capital Projects. This process includes “best practices”, tools, templates and examples that will enhance the communication process for both design and construction project management. Having the forecasting, consistent and accurate reporting will reduce last minute and undesirable surprises that would impact project budget and timelines, which translate to credibility of our agency. Implementation of the continuous improvement recommendations will ensure the ongoing success of the asset management program within Terminal Engineering in order to determine the optimized spending programs for capital assets. Consistent and accurate reporting and measurement of our projects will improve agency credibility and will assist with making effective and efficient business decisions based on improved management of project scope, schedule and cost.

Asset management implementation of the continuous improvement recommendations resulting from the 2009-2015 development effort will ensure the ongoing success of the asset management program within Terminal Engineering in order to determine the optimized spending programs for capital assets.

Performance measure detail:

Performance Measures for T-1 – Terminal Engineering Project Controls:	FY 2016	FY 2017
<p>Outcome Measures:</p> <ul style="list-style-type: none"> • POG Result Area – Improve state, regional and local transportation systems. <ul style="list-style-type: none"> • Maintain tools that monitor the age and condition of terminal facilities. • Estimate future Terminal preservation needs using the life-cycle cost model, per RCW 47.60.345. • POG Result Area – Strengthen government's ability to achieve results efficiently and effectively. <ul style="list-style-type: none"> • Develop and manage budgeting, accounting and reporting of capital subprogram W1, per RCW 43.88. • Assist executives and project managers in accessing accurate, real-time information about PINs, WINs and work orders. 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>Output Measures:</p> <ul style="list-style-type: none"> • Updated asset plan for each of the asset class in the LCCM • Review Terminal Engineering’s construction specifications for conformance with maritime industry best practices. • Ensure utilization of industry standards to estimate asset life, per RCW 47.60.345. • Develop cost accounting tools that address gaps between existing statewide tools. • Develop biennial scoping documents for preservation and improvement projects. • Administer change management processes, such as journal vouchers and project control forms. • Control funding and expenditures through the work order and task management processes. • For activities not directly attributable to specific projects, estimate construction project costs and analyze unit bid prices specific to Terminals. • Report Terminal Engineering’s budget and performance execution, through the 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

Performance Measures for T-1 – Terminal Engineering Project Controls:	FY 2016	FY 2017
development of Quarterly Project Reviews, Confidence Reports and other such tools.	Yes	Yes
<ul style="list-style-type: none"> Respond to legislative and executive queries on Terminal Engineering project delivery and program planning. 	Yes	Yes
Efficiency/Effectiveness Measures:		
<ul style="list-style-type: none"> Meet deadlines for submittal of requirements to policy makers. 	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

Goal: Preservation

This activity package is necessary to support all preservation and improvement projects in WSF capital program, allowing WSF to meet the goals of safety, preservation, mobility, environment and stewardship.

Goal: Stewardship

The project controls group and the associated efforts supports WSF’s strategy to employ state-of-the-art project management, by assisting in scope, schedule and budget development and management.

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

The activities funded by this decision package supports WSF’s Terminal Engineering Department in the implementation of improvement and preservation projects that improve and maintain the State’s marine transportation systems by maintaining the tools that monitor the age and condition of terminal facilities using the Life-Cycle Cost Model (LCCM). The LCCM also allows WSF to estimate the future Terminal preservation needs per RCW 47.60.345.

The activities funded by this decision package also strengthen government's ability to achieve results efficiently and effectively by developing and managing budgeting, accounting and reporting of capital subprogram W1, per RCW 43.88. In addition, it funds the staff necessary to assist executives and project managers in accessing accurate, real-time information about PINs, WINs and work orders.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This activity package improves statewide mobility of people, goods and services by supporting the delivery of projects on time and on budget (90 percent standard).

The activities funded by this decision package supports WSF’s Terminal Engineering Department in the implementation of improvement and preservation projects that improve and maintain the State’s marine transportation system, which serve statewide travel and are considered by the legislature to be of statewide significance.

What are the other important connections or impacts related to this proposal?

Utilization of asset management will provide a structured and prioritized approach to improving upon current WSF practices. Asset management constitutes a framework within which customers and WSF

comes to agreements about the quantity and quality of the service to be provided, as well as associated costs. In the case of WSF, Level of Service (LOS) standards would be used to drive decisions about how much ferry service to provide, and the nature of the customer experience. From such LOS standards would flow decisions about the size, location, aesthetics, timing, and prioritization of vessels and terminals.

Implementation of the Asset Management continuous improvement recommendations will provide a standardized, objective decision-making process that is transparent to the Ferries Division customers and other agencies. The Level of Service (LOS) standards that are used to justify the spending programs are readily available to those outside the agency and are based on consideration of impact to customers.

What alternatives were explored by the agency, and why was this alternative chosen?

WSF considered funding the Terminal Engineering Department's project controls and program management activities out of the design budgets of ongoing capital projects. This alternative was rejected, given that the project funding is currently heavily regulated by proviso language in ESHB 2878.

Although WSF has a good understanding of the location, performance, and condition of all of its terminal assets, ensured in part through a regular, thorough program of inspection and documentation, asset data are not integrated and cross-analyzed in order to optimize improvement, preservation, and maintenance work programs. The alternative to implementing the continuous improvement recommendations would be to utilize the asset management program at a sub-optimal level that would fail to fully realize the asset management practices as outlined in the Asset Management Study and in accordance with ESHB 1094.

What are the consequences of not funding this package?

Failure to fund this decision package will jeopardize the ability of WSF's Terminal Engineering Department to develop and manage the capital program.

If asset management implementation and updating is not funded, it would result in incomplete level of utilization of Asset Management program, and a lack of standardization in the use the asset management program that was developed in 2009-13. WSF would not be able to fully utilize a system to improve on its current practices and to continue using the recommendations of the asset management study mandated in ESHB 2358. There were three key findings in the asset management study:

1. WSF relies on the subjective judgment of individuals and poorly documented institutional knowledge to make decisions about the nature, frequency, and prioritization of maintenance. The organization cannot demonstrate that its maintenance protocols are based on any systematic analysis of risk and cost within a structured LOS framework.
2. A chief criticism of the Ferry Financing Study was that WSF relies solely on an imperfect LCCM for predicting and programming preservation projects. The LCCM was found to be imprecise and in many cases led to overstatement of needs. Although it has been improved, it still lacks the full range of inputs necessary to optimize preservation, and it does not provide mechanisms to consider the interdependency of maintenance and preservation programs.
3. WSF lacks both a strategic framework and the analytical tools for systematic asset management. As such, WSF does not develop or adhere to documents that set forth plans for acquiring, operating, maintaining, and preserving assets or asset classes throughout their life-cycle.

What is the relationship, if any, to the capital budget?

Scoping, which is an activity under this decision package prepares the project budgets for capital improvement and preservation projects.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- FTEs and labor costs are based on typical positions anticipated to charge to indirect project support cost collection centers.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Funding for the Terminal Engineering Department's project controls and reporting and program planning efforts is expected to continue in future biennia.

Due to the increased level of analysis in the risk-based LCCM, there will be additional on-going costs above the current condition-based version of the LCCM. The on-going costs in future biennia to maintain the asset management program will include the current effort to update the asset condition information, and the additional cost of validation and updating consequence costs including repair and ridership impact costs

The overall project controls and reporting, program planning and asset management budget will be developed using a zero-based budget approach for each budget cycle.

Budget Activity Package: T-2 – Terminal Engineering Technical Support
PIN: 998901B
WIN: M05427D, M05431D, and M05471C

Recommendation Summary Text:

The activity package funds CADD and imaging software upgrades, data collection, large-format printing equipment, and storage and maintenance of steel piling.

Terminal technical support activity package costs and budget will be distributed to all preservation and improvement projects.

Fiscal Detail:

T-2 - Terminal Engineering Technical Support

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction - State	122,540	104,424	226,964
Total by Fund	122,540	104,424	226,964

Object of Expenditure:

T-2 - Terminal Engineering Technical Support

Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	30,005	30,144	60,149
B - Benefits	10,139	10,167	20,306
E - Goods and Services	32,646	26,613	59,259
T - Intraagency Reimbursements	49,750	37,500	87,250
Total by Object	122,540	104,424	226,964

Salary and FTE Details:

T-2 - Terminal Engineering Technical Support

Salary and FTE Detail						
List positions by classification	Data Entry			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 1	0.10	0.10	0.10	5,717	5,774	11,491
MAINTENANCE SPECIALIST 3	0.02	0.02	0.02	777	785	1,562
TRANSPORTATION ENGINEER 3	0.02	0.02	0.02	1,044	1,054	2,098
TRANSPORTATION ENGINEER 4	0.06	0.06	0.06	4,614	4,614	9,228
TRANSPORTATION ENGINEER 4	0.15	0.15	0.15	11,536	11,536	23,072
TRANSPORTATION TECHNICIAN 1	0.13	0.13	0.13	5,459	5,514	10,973
TRANSPORTATION TECHNICIAN 3	0.02	0.02	0.02	858	867	1,725
Total Staff Dollars and Data Entry	0.48	0.48	0.48	30,005	30,144	60,149

Package Description:**Steel Piling Inventory (M05427D)****Objects of Expenditure:****T-2 - Terminal Engineering Technical Support
Steel Piling Inventory (M05427D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	2,679	2,706	5,385
B - Benefits	925	931	1,856
E - Goods and Services	146	113	259
Total by Object	3,750	3,750	7,500

Salary and FTE Details:**T-2 - Terminal Engineering Technical Support
Steel Piling Inventory (M05427D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
TRANSPORTATION ENGINEER 3	0.02	0.02	0.02	1,044	1,054	2,098
TRANSPORTATION TECHNICIAN 3	0.02	0.02	0.02	858	867	1,725
MAINTENANCE SPECIALIST 3	0.02	0.02	0.02	777	785	1,562
Total Staff Dollars and Data Entry	0.05	0.05	0.05	2,679	2,706	5,385

Steel Piling was purchased in past biennia for use in future projects, in order to avoid the rapidly-increasing price of steel and impacts to project schedule due to long lead time of pipe. Escalation in the price of steel was offset by purchasing before steel prices would rise, and by purchasing in bulk. In 2008 all the pipe was consolidated to a WSDOT storage facility in Puyallup, Washington. Funding is for maintenance and inventory management of the piling, and maintenance of the WSDOT site in which it will be stored.

CAE/CADD & Imaging Support (M05431D)**Objects of Expenditure:****T-2 - Terminal Engineering Technical Support
CAE & Imaging Support (M05431D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	4,614	4,614	9,228
B - Benefits	1,423	1,423	2,847
E - Goods and Services	27,500	23,250	50,750
Total by Object	33,537	29,287	62,825

Salary and FTE Details:**T-2 - Terminal Engineering Technical Support
CAE & Imaging Support (M05431D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
TRANSPORTATION ENGINEER 4	0.06	0.06	0.06	4,614	4,614	9,228
Total Staff Dollars and Data Entry	0.06	0.06	0.06	4,614	4,614	9,228

Printing and imaging equipment and related software are used for the production of basemaps, schedules, plan sheets, and presentation graphics. CADD software and utilities are necessary for viewing, printing, and revising AutoCAD documents submitted by consultants. WSDOT uses MicroStation, which is not industry standard; therefore, the need for translation software is on-going. In addition, drafting utilities are needed for design of mechanical Ferries structures including 3D solid modeling and mechanical drafting and, for in-water engineering design, unification of bathymetric and topographic data. Also, due to the increase in the length of time required for a workstation to be in service before retirement there will be an increasing number of incidences when the hardware in a workstation will no longer be able to run Level Playing Field software. At this point WSF will be faced with either upgrading all or part of its computer hardware inventory. In order for WSF to produce the ever more complex graphic elements the agency requires it will have to provide for nominal upgrades to the engineering workstations so that they can be used to run Level Playing field software.

Data Collection and Terminal Basemap Updates (M05471C)**Objects of Expenditure:**

**T-2 - Terminal Engineering Technical Support
Data Collection and Terminal Basemap Updates
(M05471C)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	22,712	22,824	45,536
B - Benefits	7,791	7,812	15,603
E - Goods and Services	5,000	3,250	8,250
T - Intraagency Reimbursements	49,750	37,500	87,250
Total by Object	85,253	71,386	156,639

Salary and FTE Details:

**T-2 - Terminal Engineering Technical Support
Data Collection and Terminal Basemap Updates (M05471C)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
TRANSPORTATION ENGINEER 4	0.15	0.15	0.15	11,536	11,536	23,072
BRIDGE ENGINEER 1	0.10	0.10	0.10	5,717	5,774	11,491
TRANSPORTATION TECHNICIAN 1	0.13	0.13	0.13	5,459	5,514	10,973
Total Staff Dollars and Data Entry	0.38	0.38	0.38	22,712	22,824	45,536

WSDOT Ferries Division uses base-maps (plans showing right-of-way boundaries, utilities and site features) for operations planning, engineering design work (in addition to capital projects, the terminals often require upgrades, maintenance and replacement of utilities and structures), location of utility, safety and security structures and equipment, and management of hazardous materials.

Narrative Justification and Impact Statement***What specific performance outcomes does the agency expect?***

- Documentation and control of stored steel pipe inventory.
- Plan production efficiency and incorporation of scour/bathymetric survey data into project and terminal plans.
- More accurate design models and the ability to share information between other state agencies and offices.
- Preparation of geo-referenced ortho-photos and high accuracy aerial base-maps based on current aerial photography.

Performance measure detail:

Performance Measures for T-2 – Terminal Technical Support	FY 2016	FY 2017
<p>Outcome Measures:</p> <ul style="list-style-type: none"> • POG Result Area – Strengthen government's ability to achieve results efficiently and effectively. <ul style="list-style-type: none"> ○ Steel Piling Inventory: Documenting and controlling inventory allows WSF to track and use existing materials before purchasing new materials. ○ CAE/CADD & Imaging Support: Effective transportation system governance and management through the efficient file sharing, translation and processing both inside and outside WSDOT. ○ Base-map & Site Plans Revision: Allow WSDOT to keep complete information on each facility thus allowing up to date information to be kept for the LCCM. Construction expenses by reducing the number or unknowns that the Contractor faces when they work on WSF projects would be decreased. • POG Result Area – Improve the mobility of people, goods, and services. <ul style="list-style-type: none"> ○ Steel Piling Inventory: Manage mobility system demand and maximize operations. 	<p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>Output Measures:</p> <ul style="list-style-type: none"> • Steel Piling Inventory • CAE/CADD & Imaging Support • Base-map & Site Plans Revision 	<p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>Efficiency/Effectiveness Measures:</p> <ul style="list-style-type: none"> • Improve communication and project design efficiency with updated after construction changes the layout of structures at a terminal. • Increase cost efficiency by upgrading in-house imaging tools. • Responsibly manage steel pile inventory stockpile. 	<p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

Goal: Preservation

This package supports the *WSDOT Ferries Division Final Long-Range Plan (Long-Range Plan)* by facilitating WSF’s efforts to maintain and improve terminals.

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

Fund the CAE/CADD & imaging support and base-map & site plans revision activities will strengthen WSF’s ability to achieve results efficiently by maintaining and improving file sharing, translation and processing capabilities both inside and outside WSDOT.

The steel piles that are inventoried in this budget activity package are used in terminal projects that improve the mobility of people, goods, and services.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

Ferry connections that serve statewide travel are considered by the legislature to be of statewide significance. Maintaining CAE/CADD & imaging support, base-map & site plans revision capabilities, and the steel pile inventory contribute to the improvement and preservation of terminal facilities.

What are the other important connections or impacts related to this proposal?

Impact on agency clients and services:

CAE/CADD & Imaging Support: WSF works with counties and cities that request information in formats other than those native to WSF. Commonly requested formats includes: CAD file in AutoCad, TIF images, PDF images, DXF images, and a few other minor formats. Without updates, the communications between these entities and WSF will be impacted.

Impact on other state programs or units of government:

Steel Piling Inventory: The price for this work is decreasing as there is only one location to monitor compared to multiple locations with rental rates.

CAE/CADD & Imaging Support: WSF works with the Bridge and Structures Office in Olympia, which uses MicroGDS, and the Equipment and Facilities Office /Architecture in Olympia, which use AutoCAD. WSF does not use the same software as either of these departments and therefore are required to translate any shared graphical information from one format to another.

Data Collection and Terminal Basemap Updates: More complete information will give more certainty to the work on site and will speed project delivery.

What alternatives were explored by the agency, and why was this alternative chosen?

Steel Piling Inventory: Another alternative is to pay a private company to maintain the invent, but the least cost to the state for maintaining the inventory is to have the inventory in one location and without paying rent to private companies.

CAE/CADD & Imaging Support:

Software upgrades require no change in funding, as they are a yearly-recurring cost. Eliminating this sub-activity was considered, but it will compromise WSF's ability to meet Objective 5.3 Information Technology and Decision Support Systems: Ensure that information technology and decision support systems support WSDOT's key business functions. Without the imaging support activity, project and program delivery that would not be supported to the level desired, including:

- The ability to translate AutoCAD files: WSDOT uses MicroStation, which is not industry standard; therefore, the need for translation software is on-going.
- Discrepancies in design models and bathymetric and topographic data.
- The ability to produce complex graphics: Due to the increase in the length of time required for a workstation to be in service before retirement there will be an increasing number of incidences when the hardware in a workstation will no longer be able to run Level Playing Field software. At this point the Ferries Division will be faced with either upgrading all or part of its computer hardware inventory. If the upgrades are not available, the Ferries Division's ability to produce the ever more complex graphic elements required by the agency will be limited.
- Efficient plan production: Increases in the amount of time required for plan production, potentially impact project schedules.

- Effective communication: Growing difficult in file sharing and communication with the Ferries Division’s clients and consultants.
- Maintaining industry standards.

Data Collection and Terminal Basemap Updates:

Alternative 1: *Complete remaining base-maps* – This is the preferred alternative. In 2005, it was recognized that building base-maps of the terminals would save trips for surveying structures and utilities, as well as reduce design errors by compiling all existing structures that had been built from the time a terminal was put into service. Base-mapping was funded in the 2005-07 biennium for seven terminals. In the 2007-09 biennium, two terminal base-maps were completed to 80% during large design projects, leaving 11 terminals. In the 2009-11 biennium the completion of the Seattle bas-emap is the primary focus. The projects planned for the 2011-13 biennium are Point Defiance and Southworth. The projects planned for the 2013-15 biennium are Friday Harbor, Orcas Island, and Port Townsend. The projects planned for the 2015-17 biennium are Shaw Island and Tahlequah.

Alternative 2: *Complete base-maps during the design of large projects* – With this alternative, design efficiency is not achieved because the extent of the base-map always exceeds the scope of the design. In addition, small preservation and maintenance projects that occur in the waiting period before a large project is funded continue to incur higher costs due to field reconnaissance, design inefficiencies, and higher risk due to utilities that are unknown or not located accurately.

What are the consequences of not funding this package?

Steel Piling Inventory: WSF would lose its ability to document and control inventory items if this budget activity is not funded.

CAE/CADD & Imaging Support: The benefit of funding Imaging Support will be to directly and indirectly improve the mobility of people and goods, in conformance with the State’s strategic framework; conversely, the effect of non-funding is sustaining the condition of inefficient design production.

Data Collection and Terminal Basemap Updates : The benefit of funding Base-mapping will be to directly and indirectly improve the mobility of people and goods, in conformance with the State’s strategic framework; conversely, the effect of non-funding is sustaining the condition of inefficient design production.

What is the relationship, if any, to the capital budget?

None.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

Steel Piling Inventory:

- Assumes inventory management hours by WSF staff and storage site maintenance hours by headquarters maintenance staff. Cost is biennially recurring until inventory is used.
- The Terminal Engineer 3 is for WSF staff to verify quantities, that contractors have left the facility in good condition, and to keep the spreadsheet of pipe inventory current. This effort equates to 40 to 50 hours per year.

- The Maintenance Specialist is a region position and is required to keep the yard clean and kept up for storage. This would be in the range of 40 hours per year.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.
- Non-labor expenses for testing and equipment are required to provide for testing of pipe for quality by cutting out coupons and having the analyzed. A rented forklift may also be required to consolidate the piles of material.

CAE/CADD & Imaging Support:

- WSF staff hours are required for installation and management of the equipment and software, which will be charged to the projects currently being worked on.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.
- Non-labor expenses are for equipment, software, and licenses. Cost for software upgrades recurs yearly.
 - Hardware costs:
 - Additional RAM requirement to run Level Playing Fields software (bring workstations to 8 GB RAM)
 - 16 workstations x \$250/workstation = \$4,000
 - Contingency and maintenance for year two on all hardware = \$2,500
 - Software upgrades:
 - Update workstation photo editing software to allow more accurate design efforts
 - 60 workstations x \$180/workstation = \$10,800
 - Update PDF software
 - 20 seats x \$200 = \$4,000
 - Institute the use of Project Wise for larger scale projects (Seattle, Mukilteo)
 - Server Space = \$5,000
 - Engineer's time = 80 hrs x \$75/hr = \$6,000
 - Purchase and training for following:
 - MicroGDS (Requested by Construction) = \$5,000
 - Solid Works (or replacement 3d modeling software) = \$4,750
 - AutoCad support = \$2,350/year
 - Maintenance for two years on all software = \$4,000

Base-map & Site Plans Revision:

- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Steel Piling Inventory: All costs are ongoing until the inventory is exhausted. Costs for maintain the inventory will continue to decrease as the inventory is reduced.

CAE/CADD & Imaging Support: Software costs are expected to recur biennially. Hardware costs are expected to recur only when a component has reached or exceeded its IT retirement date. Software upgrades and hardware replacement costs are ongoing and require a fairly consistent level of funding across biennia.

Base-map & Site Plans Revision: After all of the terminals have complete base-maps, future projects will fund incorporation of changes and as-built data into the base-maps. By building on completed base-maps and updating them using construction as-built information the State saves the cost of performing an additional full survey of the terminal sites in the future.

Budget Activity Package: T-3 Terminal Program Planning & Design Standards
PIN: 998901C
WIN: M05408D

Recommendation Summary Text:

At the start of the 2011-13 biennium, the *Terminal Design Manuals* will have only been recently completed and as designers begin to use and reference the manuals, it is inevitable that sections will need to be modified or added. As regulations and codes change, efforts need to be directed towards maintaining the design manuals so that they will stay current.

Fiscal Detail:

T-3 - Terminal Program Planning & Design Standards

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction - State	72,256	92,074	164,330
Total by Fund	72,256	92,074	164,330

Object of Expenditure

T-3 - Terminal Program Planning & Design Standards

Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	41,366	41,634	83,000
B - Benefits	12,390	12,441	24,830
C - Personal Service Contracts	-	25,000	25,000
E - Goods and Services	16,000	10,500	26,500
G - Travel	2,500	2,500	5,000
Total by Object	72,256	92,074	164,330

Package Description:

Terminal Design Standard Revisions (M05408D)

Objects of Expenditure:

**T-3 - Terminal Program Planning & Design Standards
Terminal Design Standards Revisions (M05408D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	41,366	41,634	83,000
B - Benefits	12,390	12,441	24,830
C - Personal Service Contracts	-	25,000	25,000
E - Goods and Services	16,000	10,500	26,500
G - Travel	2,500	2,500	5,000
Total by Object	72,256	92,074	164,330

Salary and FTE Details:

**T-3 - Terminal Program Planning & Design Standards
Terminal Design Standards Revisions (M05408D)**

Salary and FTE Detail					
List positions by classification	FTEs			Dollars	
	FY 2016	FY 2017	Biennial Average	FY 2016	Total
TRANSPORTATION ENGINEER 3	0.25	0.25	0.25	17,403	34,980
BRIDGE ENGINEER 5	0.05	0.05	0.05	4,245	8,490
MARINE PROJECT ENGINEER	0.05	0.05	0.05	4,688	9,423
BRIDGE ENGINEER 7	0.05	0.05	0.05	5,171	10,342
MARINE MECHANICAL ENGINEER	0.05	0.05	0.05	4,688	9,423
BRIDGE ENGINEER 7	0.05	0.05	0.05	5,171	10,342
Total Staff Dollars and FTEs	0.50	0.50	0.50	41,366	83,000

The Terminal Engineering Design Manuals will document the standards used by WSF. WSF terminals use distinctly marine- and upland-related design elements which require standards that are not currently incorporated in the current WSDOT Design Manual or Plans Preparation Manual. Some of these elements unique to Ferries include: Architectural guidelines, traffic standards (pertaining to speed limits 15mph and less), mechanical and electrical specifications, security expectations, marine traffic planning, and incorporation of operational level-of-service standards. By funding the formalization of design guidelines, this proposal helps WSF align its design and plans preparation process with the existing WSDOT standards. It also helps ensure the accountability, accuracy and reliability of terminal design efforts

It is important that the recently produced design manuals are updated to incorporate changes and improvements identified through the use of the manuals and to maintain the relevance of the information contained therein.

Some examples of additions to the manuals are:

- System-wide Reservations: The decision to implement reservations system-wide will result in changes to design criteria.
- Sea Level Rise: As the state moves forward and identifies ways to address sea level rise, the manual will need to reflect design changes.

As a result of these updates, the design manuals will remain a relevant tool.

Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

Terminal Design Manual will be updated to improve usability and as regulations and codes change to remain relevant.

Performance measure detail:

Performance Measures for T-3 – Terminal Design Standards	FY 2016	FY 2017
Outcome Measures:		
• Maintain efficiency in design: Support government accountability.	Yes	Yes

Performance Measures for T-3 – Terminal Design Standards	FY 2016	FY 2017
Output Measures: <ul style="list-style-type: none"> Revised <i>Terminal Design Manual</i> 	Yes	Yes
Efficiency/Effectiveness Measures: <ul style="list-style-type: none"> <i>Terminal Design Manual</i> will remain relevant. 	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency's strategic plan? If so, please describe.

Goal: Mobility

1. *Long-Range Plan* includes an initiative to improve the quality, effectiveness and efficiency of the transportation system. Updating the terminal design manual will maintain the specific engineering design criteria for the ferry terminal systems and structures that will be constructed by these projects. The Terminal Program Planning & Design Standards activity package facilitates strategically adding capacity to the ferry system to provide congestion relief.

Does this decision package provide essential support to one of the Governor's priorities? If so, please describe.

Updated design manuals strengthen government's ability to achieve results efficiently and effectively by providing current, consistent design standards for terminal improvement and preservation projects and maximizing design efforts.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

Ferry connections that serve statewide travel are considered by the legislature to be of statewide significance. Updated design manuals are an efficient and effective approach to the design of improvements and preservation projects at the ferry terminals.

What are the other important connections or impacts related to this proposal?

Current design manuals will result in an increase in efficiency; all designers will have the same criteria and guidelines thereby reducing misguided assumptions and leveling the playing field between new designers and experienced designers.

What alternatives were explored by the agency, and why was this alternative chosen?

The only alternative is to leave the design manuals without updating. This would result in a declining use and applicability and subsequently result in a wasted effort of the 2009-11 expenditures.

What are the consequences of not funding this package?

This would result in a declining use of the manuals as their applicability would diminish with new regulations and codes. Subsequently, it would result in a waste of the 2009-2015 expenditures.

What is the relationship, if any, to the capital budget?

None.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- FTEs and labor costs are based on typical positions anticipated to charge to indirect project support cost collection centers.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Updating and maintaining the manuals is on-going cost. There will be ongoing maintenance required to keep the manuals current in 2015 and beyond. The level of effort to maintain these manuals will decrease in the next biennium after the manuals have gone through the initial use. It is anticipated that some level of effort will be required in each biennium to update and maintain the manuals for future use.

Budget Activity Package: T-4 – Terminal Engineering Studies
PIN: 998901D
WIN: M05485E

Recommendation Summary Text:

To maintain the safety of the traveling public and evaluating the competency of WSF’s structures, this decision package funds the development and prioritization of seismic retrofit projects.

At WSF, 75% of our trestles, Transfer Spans, and Overhead loading structures were designed before 1998. Before this time Structures design (UBC) did not include soil characteristics in the earthquake design. At WSF, none of the terminal buildings which the public uses have ever been evaluated for life safety in a seismic event. Most of these buildings were built before 1995.

The WSF Mission is to provide safe and reliable ferry service to our customers. Studies have indicated there is a 15% chance in 50 years of a major earthquake occurring in the Puget Sound region. (500 year EQ Event) In a major seismic event our terminals will not be able to operate. Movement of people and commerce will be stopped.

In 2009-11, a study was initiated to identify all ferry terminal seismic structural vulnerabilities and develop a seismic retrofit prioritization method. These deficiencies are numerous. WSF does not have the financial resources to retrofit and or replace all of these structures. Through this activity package, WSF will prioritize these projects so that the projects that provide the most benefit towards public safety and ferry operations will be addressed first. A long range plan for replacement or retrofit will be developed as a result of this Seismic Retrofit Program. This long range plan will become part of WSF Capital Improvement Program.

Fiscal Detail:

T-4 - Terminal Engineering Studies

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction - State	250,901	250,901	501,802
Total by Fund	250,901	250,901	501,802

Objects of Expenditure:

T-4 - Terminal Engineering Studies

Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	97,311	97,311	194,622
B - Benefits	28,590	28,590	57,180
J - Capital Outlay	125,000	125,000	250,000
Total by Object	250,901	250,901	501,802

Salary and FTE Details:

T-4 - Terminal Engineering Studies

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 5	1.00	1.00	1.00	84,900	84,900	169,800
BRIDGE ENGINEER 7	0.12	0.12	0.12	12,411	12,411	24,822
Total Staff Dollars and FTEs	1.12	1.12	1.12	97,311	97,311	194,622

Package Description:**Terminal Engineering Studies (M05485E)****Objects of Expenditure:**

T-4 - Terminal Engineering Studies
Tml Structures Seismic Evaluations 15-17 (M05485E)

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	97,311	97,311	194,622
B - Benefits	28,590	28,590	57,180
J - Capital Outlay	125,000	125,000	250,000
Total by Object	250,901	250,901	501,802

Salary and FTE Details:

T-4 - Terminal Engineering Studies
Tml Structures Seismic Evaluations 15-17 (M05485E)

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 5	1.00	1.00	1.00	84,900	84,900	169,800
BRIDGE ENGINEER 7	0.12	0.12	0.12	12,411	12,411	24,822
Total Staff Dollars and FTEs	1.12	1.12	1.12	97,311	97,311	194,622

This proposal directly addresses the WSDOT goal of maintaining the safety of the traveling public. The objectives of this seismic retrofit program are to minimize the risks of complete structure collapse, minimize the loss of life and disruption of commerce. In addition, requirements of the Code of Federal Regulation will be met with these studies.

WSF's terminals are a composition of structures containing trestles, transfer spans, towers, overhead loading systems, buildings, and other components. In general these structures were built to previous design codes that do not meet current seismic design standards.

Current retrofit standards are to review existing bridge structures for both a 100-year and 1,000-year recurrence level earthquakes. Expectation is that after a 100-year earthquake event there is no operational loss to any terminal facility and that no collapse occurs due to a 1,000-year earthquake event. This is a departure from past design codes that used a single 475-year recurrence level earthquake for design of the structures.

With the difference in seismic design standards it is anticipated that all structures should be reviewed. This includes a few complex structures that should potentially be analyzed by advanced analytical methods. To provide advanced analytical skills and software programs specialist would be used to provide the necessary analysis capabilities.

Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

This activity package will contribute to the improved safety of the traveling public during and after and seismic event and will enable WSF to meet the requirements of the Code of Federal Regulations.

Performance measure detail:

Performance Measures for T-4 – Terminal Engineering Studies	FY 2016	FY 2017
Outcome Measures: <ul style="list-style-type: none"> • Prepare for emergencies: <ul style="list-style-type: none"> ○ Prioritize seismic retrofit improvement projects 	Yes	Yes
Output Measures: <ul style="list-style-type: none"> • Prioritized list of projects for retrofit or replacement 	Yes	Yes
Efficiency/Effectiveness Measures: <ul style="list-style-type: none"> • Projects will be identified for funding in the 2015-17 biennium. 	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

Goal: Safety

1. *Long-Range Plan* includes improvements that can be demonstrated to add significant value, including seismic projects. Seismic code for existing structures has been updated since many of WSF’s structures were designed and constructed. Without developing and then implementing specific seismic retrofit projects, WSF would be unable to ensure the safety of its terminals in an earthquake event as structures that have not been built to resist a seismic event are at risk for failure when an earthquake occurs.
2. The Strategic Implementation Plan includes the strategy of improving WSDOT’s emergency response capabilities. The retrofit of terminals will improve WSDOT’s emergency response capabilities by improving the likelihood of maintaining ferry operations after an earthquake.

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

Seismically retrofitting terminals improves the likelihood of maintaining the statewide mobility of people, goods, and services after an earthquake and improves the safety of people and property by managing the risk associated with earthquake events.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

After a significant seismic event, the State's marine highways may be relied upon to provide transportation to emergency response vehicles and first responders, especially if roads become impassable. The retrofit of terminals will improve service by increasing the likelihood of maintaining operations after an earthquake.

What are the other important connections or impacts related to this proposal?

Impact on agency clients and services:

Retrofit of terminals will improve service by increasing the likelihood of maintaining operations after an earthquake. Loss of use of any WSF terminal would result in a total shutdown of that transportation route, and effectively stop all traffic, including public and commercial.

Impact on other state programs or units of government:

Retrofit of terminals will improve service by increasing the likelihood of maintaining operations after an earthquake. Loss of use of any WSF terminal would result in a total shutdown of that transportation route, and effectively stop all traffic, including emergency vehicles.

What alternatives were explored by the agency, and why was this alternative chosen?

The alternatives are to:

1. Do nothing. This puts WSF's marine transportation at severe seismic risk.
2. Replace all terminal facilities without new structures designed to current earthquake codes. This option would require excessive capital costs with a low benefit cost ratio.

Continuing the program will allow WSF to prioritize retrofit projects and reduce the seismic risk.

What are the consequences of not funding this package?

Without developing and then implementing specific seismic retrofit projects, WSF would be unable to ensure the safety of its terminals in an earthquake event as structures that have not been built to resist a seismic event are at risk for failure when an earthquake occurs.

What is the relationship, if any, to the capital budget?

The seismic retrofit prioritization program will result in future capital budget requests for funding to retrofit or replace the most critical terminal assets.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- The effort required for the seismic retrofit prioritization program is similar to the effort required for the seismic retrofit evaluation of terminal structures performed in the 2013-15 biennium.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.

- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.
- Non-Labor Costs – Consultant: A Structural Engineer Seismic Specialist is required for the seismic retrofit program. According to the Seismic Retrofit Guidelines many of WSF's structures are considered irregular. Irregular Structures are not addressed in the Seismic Retrofit Guidelines. The Seismic Specialist will be brought in to provide analysis and retrofit recommendations for irregular structures and review and comment on WSF reports produced as part of the seismic retrofit program.
 - The billing rate for a Seismic Specialist is $\$210/\text{hour} \times 595 = \$125,000$.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

The seismic retrofit prioritization program is a one-time cost. The seismic retrofit prioritization program will result in future requests for funding to retrofit or replace the most critical terminal assets.

Budget Activity Package: T-5 – Regulatory Compliance & Inspections
PIN:
WINs: M05426E, M05468D, M05469D, M05470D, M05478D, M05488D, M05492B, and M05493B

Recommendation Summary Text:

This activity package funds terminal activities required by legislation, code, and statute. Activities include developing an overweight vehicle evaluation program; performing capacity analysis for structures; overwater, underwater, and upland inspections of terminal structures and systems; and developing and implementing programmatic procedures for environmental compliance and permitting.

Fiscal Detail:

T-5 - Regulatory Compliance & Inspections

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction - State	832,865	929,423	1,762,288
Total by Fund	832,865	929,423	1,762,288

Objects of Expenditure:

T-5 - Regulatory Compliance & Inspections

Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	489,730	491,745	981,475
B - Benefits	151,212	151,572	302,783
C - Personal Service Contracts	15,000	115,000	130,000
E - Goods and Services	92,711	66,822	159,533
G - Travel	4,212	4,285	8,497
J - Capital Outlay	50,000	50,000	100,000
T - Intraagency Reimbursements	30,000	50,000	80,000
Total by Object	832,865	929,423	1,762,288

Salary and FTE Details:

T-5 - Regulatory Compliance & Inspections

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 1	0.05	0.05	0.05	2,858	2,887	5,745
BRIDGE ENGINEER 3	0.50	0.50	0.50	34,806	35,154	69,960
BRIDGE ENGINEER 4	0.05	0.05	0.05	3,845	3,845	7,690
BRIDGE ENGINEER 4	0.13	0.13	0.13	9,998	9,998	19,996
BRIDGE ENGINEER 5	0.20	0.20	0.20	16,980	16,980	33,960
BRIDGE ENGINEER 5	0.55	0.55	0.55	46,695	46,695	93,390
BRIDGE ENGINEER 5	0.10	0.10	0.10	8,490	8,490	16,980
BRIDGE ENGINEER 6	0.50	0.50	0.50	46,884	46,884	93,768
BRIDGE ENGINEER 6	0.25	0.25	0.25	23,442	23,442	46,884
BRIDGE ENGINEER 7	0.04	0.04	0.04	4,137	4,137	8,274
BRIDGE ENGINEER 7	0.15	0.15	0.15	15,514	15,514	31,028
BRIDGE ENGINEER 7	0.03	0.03	0.03	3,103	3,103	6,206
ELECTRICIAN *	0.35	0.35	0.35	16,871	17,040	33,911
MACHINIST TRANS*	0.70	0.70	0.70	33,742	34,079	67,821
MARINE MECHANICAL ENGINEER	0.35	0.35	0.35	32,819	33,147	65,966
MARINE PROJECT ENGINEER	0.28	0.28	0.28	26,255	26,518	52,773
TRANSPORTATION ENGINEER 2	0.44	0.44	0.44	27,783	28,061	55,844
TRANSPORTATION ENGINEER 3	0.15	0.15	0.15	10,442	10,546	20,988
TRANSPORTATION ENGINEER 3	0.04	0.04	0.04	2,784	2,812	5,596
TRANSPORTATION ENGINEER 4	0.06	0.06	0.06	4,614	4,614	9,228
TRANSPORTATION PLANNING SPECIALIST 4	0.20	0.20	0.20	15,382	15,382	30,764
TRANSPORTATION PLANNING SPECIALIST 4	0.30	0.30	0.30	23,072	23,072	46,144
TRANSPORTATION PLANNING SPECIALIST 5	0.70	0.70	0.70	66,066	66,066	132,132
TRANSPORTATION TECHNICIAN 2	0.16	0.16	0.16	8,091	8,172	16,263
TRANSPORTATION TECHNICIAN 2	0.10	0.10	0.10	5,057	5,108	10,165
Total Staff Dollars and FTEs	6.38	6.38	6.38	489,730	491,745	981,475

Note: Position* does not belong to Terminal Engineering.

Package Description:

Bridge Load Ratings (M05426E)

Object of Expenditure

T-5 - Regulatory Compliance & Inspections

Bridge Load Ratings (M05426E)

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	21,117	21,117	42,234
B - Benefits	6,174	6,174	12,348
Total by Object	27,291	27,291	54,582

FTE and Salary Details:

**T-5 - Regulatory Compliance & Inspections
Bridge Load Ratings (M05426E)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 5	0.20	0.20	0.20	16,980	16,980	33,960
BRIDGE ENGINEER 7	0.04	0.04	0.04	4,137	4,137	8,274
Total Staff Dollars and FTEs	0.24	0.24	0.24	21,117	21,117	42,234

Per CFR Title 23 Part 650.313, WSDOT BDM, and AASHTO Manual for Bridge Evaluation perform load ratings and revise existing load ratings of all terminal structures that resist traffic or other moving loads. Load Rating calculations provide a basis for determining the safe load carrying capacity of a structure. Each structure is required to be load rated at two levels, Inventory and Operating. An Inventory Rating (HS-20 Truck) provides a comparison between all structures; an Operating Rating describes the maximum permissible Live Load on a structure. This effort will revise Load Ratings based on changes to the structures

On a biennial or sometimes an annual basis the WSDOT Bridge and Structures Office performs structural inspections and reports this data to the WSDOT Ferries Division Terminal Engineering Structural Design Unit. The Load Rating Program will review these reports and identify areas of concern.

Funding of this proposal will also provide the resources to complete or update terminal load ratings based on the following:

- Terminal mechanical/structural upgrades or modifications
- Updates in structural bridge codes
- Revisions in capacity as a result of bridge inspections
- Unanticipated damage or changes to the structures
- Construction of new terminals

Overweight Vehicle Evaluation Program (M05493B)

Object of Expenditure

**T-5 - Regulatory Compliance & Inspections
Overweight Vehicle Evaluation Program (M05493B)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	17,346	17,346	34,692
B - Benefits	5,198	5,198	10,397
Total by Object	22,544	22,544	45,089

Salary and FTE Details:

**T-5 - Regulatory Compliance & Inspections
Overweight Vehicle Evaluation Program (M05493B)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 4	0.13	0.13	0.13	9,998	9,998	19,996
BRIDGE ENGINEER 7	0.03	0.03	0.03	3,103	3,103	6,206
BRIDGE ENGINEER 5	0.05	0.05	0.05	4,245	4,245	8,490
Total Staff Dollars and FTEs	0.21	0.21	0.21	17,346	17,346	34,692

This proposal maintains funding for Washington State Ferries' (WSF) Terminal Overweight Vehicle Evaluation Program. In accordance with the Washington State Commercial Vehicle Guide vehicles registered with a GVW in excess of 80,000 pounds must have special permission from WSF to ensure that overweight vehicles do not damage any terminal structures. WSF's Overweight Vehicle Evaluation Program analyzes overweight vehicles to ensure terminal structures (trestles, transfer spans, etc.) are not damaged by these vehicles.

Funding of this proposal will provide the resources to do the following:

- Maintain procedures to efficiently analyze overweight vehicle loads
- Approve Overweight Vehicle Permit Requests for travel on WSF Timber Trestles and Transfer Spans.
- Revise criteria and guidelines for restricting overweight truck axle weights and spacings if necessary.
- Coordinate with Terminal Agents to be sure the Overweight Procedure is carried out correctly at each terminal.

Inspection Program

WSF inspection program includes the following sub-projects, which are described in detail below:

- Bridge & Underwater Inspection (M05468D)
- Scour Monitoring & Landing Aid Inspections (M05469D)
- Mechanical and Electrical Inspections (M05470D)
- Paving and Building Inspections (M05488D)

➤ **Bridge & Underwater Inspection (M05468D)**

Object of Expenditure

**T-5 - Regulatory Compliance & Inspections
Bridge & Underwater Inspections (M05468D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	149,011	149,569	298,580
B - Benefits	44,619	44,720	89,339
C - Personal Service Contracts	-	100,000	100,000
E - Goods and Services	4,000	-	4,000
G - Travel	3,000	3,000	6,000
Total by Object	200,630	297,289	497,919

Salary and FTE Details:

**T-5 - Regulatory Compliance & Inspections
Bridge & Underwater Inspections (M05468D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
MARINE PROJECT ENGINEER	0.15	0.15	0.15	14,065	14,206	28,271
TRANSPORTATION ENGINEER 3	0.10	0.10	0.10	6,961	7,031	13,992
BRIDGE ENGINEER 4	0.05	0.05	0.05	3,845	3,845	7,690
BRIDGE ENGINEER 6	0.50	0.50	0.50	46,884	46,884	93,768
BRIDGE ENGINEER 5	0.50	0.50	0.50	42,450	42,450	84,900
BRIDGE ENGINEER 3	0.50	0.50	0.50	34,806	35,154	69,960
Total Staff Dollars and FTEs	1.80	1.80	1.80	149,011	149,569	298,580

Structural and Dive Inspections: The National Bridge Inspection Standards (NBIS) are published in the CFR (Code of Federal Regulations) Title 23, Part 650, Subpart C. The NBIS sets the national standard for the proper safety inspection and evaluation of bridges and applies to all structures defined as highway bridges located on all public roads. Every 24 months, qualified personnel from the WSDOT Bridge Preservation office are responsible for inspecting and reporting on the ferry terminal trestles, transfer spans, and passenger overhead loading structures. Underwater inspections are required at least every 60 months. Bridge Preservation in concurrence with WSF inspects some structures more frequently due to age or type of construction.

➤ **Scour Monitoring & Landing Aid Inspections (M05469D)**

Object of Expenditure

**T-5 - Regulatory Compliance & Inspections
Scour Monitoring & Landing Aid Inspections (M05469D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	35,966	36,241	72,207
B - Benefits	12,103	12,154	24,257
E - Goods and Services	15,000	-	15,000
G - Travel	232	305	537
Total by Object	63,301	48,700	112,000

Salary and FTE Details:

**T-5 - Regulatory Compliance & Inspections
Scour Monitoring & Landing Aid Inspections (M05469D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
TRANSPORTATION ENGINEER 2	0.20	0.20	0.20	12,629	12,755	25,384
TRANSPORTATION TECHNICIAN 2	0.10	0.10	0.10	5,057	5,108	10,165
TRANSPORTATION TECHNICIAN 2	0.10	0.10	0.10	5,057	5,108	10,165
BRIDGE ENGINEER 5	0.10	0.10	0.10	8,490	8,490	16,980
BRIDGE ENGINEER 1	0.05	0.05	0.05	2,858	2,887	5,745
MARINE PROJECT ENGINEER	0.02	0.02	0.02	1,875	1,894	3,769
Total Staff Dollars and FTEs	0.57	0.57	0.57	35,966	36,241	72,207

Scour and Landing Aid inspections: The propellers wash from the vessels causes scour of the sediment at the base of the landing aid structures and trestle. The depth of the scour is recorded with bathymetric soundings then documented for assessment by the structural engineers. Scour monitoring is performed yearly, and in accordance with the National Bridge Inspection Standards and CFR Title 23, Part 650, Subpart C – Bridges, Structures, and Hydraulics.

Landing aids (dolphins, wingwalls, transfer spans and trestles) are critical structures in the terminal inventory. Landing aid inspections are performed yearly on wingwalls, dolphins in order to assess the condition, operability and safety of these structures.

➤ **Mechanical & Electrical Inspections (M05470D)**

Object of Expenditure

**T-5 - Regulatory Compliance & Inspections
Mechanical & Electrical Inspections (M05470D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	138,079	139,070	277,149
B - Benefits	44,618	44,791	89,409
C - Personal Service Contracts	10,000	10,000	20,000
E - Goods and Services	7,303	6,139	13,442
Total by Object	200,000	200,000	400,000

Salary and FTE Details:

**T-5 - Regulatory Compliance & Inspections
Mechanical & Electrical Inspections (M05470D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
BRIDGE ENGINEER 7	0.15	0.15	0.15	15,514	15,514	31,028
ELECTRICIAN *	0.35	0.35	0.35	16,871	17,040	33,911
MACHINIST TRANS*	0.35	0.35	0.35	16,871	17,040	33,911
MACHINIST TRANS*	0.35	0.35	0.35	16,871	17,040	33,911
MARINE MECHANICAL ENGINEER	0.35	0.35	0.35	32,819	33,147	65,966
MARINE PROJECT ENGINEER	0.10	0.10	0.10	9,377	9,471	18,848
TRANSPORTATION ENGINEER 2	0.10	0.10	0.10	6,314	6,377	12,691
BRIDGE ENGINEER 6	0.25	0.25	0.25	23,442	23,442	46,884
Total Staff Dollars and FTEs	2.00	2.00	2.00	138,079	139,070	277,149

Mechanical and Electrical Inspection/Preservation: Qualified Ferries personnel are responsible for inspecting the mechanical and electrical components of the transfer spans, and passenger overhead loading structures, in accordance with the National Bridge Inspection Standards and CFR Title 23, Part 650, Subpart C – Bridges, Structures, and Hydraulics. These inspections document the condition as well as replace obsolete or components that do not meet current safety and regulatory requirements.

➤ **Paving & Building Inspections (M05488D)**

Object of Expenditure

**T-5 - Regulatory Compliance & Inspections
Paving & Building Inspections (M05488D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	23,691	23,882	47,573
B - Benefits	7,821	7,855	15,676
E - Goods and Services	408	183	591
G - Travel	80	80	160
Total by Object	32,000	32,000	64,000

Salary and FTE Details:

**T-5 - Regulatory Compliance & Inspections
Paving & Building Inspections (M05488D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
TRANSPORTATION ENGINEER 2	0.14	0.14	0.14	8,840	8,928	17,768
TRANSPORTATION ENGINEER 3	0.04	0.04	0.04	2,784	2,812	5,596
TRANSPORTATION TECHNICIAN 2	0.06	0.06	0.06	3,034	3,064	6,098
TRANSPORTATION ENGINEER 4	0.06	0.06	0.06	4,614	4,614	9,228
TRANSPORTATION ENGINEER 3	0.05	0.05	0.05	3,481	3,516	6,997
MARINE PROJECT ENGINEER	0.01	0.01	0.01	938	947	1,885
Total Staff Dollars and FTEs	0.36	0.36	0.36	23,691	23,882	47,573

Paving and Building Inspections: Paving inspections have been performed in-house by WSF staff using the WSDOT Local Programs guidelines. WSF is attempting to develop a predictive model that will forecast the optimum time to rehabilitate pavement with performance curves that are unique to low speeds and traffic holding.

Inspections of terminal buildings is a biennial inspection and as-needed activity for ensuring the safety and operation of the buildings and vendor areas also this information is used to update the WSDOT Facilities inventory system.

All of these reports are used to update the condition parameter in the Life Cycle Cost Model (LCCM) per RCW 47.660.345(2). Additionally the reports are used to identify items that require repair, preservation, calculate load ratings, and verify as-built systems.

➤ **Terminal Maritime Security Inspections (M05492B)**

Object of Expenditure

**T-5 - Regulatory Compliance & Inspections
Terminal Maritime Security Inspections (M05492B)**

Detail by Object of Expenditure	FY 2014	FY 2015	Total
C - Personal Service Contracts	20,000	20,000	40,000
Total by Object	20,000	20,000	40,000

Terminal Maritime Security Inspections: a program to support the activities to develop and implement inspections of security protocols and infrastructure at the Washington State Ferries terminals as per 33 CFR 105.

Environmental Support (M05478C)

Object of Expenditure

**T-5 - Regulatory Compliance & Inspections
Environmental Support (M05478D)**

Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	104,520	104,520	209,040
B - Benefits	30,679	30,679	61,358
C - Personal Service Contracts	5,000	5,000	10,000
E - Goods and Services	50,000	50,000	100,000
G - Travel	900	900	1,800
J - Capital Outlay	50,000	50,000	100,000
T - Intraagency Reimbursements	30,000	50,000	80,000
Total by Object	271,099	291,099	562,198

Salary and FTE Details:**T-5 - Regulatory Compliance & Inspections
Environmental Support (M05478D)**

Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
TRANSPORTATION PLANNING SPECIALIST 5	0.70	0.70	0.70	66,066	66,066	132,132
TRANSPORTATION PLANNING SPECIALIST 4	0.20	0.20	0.20	15,382	15,382	30,764
TRANSPORTATION PLANNING SPECIALIST 4	0.30	0.30	0.30	23,072	23,072	46,144
Total Staff Dollars and FTEs	1.20	1.20	1.20	104,520	104,520	209,040

Environmental Support: WSF developed the System-wide Terminal Regulatory program to deal with the increasing regulatory requirements for ferry transportation capital projects at federal, state and local levels that cause project delays and increase cost. In response to project delays and cost, the State legislator passed the Transportation Permit Efficiency and Accountability Committee (TPEAC) to improve environmental permitting for transportation projects across the state. In order to comply with the numerous environmental requirements, WSF developed strategies including programmatic permits, Reference Biological Assessment (BA), terminal construction permitting procedures, commitment tracking, compliance monitoring, marine research, inter- agency and intra-agency coordination, state legislation analysis, federal regulatory reviews, and local ordinance, to ensure that WSF's mandate to safely operate ferries across Puget Sound is preserved.

The program has helped reduce WSF's costs and time for permitting maintenance and some preservation projects by as much as 75 percent. It is expected that the program will continue to help reduce cost and time for permitting most terminal preservation projects. The reference BA reduced the ESA consultation time by 30 percent. It also brings predictability in timing project execution, mitigation requirements and compliance with environmental regulations and requirements.

There are several regulatory changes and new species listed under ESA that have been introduced to ensure better protection of the environmental and ESA species, and water quality. These regulatory changes have significant cost increases and project delays to WSF's capital construction program if the Reference BA is not updated.

Narrative Justification and Impact Statement***What specific performance outcomes does the agency expect?***

This activity package funds activities required by legislation, code, and statute. The outcomes of these efforts will facilitate maintenance, preservation and improvements at terminal facilities by implementing or updating the procedures and assessment tools used by WSF to make preservation and improvement decisions.

Performance measure detail:

Performance Measures for T-5 – Regulatory Compliance	FY 2016	FY 2017
<p>Outcome Measures:</p> <ul style="list-style-type: none"> • Preserve and maintain state, regional and local transportation systems <ul style="list-style-type: none"> ○ Establish criteria governing the cumulative loss of lateral strength from stub piling repairs ○ Determine condition of terminal assets, to be used as basis for updating the LCCM. • Prepare for and respond to emergencies <ul style="list-style-type: none"> ○ Identify ferry terminal seismic structural deficiencies. ○ Prioritize seismic retrofit improvement projects. • The condition of the facilities will be documented and used to make decisions on the preservation of the structures in the LCCM. • Repair decisions will be made on various sub-components of the terminal assets. • Improve the quality of Washington natural resources. • Establish safeguards to protect natural resources. • Promote compliance of species protection laws. • Develop programmatic permits to expedite permitting of future capital maintenance, preservation, and improvement projects. • Ensure more predictable, efficient and effective environmental permitting of terminal capital maintenance, preservation and improvement projects. • Improve the quality of Washington’s natural resources. 	<p>Yes</p>	<p>Yes</p>
<p>Output Measures:</p> <ul style="list-style-type: none"> • Load ratings for each terminal structure, documented in writing including all supporting computations and a clear statement of all assumptions used in calculating the load rating. • Approved overweight vehicle evaluation procedure; including an updated program, integrated with the load rating program. • Update of Structural Capacity Data • Structural Inspection Reports • Underwater Inspection Reports • Scour/Bathymetric Surveys • Mechanical/Electrical Inspections • Landing Aids Inspections • Building Inspections • Paving Inspections • Programmatic Permits • Updated Reference BA • Background noise level measurements at 19 terminals and the Eagle Harbor Maintenance Facility. 	<p>Yes</p>	<p>Yes</p>

Performance Measures for T-5 – Regulatory Compliance	FY 2016	FY 2017
<p>Efficiency/Effectiveness Measures:</p> <ul style="list-style-type: none"> • Adhere to the Code of Federal Regulations by assessing the safety and load-carrying capacity of Ferries bridge structures. • Update the condition rating component of the LCCM as determined by inspection and structural analysis. • Reduce cost and time for permitting terminal preservation projects with streamlined compliance strategies. • Bring predictability to the timing of project execution, by meeting mitigation requirements. • Comply with environmental regulations and requirements. • Improve scope, schedule and budget development by establishing a better understanding of construction impacts and permitting requirements. 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

Goal: Terminal Preservation

1. Inspections are necessary for updating of the LCCM. An updated LCCM is required for developing the budget request for terminal preservation funding. RCW 47.60.345
2. Terminal preservation projects must be permitted by local, state and federal jurisdictions before construction can take place.
3. Terminal preservation projects will be programmed to achieve Category 1 (vital) and Category 2 (non-vital) preservation performance targets, per the Office of Financial Management.

Goal: Safety

1. Load rating analysis uses inspections of existing conditions of the terminal structures for calculating the load-carrying capacity of every transfer span and trestle. This analysis is used for overweight vehicle applications and to document and monitor the structural capacity of WSF’s bridge structures. The national standards for the proper safety inspection and evaluation of all highway bridges are met with this analysis. Inspections are required for compliance with the CFR, to find and monitor deteriorating structural conditions so that serviceability, safety and functional obsolescence can be determined.
2. Load rating analysis uses inspections of existing conditions of the terminal structures for calculating the load-carrying capacity of every transfer span and trestle. This analysis is used for overweight vehicle applications and to document and monitor the structural capacity of WSF’s bridge structures. The national standards for the proper safety inspection and evaluation of all highway bridges are met with this analysis.

Goal: Environment

1. The system-wide environmental compliance ensures more predictable, efficient and effective environmental permitting of terminal capital maintenance, preservation and improvement projects. It also helps WSF to communicate TE environmental compliances to stakeholders.

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

The environmental activities support WSF’s compliance with environmental regulations contributing to the States’ efforts to improve the quality of Washington’s natural resources.

The inspection program and load rating analysis contribute to the preservation of WSF’s ability to move people, goods and services by monitoring the condition of terminal structures and systems and protecting structures from unnecessary stress.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

Funding the environmental support activities allows coordination between WSF and WSDOT Headquarters Environmental Services staff on issues of statewide significance, including in-water work permits, environmental compliance and standards and safeguards.

What are the other important connections or impacts related to this proposal?

Impact on agency clients and services:

Bridge Load Ratings: Evaluating the load-carrying capacity of WSF’s bridge structures will provide information needed to post legal load limits, and bring Ferries bridge structures into compliance with CFR Title 23 Part 650.313, the WSDOT Bridge Design Manual, and AASHTO Manual Condition Evaluation of Bridges. In addition, evaluating the continuing changing capacity of terminal structures and improving the accuracy of the overweight vehicle approval process will make the terminals safer for the traveling public.

Environmental Support: Reviewing and analyzing bills and regulations gives WSF the opportunity to influence final rule making that may affect ferry services and project delivery. This increases efficiency and effectiveness in delivering ferry terminal capital projects in a more predictable environmentally responsible manner.

Impact on other state programs or units of government:

Paving and Building Inspections: Conducting the pavement survey program with WSDOT resources and pavement structural condition ratings will provide cost-effective pavement rehabilitation forecasts.

Environmental Support: WSF will coordinate with WSDOT statewide and with WSDOT Headquarters on matters of statewide significance.

What alternatives were explored by the agency, and why was this alternative chosen?

Bridge Load Ratings: The following alternatives were considered, but were discarded since they could result in unnecessary risks to customer safety:

1. Do not update calculations based on bridge inspections. Load ratings would be inaccurate not truly reflecting the capacity of the structures.
2. Do not perform checking of calculations. Checking of calculations is standard practice in the structural engineering profession.

Overweight Vehicle Evaluation Program: Maintaining the existing overweight vehicle evaluation procedure was considered, but discarded since the existing procedure was developed several years ago. Since the overweight vehicle evaluation procedure was developed, codes have changed, and terminal

assets have degraded. Continuing to use this procedure as is, may result in damage to terminal assets and a risk to the traveling public.

Inspection Program: The inspection program is a well-established need and required to meet federal and legislative requirements and the terminal preservation program's needs. Within the inspection program WSF uses many alternatives to meet this need, including:

- Combining inspections into groups;
- Allocating the same resource for consistency;
- Contracting out select inspections where appropriate;
- Streamlining methods; and
- Using previously proven methods modified for the uniqueness of the terminal structures.

Environmental Support: As an alternative, WSF could secure environmental permits and approvals on a project-by-project basis, which would result in additional costs and delays. Without the proactive approach, WSF will be required to consult with layers of environmental regulators; the US Army Corps of Engineers, WDFW, DAHP, local governments, USFWS and NMFS on every terminal construction project individually which impact project schedules and increase work load for both WSF and the regulatory agencies. Individual ESA consultation for projects takes between 90 to 360 days. WSF may have to use consultant services or hire more FTE to respond to the changing requirements in a reactionary mode, rather. This method of responding to environmental changes and requirements is not efficient and detrimental to project delivery, and costly. WSF is currently saving up to 75 percent of the time it takes to permit a maintenance project due to increase in use of programmatic permits. Not understanding issues with pile driving noise effect on fish, marine mammals, and sea birds; and shading effect on fish migration under dock through special studies and research, WSF would not have the best available science information to negotiate project mitigation and conservation measures.

What are the consequences of not funding this package?

Bridge Load Ratings: Not funding this package will result in a violation of previously stated state and federal requirements and jeopardize the safety of the traveling public.

Overweight Vehicle Evaluation Program: Without the funding, WSF will be unable to update its structural models and structural analysis tools with data from the latest WSDOT Bridge and Structures Office Reports. This becomes a serious safety risk, as WSF will not be able to accurately analyze the structural integrity of its terminals. Terminal structures may be more damaged than previously assessed and may require repairs at a faster rate. This proposal ensures the structural safety of the terminals and the alignment of WSF's data with WSDOT Bridge and Structures Office findings.

Inspection Program: WSF will not be in compliance with federal and legislative requirements will not have the information needed to update the capital preservation program as well as identifying any emerging asset problems with the terminals.

Environmental Support: Should the system-wide environmental compliance not be funded, WSF's terminal capital projects may not comply with federal, state and local laws and regulations. WSF will not be able to coordinate with WSDOT statewide and with WSDOT Headquarters on matters of statewide significance. Project development cost will increase and permitting uncertainties will grow which will put projects at risk.

What is the relationship, if any, to the capital budget?

Environmental Support: Without the environmental support in advance of terminal construction projects, the terminal construction program will not meet the legislative schedule and budget requirements because of uncertainties surrounding permit conditions, increasing the capital budget required for each project with in-water construction.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.Bridge Load Ratings & Overweight Vehicle Evaluation Program:

- The number of FTEs is estimated based on the amount of effort required to perform the load rating analysis.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.

Inspection Program:

- The FTEs are based on the scheduled inspections and the typical positions required to complete the inspections.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.
- The dive consultant will be used for the Seattle dive inspection in 2017. WSDOT Bridge Preservation Office dives all WSF terminals except Eagle Harbor and Seattle, which are too big for their work load. The WSDOT BPO administers the consultant agreement and uses their divers on some of the facilities. The cost estimate of \$100,000 is based on our most recently completed dive at Seattle with escalation factors.
- Personal Service Contracts includes \$40,000 as a placeholder for terminal maritime security inspections.
- Goods and services are to cover the replacement of bathymetric sounding gear, vendor services, remote access, manlift rentals, and Bridge Office inspection supplies.

Environmental Support:

- The FTEs are based on the anticipated level of effort to perform the activities identified.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.
- The consultant tasks include:
 - Updating the environmental permitting procedure manual.
 - Reference Biological Assessment updates to include new listed species, project impacts and mitigation techniques.

- The U.S Army Corps 18 pile programmatic has been revoked by the Corps. WSF needs to do a formal ESA consultation for a new programmatic permit that will allow WSF to install 24 inches or larger piles for terminal maintenance projects.

The estimate is based on past work to update these manuals, and developing permitting strategies for WSF based on the four distinct tasks at \$25,000 each. One major assumption to use consultants is that WSDOT does not have the FTE to do this work in-house.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Load Restrictions: Funding for load rating analysis will be ongoing per the previously stated federal and state requirements. Development of the expanded overweight vehicle evaluation program is a one-time cost. Future biennia will require funding for the ongoing implementation of the overweight vehicle evaluation program, including the procedures developed in the 2011-13 biennium.

Inspection Program: Inspections are an on-going expense and will continue to be with adjustments to cost based on the inspections required in each biennium. Funding for the inspection program will continue in future biennia. The budgets for these activities will be developed using a zero-based approach for each budget cycle.

Environmental Support: Funding for renewing programmatic permits, updating the Reference BA, research underwater noise impacts, coordinate with regulatory agencies and ESO, and environmental stewardship will continue in future biennium. Funding for renewing programmatic permits, updating the Reference BA, research underwater noise impacts, coordinate with regulatory agencies and ESO, and environmental stewardship will continue in future biennium.

Budget Activity Package: T-6 – TE Supervision, Office Support and Supplies
PIN:
WIN: M05489D

Recommendation Summary Text:

This decision package funds supervision and office support for WSF terminal construction office (organizations 362210) and the terminal design office (organization 362230) that accomplishes preliminary engineering, right-of-way acquisition and construction for the preservation and improvement of ferry terminals. The types of activities funded include executive management, supervision of project design and construction organizations, tribal relations, climate change study contribution, and administrative support.

Fiscal Detail:

T-6 - TE Supervision, Office Support & Supplies

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction - State	1,050,678	1,054,277	2,104,954
Total by Fund	1,050,678	1,054,277	2,104,954

Object of Expenditure:

T-6 - TE Supervision, Office Support & Supplies

Object of Expenditure Detail			
A - Salaries and Wages	719,580	720,086	1,439,666
B - Benefits	211,098	211,191	422,289
E - Goods and Services	116,000	119,000	235,000
G - Travel	2,000	2,000	4,000
T - Intraagency Reimbursements	2,000	2,000	4,000
Total by Object	1,050,678	1,054,277	2,104,954

Salary and FTE Details:

T-6 - TE Supervision, Office Support & Supplies

Salary and FTE Detail					
List positions by classification	FTEs			Dollars	
	FY 2016	FY 2017	Biennial Average	FY 2016	Total
LIBRARY & ARCHIVAL PROFESSIONAL 2	1.00	1.00	1.00	50,568	101,642
Secretary	1.00	1.00	1.00	47,160	94,320
Staff Aide	1.00	1.00	1.00	51,900	103,800
TRANSPORTATION PLANNING SPECIALIST 5	1.00	1.00	1.00	87,072	174,144
WMS BAND 3	1.00	1.00	1.00	108,480	216,960
WMS BAND 3	1.00	1.00	1.00	108,480	216,960
WMS BAND 3	1.00	1.00	1.00	108,480	216,960
WMS BAND 4	1.00	1.00	1.00	125,952	251,904
WMS BAND 4	0.25	0.25	0.25	31,488	62,976
Total Staff Dollars and FTEs	8.25	8.25	8.25	719,580	1,439,666

Package description:

TE Supervision, Office Support & Supplies (M05489D)

Object of Expenditure:

T-6 - TE Supervision, Office Support & Supplies

Object of Expenditure Detail			
A - Salaries and Wages	719,580	720,086	1,439,666
B - Benefits	211,098	211,191	422,289
E - Goods and Services	116,000	119,000	235,000
G - Travel	2,000	2,000	4,000
T - Intraagency Reimbursements	2,000	2,000	4,000
Total by Object	1,050,678	1,054,277	2,104,954

Salary and FTE Details:

T-6 - TE Supervision, Office Support & Supplies

Salary and FTE Detail					
List positions by classification	FTEs			Dollars	
	FY 2016	FY 2017	Biennial Average	FY 2016	Total
LIBRARY & ARCHIVAL PROFESSIONAL 2	1.00	1.00	1.00	50,568	101,642
Secretary	1.00	1.00	1.00	47,160	94,320
Staff Aide	1.00	1.00	1.00	51,900	103,800
TRANSPORTATION PLANNING SPECIALIST 5	1.00	1.00	1.00	87,072	174,144
WMS BAND 3	1.00	1.00	1.00	108,480	216,960
WMS BAND 3	1.00	1.00	1.00	108,480	216,960
WMS BAND 3	1.00	1.00	1.00	108,480	216,960
WMS BAND 4	1.00	1.00	1.00	125,952	251,904
WMS BAND 4	0.25	0.25	0.25	31,488	62,976
Total Staff Dollars and FTEs	8.25	8.25	8.25	719,580	1,439,666

Executive management and oversight is performed by the Deputy Assistant Secretary of Construction and Operations. One third of the Deputy Assistant Secretary of Construction and Operations' time is allocated to Terminal Engineering and includes the following activities:

- Provide leadership, strategic direction, visionary thinking and long-term planning to ensure secure and economical capital programs related to terminal operations, maintenance, preservation and new construction;
- Provide leadership and tactical direction to WSF employees and executive management to facilitate effective resolution of day-to-day operational issues;
- Manage available funds to successfully accomplish WSF's biennial programs within the legislatively authorized levels;
- Identify, create and assist in implementing operational cost-savings opportunities and strategic initiatives;
- Represent WSF to outside entities including the United States Coast Guard and the Legislature;
- Lead implementation of the vehicle reservation system; and
- Provide overall direction for the Ferries' Capital Preservation Program for terminals.

Executive management is performed by the Director of Terminal Engineering and includes:

- Developing strategic goals, objectives, strategies, performance measures and plans; operational policies, strategies and plans for delivering the terminal capital program;
- Integrating and coordinating goals, objectives strategies and plans of the capital and operating programs to effectively and efficiently accomplish WSF’s mission;
- Developing and implementing innovative approaches and best practices, such as alternative construction methods, financial and business case analyses, quality control procedures, safety performance standards, department procedural standards, and emergency response protocols;
- Approving the organizational structure, establishing personnel policies, procedures and practices, appointing personnel to positions, and allocating staff and consultants to accomplish work plans,
- Developing strategies and policies for media, the Transportation Commission and the Legislature.
- Planning, organizing, directing, coordinating and controlling the development and delivery of terminal capital projects;
- Developing capital investment priorities and recommending selection of projects;
- Developing the capital budget request and approving expenditures for design, right-of-way acquisitions and construction at terminals;
- Serving as the lead SEPA authority, approving environmental documentation and plans for projects and related mitigation and cleanup;
- Developing strategies and conducting evaluations of complex engineering systems, shoreline impacts, contaminated sites, and other environmental conditions, as part of negotiations and settlement of legal disputes;
- Making policy and approving designs of buildings, docks, structures, toll facilities, security systems, machinery et al.; and
- Resolving bid protests, awarding construction contracts, and settling construction claims.

Supervision of terminal planning and design includes:

- Developing, recommending and implementing strategic program plans and biennial budget requests;
- Developing and implementing the detailed staff and consultant utilization plan for design of capital projects;
- Assigning and supervising project managers;
- Overseeing the development and approval of project scope, budget and schedule;
- Supervising preliminary engineering tasks relating to environmental compliance, permitting, designs, and plans, specifications and estimates;
- Directing environmental compliance, peer review of designs and quality and constructability assessments; and
- Reviewing stamped engineering drawings, specifications and reports.

Supervision of terminal construction includes:

- Developing and implementing policies and strategies for organizational structure and requirements for staff, consultant services and material resources to deliver terminal construction projects;
- Developing and implementing policies and plans relating to personnel actions and corrective/disciplinary actions;
- Leading the management team responsible for development and delivery of the capital preservation projects;

- Supervising project inspection offices and project support activities;
- Overseeing environmental and permitting compliance;
- Reviewing and approving change orders, construction claims and negotiations; and
- Coordinating and communicating terminal construction activities.

Tribal relations activities include:

- Developing tribal relations and negotiation strategies for capital projects;
- Providing coordination between tribal representatives, terminal project managers and various WSDOT, local, state and federal officials;
- Facilitating government-to-government and routine working meeting involving Tribes;
- Assisting in drafting agreements with Tribes; and
- Training WSF staff in tribal culture, strategies, and negotiating practices.

Office engineering activities include:

- Preparing work orders authorization requests to obtain spending authority for capital projects and set up cost collection centers;
- Monitoring capital project budgets; and
- Managing the engineering library, including cataloguing, storing and retrieving terminal drawings, environmental documentation, design reports, and special studies.

Administrative services include:

- Support to management: monitoring workload and budget resources; attending and recording minutes of meetings; preparing monthly management reports; facilitating the flow of documents requiring executive approval; maintaining policies and procedures manuals and the ferry route reference manual;
- Single Point of Contact: Providing a single point of contact with Human Resources, Training, Payroll, Information Technology, Budget, Accounting, Purchasing and Administrative Services;
- Consultant invoices: reviewing consultant invoices for proper formatting, drafting approval memos, and routing to project managers for approval;
- Communication services: maintaining staff seating charts and phone/e-mail lists; providing reception of and information to visitors and backup phone reception; arranging meetings and sending notices; forwarding and distributing mail and facsimiles; providing word processing services, including formal correspondence to federal, state and local officials and the public and draft documents from handwritten notes and oral instruction; coordinating printing services;
- Personnel and payroll services: coordinating with HR to update organization charts; maintaining organization and personnel files containing items such as, staff evaluations and position classification questionnaires; coordinating hiring of temporary help; assisting with new staff orientations, including obtaining login scripts, mainframe accounts, remote access accounts, telephone installations, computer equipment and business cards; processing requests for security badges; preparing the staff training schedule; reviewing staff time sheets; entering semi-monthly pay documents to mainframe;
- Travel services: making travel arrangements for staff; reviewing requests for travel reimbursements; submitting documentation to Accounting; dispatching motor pool vehicles and scheduling maintenance; and
- Procurement services: Ordering, receiving, storing and monitoring inventories of stores wants items and office and computer supplies using MPET; ordering special equipment, such as computers, ergonomic equipment, cell phones/PDAs, cubicle accessories, name plates, etc.;

coordinating building service requests; reviewing and approving monthly billings for both commercial and non-commercial charges; conducting inventories of minor capital equipment.

Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

This activity package supports Terminal Engineering by providing the supervision, office support and supplies required to deliver projects on time and on budget.

Performance measure detail:

Performance Measures for T-6 – TE Supervision, Office Support and Supplies	FY 2016	FY 2017
Outcome Measures: <ul style="list-style-type: none"> Delivering project on time and on budget. 	Yes	Yes
Output Measures: <ul style="list-style-type: none"> Number of terminal preliminary engineering phase projects. (The number of projects are proposed and subject to change.) Number of terminal right-of-way phase projects. (The number of projects are proposed and subject to change.) Number of terminal construction phase projects. (The number of projects are proposed and subject to change.) Terminal preliminary engineering budget. Terminal right-of-way budget. Terminal construction budget. Number of terminal construction FTEs. 		71 1 43 \$26 M \$3.8 M \$182 M 48
Efficiency/Effectiveness Measures: <ul style="list-style-type: none"> Delivery planned scope of work for project support activities on time and on budget. Develop and manage program IAW RCWs 43.88 and 47.60. Spend IAW legislative appropriations and provisos. Properly account for expenditures by program, fund, proviso and fiscal period. 	Yes Yes Yes Yes	Yes Yes Yes Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

Goal: Preservation

- Terminal Engineering supervision, office support and supplies are necessary to support and facilitate terminal preservation and improvement projects.

Goal: Stewardship

- Funding the tribal relations activities ensures ongoing WSDOT awareness, particularly at the leadership team level, of key tribal interests affected by transportation programs and projects and how those interests can be factored into policy and project management decisions.

Does this decision package provide essential support to one of the Governor's priorities? If so, please describe.

This activity package improves statewide mobility of people, goods and services by supporting the delivery of projects on time and on budget (90 percent standard).

This activity package strengthens government's ability to achieve results efficiently and effectively by providing WSF Terminal Engineering employees the supervision, support and supplies they need to deliver projects.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This activity package supports Terminal Engineering improvement and preservation project implementation.

What are the other important connections or impacts related to this proposal?

None.

What alternatives were explored by the agency, and why was this alternative chosen?

This decision package complies with the requirements of ESHB 2358, Laws of 2007 by developing a support budget for supervision and support of Terminal Engineering and allocating the cost to projects. Alternative approaches, which were considered but rejected, are:

- WSF could revert to the previous cost allocation system that does not develop overhead budgets but simply collects support costs as they occur and allocates them to projects.
- Instead of allocating support costs to projects, WSF could allocate them to new subprograms.
- Support budgets could use the traditional operating budget methodology based on adjusting or adding new initiatives to a base carried forward from the prior fiscal period, instead of using a zero-base budget methodology.

What are the consequences of not funding this package?

Failure to fund this decision package will prevent WSF's ability to plan, organize, direct, coordinate and control terminal capital investments and provide organizational support for design and construction efforts.

What is the relationship, if any, to the capital budget?

None.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- FTEs and labor costs are based on specific positions that historically charged to the administrative overhead cost collection centers.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.

- Non-labor expenses are based on projected expenditures in the 2015-17 biennium inflated to 2016 and 2017 dollars using the Implicit Price Deflator for Personal Consumption forecast adopted in February 2008, included 25 percent of the non-labor expenses for the Deputy Assistant Secretary of Construction & Operations.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

For the purpose of long-range financial planning in this budget development cycle, the proposed 2015-17 terminal supervision and office support budget is assumed to continue into future biennia with adjustments for inflation. However, it should be noted that WSF will prepare a new zero-based budget request in each succeeding budget development cycle that will replace the out-biennium placeholders established by the prior budget development cycle.

Budget Activity Package: T-7 – PMRS/Primavera Implementation
PIN: 998901H
WIN: M05490C

Recommendation Summary Text:

This budget activity package funds the continued operation of the Primavera project scheduling and management system and Project Management and Reporting System (PMRS) (M05490C) activity for the WSF Terminal Engineering subprogram.

Fiscal Detail:

T-7 - PMRS/Primavera Implementation

Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	Total
A90-Puget Sound Capital Construction - State	161,500	161,501	323,000
Total by Fund	161,500	161,501	323,000

Object of Expenditure

T-7 - PMRS/Primavera Implementation

Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	Total
A - Salaries and Wages	84,900	84,900	169,800
B - Benefits	25,169	25,169	50,337
E - Goods and Services	8,699	8,700	17,399
J - Capital Outlay	42,732	42,732	85,464
Total by Object	161,500	161,501	323,000

Salary and FTE Details:

T-7 - PMRS/Primavera Implementation

Salary and FTE Detail					
List positions by classification	FTEs			Dollars	
	FY 2016	FY 2017	Biennial Average	FY 2016	Total
TRANSPORTATION TECHNICAL ENGINEER 5	1.00	1.00	1.00	84,900	169,800
Total Staff Dollars and FTEs	1.00	1.00	1.00	84,900	169,800

WSDOT’s Statewide Program Management Group (SPMG) released its PMRS in Fiscal Year 2009 for WSF. WSF’s Terminal Engineering’s Project Controls and Reporting group is responsible for:

- Implementing and maintenance of PMRS and its related project management concepts, tools and software within Terminal Engineering. This includes Primavera P6, LiveLink and SharePoint ECM, Contract Manager and cost management hardware and software.
- Integrating SPMG business processes into Terminal Engineering’s current business environment.
- Continued support and administration of these tools; including active involvement for future enhancements and representing WSF at Technical Oversight and Steering committee levels.

Package description:

PMRS Reporting System Implementation (M05490D)

Object of Expenditure:

**T-7 - PMRS/Primavera Implementation
PMRS Reporting System Implementation (M05490C)**

Detail by Object of Expenditure	FY 2014	FY 2015	Total
A - Salaries and Wages	84,984	84,984	169,968
B - Benefits	25,784	25,784	51,568
E - Goods and Services	2,000	2,000	4,000
J - Capital Outlay	42,732	42,732	85,464
Total by Object	155,500	155,500	311,000

Salary and FTE Details:

**T-7 - PMRS/Primavera Implementation
PMRS Reporting System Implementation (M05490D)**

Salary and FTE Detail					
List positions by classification	FTEs			Dollars	
	FY 2016	FY 2017	Biennial Average	FY 2016	Total
TRANSPORTATION TECHNICAL ENGINEER 5	1.00	1.00	1.00	84,900	169,800
Total Staff Dollars and FTEs	1.00	1.00	1.00	84,900	169,800

Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

WSDOT has refined its project management process for delivering its Capital Projects. This process includes “best practices”, tools, templates and examples that will enhance the communication process for both design and construction project management. This process is endorsed by Secretary’s Executive Order 1032.01 and 1042.00. Under the Secretary’s order WSDOT employees are directed to use PMRS as the agency wide project management tools supporting Capital Transportation Project Delivery. The desired outcome is to have project information that is current, easily accessible, transparent, consistent, accurate, and facilitates improved forecasting capabilities, proactive problem resolution, and improved communication.

Having the forecasting, consistent and accurate reporting will reduce last minute and undesirable surprises that would impact project budget and timelines, which translate to credibility of our agency. In addition, the PMRS enterprise system integrates schedule, contract management, electronic content management, cost control/ earned value, and cost estimating with existing WSDOT legacy systems to better support management and delivery of capital projects, by streamlining and providing a consistent statewide progress reporting from a single data source that reduces effort required by the region, and by electronically linking financial and project management systems to better streamline data handling and transfer, and to further streamline reporting and analysis across the state. Over time, the outputs will become standard across the agency and consistent information could be provided for department executives and elected officials and decision-makers.

Consistent and accurate reporting and measurement of our projects will improve agency credibility and will assist with making effective and efficient business decisions based on improved management of project scope, schedule and cost.

Performance measure detail:

Performance Measures for T-7 – Terminal Primavera Project Management:	FY 2016	FY 2017
<p>Outcome Measures:</p> <ul style="list-style-type: none"> • POG Result Area – Strengthen government's ability to achieve results efficiently and effectively. <ul style="list-style-type: none"> • Develop and manage budgeting, accounting and reporting of capital subprogram W1, per RCW 43.88. • Assist executives and project managers in accessing accurate, real-time information about PINs, WINs and work orders. 	Yes	Yes
<p>Output Measures:</p> <ul style="list-style-type: none"> • Report Terminal Engineering’s budget and performance execution, through the development of Quarterly Project Reviews, Confidence Reports and other such tools. • Respond to legislative and executive queries on Terminal Engineering project delivery and program planning. 	Yes	Yes
<p>Efficiency/Effectiveness Measures:</p> <ul style="list-style-type: none"> • Meet deadlines for submittal of requirements to policy makers. 	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

Goal: Preservation

1. This activity package is necessary to support all preservation and improvement projects in WSF capital program, allowing WSF to meet the goals of successfully managing safety, preservation, mobility, environment projects.

Goal: Stewardship

1. The project controls group and the associated efforts supports WSF’s strategy to employ state-of-the-art project management, by assisting in scope, schedule and budget development and management.

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

The activity funded by this decision package also strengthen government's ability to achieve results efficiently and effectively by developing and managing budgeting, accounting and reporting of capital subprogram W1, per RCW 43.88. In addition, it funds the staff necessary to assist executives and project managers in accessing accurate, real-time information about PINs, WINs and work orders.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This activity package improves statewide mobility of people, goods and services by supporting the delivery of projects on time and on budget (90 percent standard).

The activity funded by this decision package supports WSF's Terminal Engineering Department in the implementation of improvement and preservation projects that improve and maintain the State's marine transportation system, which serve statewide travel and are considered by the legislature to be of statewide significance.

What are the other important connections or impacts related to this proposal?

None.

What alternatives were explored by the agency, and why was this alternative chosen?

WSF's Terminal Engineering Department was directed under the Executive Order E1032.01 Project Management dated July 1, 2008 to use the PMRS Primavera, as the agency wide project management and reporting tools supporting Capital Transportation Project delivery. The PMRS replaces the Project Delivery Information System (PDIS).

What are the consequences of not funding this package?

Failure to fund this decision package will jeopardize the ability of WSF's Terminal Engineering Department to manage the capital program.

What is the relationship, if any, to the capital budget?

The PMRS provides WSF's Terminal Engineering managers with current business practices and tools to assist with making effective and efficient budgetary decisions based on improved management of project scope, schedule, and cost of capital program.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- FTEs and labor costs are based on typical positions anticipated to charge to indirect project support cost collection centers.
- Salaries are based on the Step L of the 2008 compensation schedule in which benefits are inflated to 2016 and 2017.
- Benefits are based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Funding for the Terminal Engineering Department's Primavera Project Management package is expected to continue in future biennia.

Primavera Project Management package will be developed using a zero-based budget approach for each budget cycle.

2015 - 2017 Decision Package

Agency: 405 Department of Transportation

Decision Package Code/Title: V – Vessel Project Support for the WSF Capital Construction Program

Budget Period: 2015-2017

Budget Level: Zero-based

Program: W WSF Construction
Sub-Program: W2 Vessel Construction

Recommendation Summary Text:

This is the zero-based budget request for decision package V – Vessel Project Support provided by the Vessel Maintenance, Preservation and Engineering Organization to the WSF Capital Construction Program (W) -- Vessel Capital Construction Sub-Program (W2). It funds the following activities in the 2015-2017 Biennium:

- V-1 Vessel Preservation and Engineering Management, Supervision and Support (see pg. 3)
- V-2 Vessel Life Cycle Cost Model (LCCM) Update and Maintenance (see pg. 11)
- V-3 Vessel Environmental Technical Support (see pg. 16)
- V-4 Vessel Planning / Design (see pg. 19)
- V-5 Vessel Noise Control Abatement (see pg. 25)
- V-6 Vessel Technical Support Activities (see pg. 28)

Consolidated Fiscal Detail:

Below is the consolidated fiscal detail and FTE detail for the budget activity packages included in V – Vessel Project Support for the WSF Capital Construction Program. Ferries Division will prepare a new zero-based budget request in each succeeding budget development cycle that will replace the out-biennium placeholders established by the 14LEGFIN budget. Details of individual budget activity packages follow.

Fiscal Detail:

A90 PSCC-State	1,698,000	1,698,000	3,396,000	3,522,000	3,653,000
Total by Fund	1,698,000	1,698,000	3,396,000	3,522,000	3,653,000
	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
Staffing FTEs	13.28	13.28	13.28	TBD	TBD

**V - Vessel Project Support for WSF Capital Construction
Object of Expenditure Detail**

Object of Expenditure	FY 2016	FY 2017	2015-2017
A - Salaries and Wages	968,988	968,988	1,937,976
B - Benefits	288,497	288,497	576,994
C - Personal Service Contracts	-	-	-
E - Goods and Services	440,515	440,515	881,030
G - Travel	-	-	-
J - Capital Outlay	-	-	-
T - Intraagency Reimbursements	-	-	-
Total by Object	1,698,000	1,698,000	3,396,000

**V- Vessel Project Support for WSF Capital Construction
Salary and FTE Detail**

Budget Activity Packages	FTEs			Dollars		Total
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	
V-1 - VE Management, Supervision & Support	10.25	10.25	10.25	752,867	752,868	1,505,735
V-2 - Vessel LCCM Update	1.00	1.00	1.00	72,265	72,265	144,530
V-3 - Vessel Environmental	0.50	0.50	0.50	41,910	41,910	83,820
V-4 - Vessel Planning/Design	-	-	-	-	-	-
V-5 - Vessel Noise Control Abatement	0.15	0.15	0.15	13,000	13,000	26,000
V-6 - Vessel Technical Support Activities	0.88	0.88	0.88	88,946	88,945	177,891
Total	12.78	12.78	12.78	968,988	968,988	1,937,976

Budget Activity Package: V-1 – Vessel Preservation and Engineering Management, Supervision and Support

Recommendation Summary Text:

This activity funds the supervision and support for the preservation and engineering elements of the Vessel Maintenance, Preservation & Engineering (VMPE) Organization at Ferries Division. It funds all or portions of the salaries of personnel who are essential to the on-going preservation and improvement of ferry vessels. These core individuals oversee, coordinate, lead and manage all elements of the vessel capital program regardless of specific vessel capital projects and are thus funded in the project support budget rather than by individual projects.

This activity funds supervision, project support and office support for the vessel construction / preservation office (organizations 362150 / 367310) and the vessel design office (organization 362140) that accomplish preliminary engineering and construction for the preservation of existing ferries and the acquisition of new ferries. The types of activities funded include executive management, supervision of project design and construction organizations, office engineering support and administrative support.

These core personnel include the following:

- Deputy Chief of Construction and Operations (0.25 FTE)
- Senior Preservation Port Engineer
- Chief Naval Architect
- Vessel Construction Manager
- Vessel Business Supervisor
- Vessel Life Cycle Cost Model Analyst
- Vessel Capital Budget Specialist
- Vessel Work Order Specialist
- Vessel Project Administrator
- Vessel Technical Librarian
- Staff Aide

Executive management is performed by the Deputy Chief of Construction and Operations and the Senior Preservation Port Engineer and includes:

- Developing strategic goals, objectives, strategies, performance measures and plans; operational policies, strategies and plans for delivering the vessel capital program;
- Integrating and coordinating goals, objectives strategies and plans of the capital and operating programs to effectively and efficiently accomplish Ferries Division's mission;
- Developing and implementing innovative approaches and best practices, such as, alternative construction methods, financial and business case analyses, quality control procedures, department procedural standards, and emergency response protocols;

- Approving the organizational structure, establishing personnel policies, procedures and practices, appointing personnel to positions, and allocating staff and consultants to accomplish work plans;
- Developing strategies and policies for the media, the Transportation Commission and the Legislature;
- Planning, organizing, directing, coordinating and controlling the development and delivery of vessel capital projects;
- Developing capital investment priorities and recommending selection of projects;
- Developing the capital budget request and approving expenditures for design and construction;
- Making policy and approving designs for preservation of existing vessels and construction of new vessels;
- Resolving bid protests, awarding construction contracts, and settling construction claims.

Supervision of the vessel planning and design office is performed by the Chief Naval Architect and includes:

- Developing and implementing policies and strategies for organizational structure and requirements for staff and material resources to deliver vessel planning and design capital projects;
- Supervising preliminary engineering tasks relating to environmental compliance, permitting, designs, plans, and estimates;
- Directing peer review of designs and quality and constructability assessments, and “PE stamping” engineering drawings, specifications and reports;
- Developing staffing requirements, organization charts, position descriptions, hiring procedures and conducting recruiting, interviewing and hiring activities for the vessel planning and design office consisting of marine engineers and marine designers.
- Managing the engineering library, including cataloguing, storing and retrieving vessel drawings, environmental documentation, design reports, special studies, etc.

Supervision of the vessel construction office is performed by the Vessel Construction Manager and includes:

- Developing and implementing policies and strategies for organizational structure and requirements for staff and material resources to deliver vessel construction projects;
- Developing and implementing policies and plans relating to personnel actions and corrective/disciplinary actions;
- Leading the team responsible for development and delivery of capital construction projects;
- Supervising project inspection offices and construction project support activities;
- Overseeing environmental and permitting compliance;
- Reviewing and approving change orders, construction claims and negotiations;
- Coordinating and communicating vessel construction activities;

- Providing technical assistance to project managers relating to the preparation of emergency contracts, change orders, estimates, materials certification, final records and other contract administration duties;
- Preparing organizational plans to deliver the vessel construction work program;

Supervision of the vessel maintenance, preservation and engineering budgets is performed by the Vessel Business Staff Supervisor and includes:

- Development, recommendation, implementation and execution of strategic plans and biennial budgets for the vessel capital and operating programs;
- Coordinate collection of information in response to inquiries from, and communicate to, external financial, programmatic and administrative inquiries including WSDOT, OFM, and Legislature
- Supervise tracking and reporting of VMPE capital expenditures; maintenance and updating of VMPE cost allocation system; assembly, maintenance and updating of vessel budget items in the capital financial systems including Transportation Executive Information System (TEIS) and the Capital Program Management System (CPMS); development and updating of budget decision packages and white papers for all VMPE budget areas.
- Coordinate collection, evaluation and reporting of financial information for VMPE performance reports including confidence and quarterly reports and financial reporting for any future project management reporting systems.
- Administering change management processes;
- Liaison with Capital Program Development for capital budget matters including development and modification of biennium budgets and budget development procedures.

Administrative services by the Staff Aide include:

- Support to management: monitoring workload and budget resources; attending and recording minutes of meetings; preparing monthly management reports; facilitating the flow of documents requiring executive approval; maintaining policies and procedures manuals;
- Single Point of Contact: Providing a single point of contact with Human Resources, Training, Payroll, Information Technology, Budget, Accounting, Purchasing and Administrative Services;
- Communication services: maintaining staff seating charts and phone/e-mail lists; providing reception of and information to visitors and backup phone reception; arranging meetings and sending notices; forwarding and distributing mail and facsimiles; providing word processing services, including formal correspondence to federal, state and local officials and the public and draft documents from handwritten notes and oral instruction; coordinating printing services;
- Personnel and payroll services: coordinating with HR to update organization charts; maintaining organization and personnel files containing items such as, staff evaluations and position classification questionnaires; coordinating hiring of temporary help; assisting with new staff orientations, including obtaining login scripts, mainframe accounts, remote access accounts, telephone installations, computer equipment and business cards; processing requests for security

badges; preparing the staff training schedule; reviewing staff time sheets; entering semi-monthly pay documents into the mainframe;

- Travel services: making travel arrangements for staff; reviewing requests for travel reimbursements; submitting travel documentation to Accounting; dispatching motor pool vehicles and scheduling maintenance;
- Procurement services: Ordering, receiving, storing and monitoring inventories of stores wants items and office and computer supplies using MPET; ordering special equipment, such as computers, ergonomic equipment, cell phones/PDAs, cubicle accessories, name plates, etc.; coordinating building service requests; reviewing and approving monthly billings for both commercial and non-commercial charges; conducting inventories of minor capital equipment.

Fiscal Detail:

Detail by Fund	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
A90 PSCC-State	990,267	990,268	1,980,535	TBD	TBD
Total by Fund	990,267	990,268	1,980,535	TBD	TBD
	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
Staffing FTEs	10.25	10.25	10.25	TBD	TBD

V-1 - Vessel Preservation & Engineering Management, Supervision & Support Object of Expenditure Detail			
Object of Expenditure	FY 2016	FY 2017	2015-2017
A - Salaries and Wages	752,867	752,868	1,505,735
B - Benefits	237,400	237,400	474,800
C - Personal Service Contracts	-	-	-
E - Goods and Services	-	-	-
G - Travel	-	-	-
J - Capital Outlay	-	-	-
T - Interagency Reimbursement	-	-	-
Total by Object	990,267	990,268	1,980,535

V-1 - Vessel Preservation & Engineering Management, Supervision & Support Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
Deputy Chief of Const & Ops, WMS 4	0.25	0.25	0.25	25,413	25,413	50,826
Sr. Pres. Port Engr, EMS 4	1.00	1.00	1.00	101,648	101,648	203,297
Chief Naval Arch, WMS 3	1.00	1.00	1.00	86,574	86,574	173,148
Vsl Construction Mgr, WMS 3	1.00	1.00	1.00	86,574	86,574	173,148
Vsl Business Supv, 533G	1.00	1.00	1.00	85,920	85,920	171,840
Vsl LCCM Analyst 539V	1.00	1.00	1.00	68,778	68,778	137,556
Vsl Cap Budget Spec, 543H	1.00	1.00	1.00	68,778	68,778	137,556
Vsl Work Order Spec, 530L	1.00	1.00	1.00	60,990	60,990	121,980
Vsl Proj Admin, 530L	1.00	1.00	1.00	60,990	60,990	121,980
Tech Librarian, 261C	1.00	1.00	1.00	55,260	55,260	110,520
Staff Aide, M0226	1.00	1.00	1.00	51,942	51,942	103,884
Total	10.25	10.25	10.25	752,867	752,868	1,505,735

Narrative Justification and Impact Statement

Performance measure detail:

Performance Measures for V-1 – Vessel Preservation and Engineering Management, Supervision and Support:	FY 2016	FY 2017
Outcome Measure: POG Result Area—Improve statewide mobility of people, goods and services • Deliver projects on time and on budget (90% standard)	Yes	Yes
Output Measures (Biennial-Fiscal Years Not Available) • Number of vessel preliminary engineering phase projects • Number of vessel construction phase projects • Vessel preliminary engineering budget • Vessel construction budget Number of vessel design organization FTEs; Number of vessel construction organization FTEs	44 44 \$2,725,500 \$58,424,000 39	44 44 \$2,725,500 \$58,424,000 39
Efficiency/Effectiveness Measures POG Result Area--Improve the Ability of State Government to Achieve Results Efficiently and Effectively • Delivery planned scope of work for project support activities on time and on budget • Develop and manage program IAW RCWs 43.88 and 47.60 • Spend IAW legislative appropriations and provisos • Properly account for expenditures by program, fund, proviso and fiscal period	Yes Yes Yes Yes	Yes Yes Yes Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

The projects discussed herein support the following WSDOT Strategic Goals:

- Objective 2.4 Ferry Vessel Maintenance and Preservation
- Objective 5.1 Capital Project Management and Delivery
- Objective 5.4 Accountability and Communication
- Objective 5.7 Planning and Prioritization

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

WDOT Ferry Preservation – Vessels
 WSDOT Ferry Operations – Vessels
 WDOT Transportation Management and Support

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This package supports the state-wide result of good stewardship by planning, overseeing and executing the ferry vessel preservation and improvement program.

What are the other important connections or impacts related to this proposal?

Impact on agency clients and services:

This package ensures that ferry customers travel on safe and reliable vessels and that growth in ferry customer travel demand is met subject to budget constraints.

Impact on other state programs or units of government:

None

Other:

None

What alternatives were explored by the agency, and why was this alternative chosen?

This activity complies with the requirements of ESHB 2358, Laws of 2007 by developing a support budget for supervision and support of the vessel preservation and engineering division and allocating the cost to projects.

Alternative approaches are:

- Ferries Division could revert to the prior cost allocation system which did not develop overhead budgets but simply collected support costs as they occurred and allocated them to projects.
- Instead of allocating support costs to projects, Ferries Division could allocate them to new subprograms.
- Support budgets could use the traditional operating budget methodology based on adjusting or adding new initiatives to a base carried forward from the prior fiscal period, instead of using a zero-base budget methodology.

What are the consequences of not funding this package?

Failure to fund this activity will jeopardize Ferries Division's ability to plan, organize, direct, coordinate, and control the Vessel Preservation and Improvement Program. Vessels will fall into disrepair and will not be able to meet regulatory requirements for regular drydockings resulting in loss of U.S. Coast Guard (USCG) certification which would result in the shutdown of the vessel prior to realizing the vessels expected full service life. This would then require earlier replacement than scheduled.

Vessels are a continuation of the Washington State highway system. Some island routes have no other means for delivery of goods and services.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None

Expenditure calculations and assumptions.

- FTEs: 10.25
 - Fiscal Detail table and narrative above displays FTE detail

- Labor costs: Wages: \$1,505,735 Benefits: \$474,800 Total: \$1,980,535
- Non-labor expenses. None

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Budget impacts in future biennia:

On-going funding. For the purpose of long-range financial planning in this budget development cycle, the proposed 2015-2017 vessel supervision and office support budget is assumed to continue into future biennia with adjustments for inflation. However, it should be noted that Ferries Division will prepare a new zero-based budget request in each succeeding budget development cycle that will replace the out-biennium placeholders established by the prior budget development cycle.

Distinction between one-time and on-going functions and costs:

All functions and costs are on-going.

Changes from the previous Biennium:

There are no changes from the previous Biennium.

Budget Activity Package: V-2 – Vessel Life Cycle Cost Model (LCCM) Update and Maintenance

Recommendation Summary Text:

This activity funds the Vessel Life Cycle Cost Model (LCCM) which is a legislative mandate for determination of all vessel preservation work performed during a biennium. The Vessel LCCM Update promotes efficient and effective program delivery by updating and expanding the Vessel LCCM that Ferries Division uses to allocate funding for preservation of the fleet and to measure progress toward legislative preservation performance objectives.

The Vessel LCCM Update promotes efficient and effective program delivery by updating and expanding the Vessel LCCM. The legislature, in the course of passing ESHB 2358 in conjunction with developing the 2007-2009 budget, mandated that the Ferries Division use the Vessel LCCM as the primary resource management tool for allocating funding for preservation of the fleet and for measuring progress toward legislative preservation performance objectives. Ferries Division is required to continually update the model's database of vessel information in order to ensure that this resource management tool effectively and efficiently directs preservation investments. Effective and efficient preservation investments in the fleet are critical to providing reliable ferry service.

The Vessel LCCM provides over 2,300 work category definitions, life cycle intervals between work periods for each work category and cost factors for each work category. All preservation needs and biennium preservation budgets are determined by the Vessel LCCM. Therefore it is necessary that the Vessel LCCM be reviewed on a continuing basis to document date of last work on applicable inventory items, to refine intervals based on historical data and conditions found, to update cost factors and to redefine inventory items as vessel equipment is replaced and upgraded and/or as experience indicates better level of detail.

The Vessel LCCM performs the following functions in the capital planning process:

- Inventory of systems that comprise each vessel in the fleet,
- Projection of vessel preservation needs,
- Display of vessel preservation project scope, cost and schedule in terms of Vessel LCCM inventory items,
- Progress reporting for OFM's preservation & deferred preservation backlog reduction plan,
- Classification of projects by OFM activities,
- Classification of projects as preservation,
- Classification of Vessel LCCM inventory items according to OFM's project priority structure,
- Roll up of investments in terms of the Governor's Priorities of Government strategies and result areas,
- Measurement of preservation performance against output and outcome objectives.

The quality of management information produced by the Vessel LCCM is dependent upon an accurate and complete inventory database. This is accomplished, in part, by

- Updating information about each inventory item (such as “last done” date, life cycle interval, cost factor, etc.),
- Revising the definition of an inventory item resulting in the item being split into multiple items or combining items into a single new item,
- Deleting an existing item and adding new items.

ESHB 2358, Laws of 2007 provides specific direction about the characteristics of the Vessel LCCM.

- The Vessel LCCM is used in developing preservation funding requests,
- It uses available industry standards or department-adopted standards when standard life cycles are not available,
- It is updated when inspections are made to reflect asset condition,
- It does not include systems that aren’t replaced on a standard life cycle or that are not yet built,
- Inventory data is updated at least every three years.

The Vessel Life Cycle Cost Model program is being expanded to incorporate Vessel Asset Management. The first phase of Vessel Asset Management was accomplished in the 2011-2013 Biennium with published condition ratings. The next phase will be to incorporate more asset management principles which include weighted scores for each asset.

This activity provides for two FTEs; one Vessel Life Cycle Cost Model Analyst (539V) and the equivalent of one Inspector Specialist (533E). The LCCM Analyst’s salary is included in V-1. The Inspector Specialist is included below.

Vendor support will be used for continued development of the Vessel Asset Management program (Object Code E – Goods & Services).

Fiscal Detail:

Detail by Fund	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
A90 PSCC-State	108,890	108,890	217,780	TBD	TBD
Total by Fund	108,890	108,890	217,780	TBD	TBD
	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
Staffing FTEs	1.0	1.0	1.0	TBD	TBD

V-2 - Vessel LCCM Update and Maintenance Object of Expenditure Detail			
Object of Expenditure	FY 2016	FY 2017	2015-2017
A - Salaries and Wages	72,265	72,265	144,530
B - Benefits	23,000	23,000	46,000
C - Personal Service Contracts	-	-	-
E - Goods and Services	13,625	13,625	27,250
G - Travel	-	-	-
J - Capital Outlay	-	-	-
T - Interagency Reimbursement	-	-	-
Total by Object	108,890	108,890	217,780

V-2 - Vessel LCCM Update and Maintenance Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
Inspector Specialist, 533E	1.00	1.00	1.00	72,265	72,265	144,530
Total	1.00	1.00	1.00	72,265	72,265	144,530

Narrative Justification and Impact Statement

Performance measure detail:

Performance Measures for V-2 – Vessel LCCM Update and Maintenance	FY 2016	FY 2017
<p>Outcome Measure: Improve the ability of State Government to Achieve Results Efficiently and Effectively.</p> <ul style="list-style-type: none"> • Develop and manage program IAW RCWs 43.88 and 47.6 • Ensure timely assessment of needs to plan funding for capital and fiscal period • Spend IAW legislative appropriations and provisos • Properly account for expenditures by program, fund , proviso and fiscal period 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>Output Measures:</p> <ul style="list-style-type: none"> • Review Cost Factors • Review and refine Inventory Item Descriptions • Review and Update Intervals • Inspect Assets 	<p>750</p> <p>500</p> <p>750</p> <p>700</p>	<p>750</p> <p>500</p> <p>750</p> <p>700</p>

Is this decision package essential to implement a strategy identified in the agency's strategic plan? If so, please describe.

The projects discussed herein support the following WSDOT Strategic Goals:

- Objective 2.4 Ferry Vessel Maintenance and Preservation
- Objective 5.1 Capital Project Management and Delivery
- Objective 5.2 Information Technology & Decision Support Systems
- Objective 5.4 Accountability and Communication
- Objective 5.7 Planning and Prioritization

Does this decision package provide essential support to one of the Governor's priorities? If so, please describe.

WDOT Ferry Preservation – Vessels
WSDOT Ferry Operations – Vessels
WDOT Transportation Management and Support

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This activity promotes good stewardship by planning and executing the ferry vessel preservation program in an efficient and effective manner.

What are the other important connections or impacts related to this proposal?

By achieving performance measures as discussed above, Ferries Division will be better able to provide reliable ferry service to the riding public.

What alternatives were explored by the agency, and why was this alternative chosen?

In as much as this is a legislatively mandated program, there is no current alternative to development of vessel preservation needs and budget requirements.

What are the consequences of not funding this package?

Non-funding of the Vessel LCCM Update will result in not obtaining and maintaining an up-to-date viable management tool for determination of preservation work and budget requirements, and inability to meet preservation performance objectives expressed in terms of PNP (Preservation Needs Percent) requirements for Category 1 and Category 2 systems. Without funding, meeting the requirements of ESHB 2358, which requires the budget be based on the LCCM, would not be possible.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None. As discussed above, ESHB 2358, Laws of 2007 provides specific direction about the characteristics of the LCCM and the requirement that the LCCM be used in developing preservation funding requests.

Expenditure calculations and assumptions.

- LCCM Update & Maintenance
 - FTEs: 1.0
 - One Vessel LCCM Analyst (539V) full time supported by Vessel Inspector Specialists totaling one FTE (533E).
 - Labor costs for the Vessel LCCM Analyst are included in V-1. Labor costs for the equivalent of one Vessel Inspector Specialist are included here.
 - Labor costs: Wages: \$144,530 Benefits: \$46,000 Total: \$190,530
 - Non-labor expenses: None
- Asset Management Development
 - FTEs: None
 - Labor costs: None
 - Non-labor expenses: \$27,250
 - Estimated need for vendor support for continued development of the Asset Management program (Object Code E – Goods & Services).

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Distinction between one-time and on-going functions and costs:

All of the costs are for on-going functions

Budget impacts in future biennia:

Updating of the Vessel LCCM is a continuing program and the effort required in future biennia to maintain the Vessel LCCM as a viable effort will essentially be the same as requested for the 2015-2017 biennium.

Changes from the previous Biennium:

There are no changes from the previous Biennium.

Budget Activity Package: V - 3 Vessel Environmental Technical Support

Recommendation Summary Text:

This activity provides minimal funding for Vessel Technical Support for Environmental Issues, focused primarily on ferry fuel consumption reduction. It promotes governmental efficiency and effectiveness through technical support and studies focused primarily on ensuring that vessels meet current and emerging emissions requirements. It also ensures that a focus is maintained on seeking technical approaches to reduce ferry fuel consumption; doing so results in Ferries Division cost savings or avoidance and reduction of unfavorable impacts on the quality of life in the region. This technical effort evaluates both technological enhancements and better operating practices for the means to mitigate adverse financial and environmental impacts of fuel consumption.

This activity enables continuing half time focus by one Marine Mechanical Engineer on investigating opportunities for fuel consumption and emissions reduction including coordinating monthly fuel conservation meetings, reviewing fleet fuel consumption reports, and studying alternatives for reducing fuel consumption and/or reducing vessel emissions.

Fiscal Detail:

Detail by Fund	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
A90 PSCC - State	50,292	50,292	100,584	TBD	TBD
Total by Fund	50,292	50,292	100,584	TBD	TBD
	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
Staffing FTEs	0.5	0.5	0.5	TBD	TBD

V-3 - Vessel Environmental Technical Support Object of Expenditure Detail				
Object of Expenditure	FY 2016	FY 2017	2015-2017	
A - Salaries and Wages	41,910	41,910	83,820	
B - Benefits	8,382	8,382	16,764	
C - Personal Service Contracts	-	-	-	
E - Goods and Services	-	-	-	
G - Travel	-	-	-	
J - Capital Outlay	-	-	-	
T - Interagency Reimbursement	-	-	-	
Total by Object	50,292	50,292	100,584	

V-3 - Vessel Environmental Technical Support Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
Marine Mechanical Engineer	0.5	0.5	0.5	41,910	41,910	83,820
Total	0.5	0.5	0.5	41,910	41,910	83,820

Narrative Justification and Impact Statement

Performance measure detail:

Performance Measures for V-3 – Vessel Environmental Technical Support	FY 2016	FY 2017
Outcome Measures: • Reduction in Fuel Consumption	Yes	Yes
Output Measures: • Improved Reporting to EPA on Emissions Levels	Yes	Yes
Efficiency/Effectiveness Measures: • A major reduction in reported power levels of our fleet from 75% to 37%	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

The project discussed herein supports the following WSDOT Strategic Goals:
Objective 4.5 Ferries Environmental Management.

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

WSDOT Ferry Operations – Vessels
WSDOT Ferry Improvements – Vessels

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

Maintain focus on reducing fuel consumption and air emissions.

What are the other important connections or impacts related to this proposal?

Impact on agency clients and services:

Impact on agency clients and services:

No impacts on clients or services.

Impact on other state programs or units of government:

Reduces fuel costs of the Ferries Division operation program.

Other:

Improves the quality of the environment for Puget Sound residents.

What alternatives were explored by the agency, and why was this alternative chosen?

Only other option for the projects identified herein is to completely contract out for any of these efforts which will cost more based on standard expenses incurred to date when using support contractors for similar efforts at current state of the market rates. Additionally, it will be harder to integrate such efforts with current fleet operating methodologies and standards. Ability to respond in a timely fashion to emergent needs may also be compromised if efforts have to be coordinated first through the contractual process.

What are the consequences of not funding this package?

No one will focus on addressing fuel consumption issues within the ferry fleet and furthermore, the Ferries Division may not be able to meet newly enacted and/or emerging Clean Air Act requirements. In order to maintain a continued strategic focus on fuel/air emissions reduction, it is essential that the division funds a technically qualified individual to address fleet issues. Otherwise, fuel consumption reduction and emissions reduction are additional collateral jobs for a number of people with no real driver for direction and accomplishment. Furthermore, the Ferries Division has learned that there is a need to maintain a technical capability to focus on development of applications for the abundance of emerging grant opportunities. These are expected to continue as the governmental (federal, state and local) focus on “green” programs continues to grow.

What is the relationship, if any, to the capital budget?

None.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- FTEs: 0.5
 - Assumes one Marine Mechanical Engineer working full time
- Labor costs: Wages: \$83,820 Benefits: \$16,764 Total: \$100,584
- Non-labor expenses: None

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Distinction between one-time and on-going functions and costs:

All of the costs are for on-going functions.

Budget impacts in future biennia:

Continued funding as an on-going initiative into the foreseeable future

Changes from the previous Biennium:

There are no changes from the prior biennium.

Budget Activity Package: V-4 – Vessel Planning / Design

Recommendation Summary Text:

This activity funds the Ferries Division's Vessel Planning / Design Department (Vessel Design) which promotes efficient and effective vessel design and construction through investigating, studying and developing processes and methods for improving design, engineering and shipboard applications. This also enables timely response by Vessel Design to emergent ferry issues.

This program provides tools and studies that assist in maintaining or enhancing Vessel Design's capability for supporting the ferry fleet and includes the following:

- **Design Tools**

Provides for essential design tools used by the Vessel Design staff to support preservation and improvement of the vessel fleet. These include:

- **AutoCAD:** The maintenance, upkeep, training and continued support of the AutoCAD drawing development software system including licenses, training and standards that are essential to development of the technical drawings that are critical elements of vessel preservation contracts.
- **PipeFlow:** The maintenance, upkeep, training, and continued support of this piping system design and analysis software tool.
- **Rhino 3D:** The maintenance, upkeep, training, and continued support of this three dimensional graphical interface tool used for developing designs of revised systems/arrangements and is an essential tool for exploring design alternatives.
- **LISA Finite Element Analysis:** The maintenance, upkeep, training, and continued support of the LISA finite element analysis tool that enables analysis of structural loads in complex structures.
- **Open Foam CFD Package:** The continued support of an open source computer program for the analysis of Computational Fluid Dynamics. Using Open Foam to analyze the new propellers for the different classes of vessels as well as to define the wave train behind the vessel as part of reducing erosion in Puget Sound.

- **Design Studies & Standards**

Provides for anticipated design studies as mandated by ESHB 3209. These include:

- **Emissions Testing:** WSF will be systematically testing the emissions levels on all the vessels to determine the present benchmark for the system's emission model. The study includes the installation of ports in the exhaust system on a range of vessels in the fleet. The exhaust systems include the main engines, ship's service generators and boilers.
- **Steering Control System:** develop an integrated steering control system for the Issaquah and Jumbo Class vessels. The control system shall be PLC based using industry standard equipment to avoid obsolescence in the future.
- **Redundant Power Source:** develop a battery or capacity based system to provide reserve propulsion power for the Mark II and Jumbo Class ferries. The

redundant power would alleviate the need to start a third generator when approaching the landing.

- **Unanticipated USCG/IMO Regulatory Changes:** Request is in support of any design studies that may emerge as a result of unanticipated USCG, International Maritime Organization or any other regulatory agency changes that may require changes in vessel designs.
- **Issaquah Class LNG Design Development:** Request is in support of development of a bunkering and fuel delivery system for the Issaquah Class vessels to coincide and in conjunction with the Safety and Security Assessment.
- **Fuel Conservation:** Request is for funding what is currently undefined for further vessel improvements associated with fuel conservation and air emissions reduction. Potentially includes a design study for fuel consumption indication in the pilothouse of ferries and additional design study work for positive restraint, propellers and speed reductions.
- **Vessel Design Standards:** Request is to enable work on developing Vessel Design Standards as required by ESHB 3209.

Note: Details of who will complete the design studies and development of the Vessel Design Standards are not defined. These are values based on estimated total scope of effort and will consist of an integrated effort by the Chief Naval Architect who is covered in V-1 and existing Vessel Design staff who charge their work to capital projects.

- **Design Consumables**

Provides for consumables utilized in executing engineering functions including the following:

- Offices Supplies
 - Office printer/copier paper, admin supplies, pens, pencils, notebooks.
- Color Printer
 - Lease and Maintenance Agreement.
- Plotter Supplies
 - Maintenance Agreement, supplies, paper.
- Data Acquisition System Supplies
 - Strain gauge, wires, and miscellaneous hardware.
- Library subscription fees for reference materials replacement.
- Library Cataloging System
 - WSF Terminal Engineering and WSF Vessel Engineering Libraries currently maintain five disparate cataloging systems with limited interoperability. Each system grew out of a discreet need to index, locate, and deliver technical documents from varying agencies or formats. It has been the desire of both libraries to have a unified catalog for some time, to pull document delivery into the system, and, ideally, make the catalog available for the WSDOT Library for reference. In addition to streamlining the current library catalogs, the unified catalog also anticipates greater use and building the engineering collections into a comprehensive WSF resource (including training, planning, etc.).

- **Remote Operated Vehicle (ROV) Purchase:**

The cost and capability of Remote Operated Vehicles (ROV) have improved to make the use of an ROV a cost effective tool to accomplish underwater inspections in lieu of using commercial divers or drydocks. Many of our vessels are entering the UWILD program where they will require drydocking every five years in comparison to two drydockings every five years. In addition, the availability of drydock facilities in Puget Sound has become a problem and in the case of an emergency, the use of a high definition video camera would provide an excellent tool to inspect and evaluate any damage that may occur avoiding the drydocking of the vessel.

It will also provide a detailed record of the inspection that can be provided to the US Coast Guard and others to document the condition of the vessel. It would be assumed that each vessel in the UWILD program would be inspected during their annual availability at Eagle Harbor as part of a condition monitoring program of the hull, anodes and coating system.

WSDOT purchased a ROV that has a low resolution camera. This is not appropriate for doing the USCG-required underwater inspections for our UWILD vessels. It is difficult to get the proper equipment in the needed timeframes. The rental service includes a diver, tender, and driver whether the agency needs them or not, which increases the inspection costs. The cost for the underwater inspection services provided by a consultant is extremely higher than a one-time cost of the ROV equipment.

Fiscal Detail:

Detail by Fund	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
A90 PSCC - State	271,890	271,890	543,780	TBD	TBD
Total by Fund	271,890	271,890	543,780	TBD	TBD
	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
Staffing FTEs	-	-	-	TBD	TBD

V-4 - Vessel Planning/Design Object of Expenditure Detail			
Object of Expenditure	FY 2016	FY 2017	2015-2017
A - Salaries and Wages	-	-	-
B - Benefits	-	-	-
C - Personal Service Contracts	-	-	-
E - Goods and Services	271,890	271,890	543,780
G - Travel	-	-	-
J - Capital Outlay	-	-	-
T - Interagency Reimbursement	-	-	-

Total by Object	271,890	271,890	543,780
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Narrative Justification and Impact Statement

Performance measure detail:

Performance Measures for V-4 – Vessel Planning/Design	FY 2016	FY 2017
Outcome Measures:		
• Office equipment operation maintained without loss of service	Yes	Yes
• AutoCAD update / training completed for full design staff	Yes	Yes
• Rhino3D use expanded to 2 more disciplines to improve concept examination / assessment	Yes	Yes
• Technical Library maintains efficiency	Yes	Yes
Output Measures:		
• Complete Design Studies	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency's strategic plan? If so, please describe.

The projects discussed herein support the following WSDOT Strategic Goals:

Objective 2.4 Ferry Vessel Maintenance and Preservation

Objective 5.1 Capital Project Management and Delivery

Objective 5.7 Planning and Prioritization

Does this decision package provide essential support to one of the Governor's priorities? If so, please describe.

This activity supports efficient and effective delivery of the Ferries Division capital program.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This activity supports the result area of good stewardship of public resources.

What are the other important connections or impacts related to this proposal?

None

What alternatives were explored by the agency, and why was this alternative chosen?

Design Tools & Design Studies: Only other option for design tools and completion of design studies is to completely contract out engineering work to design firms who use similar tools. Doing this will cost more based on standard expenses incurred to date when using support contractors for similar efforts at current state-of-the-market rates plus it will be harder to integrate such efforts with current fleet operating methodologies

and standards. Ability to respond in a timely fashion to emergent needs may also be compromised if efforts have to be coordinated first through the contractual process.

Design Consumables: Basic consumables such as printer and photocopier paper, admin supplies, pens, pencils, notebooks, Library materials, and maintenance agreements are necessary for basic office and engineering functions.

What are the consequences of not funding this package?

Design and construction staffs will not have the basic tools that allow them to complete their work.

What is the relationship, if any, to the capital budget?

None

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None

Expenditure calculations and assumptions.

- FTEs: None.
- Labor costs: None
- Non-labor expenses: \$543,780 (detailed below)
(Object Code E – Goods & Services)
 - Design Tools:

○ AutoCAD Support	90,000
○ Pipe Flow Analysis Tool	4,000
○ Rhino3D CAD Tool	1,500
○ LISA Finite Element Analysis Tool	3,200
○ Open Foam CFD Package Support	<u>4,000</u>
➤ Sub-Total	\$102,700
 - Design Studies & Standards:

○ Emission Testing	100,000
○ Steering Control System	20,000
○ Redundant Power System	15,000
○ Unanticipated Regulatory Changes	11,000
○ Issaquah Class LNG Design Development	11,000
○ Fuel Conservation	12,000
○ Vessel Design Standards	<u>12,500</u>
➤ Sub-Total	\$181,500
 - Design Consumables

○ Office Supplies (\$625/month)	13,500
○ Color Printer (\$375/month)	8,200
○ Plotter Supplies (\$625/month)	13,500
○ Data Acquisition System Supplies	17,780

○ Library Subscription Fees	12,600
○ Library Cataloging System	<u>54,000</u>
➤ Sub-Total	\$119,580
▪ Remote Operated Vehicle (ROV) (Non-labor expenses, Object Code E – Goods & Services)	<u>50,000</u>
➤ Sub-Total	\$50,000
▪ Training and Administrative Tasks (Based on prior expenditures)	<u>90,000</u>
➤ Sub-Total	\$90,000
▪ TOTAL:	\$543,780

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Budget impacts in future biennia:

Continued maintenance of design tools and staff capability to utilize them will require recurrent funding. Consumption of consumables will continue as design efforts continue for life cycle support of the vessel fleet. Design studies will be required in future biennia to different degrees depending on planned and also unplanned vessel improvements.

Distinction between one-time and on-going functions and costs:

All costs and functions are on-going with the exception of the ROV purchase which is a one-time cost.

Changes from the previous Biennium:

This budget submission makes the following changes:

Design Tools:

Added Open Foam CFD Package Support.

Correction: Algor Finite Element Analysis should be LISA Finite Element Analysis

Removed Data Acquisition System Tools

Design Studies:

Replaces Navigation Lighting Panel Replacements Study (project is complete) with Emissions Testing Study.

Added Steering Control System Study.

Added Redundant Power Source Study.

Design Consumables:

Added Data Acquisition System Supplies.

Added Remote Operated Vehicle (ROV) purchase.

Budget Activity Package: V-5 – Vessel Noise Control Abatement

Recommendation Summary Text:

This activity funds the vessel noise control abatement program which protects people by meeting Ferries Division's commitment to address hazardous noise exposure to the engine room crews aboard vessels. This project searches for and abates hazardous noise conditions throughout the fleet.

This is a risk management issue and is therefore a priority issue for the agency. The Ferries Division has received complaints about hazardous noise conditions aboard its vessels, and in past biennia has been involved in litigation and found liable for causing hearing impairment to vessel crew members. Beginning in the 2003-2005 Biennium, Ferries Division has been conducting noise surveys of vessel areas that are suspected or are reported to exhibit excessive noise characteristics. These noise surveys have been conducted by an acoustics consultant. Following identification of noise hazards, Ferries Division institutes corrective action generally through installation of technically feasible engineering noise controls during shipyard preservation periods. Following the corrective action, noise surveys are again conducted to ensure correction of the problems

Fiscal Detail:

Detail by Fund	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
A90 PSCC - State	45,000	45,000	90,000	TBD	TBD
Total by Fund	45,000	45,000	90,000	TBD	TBD
	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
Staffing FTEs	0.15	0.15	0.15	TBD	TBD

V-5 - Vessel Noise Control Abatement Object of Expenditure Detail			
Object of Expenditure	FY 2016	FY 2017	2015-2017
A - Salaries and Wages	13,000	13,000	26,000
B - Benefits	2,000	2,000	4,000
C - Personal Service Contracts	-	-	-
E - Goods and Services	30,000	30,000	60,000
G - Travel	-	-	-
J - Capital Outlay	-	-	-
T - Interagency Reimbursement	-	-	-
Total by Object	45,000	45,000	90,000

V-5 - Vessel Noise Control Abatement Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	Biennial Average	FY 2016	FY 2017	Total
Vessel Project Engineer, 533G	0.15	0.15	0.15	13,000	13,000	26,000
Total	0.15	0.15	0.15	13,000	13,000	26,000

Narrative Justification and Impact Statement

Performance measure detail:

Performance Measures for V-5 – Vessel Noise Control Abatement	FY 2016	FY 2017
Outcome Measures:		
<ul style="list-style-type: none"> Conduct noise surveys of vessels reported to have noise hazards or are suspected of having noise hazards 	Yes	Yes
Output Measures:		
<ul style="list-style-type: none"> Take corrected actions as necessary in response to noise surveys 	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

Objective 1.2 Ferries Safety
Objective 1.5 Worker Safety

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

Ferry Maintenance – Vessels
Ferry Preservation – Vessels
Ferry Improvements – Vessels
Ferry Operations – Vessels

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This activity ensures the safety of the traveling public and department staff.

What are the other important connections or impacts related to this proposal?

Impact on agency clients and services:

No impacts on clients or services.

Impact on other state programs or units of government:

Prevention may reduce the liability of the Ferries operating program for employee hearing injury claims.

Other:

None.

What alternatives were explored by the agency, and why was this alternative chosen?

The alternative would be to not establish a basis for noise levels on the vessels. As a consequence, vessels would not be able to have an adequate response to claims of hearing loss or have knowledge of whether the vessels are producing noise above acceptable levels. Noise aboard vessels must be controlled and reduced to acceptable levels in order to provide a safe environment for crews and the riding public.

What are the consequences of not funding this package?

The Ferries Division will not be able to determine, address and correct excessive noise situations aboard its vessels, with possible hearing impairment impact on crew personnel and the riding public.

What is the relationship, if any, to the capital budget?

None.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- FTEs: 0.15
 - Assumes a Vessel Project Engineer (533G)
- Labor costs: Wages: \$26,000 Benefits: \$4,000 Total: \$30,000
- Non-labor expenses: \$60,000 for consultant support costs.
 - The effort required to measure existing sound levels, analyze, and propose sound mitigation modifications to vessels requires the expertise afforded by a vendor (Object Code E – Goods & Services).

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Budget impacts in future biennia:

Anticipate that there will be a continued need for noise reduction aboard the vessels. Noise problems can develop from changes in vessel configuration and installed machinery and equipment. This is an area that will require monitoring throughout the life of each vessel.

Distinction between one-time and on-going functions and costs:

Funding requested is expected to be an on-going cost. Changing conditions may require future action and costs to correct emergent noise problems.

Changes from the previous Biennium:

There are no changes from the previous Biennium.

Budget Activity Package: V-6 – Vessel Technical Support Activities

Recommendation Summary Text:

This activity provides timely funding for the Ferries Division's Vessel Construction Department (Vessel Construction) pre-construction and construction activities required to meet minor emergent capital needs throughout the ferry fleet.

Typical activities include toxic waste reduction activities; radar lab testing and interfacing activities vital to safe transport; preliminary engineering for preservation projects including scheduling and data collection; construction consumables necessary to efficiently complete office and vessel construction tasks and vessel preservation special projects.

This program provides tools and studies that assist in maintaining or enhancing Vessel Construction's capability for supporting the ferry fleet and includes the following:

- **Radar Laboratory Equipment**

- The Radar and Navigational Equipment Lab is used to test new capital equipment and plan for integration with existing systems prior to purchase and installation on the vessels. The Lab is critical to Ferries Division programs and plays a vital role in preserving and improving vessel navigation and communication systems.
- The proper testing and interfacing of these systems are vital for the safe transport and passage of passengers and vehicles on vessels.
- It is necessary to purchase and test the equipment prior to fleet-wide deployment to engineer how to integrate and operate the equipment. This equipment is used as emergency repair equipment for fleet needs when failures occur above normal levels and timely periods of response. The equipment is then returned to the Lab when the need is over. Support is necessary to the Lab to ensure capital purchases are effectively deployed.

- **Schedules for Fleet-wide Vessel Preservation Periods**

This request funds a Port Engineer's efforts in conjunction with the Senior Port Preservation Engineer and the Vessel Construction Manager (the two latter are funded under V-1) for continued refinement and revisions of the Fleet-wide Vessel Preservation Period Schedules. The schedules for laying-up of vessels for preservation work must: meet USCG requirements for periodic inspection and maintenance; be responsive to vessel operation requirements in serving the riding public; consider availability of civilian shipyard facilities; and must include adjustments in schedules for emergent material conditions which impact vessel availability. Significant progress has been made in developing these schedules using online tools during the 2011-2013 Biennium; however, continued testing and modifications are necessary.

- **Bilge and Void Maintenance Program**

The “Washington State Ferries Financing Study II, Auto-Passenger Vessel Preservation and Replacement” Final Report dated January 10, 2008, in Recommendation 4, Maintenance and Preservation Recommendations, recommended that the Ferries Division institute a bilge and void maintenance program. The department concurred with this recommendation and has implemented such a program. Program activities continue. This effort encompasses the following:

- Continued update of vessel hull inspection / documentation drawings by a Marine Designer.
- Continued review of hull inspection results and planning for shipyard repairs by a Project Engineer.
- Continued review, oversight and direction of any necessary changes for vessel crew inspection processes by a Port Engineer.
- Continued research and implementation by one or more of the above for improved bilge / hull preservation systems.

- **Consultant Support for PMRS**

- The incorporation of the Ferries Division’s Vessel Preservation & Improvement program into WSDOT’s Project Management & Reporting System program continues.
- It is anticipated that assistance will be needed from WSDOT HQ internal staff and/or a consultant to facilitate the program. It is assumed that the Ferries Division will fund such assistance.

- **Construction Consumables**

- Provides consumables for Vessel Construction staff including:
 - Coveralls
 - Hard Hats
 - Safety Glasses
 - Inspection tools (e.g. weld gauges, pit gauges, mirrors, flashlights, dry film thickness tools)
 - Calibration of testing equipment (e.g. ultrasonic tester)
 - Cell phone replacements for those damaged during normal shipyard use
 - 2 laptop computers – planning factor for replacement of two laptops
 - 2 office printers – planning factor for replacement of two printers

Note: Laptops and printers are susceptible to damage due to frequent relocation of inspection staff to different shipyard locations.

Fiscal Detail:

Detail by Fund	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
A90 PSCC - State	231,661	231,660	463,321	TBD	TBD
Total by Fund	231,661	231,660	463,321	TBD	TBD
	FY 2016	FY 2017	2015-2017	2017-2019	2019-2021
Staffing FTEs	0.88	0.88	0.88	TBD	TBD

V-6 - Vessel Technical Support Activities Object of Expenditure Detail				
Object of Expenditure	FY 2016	FY 2017	2015-2017	
A - Salaries and Wages	88,946	88,945	177,891	
B - Benefits	17,715	17,715	35,430	
C - Personal Service Contracts	-	-	-	
E - Goods and Services	125,000	125,000	250,000	
G - Travel	-	-	-	
J - Capital Outlay	-	-	-	
T - Interagency Reimbursement	-	-	-	
Total by Object	231,661	231,660	463,321	

Narrative Justification and Impact Statement

Performance measure detail:

Performance Measures for V-6 – Vessel Technical Support Activities	FY 2016	FY 2017
Output Measures:		
<ul style="list-style-type: none"> All drydock contract packages have updated hull documentation drawings 	Yes	Yes
<ul style="list-style-type: none"> Vessel hull inspections completed by crews / hull inspection team and results prepared in time to provide to USCG inspector prior to each Annual Inspection 	Yes	Yes

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? If so, please describe.

The projects discussed herein support the following WSDOT Strategic Goals:

- Objective 2.4 Ferry Vessel Maintenance and Preservation
- Objective 5.1 Capital Project Management and Delivery
- Objective 5.4 Accountability and Communication
- Objective 5.7 Planning and Prioritization

Does this decision package provide essential support to one of the Governor’s priorities? If so, please describe.

Ferry Maintenance – Vessels
Ferry Preservation – Vessels
Ferry Improvements – Vessels
Ferry Operations – Vessels

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process? If so, please describe.

This activity supports the state-wide result of good stewardship by planning, overseeing, and executing the ferry vessel preservation and improvement program in an efficient and effective manner.

What are the other important connections or impacts related to this proposal?

Impact on agency clients and services:

More efficient scheduling of shipyard visits could increase vessel availability for marine transportation service.

Impact on other state programs or units of government:

None.

Other:

None.

What alternatives were explored by the agency, and why was this alternative chosen?

The only other option for the activities identified herein is to completely contract out for any of these efforts which will cost more based on standard expenses incurred to date when using support contractors for similar efforts at current state of the market rates. Additionally, it will be harder to integrate such efforts with current fleet operating methodologies and standards. Ability to respond in a timely fashion to emergent needs may also be compromised if efforts have to be coordinated first through the contractual process. Finally, the Bilge and Maintenance Plan is a legislatively and U.S. Coast Guard mandated program.

What are the consequences of not funding this package?

Failure to fund this activity will jeopardize Ferries Division’s ability to continue with essential programs that:

- Ensure vessels are preserved properly,
- Ensure efficient and executable schedules are developed to further essential vessel maintenance and preservation activities,
- Maintain a viable Radar Laboratory which is essential to ensuring acquisition of adequate vessel navigation and communication systems integrated into the vessel,
- Ensure integration of Ferries Division’s vessel preservation and improvement program into the department-wide Project Management and Reporting System.

What is the relationship, if any, to the capital budget?

None.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- Radar Laboratory:
 - FTEs: 0.25 (Vessel Master-equivalent to EMS4)
 - Labor costs: Wages: \$50,826 Benefits: \$10,100 Total: \$60,926
 - Non-labor expenses: \$50,000
 - VHF Radios, Landing Radars, Automatic Identification System (AIS), and the S57 & NOAA Charting Systems Program (Object Code E – Goods & Services)
- Develop Maintenance Schedules
 - FTEs: 0.125 (Port Engineer, EMS4)
 - Labor Costs: Wages: \$25,413 Benefits: \$5,000 Total: \$30,413
 - Non-labor expenses: \$20,000
 - Estimated need for vendor/WSDOT IT support for further development of schedules (Object Code E – Goods & Services)
- Bilge & Void Maintenance Program
 - FTEs: 0.50 (Port Engineer, EMS4; Project Engineer, 533G; Marine Designer, 538Y)
 - Labor Costs: Wages: \$101,652 Benefits: \$20,330 Total: \$121,982 (Average of EMS4, 533G, 538Y)
 - Non-labor expenses: None
- PMRS Support
 - FTEs: 0.0
 - Labor Costs: None
 - Non-labor expenses: \$40,000
 - Estimated need for vendor/WSDOT HQ support for further implementation of PMRS (Object Code E – Goods & Services)
- Construction Consumables
 - FTEs: 0.0
 - Labor Costs: None
 - Non-labor expenses: \$40,000
 - Based on historical usage (Object Code E – Goods & Services)
- Training and Administrative Tasks: \$100,000
 - Based on historical usage (Object Code E – Goods & Services)
- **TOTAL:** **\$463,321**

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Budget impacts in future biennia:

Failure to fund this activity could jeopardize the Vessel Preservation and Improvement program's ability to manage the Vessel program and maintain the vessels.

Distinction between one-time and on-going functions and costs:

All functions and costs are on-going.

Changes from the previous Biennium:

There are no changes from the previous Biennium.

Agency:	405 Department of Transportation
Decision Package Code/Title:	A - Administrative Support for WSF Construction
Budget Period:	2015-17
Budget Level:	Zero-based

Program: **W – WSF Construction**

Recommendation Summary Text:

This is the 2015-17 Biennium zero-based budget request for administrative support for the Washington State Ferries (WSF) Construction Program (W) that funds legal, contract administration, program and budget development and management, federal grant administration, capital planning, human resources, personnel, accounting, external audit, purchasing, security grant management, administrative, environmental and communications services.

The administrative support package funds the following activities in the 2015-17 Biennium:

- A-1 – Capital program legal services and contract development and administration;
- A-2 – Capital program development, budget development and management and federal grant administration;
- A-3 – System-wide capital planning and special studies;
- A-4 – Human resource and personnel services, employee risk management and employee relations services for capital program employees;
- A-5 – Capital program financial and administrative services, including accounting, external audit, purchasing, security grant management, administrative services, and environmental program management; and
- A-6 – Communications services, including public involvement, community relations and outreach for long-range capital plans and specific construction projects, coordination to mitigate the adverse impacts of construction and development of customer information about capital projects.

Consolidated Fiscal Detail: Below is the consolidated fiscal detail, object of expenditure detail and total staffing FTEs for administrative support activities. Tables A-1 through A-6 display this information by administrative activity.

Administrative Support All Activities (A)					
Fiscal Detail					
Detail by Fund	FY 2016	FY 2017	2015-17	2017-19*	2019-21*
099-1 Puget Sd Capital Construction Account- State	4,871,000	4,397,000	9,268,000	9,564,000	9,826,000
099-2 Puget Sd Capital Construction Account- Federal	25,000	25,000	50,000		
Total by Fund	4,896,000	4,422,000	9,318,000	9,564,000	9,826,000
Staffing FTEs	23.10	23.10	23.10	23.10	23.10

Administrative Support (A)						
Total Activity FTE and Dollar Detail						
	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
Legal Services and Contracts Staff	6.40	6.40	6.40	613,000	613,000	1,226,000
Program & Budget Devel & Mgmt Staff	5.50	5.50	5.50	910,000	638,000	1,548,000
System-wide Planning and Special Studies	1.00	1.00	1.00	676,000	480,000	1,156,000
HR and Personnel Staff	1.00	1.00	1.00	89,000	90,000	179,000
Finance and Administration Staff	6.80	6.80	6.80	2,359,000	2,352,000	4,711,000
Communications Staff	2.40	2.40	2.40	249,000	249,000	498,000
Total Staff Dollars and FTEs	23.10	23.10	23.10	4,896,000	4,422,000	9,318,000

Administrative Support (A)			
Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	2015-17
A - Salaries and Wages	1,635,000	1,635,000	3,270,000
B - Benefits	528,000	528,000	1,056,000
C - Personal Service Contracts	561,000	369,000	930,000
E - Goods and Services	1,847,000	1,841,000	3,688,000
G - Travel	40,000	39,000	79,000
J - Capital Outlay	284,000	9,000	293,000
T - Intraagency Reimbursements	1,000	1,000	2,000
Total by Object	4,896,000	4,422,000	9,318,000

Administrative Support (A)						
Salary and FTE Detail						
	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
Legal Services and Contracts Staff	6.40	6.40	6.40	453,000	453,000	906,000
Program & Budget Devel & Mgmt Staff	5.50	5.50	5.50	449,000	449,000	898,000
System-wide Planning and Special Studies	1.00	1.00	1.00	85,000	85,000	170,000
HR and Personnel Staff	1.00	1.00	1.00	54,000	54,000	108,000
Finance and Administration Staff	6.80	6.80	6.80	409,000	409,000	818,000
Communications Staff	2.40	2.40	2.40	185,000	185,000	370,000
Total Staff Dollars and FTEs	23.10	23.10	23.10	1,635,000	1,635,000	3,270,000

* Out-biennium budget estimates shown above reflect OFM's budget instructions. OFM directs that the out-biennium budgets equal the inflated cost of the 2015-17 budget, excluding one-time only costs. However, it should be noted that the actual 2017-19 budget request will be based on zero-based budget methodology at the time that the 2017-19 budget is developed.

Narrative Justification and Impact Statement

Performance measure detail:

Tables B-1 through B-6 provide performance measures for the six activities in the administrative support budget request using the format shown in the table below.

Performance Measures	FY 2016	FY 2017
Outcome Measure		
Output Measures		
Efficiency/Effectiveness Measures		

Is this decision package essential to implement a strategy identified in the agency’s strategic plan? Does this decision package provide essential support to one of the Governor’s priorities? Does this decision package make key contributions to statewide results? Identify important connections or impacts related to this proposal.

The administrative functions funded by this zero-based budget package promote good stewardship of public funds through governmental efficiency and effectiveness. Specific beneficiaries include policy-makers (the Legislature, the Governor and WSDOT executive management), ferry riders, communities served by the Ferry System and tax payers.

What alternatives were explored by the agency, and why was this alternative chosen?

- The Ferries Division chose to budget for administrative support to the capital program using a zero-based budgeting approach. This approach was selected in order to provide transparency and to facilitate accountability for how administrative support is delivered.
- The division considered using the incremental budgeting approach for administrative support, but rejected this approach because most of the budget would not be visible and there would be insufficient information to achieve the desired level of accountability for administrative support delivery.
- The division rejected the previous approach that did not develop an identifiable administrative support budget but simply collected administrative costs and included them in project costs because this approach did not provide transparency, created uncertainty in project costs and made accountability difficult.

What are the consequences of not funding this package?

This zero-based budget package provides administrative support to develop and administer contracts, develop and manage the capital program and budget, maintain the capital plan and other long-range plans, provide necessary HR/personnel support, administer accounts receivable and payable and communicate with policy-makers and stakeholders interested in the Ferry System. Failure to fund these activities would adversely impact the division’s ability to comply with the many laws pertaining to legislative programs, and the Ferries capital program in particular, and to effectively and efficiently deliver the program.

What is the relationship, if any, to the capital budget?

N/A

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure calculations and assumptions.

- FTEs and labor costs are based on specific positions authorized to charge to administrative cost collection centers in the Ferries Division Organization Chart dated August 1, 2014.
- Salaries are based on the WSDOT Labor Pricing Model.
- Non-labor expenses are based on actual expenditures in FYs 2012-2014.
- Most costs are inflated to 2016 and 2017 dollars using the Implicit Price Deflator for Personal Consumption. The two exceptions are planning studies and 2901 Building rent costs that are not inflated.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?

Budget impacts in future biennia:

By agreement among departmental, OFM and legislative staff, the department prepares a zero-based budget request for the biennium that an appropriations act will apply to. Future biennia expenditure plans are the inflated value of the budget for the appropriated biennium, excluding one-time only costs. However, actual development of future biennial budget requests will use zero-based budget methodology.

Distinction between one-time and on-going functions and costs:

This budget package funds the on-going core administrative support for the WSF Construction Program. There are not one-time only costs in this particular proposal.

Package description:

Legal Services and Contracts

Sub-package A-1 of the administrative support zero-based budget package funds the Ferries Division's Legal Services and Contracts Office (Organizations 361410 and 361320) that prepares contracts and agreements, administers the contracting process, and provides legal assistance in contractual matters relating to construction contracts, engineering consultant agreements, federal provisions in contracts, and capital program agreements with state agencies, local agencies and private parties. Detailed functions include:

Providing advice, guidance and consultative services relating to contract risk, legal issues and development and implementation of capital components of strategic business initiatives; and working with the Attorney General's Office to provide legal consultative services to executive management.

Preparing capital program contracts and agreements and administering the capital program contracting process, including the following activities:

- Managing the bidder pre-qualification process;
- Managing the competitive sealed bidding process, including: development of contractual documents and specifications; advertisement, solicitation and acceptance of bids; contract award, negotiation and execution; contract claims and law suits; contract close out; and management of contractual files and documents;
- Managing the request for proposals (RFP) process;
- Establishing contracts for vessel construction, terminal construction, charter services for mitigation of disruption in service caused by construction, etc.;
- Preparing contracts with private parties, cities and counties and state agencies for co-development ventures;
- Overseeing contractual compliance with all applicable federal requirements and statutes in capital contracts, agreements and procurements;
- Providing contract information to the Attorney General and WSDOT Risk Management for dispute resolution; and
- Coordinating legal issue reviews with the Attorney General's Office.

Preparing and administering consultant agreements, including the following activities:

- Managing the request for proposals (RFP) process for consultant agreements involving engineering and architectural services;
- Conducting legal and engineering review of consultant agreements;
- Negotiating consultant agreement rates (overhead rates and fee rates) and revising them periodically (typically after one year);
- Approving invoices for payment after reviewing rates and compliance with consultant rules;
- Providing agreement information to the Attorney General and DOT Risk Management for dispute resolution; and
- Coordinating legal issue reviews with the Attorney General's Office.

Providing other legal services, including:

- Handling insurance claims for vessel and terminal damages that result in reimbursement of capital expenditures to repair damage to terminals and vessels;
- Providing legal advice on compliance with regulatory agency requirements and federal-aid regulations affecting capital projects.

Table A-1: Fiscal Detail, Object of Expenditure Detail, Salary and FTE Detail for Legal Services and Contract Activities

Legal Services (A1)			
Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	2015-17
099-1 Puget Sd Capital Construction Account- State	613,000	613,000	1,226,000
Total by Fund	613,000	613,000	1,226,000
Staffing FTEs	6.40	6.40	6.40

Legal Services (A1)			
Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	2015-17
A - Salaries and Wages	453,000	453,000	906,000
B - Benefits	149,000	149,000	298,000
C - Personal Service Contracts	-	-	-
E - Goods and Services	8,000	8,000	16,000
G - Travel	1,000	1,000	2,000
J - Capital Outlay	1,000	1,000	2,000
T - Intraagency Reimbursements	1,000	1,000	2,000
Total by Object	613,000	613,000	1,226,000

Legal Services (A1)						
Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
9W002 - WMS3 - Legal Svcs/Contracts Mgr	0.60	0.60	0.60	64,000	64,000	128,000
90830 - 543J - Contract Develop Mgr (Transp Planning Supvr)	0.80	0.80	0.80	79,000	79,000	158,000
A0334 - M0255 - Contract Coord 1	0.60	0.60	0.60	33,000	33,000	66,000
A0335 - M0256 - Contract Coord 2	0.80	0.80	0.80	48,000	48,000	96,000
A0341 - M0256 - Contract Coord 2	0.80	0.80	0.80	48,000	48,000	96,000
A0342 - 148E (M0256) - Y-rated Payroll Coord (Contract Coord 2)	0.80	0.80	0.80	48,000	48,000	96,000
90017 - 530P - Trans. Tech. Engr. 5	1.00	1.00	1.00	85,000	85,000	170,000
A0338 - M0246 - Consultant Coord	1.00	1.00	1.00	48,000	48,000	96,000
Total Staff Dollars and FTEs	6.40	6.40	6.40	453,000	453,000	906,000

Table B-1: Performance Measures for legal services and contract activities

Performance Measures for Legal Services and Contracts	FY 2016	FY 2017
Outcome Measure: POG Result Area-Ability of State Government to Achieve Results Efficiently and Effectively <ul style="list-style-type: none"> Contracting and consultant task approval processes successfully support project delivery 	Yes	Yes
Output Measures: <ul style="list-style-type: none"> Number of vessel construction contracts active during the year Number of consultant agreements active during the year 	12-18 70-80	12-18 70-80
Efficiency/Effectiveness Measures: <ul style="list-style-type: none"> Number of vessel shipyard visits missed due to delays in processing contracts Number of state/federal audit finding about the contract process 	0 0	0 0

Package Description:

Program and Budget Development and Management

Sub-package A-2 of the administrative support zero-based budget package funds the Ferries Division's Program and Budget Development and Management Office (Organizations 365310 and 365315) that develops, advocates and manages the Legislature's program for capital investment in ferry terminals and vessels. This office identifies and prioritizes capital investment needs; develops program plans and budget requests; manages capital financing through the use of financial plans, bond expenditure estimates and federal and local grant administration; and controls the use of resources through allotments, program item number (PIN) budgets, project change management, work order authorizations, budget and program performance reporting and indirect cost allocation to projects. Detailed functions include:

Identifying capital program needs for preservation and improvement of Ferry System infrastructure using the life cycle cost model, the Ferry System Plan and problem-opportunity statements and preparing analyses quantifying, evaluating and prioritizing these needs.

Developing the capital program (project list) and preparing the program elements of the:

- 30-Year Metropolitan Transportation Plan (strategic planning horizon),
- 22-Year Ferry System Plan (strategic planning horizon),
- 20-Year Washington Transportation Plan (strategic planning horizon),
- 16-Year WSDOT Capital Improvement and Preservation Program (operational planning horizon), and
- Transportation Improvement Plan (TIP) and State Transportation Improvement Plan (STIP) (operational planning horizon).

Managing capital financing, including:

- Assessment of financial plans (balance sheets and sources and uses statements) supporting capital projects;
- Estimating bond expenditure demand for use in making bond sales; and
- Acquiring federal and local grants, planning for the use of grant funds and administering grants in accordance with the requirements of grantor agencies.

Managing the Ferries Division federal grant program, including:

- Preparing updates to the TIP and STIP for Ferries projects;
- Preparing grant applications;
- Administering and reporting on federal grants;
- Coordinating division participation in federal audits.
- Assigning specific federal grants to Ferries capital projects; and
- Accounting for the use of federal funds.

Developing the Ferries Division capital budget request, including:

- Preparing program budget narratives for the mission, goals, objectives, performance measures, strategies, analyses of needs, and description and classification of proposed projects;
- Determining capital program, subprogram, activity and project expenditure plans; sources of funds; objects of expenditure; work force requirements; and projected performance of budget proposals;
- Developing budgets for indirect (administrative and project support) activities; and
- Preparing legislative critiques and fiscal notes and responding to OFM and legislative inquiries.

Developing and managing the biennial plan at the program and project levels through:

- Allotments and program item number (PIN) budgets,
- Project change management,
- Work order authorizations,
- Budget and performance execution reviews, and
- Distribution of indirect costs to projects using a fully allocated costing methodology.

Table A-2: Fiscal Detail, Object of Expenditure Detail, Salary and FTE Detail for Program and Budget Development and Management

Program and Budget Development and Management (A2)			
Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	2015-17
099-1 Puget Sd Capital Construction Account- State	885,000	613,000	1,498,000
099-2 Puget Sd Capital Construction Account- Federal	25,000	25,000	50,000
Total by Fund	910,000	638,000	1,548,000
Staffing FTEs	5.50	5.50	5.50

Program and Budget Development and Management (A2)			
Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	2015-17
A - Salaries and Wages	449,000	449,000	898,000
B - Benefits	139,000	139,000	278,000
C - Personal Service Contracts	-	-	-
E - Goods and Services	48,000	49,000	97,000
G - Travel	1,000	1,000	2,000
J - Capital Outlay	273,000	-	273,000
T - Intraagency Reimbursements	-	-	-
Total by Object	910,000	638,000	1,548,000

Program and Budget Development and Management (A2)						
Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
9W045 - WMS3 - Program Development-Budget Director	0.50	0.50	0.50	54,000	54,000	108,000
9W044 - WMS2 - Capital Program Manager	1.00	1.00	1.00	90,000	90,000	180,000
90244 - 543H - Trans Planning Spec 4 (Asst Cap Pgm Mgr)	1.00	1.00	1.00	77,000	77,000	154,000
90226 - 147C - Budget Analyst 3 (Work Orders)	1.00	1.00	1.00	59,000	59,000	118,000
9W062 - WMS2 - Grant Manager	1.00	1.00	1.00	92,000	92,000	184,000
90828 - 543H - Trans Planning Spec 4 (Asst Grant Mgr)	1.00	1.00	1.00	77,000	77,000	154,000
Total Staff Dollars and FTEs	5.50	5.50	5.50	449,000	449,000	898,000

Table B-2: Program and budget development and management activities

Performance Measures for Program and Budget Devel and Mgmt	FY 2016	FY 2017
<p>Outcome Measures: POG Result Area-Ability of State Government to Achieve Results Efficiently and Effectively</p> <ul style="list-style-type: none"> • Sufficient financial and human resources are obtained to preserve and improve Ferry System infrastructure • The expenditure authorization process supports project delivery while being consistent with the legislative appropriations act and pertinent general and Ferries specific laws • Expenditures are properly accounted for and reported in accordance with pertinent general and Ferries specific laws 	<p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>Output Measures:</p> <ul style="list-style-type: none"> • Number of budget and allotment requests prepared • Number of unanticipated receipts and project change request forms processed • Number of active federal grants administered • Number of work orders administered • Number of financial reports prepared 	<p>3</p> <p>20-30</p> <p>25-30</p> <p>180-220</p> <p>40-50</p>	<p>3</p> <p>20-30</p> <p>25-30</p> <p>230-250</p> <p>50-60</p>
<p>Efficiency/Effectiveness Measures:</p> <ul style="list-style-type: none"> • Use performance-based and zero-based budgeting methods • Percent of agency budget request realized in the legislative appropriations act • Number of audit findings pertaining to budgeting, accounting for and reporting expenditures 	<p>Yes</p> <p>90%</p> <p>0</p>	<p>Yes</p> <p>90%</p> <p>0</p>

Package Description:

System-wide Planning and Special Studies

Sub-package A-3 of the administrative support zero-based budget package funds the Ferries Division’s system-wide and route-level long-range planning efforts at the federal, state, regional and departmental levels (Organization 365110).

Transportation planning requirements are increasingly complex and interwoven and require extensive technical assessments and organizational coordination. Ferries Division planning must address requirements under:

- Federal Moving Ahead for Progress in the 21st Century (MAP-21) planning criteria,
- Washington State’s statewide transportation legislation; and
- Washington State’s recent climate change legislation, with its implications for environmental sustainability, resource management, and reduction in vehicle-miles travelled.

The Ferries Planning Office leads the Ferries Division’s effort to develop a re-considered capital plan and program under ESHB 2358, Laws of 2007 (the “Ferry Financing Bill”). Detailed planning functions include:

Planning, organizing, directing, coordinating and controlling development of the Ferries Long-Range (22-year) System Plan that provides the strategic system-wide and route-level framework for specifying service levels, terminal and vessel infrastructure needs, funding sources, and optimizing resource allocations for meeting travel demand.

Preparing the Ferries Long-Range System Plan in accordance with regional, state and federal guidelines and ensuring coordination and integration with:

- The Puget Sound Regional Council’s (PSRC) Metropolitan Transportation Plan (MTP);
- Other Regional Transportation Planning Organizations (RTPOs), including the Island County RTPO, Kitsap County Coordinating Council, and San Juan County Government;
- Ferries Advisory Committees;
- Washington State’s Transportation Plan (WTP); and
- Washington State’s Climate Change initiative.

Organizing and maintaining the Ferries Division’s traffic statistics, both system-wide and by route, to provide key information for long-range capital investment plans and project selections.

Developing, maintaining and operating a ferry travel forecast model to test the impact on ridership of various planning scenarios, including service level changes, differential pricing and time-of-day usage. The ferry travel model is extensively coordinated with PSRC’s regional model and is developed under continuous consultation with the region’s travel demand forecast experts. Under the State’s climate change initiative, the ferry travel model addresses greenhouse gas emissions.

Table A-3: Fiscal Detail, Object of Expenditure Detail, Salary and FTE Detail for System-wide Planning and Special Projects

System-wide Planning and Special Projects (A3)			
Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	2015-17
099-1 Puget Sd Capital Construction Account- State	676,000	480,000	1,156,000
Total by Fund	676,000	480,000	1,156,000
Staffing FTEs	1.00	1.00	1.00

System-wide Planning and Special Projects (A3)			
Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	2015-17
A - Salaries and Wages	85,000	85,000	170,000
B - Benefits	26,000	26,000	52,000
C - Personal Service Contracts*	561,000	369,000	930,000
E - Goods and Services	1,000	-	1,000
G - Travel	1,000	-	1,000
J - Capital Outlay	2,000	-	2,000
T - Intraagency Reimbursements	-	-	-
Total by Object	676,000	480,000	1,156,000

System-wide Planning and Special Projects (A3)						
Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
TBE - 543H - Trans Planning Spec 5	1.00	1.00	1.00	85,000	85,000	170,000
Total Staff Dollars and FTEs	1.00	1.00	1.00	85,000	85,000	170,000

* Plans and studies dental:

Task	FY 2016	FY 2017	2015-17
Finalize Long Range Plan Update	\$ 220,000	\$ -	\$ 220,000
Long Range Plan Follow-on Vessel and Service Studies	\$ 110,000	\$ 110,000	\$ 220,000
Plan and Coordination with Regional Plan Updates	\$ 77,000	\$ 77,000	\$ 154,000
Other Long Range Plan Updates	\$ 99,000	\$ 99,000	\$ 198,000
Planning Support for Tariff Component of EFS Replacement	\$ 55,000	\$ 83,000	\$ 138,000
TOTAL	\$ 561,000	\$ 369,000	\$ 930,000

Table B-3: Performance measures for system wide planning and special studies

Performance Measures System-wide Planning and Special Studies	FY 2016	FY 2017
Outcome Measure: POG Result Area-Ability of State Government to Achieve Results Efficiently and Effectively <ul style="list-style-type: none"> The Ferries Division meets federal, state and regional planning requirements 	Yes	Yes
Output Measure: <ul style="list-style-type: none"> Complete Long-Range Plan and follow-on studies 	Yes	Yes
Efficiency/Effectiveness Measure: <ul style="list-style-type: none"> Number of findings of failure to meet federal, state and regional planning requirements 	0	0

Package Description:

Human Resources and Personnel

Sub-package A-4 of the administrative support zero-based budget package funds the WSDOT Human Resources and Personnel Office staff (Organizations 366030 and 366040) that provides human resources and personnel services, risk management and employee relations services for employees assigned to the WSF Construction Program W. Detailed functions include:

Providing human resources and personnel services, including:

- Developing agency staffing strategies;
- Administering employee compensation and benefits programs;
- Maintaining employee records and providing employment verifications;
- Managing employee services; including, tracking employee assignments and recording work hours in each job class;
- Maintaining personnel information; including, updating employee information, such as, address, phone number, birth date, veteran status, and name change; tracking employee classifications, such as, seniority, job class, pay rate, leave accruals, bargaining unit and affiliation; and tracking employee performance evaluations;
- Maintaining the agency's official organization charts;
- Providing staffing services and administrative support for various position actions, including: developing and processing for approval position classification questionnaires, position reallocations to new classifications, recruiting activities for vacant positions, job advertisements, job applicant screening, and new employees processing;
- Handling HRMS/payroll input and administration; and
- Conducting certain employee investigations.

Providing risk management services, including:

- Administering workers compensation, unemployment compensation, FMLA/STD/LTD, disability/retirement and work leave;
- Administering work place accommodation, return to work and employee assistance programs;
- Handling tort claims and law suits and litigation management;
- Maintaining claims records, conducting reviews and making recommendations and preparing claims analysis reports; and
- Developing and administering the drug and alcohol testing programs.

Providing employee relations services, including:

- Administering employee recognition programs, awards and events;
- Providing general disciplinary and rewards advice and counsel;
- Providing mediation services that help management and employees resolve issues;
- Developing strategies and programs that favorably affect employee productivity, motivation, communications and involvement; and
- Providing organizational development advice and counsel.

Table A-4: Fiscal Detail, Object of Expenditure Detail, Salary and FTE Detail for HR and personnel services, employee risk management and employee relations services

HR and Personnel Services (A4)			
Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	2015-17
099-1 Puget Sd Capital Construction Account- State	89,000	90,000	179,000
Total by Fund	89,000	90,000	179,000
Staffing FTEs	1.00	1.00	1.00

HR and Personnel Services (A4)			
Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	2015-17
A - Salaries and Wages	54,000	54,000	108,000
B - Benefits	20,000	20,000	40,000
C - Personal Service Contracts	-	-	-
E - Goods and Services	13,000	14,000	27,000
G - Travel	1,000	1,000	2,000
J - Capital Outlay	1,000	1,000	2,000
T - Intraagency Reimbursements	-	-	-
Total by Object	89,000	90,000	179,000

HR and Personnel Services (A4)						
Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
90294 - 119G - HR Consultant 3	0.25	0.25	0.25	15,000	15,000	30,000
A0202 - M0290 - Personnel Asst. 1	0.25	0.25	0.25	13,000	13,000	26,000
A0208 - M0290 - Personnel Asst. 1	0.25	0.25	0.25	13,000	13,000	26,000
A0216 - M0290 - Personnel Asst. 1	0.25	0.25	0.25	13,000	13,000	26,000
Total Staff Dollars and FTEs	1.00	1.00	1.00	54,000	54,000	108,000

Table B-4: Performance measures for HR/personnel services, employee risk management and employee relations services

Performance Measures HR and Personnel Services	FY 2016	FY 2017
Outcome Measure: POG Result Area-Ability of State Government to Achieve Results Efficiently and Effectively <ul style="list-style-type: none"> Capital projects and administrative and project support activities are adequately staffed to accomplish the legislatively approved program 	Yes	Yes
Output Measure: <ul style="list-style-type: none"> Number of FTEs supported 	115-135	115-135
Efficiency/Effectiveness Measure: <ul style="list-style-type: none"> Percent of actual to planned use of FTEs 	90%	90%

Package Description:**Finance and Administration**

Sub-package A-5 of the administrative support zero-based budget package funds finance and administrative services for the Ferries capital program, including: accounting and purchasing services (Organizations 365510 and 365520), external audit services (Organizations 271010 and 271030), administrative services (Organization 365910), security grant administration (Organization 363630) and environmental program management (Organization 363640). Detailed functions include:

Providing accounting services, including:

- Accounting for fixed assets, including: capitalization, depreciation and retirement of fixed assets and updating the Transportation Asset Reporting and Tracking System;
- Accounting for federal and local grants, including: monitoring set up of agreements in the accounting system, tracking expenditures against grant authorizations, preparing financial reports and reimbursement requests to grantor agencies, monitoring compliance with federal and local grant requirements, and supporting information requests from grantor auditors;
- Ensuring proper accounting for expenditures by treasury account, legislative program and fiscal period by monitoring expense budget control lines in the accounting system, reviewing accounts payable and receivable coding, monitoring work order entries, preparing journal vouchers to correct transactions, and reconciling and closing work orders;
- Conducting financial transactions, including processing consultant invoices, preparing billings under reimbursable agreements, transferring funds, cancelling warrants and tracking disposition of aged warrants;
- Reviewing general ledger summaries, such as, trial balances;
- Reporting construction work in progress;
- Preparing external state and federal financial reports; and
- Providing reception services.

Providing external audit services, including:

- Determining the reasonableness of consultant overhead rates;
- Reviewing payments to contractors and consultants;
- Identifying and resolving audit exceptions;
- Determining amounts due from or owed to contractors and consultants; and
- Providing other external audit support as required.

Providing administrative services, including:

- Managing building leases and rental agreements and acting as tenant liaison for service changes, maintenance and repair issues;
- Performing office space planning, developing tenant improvements and preparing modular office configurations;
- Managing the Ferries Division's fleet of TEF vehicles and equipment;
- Providing centralized review and approval of non-project related rent, telecommunications, copier and TEF payments;
- Managing mail distribution and collection;
- Administering state vehicle, employee and visitor parking programs;
- Coordinating vessel galley investments;
- Overseeing periodic physical inventory;
- Purchasing goods and services related to administrative activities; and
- Providing staff-aid support to the Division's Deputy Chief for Finance and Administration.

Providing administration of Homeland security grants.

Providing environmental program management, including:

- Assessing the regulatory environment to identify impacts on the policies and procedures used by engineering organizations to deliver the capital program;
- Developing, implementing, integrating and maintaining environmental protection policies and procedures for engineering organizations.

Table A-5: Fiscal Detail, Object of Expenditure Detail, Salary and FTE Detail for financial and administrative services, including accounting, external audit, payroll and administrative services

Financial and Administrative Services (A5)			
Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	2015-17
099-1 Puget Sd Capital Construction Account- State	2,359,000	2,352,000	4,711,000
Total by Fund	2,359,000	2,352,000	4,711,000
Staffing FTEs	6.80	6.80	6.80

Financial and Administrative Services (A5)			
Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	2015-17
A - Salaries and Wages	409,000	409,000	818,000
B - Benefits	146,000	146,000	292,000
C - Personal Service Contracts	-	-	-
E - Goods and Services	1,766,000	1,759,000	3,525,000
G - Travel	35,000	35,000	70,000
J - Capital Outlay	3,000	3,000	6,000
T - Intraagency Reimbursements	-	-	-
Total by Object	2,359,000	2,352,000	4,711,000

Financial and Administrative Services (A5)						
Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
90057 - 143M - Fiscal Analyst 5	0.10	0.10	0.10	6,000	6,000	12,000
A0300 - M0233 - Accountant	1.00	1.00	1.00	63,000	63,000	126,000
A0311 - M0232 - Accounting Asst. 3	1.00	1.00	1.00	52,000	52,000	104,000
90815 - 542H - Facilities Planner	0.25	0.25	0.25	18,000	18,000	36,000
A0327 - M0270 - Mail Clerk	0.50	0.50	0.50	20,000	20,000	40,000
A0322 - M0210 - Receptionist	0.50	0.50	0.50	22,000	22,000	44,000
A0328 - M0252 - Buyer 3	0.20	0.20	0.20	11,000	11,000	22,000
A0339 - M0251 - Buyer 2	1.00	1.00	1.00	52,000	52,000	104,000
09W024 - WMS2 - Enviro. Prog. Mgr	0.25	0.25	0.25	24,000	24,000	48,000
9P011 - 543G - Transp Planning Spec 3 (Security Grants)	1.00	1.00	1.00	70,000	70,000	140,000
A0215 - M0226 - Staff Aide	0.50	0.50	0.50	27,000	27,000	54,000
- - EXTERNAL AUDITOR (HQ)	0.50	0.50	0.50	44,000	44,000	88,000
Total Staff Dollars and FTEs	6.80	6.80	6.80	409,000	409,000	818,000

Table B-5: Performance measures for financial and administrative services, including accounting, external audit, purchasing and administrative services

Performance Measures for Finance and Administrative Services	FY 2016	FY 2017
<p>Outcome Measures: POG Result Area-Ability of State Government to Achieve Results Efficiently and Effectively</p> <ul style="list-style-type: none"> • The Ferries Division efficiently and effectively meets its capital program financial obligations • Expenditures are properly accounted for and reported in accordance with pertinent general and Ferries specific laws 	<p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p>
<p>Output Measures:</p> <ul style="list-style-type: none"> • Dollar amount of accounting transactions • Number of FTEs supported by administrative services 	<p>\$100-150 mil</p> <p>115-135</p>	<p>\$100-150 mil</p> <p>115-135</p>
<p>Efficiency/Effectiveness Measures:</p> <ul style="list-style-type: none"> • Close the biennium in compliance with RCW 43.88.290 • Number of audit findings pertaining to accounting for and reporting expenditures 	<p>Yes</p> <p>0</p>	<p>Yes</p> <p>0</p>

Package Description:

Communications

Sub-package A-6 of the administrative support zero-based budget package funds communications services for the Ferries capital program; including public involvement and community relations and outreach (Organization 368010) and coordination for mitigation of the adverse impacts of construction and customer information (Organization 368110). Detailed functions include:

Performing public involvement and community relations and outreach activities pertain to long-range capital plans and project design alternatives, including:

- Preparing and distributing, through a variety of media, notification of long-range capital plans and project design alternatives to customers, communities and the general public;
- Planning, organizing, and coordinating public involvement and community relations activities to facilitate agency-public dialogue about long-range capital plans and capital project design alternatives;
- Participating in public meetings and design presentations;
- Collecting, analyzing and reporting responses from customers, communities and the general public regarding long-range capital plans and project design alternatives; and
- Communicating to policy makers input from customers, communities and the general public regarding long-range capital plans and project design alternatives.

Coordinating mitigation of the adverse impacts of construction projects on customers, communities and the general public, including:

- Preparing notifications to riders that construction will disrupt or curtail ferry service and require that they adjust their means of transportation;
- Coordinating measures to facilitate safe and efficient movement of riders into and out of the terminal and through construction areas;
- Coordinating with transportation providers to mitigate the adverse impact of construction on modal connections by making adjustments in service levels, schedules and pick-up/drop-off locations;
- Leasing transportation services to mitigate the impacts of construction disruptions on ferry service; and
- Coordinating with communities to mitigate the impact of construction-related changes in ferry traffic flows on local transportation networks.

Providing general public information support to the capital program, including:

- Preparing press releases;
- Preparing web pages and information brochures describing capital projects;
- Preparing information about capital projects for use by the agency's information agents; and
- Coordinating public disclosure requests.

Table A-6: Fiscal Detail, Object of Expenditure Detail, Salary and FTE Detail for communications services, including public involvement, community relations and outreach, business development, coordination to mitigate the adverse impacts of construction and customer information

Communications Services (A6)			
Fiscal Detail			
Detail by Fund	FY 2016	FY 2017	2015-17
099-1 Puget Sd Capital Construction Account- State	249,000	249,000	498,000
Total by Fund	249,000	249,000	498,000
Staffing FTEs	2.40	2.40	2.40

Communications Services (A6)			
Object of Expenditure Detail			
Detail by Object of Expenditure	FY 2016	FY 2017	2015-17
A - Salaries and Wages	185,000	185,000	370,000
B - Benefits	48,000	48,000	96,000
C - Personal Service Contracts	-	-	-
E - Goods and Services	11,000	11,000	22,000
G - Travel	1,000	1,000	2,000
J - Capital Outlay	4,000	4,000	8,000
T - Intraagency Reimbursements	-	-	-
Total by Object	249,000	249,000	498,000

Communications Services (A6)						
Salary and FTE Detail						
List positions by classification	FTEs			Dollars		
	FY 2016	FY 2017	2015-17	FY 2016	FY 2017	2015-17
9W049 - WMS 3 - Corporate Communications Director	0.50	0.50	0.50	54,000	54,000	108,000
A0301 - M0226 - Staff Aid	0.50	0.50	0.50	27,000	27,000	54,000
9W018 - WMS 2 - Customer Communications Manager	0.20	0.20	0.20	19,000	19,000	38,000
9W054 - WMS 1 - Public Involvement Manager	0.60	0.60	0.60	43,000	43,000	86,000
90818 - 197M - Communications Consultant 5	0.60	0.60	0.60	42,000	42,000	84,000
Total Staff Dollars and FTEs	2.40	2.40	2.40	185,000	185,000	370,000

Table B-6: Performance measures for communications services, including public involvement, community relations and outreach, coordination to mitigate the adverse impacts of construction and customer information

Performance Measures for Communications Services	FY 2016	FY 2017
Outcome Measure: POG Result Area-Ability of State Government to Achieve Results Efficiently and Effectively <ul style="list-style-type: none"> The public is informed about the nature and impact of long-range plans The public is informed about the nature and impact of terminal projects 	Yes Yes	Yes Yes
Output Measure: <ul style="list-style-type: none"> Terminal preliminary engineering expenditures 	\$5-15 Mil	\$5-15 Mil
Efficiency/Effectiveness Measure: <ul style="list-style-type: none"> Number of findings of inadequate statutorily required public involvement 	0	0

TEIS Ferry Requirements

TEIS FERRY REQUIREMENTS

The Department will submit the Washington State Ferries TEIS project list electronically.

Additional Ferry Requirements

TEIS FERRY REQUIREMENTS

The Department will submit the Washington State Ferries TEIS project list electronically.

Personnel Information

FTE Summary Detail for 2015-17 Biennium

Pgm Code	Program Title	2013-15 Enacted with 2014 Supplemental	2015-17 CFL Adjustments	2015-17 Incremental Request	2015-17 Request	Difference
Operating Budget						
B	Toll Operations & Maintenance	38.7	-	37.7	76.3	37.7
C	Office of Information Technology	225.1	-	-	225.1	-
D	Facilities Maintenance & Operations	81.1	-	0.6	81.7	0.6
F	Aviation	10.6	-	1.0	11.6	1.0
H	Pgm. Delivery Management & Support	246.4	0.6	8.3	255.3	8.9
K	Transportation Economic Partnerships	2.0	-	0.5	2.5	0.5
M	Highway Maintenance and Operations	1,551.8	(9.0)	(104.7)	1,438.1	(113.7)
Q	Traffic Operations	236.4	-	1.0	237.4	1.0
S	Transportation Management & Support	172.2	(1.0)	4.0	175.2	3.0
T	Transp. Planning, Data, & Research	186.5	-	1.0	187.5	1.0
U	Charges from Other Agencies	-	-	-	-	-
V	Public Transportation	24.7	-	-	24.7	-
X	Ferries Maintenance and Operations	1,707.5	(1.0)	29.7	1,736.1	28.7
Y	Rail	10.0	-	-	10.0	-
Z	Local Programs	43.7	-	-	43.7	-
Subtotal Operating*		4,536.3	(10.4)	(21.0)	4,504.8	(31.4)
E	Transportation Equipment Fund	209.3	-	-	209.3	-
Total Operating		4,745.6	(10.4)	(21.0)	4,714.1	(31.4)
Capital Budget						
D	Capital Facilities	12.3	(12.3)	7.5	7.5	(4.8)
I	Highway Improvements	1,320.0	(1,320.0)	1,205.0	1,205.0	(115.0)
P	Highway Preservation	880.0	(880.0)	795.0	795.0	(85.0)
Q	Traffic Operations	10.3	(10.3)	10.3	10.3	-
W	Ferries Construction	126.0	(126.0)	126.0	126.0	-
Y	Rail	29.0	(29.0)	29.0	29.0	-
Z	Local Programs	-	-	-	-	-
Total Capital		2,377.6	(2,377.6)	2,172.8	2,172.8	(204.8)
Total Budget (Appropriated only)*		6,913.9	(2,388.0)	2,151.8	6,677.6	(236.2)
Total Budget (Includes TEF)*		7,123.2	(2,388.0)	2,151.8	6,886.9	(236.2)

*Due to rounding of Programs' FTEs to the tenths decimal place, Subtotal and Total amounts differ by 0.4