Decision Package Summary

State of Washington

Agency Budget Request Decision Package Summary

Agency: 405 Department of Transportation
Budget Period: 2017-19

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Individual Decision Packages

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: 5W Fuel Costs
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

The department requests a reduction to appropriation authority consistent with projected fuel prices from the June 2016 Five Percent Biodiesel (B5) Adjusted Forecast and the effect of fuel hedges that have been executed. A portion of the requested authority will also biennialize the fuel budgets for the third 144-car vessel that will be added to the fleet at the end of the 2015-17 biennium – increasing the partial-biennium authority to cover a full 24-months of use. Finally, the fuel gallons are reduced for savings in gallons once the fourth 144-car vessel comes on line in fiscal year 2019.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000
Total Cost	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-1 State	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000
Total by Fund	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000
Total Cost	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000
Program X - Operating					
E. Goods and Services	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000
Total by Program	-5,229,000	3,019,000	-2,210,000	-1,105,000	-1,105,000

Package Description

Washington State Ferries (WSF) is the largest consumer of biodiesel fuel in state government. Ferries' fuel budget is based on the number of gallons consumed per-year at the anticipated per-gallon price. The per-gallon price used to calculate the necessary budget adjustment was the June 2016 Fuel Price Forecast of biodiesel (B5), non-hedged, including all applicable taxes and fees, and then adjusted for the impact of fuel hedges executed.

The department uses actual B5 biodiesel prices, including delivery fees, applicable taxes, and the markup costs WSF must pay as the baseline in forecasting. On July 1, 2013, WSF began receiving a sales tax exemption on biodiesel fuel purchases. This exemption has been incorporated into the baseline B5

biodiesel price forecast. An adjustment to the baseline to mitigate volatility is then applied to the B5 biodiesel price to derive the unhedged fuel-price forecast.

This adjustment is intended to mitigate the volatility of using a single price point in its forecasting. The department compares the crude oil prices of five forecasting entities – WSDOT official forecast, Global Insight, New York Mercantile Exchange (NYMEX), Consensus Economics, and Economy.com – and determines the difference between the baseline forecast and the five forecasting entities' average price. These data are used to adjust the baseline for a forecast of non-hedged B5 biodiesel prices. Based on the June 2016 Forecast, the average non-hedged B5 fuel price is projected to be $2.23 per-gallon for the 2017-19 biennium, up from the $1.72 per-gallon price from the February 2016 forecast. The non-hedged per-gallon forecasted prices are then adjusted to account for fuel hedges that have been executed.

To date, the department has hedged 15,120,000 gallons for the 2017-19 biennium at an average price of $1.77 per-gallon, down from the $2.30 per-hedged gallon reflected in the February 2016 forecast. Hedges are entered into for budget stability and have always been locked in below prices that are forecasted at the time of the hedge.

The final per-gallon price of B5 biodiesel, taking into account both the June 2016 forecast and hedges executed to-date is $2.05 per-gallon for the biennium. This results in a price that is lower than the 2016 enacted budget.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Approval of this request will align the WSF budget to expected costs, consistent with continuing to provide the current level of ferry service.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

This is a technical adjustment to align the budget to most-recently forecasted fuel prices and fuel hedges executed to-date.

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

The alternative of not adjusting the WSF fuel budget would dedicate unneeded resources to this activity, unnecessarily committing account balance and precluding its use for other priorities.

What are the consequences of not funding this request?

N/A

Expenditure Calculations and Assumptions

The budget estimate is based on the June 2016 Adjusted B5 Biodiesel Forecast for the 2015-17 biennium (please see attachment A). All fuel purchased at Harbor Island is based on a five percent biodiesel blend, with the price based on the department's June 2016 official forecast for biodiesel.

The calculation 1) compares projected costs for 2017-19 to the value of the fuel budget in the 2017-19 carry-forward level (which is the 2015-17 appropriation enacted in the 2016 Legislative session); 2) adds the incremental amount needed to biennialize the 2015-17 addition of the third 144-car vessel to the fleet; and 3) adjusts for the deployment in 2017-19 of the fourth 144-car vessel, which is more fuel-efficient than the vessel it is scheduled to replace (the MV Hyak).

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

All costs are ongoing

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: 5W Ferries Fuel Costs

Base Budget: The Enacted 2016 Supplemental baseline ferries fuel budget of $78.3 million was based on the February 2016 Fuel Cost Estimate. The appropriation is from the Puget Sound Ferry Operations Account-state (109-1).

Washington State Ferries Fuel Cost Estimates
Estimates Based on February 2016 Motor Fuel Price Forecast
(as of February 18, 2016)

	FY 2016	FY 2017	2015-2017 Biennium (Projected)
Total Gallons Required	**18,233,702**	**18,233,702**	**36,467,404**
Hedged			
Total Gallons Hedged	14,658,000	12,096,000	26,754,000
Average price per gallon hedged fuel, including fees	$2.46	$2.10	$2.30
Subtotal Cost of Hedged Fuel, Including Fees (rounded to $ in 1,000s)	**$36,030,000**	**$25,427,000**	**$61,457,000**
Non-Hedged			
Total Gallons Not Hedged	3,575,702	6,137,702	9,713,404
Average price per gallon biodiesel (B5), including fees	*$1.56*	*$1.82*	*$1.72*
Subtotal Cost of Non-Hedged Fuel, Including Fees (rounded to $ in 1,000s)	**$5,578,000**	**$11,171,000**	**$16,749,000**
TOTAL Fuel Costs Including Fees	**$41,608,000**	**$36,598,000**	**$78,206,000**
Average Cost per Gallon, Including Fees	*$2.28*	*$2.01*	*$2.14*
Fuel Hedging Consultant Cost	$50,000	$50,000	$100,000
Total Cost of Fuel and Hedging Consultant	**$41,658,000**	**$36,648,000**	**$78,306,000**
Average Cost per Gallon Including Fees and Hedging Consultant	*$2.28*	*$2.01*	*$2.15*

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.
Non-Hedged Price Per-Gallon from Figure 11, Near-and Long-term Annual Fuel Price, Page 11 of February 2016 Transportation Revenue Forecast Summary (Volume I).

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		**This is a technical adjustment to align the budget to most-recently forecasted fuel prices.**

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

Washington State Ferries Fuel Cost Estimates
Estimates Based on June 2016 Motor Fuel Price Forecast
(as of June 16, 2016)

Total Budget	**FY 2018**	**FY 2019**	**2017-2019 Biennium (Projected)**
Fuel Appropriation: Chapter 10, 2015 Laws PV, Section 221 (4).	**$ 41,658,000**	**$ 36,648,000**	**$ 78,306,000**
Consumption Assumed in 2015-17 Budget	18,233,702	18,233,702	36,467,404
3rd Olympic class vessel	407,760	394,200	801,960
4th Olympic class vessel	-	(77,000)	(77,000)
Total Gallons Required	**18,641,462**	**18,550,902**	**37,192,364**
Hedged			
Total Gallons Hedged	9,072,000	6,048,000	15,120,000
Average price per gallon hedged fuel, including fees	$1.73	$1.82	$1.77
Subtotal Cost of Hedged Fuel, Including Fees (rounded to $ in 1,000s)	**$15,708,885**	**$10,985,496**	**$26,694,381**
Non-Hedged			
Total Gallons Not Hedged	9,569,462	12,502,902	22,072,364
Average price per gallon biodiesel (B5), including fees	*$2.16*	*$2.29*	*$2.23*
Subtotal Cost of Non-Hedged Fuel, Including Fees (rounded to $ in 1,000s)	**$20,670,038**	**$28,631,646**	**$49,301,684**
TOTAL Fuel Costs Including Fees (rounded to $ in 1,000s)	**$36,379,000**	**$39,617,000**	**$75,996,000**
Average Cost per Gallon, Including Fees	*$1.95*	*$2.14*	*$2.04*
Fuel Hedging Consultant Cost	$50,000	$50,000	$100,000
Total Cost of Fuel and Hedging Consultant	**$36,429,000**	**$39,667,000**	**$76,096,000**
Average Cost per Gallon Including Fees and Hedging Consultant	*$1.95*	*$2.14*	*$2.05*
Variance: Updated Cost Estimate versus Appropriation	**($5,229,000)**	**$3,019,000**	**($2,210,000)**

Base Budget	**FY 2018**	**FY 2019**	**2017-2019 Biennium (Projected)**
Fuel Appropriation: Chapter 10, 2015 Laws PV, Section 221 (4).			$78,306,000
Total Gallons Required	**18,233,702**	**18,233,702**	**36,467,404**
Hedged			
Total Gallons Hedged	9,072,000	6,048,000	15,120,000
Average price per gallon hedged fuel, including fees	$1.73	$1.82	$1.77
Subtotal Cost of Hedged Fuel, Including Fees (rounded to $ in 1,000s)	**$15,708,885**	**$10,985,496**	**$26,694,381**
Non-Hedged			
Total Gallons Not Hedged	9,161,702	12,185,702	21,347,404
Average price per gallon biodiesel (B5), including fees	*$2.16*	*$2.29*	*$2.23*
Subtotal Cost of Non-Hedged Fuel, Including Fees (rounded to $ in 1,000s)	**$19,789,276**	**$27,905,258**	**$47,694,534**
TOTAL Fuel Costs Including Fees (rounded to $ in 1,000s)	**$35,498,000**	**$38,891,000**	**$74,389,000**
Average Cost per Gallon, Including Fees	*$1.95*	*$2.13*	*$2.04*
Fuel Hedging Consultant Cost	$50,000	$50,000	$100,000
Total Cost of Fuel and Hedging Consultant	**$35,548,000**	**$38,941,000**	**$74,489,000**
Average Cost per Gallon Including Fees and Hedging Consultant	*$1.95*	*$2.14*	*$2.04*
Variance: Updated Cost Estimate versus Appropriation			**($3,817,000)**

Additional Gallons Required for new Olympic Class vessels	**FY 2018**	**FY 2019**	**2017-2019 Biennium (Projected)**
3rd Olympic class vessel	407,760	394,200	801,960
4th Olympic class vessel	-	(77,000)	(77,000)
Total Gallons Required	**407,760**	**317,200**	**724,960**
Non-Hedged			
Total Gallons Not Hedged	407,760	317,200	724,960
Average price per gallon biodiesel (B5), including fees	*$2.16*	*$2.29*	*$2.22*
Subtotal Cost of Non-Hedged Fuel, Including Fees (rounded to $ in 1,000s)	**$881,000**	**$726,000**	**$1,607,000**
TOTAL Fuel Costs Including Fees	**$881,000**	**$726,000**	**$1,607,000**
Average Cost per Gallon, Including Fees	*$2.16*	*$2.29*	*$2.22*

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.

Non-Hedged Price Per-Gallon from Figure 11, Near-and Long-term Annual Fuel Price, page 11 of the June 2016 Transportation Revenue Forecast Summary (Volume I). The biennial price per gallon is derived by dividing the subtotal cost of Non-Hedged Fuel by the number of gallons for the biennium.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: 8F Fuel Rate Adjustments
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: E – Transportation Equipment Fund

Agency Recommendation Summary Text:

Various WSDOT programs use gas and diesel fuel for motor vehicles and equipment to maintain and operate the state highway system. The June 2016 price forecast projects higher fuel costs in the 2017-19 biennium. The department requests an increase of $1.7 million to appropriations for programs that use gas and diesel fuel. The department also requests a $3.3 million increase in Transportation Equipment Fund (TEF) spending authority for TEF purchases of fuel for the department and for fuel sold to other agencies.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 039-1 State	1,000	2,000	3,000	2,000	1,000
Fund 09F-1 HOT-State	-8,000	-6,000	-14,000	-7,000	-7,000
Fund 108-1 MVA-State	870,000	806,000	1,676,000	839,000	837,000
Fund 109-1 State	-30,000	9,000	-21,000	-11,000	-10,000
Fund 218-1 MMA-State	6,000	7,000	13,000	7,000	6,000
Fund 410-6 NonAp	1,201,000	2,135,000	3,336,000	1,667,000	1,669,000
Total Cost	2,040,000	2,953,000	4,993,000	2,497,000	2,496,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program B - Operating					
Fund 09F-1 HOT-State	-8,000	-6,000	-14,000	-7,000	-7,000
Total by Fund	-8,000	-6,000	-14,000	-7,000	-7,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program C - Operating					
Fund 108-1 MVA-State	-11,000	0	-11,000	-5,000	-6,000
Total by Fund	-11,000	0	-11,000	-5,000	-6,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program D - Operating					
Fund 108-1 MVA-State	-1,000	20,000	19,000	10,000	9,000
Total by Fund	-1,000	20,000	19,000	10,000	9,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program E - Operating					
Fund 410-6 NonAppr	1,201,000	2,135,000	3,336,000	1,667,000	1,669,000
Total by Fund	1,201,000	2,135,000	3,336,000	1,667,000	1,669,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program F - Operating					
Fund 039-1 State	1,000	2,000	3,000	2,000	1,000
Total by Fund	1,000	2,000	3,000	2,000	1,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Program H - Operating					
Fund 108-1 MVA-State	7,000	20,000	27,000	14,000	13,000
Total by Fund	7,000	20,000	27,000	14,000	13,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program K - Operating					
Fund 108-1 MVA-State	5,000	5,000	10,000	5,000	5,000
Total by Fund	5,000	5,000	10,000	5,000	5,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program M - Operating					
Fund 108-1 MVA-State	879,000	778,000	1,657,000	828,000	829,000
Total by Fund	879,000	778,000	1,657,000	828,000	829,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program Q - Operating					
Fund 108-1 MVA-State	-15,000	-33,000	-48,000	-24,000	-24,000
Total by Fund	-15,000	-33,000	-48,000	-24,000	-24,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program S - Operating					
Fund 108-1 MVA-State	6,000	6,000	12,000	6,000	6,000
Total by Fund	6,000	6,000	12,000	6,000	6,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program T - Operating					
Fund 108-1 MVA-State	-5,000	3,000	-2,000	-1,000	-1,000
Total by Fund	-5,000	3,000	-2,000	-1,000	-1,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-1 State	-30,000	9,000	-21,000	-11,000	-10,000
Total by Fund	-30,000	9,000	-21,000	-11,000	-10,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program Y - Operating					
Fund 218-1 MMA-State	6,000	7,000	13,000	7,000	6,000
Total by Fund	6,000	7,000	13,000	7,000	6,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program Z - Operating					
Fund 108-1 MVA-State	5,000	7,000	12,000	6,000	6,000
Total by Fund	5,000	7,000	12,000	6,000	6,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Revenue	**FY 2018**	**FY 2019**	**2017-19 Total**	**FY 2020**	**FY 2021**
Fund 410-6 NonAppr	1,201,000	2,135,000	3,336,000	1,667,000	1,669,000

Object of Expenditure	**FY 2018**	**FY 2019**	**2017-19 Total**	**FY 2020**	**FY 2021**
E. Goods and Services	1,767,000	2,115,000	3,882,000	1,942,000	1,940,000
F. Net Cost of Goods Sold/Fuel	273,000	838,000	1,111,000	555,000	556,000
Total Cost	2,040,000	2,953,000	4,993,000	2,497,000	2,496,000
Program B - Operating					
E. Goods and Services	-8,000	-6,000	-14,000	-7,000	-7,000
Total by Program	-8,000	-6,000	-14,000	-7,000	-7,000
Program C - Operating					
E. Goods and Services	-11,000	0	-11,000	-5,000	-6,000
Total by Program	-11,000	0	-11,000	-5,000	-6,000

Program D - Operating					
E. Goods and Services	-1,000	20,000	19,000	10,000	9,000
Total by Program	-1,000	20,000	19,000	10,000	9,000
Program E - Operating					
E. Goods and Services	928,000	1,297,000	2,225,000	1,112,000	1,113,000
F. Net Cost of Goods Sold/Fuel	273,000	838,000	1,111,000	555,000	556,000
Total by Program	1,201,000	2,135,000	3,336,000	1,667,000	1,669,000
Program F - Operating					
E. Goods and Services	1,000	2,000	3,000	2,000	1,000
Total by Program	1,000	2,000	3,000	2,000	1,000
Program H - Operating					
E. Goods and Services	7,000	20,000	27,000	14,000	13,000
Total by Program	7,000	20,000	27,000	14,000	13,000
Program K - Operating					
E. Goods and Services	5,000	5,000	10,000	5,000	5,000
Total by Program	5,000	5,000	10,000	5,000	5,000
Program M - Operating					
E. Goods and Services	879,000	778,000	1,657,000	828,000	829,000
Total by Program	879,000	778,000	1,657,000	828,000	829,000
Program Q - Operating					
E. Goods and Services	-15,000	-33,000	-48,000	-24,000	-24,000
Total by Program	-15,000	-33,000	-48,000	-24,000	-24,000
Program S - Operating					
E. Goods and Services	6,000	6,000	12,000	6,000	6,000
Total by Program	6,000	6,000	12,000	6,000	6,000
Program T - Operating					
E. Goods and Services	-5,000	3,000	-2,000	-1,000	-1,000
Total by Program	-5,000	3,000	-2,000	-1,000	-1,000
Program X - Operating					
E. Goods and Services	-30,000	9,000	-21,000	-11,000	-10,000
Total by Program	-30,000	9,000	-21,000	-11,000	-10,000
Program Y - Operating					
E. Goods and Services	6,000	7,000	13,000	7,000	6,000
Total by Program	6,000	7,000	13,000	7,000	6,000
Program Z - Operating					
E. Goods and Services	5,000	7,000	12,000	6,000	6,000
Total by Program	5,000	7,000	12,000	6,000	6,000

Package Description

TEF is responsible for the acquisition and operating costs of about 6,500 vehicles and equipment of all types. Department programs use this equipment to operate and maintain the highway system and to support department activities. In the 2017-19 biennium, programs will use approximately seven million gallons of fuel.

As a nonappropriated, proprietary, internal service fund, TEF charges rent for the use of equipment. The rental rates paid by department programs include fuel costs; these rental rates will increase in the 2017-19 biennium because of higher fuel costs. The impact of increased TEF rental rates for capital programs is absorbed in the cost of capital projects.

This package also requests an increase in TEF nonappropriated spending authority of $3.3 million for the increased purchase cost of fuel for the department and for fuel sold to other agencies.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
N/A

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
This decision package is a technical adjustment to reflect expected fuel prices and consumption and does not change planned activities or services.

What alternatives were explored, and why was this alternative chosen?
The department has instituted the following fuel conservation measures: (1) a "no idle" policy that requires vehicle operators to turn off engines prior to leaving vehicles; (2) using energy-efficient LED lighting on equipment when possible; (3) teaching driving techniques that conserve fuel; (4) keeping equipment operating at peak efficiency; and (5) purchasing new equipment and updating existing equipment with fuel-saving technology when possible.

TEF's vehicles and equipment are essential to accomplishing the department's mission of operating and maintaining the state's highways. Other than ongoing efforts to reduce consumption, the alternative would be to defer replacement of worn-out equipment, using those resources to pay higher fuel costs instead. The alternative of requesting additional appropriation authority was chosen in order to avoid further exacerbating the backlog of equipment replacement needs and to maintain current levels of service.

What are the consequences of not funding this request?
TEF would have to reduce expenditures to replace worn-out equipment (increasing the current $92 million equipment replacement backlog), which would affect the capability of the department to perform its mission. Department programs would have to reduce their services, which also would affect accomplishment of the agency's mission.

Expenditure Calculations and Assumptions
This request is based on the June 2016 fuel price forecast of the Transportation Revenue Forecast Council. The calculations also take into account actual consumption and prices through May 2016, in addition to a forecast of fuel consumption for June 2016 forward, based on the prior two-year average for each forecasted month.

Department fuel costs are included in TEF rental rates. The forecasted rental change by program is shown in the following table. The change in equipment rent by program also takes into account the change in specific equipment rented by programs, thus some programs show a decrease in equipment rent because of a decrease in equipment rented. Capital programs I, P, and W are assumed to absorb the increase in fuel costs into the cost of capital projects.

2017-19 Change in TEF Equipment Rental Due to Fuel Based on the June 2016 Forecast				
Pgm.	**Description**	**Forecast Change in Equipment Rental**	**Adjustment for Capital Programs Absorbing Change in Fuel Cost**	**Change in Funding Needed**
B	Toll Oper.& Maint.	($14,000)	$0	($14,000)
C	Info. Tech.	($11,000)	$0	($11,000)
D	Facilities	$19,000	$0	$19,000
F	Aviation	$3,000	$0	$3,000
H	Pgm Delivery	$27,000	$0	$27,000
I	Improvements	($29,000)	$29,000	$0
K	Public/Private Partnership	$10,000	$0	$10,000
M	Highway Maint & Oper.	$1,657,000	$0	$1,657,000
P	Preservation	$589,000	($589,000)	$0
Q	Traffic Operations	($48,000)	$0	($48,000)
S	Trans. Mgmnt.	$12,000	$0	$12,000
T	Planning, Data, Rsrch.	($2,000)	$0	($2,000)
V	Public Transportation	$0	$0	$0
W	Ferries Construction	$8,000	($8,000)	$0
X	Ferries Operations	($21,000)	$0	($21,000)
Y	Rail Programs	$13,000	$0	$13,000
Z	Local Programs	$12,000	$0	$12,000
	Subtotal WSDOT	$2,225,000	($568,000)	$1,657,000
	Other Agencies	$1,111,000		
	Total Program E	$3,336,000		

Change in Estimated TEF Expenditures for Fuel from February 2016 to June 2016 Forecast

Current 2015-17 Budget Based on February 2016 Forecast

	WSDOT			Other Agencies			Total Program E		
	FY 16	FY 17	Biennium	FY 16	FY 17	Biennium	FY 16	FY 17	Biennium
Gasoline									
Gallons	1,216,184	1,237,319	2,453,503	3,085,118	3,124,411	6,209,529	4,301,302	4,361,730	8,663,032
Price Per Gallon	$2.3524	$2.3753	$2.3640	$2.2891	$2.3748	$2.3322	$2.3524	$2.3753	$2.3412
Total Unleaded	$2,861,000	$2,939,000	$5,800,000	$7,062,000	$7,420,000	$14,482,000	$9,923,000	$10,359,000	$20,282,000
Diesel									
Gallons	2,381,133	2,278,309	4,659,442	289,833	288,698	578,531	2,670,966	2,567,007	5,237,973
Price Per Gallon	$2.4535	$2.7130	$2.5804	$2.4566	$2.7122	$2.5841	$2.4535	$2.7130	$2.5808
Total Straight Diesel	$5,842,000	$6,181,000	$12,023,000	$712,000	$783,000	$1,495,000	$6,554,000	$6,964,000	$13,518,000
Total Gas & Diesel									
Gallons	3,597,317	3,515,628	7,112,945	3,374,951	3,413,109	6,788,060	6,972,268	6,928,737	13,901,005
Dollars	$8,703,000	$9,120,000	$17,823,000	$7,774,000	$8,203,000	$15,977,000	$16,477,000	$17,323,000	$33,800,000

Forecast for 2017-19 Based on June 2016 Fuel Forecast

	WSDOT			Other Agencies			Total Program E		
	FY 18	FY 19	Biennium	FY 18	FY 19	Biennium	FY 18	FY 19	Biennium
Gasoline									
Gallons	1,239,153	1,242,373	2,481,526	3,072,595	3,087,784	6,160,379	4,311,748	4,330,157	8,641,905
Price Per Gallon	$2.3508	$2.6409	$2.4960	$2.3505	$2.6407	$2.4960	$2.3508	$2.6409	$2.4960
Total Unleaded	$2,913,000	$3,281,000	$6,194,000	$7,222,000	$8,154,000	$15,376,000	$10,135,000	$11,435,000	$21,570,000
Diesel									
Gallons	2,313,636	2,290,614	4,604,250	284,112	284,689	568,801	2,597,748	2,575,303	5,173,051
Price Per Gallon	$2.9037	$3.1153	$3.0090	$2.9038	$3.1157	$3.0098	$2.9037	$3.1153	$3.0091
Total Diesel	$6,718,000	$7,136,000	$13,854,000	$825,000	$887,000	$1,712,000	$7,543,000	$8,023,000	$15,566,000
Total Gas & Diesel									
Gallons	3,552,789	3,532,987	7,085,776	3,356,707	3,372,473	6,729,180	6,909,496	6,905,460	13,814,956
Dollars	$9,631,000	$10,417,000	$20,048,000	$8,047,000	$9,041,000	$17,088,000	$17,678,000	$19,458,000	$37,136,000

Change From February 2016 Forecast for 2015-17 to June 2016 Forecast for 2017-19

	WSDOT			Other Agencies			Total Program E		
	FY 18	FY 19	Biennium	FY 18	FY 19	Biennium	FY 18	FY 19	Biennium
Gasoline									
Gallons	22,969	5,054	28,023	(12,523)	(36,627)	(49,150)	10,446	(31,573)	(21,127)
Price Per Gallon	($0.0016)	$0.2656	$0.1321	$0.0614	$0.2659	$0.1637	($0.0016)	$0.2656	$0.1548
Total Unleaded	52,000	342,000	394,000	160,000	734,000	894,000	212,000	1,076,000	1,288,000
Diesel									
Gallons	(67,497)	12,305	(55,192)	(5,721)	(4,009)	(9,730)	(73,218)	8,296	(64,922)
Price Per Gallon	$0.4502	$0.4023	$0.4286	$0.4472	$0.4035	$0.4257	$0.4502	$0.4023	$0.4283
Total Diesel	876,000	955,000	1,831,000	113,000	104,000	217,000	989,000	1,059,000	2,048,000
Total Gas & Diesel									
Gallons	(44,528)	17,359	(27,169)	(18,244)	(40,636)	(58,880)	(62,772)	(23,277)	(86,049)
Dollars	928,000	1,297,000	2,225,000	273,000	838,000	1,111,000	1,201,000	2,135,000	3,336,000

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

Fuel cost increases are expected to be ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: 8F Fuel Rate Adjustments

Base Budget: The current 2015-17 biennium budget, enacted in the 2016 Legislative Session, was based on the February 2016 price forecast, and assumed the department's appropriated programs would spend $17,823,000 for gas and diesel fuel (excluding ferry vessel fuel). The February 2016 forecast also projected purchases on the part of other agencies to total $15,977,000. Altogether, the TEF program was budgeted to spend $33,800,000 in nonappropriated Transportation Equipment Funds for fuel.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	The TEF program, in addition to providing fuel to other WSDOT programs, sells fuel to other state agencies, with the largest external customer being the WSP.
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:

Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections	**N/A**	

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: AA Capital Projects
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: I – Improvements

Agency Recommendation Summary Text:

Funding is provided to deliver projects funded through the Washington State Department of Transportation (WSDOT) capital programs. The funding will allow the department to move towards the completion of the 2003 and 2005 transportation revenue packages and to continue implementing the 2015 Connecting Washington Transportation Package.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
	0	0	0	0	0
Fund 02M-1 ERAA-State	212,000	212,000	424,000	183,000	182,000
Fund 094-1 TInA-State	2,684,000	2,683,000	5,367,000	2,684,000	2,683,000
Fund 096-1 HIA-State	147,000	146,000	293,000	147,000	146,000
Fund 096-2 HIA-Federal	109,000	109,000	218,000	491,000	490,000
Fund 097-1 RV-State	1,240,000	1,240,000	2,480,000	1,098,000	1,098,000
Fund 099-1 PSCC-State	32,175,000	32,175,000	64,350,000	25,889,000	25,889,000
Fund 099-2 PSCC-Federal	66,293,000	66,294,000	132,587,000	65,185,000	65,185,000
Fund 099-7 PSCC-Local	7,827,000	7,827,000	15,654,000	50,000	50,000
Fund 09H-1 TPA-State	58,343,000	58,340,000	116,683,000	46,224,000	46,224,000
Fund 09H-T TPA-Bond	225,000,000	224,000,000	449,000,000	87,500,000	87,500,000
Fund 106-1 HSF-State	4,570,000	4,569,000	9,139,000	3,375,000	3,375,000
Fund 108-1 MVA-State	50,627,000	50,628,000	101,255,000	59,439,000	59,438,000
Fund 108-2 MVA-Federal	399,912,000	399,909,000	799,821,000	336,962,000	336,963,000
Fund 108-7 MVA-Local	22,277,000	22,276,000	44,553,000	49,483,000	49,484,000
Fund 16J-1 520-State	13,289,000	13,289,000	26,578,000	273,000	272,000
Fund 20H-1 CWA-State	598,592,000	598,589,000	1,197,181,000	498,855,000	498,853,000
Fund 20H-T CWA-Bond	134,000,000	134,000,000	268,000,000	585,000,000	585,000,000
Fund 215-1 SpC-State	73,000	73,000	146,000	0	0
Fund 218-1 MMA-State	54,460,000	54,458,000	108,918,000	48,871,000	48,869,000
Fund 218-2 MMA-Federal	510,000	510,000	1,020,000	0	0
Fund 511-1 TNB-State	1,546,000	1,545,000	3,091,000	1,402,000	1,401,000
Fund 535-1 AWV-State	61,023,000	61,023,000	122,046,000	35,028,000	35,027,000
Fund 550-1 Nic-State	3,504,000	3,505,000	7,009,000	9,771,000	9,771,000
Fund 550-T Nic-Bond	52,000,000	51,000,000	103,000,000	6,000,000	6,000,000
Fund 595-1 I405-State	6,000,000	6,000,000	12,000,000	2,500,000	2,500,000
Total Cost	1,796,413,000	1,794,400,000	3,590,813,000	1,866,410,000	1,866,400,000
Staffing FTEs	2,156.8	2,154.8	2,155.8	2,154.8	2,154.8
Program D - Capital					
	0	0	0	0	0
Fund 108-1 MVA-State	3,044,000	3,045,000	6,089,000	3,158,000	3,159,000
Fund 20H-1 CWA-State	11,500,000	11,500,000	23,000,000	7,500,000	7,500,000
Total by Fund	14,544,000	14,545,000	29,089,000	10,658,000	10,659,000
Staffing FTEs	7.5	7.5	7.5	7.5	7.5

Program I - Capital					
	0	0	0	0	0
Fund 09H-1 TPA-State	56,205,000	56,204,000	112,409,000	43,965,000	43,965,000
Fund 09H-T TPA-Bond	225,000,000	224,000,000	449,000,000	87,500,000	87,500,000
Fund 108-1 MVA-State	19,178,000	19,178,000	38,356,000	17,589,000	17,588,000
Fund 108-2 MVA-Federal	103,297,000	103,296,000	206,593,000	81,385,000	81,385,000
Fund 108-7 MVA-Local	7,827,000	7,826,000	15,653,000	41,154,000	41,154,000
Fund 16J-1 520-State	13,153,000	13,154,000	26,307,000	0	0
Fund 20H-1 CWA-State	374,919,000	374,918,000	749,837,000	346,184,000	346,184,000
Fund 20H-T CWA-Bond	134,000,000	134,000,000	268,000,000	585,000,000	585,000,000
Fund 215-1 SpC-State	73,000	73,000	146,000	0	0
Fund 218-1 MMA-State	8,995,000	8,994,000	17,989,000	0	0
Fund 535-1 AWV-State	61,023,000	61,023,000	122,046,000	35,028,000	35,027,000
Fund 550-1 Nic-State	3,057,000	3,058,000	6,115,000	1,845,000	1,844,000
Fund 550-T Nic-Bond	23,000,000	22,000,000	45,000,000	0	0
Fund 595-1 I405-State	6,000,000	6,000,000	12,000,000	2,500,000	2,500,000
Total by Fund	1,035,727,000	1,033,724,000	2,069,451,000	1,242,150,000	1,242,147,000
Staffing FTEs	1,205.0	1,205.0	1,205.0	1,205.0	1,205.0
Program P - Capital					
	0	0	0	0	0
Fund 097-1 RV-State	1,240,000	1,240,000	2,480,000	1,098,000	1,098,000
Fund 09H-1 TPA-State	104,000	104,000	208,000	270,000	270,000
Fund 106-1 HSF-State	1,000	0	1,000	0	0
Fund 108-1 MVA-State	25,447,000	25,447,000	50,894,000	35,848,000	35,848,000
Fund 108-2 MVA-Federal	283,368,000	283,367,000	566,735,000	247,777,000	247,778,000
Fund 108-7 MVA-Local	5,200,000	5,200,000	10,400,000	2,579,000	2,580,000
Fund 16J-1 520-State	136,000	135,000	271,000	273,000	272,000
Fund 20H-1 CWA-State	91,215,000	91,215,000	182,430,000	89,380,000	89,380,000
Fund 511-1 TNB-State	1,546,000	1,545,000	3,091,000	1,402,000	1,401,000
Fund 550-1 Nic-State	447,000	447,000	894,000	7,926,000	7,927,000
Fund 550-T Nic-Bond	29,000,000	29,000,000	58,000,000	6,000,000	6,000,000
Total by Fund	437,704,000	437,700,000	875,404,000	392,553,000	392,554,000
Staffing FTEs	795.0	795.0	795.0	795.0	795.0
Program Q - Capital					
	0	0	0	0	0
Fund 108-1 MVA-State	2,908,000	2,908,000	5,816,000	2,844,000	2,843,000
Fund 108-2 MVA-Federal	2,553,000	2,553,000	5,106,000	2,100,000	2,100,000
Fund 108-7 MVA-Local	250,000	250,000	500,000	250,000	250,000
Total by Fund	5,711,000	5,711,000	11,422,000	5,194,000	5,193,000
Staffing FTEs	10.3	10.3	10.3	10.3	10.3
Program W - Capital					
	0	0	0	0	0
Fund 099-1 PSCC-State	32,175,000	32,175,000	64,350,000	25,889,000	25,889,000
Fund 099-2 PSCC-Federal	66,293,000	66,294,000	132,587,000	65,185,000	65,185,000
Fund 099-7 PSCC-Local	7,827,000	7,827,000	15,654,000	50,000	50,000
Fund 09H-1 TPA-State	1,462,000	1,461,000	2,923,000	1,989,000	1,989,000
Fund 20H-1 CWA-State	73,611,000	73,610,000	147,221,000	11,107,000	11,106,000
Fund 218-1 MMA-State	0	0	0	1,367,000	1,367,000
Total by Fund	181,368,000	181,367,000	362,735,000	105,587,000	105,586,000
Staffing FTEs	126.0	126.0	126.0	126.0	126.0
Program Y - Capital					
	0	0	0	0	0
Fund 02M-1 ERAA-State	212,000	212,000	424,000	183,000	182,000
Fund 094-1 TInA-State	2,684,000	2,683,000	5,367,000	2,684,000	2,683,000
Fund 218-1 MMA-State	22,757,000	22,757,000	45,514,000	28,752,000	28,751,000
Fund 218-2 MMA-Federal	510,000	510,000	1,020,000	0	0
Total by Fund	26,163,000	26,162,000	52,325,000	31,619,000	31,616,000
Staffing FTEs	13.0	11.0	12.0	11.0	11.0

Program Z - Capital					
	0	0	0	0	0
Fund 096-1 HIA-State	147,000	146,000	293,000	147,000	146,000
Fund 096-2 HIA-Federal	109,000	109,000	218,000	491,000	490,000
Fund 09H-1 TPA-State	572,000	571,000	1,143,000	0	0
Fund 106-1 HSF-State	4,569,000	4,569,000	9,138,000	3,375,000	3,375,000
Fund 108-1 MVA-State	50,000	50,000	100,000	0	0
Fund 108-2 MVA-Federal	10,694,000	10,693,000	21,387,000	5,700,000	5,700,000
Fund 108-7 MVA-Local	9,000,000	9,000,000	18,000,000	5,500,000	5,500,000
Fund 20H-1 CWA-State	47,347,000	47,346,000	94,693,000	44,684,000	44,683,000
Fund 218-1 MMA-State	22,708,000	22,707,000	45,415,000	18,752,000	18,751,000
Total by Fund	95,196,000	95,191,000	190,387,000	78,649,000	78,645,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Package Description

The department is responsible for preserving over 18,600 state highway lane miles, over 3,600 bridge structures, 47 safety rest areas, 22 ferry vessels and 20 ferry terminals.

The seven capital programs provide and support safe, reliable and cost effective transportation options to improve livable communities and economic viability for people and businesses. Investments in transportation create living-wage jobs, spur economic recovery, promote vibrant communities, and position businesses for participation in the global economy. The department estimates that the job impacts for the 2017-19 biennium averages about 16,730 jobs per year for direct, indirect, and induced jobs.

The department's budget request includes funding for several mega-projects, including the state route (SR) 520 Corridor Program and the replacement of the Alaskan Way Viaduct. Other major highway projects include:

- Extending the Express Toll Lanes on Interstate 405 to SR 167,
- Completing the US 395 North Spokane corridor to Interstate 90 (I-90),
- Extending SR 167 from SR 509 to SR 161 in Tacoma,
- Adding an additional lane on I-90 from the summit to Easton, and
- Extending SR 509 to Interstate 5 in King County.

Construction of hundreds of highway projects, including construction of new interchanges, lanes and bridges, is underway. This request incorporates the 2015 Connecting Washington Transportation Package into the applicable programs and applies the new approaches to proactively deliver the capital program. The enacted Connecting Washington Transportation Package requires Practical Design for those projects funded through the 16-year package. The department is implementing this direction through a comprehensive Practical Solutions approach, which involves Least Cost Planning and Practical Design throughout the entire project lifecycle.

In March 2013, a U.S. district court issued a permanent injunction, which was affirmed by the U.S. Court of Appeals for the Ninth Circuit in June 2016, that requires WSDOT to repair or replace approximately 847 fish barrier culverts by 2030, which the department has estimated could cost $2.4 billion over the next 17 years. This request provides $97.5 million in funding for fish barriers in the injunction area in the 2017-19 biennium.

Two 144-auto ferry vessels are being constructed. One will be placed in service mid-2017, the other in the 2017-19 biennium. The 2017-19 Vessel Preservation Project List is sized at $65M, just under 70 percent of the documented requirement of the lifecycle cost model. This would be an increase over the past ten years, over which preservation funding has averaged roughly 50 percent of the documented need. This consistent underfunding of preservation has put the fleet at risk of not attaining the targeted 60-year vessel service life. This request includes additional funding for the Seattle Ferry Terminal, which will replace the north trestle and terminal building. The project also replaces the transfer span and overhead loading for slip three.

Federal funds made available under the American Recovery and Reinvestment Act of 2009 Inter-City High-Speed Passenger Rail Program will finance capital improvements to expand the Amtrak Cascades Service, including projects needed to provide two additional daily round trips between Seattle and Portland, reduce travel time between Seattle and Portland and improve on-time performance.

A detailed list of capital projects by program can be found in the Transportation Executive Information System (TEIS).

Program: D0C Capital Facilities – Capital
Recommendation Summary
Funding is provided to continue the replacement of the existing Olympic Region Maintenance and Administration Facility and to replace the North Central Region administration building in Wenatchee. Funding will also be used for minor works projects that preserve and improve the department's facilities located around the state.

Program: I0C Improvements – Capital
Recommendation Summary
Funding is provided to capital projects that enhance mobility, safety, and reliability in support of strengthened state economy and an improved environment. Funding is also updated to reflect the timing and cost of projects currently authorized by the Legislature.

Program: P0C Preservation – Capital
Recommendation Summary
WSDOT uses a long range planning method to program investments in our transportation infrastructure and to comply with Federal requirements. Funding is provided to preserve roadway pavements at lowest life cycle cost, replace and rehabilitate bridges and other structures, preserve other facilities such as weigh stations and rest areas, and replace electrical and drainage systems that have reached the end of their serviceable life.

Program: Q0C Traffic Operations – Capital
Recommendation Summary
Funding is provided for Intelligent Transportation System (ITS) projects that improve commercial vehicle operations, traveler information, and safety and congestion relief by applying advanced technology to transportation solutions.

Program: W0C Ferries – Capital
Recommendation Summary
Funding is provided for capital projects that preserve and improve existing ferry terminals and vessels. Additional funding is provided for the Seattle Terminal project and to increase the amount of funds available to address emergencies.

Program: Y0C Rail – Capital
Recommendation Summary
Funding is provided for capital improvements to support intercity passenger rail service; closing out the final delivery of the American Recovery and Reinvestment Act (ARRA) grants; further improve Amtrak Cascades service; emergent freight rail assistance to improve the movement of goods throughout the state; and low interest loans for improvements to publicly-owned rail infrastructure. In addition, funding is provided for ongoing state support for High Speed Passenger Rail.

Program: Z0C Local Programs – Capital
Recommendation Summary
Funding is provided for various local priority projects and for the Pedestrian and Bicycle Safety and Safe Routes to Schools grant programs. The funding available for the Safe Route to Schools Grant Program increases to reflect a request for additional funding from the Highway Safety Account.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
If funding is provided, work can start or continue on a significant amount of capital projects, resulting in economic benefits and enhancing safety and improving mobility for the state's citizens.

The department follows state law to produce a project prioritization array that achieves maximum performance within limited resources. Priority programming uses information on benefits and costs of transportation investment options in allocating funding to particular projects. Revised Code of Washington, Chapter 47.05 Priority Programming for Highway Development directs WSDOT to perform this function and incorporates the following general steps:

1) **Identify Needs:** Identify transportation needs based on factual data so the magnitude of the need and the effect it has on the performance of the transportation system is clear (RCW 47.05.051).
2) **Group into Categories**: Group similar needs into categories so that proposed projects addressing the needs may be compared against each other.
3) **Scope Solution and Evaluate Performance:** Scope a project solution that addresses the need using best management practices that includes Moving Washington and Practical Design. For each project, determine performance level and cost. Look at alternatives to find the most cost effective action (RCW 47.05.030).
4) **Prioritize within Categories:** Place the most cost effective alternative in rank order of the change in performance and cost (RCW 47.05.051).
5) **Evaluate Trade-offs Between Categories:** Compare categories of like projects with others to determine how the performance measure for that group will change if funding is moved between categories (RCW 47.05.035).

Some methods used are more refined and systematic than others, while some have benefited from greater attention, in some instances, years of data collection and analysis. The department's prioritization methods benefit from continuous review and improvement to gain the benefit of

experience. Various levels of risk are considered in evaluating trade-offs between categories as a means to maximize performance within limited resources.

Performance Measure Detail

This request contributes to the Results Washington Goal 2: Prosperous Economy through support for sustainable, efficient infrastructure.

Identify important connections or impacts related to this proposal.

N/A

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

In the case of limited funding, the choices could include delays in project delivery and/or changes to the project list. This alternative is consistent RCW 47.05 Priority Programming for Highway Development and the most recent legislative capital project list.

What are the consequences of not funding this request?

If funding is not provided, the design and construction of new capital projects will be stopped, impacting the state's economy and preventing the state's citizens from enjoying the benefits of the projects. If funding was not provided for projects that are under construction, the department would likely face litigation brought on by contractors.

Expenditure Calculations and Assumptions

The appropriation requested is based on the biennial needs identified by each individual project. This information is reviewed at the program level to ensure consistency with department policies. New projects are aged based on the type of improvement, construction methodology, and the proposed delivery schedule. With few exceptions, projects funded by the Connecting Washington Transportation Package have been held to cash flow levels assumed in the 2016 Legislative Session.

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

As a capital request, there are costs associated with delivering projects and programs that extend into future biennia. However, capital projects have historically been treated as one-time expenditures in the budget processes that establish the carry forward funding for the ensuing biennium. Funding for projects is then added back in the budget as maintenance-level adjustment. This decision package assumes the practice of treating capital projects as one-time expenditures.

The future costs of projects are reflected in the department's financial plan. These costs are identified by the project teams. At the program level, the department has assumed a current law approach in developing its budget request. This means that out-year expenditures for certain accounts may not be financially constrained over a six or ten-year period, but are generally consistent with investment levels from the most recent legislative project list.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: BA Traffic & Revenue Related Costs
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: B – Toll Operations & Maintenance

Agency Recommendation Summary Text:

The Washington State Department of Transportation (WSDOT) is forecasting an increase to both traffic and revenue on all four toll facilities in the 2017-19 biennium. Costs such as credit card fees, printing and postage costs and out-of-state license plate look up costs are directly impacted by increases in traffic and revenue. Therefore, the department is requesting $1.6 million for cost increases related to growth in traffic and revenue.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 09F-1 HOT-State	3,000	7,000	10,000	11,000	15,000
Fund 16J-1 520-State	348,000	656,000	1,004,000	688,000	778,000
Fund 511-1 TNB-State	279,000	315,000	594,000	305,000	327,000
Fund 535-1 AWV-State	0	0	0	2,882,000	3,259,000
Fund 595-1 I405-State	-17,000	-6,000	-23,000	-20,000	128,000
Total Cost	613,000	972,000	1,585,000	3,866,000	4,507,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program B - Operating					
Fund 09F-1 HOT-State	3,000	7,000	10,000	11,000	15,000
Fund 16J-1 520-State	348,000	656,000	1,004,000	688,000	778,000
Fund 511-1 TNB-State	279,000	315,000	594,000	305,000	327,000
Fund 535-1 AWV-State	0	0	0	2,882,000	3,259,000
Fund 595-1 I405-State	-17,000	-6,000	-23,000	-20,000	128,000
Total by Fund	613,000	972,000	1,585,000	3,866,000	4,507,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	613,000	972,000	1,585,000	3,866,000	4,507,000
Total Cost	613,000	972,000	1,585,000	3,866,000	4,507,000
Program B - Operating					
E. Goods and Services	613,000	972,000	1,585,000	3,866,000	4,507,000
Total by Program	613,000	972,000	1,585,000	3,866,000	4,507,000

Package Description

Certain tolling costs are directly related to a toll facility's level of traffic and revenue. These costs include credit card fees, printing costs, postage costs, and out-of-state license plate look up costs.

Credit card fees are calculated at the percentage of adjusted gross revenues including fees that will be paid by credit card multiplied by the credit card fee rate. An analysis of fiscal year 2016 actual credit card results shows that the percentage of revenues collected by credit card and the credit card fee rate have both increased over fiscal year 2015 levels. Based on this analysis and recent toll revenue growth projections, the Toll Division is anticipating a system-wide increase totaling $1.2 million in the 2017-19 biennium.

Printing, postage and license plate look up fees are directly related to the level of pay-by-mail toll trips multiplied by the pay-by-mail unit costs (such as paper/envelope costs, printing costs, postage costs) and the rate of resolution of initial mailings (for example, if the rate of payment on first notices increases, the number of total mailings reduces). Based on the current forecasted pay-by-mail rates and an analysis of fiscal year 2016 actuals, the Toll Division is anticipating a system-wide increase totaling $400,000 for printing and postage and out-of-state license plate look up costs in the 2017-19 biennium.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

- WSDOT expects to collect 87 percent of all tolls and fees (such as pay-by-plate fees, statement fees, late payment fees and civil penalties) through credit card payments.
- WSDOT is projecting it will mail approximately 6.5 million first and second toll bill notices throughout the 2017-19 biennium. An increase of 16 percent over the 5.6 million projected to be mailed in the 2015-17 biennium.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

See the attached OFM addendum.

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

The department did not look at any alternatives to increases in credit card fees. Credit card fees are a net positive to the Tolling Program. The department makes efforts to move its customers toward prepaid, credit card supported accounts because they are the lowest cost solution. With that, the department regularly looks for ways to reduce the component costs that make up credit card fees. For example, reducing (or limiting the growth of) the cost per transaction fee and/or credit card fee rates charged by the various credit card merchants is important.

Additionally, the department makes efforts to reduce the number of monthly credit card replenishments regular customers require to keep their account balances current. For example, if a customer routinely pays $100 a month in tolls, the department allows the customer to reset its replenishment amount to $100 instead of the default amount of $30. This reduces the number of credit card transaction fees the department pays.

As to printing and postage costs, the department takes steps to convert recurring pay by mail customers to prepaid customers, which will reduce their printing and postage cost impact. WSDOT recently replaced its print house vendor with Department of Enterprise Services Printing. This change is also expected to reduce printing and postage costs.

What are the consequences of not funding this request?
If this package is adopted, the department will be able to continue to offer credit cards as a payment option as well as offer its infrequent users (such as out-of-state customers) a pay-by-mail option.

Expenditure Calculations and Assumptions
Object E: Based on historical analysis, the department expects to collect 87 percent of all toll revenues and fees through credit card charges at a 2.15 percent blended credit card rate. For the upcoming 2017-19 biennium, WSDOT is forecasting $7.1 million in credit card charges. This is an increase of $1.2 million over the 2015-17 biennium (see OFM Addendum for detailed calculations by facility).

Based on recent traffic and revenue updates, WSDOT expects to mail approximately 5.6 million toll bills and 1.1 million miscellaneous letters and customer statements in the 2017-19 biennium. Based on recent mailing cost history, the average cost per mailing is forecasted to be $0.70; the total mailing (printing, postage, mailing) expenditures will be approximately $4.7 million. This is an increase of $400,000 over the current biennium expenditure authority (see OFM Addendum for detailed calculations by facility).

The department is forecasting an 11.5 percent out-of-state, pay-by-mail participation rate. At an average cost of $1.25 each, this is estimated to cost $600,000 million in the 2017-19 biennium. This is an increase of $10,000 over current levels (see OFM Addendum for detailed calculations by facility).

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

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: BA Traffic & Revenue Related Costs

Base Budget: Certain tolling costs are directly related to a toll facility's level of traffic and revenue. These costs include; Credit card fees, printing/postage costs, and out of state license plate look up costs. The sections below detail the calculations for each item that contributes to this decision package.

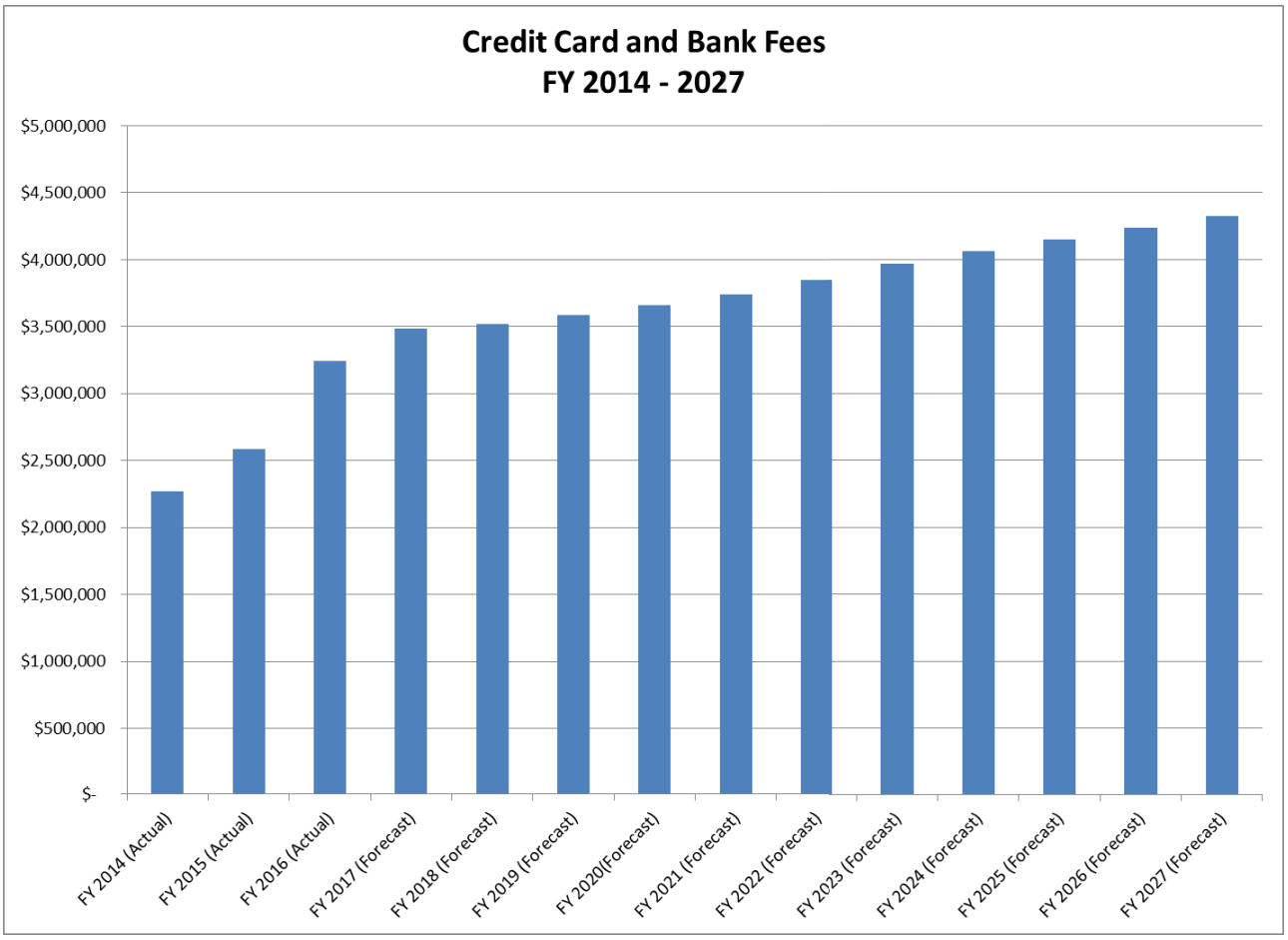
Credit Card Fees
Credit card fee calculations consist of three components: (a) the amount of revenue to be collected, (b) the percentage of revenue collected by credit card, and (c) the credit card fee rate. There several types of revenues which are collected by credit card; toll revenue, fee revenue, transponder revenue.

Credit card Fee Rates are a blend of the per transaction fee and the credit card fee percent components of credit card charges. Credit card fee percentages vary slightly based on card type (e.g., V/MC, AMEX, Discover). The blended rate is based on historical credit card charge data.

SR-16 TNB tollbooth (manual collection) equipment uses a different credit card processor than the CSC system. The per transaction fee for the tollbooth system is twice the amount of the CSC system rate. Treasury is working with credit card processors throughout the state to move to the new statewide contract that will reduce the tollbooth system from $0.08/transaction to $0.03/transaction. WSDOT is confirming the schedule for conversation to the new credit card processor for TNB tollbooths.

For fiscal year 2017-19, WSDOT is forecasting a need for $7.1 million in credit card fee expenditure authority. This is an increase of $1.2 million over fiscal year 2015-17 expenditure authority.

The chart below details the credit card and bank fee history and forecast from fiscal years 2014 to 2027.



The increase seen between fiscal year 2015 to fiscal year 2016 is related to an increase in the percentage of revenues collected by credit card and the toll commencement of I-405 Express Toll Lanes in September 2015. The amounts above do not include projected SR-99 Tunnel credit card and bank fees.

Printing/Postage and Out of State Look up Costs

Printing and postage cost calculations consist of four components:

1) The number of pay by mail transactions,
2) The average number of pay by mail transactions per toll bill,
3) The rate of collection on initial toll bill notices, and
4) The average cost of mailing per unit mailed.

The average cost of mailing per unit consists of three components:

1) Notice printing costs,
2) Notice postage costs, and
3) Mailing consumables costs (such as letterhead and envelopes).

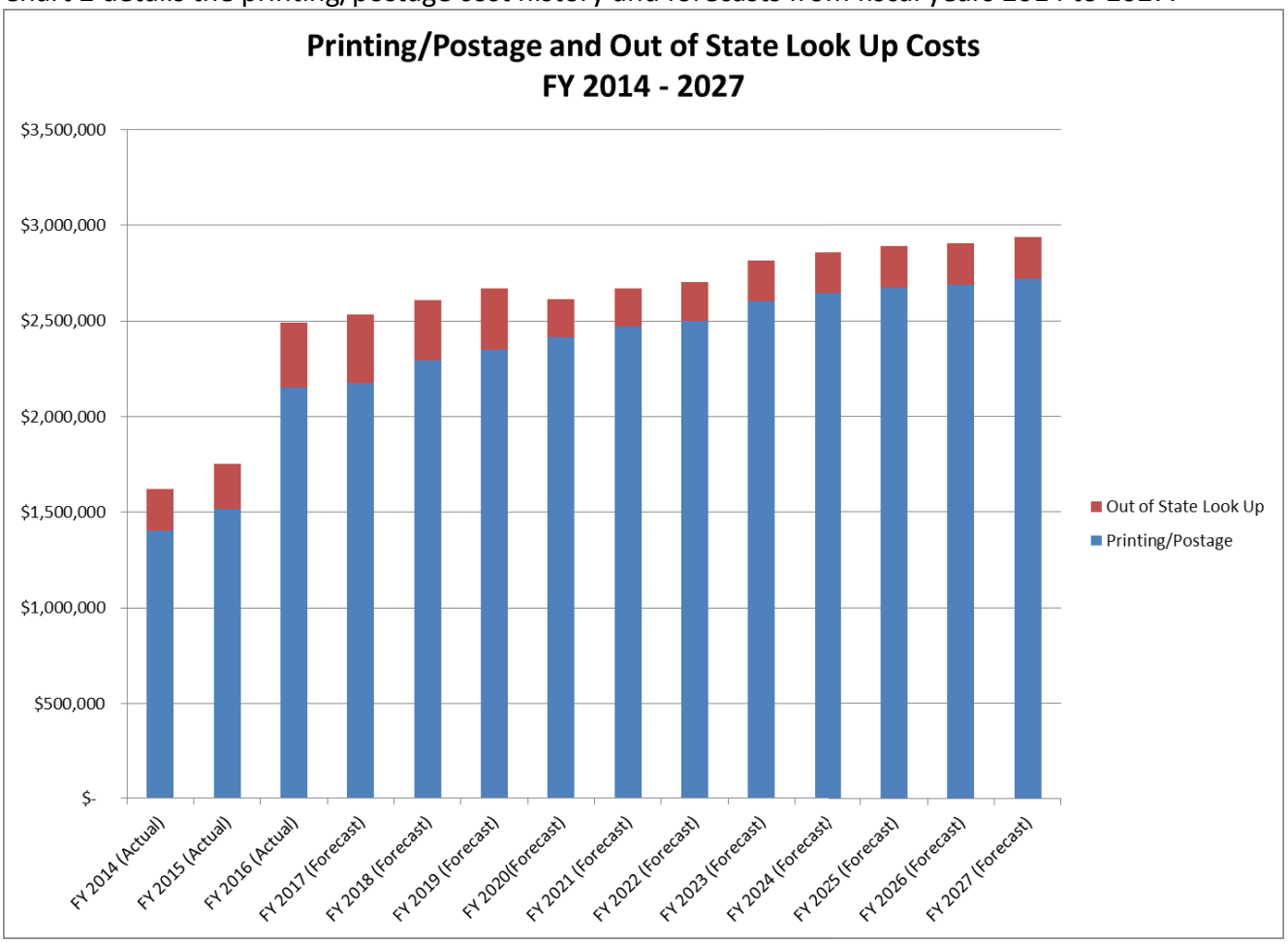
Out of state license plate look up cost calculations consist of four components:

1) the number of pay by mail transactions,

2) the average number of pay by mail transactions per toll bill,
3) the rate of out of state license plates, and
4) cost per look up charge by vendor.

For the 2017-19 biennium, WSDOT is forecasting a need for $5.3 million in pay by mail expenditure authority. This is an increase of $0.4 million over the 2015-17 biennial expenditure authority.

Chart 2 details the printing/postage cost history and forecasts from fiscal years 2014 to 2027.



The increase seen between fiscal year 2015 to fiscal year 2016 is related to an increase in the toll commencement of I-405 Express Toll Lanes in September 2015. The amounts above do not include projected SR-99 Tunnel printing and postage costs.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:

Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: BC CSC Vendor Operations & Maintenance
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: B – Toll Operations & Maintenance

Agency Recommendation Summary Text:

WSDOT recently executed an existing option for a two-year extension with the current statewide Customer Service Center (CSC) vendor. The contract will be extended through June 2018. In addition, WSDOT is negotiating the extension of the current contract through fiscal year 2020. This is necessary because the procurement effort to replace the existing CSC system and operator won't be complete by the end of the current contract period. WSDOT is requesting $1.7 million to support increased vendor costs in the 2017-19 biennium.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 09F-1 HOT-State	2,000	4,000	6,000	43,000	32,000
Fund 16J-1 520-State	460,000	811,000	1,271,000	1,114,000	841,000
Fund 511-1 TNB-State	96,000	181,000	277,000	408,000	264,000
Fund 535-1 AWV-State	0	0	0	3,516,000	3,794,000
Fund 595-1 I405-State	0	100,000	100,000	408,000	270,000
Total Cost	558,000	1,096,000	1,654,000	5,489,000	5,201,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program B - Operating					
Fund 09F-1 HOT-State	2,000	4,000	6,000	43,000	32,000
Fund 16J-1 520-State	460,000	811,000	1,271,000	1,114,000	841,000
Fund 511-1 TNB-State	96,000	181,000	277,000	408,000	264,000
Fund 535-1 AWV-State	0	0	0	3,516,000	3,794,000
Fund 595-1 I405-State	0	100,000	100,000	408,000	270,000
Total by Fund	558,000	1,096,000	1,654,000	5,489,000	5,201,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	558,000	1,096,000	1,654,000	5,489,000	5,201,000
Total Cost	558,000	1,096,000	1,654,000	5,489,000	5,201,000
Program B - Operating					
E. Goods and Services	558,000	1,096,000	1,654,000	5,489,000	5,201,000
Total by Program	558,000	1,096,000	1,654,000	5,489,000	5,201,000

Package Description

In April 2016, WSDOT executed the final two-year contract extension of its statewide CSC contract. In addition to extending the contract period, and in accordance with contract provisions, WSDOT negotiated increased monthly payments to compensate the vendor for workloads related to tolling the I-405 Express Toll Lanes and other customer advocacy programs, such as the Advocacy for the Customer

(A4C) and the Customer Program for Resolution (CPR). The monthly payment increased by $268,000 from $500,000 to $768,000 per month.

In addition, in preparation for the planned procurement of a new CSC system and operator, WSDOT needs to retain the current vendor through fiscal year 2020 – the planned "go-live" date for the new CSC system and operations contract. WSDOT is currently negotiating this sole source extension with the existing vendor and assumes that the terms will include a contract price increase above the fiscal year 2018 amount. The estimate represents a 23 percent increase in costs.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

WSDOT expects to be able to continue CSC operations and system support under the existing statewide CSC contract through fiscal year 2020. This extension is required due to the procurement schedule for a replacement CSC system and vendor. Not extending the current vendor contract would result in WSDOT not having a system and customer service operations for processing toll transactions.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Please see the attached OFM addendum.

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

WSDOT looked at several alternatives including; replacing the CSC operator early and keeping the current vendor on to maintain the system, taking over the CSC operations with WSDOT staff and keeping the current vendor on to maintain the system, and extending the existing contract.

Extending the existing contract offered the least transition risk. Any other solution would require multiple transitions and could create unintended consequences and likely negative impacts on customers.

What are the consequences of not funding this request?

WSDOT will be able to minimize its transition risks and limit negative impacts on customers.

Expenditure Calculations and Assumptions

The updated pricing schedule amended in March 2016 to include the changes related to the roll out of I-405 ETL and the CPR and A4C program (customer relief programs) committed WSDOT to paying the current CSC vendor $768,000 per month in fiscal year 2017. This is an increase of $268,000 (per month) over previous levels.

Per contract pricing, if the vendor reaches 700,000 active prepaid accounts under management, they are entitled to a $20,000/month increase. As of June 30, 2016, there are 650,000 active accounts. WSDOT is anticipating the vendor will reach the 700,000 account threshold in November 2016 and has included this increase in the calculations for this budget request. In addition, the contract includes an annual CPI adjustment, not to exceed 5.0 percent. This request assumes a 2.5 percent annual CPI adjustment. Combined, WSDOT expects to pay the vendor $822,000 per month in fiscal year 2018 for an annual total of $9.9 million.

For estimating the contract extension into fiscal year 2019, WSDOT has increased the per month costs by about 23 percent in anticipation of the potential outcome from sole source contract negotiations with the current vendor. Thus this request assumes WSDOT will pay the CSC vendor $1.01 million per month in fiscal year 2019 for an annual total of $12.1 million.

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

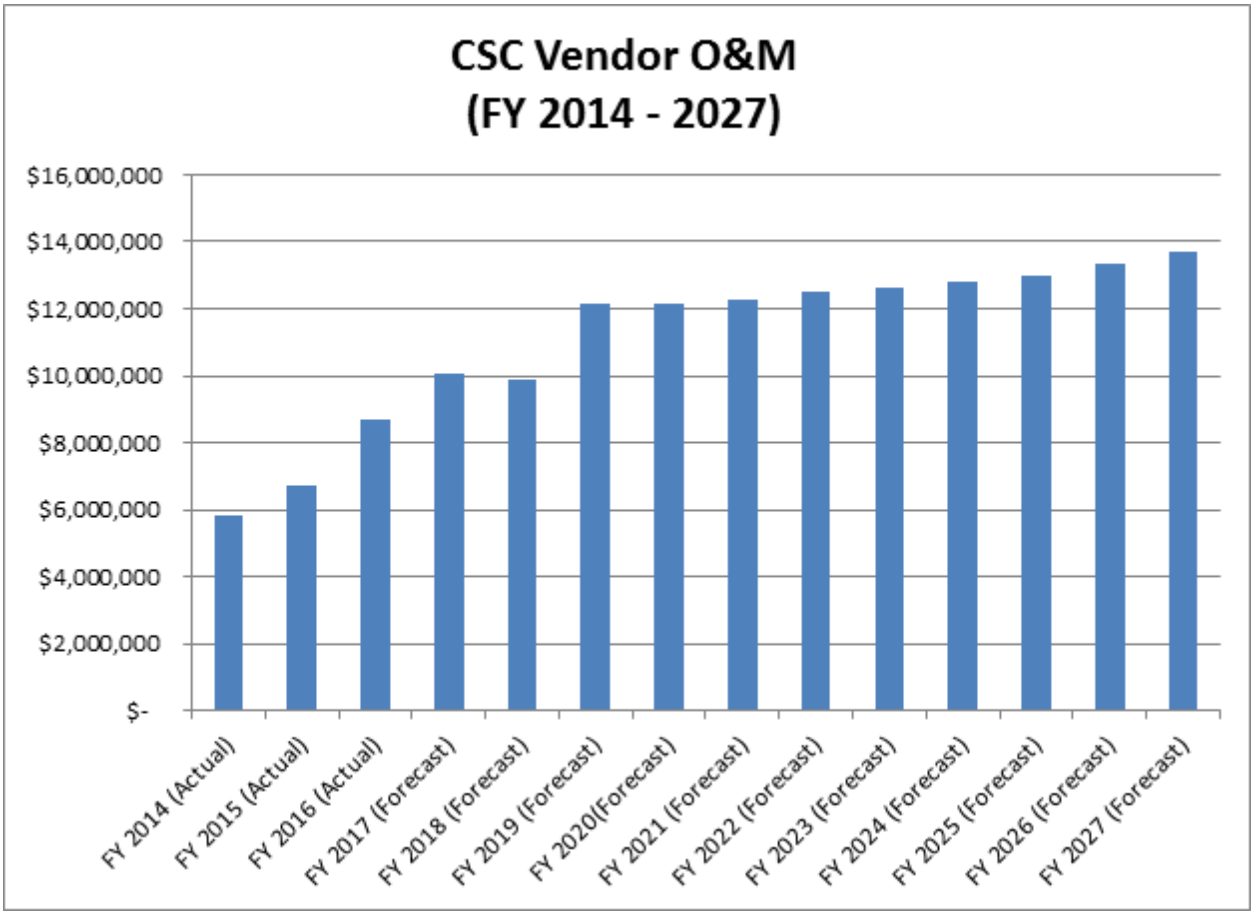
These costs will be on-going. WSDOT is projecting that a new vendor, or vendors, will price the contract(s) at fiscal year 2020 levels. The amounts forecasted for the new CSC vendor are included in fiscal year 2021.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: BC CSC Vendor O&M Increase

Base Budget: The statewide CSC Vendor contract costs are set according to an agreed pricing table that consists of a lump sum monthly amount and a variable monthly amount based on the number of active prepaid accounts. Per agreement, the monthly amounts can increase annually based on a CPI calculation (not to exceed five percent). In addition to these increases, if WSDOT initiates a change to the contract, the vendor is entitled to an increase in its monthly lump sum payment.

An increase to the contract occurred most recently with the opening of I-405 Express Toll Lanes and the implementation of various customer relief programs such as Customer Program for Relief (CPR) and Advocate for Customer (A4C). The table below details the CSC Vendor costs from fiscal years 2014-16 and the projected amounts required from fiscal years 2017-27.



Fiscal year 2017 projections include the assumption that all planned system enhancement work – such as collections and write offs functionality – are completed by the June 2017. The increase seen between fiscal year 2018 and fiscal year 2019 represents a premium of $1.7 million (approx. 23 percent increase) requested to support the extension of the existing CSC vendor contract into fiscal year 2019.

Extending the contract into fiscal year 2019 will allow for a more efficient transition to a new contract as a part of the planned CSC Procurement. It is anticipated that the existing vendor will require additional remuneration to continue to support the CSC systems and operations beyond the end of its existing contract in June 2018.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Identify: Tolling has become an integral part of the transportation system in both King and Pierce Counties. Providing for a seamless transition between contracts is critical to meeting customer expectations.
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	Identify: The existing statewide CSC system interfaces with other agencies such as the Office of the State Treasurer and the Department of Licensing. Funding a smooth transition limit any negative impacts on these agencies.
Responds to specific task force, report, mandate, or exec order?	Yes	Identify: The Tolling Expert Review Panel convened by WSDOT recently recommended WSDOT enter into contract extension negotiations with the current vendor as soon as possible in order to mitigate contract transition risks.
Does request contain a compensation change?	Yes	Identify: WSDOT is anticipating an increase to the contract price based on extending into fiscal year 2019.

Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	Yes	Identify: Extension of current contract through fiscal year 2019.
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: BD Increased Transponder Costs
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: B – Toll Operations & Maintenance

Agency Recommendation Summary Text:

WSDOT is requesting $1.4 million to support the purchase and sale of transponders. Since the opening of I-405 Express Toll Lanes transponder sales have exceeded projections by approximately 40 percent. This trend has continued beyond the initial startup phase and is expected to continue into the 2017-19 biennium. While the revenue generated from transponder sales funds the purchase, packaging and administration of the program, WSDOT needs additional appropriation authority to accommodate the increase in transponder sales volume.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 09F-1 HOT-State	23,000	24,000	47,000	15,000	15,000
Fund 16J-1 520-State	376,000	401,000	777,000	280,000	273,000
Fund 511-1 TNB-State	196,000	200,000	396,000	130,000	123,000
Fund 535-1 AWV-State	0	0	0	330,000	369,000
Fund 595-1 I405-State	79,000	86,000	165,000	40,000	41,000
Total Cost	674,000	711,000	1,385,000	795,000	821,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program B - Operating					
Fund 09F-1 HOT-State	23,000	24,000	47,000	15,000	15,000
Fund 16J-1 520-State	376,000	401,000	777,000	280,000	273,000
Fund 511-1 TNB-State	196,000	200,000	396,000	130,000	123,000
Fund 535-1 AWV-State	0	0	0	330,000	369,000
Fund 595-1 I405-State	79,000	86,000	165,000	40,000	41,000
Total by Fund	674,000	711,000	1,385,000	795,000	821,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Revenue	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Fund 09F-1 State	23,000	24,000	47,000	15,000	15,000
Fund 16J-1 State	376,000	401,000	777,000	280,000	273,000
Fund 511-1 State	196,000	200,000	396,000	130,000	123,000
Fund 535-1 State	0	0	0	330,000	369,000
Fund 595-1 State	79,000	86,000	165,000	40,000	41,000

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	674,000	711,000	1,385,000	795,000	821,000
Total Cost	674,000	711,000	1,385,000	795,000	821,000
Program B - Operating					
E. Goods and Services	674,000	711,000	1,385,000	795,000	821,000
Total by Program	674,000	711,000	1,385,000	795,000	821,000

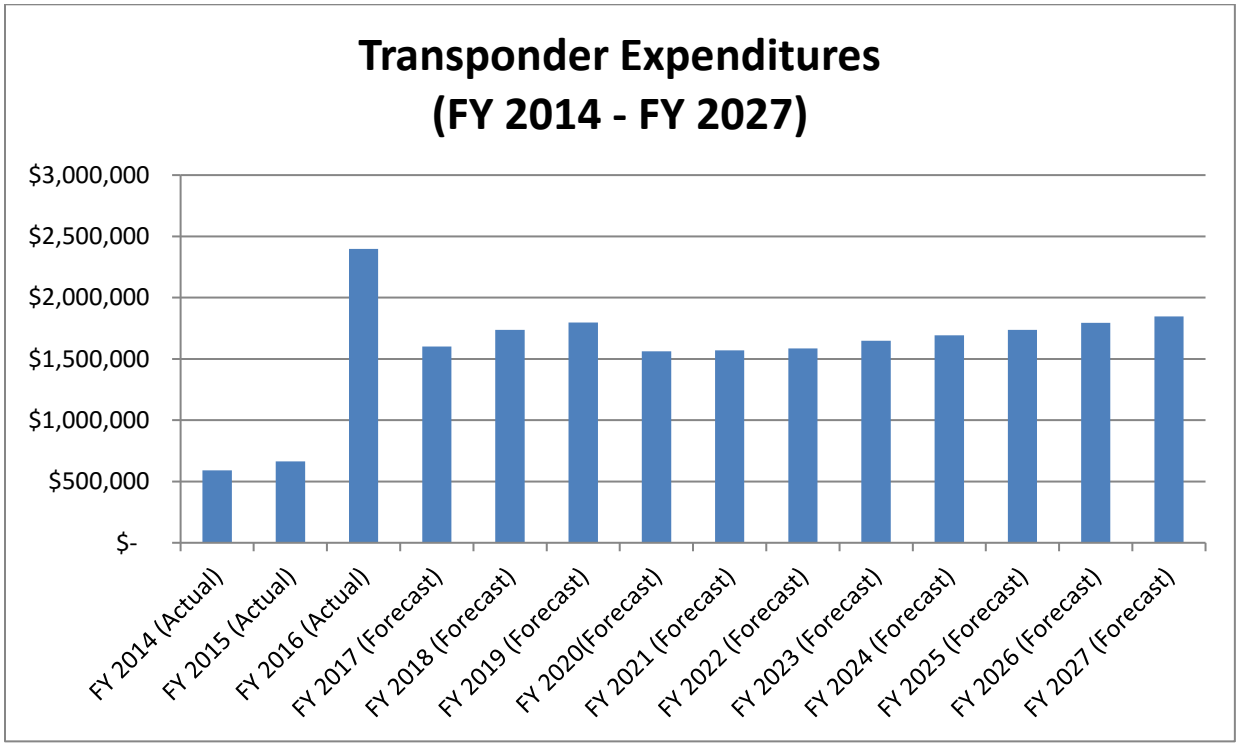
Package Description

Prior to the opening I-405 Express Toll Lanes, the department sold approximately 12,000 transponders each month. Since the initial ramp up period on I-405 Express Toll Lanes ended (January 2016), the average has increased to approximately 21,000 transponder sales per month. The increase in transponder sales has been across all transponder types and has not been limited to the unique FlexPass transponders used on the I-405 ETL. Both the sustained increase in sales and the distribution across all pass types have led WSDOT to conclude a higher level of sales is the new base. The department believes this increase in transponder sales can be attributed to several factors including; marketing campaigns related to the roll out of I-405 Express Toll Lanes, continued efforts to convert repeat pay by mail customers to prepaid, transponder customers, and the continual presence of *Good To Go!* in the local media.

The 2015-17 budget for transponder purchases and sales totals just under $2.1 million while actual expenditures are estimated to total approximately $4.0 million. The difference is currently being absorbed in the Toll Division budget due to under-expenditures in other areas. However, this budget capacity is not anticipated to be available in the 2017-19 biennium. Thus, WSDOT is requesting $1.4 million in additional budget authority specifically for transponder purchases and sales.

The $1.4 million requested will support the purchase and sale of approximately 200,000 additional transponders (8,000 per month). The following chart details the transponder sales growth starting in fiscal year 2014 and continuing through fiscal year 2027.

Note: These sales volumes do not reflect any impact that toll commencement on SR 99 Tunnel will have on transponder sales. Transponders and other start-up costs associated with the SR 99 Tunnel will be submitted in the department's 2018 supplemental budget request.



Fiscal year 2016 transponder expenditures included the ramp up for I-405 Express Toll Lanes tolling. Approximately 200,000 transponders were sold beyond initial estimates. The department expects transponder sales to continue growing over the next two fiscal years and then stabilizing in fiscal year 2020 after the roll out of SR 99 Tunnel.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The wider usage of transponders is in the best interest of the department and its customers because:

It increases operation system efficiency.

- Reduces the leakage (caused by unreadable license plates, unidentified owners, or unpaid toll bills) and increases the rate of toll collection;
- Reduces cost of collection (for postage, printing, license plate look-ups, or image reviews);
- Reduces errors (such as wrong license plates, addresses, or vehicle owners);
- Increases net revenue (for both transponder net revenue and toll net revenue); and
- Reduces adjudication costs (our goal is to collect tolls, not to spend resources to collect penalties).

- It reduces total toll costs for toll payer.
  - The Good To Go! toll rate is $2.00 cheaper per transaction; having a transponder is going to benefit our frequent customer.
  - It reduces the chance of having to pay civil penalties.

Performance Measure Detail

The department continues to work toward its goal of 75 percent transponder toll payment usage. Adopting this package is expected to improve the transponder penetration rate from 63 percent to 70 percent during the 2017-19 biennium.

Identify important connections or impacts related to this proposal.

See the attached OFM addendum.

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

This alternative was chosen because increased transponder sales and transponder penetration rates are a net positive for the department. The only alternatives to transponder sales would be for customers to use pay-by-plate or pay-by-mail account options. Both of these alternatives create increased costs and increased risk of revenue loss through the revenue leakage inherent in photo-based tolling.

What are the consequences of not funding this request?

This decision package will result in increased net revenue through reduced costs and net revenue from transponder sales.

Expenditure Calculations and Assumptions

Object E: Based on current sales volumes and historical sales trends, the department is projecting transponder sales to exceed the amounts assumed in the base. Current modeling shows the total additional transponders expected to be sold in the 2017-19 biennium will total just over 200,000. The current average cost of a transponder – including packaging and mailing costs – is approximately $7.00.

The department is requesting $1.4 million to purchase and sell transponders at the levels projected.

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

These costs will be ongoing.

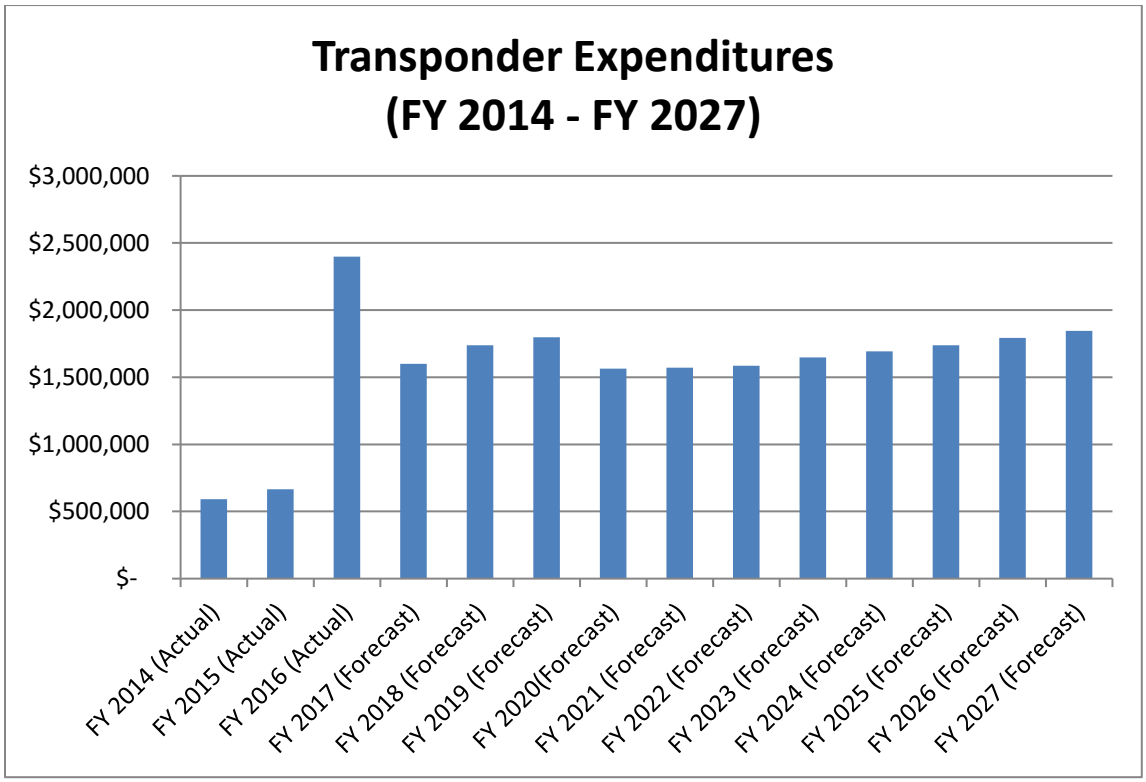
Note: These costs do not reflect the impact of toll commencement on SR 99 Tunnel. Transponder purchases to support tolling on the SR 99 Tunnel will be submitted in the department's 2018 supplemental budget request.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: BD Increased Transponder Costs

Base Budget: Transponder costs (purchase costs, inventory management, packing, shipping, etc.) are offset by transponder revenue. The current 2015-17 base budget for transponders totals just under $2.1 million while the total expenses are estimated at just under $4.0 million. The difference is able to be absorbed through other budget under-expenditures.

The table below details actual and forecasted transponder expenditures for fiscal years 2014 through 2027.



Fiscal year 2016 includes transponders sold in support of I-405 Express Toll Lanes toll commencement in September 2015. WSDOT is experiencing continued transponder sales growth beyond the forecasted I-405 ETL ramp up period (ended in March 2016). During fiscal year 2015, WSDOT sold approximately 12,000 transponders per month. From April – July 2016, the department has averaged 21,000 transponder sales per month with no signs of returning to fiscal year 2015 levels.

Since transponder-based toll trips represent the lowest cost payment type and considering that transponder costs are offset by transponder sales revenue, an increase in this cost area is a net positive scenario for WSDOT.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	
Other local gov't impacts?	No	
Tribal gov't impacts?	No	
Other state agency impacts?	No	
Responds to specific task force, report, mandate, or exec order?	No	
Does request contain a compensation change?	No	
Does request require a change to a collective bargaining agreement?	No	
Facility/workplace needs or impacts?	No	
Capital Budget impacts?	No	
Is change required to existing statutes, rules or contracts?	No	
Is the request related to or a result of litigation?	No	
Is the request related to Puget Sound recovery?	No	
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: CB Ferries IT Support
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: C – Information Technology

Agency Recommendation Summary Text:

Funding is requested for additional Information Technology (IT) staff to provide support to users of department systems, system maintenance and support, after hours IT support, and integration of new functionality into existing systems. The additional funding will provide two IT user support staff, an IT Business Analyst, and four support staff for the Electronic Fare System and Vehicle Reservation System. The additional staff will enable IT to provide near 24/7 coverage needed to support the operating hours of the Ferries Division.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	510,600	436,600	947,200	376,600	376,600
Total Cost	510,600	436,600	947,200	376,600	376,600
Staffing FTEs	7.0	7.0	7.0	7.0	7.0
Program C - Operating					
Fund 108-1 MVA-State	510,600	436,600	947,200	376,600	376,600
Total by Fund	510,600	436,600	947,200	376,600	376,600
Staffing FTEs	7.0	7.0	7.0	7.0	7.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	504,000	504,000	1,008,000	504,000	504,000
B. Employee Benefits	207,000	207,000	414,000	207,000	207,000
E. Goods and Services	-214,400	-274,400	-488,800	-334,400	-334,400
J. Capital Outlays	14,000	0	14,000	0	0
Total Cost	510,600	436,600	947,200	376,600	376,600
Program C - Operating					
A. Salaries and Wages	504,000	504,000	1,008,000	504,000	504,000
B. Employee Benefits	207,000	207,000	414,000	207,000	207,000
E. Goods and Services	-214,400	-274,400	-488,800	-334,400	-334,400
J. Capital Outlays	14,000	0	14,000	0	0
Total by Program	510,600	436,600	947,200	376,600	376,600

Package Description

The department is requesting additional funding to provide sufficient IT staffing levels to support the Ferries Division. There are three areas where available IT staffing is insufficient to cover the demands of the business: IT User Support, Business Analysis, and system maintenance and support for both the Electronic Fare System (EFS/Wave2Go) and the Vehicle Reservation System (VRS/Save a Spot). IT systems in the Ferries Division support operations that are essentially 24/7; however, current staffing levels are sufficient to cover only standard agency work schedules (generally, 8:00 am to 6:00 pm).

IT support needs at other times are handled through a combination of overtime or exchange time (compensatory time off for extra hours worked). Exchange time, which covers all but one of the IT staff supporting Ferries, presents a particularly perplexing problem because this time logged for unplanned work hours is repaid in kind to the staff (i.e., via a one-for-one addition to that person's paid leave). So the employee who provides that service outside regular work hours is then unavailable for work as planned, and another staff member must cover that time, possibly earning additional exchange time. This situation means that staff on station is often very light and service levels cannot be maintained.

Examples of work performed due to the need for 24/7 support include:

- Assistance with operations staff logging into workstations, particularly in tollbooths or applications that directly support operations (tollbooth applications, Dispatch, etc.);
- Triage of unanticipated problems that may be related to networking, user account status or security levels, or user error;
- Cash management at the beginning or end of tollbooth shifts; and,
- User help with handheld ticket readers that have not connected to the network or are experiencing difficulty with the One Regional Card for All (ORCA) cards, etc.

Additionally, there is a great deal of demand on the reservation system and a prioritization to have customers use the online reservation functions and not push users to the call center. Thus, it is even more imperative for IT support of the online system since if users are able to successfully access the electronic reservation tools then fewer riders will need to access the call center.

Details of the Three Support Areas

IT User Support (Help Desk and Workstations): This package includes a request for two additional User Support staff dedicated to Ferries Division work.

The IT User Support group comprises two teams of support staff: the IT Help Desk for Ferries Division; and the Workstation Support technicians who support all business users except tollbooth operations (tollbooth/revenue operations are supported separately). The Help Desk is staffed by two journeyman technicians and a supervisor who support over 2,800 user accounts. The operational activity generated by these accounts is reflected in the 8,000 incidents reported to and processed by the Ferries IT Help Desk in fiscal year 2016. Notably, although the Ferries Division accounts for 15 percent of WSDOT's help desk activity, over 50 percent of WSDOT's critical and high-priority incidents occur at Ferries Division, a reflection of the operations-focused business of the division.

The Workstation support team for Ferries Division comprises one supervisor and two technicians who are responsible for support of 728 workstations and the software running on them. Given even the most conservative industry ratios of 135 workstations per support FTE (from HDI Research), the current level of staffing is problematic. Using ratios suggested by Gartner Group of 70 workstations per support FTE, the current staffing model is not sustainable. Note also that the installed base of devices and functions continues to grow. For example, in fiscal year 2017, Ferries Division will install a new Pedestrian Passenger Counting solution at six terminals. These new installations provide an important link in safety operations and will spawn incidents that will be considered high-priority cases.

These staff provide services that include on-site work for all vessels and terminals, the Eagle Harbor Maintenance Facility, and users at the 2901 headquarters building.

The department is requesting funding for two additional staff at the Information Technology Specialist 3 (ITS3) level to provide sufficient IT user support for the Ferries Division. The staff of two FTEs will be focused on work as follows:

- One FTE dedicated to the service desk and phones, bringing the total staff for this function to three that manage the 2,800 user accounts and 8,000 annual incidents
- One FTE dedicated to provide support to users at the headquarters, Eagle Harbor Maintenance facility, the terminals, and vessels. The unusual IT support profile of Ferries Division operations means that a problem on a vessel often takes significantly more time to remedy, not because of the problem, but because the sailing schedule often requires IT staff to sail with the vessel. The roundtrip sailing consumes IT staff time beyond that which would be required in an office environment. They must wait, fix, and return. The additional staff would provide enough capacity and flexibility to allow technicians to provide support to vessels under way when the support is required.

Business Analyst: The request to add a Business Analyst position will address the need to maintain best practices for investigating and planning the development of new business support applications and the integration of new functionality into existing systems. Effective and rigorous documentation of business needs and the translation of those needs to technical requirements dramatically reduce the risk in the many business support development projects undertaken in support of the Ferries Division. A dedicated Business Analyst position at the ITS5 level is needed because the volume of requests for system enhancements and new features are significant and consistent such that an additional position is warranted.

Currently, there are 61 discrete applications in the IT Portfolio for Ferries Division. Of these, 49 applications are active and supported under a model that includes potential modifications to meet changing business needs. These applications represent a very large collection of business functions that needs attention from an IT-knowledgeable business person who understands the Ferries Division's processes and can help prioritize and scope the changes needed by the business.

Contractors or consultants have been used in the past to meet the need for a business analyst on large projects, and are funded as a necessary contributor to those projects. However, the majority of the application workload for business support are small projects, not large-scale system design and replacement projects. This Business Analyst position is defined specifically to provide oversight on smaller, internally-managed projects to improve applications to ensure that they respond to changing business needs. Currently, the department must pull staff programmers away from their regular duties to fill in when new features or enhancements are requested for existing systems. A dedicated Business Analyst would allow existing programmer staff to focus on development, testing, and software support. The lack of a Business Analyst means that programmers must budget time away from those primary assigned tasks to work on other tasks such as requirements definition and elaboration, for which they have little training and little or no experience.

Contractors and consultants require time to learn the unique business environments and the operational complexities of the Ferries. This can be a steep learning curve and must be repeated each time a new consultant is brought in to work on a system. The department would benefit by having

someone on staff that is familiar with the Ferries organization, business, and systems. A dedicated business analyst would be able to support multiple projects simultaneously.

Having staff with this focus would have made significant contributions in both time-to-market and first-try accuracy of recent projects, such as:

- The two "sprints" undertaken in 2015 and 2016 to meet compliance with Payment Card Industry Data Security Standards (PCI DSS);
- The Terminal Conditions application that underlies that public web page; the enhancements to the Fuel Consumption application;
- The rewrite of the Traffic Stats reporting tool;
- The new application supporting Letters of Time for mariners; and
- The Vessel and Terminal Records library systems.

Looking ahead, this resource will provide significant value as Ferries delivers improvements to the customer accounts and alerting systems driven by schedules, fares, and reservations activity.

Revenue System Maintenance and Support: The EFS and the VRS systems are dynamic, 24/7 systems that challenge the IT Division (ITD) to provide adequate support. These systems were designed and developed to meet clear needs described by the traveling public, but additional funding for support was not provided when improvements such as VRS and the Terminal Conditions web page were deployed.

The department currently uses contractors to provide field support for the hardware in these revenue-focused systems. These contract agreements are of a break/fix nature and support the systems only when something has malfunctioned. The contractors are responsible for removing and replacing broken hardware and dealing with vendors for returns, warranty, and replacements. The agreements do not provide any benefit in the areas of preventive maintenance or ongoing maintenance in the form of monitoring the systems and components, nor do they provide new replacements when units wear out.

The department is proposing canceling this contract and using the savings to hire four dedicated staff to support the EFS and VRS systems. The current break/fix agreements cost the department $227,000 per year. This amount would cover most of the salary and benefits (approximately 75 percent) of the cost of three FTEs at the ITS3 level. The department is also requesting an additional investment to add a fourth FTE at the ITS5 level who will provide oversight of these functions and develop improvements in training, service approach, and service delivery to assure a higher level of performance, above and beyond simply replacing the service as delivered under contract. This senior staff position will also plan the service changes anticipated for the successor system projected to be procured in the 2019-21 biennium. These four staff combined will provide far more benefit and sustainable expertise than just the break/fix work that has historically been done by contractors. These staff will support specialized devices at terminals, including tollbooths, as well as revenue system support at terminals and within Ferries Accounting.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The department expects the additional staffing requested will provide substantially improved IT support to Ferries. The three business areas covered in this request (user support, business analysis, and revenue system maintenance and support) reach virtually all aspects of Ferries operations. All Ferry employees will enjoy more timely support as well as faster resolution of trouble tickets and reduced downtime.

Performance Measure Detail

For this request the expected outcome for IT User Support will be:

- Improved responsiveness to incidents in the fleet (mean time to repair, or MTTR), particularly for high-priority assets.
- Improved analysis of service interruptions and proactive measures instituted as a result.
- Expanded on-station hours beyond current core hours of 8:00 am-6:00 pm.
- Focused attention on timely account management, particularly in the credit card environment.
- Minimal downtime (<1 percent) of new pedestrian passenger-counting solution.

For this request the expected outcome for Business Analyst will be:

- Requirements documentation for all process and application changes that require over 200 hours of staff time to complete.
- Committed delivery dates for all system improvements.
- Quarterly application scorecards for each department in the Ferries Division, detailing projects, status, and resources consumed.

For this request the expected outcome for Revenue System Maintenance and Support will be:

- Some equipment issues resolved on-site rather than requiring removal and replacement of devices.
- Improved support coverage for commute rush hours and outside core 8:00 am-6:00 pm Monday-Friday periods, nearing full 24/7 support.
- Expertise developed in-house for current system and to support migration to new solution in future biennia.
- Reduction in overtime and exchange time.

Identify important connections or impacts related to this proposal.

The new pedestrian passenger counting solution, CountWise, will provide input to other systems already in place at Ferries Division terminals. The automated count of pedestrian passengers will be combined with the count of passengers passing through the auto tollbooths to provide a complete count to the vessel master and terminal supervisor. It is important that support staff can respond quickly to any events or issues in this system.

By improving the support profile of the revenue systems, we are better prepared for future changes. As new system technologies are brought onboard, these staff resources will assume appropriate duties in support of the new systems, both for ticketing and the new Regional ORCA fare card, expected to be procured in the 2019-21 biennium. These staff will also provide in-house flexibility to augment other ITD functions as necessary, not subject to contractual restrictions based on work descriptions. Also, senior staff including data base experts, business intelligence experts and our most experienced managers are

called upon to regularly staff help lines and perform repeatable user support functions in addition to their defined duties. This model creates problems both in unnecessarily long lead times toward project completion and unnecessary accrual of exchange time.

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

The alternative considered is to use contractors and consultants to perform the duties described. The current contract for third-party support of the revenue system is a good indicator of costs when these services are delivered in this way. Three full-time staff can be funded for approximately the same cost as third-party remove-and-replace functions. Dedicated staff is a far more cost-effective approach to this support model.

Consider lost expertise. Using WSDOT support FTEs significantly reduces loss of institutional knowledge. Third-party consultants and contract firms provide adequate service and bring some new perspective to the support equation. However, this expertise is transient for the agency and will not be guaranteed by the service provider; that is, contract staff member 'B' will not necessarily bring the same skill set to the contract work that we expect based on prior work by contract staff member 'A.'

What are the consequences of not funding this request?

The improved service levels generated by the adoption of this package will carry a cost that must be sustained until a new support model is adopted, or it is agreed to allow the support level to degrade.

Expenditure Calculations and Assumptions

This request includes funding for a total of seven (7) additional staff to meet the needs detailed above, and as follows:

Function	Level	Staff #	FY2018 Salaries	FY2018 Benefits	FY2019 Salary	FY2019 Benefits	2017-19 Biennium
IT User Support	ITS3	2	135,768	57,328	135,768	57,328	386,192
IT Business Analyst	ITS5	1	82,727	31,759	82,727	31,759	228,972
Revenue Systems Support	ITS3	3	203,652	85,992	203,652	85,992	579,288
Revenue Systems Support	ITS5	1	82,727	31,759	82,727	31,759	228,972
Totals		**7**	**504,874**	**206,838**	**504,874**	**206,838**	**1,423,424**

Additionally, the total request is reduced based on canceling two vendor contracts that has cost the department $227,000 per (break/fix) and $120,000 per year (revenue systems support). The revenue system support contract could be cancelled as early as December 2018, therefore the savings in fiscal year 2019 is expected to be only $60,000.

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

All costs detailed here are ongoing. Staff costs are predictable for near-term biennia. Support and maintenance fees are similarly known for the next two biennia (through fiscal year 2021). In the 2019-21 biennium, a separate package for equipment lifecycle maintenance is anticipated.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Ferries IT Support

Base Budget: WSDOT's current support for the functions in this Decision Package are:

Description	Annual	FTE count
User Support for Ferries Division	$581,800	6
Revenue Systems Support	$546,800	5
Revenue Systems Support (contracted for remove/replace)	$227,000	0
Revenue Systems Support (contracted for configure/test)	$120,000	0
Business Analysis	$0	0
Total	**$1,475,600**	**11**

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

The pedestrian passenger counting solution will provide input to other systems already in place at Ferries Division terminals. The automated count provided by CountWise of pedestrian passengers will be combined with the count of passengers passing through the auto tollbooths to provide a complete count to the vessel master and terminal supervisor. It is important that support staff can respond quickly to any events or hiccups in this system.

By improving the support profile of the Revenue systems, we are better prepared for future changes. As new system technologies are brought onboard, these resources will assume appropriate duties in support of the new systems, both for ticketing and the new Regional ORCA fare card, expected to be procured in the 2019-21 biennium. These staff will also provide in-house flexibility to augment other ITD functions as necessary, not subject to contractual restrictions based on work descriptions. Key among these functions is the move toward 24/7 support of the public-facing revenue and reservations systems. Also, senior staff including data base experts, business intelligence experts and our most experienced managers are called upon to regularly staff help lines and perform repeatable user support functions in addition to their defined duties. This model creates problems both in unnecessarily long lead times toward project completion and unnecessary accrual of Exchange time (compensatory time off for extra hours worked).

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	The resources requested in this package will have a material impact on the service levels provided to terminals and the passengers who use those terminals in San Juan, Island, Kitsap, Jefferson, Snohomish, King, and Pierce Counties.

Other local gov't impacts?	Yes	Local municipalities are especially impacted by incidents at Ferries terminals, particularly when those incidents affect tollbooths. When equipment or other IT issues slow tollbooth operations, traffic can back up onto city streets and cause congestion.
Tribal gov't impacts?	No	
Other state agency impacts?	No	
Responds to specific task force, report, mandate, or exec order?	No	
Does request contain a compensation change?	No	
Does request require a change to a collective bargaining agreement?	No	
Facility/workplace needs or impacts?	No	
Capital Budget impacts?	No	
Is change required to existing statutes, rules or contracts?	Yes	While not required for this package, the department is proposing to repurpose funding currently used for contract staff (through a contract with Puget Sound Data Systems) to offset some of the costs of this proposal.
Is the request related to or a result of litigation?	No	
Is the request related to Puget Sound recovery?	No	
Identify other important connections		In addition to support for internal WSDOT operations, the staff requested will maintain equipment and software that supports many public-facing assets deployed in support of Ferries Division operations. These assets include web sites, highway radio alerts, email and SMS (text) messaging, and the local terminal operations that the public makes use of every day.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
A: Salaries	504,000	504,000	504,000	504,000
B: Benefits	207,000	207,000	207,000	207,000
E: Goods and Services	-214,400	-274,400	-334,400	-334,400
J: Capital outlays/equipment	14,000	0	0	0
Total Cost	**510,600**	**436,600**	**376,600**	**376,600**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☐Yes ☒ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: CD Business Intelligence (BI) Support
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: C – Information Technology

Agency Recommendation Summary Text:

Funding is requested for three FTEs, software, and hardware to expand critically needed technical support for WSDOT's Business Intelligence (BI) environment. Data warehouse (DW) and BI tools are increasingly important to organizations for securing and maintaining data and for providing users with tools to query, analyze and utilize data. Effective BI tools should facilitate easy interpretation of large volumes of data. Similarly, an effective and efficient data warehouse provides a storage of current and historical program data and is a core component of a BI environment.

Since its inception in the early 2000s, WSDOT's Data Warehouse and its associated reporting and visualization tools have evolved to become a multi-disciplinary BI environment of critical importance to the department. The demand for BI support has grown 10 percent per year over the last five years without an increase in the number of BI support staff. Currently, six staff members support the Information Technology (IT) aspects of WSDOT's BI environment.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	422,000	355,000	777,000	474,000	472,000
Total Cost	422,000	355,000	777,000	474,000	472,000
Staffing FTEs	3.0	3.0	3.0	4.0	4.0
Program C - Operating					
Fund 108-1 MVA-State	422,000	355,000	777,000	474,000	472,000
Total by Fund	422,000	355,000	777,000	474,000	472,000
Staffing FTEs	3.0	3.0	3.0	4.0	4.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	248,000	248,000	496,000	331,000	331,000
B. Employee Benefits	95,000	95,000	190,000	127,000	127,000
E. Goods and Services	3,000	12,000	15,000	16,000	14,000
J. Capital Outlays	76,000	0	76,000	0	0
Total Cost	422,000	355,000	777,000	474,000	472,000
Program C - Operating					
A. Salaries and Wages	248,000	248,000	496,000	331,000	331,000
B. Employee Benefits	95,000	95,000	190,000	127,000	127,000
E. Goods and Services	3,000	12,000	15,000	16,000	14,000
J. Capital Outlays	76,000	0	76,000	0	0
Total by Program	422,000	355,000	777,000	474,000	472,000

Package Description

Data warehouse (DW) and business intelligence (BI) tools are increasingly important to organizations for securing and maintaining data and for providing users with tools to query, analyze and utilize data. Effective BI tools should facilitate easy interpretation of large volumes of data. Similarly, an effective and efficient data warehouse provides a storage of current and historical program data and is a core component of a BI environment.

WSDOT's data warehouse combines the department's enterprise data from many unrelated source systems into a central comprehensive and integrated data repository. The department's business units and transportation partners use reporting and visualization software to access data from the agency's data warehouse to:

- Fulfill the agency's federal, state, and legislative reporting requirements;
- Enable trend analysis; and
- Support decision making.

This information directly supports WSDOT's activities, including:

- Project planning and scoping
- Tracking construction project costs
- Reporting to the Legislature and public on project schedules and costs
- *Gray Notebook* reporting
- Financial planning, reporting, and budget preparation and implementation
- Reporting on ferries ridership
- Highway safety
- Highway maintenance
- Mobility
- Asset tracking

The BI environment provides staff with high-quality data and tools for data analysis (statistical and numerical studies), data visualization (graphs, charts and maps) and traditional reports. Oftentimes the analysis facilitated through the DW and BI are mission-critical to the programs' business. The DW today combines data from over 20 different operational systems. Over 5,000 reports have been created by department BI staff and subject-matter experts, and about 250 different reports are used every day by internal WSDOT staff and external trusted partners. The DW serves about 200 distinct users every work day, and over the course of a year, about 2,000 different department employees make use of it. Users range from management and professional staff to technical specialists. BI users are located in 45 WSDOT offices throughout the state.

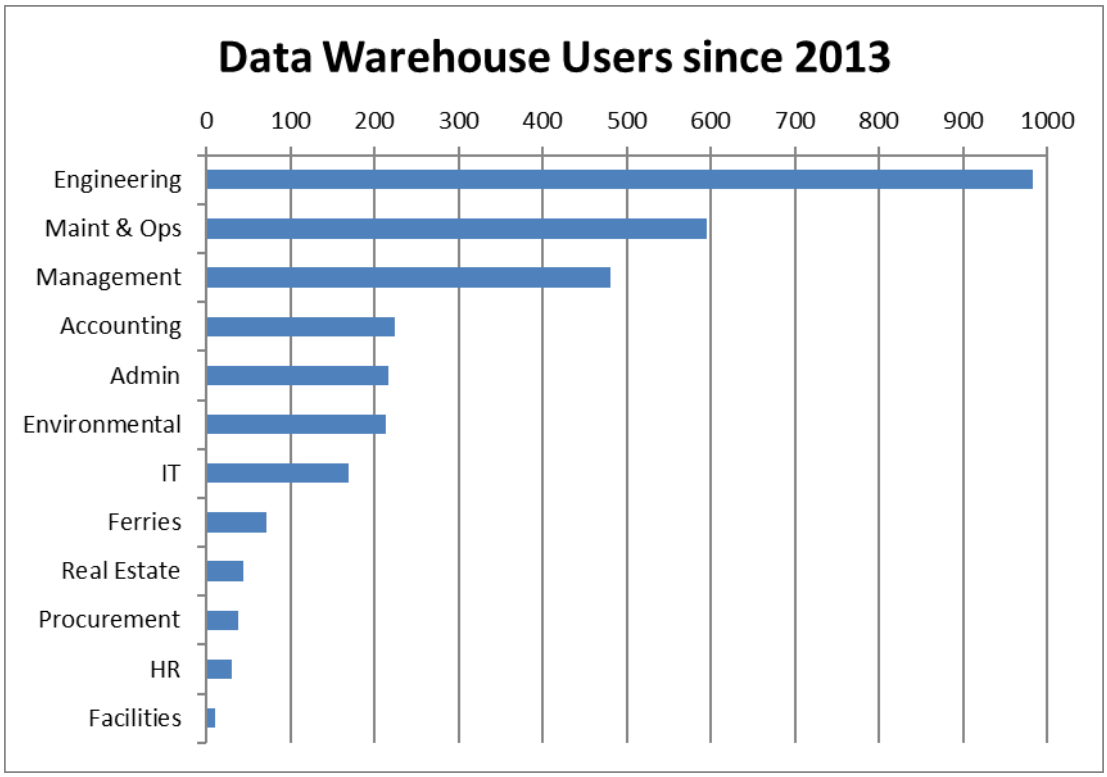


Chart Notes: This chart shows the cumulative counts of user IDs that ran a query in Cognos, Hyperion, or FIRS. Use of any of these tools by a user any number of times since 2013 would produce a count of one.

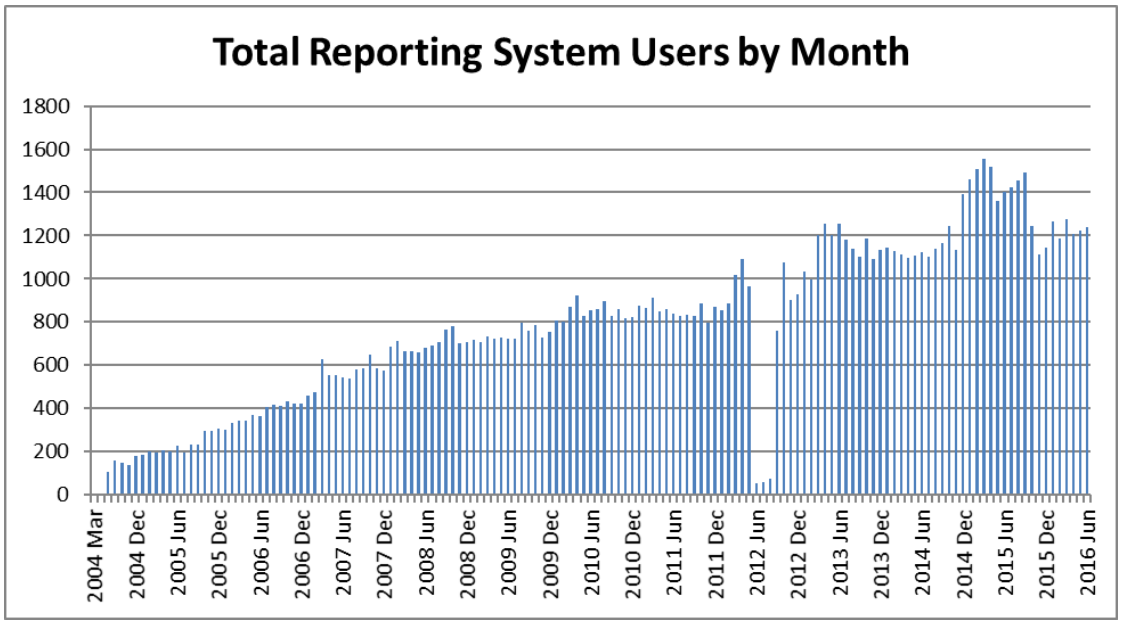


Chart Notes:

1. Reporting System refers to Cognos, Hyperion, and FIRS; these three systems deliver data that is stored in the Data Warehouse.
2. Use of any of these tools by a user, any number of times in two different months since 2004, would produce a count of one in each month.
3. Minimal data was captured during the summer of 2012 due to planned system changes.
4. The spike in usage in the summer of 2015 reflects training on newly implemented software.

The department's growing dependence on BI support is driven by the ever-increasing demand for:

- Transparency in agency operations,
- Collaboration with external partners and the Legislature,
- Interdisciplinary work within the agency,
- Open data,
- Lean practices,
- Community engagement,
- Transportation and environmental resource stewardship,
- Public records,
- Strategic investments,
- Performance measurement,
- Legislative and federal reporting, and
- Efficient performance of mission critical work.

Note: Open Data is machine-readable files provided publicly for download. Open data is part of the broader internal open government initiative. The state of Washington provides open data at https://data.wa.gov/. WSDOT provides some data on our website, http://www.wsdot.wa.gov/mapsdata.htm. The OCIO requires all state agencies to report annually on open data plans and activities. BI tools are used by data stewards to determine what is suitable for open publications. BI tools also can generate the open-data files.

The department's needs and expectations have expanded beyond the support model used during the early years of having a DW. Today, the department's knowledge workers require a broad range of agency-wide data, multiple-data-source integration, user-friendly interfaces, and integration with maps and dashboards. Current resources and staffing levels cannot meet these needs satisfactorily.

In preparing this request, the department reviewed numerous industry publications regarding establishing, sizing and maintaining a Data Warehouse and Business Intelligence (DW/BI) unit. The publications reviewed were:

- ETL-Tools.Info, *Data Warehouse and BI Team Staffing*.
- Jones, Caper, Chairman, Software Productivity Research, Inc., *Do Language Levels Affect Productivity?*
- Kimball, Ralph and Laura Reeves, Margy Ross and Warren Thornthwaite, *The Data Warehouse Lifecycle Toolkit.* John Wiley & Sons, 1998. Page 716; Page 19.2 in PDF.
- The Computer Electronics, Article 1687*. Data Warehouse and Business Intelligence Staffing Ratios*. October 2011.

The PDF versions of *The Data Warehouse Lifecycle Toolkit* and *Data Warehouse and Business Intelligence Staffing Ratios* can be provided. They are not attached to the request simply due to the document size and to save on printing. Also included as a source file attachment is a document titled *Business Intelligence Staffing Information*. This document describes the rationale in deriving estimates from the referenced publications.

(1) **Why the funding is needed.** Additional technical support is critically needed for the current and growing demand for BI within WSDOT. The requested resources enable WSDOT to achieve:

- Results Washington goals for transparency,
- WaTech's goals for open data provision, and
- WSDOT's strategic plan goals for:
  - Smart technology,
  - Community engagement,
  - Strategic investments, and
  - Environmental and transportation resource stewardship.

The department's BI environment also helps WSDOT comply with public disclosure requests and records retention rules by:

- Providing an intuitive interface to query integrated and governed data content, and
- Automatically removing records that have exceeded their Records Retention schedule.

The department's BI environment allows the agency to report its performance measures on:

- Highway safety,
- Mobility,
- Capital project delivery,
- Ferry usage, and
- Contract awards and payments to Disadvantaged Business Enterprises.

Information derived by use of agency BI tools can be found within numerous WSDOT publications including *The Gray Notebook*.

The department's BI environment also provides information for Safety Analyst, the primary tool used to implement *WSDOT Executive Order 1085 – Sustainable Highway Safety Program*, and for the Project Management Reporting System, the tool used to manage and report the status of capital transportation project delivery.

Also, like many other state agencies, WSDOT has experienced a reduction in the number of staff and reduced budgets. With the same workload being performed by fewer people, WSDOT has a need for increased reliability, speed and distribution of meaningful information for both operational work and decision support.

There has been no increase in the number of BI support staff over the last five years, yet demand on the BI environment has grown significantly, including major revisions to existing subject areas to accommodate changing business needs. Over the last five years, growth in customer usage has increased at the rate of approximately 10 percent per year.

Currently, six staff members, including the DW Database Administrator, support the IT aspects of WSDOT's BI environment.

At this time, only three staff support over 1,200 production data processing modules. These data processing modules extract data from source systems, transform the data for integration, and then load the data into the data warehouse. 1,200 production data processing modules equates to over 12 development-person-years of work, and according to *The Data Warehouse Lifecycle*

Toolkit and Software Productivity Research, Inc., 10 staff members are needed for adequate support. Within the next few months, 276 new modules will be added to the production environment. A module is a program that retrieves a specific set of data from a source system, transforms it into the correct format, and loads it into the data warehouse. The addition of support staff is essential to maintain the level of service needed by the department, WSDOT's transportation partners, and the public.

The agency's business units consider WSDOT's BI environment to be mission critical to their work. Users are also seeking more complex reporting with deeper levels of detail, dashboards, maps and the ability to present and query information in a variety of visualization formats. Business Intelligence clients want to securely provide such information to external partners and the public. As users start to employ more BI reporting and analysis features, current staff will no longer be able to meet the need for technical support. Additional software and hardware are needed to ensure the desired performance, security, and availability of a BI environment that meets these needs. These software and hardware needs are described in detail in item (3) below.

In *The Data Warehouse Lifecycle Toolkit*, Kimball et. al. provides information regarding current practice DW/BI staffing levels for various sized organizations. WSDOT is considered a large organization according to this study and currently employs approximately 270 IT staff. Of these staff, five are dedicated to DW/BI support. For purposes of this study the DW Database Administrator is excluded. This equates to a DW/BI staffing level of 1.9 percent. Compared to other organizations in the study, WSDOT's level of DW/BI staff places it in the twenty-fifth percentile as compared to other large and governmental organizations.

(2) What issue/problem is being addressed? The package will address the agency's current and anticipated DW design and processing support needs.

Addressing these needs will ensure the integrity, security and availability of the agency's BI environment. If these needs are not addressed, it increases the risk that the information could become corrupt, untrustworthy and/or unavailable, and this would jeopardize overall WSDOT operations and endanger the agency's ability to meet external reporting obligations.

(3) What will the funding buy? Funding is needed for FTEs and Infrastructure Hardware and Software.

FTEs:
Two new Extract, Transform, and Load (ETL) Analyst positions at the Information Technology Specialist 5 (ITS5) Level. These positions will allow for more timely delivery of DW and decision support data products. Currently, there is a backlog of approximately 100 tasks. The majority of these tasks have been in the queue for more than one year. Current BI staffing levels have the capacity to ensure the DW—in a static, unchanging state--remains operational, meets mandated requirements and performs reliably. But data warehouses are continually asked to change in response to changing business needs. Any additional capacity is used to provide value by improving existing business processes; however, there is little staff capacity for system optimization and long term planning.

IT industry standards indicate that for a BI program of WSDOT's size (five major lines of business and 10 data marts), the appropriate support staff would comprise 10 data warehouse and data integration specialists that conduct data modeling and data administration activities. WSDOT currently has three.

One new Business Intelligence Reporting Specialist position at the ITS 5 Level (beginning in the 2019-21 biennium). Funding for the 2017-19 biennia is being requested as part of the labor system replacement decision package. This position will help business units develop standard and ad hoc reports, streamline query and report performance, create dashboards, and integrate reports with graphs, charts and maps. WSDOT currently has one position performing this role on a full-time basis. IT industry standards state that a BI program like WSDOT's should have five reporting specialists on staff.

One new Data Modeler position at the ITS 5 Level. This position will support the design and overall integration of DW and decision support data products. IT industry standards indicate that a BI program of WSDOT's size should have 10 data modelers and database administrators. WSDOT has no dedicated BI data modeling support. WSDOT employs two full time data modelers for all agency data modeling needs – not just for the BI environment. WSDOT has one Data Warehouse database administrator.

Infrastructure Hardware and Software:

- Software, virtual server, and storage space to support geospatial extract, transform and load processes.
  This will allow data to be displayed, queried, and analyzed through a map interface.
- Software AG Adabas SQL Gateway. Adabas is the primary database for WSDOT's mainframe systems.
  - Adabas databases contain much of WSDOT's mission critical data including financial, construction contracts, and roadway data.
  - Adabas SQL Gateway software allows direct access to mainframe data by the programming languages that are now most widely used for WSDOT applications. This will greatly improve the ability to perform data analysis, data quality/validation checking and troubleshoot data load quality issues.
- Workstations and Microsoft Developers Network (MSDN) licenses for new staff and workstation upgrades for existing BI staff.

(4) How the funding will address or resolve any specific issue? The funding will:

- Allow the department to address current and anticipated user demand for data analysis and reporting for both internal and external needs.
- Help the department achieve goals for community involvement; the provision of open data to the public; streamlining processes and decision making; and providing transparency to the decision making process.
- Complete the integration of new subject areas, major enhancements, and reporting formats added in 2016 and provide for their ongoing support. These include:
  - Crash Data Portal with Geographic Information System (GIS) integration,
  - Capital Project Reporting with GIS integration,
  - Addition of the Human Resources subject,
  - Addition of the Disadvantaged Business Enterprise Payments subject,

    - Addition of the Project Management (PMRS) subject,
    - Washington State Ferries Key Performance Measures dashboard,
    - Washington State Ferries schedule analysis visualization, and
    - Integration of GIS tools with Cognos.
- Ensure the integrity, reliability, and security of the BI environment.
- Provide increased reliability, speed and distribution of meaningful information for operational work, public disclosure requests, and decision support.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

(1) What desired results will be achieved?

- Increased support to address current and anticipated user demand for BI by the agency, transportation partners, the Legislature, and the public.
- Enhanced ability for the department to achieve goals for community involvement, the provision of open data, least-cost planning, interagency and public-private collaboration, and strategic investments.
- Continued support for department operational activities, data sharing obligations, and reporting requirements.
- Capacity to address operational technology issues, achieve service-level agreement commitments, and support mission critical use.
- Capacity to attend to the ongoing changes required of the business to address changing legislative and federal obligations and reporting requirements.
- Efficient and reliable provision of analytical data products for use with GIS and BI software.
- Reliability in maintaining BI information content.
- Reduced time to address Public Disclosure Requests.
- Facilitated reporting on agency performance measurements.
- Enhanced transparency into the agency's decision making process through the provision of comprehensive and integrated information.
- Continued support for Safety Analyst and the Project Management Reporting System tools.

(2) What undesired results will be reduced?

- The likelihood that the provided information is corrupt, insecure, unavailable, or unreliable.
- Inability to fulfill federal and legislative reporting requirements and data sharing obligations with transportation partners and the public.
- Inability to address operational activities and the ongoing changes required of the business.
- Inability to address Public Disclosure Requests and federal reporting requirements in a timely fashion.
- Decisions based on data silos, inappropriately combined data sources, and misinterpreted information.
- Limited ability to perform least-cost planning due to a lack of reliable and comprehensive interdisciplinary information.
- Difficulty in achieving Results Washington and WSDOT Strategic plan goals.
- Inefficient departmental operations and environmental and transportation resource stewardship.
- Increased risk that the department will not be compliant with records retention rules.

(3) Will efficiency increase? How? Efficiency will increase in the following ways.

- Efficiency is increased by maintaining staff workloads at a level that facilitates accurate and timely work and allows WSDOT to address current and anticipated demand for BI.
- Integrated tabular and geospatial data streamlines data analysis for business professionals by reducing the delays and confusion caused by working across different reporting and analysis tools.
- The comprehensive and integrated information provided via WSDOT's BI environment streamlines decision making, strategic investment, and environmental and transportation resource stewardship.
- Increased BI support facilitates interdisciplinary work and least-cost planning efforts.
- Implementation of BI software and hardware upgrades speeds the distribution of meaningful information for operational and decision support work.
- The provision of BI information to transportation partners and the general public facilitates collaboration and enables projects to run more efficiently.

(4) Will outputs change? How? Yes, outputs are likely to increase due to increased availability and responsiveness in addressing evolving business requirements, data sharing obligations, external reporting requirements, and the demand for open data products.

The kinds and complexity of outputs are also changing. The WSDOT business community, transportation partners and the public are increasingly requesting enhanced information delivery via portals and dashboards. Users are also requesting more complex reporting with drill-down capabilities and the ability to both present and query information via a variety of formats including interactive tables, charts, graphs, and maps.

(5) What is the expected impact on clients, services provided, citizens, other agencies, or governments? The requested resources help the department achieve:

- Results Washington goals for transparency in agency operations and decision making.
- WSDOT Strategic Plan goals for community engagement, strategic investment, and environmental and transportation resource stewardship.
- Federal and legislative reporting requirements.
- Data sharing agreement compliance.
- Highway safety goals as described by *WSDOT Executive Order 1085 – Sustainable Highway Safety Program*, and
- WaTech's goals for open data provision to support jobs, justice, analysis, and civic action.
- Quicker response to public disclosure requests and an overall reduced need for public disclosure requests.
- The provision of vetted, comprehensive and integrated information to state agencies and transportation partners at the municipal, county, tribal, regional, metropolitan and regional transportation planning organization, and federal agency level.
- Increased opportunities for interagency and public-private collaboration.
- Enhanced information provision via portals and dashboards.
- Increased external information access for transportation partners, the Legislature, the Transportation Commission, and the public.
- The ability for transportation partners to query and display information in a variety of formats.
- Tighter integration with GIS open data offerings provided via www.geography.wa.gov and WSDOT's ArcGIS Online portal.

Performance Measure Detail

The department's Business Intelligence team gathers performance measures on:

- The number of enhancement requests and the amount of time to fulfill these requests.
- The number of supported data warehouse subjects.
- The number of supported reports and interfaces.
- The number of report and data warehouse users.

The following performance targets for each of the above listed items are based on historical averages and the current backlog of pending requests:

- Ten percent decrease in the amount of time required to fulfill enhancement requests within the first two years. The percentage of decrease will likely decline in a linear fashion each year as more subjects are added and consume support time.
- An increase of at least two subject areas per year is anticipated.
- Ten percent increase in the number of supported reports and interfaces each year.
- Ten percent increase in the number of report and data warehouse users each year.

Identify important connections or impacts related to this proposal.

The department's BI environment provides critical support to almost all WSDOT business areas including Accounting and Financial Services, Human Resources, Construction Office, Environmental Services Office, Office of Equal Opportunity, Capital Program Development Management, Maintenance and Operations, and Washington State Ferries. The Data Warehouse has an average of 200 distinct WSDOT users per day with representatives from every region and mode. These users work in a variety of jobs from Transportation Engineers to Administrative Assistants to WMS Band Managers. The department's business units rely on BI data when making decisions, responding to public disclosure requests, and complying with federal, state and legislative reporting requirements.

In addition, this information is shared with external partners such as Washington State Patrol, Department of Licensing, Department of Ecology, Department of Health, Office of the Attorney General, Administrative Office of the Courts, Federal Highway Administration, WaTech, State Auditor's Office, Legislature, Transportation Commission, Military Department, the Office of Financial Management, and the Washington Traffic Safety Commission.

This decision package facilitates the provision of consistent, reliable and integrated information to state government and transportation partners at the municipal, tribal, county, regional transportation planning organization, metropolitan transportation planning organization, and federal agency levels. This information is used to streamline the transportation planning (least-cost planning) and scoping process, engage the community, and to offer opportunities for interagency and public-private collaboration. This decision package also facilitates the provision of information for open data offerings. Open data is information that does not require protection from unauthorized disclosure and is made available to the public to support jobs, justice, analysis and civic action.

Please Note: The Labor System Replacement Decision Package includes a request for additional BI staff (one ITS 5 BI Reporting Specialist for the duration of the 2017-19 biennium and one ITS 5 ETL Analyst ongoing) and BI environment enhancements. The additional BI staff and enhancements are deemed necessary for the successful implementation and ongoing support of the Labor System Replacement.

Originally, the BI Reporting Specialist position was included in the Business Intelligence Support Decision Package for the 2017-19 biennium and ongoing. This position is now included in the Labor System Replacement Decision Package for the duration of the 2017-19 biennium to ensure adequate resources for project implementation. Ongoing support for the BI Reporting Specialist position beyond the 2017-19 biennium is included in the Business Intelligence Support Decision Package. There is no duplication of software, hardware, or personnel across this decision package and the Labor System Replacement Decision Package.

Business units rely on the department's BI environment to comply with federal, state, and legislative reporting requirements, and to analyze and report on performance measures. Examples include:

- **Disadvantaged Business Enterprise (DBE) Program and Prime Contractor Payments**
  The Federal Highway Administration (FHWA) states, "Prime contractors must adhere to the Disadvantaged Business Enterprise (DBE) Program and promptly pay subcontractors for completed work" as one of the requirements for receiving federal money for construction contracts. WSDOT is responsible for monitoring Prime Contractor Payments and the distribution of these payments to subcontractors as part of FHWA's required reporting. WSDOT uses data collected in the Construction Data Mart and the Disadvantaged Business Enterprise Payment (DBEP) Data Mart to meet this federal reporting requirement and to provide Prime Contractor Payment information to the public, including subcontractors. The department's BI environment is the only location where this diverse data is collected and integrated to meet this reporting need.

- **Washington State's Traffic Safety Plan – Target Zero**
  The goal of Target Zero is to eliminate traffic deaths and serious injuries by 2030. Target Zero is endorsed by Governor Inslee. To achieve the aggressive goals outlined in the Target Zero plan, WSDOT must monitor Key Performance Indicators (KPIs) and Key Performance Measures (KPMs) to determine the factors and locations associated with the largest number of fatalities and injuries. The Collision Data Mart is critical to this analysis and is the only place the KPIs and KPMs associated with Target Zero measures exist. Once the most common factors are identified, action plans are created to mitigate the identified factors. The department's BI environment is critical to monitoring the effectiveness of these action plans as well as to identifying the next set of factors to be addressed.

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

WSDOT has investigated services offered by WaTech. WSDOT was an early-adopter of Data Warehousing and BI reporting tools and already has a significant investment in decision support software and infrastructure and has over 15 years of development and support experience. WaTech began providing services for BI reporting in the last few years and has not attained the same level of maturity in this area. WaTech's BI reporting and visualization tool offerings were explored. WaTech and WSDOT staff mutually agreed that WaTech's system was not yet ready for the level of service already in place at WSDOT as well as the expected future demands for those services. Furthermore, WSDOT would need to undergo a full-scale migration effort to use WaTech's BI reporting and analysis tool.

What are the consequences of not funding this request?

Not funding this package would:

- Jeopardize overall WSDOT operations with more BI service disruptions as technical issues arise that cannot be properly addressed.
- Endanger WSDOT's ability to meet external reporting obligations.
- Inhibit WSDOT's ability to achieve Strategic Plan and Results Washington goals.
- Delay fulfillment of Public Disclosure Requests.
- Delay fulfillment of BI data and reporting enhancement requests.
- Reduce the number of implemented BI data and reporting enhancement requests.
- Inhibit the enhancement and expansion of reporting capabilities and GIS connectivity for both internal and external collaboration.
- Reduce the provision of open data products.
- Restrict the addition of new subject areas needed to fulfill federal, state, and legislative obligations and reporting requirements.
- Increase the likelihood that the provided information becomes corrupt, untrustworthy and/or unavailable.
- Inhibit inter-disciplinary collaboration.
- Impede agency performance measurement efforts.

Expenditure Calculations and Assumptions

Software and infrastructure purchases and software maintenance costs are based on quotes from vendors that WSDOT already has under contract. Software license maintenance costs include a yearly increase of 5 percent. Sales tax of 8.9 percent (Tumwater, WA) has been applied.

Object of Expenditure Detail					
Object of Expenditure	**FY 2018**	**FY 2019**	**2017-19**	**2019-21**	**2021-23**
A - Salaries and Wages	248,000	248,000	496,000	662,000	662,000
B - Benefits	95,000	95,000	190,000	254,000	254,000
C - Personal Service Contracts	-	-	-	-	-
E - Goods and Services	-	-	-	-	-
EY01 - Spatial ETL Server License Maintenance (FME from Safe Software)	-	3,000	3,000	7,000	7,000
EY01 - Software AG Adabas SQL Gateway Maintenance	-	9,000	9,000	19,000	21,000
EY01 - MSDN Licenses (renewal every two years)	3,000		3,000	4,000	4,000
G - Travel	-	-	-	-	-
J - Capital Outlay	-	-	-	-	-
JB02 - Software AG Adabas SQL Gateway	44,000	-	44,000		
JB02 - Spatial ETL server license (FME from Safe Software)	15,000	-	15,000		
JA06 - VM server to host the Spatial ETL server license	2,000	-	2,000		
JA06 - New Employee Workstations	15,000	-	15,000		

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

Software and infrastructure purchases are one-time costs and amount to $76,000.

Ongoing costs include the three new support FTEs funded at the ITS 5 level, plus an additional ITS 5 level BI Reporting Specialist beginning in the 2019-21 biennium, and the ongoing software maintenance costs for the purchased software products.

FTE costs (including both salary and benefits) amount to $686,000 in the 2017-19 biennium and $916,000 in out biennia. Software maintenance costs amount to $15,000 in the 2017-19 biennium and $30,000 in the 2019-21 biennium. The first year's maintenance costs are included with the software purchases.

Extract, Transform, and Load (ETL) Analyst Resource Needs

Please see: Kimball, Ralph and Laura Reeves, Margy Ross and Warren Thornthwaite. *The Data Warehouse Lifecycle Toolkit.* 1998, John Wiley & Sons. Page 716; Page 19.2 in PDF.

Please Note: The PDF version of this book is included as a source file attachment with the Business Intelligence Support Decision Package.

There are two predominant data warehousing approaches in the IT industry. WSDOT chose the Kimball approach and WSDOT has made a disciplined effort to minimize deviation from his recommended practices. The above referenced book is Ralph Kimball's book on "Expert Methods for Designing, Developing, and Deploying Data Warehouses."

As per *The Data Warehouse Lifecycle Toolkit:*

> *You need to ensure that there will be adequate funding for dedicated data warehouse maintenance resources beyond the initial construction phase. The maintenance activities described in this chapter are nonnegotiable; they must be performed if you expect a return on your original investment. As a general rule, it takes 50 percent of the development resources to provide ongoing maintenance for a steady-state warehouse, assuming no additional users or data sources. Typically, there is no decline in ongoing needs.*

Typically, WSDOT has devoted about two to three staff members to the development of each of the agency's ten data marts. Kimball's estimate for support is: 10 support areas (data marts) x 2 development staff x 50% = 10 ETL Analyst staff members. WSDOT currently has three.

Another means of calculating ETL support needs is offered via Caper Jones, Chairman, Software Productivity Research, Inc.
As per *Do Language Levels Affect Productivity?:*

> ***What Is A Language Level?***
> *As language levels go up, fewer statements to code one Function Point are required. For example, COBOL is a level 3 and requires about 105 statements per Function Point.*
> *The numeric levels of various languages provide a convenient shortcut for converting size from one language to another. For example, if an application requires 1000 non-commentary COBOL statements (level 3), then it would take only 500 statements in a level 6 language (such as NATURAL) and only 250 statements in a level 12 language (such as OBJECTIVE C). As you can see, the average number of statements required is proportional to the levels of the various languages.*
>
> ***Do Language Levels Affect Productivity?***
> *The correlation between the level of a language and development productivity is not linear. For most large software projects, coding amounts to only about 30 percent of the effort.*
>
> *Assume a program is written in a language that is twice the level of a similar program, for instance level 6 versus level 3. In this example, the coding effort might be reduced by 50 percent. But the total project might be improved by only 15 percent, since coding only comprised 30 percent of the original effort. Double the level of the language again to a level 12. That will only*

give an additional 7.5 percent net savings. Once again, coding is halved. But coding is not a major factor for very high level languages.

More accurate economic productivity rates can be gained by examining the average monthly Function Point production rates associated with various language levels. Table 1 looks at how language levels affect productivity.

Table 1. Language Level Relationship to Productivity

LANGUAGE LEVEL	***PRODUCTIVITY AVERAGE PER STAFF MONTH***
1 – 3	***5 to 10 Function Points***
4 - 8	***10 to 20 Function Point***
9 - 15	***16 to 23 Function Points***
16 - 23	***15 to 30 Function Points***
24 - 55	***30 to 50 Function Points***
Above 55	***40 to 100 Function Points***

WSDOT currently has 1,200 Production ETL sessions running on a regular basis in Informatica. There are an additional 50 sessions running in development. Each of these sessions equate to a function point and Informatica equates to a level 12 programming language.

Based on the information provided, 1200 function points divided by the productivity average-per-staff-month of 20 function points equates to 60 developers for initial creation work. Assuming traditional application support percentages of 10-25 percent of the original development effort, WSDOT would require 6 – 15 support personnel to maintain ETL sessions. New sessions typically require a higher level of support for the first two years and should be estimated at 50 percent of the development effort.

Data Warehouse and BI Team Staffing

Please see, *Data Warehouse and BI Team Staffing***,** available via: http://etl-tools.info/en/bi/dw-team.htm.

As per the *Sample Data Warehouse Team Organogram,*

The head count in our sample data warehousing (DW) team lists 35 people. Be aware that this organogram depends heavily on the company size and its mission, however it may be treated as a good illustration of proportions on the BI resources in a typical environment.

Keep in mind that not all positions involve full time resources.

- *Steering committee, Business owners - 3 **
- *Business Data Management group - 5*
- *DW team - 20:*
  - *6 DW/ETL specialists and developers*
  - *3 report designers and analysts*
  - *6 DW technical analysts*
  - *5 Testers* (an analyst may also play the role of a tester)*
- *Support and maintenance - 5**

*** - resource partially involved, full-time not required, the person is also responsible for other areas than business intelligence*

The five testers were not counted because WSDOT usually has skilled power users in the business who perform this function. The five support and maintenance staff were not counted because these are infrastructure and server-support staff to whom we are customers. That leaves a total of 15 as the estimate for technical support of an enterprise-wide BI operation.

WSDOT supports five major lines of business and ten business data management groups. In keeping with these numbers, the associated percentages indicate that we should have:

- 10 DW/ETL specialists and developers
- 10 DW technical analysts (data modelers and database administrators)
- 5 report designers and analysts

WSDOT currently has the following dedicated BI support staff:

- 3 DW/ETL specialists and developers
- 1 DW database administrator
- 1 report designer and analyst
- 1 BI coordinator – project management and business analyst

Also, as per *Data Warehouse and Business Intelligence Staffing Ratios*, The Computer Electronics Article 1687, published in October, 2011: (Please Note: The PDF version of this article is included as a source file attachment with the Business Intelligence Support Decision Package.)

> *DW/BI Staff as Percentage of IT Staff*
> *For those organizations that do have DW/BI staff, Figure 3 shows they make up 3.8% of the IT staff at the median, the point at which half the organizations have a lower ratio and half have a higher ratio. Typical DW/BI staffing stays within a fairly narrow range, moving from 2.1% at the 25th percentile to 6.2% at the 75th percentile.*

WSDOT employs approximately 270 IT staff and of these six are devoted to Data Warehouse and Business Intelligence support. This study, though, does not include the Data Warehouse Database Administrator in the calculations, which would then reduce WSDOT's devoted staff to five. This equates to a BI staffing level percentage of 1.9 percent, which is below the twenty-fifth percentile ranking based on a survey of more than 200 IT organizations.

Since WSDOT employs more than 100 IT staff members, WSDOT is considered to be a large organization in this study. According to the article, "Large organizations have a lower ratio of DW/BI staff to IT staff than midsize organizations because of economies of scale and because they tend to have larger, more complex staffing requirements in other areas." As compared to large organizations and the government sector, WSDOT's staffing rates fall close to the twenty-fifth percentile level.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Business Intelligence (BI) Support

Base Budget: WSDOT's current BI program consists of the following:

Existing BI Support FTEs	Annual Salary	Annual Benefits	Biennial Total
3 ITS 5 Extract, Transfer, and Load (ETL) Analysts	248,000	95,000	686,000
1 ITS 6 Data Warehouse Database Administrator	91,000	34,000	250,000
1 ITS 6 BI Coordinator	91,000	34,000	250,000
1 ITS 5 BI Report Writer	83,000	32,000	230,000
Existing Licensing Costs (Including sales tax)	**Annual Cost**		
Informatica	65,000		130,000
IBM Cognos	49,000		98,000
Real Time Technology Solutions QuerySurge	2,000		4,000
TOTAL EXISTING COSTS		824,000	1,648,000

What are other important connections or impacts related to this proposal? Through the provision of integrated, reliable, and vetted information, the department's BI environment helps the agency achieve goals for community involvement, the provision of open data to the public, streamlining processes and decision making, and providing transparency to the decision making process. Included below are some explicit example of these impacts:

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	**Commuter Impact Analysis (CIA):** CIA is a system used by WSDOT, cities, and counties to provide roadway construction information to help mitigate impacts to the traveling public. Staff use the WSDOT BI environment, particularly the Capital Program Management System (CPMS) Data Mart, data to create the WSDOT portion of the information. **Crash Data Portal:** The Crash Data Portal allows public access to commonly requested Washington State Crash Data. Access to crash data has previously only occurred via a manual public disclosure request/response process. The Crash Data Portal saves time and money by providing on-demand queries of Washington State Crash Data. In addition, the report parameters are granular enough to allow employees from Washington cities, Washington counties and various other state and

		federal entities to request crash data for specific areas of interest. This data is populated via the WSDOT BI environment's Collision Data Mart. **Disadvantaged Business Enterprise (DBE) Program and Prime Contractor Payments:** WSDOT is responsible for monitoring Prime Contractor Payments and the distribution of these payments to subcontractors as part of FHWA's reporting requirements. WSDOT uses data collected in the BI environment's Construction Data Mart and the Disadvantaged Business Enterprise Payment (DBEP) Data Mart to meet this federal reporting requirement and to provide Prime Contractor Payment information to the public, including subcontractors. **Traffic Geoportal:** This web interface allows transportation partners and the public to access Annual Average Daily Traffic (AADT) volumes for both traffic counting locations and roadway segments, along with access to monthly and hourly traffic volume data from permanent traffic recorders. This data is provided via WSDOT's BI environment. **Transportation Executive Information System (TEIS) Project Pages and the WSDOT Project Search Page:** These tools provide WSDOT's transportation partners and the general public with basic information about projects in and around their communities. This data is populated via the WSDOT BI environment's CPMS Data Mart. **WSDOT Community Planning Portal:** This compilation of WSDOT map data is for use by cities and counties for general planning purposes. The State Route Inventory and WSDOT Project Inventory are provided via WSDOT's BI environment. WSDOT's BI environment also provides open data and information used by the Federal Highway Administration, National Highway Traffic Safety Commission, the media, real estate companies, engineering firms, and the public
Other local gov't impacts?	Yes	• The tools described in this addendum provide benefits to government agencies at all levels within the state.

		• Special requests for traffic and crash data are provided to local agencies via WSDOT's BI environment.
Tribal gov't impacts?	Yes	• The tools described in this addendum provide benefits to the Tribal governments within Washington. • Special requests for traffic and crash data are provided to Tribal governments via WSDOT's BI environment.
Other state agency impacts?	Yes	• The tools described in this addendum provide benefits to Washington state agencies. • Data from WSDOT's BI environment is shared with external partners such as Washington State Patrol, Department of Licensing, Department of Ecology, Department of Health, Administrative Office of the Courts, WaTech, State Auditor's Office, Office of the Attorney General, Legislature, Transportation Commission, Military Department, the Office of Financial Management, and the Washington Traffic Safety Commission.
Responds to specific task force, report, mandate, or exec order?	Yes	**Disadvantaged Business Enterprise (DBE) Program and Prime Contractor Payments:** Please see detailed description given above. **FAST Act (MAP-21)**: Fast Act requires WSDOT to provide crash data to Metropolitan and Regional Planning Organizations. This data comes from WSDOT's BI environment. **Washington State's Traffic Safety Plan – Target Zero:** The goal of Target Zero is to eliminate traffic deaths and serious injuries by 2030. Target Zero is endorsed by Governor Inslee. To achieve the aggressive goals outlined in the Target Zero plan, WSDOT must monitor Key Performance Indicators (KPIs) and Key Performance Measures (KPMs) to determine the factors and locations associated with the largest number of fatalities and injuries. The BI environment's Collision Data Mart is critical to this analysis and is the only place the KPIs and KPMs associated with Target Zero measures exist. Once the most common factors are identified, action plans are created to mitigate the identified factors. WSDOT's BI environment is critical to monitoring the effectiveness of these action plans as well as to identifying the next set of factors to be addressed. **Washington State Office of the Chief Information Officer (OCIO) Open Data Planning (Policy 187):**

		This policy stipulates that "Washington State agencies must develop, implement, and maintain an Open Data Plan that outlines how the agency will routinely work to make open data publicly available." WSDOT's BI environment is a key component to providing the public with vetted, integrated, and consistent information. WSDOT provides open data offerings via the tools described in this addendum and also via the WSDOT GeoData Distribution website.
Does request contain a compensation change?	No	
Does request require a change to a collective bargaining agreement?	No	
Facility/workplace needs or impacts?	No	
Capital Budget impacts?	No	
Is change required to existing statutes, rules or contracts?	No	
Is the request related to or a result of litigation?	No	
Is the request related to Puget Sound recovery?	No	
Identify other important connections		• WSDOT's BI environment also provides open data and information used by the Federal Highway Administration, National Highway Traffic Safety Commission, the media, real estate companies, engineering firms, and the public.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
A and B: Salary, Wages, and Benefits 2 ITS 5 FTE Extract, Transform, and Load (ETL) Analysts and 1 ITS 5 FTE Data Modeler. 1 ITS 5 BI Reporting Specialist is included beginning in FY 2020 and ongoing.	343,000	343,000	458,000	458,000
E: Goods and Services Spatial ETL Server License Maintenance		3,000	3,000	4,000
Software AG Adabas SQL Gateway Maintenance		9,000	9,000	10,000
MSDN Licenses (renewal every two years)	3,000		4,000	
J: Capital Outlay				
Software AG Adabas SQL Gateway	44,000			
Spatial ETL server license (FME from Safe Software)	15,000			
VM server to host the Spatial ETL license	2,000			
New Employee Workstations	15,000			
Total Cost	**422,000**	**355,000**	**474,000**	**472,000**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service?	☐Yes	☒ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.)	☐Yes	☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.)	☐Yes	☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: CE Software License & Maint Agreements
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: C – Information Technology

Agency Recommendation Summary Text:

Funding is requested for the increased costs of software licenses and equipment maintenance agreements that support all Washington State Department of Transportation (WSDOT) department-wide project deliveries, program activities, and business operations. The software and equipment are critical to WSDOT's operations as they are necessary to support the department's mission to provide and support "safe, reliable and cost-effective transportation options to improve livable communities and economic vitality for people and businesses." The last general budget increase for these licenses and agreements occurred at the start of the 2013-15 biennium.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000
Total Cost	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program C - Operating					
Fund 108-1 MVA-State	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000
Total by Fund	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000
Total Cost	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000
Program C - Operating					
E. Goods and Services	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000
Total by Program	1,408,000	1,409,000	2,817,000	2,035,000	2,036,000

Package Description

This package requests funding to maintain the department's existing software licenses and maintenance agreements that support communications, project development and reporting, bridge design, project management, environmental, business activities (accounting, imaging, inventory, disaster recovery), and information technology (IT) infrastructure (e.g., servers, operating systems, network equipment). These costs are accounted for in Subprogram C6 – Software Maintenance Contracts.

This request is based on the actual net cost increases incurred in prior biennia to software licenses and equipment maintenance agreements. The software license and equipment maintenance costs have increased approximately 10 percent per biennium since the 2007-09 biennium. The total percentage

increase during this 10-year period exceeds 53 percent (Please see the Budget vs. Actual by Biennium chart at the end of this section.).

The last budget increase to cover the additional costs of these goods and services occurred at the beginning of the 2013-15 biennium. The budget increase was based on actual increases incurred in the prior biennium (2011-13), not on the projected increases for the 2013-15 biennium. Because of this prior biennium actual cost based approach, the department's IT Division has had to reduce spending in other areas of IT to cover the actual cost increases incurred in the past two biennia.

Three of the largest contract cost increases are:

- Cisco SMARTnet;
- Oracle Primavera; and
- the state's master contract for Microsoft enterprise licenses.

Funding the contract increases ensures that the department will be able to continue to support project deliveries, program activities, and business operations without diverting funds from other uses to cover these mandatory license and maintenance cost increases.

The increase in the number of department-wide network equipment is also driving the increase in the department's contract cost for Cisco's SMARTnet maintenance program. This maintenance program provides the department with access to the Cisco Technical Assistance Center for troubleshooting network equipment as well as access to equipment software upgrades. The program also provides 24/7 replacement, 365 days a year of failed network equipment running public facing applications, and next business day service for all other covered equipment.

The department's Project Management and Reporting System is made up of the Primavera suite of applications from Oracle (Scheduler and Cost Manager). Contract costs have increased each year for this software suite. Department-wide use of this system is critical to the successful delivery of construction projects on-time, on-budget, and within scope with a high level of accountability.

As the department has added new software or replaced existing software, software maintenance costs have increased accordingly.

Historically, the IT Division's budget decision packages for software licenses and equipment maintenance were not approved when based on estimated costs for the upcoming biennium. What has been approved are decision packages based on prior biennium actual costs. This has caused the IT Division to divert funds from other areas to cover the software and maintenance cost increases. As the chart shows, the historic shortfall between budget and actual has ranged from $300,000 underspent (the first year of a budget request for these costs) to almost $2 million overspent.

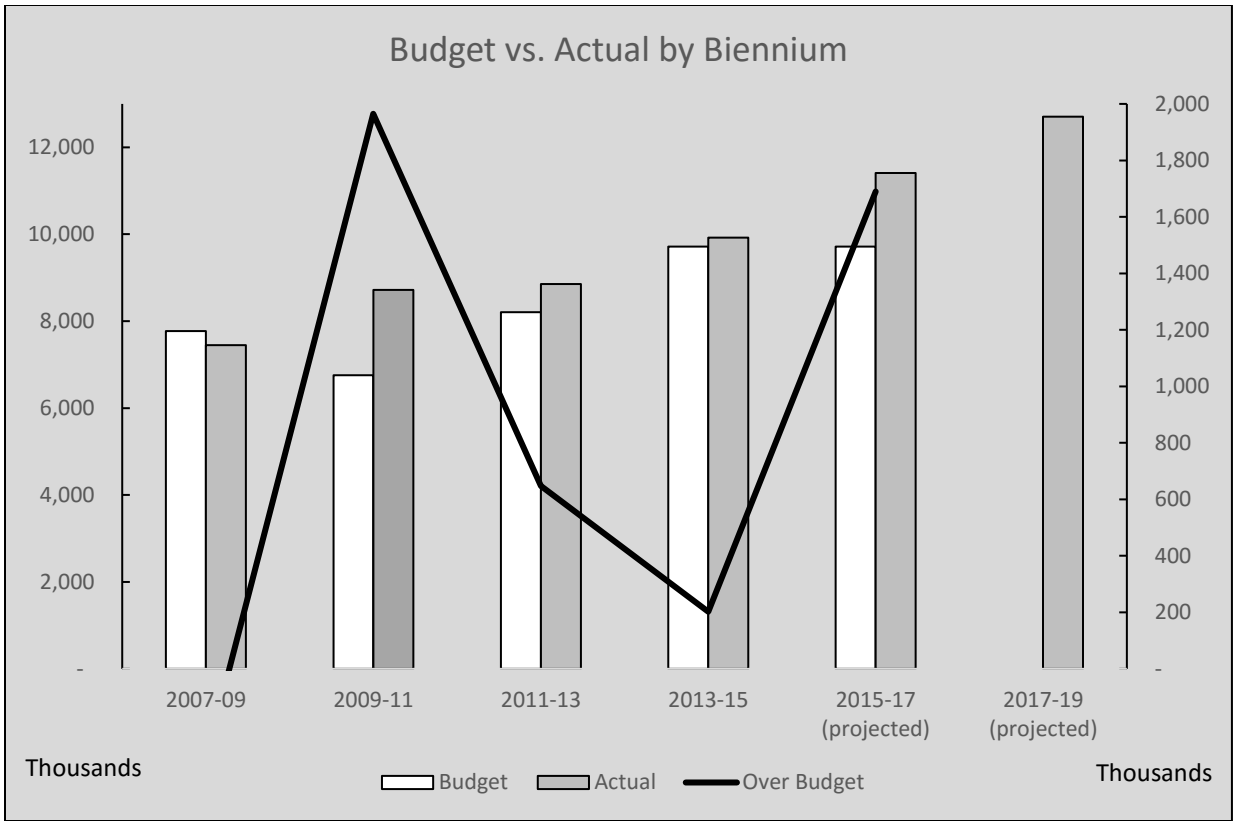


Chart Notes:

1. There was not a shortfall for the 2007-09 biennium. This was also the initial biennium for Subprogram C6 and the subprogram was fully funded in that biennium.
2. The chart shows the budget decreasing between the 2007-09 and 2009-11 biennia. The funding for Subprogram C6 was increased in the 2011-13 and 2013-15 biennia. As shown above, the amount funded in the 2013-15 biennium resulted in the smallest shortfall experienced for the subprogram.
3. The department is forecasting a budget need in the 2015-17 biennium and this request would alleviate a funding shortfall in the 2017-19 biennium.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The outcomes and results that will occur because of this funding change are the continued availability, operation, and support for critical software and hardware infrastructure used by the department and the agencies it supports, such as the Office of Minority and Women's Business Enterprises, the Washington State Transportation Commission, the Freight Mobility Strategic Investment Board.

If the department does not receive funding to cover the increased software licenses costs in the biennium they occur:

- Out of date software exposes the department to fines and/or the inability to process credit card transactions due to non-compliance with Payment Card Industry Data Security Standards;

- The department would be unable to upgrade to the most current versions of software and increase the department's security exposure (i.e., older software does not have updated security protections);
- The department would be in violation of the contract terms and conditions;
- The vendors would remotely disable use of the software for non-payment; and
- The software would continue to function, but the vendor would not provide support to resolve technical issues.

If the department does not receive funding to cover the increased equipment maintenance costs in the biennium they occur:

- The vendors would not provide expedited service (days instead of hours) to replace failed critical core network equipment; or
- The vendors would not provide support to resolve technical issues for malfunctioning equipment.

Efficiency could increase especially pertaining to software. As an example, the Microsoft Enterprise Agreement allows the department to upgrade to the newest versions of software. These newer versions typically contain security, technical, and usability enhancements, such as:

- The software would include improved functionality making it more secure and more stable;
- The user interface would be more intuitive for the end-user; and
- The software would support newer features of hardware and other software.

Outputs are not expected to change.

The expected impact on citizens, other agencies, or governments is one of continued high availability and performance of our networks and externally facing applications.

Performance Measure Detail

No measurable activity performance measures are expected to be affected by this decision package.

Identify important connections or impacts related to this proposal.

The software and hardware identified in this package support the following stakeholders:

- All divisions within the department
- Other state agencies
    - Office of Minority and Women's Business Enterprises
    - Washington State Transportation Commission
    - Freight Mobility Strategic Investment Board
- Citizens who access department sites, applications, and networks (Traffic cameras, Tolling, Ferries' schedules and Vehicle Reservations, etc.)

The proposal will allow the department to maintain compliance with the Payment Card Industry Data Security Standards; compliance allows the department to continue to accept credit cards for payment of tolls, tickets, etc. The proposal may also have an impact on the department's security audit required by the state Office of the Chief Information Officer. The audit identifies potential security risks and requires that we address them.

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

There were two alternatives identified. The first option would be to continue to divert funds away from other uses in order to fund the software license and equipment maintenance increases. The second option would be to discontinue support for software and equipment when licenses or maintenance costs increase above the current base amount.

The first option was not selected because no pros were identified for this option. The cons for this option are:

- The department's IT Division must continue to divert funds from other uses to pay for these licenses and agreements; the effect is compounded if one assumes the IT Division's budget remains relatively flat but all other costs continue rising.
- Because some of the funds are diverted from hardware refresh and some of the equipment is now well over eight years old, the IT Division is beginning to experience increased equipment failures that have not been seen previously.

The second option was not selected as there is only one pro for this approach: assuming that the IT Division's budget remains relatively flat, the department has been able to cover these contract cost increases by diverting funds from other critical uses. Cons for this option are:

- More funds would be diverted from other critical areas.
- Critical positions would not be filled; this would result in:
  - The IT Division not being able to satisfy the requirements of the department's business divisions, or
  - Having to hire costlier contractors to support the software infrastructure.
- Hardware will be further extended beyond its useful life resulting in an increase in the rate of equipment failure.

What are the consequences of not funding this request?

Because these are existing contracts, the IT Division must pay for their use. If the contracts are cancelled, the department will not be allowed to use software and will not be able to recover from or replace failed hardware. The affected stakeholders would include:

- All divisions within the department,
- Other Washington state agencies and local jurisdictions who rely on departmental applications (Office of Minority and Women's Business Enterprises, Washington State Patrol, Department of Licensing, City of Seattle, etc.);
- Citizens and businesses who access the department's externally facing applications (general travel information, disadvantaged business program, oversize load permits, traffic maps, vehicle reservations, ferry ticketing, tolling accounts, traffic cameras, etc.); and
- Other states.

Expenditure Calculations and Assumptions

The actual software license and equipment maintenance costs have increased approximately 10 percent per biennium since the 2007-09 biennium. The percentage increase during this 10-year period is over 53 percent. This budget request would fully fund the total projected software licenses and hardware maintenance contracts costs in Subprogram C6 – Software Maintenance Contracts for fiscal years 2018 and 2019.

The estimated costs in fiscal years 2020 and 2021 assume a 10 percent increase over fiscal years 2018 and 2019.

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

All costs are ongoing.

ATTACHMENT

Vendor	Obj	2007-09 Actual Cost (a)	2009-11 Actual Cost (b)	2011-13 Actual Cost (c)	2013-15 Actual Cost (d)	2015-17 Estimated Cost (e)	2017-19 Estimated Cost (f)	Estimated Increase (f-d)*
Avaya	EY01	0	186,000	268,186	261,788	727,963	1,220,000	958,212
Microsoft (EA)	EY01	2,191,003	2,417,000	3,196,292	3,766,301	4,000,000	4,473,000	706,699
Image source Inc. (ILINX)	EY01				234,000	456,148	476,000	242,000
Right Systems (Smartnet)	EE10	0	122,300	435,627	684,499	863,250	915,000	230,501
Oracle USA	EY01	0	364,670	419,201	344,384	468,000	488,000	143,616
IBM	EY01	454,510	430,000	195,566	411,252	520,000	549,000	137,748
Subtotal products above(6)								2,418,776
Subtotal Other Products Increasing (71)								768,685
Total Products increasing (77)								3,187,461
Products No Change (2)								-
Products Reducing (11)								(108,393)
Discontinued Products (53)								(261,622)
TOTAL		**7,451,349**	**8,720,394**	**8,852,804**	**9,920,127**	**11,386,453**	**12,668,573**	**2,817,446**

*NOTE: The last increase occurred in the 2013-15 biennium; therefore the estimated increase is calculated against that biennium's budget amount

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Software License & Maintenance Agreements

Base Budget: WSDOT's current Subprogram C6 (Software License & Maintenance Agreements) consists of the following:

Existing Software License & Equipment Maintenance (including sales tax)	Annual Budget
Software Licenses and Equipment Maintenance	$ 4,859,000

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

The department's IT Division provides support for every division within the agency. In addition to WSDOT personnel, other users of our applications and network would be impacted by increased failure rates and downtime, decreasing performance, less flexibility, slower response times, and decreased security. These include:

- Travelling public
- Businesses who make use of the state's transportation infrastructure
- Other Washington state agencies (e.g., DOL, WSP, OMWBE)
- Other state/provincial agencies (e.g., Oregon DOT, Idaho DOT, British Columbia)
- Local governments and jurisdictions, both in Washington and neighboring states/province
- Tribal governments

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	In most cases, the impact to regions/counties is not direct. However, regional and county jurisdictions rely on information and services from WSDOT. This reliance would be impacted if WSDOT was unable to supply the services or data that these governments rely upon.

Other local gov't impacts?	Yes	In most cases, the impact to local governments is not direct. However, local governments and local jurisdictions rely on information and services from WSDOT. This reliance would be impacted if WSDOT was unable to supply the services or data that these governments rely upon.
Tribal gov't impacts?	Yes	In most cases, the impact to tribal governments is not direct. However, regional and county jurisdictions rely on information and services from WSDOT. This reliance would be impacted if WSDOT was unable to supply the services or data that these tribal governments rely upon.
Other state agency impacts?	Yes	WSDOT supports applications for the Office of Minority and Women Business Enterprises (OMWBE), including the Disadvantaged Business Enterprise Program (DBEP) and Prime Contractor Payments. In addition to OMWBE, we also support the network infrastructure for the State Transportation Commission, and the Freight Mobility Strategic Investment Board (FMSIB).
Responds to specific task force, report, mandate, or exec order?	No	
Does request contain a compensation change?	No	
Does request require a change to a collective bargaining agreement?	No	
Facility/workplace needs or impacts?	No	
Capital Budget impacts?	No	
Is change required to existing statutes, rules or contracts?	No	
Is the request related to or a result of litigation?	No	

Is the request related to Puget Sound recovery?	No	
Identify other important connections		In addition to support for internal WSDOT operations, the Ferries Ticketing and Vehicle Reservations systems as well as network infrastructure and web access for Tolling rely on these software and hardware support contracts. These systems are used extensively by the traveling public and businesses The inability to maintain software and equipment could adversely affect WSDOT's business operations and ability to deliver critical services to the public.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
E: Goods and Services Software Licenses and Network Hardware Maintenance	1,408,000	1,409,000	2,035,000	2,036,000
Total Cost	**1,408,000**	**1,409,000**	**2,035,000**	**2,036,000**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☐Yes ☒ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: DA Wireless Sites Lease Adjustments
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: D – Capital Facilities - Operating

Agency Recommendation Summary Text:

Additional appropriation authority of $107,000 is requested for unavoidable increases to leases for wireless radio communication sites. The wireless communication system is essential for daily highway operations and is the primary source of communication during emergencies. This request will allow the wireless communication system to continue to function at the current level of service.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	52,000	55,000	107,000	53,000	54,000
Total Cost	52,000	55,000	107,000	53,000	54,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program D - Operating					
Fund 108-1 MVA-State	52,000	55,000	107,000	53,000	54,000
Total by Fund	52,000	55,000	107,000	53,000	54,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	52,000	55,000	107,000	53,000	54,000
Total Cost	52,000	55,000	107,000	53,000	54,000
Program D - Operating					
E. Goods and Services	52,000	55,000	107,000	53,000	54,000
Total by Program	52,000	55,000	107,000	53,000	54,000

Package Description

The department has 79 wireless communication sites that are leased from various vendors and agencies. These sites have 92 separate leases associated with them, since some sites have separate leases for access to the land, for space in the buildings, or for space on the tower. Each lease contract contains language that either requires WSDOT to pay, or allows property owners to request, annual or term (fifth year) increases in lease payments. Contracts also allow renegotiation of the terms of the lease if additional equipment is added to the site or tower. Additional appropriation authority of $107,000 is requested for lease increases in the 2017-19 biennium.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
Approval of this package to cover increases in wireless lease costs will contribute to maintaining vital communications during emergencies.

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
The department's wireless communication system provides statewide radio communication and data transmission that is vital to the department, other agencies, and the traveling public.

What alternatives were explored, and why was this alternative chosen?
Alternatives to the request would result in undesirable consequences. For example, the department could close wireless sites but terminating leases for some wireless sites and reducing the wireless communication network would result in negative impacts to maintenance operations, emergency response, traffic management, and traveler information. The Highway Maintenance program would experience operational inefficiency and reduced employee safety due to compromised communication from supervisor to staff in certain remote areas where there are limited, or no, communication options. Counties, the Washington State Patrol, the Department of Natural Resources, and the state Emergency Management Division rely on WSDOT's wireless communication infrastructure for emergency response. Reduced wireless capability would lead to a loss of communication during a major disaster such as an earthquake or tsunami. Additionally, the ability to convey information to and from variable message signs, cameras, and other traffic management devices by Traffic Management Centers would be reduced.

A second alternative would be to reduce planned levels of building facilities' Preventive Maintenance (PM). The Capital Facilities maintenance and operations budget supports the daily operation of essential building facilities that support staff and equipment that maintain, operate, and construct state highways. Reductions in PM have occurred over several biennia. Further reductions in the PM budget would result in increased corrective maintenance to building systems, such as heating and plumbing, and building components, such as overhead doors. The program currently has a backlog of unmet preventive maintenance needs and cannot be further reduced without substantial impacts to occupants and/or building operations.

The recommended alternative of additional appropriation authority for unavoidable cost increases was selected to keep facilities open and operational without impacting current levels of service and agency performance.

What are the consequences of not funding this request?
Rather than risk the closure of infrastructure that is integral to communications and public safety, if the request is not approved, resources would need to be diverted from planned facility maintenance activities. The Capital Facilities Program is already operating with constrained maintenance resources, and further diversion of those resources would lower overall service levels and result in accelerated deterioration of agency facility assets.

Expenditure Calculations and Assumptions

The assumptions and method of calculating the increase for each category of lease is as follows:

- For leases that expire after the 2017-19 biennium, cost increases are simply stated in the lease, normally increased by a fixed percentage per year or by the Consumer Price Index (CPI);
- For leases that expire during the 2015-17 or 2017-19 biennia it is assumed that the leases will be renewed with the same cost escalation clause that is in the existing lease. For example, if the current lease stipulates that the cost will increase each year by the CPI, the cost of the renewed lease is assumed to increase each year by the CPI; and
- There is one new lease for which there is no budget authority in the base and the cost is simply stated in the lease document.

Summary of Budget Request by Lease Category		
Lease Category	**Number of Leases**	**2017-19 Estimated Increase**
Annual increases for leases that expire after 2017-19	66	$72,000
Leases that expire during 2015-17 or 2017-19	25	$16,000
New lease	1	$19,000
Total	**92**	**$107,000**

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

All costs are ongoing and are expected to continue to increase.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Wireless Site Lease Adjustments

Base Budget: This request is for an increase to unavoidable costs currently paid by the department. In the 2015-17 biennium, wireless lease costs are expected to total $1,160,000.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Wireless lease costs are paid to various entities including counties, cities, and public utility districts. Other recipients of lease payments include companies, private landowners, utility companies, and other state agencies such as the Department of Natural Resources and the Washington State Patrol.
Other local gov't impacts?	Yes	See above.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	See above.
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:

Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: DB Local Government Assessments
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: D – Capital Facilities - Operating

Agency Recommendation Summary Text:

Additional appropriation authority of $74,000 is requested for property assessments made by local governments for purposes such as emergency medical services, weed control, irrigation, diking, drainage, landscaping, roads, fire districts, and other city and county support.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	37,000	37,000	74,000	37,000	37,000
Total Cost	37,000	37,000	74,000	37,000	37,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program D - Operating					
Fund 108-1 MVA-State	37,000	37,000	74,000	37,000	37,000
Total by Fund	37,000	37,000	74,000	37,000	37,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	37,000	37,000	74,000	37,000	37,000
Total Cost	37,000	37,000	74,000	37,000	37,000
Program D - Operating					
E. Goods and Services	37,000	37,000	74,000	37,000	37,000
Total by Program	37,000	37,000	74,000	37,000	37,000

Package Description

Local government entities have the statutory authority to tax property owners, including other government entities, for services such as emergency medical services, fire protection, weed control, water management, irrigation, diking, and drainage. Examples of taxing districts include counties, cities, fire departments, and wastewater districts. Assessments associated with property are anticipated to continue to increase.

Additional appropriation authority of $74,000 is requested for the 2017-19 biennium to pay these costs.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The department expects that the additional funding will prevent the program from having to redirect funds from other facilities maintenance activities to pay local government assessments, maintaining current levels of service.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Please see the attached addendum.

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

Because the fees must be paid, the only alternative is to use existing budget authority planned for facility maintenance activities. This option was not chosen due to the adverse impacts and reduced levels of service that would result.

What are the consequences of not funding this request?

Because the agency is legally required to pay these assessments, if the request is not approved, resources would need to be diverted from planned facility maintenance activities. The Capital Facilities Program is already operating with constrained maintenance resources, and further diversion of those resources would lower overall service levels and result in accelerated deterioration of agency facility assets.

Expenditure Calculations and Assumptions

This request is based upon the increase in expenditures from 2011-13 to the estimated costs for 2017-19, adjusted by the incremental appropriation of $87,000 provided in the 2015-17 enacted budget as shown in the table below. Expenditures for the 2015-17 biennum were estimated by doubling actual expenditures for fiscal year 2016; expenditures for 2017-19 were estimated by increasing the 2015-17 biennial amount by 10 percent, the approximate percent increase from 2011-13 to 2013-15.

Difference Between Expenditure Increases versus Budget Increases

Program D - Stormwater and Other Assessments							
Pgm.	**Object**	**Object Name**	**2011-13**	**2013-15**	**Estimated 2015-17**	**Estimated 2017-19**	**Cumulative**
D	EZ03	Assessments	254,255	289,802	331,914	365,105	
D	EZ04	Storm Water	172,140	180,322	201,910	222,101	
Total			426,396	470,123	533,823	587,206	
$ Change From Previous Biennium				**43,728**	**63,700**	**53,382**	**160,810**
% Change From Previous Biennium				10.3%	13.5%	10.0%	
Incremental funding appropriated to Program D					87,000	0	87,000
Difference							73,810
Rounded to thousands of dollars							**$74,000**

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

All costs are ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Local Government Assessments

Base Budget: The base budget is equal to the actual expenditures through 2011-13 of $426,000. The last budget adjustment, in the 2015-17 enacted budget, provided an increase of $87,000 to bring the budget to that level.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Identify: These bills are paid to multiple local jurisdictions, which rely on such assessments for revenue.
Other local gov't impacts?	Yes	Identify: see above
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:

Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: FB Additional Federal Authority
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: S – Transportation Mgmt & Support

Agency Recommendation Summary Text:

The department is requesting several increases to federal funding. The increases are in Program F – Aviation, Program S – Transportation Management and Support, and Program T – Transportation, Planning, Data, and Research. In addition, WSDOT is requesting to move $500,000 of federal authority from Program U – Charges from Other Agencies to Program S.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 039-2 Federal	0	250,000	250,000	0	0
Fund 108-2 MVA-Federal	3,937,500	3,937,500	7,875,000	3,500,000	3,500,000
Total Cost	3,937,500	4,187,500	8,125,000	3,500,000	3,500,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program F - Operating					
Fund 039-2 Federal	0	250,000	250,000	0	0
Total by Fund	0	250,000	250,000	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program S - Operating					
Fund 108-2 MVA-Federal	687,500	687,500	1,375,000	250,000	250,000
Total by Fund	687,500	687,500	1,375,000	250,000	250,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program T - Operating					
Fund 108-2 MVA-Federal	3,500,000	3,500,000	7,000,000	3,500,000	3,500,000
Total by Fund	3,500,000	3,500,000	7,000,000	3,500,000	3,500,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program U - Operating					
Fund 108-2 MVA-Federal	-250,000	-250,000	-500,000	-250,000	-250,000
Total by Fund	-250,000	-250,000	-500,000	-250,000	-250,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Revenue	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Fund 039-2 Federal	0	250,000	250,000	0	0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	2,467,897	2,467,897	4,935,794	2,467,897	2,467,897
B. Employee Benefits	821,000	821,000	1,642,000	821,000	821,000
C. Professional Service Contracts	0	250,000	250,000	0	0
E. Goods and Services	209,066	209,066	418,132	209,066	209,066
J. Capital Outlays	2,037	2,037	4,074	2,037	2,037
N. Grants,Benefits and Client Svcs	437,500	437,500	875,000	0	0

Total Cost	3,937,500	4,187,500	8,125,000	3,500,000	3,500,000
Program F - Operating					
C. Professional Service Contracts	0	250,000	250,000	0	0
Total by Program	0	250,000	250,000	0	0
Program S - Operating					
E. Goods and Services	250,000	250,000	500,000	250,000	250,000
N. Grants,Benefits and Client Svcs	437,500	437,500	875,000	0	0
Total by Program	687,500	687,500	1,375,000	250,000	250,000
Program T - Operating					
A. Salaries and Wages	2,467,897	2,467,897	4,935,794	2,467,897	2,467,897
B. Employee Benefits	821,000	821,000	1,642,000	821,000	821,000
E. Goods and Services	209,066	209,066	418,132	209,066	209,066
J. Capital Outlays	2,037	2,037	4,074	2,037	2,037
Total by Program	3,500,000	3,500,000	7,000,000	3,500,000	3,500,000
Program U - Operating					
E. Goods and Services	-250,000	-250,000	-500,000	-250,000	-250,000
Total by Program	-250,000	-250,000	-500,000	-250,000	-250,000

Package Description

The department's federal authority in several programs is insufficient due to additional federal grant awards. Providing the needed federal authority will streamline the current process required to spend available federal funds and lessen the need for future unanticipated receipts. The department is requesting increase spending authority for federal funds in several programs. These increases are detailed below by program.

Program F – Aviation

The WSDOT Aviation Program anticipates receiving $2.4 million in federal grants from the Federal Aviation Administration in the 2017-19 biennium for the following projects:

Statewide Pavement Condition Index Study	$1,000,000
Statewide Economic Impact Study	$400,00
Statewide Disadvantage Business Enterprise (DBE) Disparity Study	$1,000,000
TOTAL	**$2,400,000**

The federal carry-forward level for the 2017-19 biennium is $2,150,000. The department is requesting the difference of $250,000 in additional federal expenditure authority.

Note: The department is also requesting, in a separate decision package, a reappropriation of $2.5 million to continue the Methow Valley Airport Runway Rehabilitation Project

Program S – Transportation Management and Support

Increased Motor Vehicle Account (MVA)-federal expenditure authority is requested for Strategic Highway Research grants. The current carry-forward level of federal authority does not align with the federal funding expected for this program. Making this adjustment should eliminate the need for an unanticipated receipt request during the biennium. These increases were provided in the 2016 Supplemental Budget but were removed in a carry-forward level adjustment.

The department's Quality Assurance and Safety System Unit is requesting federal authority in the 2017-19 biennium for grant awards received, but not fully expended, in the 2015-17 biennium. The Highway Research grants were provided totaling $1,021,000 for two studies on: the impact of roadway lighting on nighttime crash performance and driver behavior, and the influence of roadway design features on episodic speeding on Washington state roads. WSDOT is requesting $875,000 in federal authority for the 2017-19 biennium.

An increase in Program S (completely offset with a decrease to Program U) for federal authority for the Disadvantaged Business Enterprises (DBE) Support Services Program. This program and funding are in Program U because the work was once contracted out to the Office of Minority and Women's Business Enterprises (OMWBE). The contract with OMWBE was terminated in March 2009. Thus, this funding is more appropriate in Program S.

Program T – Transportation, Planning, Data, and Research (Subprogram T2)
Program T routinely receives federal funds for various grants. The department has unspent federal grant awards from prior years which, when combined with the current year's funding, exceed the available appropriation authority. The table below details the funding available in the 2015-17 biennium compared with the anticipated expenditures and resulting amount of carryover for the 2017-19 biennium. This carryover amount totals $6.7 million and when combined with the federal grant awards for fiscal years 2018 and 2019 will exceed the amount of federal appropriation authority available in Program T, Subprogram T2. The department is requesting an ongoing increase in federal authority totaling $7 million per biennium.

Program T Planning		**15-17 Biennium**		**17-19 Biennium**
Carryover		$ 5,987,577	(e)	**$ 6,715,057**
FHWA Apportionment	FFY15	$ 2,411,793	FFY17(e)	$ 2,588,250
FHWA Apportionment	FFY16	$ 10,108,937	FFY18(e)	$ 10,576,500
FHWA Apportionment	FFY17(e)	$ 7,764,750	FFY19(e)	$ 8,111,250
Total of Revenues		$ 26,273,057		$ 27,991,057
Est. Program Expenditures	(e)	$ 19,558,000	Est. 2017-19 CFL Federal Authority	$16,462,100
			Available Federal Funding	$ 11,528,957
Net for Carryover	(e)	**$ 6,715,057**	Requested Appropriation Authority	$ 7,000,000
(e) = estimated				

The additional federal authority will allow the department to increase program activities that include but are not limited to:

- Washington Transportation Plan,
- Modal system planning and integration,
- Corridor and network level planning, and
- Collaborative planning with Regional Transportation Planning Organizations, Metropolitan Planning Organizations, and Tribal and local governments.

This work advances *Results Washington*, *Results WSDOT*, federal planning emphasis areas and the federal planning requirements, and is part of WSDOT's Practical Solutions implementation within the agency. This and other workload is ongoing and this request will provide the necessary authority for the expected level of federal awards.

Program U – Charges from Other Agencies
A reduction in federal authority totaling $500,000 to reflect moving the DBE Support Services funding from Program U to Program S. The DBE Support Services Program is an entirely federally funded program to provide DBEs with training, guidance, and technical assistance to become competitive in the highway construction industry. The DBE Support Services Program is designed to work collaboratively with stakeholder organizations (e.g. community and trade-based organizations), including Native American governments, other state and federal agencies, and small business organizations, to assist DBEs in successfully competing for highway construction projects.

The work was previously contracted out to OMWBE and was budgeted for in Program U. The contract with OMWBE was terminated in March of 2009. The DBE Support Services Program no longer fits in Program U since it does not involve a payment to another agency. The department requests the $500,000 of federal appropriation authority for the program be moved from Program U to Program S.

Remaining in Program U is $940,000 in state spending authority for an agreement with OMWBE as per RCW 39.19.120 to certify for WSDOT the authenticity and eligibility of DBEs. This certification of DBEs is separate from the DBE Support Services Program.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
The additional federal appropriation authority will provide the program capacity to complete the planned federally-funded studies and activities in the 2017-19 biennium. For Programs F and S, the studies/research activities have already been identified. For Program T, the additional federal authority will be programmed for various planning and practical solutions projects.

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
This request impacts multiple stakeholders internal and external to the agency.

What alternatives were explored, and why was this alternative chosen?
If additional federal spending authority is not provided in the budget, the department would need to request unanticipated receipts during the biennium. If the unanticipated receipt process is not available to the department then current projects already begun in Program S could not be continued, identified studies for Program F could not be initiated, and Program T would have additional federal planning monies that could not be accessed.

Allowing the DBE support service program to remain in Program U was considered, although the type of expenditures occurring in the DBE Support Services Program are not consistent with the program purpose, which is to make payments to other agencies.

What are the consequences of not funding this request?

Additional federal expenditure authority is necessary to spend federal grants. If the request is not funded, the department must request approval of an unanticipated receipt(s) for any unspent federal grants or additional federal grants, if they become available.

Expenditure Calculations and Assumptions

The department assumes any additional federal authority will be fully exhausted in the course of completing the work funded by the federal grants.

The funding for the DBE Support Services is the base amount of federal authority that has been in the WSDOT budget for some time.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Additional Federal Authority for Programs F, S, T, and U

Base Budget:
Program F: The base budget for the WSDOT Aviation Program for federal authority is $2,150,000 (2017-19 carry-forward level for the Aeronautics Account-federal).

Program S: The current federal fund budget for the Quality Assurance and Safety System unit in WSDOT totals $1,021,000 for two studies on: the impact of roadway lighting on nighttime crash performance and driver behavior and the influence of roadway design features on episodic speeding on Washington state roads. The department requests $875,000 in federal authority for the 2017-19 biennium.

Program T: The current federal funds appropriation authority for Program T/Subprogram T2 totals approximately $16.5 million.

Program U: The base budget for DBE Support Services is the $500,000 in federal authority requested for transfer to Program S.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Completing the Disadvantage Business Enterprise (DBE) study is mandatory in order for the state to continue to receive Airport Improvement Plan (AIP) funding. Failing to complete this work could have a negative impact on regions and counties. The pavement and economic impact studies are directly related to the efficiency and economic impacts on airports throughout the state; these studies will have an impact on regions and counties with public use airports. The two studies being conducted in Program S have regional impacts as they will contribute to the body of highway safety research available to all transportation entities. Providing increased federal funding for planning activities will correspondingly increase the planning activities undertaken by the department and since the WSDOT planning activities typically impact and benefit our local partners.
Other local gov't impacts?	Yes	Please see above.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:

Responds to specific task force, report, mandate, or exec order?	Yes	The DBE study is mandated by 49 CFR (Code of Federal Regulations) Part 26.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: FC Reappropriate 2015-17 Fed Authority
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: F – Aviation

Agency Recommendation Summary Text:

The department requests reappropriation of federal spending authority for the Aviation Program in the amount of $2.5 million for continuation of the Methow Valley Airport Runway Project.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 039-2 Federal	1,250,000	1,250,000	2,500,000	0	0
Total Cost	1,250,000	1,250,000	2,500,000	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program F - Operating					
Fund 039-2 Federal	1,250,000	1,250,000	2,500,000	0	0
Total by Fund	1,250,000	1,250,000	2,500,000	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Revenue	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Fund 039-2 Federal	1,250,000	1,250,000	2,500,000	0	0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
C. Professional Service Contracts	1,250,000	1,250,000	2,500,000	0	0
Total Cost	1,250,000	1,250,000	2,500,000	0	0
Program F - Operating					
C. Professional Service Contracts	1,250,000	1,250,000	2,500,000	0	0
Total by Program	1,250,000	1,250,000	2,500,000	0	0

Package Description

The department is seeking reappropriation of $2.5 million of federal appropriation authority to complete the Methow Valley Airport Runway Project.

The total federal authority for the project is $2,905,000. This includes $405,000 for the design phase and $2.5 million for the construction phase. Both phases were originally expected to be complete in the 2015-17 biennium. However, the project was delayed during design, and construction is now expected to begin in July 2017, with receipt of federal reimbursement of the remaining $2.5 million occurring in the 2017-19 biennium, rather than in the 2015-17 biennium as originally planned.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Funds reappropriated will be used for completion of the Methow Valley Airport Runway Project. This reappropriation will ensure that the construction phase of the rehabilitation project can continue without delay.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Federal funding for the Methow Valley Runway Rehabilitation Project has been approved by the FAA. Stakeholders include airport users, the Methow Valley community, and federal partners.

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

The only other option would be to utilize the program's baseline federal appropriation authority, which is fully committed.

What are the consequences of not funding this request?

If the reappropriation is not approved, other work with awards for the 2017-19 biennium that plan to use the remaining $2.2 million in federal appropriation authority could be put on hold.

Expenditure Calculations and Assumptions

The reappropriation request has been sized according to the amount of unspent awarded federal funds. Construction is assumed to start in July of 2017, with receipt of federal reimbursement to occur in the 2017-19 biennium.

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

All costs are one-time.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Reappropriate 2015-17 Fed Authority

Base Budget: The federal authority for Methow Valley Airport Runway Project is currently at $2,905,000 ($405,000 for the design phase and $2.5 million for the construction phase) in subprogram F2, Airport Investment. The design phase of this project will completed by June 2017. The remaining $2.5 million will be spent in the 2017-19 biennium; the program is seeking re-appropriation authority in that amount. The base budget for this project is zero in the 2017-19 biennium.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Identify: Rehabilitation of the runway will provide other opportunities for the community and regional areas and increase safety for current and future air traffic.
Other local gov't impacts?	Yes	Please see above.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	Yes	The Airport Master Plan identifies and justifies the facility needs to accommodate existing and future aircraft operations. This project is being conducted based on the master plan.

Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: HA Practical Solutions Training
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: H – Program Delivery Mgmt & Support

Agency Recommendation Summary Text:

Appropriation authority is requested to continue Practical Solutions Training. The department received a budget increase for Practical Solutions training for the 2015-17 biennium; this request will allow completion of that effort.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	490,000	490,000	980,000	0	0
Total Cost	490,000	490,000	980,000	0	0
Staffing FTEs	4.0	4.0	4.0	0.0	0.0
Program H - Operating					
Fund 108-1 MVA-State	490,000	490,000	980,000	0	0
Total by Fund	490,000	490,000	980,000	0	0
Staffing FTEs	4.0	4.0	4.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	298,000	298,000	596,000	0	0
B. Employee Benefits	120,000	120,000	240,000	0	0
E. Goods and Services	31,000	31,000	62,000	0	0
G. Travel	39,000	39,000	78,000	0	0
J. Capital Outlays	2,000	2,000	4,000	0	0
Total Cost	490,000	490,000	980,000	0	0
Program H - Operating					
A. Salaries and Wages	298,000	298,000	596,000	0	0
B. Employee Benefits	120,000	120,000	240,000	0	0
E. Goods and Services	31,000	31,000	62,000	0	0
G. Travel	39,000	39,000	78,000	0	0
J. Capital Outlays	2,000	2,000	4,000	0	0
Total by Program	490,000	490,000	980,000	0	0

Package Description

This request is to continue the WSDOT Practical Solutions Training Program begun in the 2015-17 biennium. WSDOT has developed a training continuum to foster the internal use of Practical Solutions to achieve WSDOT's strategic goals of modal integration and strategic investment. Practical Solutions focuses on the need for the project and finding the most cost-effective solution to address that need.

During the current 2015-17 biennium, WSDOT has developed the curriculum and materials for two classroom courses and one e-learning course. With approval of this request for the 2017-19 biennium,

these classes will continue to be presented, in addition to the Highway Safety Manual training. (See Attachment A for course descriptions.) By the end of the biennium, it is expected that all of the 2,000 WSDOT engineering staff will have been trained in their respective courses and 4,000 non-engineering WSDOT staff will have completed the e-learning training class.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

- Successful training of all 2,000 WSDOT engineering staff in their respective courses.
- Successful training of 4,000 non-engineering WSDOT staff in the e-learning training class.
- Expanded use of demand management and operational systems' improvements to address transportation deficiencies.
- Strategic use of capital projects as alternatives to capital investments.
- Cost-effective solutions, implemented to strategically address system needs.
- Better, more transparent decision making.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Please see attached addendum.

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

Prior to developing Practical Solutions Training, the department relied solely on the use of opportunistic communication with regions and staff to share the message on Practical Solutions. These communications included design and construction conferences, practical design peer reviews, and other informal communication. Although important as an adjunct to deliberative training, this approach reached a limited audience, and did not provide the depth and breadth of knowledge to implement a Practical Solutions Program. The training program implemented in 2015-17, and the continuation of it, is the preferred choice because it provides high-impact benefits for relatively low costs.

What are the consequences of not funding this request?

If this package is not approved, continuation of Practical Solutions Training would be interrupted, and implementation of Practical Solutions would be impeded by a lack of dedicated resources to accomplish major activities. In addition, the ability to achieve the goals of Results Washington in a timely fashion becomes compromised.

Expenditure Calculations and Assumptions

Cost Estimates for 2017-19 Practical Solutions Training

	FTE	FY18	FY19
Salaries		**298,000**	**298,000**
Secretary Senior	1.0	37,000	37,000
Transportation Engineer 4	2.0	161,000	161,000
WMS Manager	1.0	100,000	100,000
Benefits		**120,000**	**120,000**
Secretary Senior	1.0	22,000	22,000
Transportation Engineer 4	2.0	63,000	63,000
WMS Manager	1.0	35,000	35,000
Goods and Services		**30,710**	**30,710**
Printing materials, $17.12/attendee		21,360	21,360
Room rental		750	750
Supplies, materials		2,500	2,500
Copy machine lease		3,850	3,850
Teaching materials		1,250	1,250
Registration fee - employee training		1,000	1,000
Travel		**39,240**	**39,240**
In-state travel - per diem		25,440	25,440
Out-of-state travel		4,000	4,000
TEF charges - state car		4,800	4,800
Reimbursable mileage @ $0.54/mile		5,000	5,000
Captial Outlay			
Software licenses		**2,000**	**2,000**
Fiscal Year Total		**489,950**	**489,950**
Rounded Fiscal Year Total		**490,000**	**490,000**
Biennium Total			**980,000**

Three classes will be offered:

Class 1, Practical Solutions 101. Full course, multimodal approach, eight class hours (one-day class). 24 classes per-year with 20 students per-class, for a total of 480 students trained per-year or 960 for the biennium.

Class 2, Multimodal Cost Estimating through Project Development. Comprises multiple modules, 24 class hours (three-day class). 24 classes per-year with 20 students per-class, for a total of 480 students trained per-year or 960 for the biennium.

Class 3, Integrating the Highway Safety Manual into the Project Delivery Process. 16 class hours (two-day class). 12 classes per-year with 24 students per-class, for a total of 288 students trained per-year or 576 for the biennium.

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

This request for the 2017-19 biennium will complete the Practical Solutions Training Program begun in the 2015-17 biennium. There will be no budget impacts in future biennia.

The Practical Solutions Training Program develops and delivers instruction for applying the Practical Solutions approach at WSDOT.

Training Courses:

- **Practical Solutions Approach to Project Development Overview** (classroom training)

  This one-day course provides an overview of Practical Solutions approach as well as WSDOT's project development process. It includes interactive discussions about identifying needs, assessing alternative strategies to address performance gaps and applying a practical set of solutions. The training highlights the importance for community engagement throughout the project development process.

- **eLearning: Practical Solutions Approach to Project Development Overview** for all WSDOT staff

  This online training summarizes the content in the overview course, and is targeted to all WSDOT staff. It will be available to local agencies, consultants and contractors.

- **Multimodal Design** (classroom training)

  This four-day course is targeted to project development staff, and builds on the overview course to provide modal-specific content, including recognizing that modes are fundamentally different, understanding modal funding, capacity, system-level needs, performance metrics, building teams and managing multimodal conflict.

- **HSM: Highway Safety Manual** (classroom training)

  This course includes four modules:

  Module A, **Practical Solutions Basics**, is targeted towards a broad audience, with the goal of developing a basic understanding of safety in Practical Solutions, Target Zero and sustainable safety, and how they all fit together.

  Module B, **Fundamentals of Processes, Tools and Outputs**, targets managers and team leads for planning studies and project development teams, with the goal of enabling managers to know *that* they need to ask, *what* they need to ask for and *how to use* what they get from safety analysis experts.

  Module C, Basics **of Analysis and Selecting Countermeasures**, is targeted to project development teams (design and traffic operations) as well as scoping teams, with the goal of detailing the basics of safety in Practical Solutions, the role of the HSM, tools and process, basic analysis and documentation.

  Module D, **Advanced Analysis**, is targeted towards safety analysis experts in the planning and project development process (including design and traffic operations).

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Practical Solutions Training

Base Budget: The $1.7 million appropriated for the 2015-17 biennium to develop a Practical Solutions Training Program and implement least-cost planning and practical design within the department was a one-time increase and was removed at the 2017-19 carry-forward level. Therefore, there is no base budget for this activity in the 2017-19 biennium.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Community engagement is a key factor in successful implementation of Practical Solutions. The training requested will expand communication, and focus on system solutions and intermodal connectivity.
Other local gov't impacts?	Yes	Please see above
Tribal gov't impacts?	Yes	Please see above
Other state agency impacts?	Yes	Please see above
Responds to specific task force, report, mandate, or exec order?	Yes	Engrossed Substitute House Bill 2012 (Chapter 12, Laws of 2015) encourages the department to apply practical design principles to each Connecting Washington project, and submit semiannual reports to the Office of the State Treasurer (OST) and the transportation committees of the Legislature, reporting when savings become available for OST transfer to the Transportation Future Funding Program Account to support additional projects.
Does request contain a compensation change?	No	Identify:

Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No STOP

☒ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

Stakeholders include citizens and taxpayers of Washington state, local agencies (city, county, tribal governments, regulatory agencies, transit, MPO's, RTPO's) and multi-modal advocacy groups.

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Software licenses	2,000	2,000	0	0
Total Cost	**2,000**	**2,000**	**0**	**0**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☐Yes ☒No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: MA Electrical Utilities
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: M – Highway Maintenance & Operations

Agency Recommendation Summary Text:
Additional appropriation authority is requested to cover increased electricity costs in the Highway Maintenance Program (Program M).

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	554,000	856,000	1,410,000	856,000	856,000
Total Cost	554,000	856,000	1,410,000	856,000	856,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program M - Operating					
Fund 108-1 MVA-State	554,000	856,000	1,410,000	856,000	856,000
Total by Fund	554,000	856,000	1,410,000	856,000	856,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	554,000	856,000	1,410,000	856,000	856,000
Total Cost	554,000	856,000	1,410,000	856,000	856,000
Program M - Operating					
E. Goods and Services	554,000	856,000	1,410,000	856,000	856,000
Total by Program	554,000	856,000	1,410,000	856,000	856,000

Package Description
Electricity is used by the Highway Maintenance program in the operation of highway system features such as highway lighting, traffic signals, urban tunnels, intelligent transportation systems, rest areas, and moveable/floating bridges. Additional expenditure authority is requested to cover the higher electricity costs and to prevent the redirection of funds intended for the delivery of services.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
Additional appropriation authority for increasing utility costs supports the department's performance in state highway maintenance and operations.

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
This request is needed to keep the highway system operational for the public.

What alternatives were explored, and why was this alternative chosen?
Funds could be shifted from other maintenance activities to cover the increased cost of electricity. This alternative was not selected due to the adverse impact from decreased maintenance of highways.

What are the consequences of not funding this request?
Since electrical bills must be paid, the program would need to divert funds from maintenance and repair activities, which would cause a decrease in levels of service.

Expenditure Calculations and Assumptions
This decision package requests the difference between funding in the base budget and projected electricity expenditures for the 2017-19 biennium, based on actual costs through fiscal year 2016, projected by historical growth rates.

The budget base was last adjusted in the 2016 Session:

Budget base for 2013-15	$11,710,000	
2016 supplemental adjustment	1,109,000	
New budget base	**$12,819,000**	(Actual expenditures for 2013-15)

Expenditures for the 2017-19 biennium are estimated by 1) using actual expenditures for fiscal year 2016 and assuming the same pattern of expenditures, by fiscal year, from the prior biennium to estimate fiscal year 2017 expenditures; and 2) inflating the fiscal year 2017 amount, and each successive fiscal year estimate, by the historical average percent that expenditures have increased over the past 10 years, to estimate expenditures for fiscal year 2018 and fiscal year 2019.

Step 1. Estimate FY 2017 Expenditures

2013-15 Fiscal Year Split (actuals):	Amount	Percent
FY 2014 actuals	$6,374,549	49.7%
FY 2015 actuals	6,444,544	50.3%
2013-15 actuals	$12,819,093	100.0%
Total 2015-17 Estimate, Using 2013-15 FY Split:		
FY 2016 actual expenditures	$6,602,583	49.7%
FY 2017 estimate, assuming 2013-15 FY % split	**6,675,083**	50.3%
2015-17 estimated total	$13,277,666	100.0%

Step 2. Estimate 2017-19 Expenditures	
Historic Average Growth:	
FY 2006 expenditures	$4,609,247
FY 2016 expenditures	$6,602,583
Percent change	43.2%
Divided by number of years of growth	10
Average annual percent growth rate	**4.3%**
Apply Growth Rate to Estimate 2017-19:	
Estimated FY 2017 expenditures	$6,675,083
Est. FY 2018 (FY 2017, increased by 4.3%)	6,963,756
Est. FY 2019 (FY 2018, increased by 4.3%)	7,264,914
2017-19 estimated expenditures	**$14,228,671**

The increase in requested budget authority is the difference between the projected expenditure level for 2017-19 and the value of the base budget.

Estimated 2017-19 costs	$14,229,000
Amount in budget base	(12,819,000)
Decision package request	**$1,410,000**

Expenditures for electricity have increased as the result of net rate increases plus the addition of new infrastructure from highway construction projects. Rate changes are published for companies that are regulated by the Utilities and Transportation Commission (UTC). These utility companies include Avista, Puget Sound Energy, and Pacific Power. These companies provide only about one-half of the energy used by the department; there are dozens of other providers across the state that do not fall under the UTC's purview and that do not give the department advance notice of their rate adjustments. The methodology employed to calculate the value of this request takes into account projected growth for all rates, not only for those companies regulated by the UTC, as well as projected increases in consumption.

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

All costs are ongoing. In the 2015-17 biennium, the department is implementing a pilot project to incorporate adaptive light-emitting-diode (LED) lighting on a subset of the state highway lighting system. It is expected that annual cost savings within the Highway Maintenance program resulting from the more energy-efficient lighting will total approximately $255,000. However, for the 12-year life of the Certificate of Participation debt, which helped pay for the pilot project, the savings will be needed to pay the estimated $251,000 annual debt service cost. The costs estimated for the purpose of this decision package are based on actuals through fiscal year 2016, which occurred prior to the installation of the more energy-efficient lights. The projected budget need in this decision package, based on fiscal year 2016 actuals, will be sufficient to cover the additional debt service due to the expected offsetting energy savings associated with the LED pilot.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Electrical Utility Cost Increases

Base Budget: The base budget for Program M for electricity costs is $12,819,000, Motor Vehicle Account-State (108-1). The amount was cited in the decision package for the 2016 supplemental budget and represents actual expenditures for the 2013-15 biennium, for which additional funding of $1,109,000 was provided to meet that level of expenditures.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: MG Oregon Bridge Agreements
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: M – Highway Maintenance & Operations

Agency Recommendation Summary Text:

Additional appropriation authority of $591,000 is requested to reimburse the Oregon Department of Transportation (ODOT) for 50 percent of additional planned maintenance work on bridges over the Columbia River.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	295,500	295,500	591,000	295,500	295,500
Total Cost	295,500	295,500	591,000	295,500	295,500
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program M - Operating					
Fund 108-1 MVA-State	295,500	295,500	591,000	295,500	295,500
Total by Fund	295,500	295,500	591,000	295,500	295,500
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	295,500	295,500	591,000	295,500	295,500
Total Cost	295,500	295,500	591,000	295,500	295,500
Program M - Operating					
E. Goods and Services	295,500	295,500	591,000	295,500	295,500
Total by Program	295,500	295,500	591,000	295,500	295,500

Package Description

WSDOT and ODOT split the maintenance costs of the bridges that span the Columbia River between the two states. In the agreements, one state takes the lead in planning and managing the work and paying the maintenance costs. The other state reimburses the lead state for half the costs after the work is completed. ODOT has the lead for the US-101 Astoria-Megler Bridge (opened in 1966); I-5 Bridges (opened Northbound in 1917 and Southbound in 1958); I-205 Glenn Jackson Memorial Bridge (opened 1982); and the US 197 Dalles Bridge (opened in 1953). WSDOT has the lead for SR 433 Lewis and Clark Bridge (opened in 1930); and the US 97 Biggs Rapid Bridge (opened in 1962).

Absent the replacement of the two bridges across the Columbia River on I-5, ODOT has determined it is necessary to perform extensive maintenance work on those bridges and the other bridges. This work includes deck repairs, navigation light repair, roadway lighting repair, replacement of conduit and wire, and joint repair.

The additional planned work, above the baseline budgeted amount, will add $1.2 million to the biennium's costs, of which the WSDOT share is $591,000.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

One of the department's goals for strategic investments is to effectively manage system assets and multimodal investments on corridors to enhance economic vitality. This budget request, to keep the transportation routes between Washington and Oregon in sound operational condition, is consistent with that goal. In addition, bridge maintenance aims to "perform the right work on the right bridge at the right time," and this request supports that principle.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Refer to the attached addendum.

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

Nonpayment is not an alternative as payment of these fees is a legal requirement. Another alternative is to shift existing funds from various maintenance activities but this was not chosen due to the adverse impacts and reduced level of service that would result from shifting existing funds. Requesting additional funds was selected to meet legal requirements and to preserve the existing level of service provided for other maintenance activities.

What are the consequences of not funding this request?

Since this is a legal mandate, the program would have to redirect funds from other maintenance activities causing service levels to decrease.

Expenditure Calculations and Assumptions

The baseline average biennial maintenance costs for the ODOT lead bridges are as follows:

Bridge Name	Total Biennial Maintenance Cost (Average)	ODOT Share	WSDOT Share
I-5 Bridges	$1,810,000	$950,000	$950,000
US-197 Dalles Bridge	100,000	50,000	50,000
US-101 Astoria/Megler Bridge	100,000	50,000	50,000
I-205 Jackson Bridge	100,000	50,000	50,000
Total	**$2,200,000**	**$1,100,000**	**$1,100,000**

ODOT has informed WSDOT that additional planned 2017-19 maintenance work for these bridges will add $1,182,000 to baseline costs, of which the WSDOT share is $591,000.

Bridge Name	Estimated Total 2017-19 Biennial Maintenance	ODOT Share	WSDOT Share
I-5 Bridges	$1,062,000	$531,000	$531,000
US-197 Dalles Bridge	100,000	50,000	50,000
US-101 Astoria/Megler Bridge	20,000	10,000	10,000
I-205 Jackson Bridge	0	0	0
Total	**$1,182,000**	**$591,000**	**$591,000**

The decision package requests one-time appropriation for WSDOT's share of costs above baseline.

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

The $591,000 is one-time for the 2017-19 biennium. Additional maintenance costs (costs above the baseline average biennial maintenance costs) are zero-based each biennium as these increments change from biennium to biennium. As these bridges age, the future biennia expenditures are expected to increase.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Oregon Bridge Agreements

Base Budget: WSDOT's average biennial maintenance costs for the ODOT lead bridges comprise the base budget and are as follows:

Bridge Name	Total Biennial Maintenance Cost (Average)	ODOT Share	WSDOT Share
I-5 Bridges	$1,810,000	$950,000	$950,000
US-197 Dalles Bridge	100,000	50,000	50,000
US-101 Astoria/Megler Bridge	100,000	50,000	50,000
I-205 Jackson Bridge	100,000	50,000	50,000
Total	**$2,200,000**	**$1,100,000**	**$1,100,000**

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	A long-standing agreement with ODOT requires that WSDOT cover 50 percent of the costs to maintain and preserve bridges across the Columbia River.
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:

Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: MH Damages by Known Third Parties
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: M – Highway Maintenance & Operations

Agency Recommendation Summary Text:

When damage to WSDOT property is caused by a third party and the third party who caused the damage is known, the department pursues collection of reimbursement for the cost of the repair from the identified individual. The total cost of these repairs is anticipated to be higher in the 2017-19 biennium than the base budget authority for the purpose. Additional appropriation authority is requested to cover the higher expected costs.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	1,900,000	2,716,000	4,616,000	2,716,000	2,716,000
Total Cost	1,900,000	2,716,000	4,616,000	2,716,000	2,716,000
Staffing FTEs	16.5	23.6	20.1	23.6	23.6
Program M - Operating					
Fund 108-1 MVA-State	1,900,000	2,716,000	4,616,000	2,716,000	2,716,000
Total by Fund	1,900,000	2,716,000	4,616,000	2,716,000	2,716,000
Staffing FTEs	16.5	23.6	20.1	23.6	23.6

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	718,000	1,027,000	1,745,000	1,027,000	1,027,000
B. Employee Benefits	389,000	557,000	946,000	557,000	557,000
E. Goods and Services	793,000	1,132,000	1,925,000	1,132,000	1,132,000
Total Cost	1,900,000	2,716,000	4,616,000	2,716,000	2,716,000
Program M - Operating					
A. Salaries and Wages	718,000	1,027,000	1,745,000	1,027,000	1,027,000
B. Employee Benefits	389,000	557,000	946,000	557,000	557,000
E. Goods and Services	793,000	1,132,000	1,925,000	1,132,000	1,132,000
Total by Program	1,900,000	2,716,000	4,616,000	2,716,000	2,716,000

Package Description

The Highway Maintenance program's 2017-19 carry-forward level budget includes $10.6 million to pay for damages to the highway system where the responsible party is known and reimbursement is anticipated. Expenditures for the 2017-19 biennium are projected to be over $15.2 million; the difference is requested in additional appropriation authority.

The department diligently pursues recovery for damages caused by known third parties and recovered costs are deposited to the Motor Vehicle Account as state revenue.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Increased appropriation authority will allow the program to continue repairing damages caused to the highway system by known third parties without redirecting resources from other highway maintenance activities. Therefore, with approval of this request, the department will be able to sustain existing levels of service.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Approval of the request will provide highway users with a sustained level of service of highway maintenance.

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

Explored alternatives include:

1. Redirecting funds from other activities. The program has an estimated $96 million backlog per-biennium of unfunded maintenance, which is increasing as new transportation infrastructure is added to the system. At the same time, the program is expected to achieve Maintenance Accountability Process (MAP) targets and meet a variety of legal mandates and program obligations. Damages to the highway caused by motorists usually are to safety features, such as to guard rail and signage, so repairs are usually given a high priority and repaired quickly regardless of the cost or other plans for the funding. Without the requested budget authority, resources for other areas of the Highway Maintenance program would be used for damage repairs caused by known third parties and other activities of the program would be adversely affected.
2. Deferring damage repair until funding is available. This is an option, if the specific damage does not create a safety hazard or increased liability, but it adds to the maintenance backlog.

Requesting the additional funding in this decision package was the chosen alternative because, if approved, it will prevent the adverse consequences of the other alternatives and this approach is consistent with previous direction of policy-makers.

What are the consequences of not funding this request?

Depending on the nature of the damage and the availability of other funds, if the unrepaired highway infrastructure poses a safety hazard, then the program would likely have no other option than to redirect funds from other activities. As noted, this would negatively impact other maintenance activities. If the damage does not pose a safety hazard, then the repair would be deferred, but collection efforts might be affected, since the responsible third party may argue that no reimbursement is warranted, since no repairs were made.

Expenditure Calculations and Assumptions

This decision package requests the difference between funding in the base budget and projected expenditures for the 2017-19 biennium for the repair of damages caused by known third parties, based on actual costs through fiscal year 2016, projected by historical growth rates.

The budget base was last adjusted in the 2016 Session:

Budget base for 2013-15	$8,500,000	
2016 supplemental adjustment	2,110,000	
Current budget base	**$10,610,000**	(Actual expenditures for 2013-15)

Expenditures for the 2017-19 biennium are estimated by 1) using actual expenditures for fiscal year 2016 and assuming the same pattern of expenditures, by fiscal year, from the prior biennium to estimate fiscal year 2017 expenditures; and 2) inflating the fiscal year 2017 amount, and each successive fiscal year estimate, by the historical average percent that expenditures have increased over the past 10 years, to estimate expenditures for fiscal year 2018 and fiscal year 2019.

Step 1. Estimate FY 2017 Expenditures

2013-15 Fiscal Year Split (actuals):	Amount	Percent
FY 2014 actuals	$5,188,665	48.9%
FY 2015 actuals	5,420,976	51.1%
2013-15 actuals	$10,610,000	100.0%
Total 2015-17 Estimate, Using 2013-15 FY Split:		
FY 2016 actual expenditures	$6,195,561	48.9%
FY 2017 estimate, assuming 2013-15 FY % split	**6,472,954**	51.1%
2015-17 estimated total	$12,668,515	100.0%

Step 2. Estimate 2017-19 Expenditures

Historic Average Growth:	
FY 2006 expenditures	$2,906,825
FY 2016 expenditures	$6,195,561
Percent change	113.1%
Divided by number of years of growth	10
Average annual percent growth rate	**11.3%**
Apply Growth Rate to Estimate 2017-19:	
Estimated FY 2017 expenditures	$6,472,954
Est. FY 2018 (FY 2017, increased by 4.3%)	7,205,293
Est. FY 2019 (FY 2018, increased by 4.3%)	8,020,489
2017-19 estimated expenditures	**$15,226,000**

The increase in requested budget authority is the difference between the projected expenditure level for 2017-19 and the value of the base budget.

Estimated 2017-19 costs	$15,226,000
Amount in base budget	(10,610,000)
Decision package request	**$4,616,000**

Revenue to Support Request:
Total revenues and expenditures for the Highway Maintenance program, shown in the table below, are not necessarily equivalent within a given fiscal period for the following reasons:

- The revenue includes collections for damages repaired in both the Highway Maintenance program and the Preservation program as this revenue source is not distinguished by program within the WSDOT accounting system.
- Revenue collections for specific incidents can occur in a fiscal period other than that in which the incident's damages are repaired.
- Revenues are initially estimates of the debt owed by known third parties and are adjusted for the probably of collection based upon the age of the debts.
- Debts of $100,000 or more are tracked individually and the recording of the revenue may be shifted from one fiscal period to another based upon the probably of collection within a fiscal period.

Revenue & Program M Expenditures
Related to Damages by Known Third Parties
(in Millions of Dollars)

Fiscal Period	Revenue	Expenditures
2003-05	$5.8	$5.4
2005-07	$7.2	$6.9
2007-09	$9.5	$9.0
2009-11	$11.0	$7.2
2011-13	$10.0	$8.5
2013-15	$15.9	$10.6
FY 2016	$5.5	$6.2

Although revenues are lagging expenditures during the first half of the 2015-17 biennium, WSDOT Region staff cleared all unbilled items, which totaled over 400 claims, as of August 2016. With continued diligence and tracking, the revenue-to-expenditure balance is expected to be restored over the course of the biennium.

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

All costs are ongoing. The budget requested to maintain this activity is projected to continue to increase over time. The agency pursues collection from liable third parties and costs are reimbursed, though frequently not in the same fiscal period.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Damages by Known Third Parties

Base Budget: The budget base was last adjusted in the 2016 Session:

Budget base for 2013-15	$8,500,000	
2016 supplemental adjustment	2,110,000	
Current budget base	**$10,610,000**	(Actual expenditures for 2013-15)

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: ML Local Government Stormwater Fees
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: M – Highway Maintenance & Operations

Agency Recommendation Summary Text:

Additional appropriation authority is requested for stormwater assessments charged by local governments under RCW 90.03.525.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	500,000	501,000	1,001,000	500,000	500,000
Total Cost	500,000	501,000	1,001,000	500,000	500,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program M - Operating					
Fund 108-1 MVA-State	500,000	501,000	1,001,000	500,000	500,000
Total by Fund	500,000	501,000	1,001,000	500,000	500,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	500,000	501,000	1,001,000	500,000	500,000
Total Cost	500,000	501,000	1,001,000	500,000	500,000
Program M - Operating					
E. Goods and Services	500,000	501,000	1,001,000	500,000	500,000
Total by Program	500,000	501,000	1,001,000	500,000	500,000

Package Description

Many local governments assess fees to property owners for the purposes of managing stormwater. RCW 90.03.525 provides the conditions by which these local governments may assess stormwater fees to WSDOT related to the state highway right-of-way. Assessments have steadily increased over time. In 2014, the Legislature amended the RCW, which expanded the eligible projects for which local governments can use the local fee revenue and eliminated the planning requirement. Based on fiscal year 2016 costs, the 2017-19 biennial cost to pay the local assessments is expected to be greater than the current budget base by approximately $1 million.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The department expects that the additional funding will prevent the Highway Maintenance Program from having to redirect a portion of its budget from other highway maintenance activities to pay local government stormwater assessments. Therefore, there would be no change in otherwise anticipated levels of service or Maintenance Accountability Process (MAP) measures.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Please refer to the attached addendum.

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

One alternative is to shift existing funds from various maintenance activities but this was not chosen due to the adverse impacts and reduced levels of service that would result.

What are the consequences of not funding this request?

Since the agency is legally required to pay these assessments, the program would have to redirect funds from other maintenance activities, causing service levels to decrease.

Expenditure Calculations and Assumptions

The decision package assumes the level of billings received for calendar year 2016 through August 22, 2016, will continue into the 2017-19 biennium. Because the 2016 calendar year is not complete, and local governments are authorized to increase fees at any time, the cost may increase over the level currently known for calendar year 2016, which is $3,545,953.

Assuming a continuation of this annual total, the cost to cover the fees in the 2017-19 biennium is expected to be $3,546,000 x 2 = $7,092,000. The budget base for stormwater fee costs is $6,091,000. The difference of $1,001,000 is requested.

The data for the calculations are shown in the tables on the following page.

Local Stormwater Utility Fees by Calendar Years

Municipality	2008 Fees	2009 Fees	2010 Fees	2011 Fees	2012 Fees	2013 Fees	2014 Fees	2015 Fees	2016 To-Date
Bellevue	$227,250	$243,203	$263,767	$271,606	$282,632	$303,301	$308,429	$329,268	$342,704
Bellingham	44,364	44,364	44,364	44,364	44,364	53,624	56,877	60,280	63,893
Bothell	0	52,905	52,905	56,812	62,582	65,360	59,250	155,983	169,085
Clark County	0	105,234	81,849	78,791	77,951	76,785	77,922	97,275	96,375
Cowlitz County	0	0	0	0	0	0	10,260	0	0
Douglas County	19,656	16,411	11,232	11,232	0	0	0	0	0
Kent	28,058	47,652	54,781	49,751	0	0	0	0	0
King County	714,300	714,321	714,321	796,009	796,009	917,325	1,042,079	1,042,079	1,042,079
Kitsap County	106,832	144,553	20,692	0	24,544	27,768	107,452	140,614	148,331
North Bend	4,255	0	0	0	0	0	0	0	0
Olympia	33,549	33,549	33,549	33,549	33,549	33,549	33,549	30,753	33,549
Pierce County	126,710	139,263	152,671	192,570	213,300	203,569	209,217	213,969	227,273
Redmond	0	0	0	0	0	0	0	18,666	111,995
Renton	44,061	44,021	44,021	61,669	68,472	71,590	78,986	84,661	85,436
SeaTac	34,112	34,112	37,276	37,276	37,276	37,276	39,320	52,945	52,945
Skagit County	18,436	18,436	18,436	18,436	18,436	18,436	18,436	10,535	10,535
Snohomish County	203,785	187,323	96,648	64,509	65,179	82,108	135,928	411,569	565,953
Thurston County	0	0	0	0	0	0	0	0	232,264
Tukwilla	54,694	54,694	54,694	69,186	76,105	79,915	87,898	105,476	121,296
Vancouver	0	0	160,754	271,970	215,000	232,000	219,784	219,784	242,240
Total	**$1,660,062**	**$1,880,041**	**$1,841,960**	**$2,057,730**	**$2,015,399**	**$2,202,606**	**$2,485,387**	**$2,973,856**	**$3,545,953**

Note: Calendar year 2016 figures current as of August 22, 2016.

Budget Base	Past Funding Adjustments
2001-03	$700,000
2003-05	319,000
2009-11	286,000
2013-15	1,300,000
2015-17	659,000
2016 Supp.	2,827,000
Total	**$6,091,000**

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

All costs are ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Local Government Stormwater Fees

Base Budget: The base budget is a compilation of specific Legislative budget increases for local government stormwater assessments, the sum of which yields the total amount in the base budget. The history of adjustments is as follows:

Budget Base	Past Funding Adjustments
2001-03	$700,000
2003-05	319,000
2009-11	286,000
2013-15	1,300,000
2015-17	659,000
2016 Supp.	2,827,000
Total	**$6,091,000**

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Payments will be made to local jurisdictions that assess stormwater fees to WSDOT.
Other local gov't impacts?	Yes	See above.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	Yes	Assessments and payments are made in compliance with RCW 90.03.525.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:

Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	Yes	Indirectly related to Puget Sound Action Agenda Implementation. Specifically, Strategy 10 (managing urban stormwater) and related sub-strategies. The WSDOT expenditures are a source of revenue to the local governments; the local governments implement their local projects, some of which are assumed to fall within the Puget Sound recovery area.
Identify other important connections	**N/A**	

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: SA Human Resources Support for WSF
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: S – Transportation Mgmt & Support

Agency Recommendation Summary Text:

The Washington State Department of Transportation (WSDOT) is requesting funding for three additional FTEs and related employee-specific costs to provide additional human resources support for the Washington State Ferries workload. The additional FTEs will help address workload levels and hopefully also help alleviate a major reason the Ferries' Human Resources Office experiences high employee turnover.

WSDOT is also requesting a (net zero) shift in programmatic appropriations to align the funding for the Ferries Human Resource Office with the current operational structure.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 099-1 PSCC-State	-107,000	-107,000	-214,000	-107,000	-107,000
Fund 108-1 MVA-State	1,071,000	1,071,000	2,142,000	1,071,000	1,071,000
Fund 109-1 State	-626,000	-626,000	-1,252,000	-626,000	-626,000
Total Cost	338,000	338,000	676,000	338,000	338,000
Staffing FTEs	3.0	3.0	3.0	3.0	3.0
Program S - Operating					
Fund 108-1 MVA-State	1,071,000	1,071,000	2,142,000	1,071,000	1,071,000
Total by Fund	1,071,000	1,071,000	2,142,000	1,071,000	1,071,000
Staffing FTEs	11.5	11.5	11.5	11.5	11.5
Program W - Capital					
Fund 099-1 PSCC-State	-107,000	-107,000	-214,000	-107,000	-107,000
Total by Fund	-107,000	-107,000	-214,000	-107,000	-107,000
Staffing FTEs	-1.3	-1.3	-1.3	-1.3	-1.3
Program X - Operating					
Fund 109-1 State	-626,000	-626,000	-1,252,000	-626,000	-626,000
Total by Fund	-626,000	-626,000	-1,252,000	-626,000	-626,000
Staffing FTEs	-7.3	-7.3	-7.3	-7.3	-7.3

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	215,000	215,000	430,000	215,000	215,000
B. Employee Benefits	87,000	87,000	174,000	87,000	87,000
E. Goods and Services	33,000	33,000	66,000	33,000	33,000
J. Capital Outlays	3,000	3,000	6,000	3,000	3,000
Total Cost	338,000	338,000	676,000	338,000	338,000

Program S - Operating					
A. Salaries and Wages	719,000	719,000	1,438,000	719,000	719,000
B. Employee Benefits	316,000	316,000	632,000	316,000	316,000
E. Goods and Services	33,000	33,000	66,000	33,000	33,000
J. Capital Outlays	3,000	3,000	6,000	3,000	3,000
Total by Program	1,071,000	1,071,000	2,142,000	1,071,000	1,071,000
Program W - Capital					
A. Salaries and Wages	-73,000	-73,000	-146,000	-73,000	-73,000
B. Employee Benefits	-34,000	-34,000	-68,000	-34,000	-34,000
Total by Program	-107,000	-107,000	-214,000	-107,000	-107,000
Program X - Operating					
A. Salaries and Wages	-431,000	-431,000	-862,000	-431,000	-431,000
B. Employee Benefits	-195,000	-195,000	-390,000	-195,000	-195,000
Total by Program	-626,000	-626,000	-1,252,000	-626,000	-626,000

Package Description

The Ferries Division employs about 1,865 staff or about 1,850 FTEs. Ten of those FTEs provide information and services in recruitment, classification, organizational development, compensation, labor relations (bargaining, interest arbitration, labor management committee meetings and Step 1 Grievance Responses), coaching and disciplinary action, benefits, staff development, Diversity/American Disability Act Affairs, and training development and delivery.

Of those 10 FTEs:

- Three are Human Resources Consultant (HRC) 4 positions,
- Two are HRC3 positions as a Recruiter and a Drug and Alcohol Representative,
- Three are Personnel Assistants 2 (PA2) positions, one of these is currently vacant, and
- Two are Washington Management Services (WMS) positions, one of these is currently vacant.

The department is requesting the addition of three new positions: one WMS position for a HR Manager, one HRC4 position, and one PA2 position.

The number of staff providing human resources support has decreased over the past ten years. In 2011, there were approximately 11 FTEs within the Ferries HR office. While there have been some changes in job responsibility and consolidation to headquarters, much of this work has been absorbed by the employees within the Ferries HR office. Over the past several years, Ferries is one of the few divisions that has grown overall, but not within their HR office. The consolidation to headquarters is reflected in the agency's organization but is not reflected in the agency's budget structure and changing the appropriation from Programs X and W to Program S for the existing staff is included in the decision package. The table below provides a several year history of the actual Ferries FTE and the HR staff supporting the organization. The staff reductions that have occurred are not sustainable.

Year	Total Number of WSF Staff (Actual FTE)	WSF Human Resources FTE
2011	1,645	10.82
2012	1,779	7.28
2013	1,723	8.05
2014	1,834	8.34
2015	1,758	8.23
2016	1,863	8.00

The HR office at Ferries has experienced high turnover for the past several years. In the past twelve months, Ferries has hired three new HRC4s and two new PA2s with a third new PA2 to be hired shortly. The recruiter is new in role, and there has been turnover at the HR manager level. This turnover significantly impacts unit performance as the human resources and collective bargaining environment for Ferries staff is very complex.

During the exit interview process, previous employees have indicated that they were leaving employment at WSF due to the heavy workload and low corresponding pay.

The number of employees each Ferries HR staff supports is the highest ratio of all of the department's HR offices. The current ratio for Ferries HR support is about 1:185. In calculating this number, the WMS HR Manager, Labor Relations Manager and Recruiter (who do not field daily calls) are included. Within the rest of the department's HR offices, the ratio is about 1:140. It should be noted that there is a higher volume of calls at Ferries because a large number of Ferry staff do not have routine access (in their work role) to the internet and email and thus they have lower levels of "self-service" information. They must rely on the personal contact of their HR professional.

In addition, the needs for the Ferries workforce are higher when looking at standard HR workload drivers such as hiring activity and grievance data (about 60 grievances and 186 new hires during the past fiscal year).

A ratio lower than 1:140 would be more desirable given the intense workload at Ferries. The addition of three FTEs to this office will bring the ratio to 1:150. The addition will aid to alleviate the turnover within HR and the staff will provide better customer services for the Ferry programs and employees.

The department also requests the transfer of funding for HR staff from programs W and X to HR at Headquarters in Program S for eight and a half (8.5) current FTEs. In January 2010, Ferries HR staff began reporting to Headquarters HR in Program S. The Headquarters HR office provides support services that benefit the whole department, which is a primary function of Program S. The change in funding will align resources with the organizational reporting structure for HR office.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

By increasing the number of staff to support by each HR staff thus to alleviate the high workload, Ferries will increase the retention rate in HR office. The funding changes will align with the organizational reporting structures.

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
N/A

What alternatives were explored, and why was this alternative chosen?
No other alternative was considered.

What are the consequences of not funding this request?
Not funding this request could affect timely handling of hiring and grievance services in Ferries. The financial structure will not align with management structure.

Expenditure Calculations and Assumptions
The three FTEs are calculated at highest reachable steps, L and Z (of 589b WMS2), with the standard employee related costs. Step M is not used because it requires six years from step L. The employee's related costs are $11,500 for each FTE.

The transfer of fund sources from Ferries to program S was calculated for salary and benefits only and does not included the employee's related costs such as equipment, materials, and professional development. The major impacts of the fund transfer are the decreasing of fund in Programs X and W, Accounts 109 and 099 respectively, and the increasing fund in Program S to Account 108.

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

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Human Resources Support for WSF

Base Budget: The Ferries human resources staff operationally report to the human resources director although the funding has remained in Program X and W. This proposal will consolidate the Ferries HR funding in Program S and simplify budgeting for the WSDOT HR office.

	Program	Fund	Annual Base Budget
Dollars *(existing program)*	X	109-1	$626,000
Dollars *(existing program)*	W	099-1	$107,000
Dollars *(existing program)*	S	108-1	$118.000
FTEs *(existing program)*	X	108-1	7.25
FTEs (existing program)	W	108-1	1.25
FTEs *(existing program)*	S	108-1	1.00

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:

Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections	**None**	

Please provide a detailed discussion of connections/impacts identified above.
N/A

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: UA Federal Appropriation from Program U to S
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: U – Charges/Payments to Other Agencies

Agency Recommendation Summary Text:

A net zero change is requested to move $500,000 of federal appropriation authority for the Disadvantaged Business Enterprises (DBE) Support Services Program from Program U, Charges from Other Agencies, to Program S, Transportation Management and Support.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-2 MVA-Federal	0	0	0	0	0
Total Cost	0	0	0	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program S - Operating					
Fund 108-2 MVA-Federal	250,000	250,000	500,000	250,000	250,000
Total by Fund	250,000	250,000	500,000	250,000	250,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program U - Operating					
Fund 108-2 MVA-Federal	-250,000	-250,000	-500,000	-250,000	-250,000
Total by Fund	-250,000	-250,000	-500,000	-250,000	-250,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Program S - Operating					
E. Goods and Services	250,000	250,000	500,000	250,000	250,000
Total by Program	250,000	250,000	500,000	250,000	250,000
Program U - Operating					
E. Goods and Services	-250,000	-250,000	-500,000	-250,000	-250,000
Total by Program	-250,000	-250,000	-500,000	-250,000	-250,000

Package Description

The Disadvantaged Business Enterprise (DBE) Support Services Program is an entirely federally funded program to provide DBEs with training, guidance, and technical assistance to become competitive in the highway construction industry. The DBE Support Services Program is designed to work collaboratively with stakeholder organizations (e.g. community and trade-based organizations), including Native American governments, other state and federal agencies, and small business organizations, to assist DBEs in successfully competing for highway construction projects.

The work was previously contracted out to the Office of Minority and Women's Business Enterprises (OMWBE) and was budgeted for in WSDOT Program U, Payments to Other Agencies. The contract with OMWBE was terminated in March of 2009. Since that time, contractors have performed the work and, beginning in the 2015-17 biennium, the work is being performed by WSDOT personnel. The DBE Support Services Program no longer fits in Program U since it does not involve a payment to another agency. The department requests the $500,000 of federal appropriation authority for the program be moved from Program U to Program S, Transportation Management and Support.

Remaining in Program U is $940,000 in state spending authority for an agreement with OMWBE as per RCW 39.19.120 to certify for WSDOT the authenticity and eligibility of DBEs. This certification of DBEs is separate from the DBE Support Services Program.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
N/A

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
Please see the addendum attached.

What alternatives were explored, and why was this alternative chosen?
Allowing the DBE support service program to remain in Program U was considered, although the type of expenditures occurring in the DBE Support Services Program, such as salaries and benefits, are not consistent with the program purpose, which is to make payments to other agencies.

What are the consequences of not funding this request?
If this proposal is not adopted, the exception to normal Program U practices will need to be extended, which may cause confusion with expenditure tracking and reporting.

Expenditure Calculations and Assumptions
This request changes only the location of the budget for the DBE program from Program U to Program S without any change in the amount or source of funding.

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

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title:

Base Budget: This proposal does not expand or alter a current program or service but simply moves current federal appropriation authority of $500,000 from one program to another.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections	**N/A**	

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: VA Regional Mobility Grants Reappropriation
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: V – Public Transportation

Agency Recommendation Summary Text:

The Regional Mobility Grant Program provides funding for projects that reduce travel delay and improve connections between counties and regional population centers, while helping the state reach its goals of reducing greenhouse-gas emissions and vehicle-miles traveled. Grants are awarded for capital construction, equipment acquisition, and operations. Due to delays on several projects, completion dates for those projects have been deferred into the 2017-19 biennium. As a result, funds will need to be carried forward into the next biennium to support the deferred work. This decision package is requesting the authority to reappropriate remaining unspent balance from the 2015-17 biennium into the 2017-19 biennium to enable completion of those projects.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 11B-1 RegM-State	5,541,529	5,541,529	11,083,058	0	0
Total Cost	5,541,529	5,541,529	11,083,058	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program V - Operating					
Fund 11B-1 RegM-State	5,541,529	5,541,529	11,083,058	0	0
Total by Fund	5,541,529	5,541,529	11,083,058	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
N. Grants,Benefits and Client Svcs	5,541,529	5,541,529	11,083,058	0	0
Total Cost	5,541,529	5,541,529	11,083,058	0	0
Program V - Operating					
N. Grants,Benefits and Client Svcs	5,541,529	5,541,529	11,083,058	0	0
Total by Program	5,541,529	5,541,529	11,083,058	0	0

Package Description

WSDOT'S reappropriation request will align the budget with current delivery schedules on nine projects. A detailed description and justification associated with each project is provided below.

King County Metro – I-90 Manage Demand

This project was designed as a four-year effort in coordination with state and local partner activities, but was submitted and approved as a two-year project. The project has not been able to meet this compressed timeline. Therefore, $1.3 million is requested for reappropriation in the 2017-19 biennium.

King County Metro – Park and Ride Efficiency and Access Project
This project's budget has been spent more slowly than expected due to longer planning phases for the project components; specifically, coordination with local partners, essentially compressing the project work into an unrealistic timeframe. Therefore, $440,000 is requested for reappropriation in the 2017-19 biennium.

King County Metro – Route 245 Corridor Speed and Reliability Improvement
Construction on this project is expected to begin in the first quarter of 2017, with completion scheduled near the end of the second quarter. If a delay occurs, a small portion of the project may extend into the first part of the third quarter. Therefore, $600,000 is requested for reappropriation in the 2017-19 biennium.

King County Metro – SR 522 and I-5 Operating
Service expansion along selected King County Metro and Sound Transit routes did not take effect on July 1st as planned. There is also a delay in implementing the public outreach and awareness campaign. Therefore, $226,097 is requested for reappropriation in the 2017-19 biennium.

Pierce Transit – Route 1 Connections/Route 4 112th Street Peak Hour Service
Due to a conflict between the service change date and notification of award, implementation of new service was delayed during the 2015-17 biennium. Therefore, $1.2 million is requested for reappropriation in the 2017-19 biennium.

Seattle DOT – Broadway Streetcar Extension
This project was originally on the contingency award list and was funded at the halfway point of the biennium with new revenue. Due to the timing of the grant award, the city of Seattle significantly slowed the project's timeline. The project is proceeding with design in the current biennium by using other funding sources. Therefore, $4 million is requested for reappropriation in the 2017-19 biennium.

Seattle DOT – 23rd Ave Transit Improvements
To align funding with the current construction schedule and enable the City of Seattle to perform activities that increase awareness of transit corridor improvements, WSDOT is requesting $100,000 to be reappropriated in the 2017-19 biennium.

Spokane Transit – Central City Line
While the project has progressed in the 2015-17 biennium the work has been funded with transit-project funding and the regional mobility grant funding has not been fully expended. Therefore, $2.2 million is requested for reappropriation in the 2017-19 biennium.

Spokane Transit Authority – West Plains Transit Center
This project experienced delays created by a design change and phasing of improvements. As well, there is a need for an *Interchange Justification Report* process. Therefore, $1.1 million is requested for reappropriation in the 2017-19 biennium.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
These projects help the state achieve its goals of reducing greenhouse-gas emissions and vehicle-miles traveled.

Performance Measure Detail
This request contributes to two goals of the Governor's Results Washington initiative: Goal 3, Outcome measure 1.1: Reduce transportation-related greenhouse-gas emissions from 44.9 million metric tons per year (mmt/year) (projected 2020) to 37.5 mmt/year (1990) by 2020; and Goal 2, Outcome measure 3.2: Increase the percentage of Washingtonians using alternative transportation commute methods to 33 percent.

Identify important connections or impacts related to this proposal.
Without increased appropriation authority, these projects cannot be completed.

What alternatives were explored, and why was this alternative chosen?
No alternatives were explored. This request is to complete legislatively approved projects.

What are the consequences of adopting this package?
Without this reappropriation, construction cannot be completed.

Expenditure Calculations and Assumptions
See *Attachment A – RMGP Reappropriation Summary* for project-level detail.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?
All costs are one-time costs. WSDOT may request reappropriation for some of these projects in future biennia.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: 17-19 Regional Mobility Grant Projects

Base Budget: If the proposal is an expansion or alteration of a current program or service, provide information on the resources now devoted to the program or service. Please include annual expenditures and FTEs by fund and activity (or provide working models or backup materials containing this information).

Information on the following page.

PIN	Agreement #	Project Title	15 - 17 16LEGFIN
REGIONAL MOBILITY GRANTS			
20130102	GCB1511	Ben Franklin Transit, Park and Ride Richland	$491,000
20150018	GCB2298	City of Fife - Bus Shelter Installation	$75,000
20150002	GCB2292	City of Kent, Kent Transit Center 1st Ave N Parking	$272,000
20150013	GCB2114	City of Tacoma - Tacoma Link Expansion Phase 1	$2,500,000
20130100	GCB1518	City of Tukwila, Urban Pedestrian Bridge	$6,808,000
20130022	GCB1502	Community Transit, Double Decker Buses	$3,978,000
20130111	GCB1514	Community Transit, Mukilteo Park and Ride Plus	$3,656,000
20150005	GCB2294	Community Transit-Seaway Transit Center-Swift II BRT	$3,000,000
20150007	GCB2236	C-TRAN - Fisher's Landing Transit Center South Parking Expansion	$2,849,000
20130028	GCB1507	C-TRAN, Fourth Plain Bus Rapid Transit	$2,259,000
20150012	GCB2299	Grant Transit - GTA Multimodal Transit Center	$1,598,000
20150020	GCB2235	Grays Harbor Transportation Authority - Run Cutting Software Purchase	$56,000
20130024	GCB1504	Intercity Transit, Olympia-Seattle Express Bus Service	$640,000
20130023	GCB1503	Intercity Transit, Tumwater/Dupont/Lakewood Express Bus Service	$1,859,000
20150011	GCB2291	Jefferson Transit Authority - SR 20/Four Corners Road Park and Ride Facility	$1,040,000
20150010	GCB2288	King County Metro - I-90 Manage Demand	$2,880,000
20150009	GCB2289	King County Metro - Park and Ride Efficiency and Access Project	$1,040,000
20150008	GCB2286	King County Metro - Route 245 Corridor Speed and Reliability Improvement	$2,192,000
20130021	GCB1501	King County Metro, I-405 Corridor Managing Demand	$1,456,000
20130025	GCB1505	King County Metro, Rapid Ride F Line Service Extension	$2,131,000
20150003	GCB2287	King County Metro, SR 522 and I-5 Operating	$1,737,000
20110014	GCA6760	Kitsap Transit, Poulsbo SR 305/3 Park and Ride	$1,092,000
20130101	GCB1701	Kitsap Transit, SR 305 Interchange Improvemetns at Suquamish Way Park and Ride	$2,317,000
20150023	GCB2300	Kittitas County - I-90 Exit 78 park and ride	$223,000
20150015	GCB2301	Link Transit - Wenatchee Riverfront Shuttle	$1,260,000
20150024	GCB2304	Mason Transit - Park and Ride Development	$2,250,000
20150016	GCB2281	Mason Transit - Regional Express Commuter Bus Service	$1,317,000
20150014	GCB2215	Pierce Transit - Route 1 Connections/Route 4 112th Street Peak Hour Service	$2,321,000
20130029	GCB1508	Pierce Transit, SR 7/Pacific Ave Peak Hour Service Expansion	$1,264,000
20150017	GCB2277	Pullman Transit - Two, 40-foot Electric Hybrid Buses to Increase Capacit	$1,056,000
20150021	GCB2285	Seattle DOT Broadway Streetcar Extension	$4,000,000
20130027	GCB1506	Seattle DOT, 23rd Ave Transit Improvements	$3,031,000
20150004	GCB2293	Sound Transit Sumner Station Access Improvements	$3,000,000
20150001	GCB2283	Sound Transit/Community Transit, High Capacity Double Decker	$4,000,000
20150019	GCB2302	Spokane Transit Authority - West Plains Transit Center	$1,740,000
20130109	GCB1513	Spokane Transit, Central City Line	$2,200,000
20150022	GCB2248	Town of Concrete Solo Park and Superior Avenue Park and Ride Improvement	$477,000
20150006	N/A	WSDOT - SR 525 - Pedestrian Improvements	$527,000
		TOTAL RMG FUNDING	**$74,592,000**

What are other important connections or impacts related to this proposal? Please complete the following table and provide detailed explanations or information below:

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Identify: See package for descriptions of impacts.
Other local gov't impacts?	Yes	Identify: See package for descriptions of impacts.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections	None	

Please provide a detailed discussion of connections/impacts identified above.
N/A

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: VB Transit Projects Reappropriation
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: V – Public Transportation

Agency Recommendation Summary Text:

These multimodal transportation funds are solely for transit projects identified in LEAP Transportation Document NL-3. Due to project delays during the 2015-17 biennium, WSDOT requests the authority to reappropriate the remaining balance to the 2017-19 biennium.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 218-1 MMA-State	662,500	662,500	1,325,000	0	0
Total Cost	662,500	662,500	1,325,000	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program V - Operating					
Fund 218-1 MMA-State	662,500	662,500	1,325,000	0	0
Total by Fund	662,500	662,500	1,325,000	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
N. Grants,Benefits and Client Svcs	662,500	662,500	1,325,000	0	0
Total Cost	662,500	662,500	1,325,000	0	0
Program V - Operating					
N. Grants,Benefits and Client Svcs	662,500	662,500	1,325,000	0	0
Total by Program	662,500	662,500	1,325,000	0	0

Package Description

WSDOT's reappropriation request will align the budget with current delivery schedules on two delayed projects. As a result of the delays, $1.3 million is requested for reappropriation. A detailed description and justification associated with each project is provided below.

Bike Share Expansion – Kirkland, Bellevue, Redmond, Issaquah

This project had a significant revision to its scope, schedule, and budget. When Pronto began experiencing programmatic challenges in late 2015, state funding was scaled back and the partnering cities delayed implementation of expansion pending further study. Therefore, $325,000 is requested for reappropriation in the 2017-19 biennium.

RapidRide Expansion, Burien-Delridge
This project was delayed, as additional time was needed for King County Metro and the Seattle Department of Transportation to coordinate their efforts and finalize the delivery plan for the project. Therefore, $1.0 million is requested for reappropriation in the 2017-19 biennium.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
These projects help the state achieve its goals of reducing greenhouse-gas emissions and vehicle-miles traveled.

Performance Measure Detail
This request contributes to two goals of the Governor's Results Washington initiative: Goal 3, Outcome measure 1.1: Reduce transportation-related greenhouse-gas emissions from 44.9 million metric tons per year (mmt/year) (projected 2020) to 37.5 mmt/year (the 1990 level) by 2020; and Goal 2, Outcome measure 3.2: Increase the percentage of Washingtonians using alternative transportation commute methods to 33 percent.

Identify important connections or impacts related to this proposal.
Without increased appropriation authority, this project cannot be completed.

What alternatives were explored, and why was this alternative chosen?
No alternatives were explored. This request is to complete legislatively approved projects.

What are the consequences of adopting this package?
Without this reappropriation, construction cannot be completed.

Expenditure Calculations and Assumptions
See *Attachment A – Transit Projects Reappropriation Summary* for project-level detail.

Which costs and functions are one-time versus ongoing? What are the budget impacts in future biennia?
All costs are one-time costs. WSDOT may request reappropriation for some of these projects in future biennia.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: 17-19 Transit Projects

Base Budget: If the proposal is an expansion or alteration of a current program or service, provide information on the resources now devoted to the program or service. Please include annual expenditures and FTEs by fund and activity (or provide working models or backup materials containing this information).

PIN	Agreement #	Project Title	15 - 17 2016 Enacted
TRANSIT PROJECTS			
G2000028	GCB2169	Bike Share Expansion - Kirkland, Bellevue, Redmond, Issaquah	$500,000
G2000047	N/A	C-TRAN, Vancouver Mall Transit Center Relocation and Upgrade	$0
G2000038	N/A	King County Metro, 67th to Fremont Transit Corridor	$0
G2000043	N/A	King County Metro, Route 48 North University Link Station to Loyal Heights	$0
G2000039	N/A	Kitsap Transit, East Bremerton Transfer Center	$0
G2000044	N/A	Kitsap Transit, Silverdale Transfer Center	$0
G2000042	N/A	Mason Transit, Park and Ride Development	$0
G2000040	N/A	MLK Way/Rainier Ave S I/C Improvements	$0
G2000029	GCB2316	North Broadway Bus Stop Safety Improvements	$1,000,000
G2000041	N/A	Northgate Transit Center Pedestrian Bridge	$0
G2000030	GCB2317	Orcas Village Park and Ride	$737,000
G2000031	GCB2297	RapidRide Expansion, Burien-Delridge	$1,500,000
G2000032	N/A	Route 40 Northgate to Downtown	$0
G2000033	N/A	Route 43 and Route 44- Ballard to University District	$0
G2000034	GCB1513	Spokane Central City Line	$3,000,000
G2000045	N/A	SR 7 Express Service Tacoma to Parkland/Spanaway	$0
G2000046	N/A	SWIFT II Bus Rapid Transit	$0
G2000035	GCB2275	System Enhancements, Expansion and Safety Improvements	$831,000
G2000036	GCB2262	Tri-County Connector	$2,300,000
G2000037	GCB2359	Trolley Expansion/Electrification	$2,022,000
G2000027	GCB1853	Yakima Transit - Additional Buses	$2,000,000
T000001	N/A	Transit Tier Projects Contingency/Reserve	
		TOTAL (TIER) TRANSIT FUNDING	**$13,890,000**

What are other important connections or impacts related to this proposal? Please complete the following table and provide detailed explanations or information below:

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Identify: See package description for impacts.
Other local gov't impacts?	Yes	Identify: See package description for impacts.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections	None	

Please provide a detailed discussion of connections/impacts identified above.
N/A

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: XA Credit Card Costs
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

Businesses that accept credit cards pay fees based on a percentage of the total transaction. Because WSF accepts payments for fares by credit card, it incurs these costs. Credit card costs paid by WSF continue to increase. This is because of both natural overall revenue growth, and credit card payments as a percentage of total revenue. Appropriation authority is requested to cover the cost of these increases in the 2017-19 biennium.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	96,000	250,000	346,000	250,000	250,000
Total Cost	96,000	250,000	346,000	250,000	250,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-1 State	96,000	250,000	346,000	250,000	250,000
Total by Fund	96,000	250,000	346,000	250,000	250,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	96,000	250,000	346,000	250,000	250,000
Total Cost	96,000	250,000	346,000	250,000	250,000
Program X - Operating					
E. Goods and Services	96,000	250,000	346,000	250,000	250,000
Total by Program	96,000	250,000	346,000	250,000	250,000

Package Description

This decision package requests additional appropriation authority for merchant-related credit card costs, which are increasing due to the higher volume and value of credit card payments. As more consumers switch to rewards cards, the costs to the vendor increase even more.

WSF began accepting credit card payments in 2008. Recent history reveals that credit card payments as a percent of total fare revenue has continued to steadily increase. Merchant fees paid by WSF are charged as a percentage of the credit card revenue so, as credit card volume increases, the amount WSF pays increases proportionately.

In fiscal year 2009, credit card revenue made up 60 percent of revenue collections. In the most recently completed fiscal year, 2016, the share of credit card revenue had increased to 71.4 percent – or $129.9 million out of total fare revenue of $181.9 million.

This request supports the use of credit cards by WSF customers, reflects the continued use of credit cards as the primary form of payment for ferry travel, accounts for forecasted increases in total revenue, and meets required revisions to fee-paying products.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?
Compliance with the higher credit card fees allows the department to accept credit cards as a form of payment, which supports the daily operations of WSF and provides customers with a convenient payment option.

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
Without this investment, businesses and regular users of Washington's ferry system would lose an efficient, functional method of paying fares. Out-of-state visitors expecting to pay by credit card would not be able to do so. Visitors from Canada would have to carry sufficient U.S. currency to enable them to ride the ferries on a cash basis.

What alternatives were explored, and why was this alternative chosen?
Compliance with the Payment Card Industry merchant classification is not optional if the department is to continue to offer credit card payment options. The alternative of limiting payments to cash-only would be inefficient, impractical, and increase safety and security risks.

What are the consequences of not funding this request?
In order to continue to accept fare payments by credit card, the department must fund the costs associated with higher volumes and fees. If this package is not adopted, WSF will have to reprioritize within existing resources, which would affect other program areas.

Expenditure Calculations and Assumptions
The cost increases were estimated by:

1. Measuring the percentage of total revenue attributable to credit card payments, based on most recent actual experience (fiscal year 2016);
2. Applying the most recent percentage of credit card activity to the forecast of future total receipts and adding 1.5 percent annually to estimate the future revenue from credit card payments;
3. Applying the most recent actual experience of fee rates (fiscal year 2016); and;
4. Calculating the difference between resulting projected costs and the base budget for credit card costs.

The details of the steps are displayed in the following table.

Fare Revenue History & Forecast and Percentage from Credit Card Payments

	Fiscal Year	Revenue[1]	Revenue Receipts via Credit Card	Credit Card Payments as % of Fare Revenue[2]	Merchant Fee Rate	Merchant Fee	Budget	Difference
	2014	$167,557,942	$114,431,286	68.3%	2.13%	$2,435,252	$2,424,000	
	2015	$176,202,469	$122,657,418	69.6%	2.13%	$2,612,560	$2,424,000	
	2016	$181,916,329	$129,921,305	71.4%	2.16%	$2,803,041	$2,886,000	
Forecast	2017	$187,506,000	$136,725,936	72.9%	2.16%	$2,949,851	$2,986,000	
	2018	$191,954,000	$142,848,646	74.4%	2.16%	$3,081,947	$2,986,000	$95,947
	2019	$197,577,000	$149,996,834	75.9%	2.16%	$3,236,169	$2,986,000	$250,169
							2017-19 Projected Budget Gap:	**$346,117**

[1] Amounts for fiscal years 2014 through 2016 reflect actual ferry fares collected. In addition, amounts charged for reservations that do not show up at the terminal are also included in the actuals. Beginning with fiscal year 2017, amounts reflected are from the adopted WSF Revenue Forecast, June 2016, Alternative 1.

[2] The FY16 actual percentage of total revenue received in credit card payments (71.4 percent) is projected to increase by 1.5 percent annually, based on recent growth. This yields an estimate of future credit card revenue. It is assumed that the maximum of credit-card payments as a percentage of fare revenue will be 80 percent.

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

All costs are ongoing. Future biennium costs continue at the fiscal year 2019 level, annually.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Credit Card Costs

Base Budget: WSF's base budget for credit card costs is $2,986,000 per-year beginning in fiscal year 2017.

This is based on the 2015-17 biennium budget adjustment to the prior budget base of $2,424,000 per-year, to which the enacted budget added $462,000 for fiscal year 2016 and $562,000 for fiscal year 2017, for a current fiscal year 2017 base of $2,986,000. Appropriations for these costs are from the Puget Sound Ferry Operations Account-State (109-1).

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:

Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		Without this appropriation, businesses and regular users of Washington's ferry system could lose an efficient, functional method of paying fares. Out-of-state visitors expecting to pay by credit card would not be able to do so. Visitors from Canada would have to carry sufficient U.S. currency to enable them to ride the ferries on a cash basis.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: XB WA State Ferries Utility Costs
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

Appropriation authority is requested to cover increased utility costs at all Washington State Ferries (WSF) ferry terminals. Utility costs include sewer, garbage, electricity, stormwater, water, propane and natural gas, and other heating costs.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	0	65,000	65,000	65,000	65,000
Total Cost	0	65,000	65,000	65,000	65,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-1 State	0	65,000	65,000	65,000	65,000
Total by Fund	0	65,000	65,000	65,000	65,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	0	65,000	65,000	65,000	65,000
Total Cost	0	65,000	65,000	65,000	65,000
Program X - Operating					
E. Goods and Services	0	65,000	65,000	65,000	65,000
Total by Program	0	65,000	65,000	65,000	65,000

Package Description

Utility costs at Washington State Ferries (WSF) continue to increase due to utility rate increases, infrastructure upgrades, and improvements at ferry terminals. Although some infrastructure upgrades and improvements, such as replacement of traditional with LED lighting, have increased energy efficiency and reduced consumption, other projects have led to additional power needs. Examples of the latter include the addition of numerous security and IT features, and installation of hydraulic lift spans, which use more power than the older structures.

Since fiscal year 2011, utility costs have increased 15.7 percent, which is an average annual increase of 3.1 percent over this time period. Based on existing utility usage, and projected rate increases, the estimated need for utilities in the 2017-19 biennium is an additional $65,000.

Utility costs are paid mostly through utilities at ferry terminals. WSF operates fifteen ferry terminals and there are five additional ferry terminals (San Juan Islands and Sidney, BC) that are operated through contracted services. WSF pays utility costs at all of these facilities.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Approval of this request will allow WSF to continue to provide the planned level of ferry service by meeting financial obligations associated with utility costs at terminals and on vessels. Increased appropriation authority for utility costs reduces the risk of annual utility overruns not being covered by underruns in other areas of the operating budget. The additional appropriation authority will allow WSF to continue to provide its planned levels of service, and would not change outputs.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Adopting this proposal allows for payment of required utility costs from the WSF operating budget and will enable WSF terminals and terminal staff to continue to support existing WSF service levels.

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

Utilities are a required cost of operating a ferry system. The only alternatives to the decision package would be to take the risk that underruns in other areas would be available to cover these costs, or to reduce other current activities. Either of these options would carry potential problematic effects, and were rejected. WSF staff continually strive to conserve and reduce the use of utilities.

What are the consequences of not funding this request?

Because these bills are not discretionary, if the request is not approved, the program would need to reduce other planned activities.

Expenditure Calculations and Assumptions

Utilities costs paid through the terminals budget have increased 15.7 percent since fiscal year 2011, which equates to an average annual increase of 3.1 percent over the last five years (fiscal year 2011 to fiscal year 2016).

The cost growth since fiscal year 2011 is primarily due to rate increases for electricity, water, and stormwater[1]. A small portion of the increase includes net additional utility consumption associated with terminal upgrades and improvements that have taken place over that time period.

Forecasted expenditures are derived by applying average annual growth fiscal year 2011 to fiscal year 2016 (3.1 percent).

[1] The 2011-13 enacted budget provided a separate appropriation increase for the Ferries Operations Program for stormwater management compliance. The stormwater rates referenced within this decision package are part of standard utility costs that are based on usage.

Fiscal year 2016 expenditures = $1,939,167 and fiscal year 2011 expenditures = $1,675,450 for an increase of $216,717 or 15.7 percent, divided by 5 for the number of years (average growth of 15.7% ÷ 5 = 3.1%). Fiscal year 2016 expenditures represent actuals through Phase 1 close.

The budget base was last adjusted in the 2015 session for the 2015-17 biennium; therefore, the fiscal year 2017 budget is the base for the 2017-19 biennium.

WSF Utilities: 2017-19 Budget Request

	Actual Expenditure History						Forecasted Expenditures		
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
EC01 Utilities - General	$688,779	$768,521	$743,444	$807,070	$810,732	$900,923	$929,284	$958,538	$988,713
EC02 Natural/Propane Gas	23,693	22,576	19,880	19,911	13,163	14,694	15,156	15,633	16,125
EC04 Other Heating/Power	56,498	45,598	47,386	58,534	48,515	49,359	50,913	52,516	54,169
EC05 Electricity	722,382	788,640	791,409	798,330	796,613	754,167	777,908	802,397	827,656
EC09 Water	184,100	205,954	225,290	229,923	227,732	220,024	226,950	234,095	241,464
Total	$1,675,450	$1,831,288	$1,827,409	$1,913,768	$1,896,754	$1,939,167	$2,000,212	$2,063,179	$2,128,128
Budget Base	*1,635,000*	*1,655,000*	*1,700,000*	*1,696,500*	*1,696,500*	*1,997,500*	*2,063,500*	*2,063,500*	*2,063,500*
Difference between forecasted expenditures and budget base (rounded to $1,000s)								**0**	**(65,000)**
							2017-19 Projected Gap:	**($65,000)**	

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

All costs are ongoing. Out-year costs are based on the fiscal year 2019 figure. Budget requirements beyond the 2017-19 biennium will likely continue to increase annually with rate increases, inflation, and infrastructure improvement.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: WSF Utilities

Base Budget: The WSF operating budget includes $2 million per-year for utility costs at WSF terminals beginning in fiscal year 2017, or $4.1 million for the 2017-19 biennium. The fund source is Puget Sound Ferry Operations Account-State (109-1) and there are no FTEs associated with these utility expenditures.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		**Adopting this proposal allows for payment of required utility costs at terminals and from vessels from the WSF operating budget. Overruns on utility costs will impact other areas of the operating budget, possibly affecting service provided to the traveling public. Approval of the proposal will enable WSF terminals and terminal staff to continue to support existing WSF service levels for the traveling public.**

Please provide a detailed discussion of connections/impacts identified above.
None

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: XC WSF Deck & Engine Employee Mileage
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

Washington State Ferries (WSF) reimburses employees for over three million miles of travel each year, in accordance with various current collective bargaining agreements. Mileage usage has increased in recent years and additional appropriation authority is requested to cover these increases.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	232,000	232,000	464,000	232,000	232,000
Total Cost	232,000	232,000	464,000	232,000	232,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-1 State	232,000	232,000	464,000	232,000	232,000
Total by Fund	232,000	232,000	464,000	232,000	232,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
G. Travel	232,000	232,000	464,000	232,000	232,000
Total Cost	232,000	232,000	464,000	232,000	232,000
Program X - Operating					
G. Travel	232,000	232,000	464,000	232,000	232,000
Total by Program	232,000	232,000	464,000	232,000	232,000

Package Description

In accordance with collective bargaining agreements currently in place with several ferries' bargaining units, WSF reimburses employees for mileage costs when employees travel from their regularly assigned terminals, routes, or homeports for work at other locations within the ferry system, or when a vessel is assigned to another route. Reassignments of both deck and engine room employees occur due to staffing absences or vacancies. Reassignments of engine room employees also occur when a vessel is assigned to a route other than its homeport.

WSF reimburses employees for over three million miles of travel each year. The number of miles reimbursed has grown over the past two years from 3.3 million a year to 3.9 million a year, an increase of 17.7 percent. Several factors contribute to this increase:

- For engine room crew, additional out-of-service time due to unforeseen mechanical issues in the fleet has resulted in additional days when vessels are not on their regularly assigned route. When a larger vessel breaks down, there is often a cascading set of boat reassignments required to maintain level-of-service. This is due to a limited number of larger vessels to fill in when a boat is unavailable, and leads to a situation where engine crews receive mileage reimbursement for travel.
- As new larger vessels are deployed, and small vessels are retired, the overall workforce has grown (5.5 percent increase in Engine Department FTEs and 1.0 percent increase in Deck Department FTEs).
- In the Deck Department, there is a lack of personnel in some job classes to fill in when employees are on leave (annual, comp time, etc.), on sick leave, or are unable to work. When regular crew fill in for other staff, there may be mileage paid for work on routes other than the employee's regularly assigned route.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The ability to pay mileage when a vessel is operating outside its assigned route allows WSF to deal productively with unanticipated out-of-service vessels and minimize disruptions to customers. The ability to cover staff reassignments ensures that WSF complies with United States Coast Guard (USCG) Certificate of Inspections and collective bargaining agreements and can maintain current levels of service expected by the traveling public and elected policy-makers.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

This decision package allows WSF to maintain crewing levels required by the USCG Certificate of Inspection for current service levels and comply with collective bargaining agreements currently in place.

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

The alternative, fewer boat moves, which would result in a reduction of service levels, was not chosen because the department is operating under the principle that the Governor, the Legislature, the general public, and other affected stakeholders expect current levels of ferry service to be maintained.

What are the consequences of not funding this request?

Because the costs are nondiscretionary expenditures associated with maintaining current levels of service, if the decision package is not approved, the program would need to rely on underruns in other areas of the budget to cover these costs or reduce planned activities elsewhere.

Expenditure Calculations and Assumptions

The baseline budget assumes 3.3 million miles at the reimbursement rate at the time of the last budget adjustment of $0.565 per-mile.

The new rate, as of January 1, 2016, is $0.540 per-mile.

The request is calculated in two steps:

1. Adjust the baseline miles by the difference between the two rates.
   $0.540 - $0.565 = -$0.025 per-mile x 3,285,000 miles = a reduction of $82,125

2. Add the new miles at the current reimbursement rate.
   $0.540 x 581,000 = an increase of $313,740

This yields a net increase of $313,740 - $82,125 = $231,615 per-year, or $232,000 rounded.

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

All costs are ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: WSF Deck & Engine Employee Mileage

Base Budget: WSF's baseline budget includes $3.7 million per-biennium for mileage. The budget was sized at 3.3 million annual miles for deck and engine employees at the rate of $0.565 per-mile, or $1.9 million per-year in the Puget Sound Ferry Operations Account-State (109-1).

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		**This decision package allows WSF to comply with collective bargaining agreements, crewing levels required by the US Coast Guard Certificate of Inspection, and for service levels set forth by the Legislature.**

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: XE Standby Vessel Operations
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

An incremental increase in appropriation authority is requested for the cost of continuing the operation of an Evergreen State class vessel as standby. Budget authority for the use of this standby vessel was included in the enacted 2016 supplemental budget for part of the 2015-17 biennium; this decision package adjusts the base to account for a full biennium's operating costs. The budget authority will maintain scheduled levels of ferry service in the event of vessel breakdowns, as well as provide the capacity to plan and deliver maintenance work.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	591,000	591,000	1,182,000	591,000	591,000
Total Cost	591,000	591,000	1,182,000	591,000	591,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-1 State	591,000	591,000	1,182,000	591,000	591,000
Total by Fund	591,000	591,000	1,182,000	591,000	591,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	473,000	473,000	946,000	473,000	473,000
B. Employee Benefits	118,000	118,000	236,000	118,000	118,000
Total Cost	591,000	591,000	1,182,000	591,000	591,000
Program X - Operating					
A. Salaries and Wages	473,000	473,000	946,000	473,000	473,000
B. Employee Benefits	118,000	118,000	236,000	118,000	118,000
Total by Program	591,000	591,000	1,182,000	591,000	591,000

Package Description

Washington State Ferries (WSF) typically provides service with a fleet of 22 vessels, including one dedicated standby vessel. The number of vessels in the fleet is necessarily more than the number of vessels needed for service because, when regularly assigned vessels are taken off the assigned route for maintenance and preservation work, there needs to be a replacement vessel to fill in for the vessel being taken out of service.

Normally, during the course of a year, WSF has between 17 and 19 vessels on routes, depending on the season. During winter, 17 vessels are on routes; during the spring and fall shoulder seasons, the number increases to 18; and, in the summer, to 19 vessels. Depending on the number of vessels in service,

between two and four vessels are available as maintenance spares, which fill in for regularly assigned vessels that are taken out of service for maintenance, such as when a vessel is drydocked, or taken to a commercial shipyard and physically removed from the water, as required by the U.S. Coast Guard.

For any given year, each vessel is scheduled to be out of service for an average of six to seven weeks for maintenance and inspections (the WSF annual performance for vessel out-of-service time is eight weeks, and this figure includes both planned and unplanned work). In order to accommodate the needed maintenance time, no fewer than two vessels are out of service for maintenance at any given point. Typically, the maintenance spares are not available for emergency service, as they are replacing vessels out for maintenance. Vessels out of service for maintenance generally cannot be quickly returned to service in the event of emergencies because they could be in drydocks, undergoing work on major mechanical systems, or are otherwise not available without significant cost and delays of several days or weeks.

The current Evergreen State Class vessel replaced the smaller MV Hiyu as a standby vessel. The differential in operating costs was included in the 2016 supplemental budget for part of the 2015-17 biennium; the remaining difference needed to cover a full 24-month period is requested.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Approval of this request will allow WSF to meet service-level obligations with minimal impact to riders.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

This package will ensure WSF can preserve current route schedules, while having minimal impacts when vessels are pulled out for service, which affects regular riders, tourists, and commerce.

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

Alternatives to maintaining a standby vessel include downsizing of routes, delays, and cancellations of service during periods of high maintenance or emergency events. The option presented in this decision package was selected to minimize these effect and provide continuity of passenger service.

What are the consequences of not funding this request?

If not approved, and accompanied by planned service reductions, the result would be unplanned service reductions that would result from delays and cancellations. Such unplanned reductions do not take into account factors that would be considered in a planned downsizing - such as the availability to riders of alternative routes, routes dependent on ferry service for medical or emergency access, numbers of riders affected, routes that are self-supported with revenue, and other considerations - and are, therefore, disruptive and inefficient.

Expenditure Calculations and Assumptions

All costs are related to crewing the engine room of an Evergreen State Class vessel, and are offset by the reduction of 1) the amount in the base budget attributable to engine room staffing for the MV Hiyu, which has been retired from service, and 2) the portion of the base budget provided at carry-forward level for the current standby vessel. The crew necessary to run an Evergreen State Class vessel engine room includes one-half Staff Chief/Alternate Staff Chief, one-half Chief, and two Oilers. (All engine room positions operate 24 hours per-day, seven days per-week.) The MV Hiyu required only one-quarter Chief and no oilers, constituting the difference in cost between the two vessels. The cost is also offset by $809,000 provided for the standby vessel in the 2017-19 carry-forward level budget.

There are no differences in deck crew between the two vessels because the deck crew remains the same whichever vessel is deployed as backup. This is the case because deck crews are assigned by watch, that is, by route and schedule. Consistent with current labor contracts, when one vessel replaces another, the deck crew stays with the assigned watch on the replacement vessel. Therefore, there would be no cost differential whether the backup vessel is an Evergreen State Class Vessel or the MV Hiyu.

The consumption of fuel is not included in the cost differential because it is not possible to foresee how often, or for how long, a standby vessel will be called into service; therefore, it is not possible to estimate fuel use.

Staffing Cost of Backup Vessel Engine Crew

E. State Class Standby Vessel

FTE	Staff	Daily Cost	Annual Cost	Biennium Cost
2.5	Staff Chief/Alt Staff Chief	$1,080	$394,247	$788,495
2.5	Chief	$1,026	$374,446	$748,892
9.8	Oilers	$2,179	$795,320	$1,590,641
14.8	Total Staff	$4,285	$1,564,014	$3,128,028

Amount in Base as a result of Hiyu Offset

FTE	Staff	Daily Cost	Annual Cost	Biennium Cost
-2.5	Staff Chief/Alt Staff Chief	($1,057)	($385,798)	($771,595)
-1.3	Chief	($500)	($182,672)	($365,343)
0.00	Oilers	$0.00	$0.00	$0.00
-3.8	Total Staff	($1,557)	($568,469)	($1,136,939)
11.0	Net Staffing Costs	$2,728	$995,545	$1,991,090
-11.0	Less 2016 Leg Funding in CFL		($404,500)	($809,000)
0	Request for Remaining Need	$1,619	$591,045	$1,182,090
	Decision Package Request Rounded		**$591,000**	**$1,182,000**

Note: Components may not add to totals due to rounding.

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

Costs are ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Title: Standby Vessel Operations

Base Budget: The total amount in the base budget is the net of the cost of operating the MV Hiyu for the biennium plus the net amount provided at carry-forward level for the 2016 supplemental action. The total available for MV Hiyu operations has actually been reduced as part of the 2016 supplemental calculation; however, that partial reduction is contained within the net carry-forward level dollar value.

Annual Amount in Base From Hiyu Offset	Annual Dollars	Biennial Dollars	FTEs
Staff Chief/Alt Staff Chief	$385,797.70	$771,595.40	2.5
Chief	$182,671.55	$365,343.10	1.3
Oilers	$0.00	$0.00	
Total Hiyu Staff Funding	$568,469.25	$1,136,938.50	3.8
Annual Amount from Carry Forward Level	$404,500.00	$809,000.00	11.0
Total Base Budget for Standby Vessel Engine Crew	$972,969.25	$1,945,938.50	14.8
Rounded Annual Base Budget for Standby Vessel	$973,000.00	$1,946,000.00	14.8

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:

Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		This package will ensure WSF can preserve current route schedules, while having minimal impacts when vessels are pulled out for service, which impacts regular riders, tourists, and commerce.

Please provide a detailed discussion of connections/impacts identified above.
This package will ensure WSF can preserve route schedules the traveling public expects, while having minimal impacts when vessels are pulled out for service – a positive outcome for regular riders, tourists, and commerce.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: XF Fourth 144-Car Vessel Operations
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

Appropriation authority is requested to operate and maintain the new MV Suquamish, the fourth Olympic Class (144-car capacity) vessel, which is expected to be delivered in July 2018 with service to begin October 2018. The new vessel will allow for the retirement of one Super class vessel (MV Hyak).

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	0	1,563,000	1,563,000	354,000	354,000
Total Cost	0	1,563,000	1,563,000	354,000	354,000
Staffing FTEs	0.0	10.7	5.3	8.2	8.2
Program X - Operating					
Fund 109-1 State	0	1,563,000	1,563,000	354,000	354,000
Total by Fund	0	1,563,000	1,563,000	354,000	354,000
Staffing FTEs	0.0	10.7	5.3	8.2	8.2

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	0	764,000	764,000	203,000	203,000
B. Employee Benefits	0	191,000	191,000	51,000	51,000
E. Goods and Services	0	608,000	608,000	100,000	100,000
Total Cost	0	1,563,000	1,563,000	354,000	354,000
Program X - Operating					
A. Salaries and Wages	0	764,000	764,000	203,000	203,000
B. Employee Benefits	0	191,000	191,000	51,000	51,000
E. Goods and Services	0	608,000	608,000	100,000	100,000
Total by Program	0	1,563,000	1,563,000	354,000	354,000

Package Description

The department requests appropriation and full-time equivalent (FTE) authority to operate and maintain the fourth Olympic Class (144-car capacity) vessel, the MV Suquamish. This vessel is under construction in the current 2015-17 biennium. The anticipated delivery date is July 2018 and the vessel is scheduled to be put into service in October 2018. Additional costs that will occur as of fiscal year 2019 include the one-time costs of sea trials and training, as well as the ongoing operating and maintenance costs that are incrementally greater than those of the retiring vessel.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The fourth 144-car vessel (Suquamish) will replace the MV Hyak, a Super-Class vessel, which will be retired. The MV Suquamish will split time in service on the Seattle/Bremerton and Anacortes/San Juan Islands routes.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

This request is for additional appropriation authority to operate and maintain the vessel constructed with capital program (Program W) budget authority, as enacted. Those affected include the traveling public and businesses engaging in commerce and the transport of goods. Shoring up the fleet is a result, which will impact economic activity and mobility as well as safety and system reliability.

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

Operating the new vessel requires new expenditures that have not been budgeted for previously. The program is not able to absorb the magnitude of these costs through other marginal reductions. The operation of this ferry allows WSF to provide reliable service on several routes.

What are the consequences of not funding this request?

Approval of this request will ensure the department has the spending authority needed to cover the operating costs of the new Olympic Class vessel. If the request is not approved, because the program cannot absorb the new operating costs, the result would be continuing operation of a vessel scheduled to be retired, which would have a negative impact on service reliability for customers.

Expenditure Calculations and Assumptions

Costs are based on the following assumptions:

- All additional costs begin in fiscal year 2019.
- The new Olympic Class vessel is delivered in July 2018.
- The new vessel goes into revenue service in October 2018.
- The retiring MV Hyak is de-crewed by the end of October 2018.

Labor costs: Labor costs for the new 144-car vessel are compared to the labor costs for the retiring MV Hyak, and the difference is requested as a budget increase. There is no difference in the cost of engine labor between the two vessels; however, deck labor is estimated to be $243,000 greater in the new vessel for fiscal year 2019 and beyond.

Deck labor is based on the assumption that the new vessel's staffing level is the same as the third 144-car (Olympic Class) vessel and crewed as follows: one Master, one Mate, one Second Mate, one Able Seaman-Quartermaster, one Able Seaman-Bos'n, three Able Seamen, and three Ordinary Seamen. The retiring vessel required only two Able Seamen, rather than three; all other deck labor requirements are the same.

Engine labor is based on the assumption that both the new and old vessels are crewed by one Chief Engineer, one Assistant Engineer, and two Oilers. Ongoing labor costs are adjusted to full fiscal years.

Training costs: In addition to the ongoing difference in deck labor, there are one-time training costs of $712,000 in the 2017-19 biennium ($362,000 deck and $350,000 engine), based on eight weeks of training.

One-time fuel: There are one-time fuel costs of $308,000 in fiscal year 2019 to cover the estimated consumption during the eight weeks of training time. During this time, the vessel will run for 16 hours per-day, 5 days per-week and use 134,400 gallons for the duration. This is calculated using the following assumptions:

- 16 hours per-day x 5 days per-week x 8 weeks = 640 hours of training
- The average consumption = 210 gallons per-revenue-service hour
- 640 hours x 210 gallons per-hour = 134,400 gallons
- Fiscal year 2019 non-hedged fuel price, as of the June 2016 Forecast = $2.29 per-gallon
- 134,400 gallons x $2.29 per-gallon = Approximately $308,000

Ongoing costs for fuel are expected to be slightly less than for the retiring vessel, due to improved efficiency. This expected slight difference is reflected in the decision package for ferries fuel cost increases. During the 2017-19 biennium, actual fuel consumption will be measured and, if differences exist, incorporated into future fuel forecasts.

Non-labor costs:
One-time non-labor costs of $300,000 in the 2017-19 biennium are for inventory adjustments and other costs associated with decommissioning vessels and adding new vessels to the fleet. The ongoing non-labor costs of $100,000 per-year, starting in fiscal year 2020, reflect higher maintenance costs for the new vessels. The new vessels are larger and more complex than the vessel being replaced and will require an increase in the overall pool of maintenance dollars.

Operating Costs for 4th Olympic Class 144-Car Vessel

Amount Required for Suquamish		**2019**		**2020**	**2021**	**2019-21**
	FTEs	**Dollars**	**FTEs**	**Dollars**	**Dollars**	**Dollars**
Engine Labor	16.0	1,664,000	43.9	2,283,500	2,283,500	4,567,000
Deck Labor	34.4	3,013,000	90.4	3,894,000	3,894,000	7,788,000
Total Suquamish Staff Funding	50.4	4,677,000	134.3	6,177,500	6,177,500	12,355,000
Amount in Base From Hyak Offset						
Engine Labor	(16.0)	(1,664,000)	(43.9)	(2,283,500)	(2,283,500)	(4,567,000)
Deck Labor	(31.3)	(2,770,000)	(82.2)	(3,640,000)	(3,640,000)	(7,280,000)
Total Hyak Staff Funding	(47.3)	(4,434,000)	(126.1)	(5,923,500)	(5,923,500)	(11,847,000)
Net amount requested	**3.1**	**243,000**	**8.2**	**254,000**	**254,000**	**508,000**
Additional Costs						
Engine Labor Training	3.4	350,000				
Deck Labor Training	4.1	362,000				
Fuel Costs for Training	0.0	308,000				
Non-Labor Costs[1]	0.0	300,000	0.0	100,000	100,000	200,000
Total Additional Costs	**7.5**	**1,320,000**	**0.0**	**100,000**	**100,000**	**200,000**
Total Decision Package Request	**10.6**	**1,563,000**	**8.2**	**354,000**	**354,000**	**708,000**

[1]Non Labor costs in FY2019 are for inventory adjustments and other costs associated with decommissioning vessels and adding new vessels to the fleet. Ongoing Non Labor costs reflect higher maintenance costs for the new vessels.

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

Training costs: of $712,000, non-labor costs of $300,000, and training fuel costs of $308,000 in the 2017-19 biennium are one-time.

Ongoing labor costs are annualized, and non-labor costs are $100,000 per-year. The impact of ongoing fuel costs is submitted with the 2017-19 ferries fuel decision package.

Addendum for WSDOT 2017-19 Decision Package

Decision Package: Operate 4th 144-Car Vessel

Base Budget: Appropriation authority is requested to operate and maintain the new MV Suquamish, the fourth Olympic Class (144-car capacity) vessel, which is expected to be delivered in July 2018 with service to begin October 2018. The new vessel is replacing the MV Hyak, the budget for which is in Ferry Operations' base. This amount is subtracted from the costs to operate the new vessel as the MV Hyak is to be retired when the MV Suquamish is put into service. The base amount below is all funded out of the Puget Sound Ferry Operations Account-State (109-1).

Amount in Base From Hyak Offset		2019		2020	2021	2019-21
	FTEs	Dollars	FTEs	Dollars	Dollars	Dollars
Engine Labor	16.0	1,664,000	43.9	2,283,500	2,283,500	4,567,000
Deck Labor	31.3	2,770,000	82.2	3,640,000	3,640,000	7,280,000
Total Hyak Staff Funding	**47.3**	**4,434,000**	**126.1**	**5,923,500**	**5,923,500**	**11,847,000**

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:

Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		**This request is for additional appropriation authority to operate and maintain the vessel constructed with Capital Program (Program W) funds as approved by the Legislature. Those affected include the traveling public and businesses engaging in commerce and the transport of goods. Shoring up the fleet is essential, not only for economic strength and mobility but for safety and system reliability.**

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: XI Ferries Security & Navigation System Support
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

The department requests an appropriation increase for:

1) Additional Information Technology (IT) staff and services to meet the support needs of the Marine Access and Security Control (MASC) system;
2) Replacement of key MASC equipment components that fail outside of the expected lifecycle; and
3) Maintenance of bridge navigation systems on vessels.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	850,000	860,000	1,710,000	875,000	891,000
Fund 109-1 State	248,000	248,000	496,000	248,000	248,000
Total Cost	1,098,000	1,108,000	2,206,000	1,123,000	1,139,000
Staffing FTEs	2.0	2.0	2.0	2.0	2.0
Program C - Operating					
Fund 108-1 MVA-State	850,000	860,000	1,710,000	875,000	891,000
Total by Fund	850,000	860,000	1,710,000	875,000	891,000
Staffing FTEs	2.0	2.0	2.0	2.0	2.0
Program X - Operating					
Fund 109-1 State	248,000	248,000	496,000	248,000	248,000
Total by Fund	248,000	248,000	496,000	248,000	248,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	150,000	150,000	300,000	150,000	150,000
B. Employee Benefits	60,000	60,000	120,000	60,000	60,000
E. Goods and Services	884,000	898,000	1,782,000	913,000	929,000
J. Capital Outlays	4,000	0	4,000	0	0
Total Cost	1,098,000	1,108,000	2,206,000	1,123,000	1,139,000
Program C - Operating					
A. Salaries and Wages	150,000	150,000	300,000	150,000	150,000
B. Employee Benefits	60,000	60,000	120,000	60,000	60,000
E. Goods and Services	636,000	650,000	1,286,000	665,000	681,000
J. Capital Outlays	4,000	0	4,000	0	0
Total by Program	850,000	860,000	1,710,000	875,000	891,000
Program X - Operating					
E. Goods and Services	248,000	248,000	496,000	248,000	248,000
Total by Program	248,000	248,000	496,000	248,000	248,000

Package Description

The scope of the Marine Access and Security Control (MASC) system has expanded dramatically since the initial support model was developed in the 2003-05 Biennium. The requested IT staff will provide the capabilities to resolve system issues and outages and to meet Ferries' service needs.

Additional resources will also support annual software maintenance, hardware upgrades in support of system warranties, and replacement of key equipment – specifically, security system video servers and uninterruptible power supplies (UPS) and the batteries within those power supplies.

The MASC solution comprises cameras, electronic door locks, motion detectors, infrared illuminators, video control and recording devices, permission-control software, servers, and supporting hardware and software to permit WSDOT and its partners to meet a level of security demanded by the U.S. Department of Homeland Security (DHS) for ferries. The requirements for this solution are laid out in the Alternate Security Plan developed by DHS and WSDOT Ferries Division in 2002-2004.

The department is requesting additional appropriation authority for two positions at the Information Technology Specialist 4 (ITS4) level to provide sufficient staffing levels and also to address the cost of vendor support for the security installation at Ferries. By one measure (number of security devices supported), the installation has grown more than 400 percent since the initial support package and funding were developed. Also, a new system vendor completed a system makeover in 2014 under a series of federal grants, a project made necessary because the original vendor ceased operations. However, no funding has been authorized to cover vendor support charges of the new system.

Note: The prior system, Vigilos, did not impose regular, annual maintenance charges before the vendor ceased operations.

The current MASC solution imposes annual support costs for software maintenance of $291,000 and engineering and technical services of $341,000, for a total cost of $632,000 per-year in fiscal year 2018. The portion of these costs for software maintenance ($291,000) is expected to increase up to five percent annually. This increase brings the total amount (software maintenance and engineering/technical services) to $1.3 million for the 2017-19 biennium. Approval of this budget request will provide capacity to pay for annual support and maintenance from the prime contractor and four software vendors, as well as increase the number of staff dedicated to supporting the MASC system by two (from three to five).

The security system also requires regular maintenance or replacement of some features, such as key boxes and electronic door locks, monitoring systems (cameras, alarms, etc.), and other items at a cost of $132,000 per year. In addition, the security system demands a redundant or dedicated power supply so systems can operate at all times without risk of failure. Having an uninterruptable source of power is critical for vessel systems and at ferry terminals for predictable, safe operations. Battery-powered systems, or systems with battery back-ups, require maintenance – including replacement of batteries on a continual basis at an estimated cost of $77,000 per-year.

Bridge Navigation Systems are specialized technologies used on ferry vessels in the wheelhouse where the captain and deck officers navigate across Washington State Ferries' routes. Vessel measurement technology, directional technology, and communications technology are essential and critical tools to successfully and safely operate ferry vessels. These technologies are highly specialized, and external contracted specialists are required to check and maintain the systems. Recent enhancements in technology and some changes in requirements have led to additional maintenance activity. The projected cost is $55,000 per-year.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The department expects the additional staffing will provide the resources required to improve the reliability and overall availability of the assets deployed in the MASC system. Improvements in the interoperability of the security solution with other technologies, such as the ticketing and passenger counting solutions, are also expected. Additionally, maintaining the many software and hardware assets that collectively comprise the MASC solution and the bridge navigation systems will ensure their viability into future biennia.

Performance Measure Detail

Approximately 3,500 individual components make up the MASC solution. The great majority of these require regular tuning and maintenance, while the remainder are recognized as more traditional IT assets such as servers, workstations, network switches, and patch panels.

Currently, 350 to 450 incidents requiring intervention by a technician are active at any point in time. Deploying two additional staff to IT operations will reduce that number of active incidents to approximately 25 percent of the current state (85 to 120 active incidents). That smaller number is within a target range that will allow the IT Division to act with focus through temporary staff augmentation, thereby reducing disruptive incidents to virtually zero.

A stable service level was established in 2010 to clarify response times for key incidents based on impact and severity. While the system has expanded dramatically, by 400 percent, in the intervening years, staffing levels have not kept pace. As a result, the service level is not being met consistently, and only through extraordinary efforts of staff in the most critical situations. When offline devices reduce availability of the MASC system, extraordinary measures are required in Ferries Operations to assure safety levels are maintained. The two additional staff in this request will allow the service level to be met on a consistent basis and thereby assure that Ferries Division moves into the heightened safety posture much less frequently.

Identify important connections or impacts related to this proposal.

The new MASC solution comprises many software and hardware components integrated into a system. This system provides a single interface to the security personnel at Ferries Division who run the system. The costs for software and hardware maintenance, support, and professional services for regular system maintenance and upgrades are contracted at $632,000 for fiscal year 2018. Software maintenance and support, a portion of these costs ($291,000) are expected to increase by up to five percent annually.

The security solution is hosted in a dedicated subnet of the WSDOT general-purpose business network. The network has been upgraded to current, near-state-of-the-art capabilities, including high-speed wireless over water connectivity. This upgrade has allowed new software-defined networks to be established and permits the department to separate this security traffic from the rest of the network.

The remainder of this request is for maintenance resources attendant upon the bridge navigation systems. While there is no direct connection to stakeholders, the request is linked to the ability of Washington State Ferries to maintain these systems without disruption. Disruptions can affect business processes and could also affect the operation of vessels and lead to delays and possibly missed trips for customers.

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

Work on the bridge navigation systems is highly specialized, so using existing state workforce is not a viable option. Both the Ferries Operating Program's maintenance department and the department's Information Technology Program have shared costs in order to address MASC needs as they arise in order to get needed maintenance work accomplished. However, the amount of maintenance needed for these systems cannot be absorbed without affecting other maintenance activities, or by taking away other resources to cover these costs. Therefore, this package includes additional staff.

The alternative to agency staff providing these services is outsourcing to a consulting firm or to independent contractors. Hiring additional internal staff is preferable for two reasons:

- **Cost.** With market-rate and profit included for a third party, even favorable charges to augment current staff, costs would total $320,000 per-year (see Expenditure Calculations and Assumptions, below).
- **Lost expertise.** Third-party consultants and contract firms will likely provide good service and bring some new perspective to the support equation. However, this expertise is transient for the agency and will not be guaranteed by the service provider; that is, contract staff member 'B' will not necessarily bring the same skill set to the contract work that the department would expect based on prior work by contract staff member 'A.'

What are the consequences of not funding this request?

If this package is not approved, support for the Alternate Security Plan that MASC sustains will continue to fall below the desired service level and will degrade further. It is possible that the MASC solution will eventually become only partly operational. The reprioritization and reassignment of Ferries' IT staff that are currently supporting other areas is not practical; existing staff are working on other critical components of the Ferries' IT infrastructure.

Maintenance activity is linked to service reliability and vessel out-of-service time. Ongoing maintenance is necessary to keep systems running and allow for potential problems to be identified before they affect system performance. If maintenance activity is not accomplished due to a lack of resources, or if activities are delayed, there is an increased risk of systems failing due to a part or component failing. While these incidents may be minor, and require little time to fix, there is also a risk that a failure can affect other areas of the system which have larger impacts and could affect the system as a whole.

Continued strain on the maintenance budget is likely to result in additional risk of periodic failures of systems. Considering the importance of security and navigation-related systems, and the need to supply power to systems at all times, any risk has a potential impact on business operations and possible impacts to more critical systems that reach the traveling public.

Expenditure Calculations and Assumptions

Program C Expenditure Assumptions
Staff costs are based on 2017-19 biennium salary ranges for two ITS 4-level employees and estimated at $105,000 per-year per ITS 4, or $210,000 per-year for both.

As a comparison, market-level rates for the services provided by contract employees working with the existing staff are between $80 and $120 per-hour. At full-time equivalence, two contracted staff would cost a minimum of over $280,000 per-year.

	At $80 per-hour	At $120 per-hour
Annual cost of two contractors	$284,000	$426,000
Annual cost of two ITS 4 FTEs	$210,000	$210,000
Difference - contractor v. employee	**$74,000**	**$216,000**

The costs for vendor support of the system identified on line E. Goods and Services in the Objects of Expenditure Table are determined by the various software package annual fees. There is some variability in these support costs, as vendor support models may change or different software packages may be swapped in or out of the solution.

Program X Expenditure Assumptions
The total request for Program X is calculated as follows:

$132,000 security + $77,000 UPS + $55,000 navigation systems - $16,000 in the base budget = $248,000 per-year or $496,000 per-biennium.
Detailed cost estimate methodology for each area is provided below.

Security Systems: Costs for replacement of failed components in MASC are based on the total value of those components throughout the system ($3,029,217 per the inventory displayed below). That value is then used for the basis of maintenance costs at a rate of between three percent and five percent of the value per-year, depending on the component, totaling $132,000 per-year.

ITEM	Value	Maint Rate	Annual Cost	**Biennium Cost**
Security Cameras	$732,400	5%	$36,620	$73,240
Electronic Locks	656,500	5%	32,825	65,650
Security Servers & Equipment	865,350	3%	25,961	51,921
Key Boxes	373,491	5%	18,675	37,349
Enhanced Video Cameras	298,276	5%	14,914	29,828
Power Disribution Units	103,200	3%	3,096	6,192
Security Sub-total	$3,029,217	3%	$132,090	**$264,180**

Uninterruptable Power Supply (UPS): Replacement cost of batteries in uninterruptible power supplies are calculated over three- and five-year cycles for vessels and terminals, respectively. Batteries on vessels wear out more frequently due to vibration and more intensive use, when power is shifted from ship to shore, for example, so require a more frequent replacement cycle.

ITEM	Value	Replacement Rate (Battery)	% (Annual)	Annual Cost	**Biennium Cost**
Vessel UPS Equipment	$125,250	3 Year	33.3%	$41,750	$83,500
Terminal UPS Equipment	178,050	5 Year	20.0%	35,610	71,220
Uniterruptable Power Sup	$303,300			$77,360	**$154,720**

Navigation Systems: The request for maintenance of bridge navigation systems is based on the estimated maintenance and inspection cost.

ITEM	Contractor Parts/ Materials	Contractor Labor	Annual Maint. Cost	**Biennium Cost**
Draft Tool (Freeboard)*	$18,000	$12,000	$30,000	$60,000
Magnetic Compass	10,000	5,000	15,000	30,000
Communications (800 mHz)**		10,000	10,000	20,000
Nav Systems Sub Total	$28,000	$27,000	$55,000	**$110,000**

* measurement of height (waterline to car deck).

** inspection costs only

Note: Parts/Materials and labor are for maintenance of items as needed.

The request is reduced by $16,000 per-year, the amount of budget in the base for these purposes.

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

All costs are ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Ferries Security and Navigation System Support

Base Budget:

Program C

WSDOT's current support for the functions in this Decision Package are:

Description	Annual	FTE Count	Sub-sub Object
Security System Support for Ferries Division	$312,000	3.0	TA10/TA11
Hardware maintenance and replacements	$50,000	0	JA06/JA08
Security Systems Support (contracted labor)	$241,000	0	ER27
Total	**$603,000**	**3.0**	

Program X

For navigation systems, there is an annual budget of $294,000 per-year in vessels deck operations. There are a combined 17 systems and subsystems for this budget, used to pay specialists to install, inspect, or maintain the equipment including any costs for specialized parts or equipment. For security maintenance, there is a budget of $153,000 per-year for maintenance in the operating program for the labor to respond to maintenance calls, not for the equipment and materials used. As far as replacement of equipment that failed before the end of lifecycle, there is currently a budget of $16,000 per-year.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	The resources requested in this package will affect the service levels provided to terminals and the passengers who use those terminals in San Juan, Island, Kitsap, Jefferson, Snohomish, King, and Pierce Counties.
Other local gov't impacts?	Yes	Local ferry-served municipalities rely on safe and timely ferry service to sustain their economies and provide basic transportation to residents and tourists. Washington State Ferries can meet these needs in cooperation with the U.S. Coast Guard by implementing the integrated security solution that is the focus of this decision package. The solution must meet very high service levels for availability and coverage. Ensuring those high service levels is

		the purpose for the increase requested in this package.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	The Washington State Patrol (WSP) relies upon the security solution described in the package to provide surveillance of the ferry routes; the WSP patrols vessels and terminals remotely through these systems.
Responds to specific task force, report, mandate, or exec order?	Yes	The request relates to security features required by the U.S. Dept. of Homeland Security for ferries.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		Please see detailed information below.

Please provide a detailed discussion of connections/impacts identified above.
In addition to support for internal WSDOT operations, the staff requested will maintain equipment and software that supports the mission of the Washington State Patrol.

The request is for maintenance resources. While there is no direct connection to stakeholders, the request is linked to the ability of Washington State Ferries to maintain systems without disruption. Disruptions can affect business processes and could also affect the operation of vessels and terminals and could lead to delays for customers and possibly missed trips.

The new MASC solution comprises many software and hardware components integrated into a system. This system provides a single interface to the security personnel at WSF who run the system. Including software and hardware maintenance, support, and professional services for regular system maintenance and upgrades, these costs total $631,565 for fiscal year 2018, and increases to $650,000 in fiscal year 2019, due to an annual increase in software maintenance charges.

The security solution is hosted in the WSDOT general-purpose business network. As that network has been upgraded to current, near-state-of-the-art capabilities, including high-speed wireless over water connectivity, new software-defined networks have been established to permit the department to separate this security traffic virtually.

In addition to support for internal WSDOT operations, the staff requested will maintain equipment and software that supports the mission of the Washington State Patrol.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Program C				
Salaries	150,000	150,000	150,000	150,000
Benefits	60,000	60,000	60,000	60,000
Goods and Services	636,000	650,000	665,000	681,000
Capital outlays/equipment	4,000	0	0	0
Subtotal Program C	**850,000**	**860,000**	**875,000**	**891,000**
Program X				
Security Systems	132,000	132,000	132,000	132,000
Uninterruptable Power Supply	77,000	77,000	77,000	77,000
Navigation Systems	55,000	55,000	55,000	55,000
Less amount in base	-16,000	-16,000	-16,000	-16,000
Subtotal Program X	**248,000**	**248,000**	**248,000**	**248,000**
Total Cost for both Program C & X	**1,098,000**	**1,108,000**	**1,123,000**	**1,139,000**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☐Yes ☒ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: YC Talgo Maintenance Contract
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: Y – Rail - Operating

Agency Recommendation Summary Text:

The department requests a $557,000 increase for Talgo maintenance service costs. The current contract includes a default three-percent annual increase for three state-owned passenger train sets that are used for the Amtrak Cascades service.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 218-1 MMA-State	207,000	350,000	557,000	350,000	350,000
Total Cost	207,000	350,000	557,000	350,000	350,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program Y - Operating					
Fund 218-1 MMA-State	207,000	350,000	557,000	350,000	350,000
Total by Fund	207,000	350,000	557,000	350,000	350,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	207,000	350,000	557,000	350,000	350,000
Total Cost	207,000	350,000	557,000	350,000	350,000
Program Y - Operating					
E. Goods and Services	207,000	350,000	557,000	350,000	350,000
Total by Program	207,000	350,000	557,000	350,000	350,000

Package Description

The Amtrak Cascades service consists of a fleet of seven sets of Talgo-manufactured passenger rail cars. This includes three sets owned by the state of Washington, two owned by Amtrak, and two owned by the state of Oregon. The Talgo Maintenance Contract for Washington state is a 20-year contract with terms negotiable every four years. The contract also states that if the Parties are unable to reach agreement on pricing, Talgo shall get a three percent annual increase for maintenance services.
In past negotiations, WSDOT and Talgo failed to reach agreement for pricing less that the contract provision of three percent. Thus, the current contract contains the three-percent default increase.
The current underlying contract expires June 30, 2019.
Approval of this request will allow the department to continue the use of state-owned equipment without reducing or eliminating service.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Approval of the requested budget increase for the higher Intercity Passenger Rail costs will allow WSDOT to continue services in the 2017-19 biennium without service reduction or elimination. In addition, the department will be able to meet the requirements in the Service Outcome Agreement (SOA) for American Recovery and Reinvestment Act (ARRA) High Speed Rail funds, which obligate the state to maintain and expand service between Portland and Seattle in July 2017.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

The increased budget authority for Talgo passenger rail car maintenance will maintain for Amtrak Cascades.

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

Options to reduce Amtrak service fees continue to be explored. The Rail Division's Action Plan is updated annually and identifies strategies to reduce Amtrak costs. For example, WSDOT has taken the following cost containment steps: modified additional holiday service to achieve cost recovery; published a Request for Information (RFI) seeking cost management and revenue generation ideas from industry. WSDOT, together with other states and with support from Federal Railroad Administration, is working with Amtrak to negotiate lower service fees and implement cost management strategies.

Additional options include working with Amtrak to offset the subsidy costs by increasing fares and/or cuts to service. However, there is elasticity in passenger rail fares. Fares can be increased, but only to a point because after it reaches a certain level, the loss of ridership outweighs the incremental increase from higher fares. The current contract includes proposed language to alter service and the ability to contract out specific services. This will allow WSDOT to provide similar service through a different vendor, which could result in a cost savings.

Another area explored was the reduction of train trips but service reduction options are limited because of the requirements in the Service Outcome Agreement (SOA) for ARRA High Speed Rail funds, which obligate the state to maintain and expand service between Portland and Seattle in July 2017. If the SOA is not met, the federal government could require the department to pay back some portion of the federal ARRA funds.

What are the consequences of not funding this request?

Without the requested appropriation increase, it will be necessary to reduce service to stay within the current budget level. If service reductions are implemented, the department could be required to pay back federal ARRA funds. Payback of the ARRA funds would be calculated on a pro-rata share based on the 20-year goals outlined in the SOA. In addition, there are penalties assessed for early termination of the Talgo contract.

Expenditure Calculations and Assumptions

The department assumes an annual increase of a default three percent starting July 1 of each fiscal year. The amount is based on the current contract, which ends June 30, 2019. The request for an additional $557,000 for the 2017-19 biennium is calculated below.

	Current Level				Projected Cost			
	FY16	Contractual Increase	FY17	2015-17 Biennium	Contractual Increase	FY18	FY19	2017-19 Biennium
Monthly Maintenance Staff Cost	$375,334	3.0%	$386,594		3.0%	$398,192	$410,138	
Yearly Maintenance Staff Cost	$4,504,008		$4,639,128	$9,143,000		$4,778,302	$4,921,651	$9,700,000
Non-Maintenance Repairs Cost				$100,000				$100,000
Total Cost				**$9,243,000**				**$9,800,000**
Amount Requested								**$557,000**

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

All costs are ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Talgo Maintenance Contract

Base Budget:

Talgo Maintenance Contract - Three State-Owned Train Sets
Transportation Multimodal Account-state (218-1)

Current cost of maintenance of the three state-owned Talgo train sets:

FY 2016		FY 2017		**2015-17 Total**
Monthly	Annual	Monthly	Annual	
$375,334	$4,504,008	$386,594	$4,639,128	**$9,143,000**

Projected cost of with three-percent escalator:

FY 2018		FY 2019		**2017-19 Total**
Monthly	Annual	Monthly	Annual	
$398,192	$4,778,302	$410,138	$4,921,651	**$9,700,000**

Increase: $557,000

*Does not include $100,000 for non-maintenance repair cost.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:

Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		Allows the department to continue current and soon-to-be expanded Cascades Intercity Passenger Rail service without reductions or interruptions. Stakeholders include the traveling public; federal partners (FRA); Oregon state partners; and Amtrak.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes Continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: ZR Transp. Commission Fee Increases
Budget Period: 2017-19 Regular Session
Budget Level: ML – Maintenance Level
Program: B – Toll Operations & Maintenance

Agency Recommendation Summary Text:

The Washington State Transportation Commission has rate-setting authority for tolls and state ferry fares. During the 2017-19 biennium the commission may set and/or adjust fees related to the Tacoma Narrows Bridge, State Route 167 High Occupancy Toll Lanes (pending continued legislative authorization), Interstate 405 Express Toll Lanes, State Route 520, State Route 99 Toll Tunnel, and state ferry fares. While the commission sets ferry fares and tolls, they are collected and expended by the department.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Total Cost					
Staffing FTEs					

Revenue	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Fund 09F-1 State	1,833,000	1,951,000	3,784,000	0	0
Fund 109-1 State	2,549,000	6,147,000	8,696,000	0	0
Fund 16J-1 State	3,207,000	4,697,000	7,904,000	0	0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021

Package Description

In response to Office of Financial Management (OFM) operating budget instructions, the Transportation Commission prepared the following responses for each fee category:

Justification for New or Increased Fee Requests

Ferry Fares

1. **Fee name –** Ferry Fares.
2. **Current fee rate (FY 2017) –** Schedule varies by route and type of service. Transaction average is $7.59.
3. **Proposed fee rate**
   a. Fiscal year 2018 – The amounts of future fare increases are unknown at this time as the Transportation Commission sets ferry fares to meet revenue targets established in the biennial budget enacted by the Legislature. Future fare increases may be approximately 2.5 percent above current rates, if current Legislative budget assumptions carry forward into the 2017-19 biennium.

b. Fiscal year 2019 **–** The amounts of future fare increases are unknown at this time as the Transportation Commission sets ferry fares to meet revenue targets established in the biennial budget enacted by the Legislature. Future fare increases may be approximately 2.5 percent above 2018 rates, if current Legislative budget assumptions carry forward into the 2017-19 biennium.

4. **Incremental rate change for each year**
   a. Fiscal year 2018 – The amounts of future fare increases are unknown at this time as the Transportation Commission sets ferry fares to meet revenue targets established in the biennial budget enacted by the Legislature. Future fare increases may be approximately 2.5 percent above current rates, if current Legislative budget assumptions carry forward into the 2017-19 biennium.
   b. Fiscal year 2019 **–** The amounts of future fare increases are unknown at this time as the Transportation Commission sets ferry fares to meet revenue targets established in the biennial budget enacted by the Legislature. Future fare increases may be approximately 2.5 percent above 2018 rates, if current Legislative budget assumptions carry forward into the 2017-19 biennium.
5. **Expected implementation date –** October 2017 and October 2018.
6. **Estimated additional revenue generated by increase**
   a. Fiscal year 2018 – $2,549,000 (based upon the June 2016 Transportation Revenue Forecast (Alternative 1) which assumes a 2.5 percent fare increase).
   b. Fiscal year 2019 – $6,147,000 (based upon the June 2016 Transportation Revenue Forecast (Alternative 1) which assumes a 2.5 percent fare increase).
7. **Justification for the increase and discussion of consequences of not increasing the fee –** Fares are proposed by the Washington State Department of Transportation (WSDOT) to the Transportation Commission based on input from ferry advisory committees, ferry served communities, and the financial needs of Washington State Ferries based upon the enacted transportation budget. Based upon this input and recommendations, the Transportation Commission sets ferry fares and fare policies for the state ferry system.

   If the fares are not adjusted, Ferries Maintenance and Operations budget (Program X) would have to be reduced, which may result in service reductions and delays for ferry vessel and/or ferry terminal maintenance. Without proper maintenance there could be a disruption of ferry service due to a vessel breaking down or due to terminals not being able to receive ferries for loading and unloading of passengers and vehicles. In addition, the department may have to reduce service hours, reduce ferry capacity, and/or significantly alter the existing ferry service schedule.
8. **Indication of any changes in who pays –** No change.
9. **Indication of any changes in methodology for determining the fee –** No change.
10. **Recommendation Summary code for the related expenditure request, if tied to a budget request –** Department of Transportation Decision Package ML-ZR, Transp. Commission Fee Increases.
11. **Alternatives considered to an increase –** None considered given the Transportation Budget assumes established fare revenue targets will be achieved via fare increases.
12. **Indication of whether the fee increase requires a statutory change, i.e., a separate bill. (If yes, a proposal should be submitted as part of the agency request legislation process.) –** Statutory change is not required.
13. **Indication of any changes in who pays –** No change.
14. **Indication of any changes in methodology for determining the fee –** No change.
15. **Recommendation Summary code for the related expenditure request, if tied to a budget request –** Department of Transportation Decision Package ML-ZR, Transp. Commission Fee Increases.

16. **Alternatives considered to an increase –** None considered given the Transportation Budget assumes established fare revenue targets will be achieved via fare increases.
17. **Indication of whether the fee increase requires a statutory change, i.e., a separate bill. (If yes, a proposal should be submitted as part of the agency request legislation process.) –** Statutory change is not required.

Tacoma Narrows Bridge (TNB) Tolls

1. **Fee name –** Tacoma Narrows Bridge Tolls.
2. **Current fee rate (FY 2017) –** two-axle vehicles: $5.00 electronic toll collection (ETC)/$6.00 cash/$7.00 pay by mail. Toll rates increase on a per axle charge, if a vehicle has more than two axles. (up to six axles).
3. **Proposed fee rate**
   a. Fiscal year 2018 – Unknown at this time. The Transportation Commission determines toll rate adjustments based upon current and estimated traffic volumes and toll revenue for the coming fiscal year, along with estimates on futures costs and revenues. Toll rates must be set to cover those costs identified in current law, including debt payments, maintenance, operations, and insurance.
   b. Fiscal year 2019 **–** Unknown at this time. The Transportation Commission determines toll rate adjustments based upon current and estimated traffic volumes and toll revenue for the coming fiscal year, along with estimates on futures costs and revenues. Toll rates must be set to cover those costs identified in current law, including debt payments, maintenance, operations, and insurance.
4. **Incremental rate change for each year**
   a. Fiscal year 2018 – Varies year by year. Rates are adjusted on an as-needed basis to ensure costs and requirements are being met based on current law mandates.
   b. Fiscal year 2019 – Varies year by year. Rates are adjusted on an as-needed basis to ensure costs and requirements are being met based on current law mandates.
5. **Expected implementation date –** July 2017 and July 2018.
6. **Estimated additional revenue generated by increase –** These estimates will be determined during the Transportation Commission rate setting process which will begin December 2016.
   a. Fiscal year 2018 – $ TBD
   b. Fiscal year 2019 – $ TBD
7. **Justification for the increase and discussion of consequences of not increasing the fee –** Toll revenues fund operations, maintenance, preservation, and reimbursement of debt service for the TNB. Toll rates must be raised periodically to keep up with escalating debt payments as well as operational and maintenance costs and other funding needs.

   The consequence of not raising the toll rates periodically will likely result in insufficient revenue collections to make debt payments and cover required costs, thus requiring funds in the Motor Vehicle Fund (MVF) to make the debt payments and cover the costs referred to above. Taking funds out of the MVF for this purpose takes away obligated revenues that would have otherwise funded highway projects and other transportation programs.
8. **Indication of any changes in who pays –** No change.
9. **Indication of any changes in methodology for determining the fee –** No change.
10. **Recommendation Summary code for the related expenditure request, if tied to a budget request –** Department of Transportation Decision Package ML-ZR, Transp. Commission Fee Increases.

11. **Alternatives considered to an increase –** None. If toll rates are not raised to cover debt service and other required costs, and to maintain the account balance above the TNB sufficient minimum balance, other revenue sources would need to be used.
12. **Indication of whether the fee increase requires a statutory change, i.e., a separate bill. (If yes, a proposal should be submitted as part of the agency request legislation process.) –**Statutory change is not required.

State Route (SR) 167 High Occupancy Toll (HOT) Lane Tolls

1. **Fee name –** SR 167 High Occupancy Toll (HOT) Lane Tolls.
2. **Current fee rate (FY 2017) –** When the SR 167 HOT lanes are in operation, the minimum toll rate is $0.50 and the maximum toll rate is $9.00. Toll rates vary based upon several factors including time of day, traffic volumes, traffic demand, and overall corridor performance. Toll authorization ends at the end of fiscal year 2017; however, it is assumed continued authorization will be provided in the budget bill.
3. **Proposed fee rate**
   a. Fiscal year 2018 – The minimum and maximum toll rates set by the Commission are anticipated to be the same as fiscal year 2017. Rates automatically adjust within the established toll schedule using dynamic tolling to ensure performance requirements are met.
   b. Fiscal year 2019 – The minimum and maximum toll rates set by the Commission are anticipated to be the same as fiscal year 2017. Rates automatically adjust within the established toll schedule using dynamic tolling to ensure performance requirements are met.
4. **Incremental rate change for each year**
   a. Fiscal year 2018 –The variable rate schedule is not expected to be adjusted unless revenues are insufficient to cover toll operation costs or required performance measures are not met.
   b. Fiscal year 2019 – The variable rate schedule is not expected to be adjusted unless revenues are insufficient to cover toll operation costs or required performance measures are not met.
5. **Expected implementation date –** NA
6. **Estimated additional revenue generated by ~~increase~~ continuation of current tolling policy**
   a. Fiscal year 2018 – $1,833,000 (based on June 2016 traffic and revenue estimates).
   b. Fiscal year 2019 – $1,951,000 (based on June 2016 traffic and revenue estimates).
7. **Justification for the increase and discussion of consequences of not increasing the fee –**
   Tolls are needed to administer SR 167 HOT Lanes tolling and achieve the required performance measures. If WSDOT cannot administer tolling on SR 167 HOT Lanes, the following impacts to the corridor would occur:
   - Increased travel time
   - Increased traffic congestion
   - Fewer choices for drivers
   - Lack of funding for the operations of the HOT lanes.
8. **Indication of any changes in who pays –** No change.
9. **Indication of any changes in methodology for determining the fee –** No change.
10. **Recommendation Summary code for the related expenditure request, if tied to a budget request –** Department of Transportation Decision Package ML-ZR, Transp. Commission Fee Increases.
11. **Alternatives considered to an increase –** If required performance measurements are not being met, per WAC 468.270.075, a toll rate increase may be considered.

12. **Indication of whether the fee increase requires a statutory change, i.e., a separate bill. (If yes, a proposal should be submitted as part of the agency request legislation process.) –** Toll authorization ends at the end of fiscal year 2017. Tolling authorization will need to be made permanent or the pilot project will need to be extended for the department to collect tolls during the 2017-19 biennium.

<u>State Route (SR) 520 Bridge Tolls</u>

1. **Fee name –** State Route 520 Bridge Tolls.
2. **Current fee rate (FY 2017) –** Toll schedule varies by time of day, day of week, and payment option. No tolls are collected between 11:00 pm-5:00 am.
3. **Proposed fee rate**
   a. Fiscal year 2018 – Per WAC 468-270-071, toll rates will increase by 5 percent and nighttime tolling (11pm-5am) will begin at a toll rate of $1.25.
   b. Fiscal year 2019 – The variable rate schedule is anticipated to be the same as fiscal year 2018.
4. **Incremental rate change for each year**
   a. Fiscal year 2018 – Per WAC 468-270-040(2), the Commission adopted a toll rate increase of 5 percent over fiscal year 2017, and implementation of overnight tolling (11pm-5am) at $1.25.
   b. Fiscal year 2019 – No rate change anticipated.
5. **Expected implementation date –** July 2017.
6. **Estimated additional revenue generated by increase**
   a. Fiscal year 2018 – Toll rate increases are already assumed in the Transportation Revenue Forecasts.
   b. Fiscal year 2019 – No toll rate increase anticipated.
7. **Justification for the increase and discussion of consequences of not increasing the fee –** RCW 47.56.850 provides the Transportation Commission authority to set toll rates on eligible toll facilities. RCW 47.56.870 designates SR 520 as an eligible toll facility. Pursuant to WAC 468-270-040(2), the Commission must consider toll rates that will help maintain travel time, speed, and reliability on the corridor and must set and adjust toll rates to generate revenue sufficient and necessary to cover costs and obligations

   The consequence of not raising the toll rates periodically could result in the state failing to cover required costs and meet its debt service requirements. Not raising toll rates will likely result in insufficient revenue collections, thus requiring funds in the Motor Vehicle Fund (MVF) to make the debt payments and cover the costs mentioned above. Using MVF funds for this purpose would take away revenue that would have otherwise funded highway projects and other transportation programs.
8. **Indication of any changes in who pays –** No change.
9. **Indication of any changes in methodology for determining the fee –** No change.
10. **Recommendation Summary code for the related expenditure request, if tied to a budget request –** Department of Transportation Decision Package ML-ZR, Transp. Commission Fee Increases.
11. **Alternatives considered to an increase –** None. If toll revenues are insufficient to cover debt service, other revenue sources would have to be used.
12. **Indication of whether the fee increase requires a statutory change, i.e., a separate bill. (If yes, a proposal should be submitted as part of the agency request legislation process.) –** Statutory change is not required.

I-405 Express Toll Lanes (ETL) Tolls

1. **Fee name** – I-405 Express Toll Lanes Tolls.
2. **Current fee rate (FY 2017)** – When the I-405 express toll lanes are in operation, the minimum toll rate is $0.75 and the maximum toll rate is $10.00. Toll rates vary in amount by time of day and level of traffic congestion, and overall corridor performance. Rates automatically adjust within the established toll schedule using dynamic tolling to ensure performance requirements are met.
3. **Proposed fee rate** – The I-405 toll rate schedule in fiscal year 2018 and fiscal year 2019 is anticipated to be the same as fiscal year 2017.

State Route 99 Toll Tunnels

The facility is expected to commence tolling late in the 2017-19 biennium. The rate setting process and toll policy decision-making process are expected to occur during the 2017-19 biennium.

State of Washington
Request for Fees
2017-19 Biennium

	Code	Title
AGENCY	410	Transportation Commission

Agy #	Agency Name	Fee Code	Name of Fee	Is a bill required?	Z-Draft # (or Pending)	New, Increased, Continued?	Incremental Revenue Dollars in Thousands GF-S FY 2018	GF-S FY 2019	Other Funds FY 2018	Other Funds FY 2019	Tied to Expenditure Change?	Fee Payer Position	Explanation of Change See Instructions
410	Transportation Commission	1001	Ferry Fares	No	N/A	Increased	-	-	2,549	6,147	Supports Dept. of Transportation (Agency 405) Expenditures per RCW 47.60.530	Unknown. Public input on future fare increases will be gathered at the time the increase is being considered.	2.5% annual fare increases are assumed in current Legislative budget assumptions.
410	Transportation Commission	3002	Tacoma Narrows Bridge Tolls	No	N/A	Not Known	-	-	TBD	TBD	Supports Dept. of Transportation (Agency 405) Expenditures per RCW 47.56.165	Unknown. Public input on future toll increases will be gathered at the time the increase is being considered.	Rates are adjusted based on estimated revenue needed to cover costs as required in law.
410	Transportation Commission	2001	SR 167 High Occupancy Toll (HOT) Lane Tolls	No	N/A	Continued	-	-	1,833	1,951	Supports Dept. of Transportation (Agency 405) Expenditures per RCW 47.56.403 and RCW 47.66.090	Unknown. Public input on future toll increases will be gathered at the time the increase is being considered.	The SR 167 HOT lanes and related toll schedule will sunset on June 30, 2017 under current law requirements. Should the Legislature make the HOT lanes permanent, or extend the pilot project, the toll rate schedule is anticipated to be the same as FY 2017.
410	Transportation Commission	3001	State Route 520 Tolls	No	N/A	Increased	-	-	3,207	4,697	Supports Dept. of Transportation (Agency 405) Expenditures per RCW 47.56.875, RCW47.56.820 and RCW 47.56.850.	Unknown. Public input on future toll increases will be gathered at the time the increase is being considered.	5% annual toll increase are planned in the current administrative code for the beginning of FY 2017 and FY 2018 (July 1). In addition, overnight tolls (11pm-5am) of $1.25 are scheduled to begin in FY 2018 (July 1, 2017).
410	Transportation Commission	3003	I-405 Express Toll Lanes Tolls	No	N/A	Continued	-	-	-	-	Supports Dept. of Transportation (Agency 405) Expenditures per RCW 47.56.820, RCW47.56.850, RCW 47.56.880, and RCW 47.56.884.	Unknown. Public input on future toll increases will be gathered at the time the increase is being considered.	The I-405 toll rate schedule is anticipated to be the same as FY 2017.

							Incremental Revenue Dollars in Thousands						
							GF-S		Other Funds				
Agy #	Agency Name	Fee Code	Name of Fee	Is a bill required?	Z-Draft # (or Pending)	New, Increased, Continued?	FY 2018	FY 2019	FY 2018	FY 2019	Tied to Expenditure Change?	Fee Payer Position	Explanation of Change See Instructions
410	Transportation Commission	New	State Route 99 Tolls	No	N/A	New			TBD	TBD	Supports Dept. of Transportation (Agency 405) Expenditures per RCW 47.56.850, RCW47.56.820, RCW 47.56.862, and RCW 47.56.864	Unknown. Public input on future toll rates will be gathered at the time the rates are being considered (TBD).	The Commission will set rates in accordance with requirements set forth in RCW 47.56.862. The facility is expected to commence tolling late in the 2017-19 biennium. The rate setting process and toll policy decision-making process are expected to occur during the 2017-19 biennium.

Additional Comments

While the Transportation Commission (Agency 410) sets ferry fares and tolls, they are collected and expended after appropriation by the Department of Transportation (Agency 405). Fee proposals are based on the June 2016 Transportation Revenue Forecast. Toll incremental revenue are based on June 2016 Transportation Revenue Forecast. Actual fares and tolls are to be determined by the Transportation Commission and may vary from the amounts proposed in this document.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G1 Eagle Harbor Apprentices
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

The department requests appropriation authority to establish four apprentice positions at the Washington State Ferries (WSF) Maintenance Facility located at Eagle Harbor on Bainbridge Island. The four apprentice positions will be a combination of electricians, pipefitters, and welders/boilermakers. Apprentices will build up marine trade skills and ensure that there continues to be an experienced workforce at the Eagle Harbor Maintenance Facility. Workers at the facility are responsible for the maintenance of WSF's ferry vessels and ferry terminals.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	271,000	271,000	542,000	271,000	271,000
Total Cost	271,000	271,000	542,000	271,000	271,000
Staffing FTEs	4.0	4.0	4.0	4.0	4.0
Program X - Operating					
Fund 109-1 State	271,000	271,000	542,000	271,000	271,000
Total by Fund	271,000	271,000	542,000	271,000	271,000
Staffing FTEs	4.0	4.0	4.0	4.0	4.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	192,000	192,000	384,000	192,000	192,000
B. Employee Benefits	79,000	79,000	158,000	79,000	79,000
Total Cost	271,000	271,000	542,000	271,000	271,000
Program X - Operating					
A. Salaries and Wages	192,000	192,000	384,000	192,000	192,000
B. Employee Benefits	79,000	79,000	158,000	79,000	79,000
Total by Program	271,000	271,000	542,000	271,000	271,000

Package Description

The department proposes establishing an apprenticeship program for four positions at WSF. The program will allow apprentices to develop experience in the marine industry, with emphasis on ferry vessels and ferry terminals. The goal of the apprenticeship program is the continuing development of a skilled marine workforce for the Eagle Harbor Maintenance Facility. WSF's maintenance facility provides 24/7 maintenance for 22 ferry vessels and 20 ferry terminals, 365 days per year. There are currently 116 trade positions comprising foremen, leads and journeymen at the Eagle Harbor Maintenance Facility, including 21 electricians, 17 pipefitters, and 11 welders/boilermakers.

An Eagle Harbor Apprenticeship Program was attempted using FTE vacancies several years ago in collaboration with marine unions; however, the department was not able to sustain the program within existing resources. Without an apprenticeship program, there is a diminishing pool of skilled marine workers with experience in the particular marine maintenance issues that arise on ferry vessels and at ferry terminals.

With any apprenticeship program there is no guarantee the participant will continue as journeyman, but the risk is acceptable given the potential benefit, which is the development of journeymen who have developed skills that are paired with experience in the maritime industry and first-hand knowledge of the ferry system.

Note: Additional appropriation authority was provided in the 2015-17 biennium for two journeyman electrician positions to assist with Eagle Harbor workload. This current package would augment existing staff and will assist with succession planning.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

WSF must have a pool of qualified journeymen with marine-specific skills to provide timely responses to emerging maintenance needs and to keep up with routine maintenance. As the WSF vessel fleet and ferry terminals continue to age, there is an increased need for a skilled workforce to maintain them. By investing in marine apprentices, WSF is ensuring the continuity of a workforce that will hold a high standard of excellence, so ferry vessels and terminals continue to operate predictably and reliably.

Performance Measure Detail

WSF is measured on a number of performance goals. Among these goals are passenger satisfaction, on-time performance, service reliability, and vessel out-of-service time. These performance measures are dependent upon a well-maintained vessel fleet and on working ferry terminals. A pool of skilled, trained maintenance staff is needed to operate the ferry system. A lack of skilled marine workers or a diminished skill pool will result in lower performance on operation and maintenance performance measures.

Identify important connections or impacts related to this proposal.

This proposal has a positive impact on WSF's customers by increasing the pool of skilled maintenance workers available, which allows WSF to maintain service reliability at a high level.

Approval of the request will also allow WSF to fully implement the apprenticeship provisions in the collective bargaining agreements with the Metal Trades and the Carpenters unions.

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

An alternative approach to skilled-worker succession planning would be to hire more full-wage journey level workers who do not have a marine-specific background, and train them in the subsets of skills unique to the marine environment. The department requested additional journey-level workers and received appropriation authority for two additional electricians in the 2016 session. This request builds on that, as a cost-efficient alternative.

What are the consequences of not funding this request?

If the request is not approved, the pool of trained craft personnel, now and in the future, to maintain vessels and terminals will be smaller than it needs to be. This could lead to more vessel out-of service time, decreased service reliability, and reduced customer satisfaction. Currently, there are occasions when preventive maintenance work is delayed or postponed due to lack of available personnel.

Expenditure Calculations and Assumptions

The cost of an apprentice is, on average, 80 percent of the cost of a journey-level craft person (varying from 70 to 90 percent). Costs are based on four apprentices, being paid at 80 percent of journeyman wage:

Base wage (Journeyman): $28.85 per-hour.

Apprentice wage: $23.08 per-hour
Annual salary (apprentice): $48,006
Benefits (Pension/Social Security/Medicare): $48,006 x 18.83% = $9,040
Health care: $10,656 (calendar year 2017 rate of $888 per-month per-employee x 12)
Total annual cost per-apprentice: $67,702

Annual cost: $67,702 x four apprentices = $270,808 (rounded to $271,000) per-year
Biennial cost: 2 x annual cost ($271,000) = $542,000

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

Costs are ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Eagle Harbor Apprentices

Base Budget: The Eagle Harbor labor budget is approximately $10.5 million per-year. This is the budget for approximately 116 employees who work at WSF's maintenance facility (Eagle Harbor) on Bainbridge Island. There has been no funding specifically for an apprenticeship program.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		This proposal has a positive impact on WSF's customers by increasing the pool of skilled maintenance workers available, which allows WSF to maintain service reliability at a high level. Funding of the proposal will also allow WSF to fully implement the apprenticeship provisions in the collective bargaining agreements with the Metal Trades and the Carpenters unions.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G2 Standardize Vessel Maintenance Procedures
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

The request is for appropriation authority to develop sets of standardized vessel maintenance procedures, by vessel class, aligning maintenance procedures to manufacturers' recommendations and Washington State Ferries (WSF) best practices. Through this work, it will be possible to coordinate maintenance activities by way of a defined process that is well understood across the organization and throughout the maintenance department. The resulting formalized maintenance procedures and documentation will be used for vessel maintenance planning, training, execution, and continuous improvement.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	350,000	350,000	700,000	0	0
Total Cost	350,000	350,000	700,000	0	0
Staffing FTEs	0.5	0.5	0.5	0.0	0.0
Program X - Operating					
Fund 109-1 State	350,000	350,000	700,000	0	0
Total by Fund	350,000	350,000	700,000	0	0
Staffing FTEs	0.5	0.5	0.5	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	52,000	52,000	104,000	0	0
B. Employee Benefits	10,000	10,000	20,000	0	0
E. Goods and Services	288,000	288,000	576,000	0	0
Total Cost	350,000	350,000	700,000	0	0
Program X - Operating					
A. Salaries and Wages	52,000	52,000	104,000	0	0
B. Employee Benefits	10,000	10,000	20,000	0	0
E. Goods and Services	288,000	288,000	576,000	0	0
Total by Program	350,000	350,000	700,000	0	0

Package Description

Currently, maintenance procedures vary considerably among vessels within each vessel class, and for like equipment between classes. In most cases, maintenance procedures are not documented, other than by title, relying instead on the knowledge of each individual vessel watch. Maintenance resources needed for the maintenance procedures (the number of personnel and requisite skills) are not specified or estimated. Required parts and tools that should be used in the maintenance procedures are not specified.

This shortcoming impedes consistent execution of maintenance. It also impedes meaningful analysis and optimization of maintenance procedures. The impact of the shortcoming will be even more severe as the aging vessel workforce retires, taking much of the essential knowledge and experience with it.

These vessel maintenance procedures are fundamental to the good order of the vessels. The department requests budget authority to standardize the procedures, allowing alignment of maintenance procedures to manufacturers' recommendations and WSF best practices for seven classes of vessels.

This proposal would utilize specialists in this field, working with WSF under the direction of a Maintenance Port Engineer as project lead. The project will tap into the extensive knowledge of the engine room staff chief engineers to develop, standardize, and document vessel maintenance procedures.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

This decision package will allow WSF to achieve the following important goals:

- Improve vessel reliability through fully documented and standardized fleet maintenance procedures.
- Manage maintenance cost growth through reduced rework and improved management of labor, skills, parts and tools.
- Address workforce succession planning through documentation of best maintenance practices that reflect the knowledge and experience of WSF's aging workforce.
- Improve safety through integration of safety precautions and personal protective equipment into maintenance procedures.
- Set the stage for future potential cost savings by providing a platform for lean and continuous improvement initiatives.

Performance Measure Detail

The proposal is linked to two legislatively-required performance measures, service reliability and vessel out-of-service time. Through the development of standardized maintenance procedures for vessels it will be possible to make the best use of maintenance resources and allow for opportunities to sustain vessel reliability. In conjunction with capital investments, these procedures will allow for better use of vessel out-of-service time and, in this sense, there will be an ability to limit additional unplanned maintenance.

Identify important connections or impacts related to this proposal.

This will improve vessel reliability and allow WSF to reliably sustain current levels of service.

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

WSF does not have the resources within its existing budget and personnel availability to develop this initiative. Bringing in a consultant firm and dedicating financial resources to this project is the best alternative, because it will allow WSF to create a solid and reliable base of maintenance procedures and, thus, contribute to the reliability of vessel service.

What are the consequences of not funding this request?
If this request is not funded, WSF will continue with the current practice, which relies on the memory of an aging workforce and inconsistent documentation. Institutional knowledge will be lost as personnel retire. This could result in more out-of-service time for vessels and impact service reliability.

Expenditure Calculations and Assumptions
Labor cost is based on a 0.5 FTE (Staff Chief Engineer):

Wages: $49.44 per-hour x 1,040 (1/2 time) hours = $51,417.60 (rounded to $52,000)
Benefits: $51,417.60 x 18.83% = 9,682 (rounded to $10,000)
Total cost per-year: $62,000

Consultant costs are based on an assumed level of effort for one full-time consultant. The estimate of $288,000 per-year assumes the following:

$24,000 per-month * 12 months per-year = $288,000 per-year

For total annual costs of $350,000 or $700,000 for the biennium.

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

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Standardize Vessel Class Maintenance Procedures

Base Budget: The proposal is for a new one-time activity, for which there is no base budget.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		The project is expected to support service reliability and allow WSF to sustain current levels of service as the overall fleet ages and knowledgeable staff retire.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No STOP

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G3 Surplus Property Disposal
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: H – Program Delivery Mgmt & Support

Agency Recommendation Summary Text:

The Legislature, as part of its 2015 Connecting Washington revenue package, identified surplus property sales as one of several sources of revenue that will support the 16-year, $16 billion package of transportation enhancements. Additional appropriation authority is requested to provide the surplus property sales' group with resources needed to help meet the revenue targets of the 2015 Connecting Washington revenue package.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	402,000	402,000	804,000	402,000	402,000
Total Cost	402,000	402,000	804,000	402,000	402,000
Staffing FTEs	1.5	1.5	1.5	1.5	1.5
Program H - Operating					
Fund 108-1 MVA-State	402,000	402,000	804,000	402,000	402,000
Total by Fund	402,000	402,000	804,000	402,000	402,000
Staffing FTEs	1.5	1.5	1.5	1.5	1.5

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	118,000	118,000	236,000	118,000	118,000
B. Employee Benefits	30,000	30,000	60,000	30,000	30,000
C. Professional Service Contracts	211,000	211,000	422,000	211,000	211,000
E. Goods and Services	23,000	23,000	46,000	23,000	23,000
G. Travel	20,000	20,000	40,000	20,000	20,000
Total Cost	402,000	402,000	804,000	402,000	402,000
Program H - Operating					
A. Salaries and Wages	118,000	118,000	236,000	118,000	118,000
B. Employee Benefits	30,000	30,000	60,000	30,000	30,000
C. Professional Service Contracts	211,000	211,000	422,000	211,000	211,000
E. Goods and Services	23,000	23,000	46,000	23,000	23,000
G. Travel	20,000	20,000	40,000	20,000	20,000
Total by Program	402,000	402,000	804,000	402,000	402,000

Package Description

In 2008, the WSDOT developed the Surplus Property Report, which is a statewide inventory of all department-owned surplus property that is suitable for development for department facilities or that should be sold. Subsequently, WSDOT's Real Estate Services Division received a budget increase to cover the costs of disposing of surplus property.

In the 2013-15 biennium, the department sold 111 new properties, generating $9 million in revenue. Total revenue generated by disposal of properties was over $12 million, including real estate contracts, down payments, interest, and new sales. However, it is not possible to meet revenue expectations of Connecting Washington at current funding levels.

Additional appropriation will sustain the surplus property disposal work and allow the program to continue its efforts toward the goal of the Legislature, as part of its 2015 Connecting Washington revenue package, to generate $80 million in property sales' revenue through fiscal year 2031, in support of the 16-year, $16 billion package of transportation enhancements.

The June 2016 forecast for Sale of Property projects revenue of $9.5 million in the 2017-19 biennium. Without additional resources, the department estimates it will generate approximately $6 million to $7 million in the 2017-19 biennium, which will be reflected in the September 2016 forecast. The current base operating budget in Program H for surplus property sales is $1,604,000 and is not enough to sustain the staff and activities needed to accomplish the surplus property disposal work. Additional appropriation authority of $804,000 is requested to support increased departmental efforts. Experience has shown that resulting revenue to the Motor Vehicle Account is well in excess of the administrative cost of the sales.

Without an increased appropriation, Real Estate Services will not be successful in meeting the additional 'to market' surplus property sales, nor will the department generate the dollars detailed in Results Washington of $5 million per-year. The current base funding leaves no money to cover the following activities:

- Labor charges for statewide disposal reviewers (environmental, maintenance, access, utilities, etc.)
- Surveys
- Labor charges for Region staff who assist with disposal-related plans (assist dedicated TE3 on complex plan revisions)
- Appraisal expenses (completed by staff appraisers outside of the dedicated staff, and for contracted appraisals)
- Auction posting materials (for sale signs and posts)
- Printing of auction brochures and postcards
- Auction advertising
- Labor charges from Region staff assisting with posting of auction properties
- Fee for listing unsold auction properties on Northwest Multiple Listing Service
- Environmental assessments (preliminary soil testing, Phase 1 and Phase 2 assessments when contamination is suspected)

Selling department-owned properties that are no longer needed for a highway purpose generates state revenue for the Motor Vehicle Account, eliminates maintenance expenses, eliminates assessment fees, reduces liability, and returns the properties to an active tax status, creating additional revenue for local jurisdictions. It is expected that the increased efforts will generate revenue in amounts that will fund the sales effort and exceed the appropriation request.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The additional appropriation authority will sustain the department's surplus property disposal work and allow the program to continue its efforts toward the goal of surplus sales, resulting in revenue to the Motor Vehicle Account in excess of the administrative cost of the sales.

The additional budget authority will allow properties to be brought to market, thereby reducing the risk and exposure of the department's ownership and lost revenue. The requested budget level will increase the number of and the pace at which properties are brought to market, resulting in additional sales and revenue.

The additional resources will also allow the department to reduce delays in updating right-of-way plan sheets used in the disposal process, fund appraisals, and increase marketing efforts such as using the Multiple Listing Service for exposure beyond WSDOT's normal advertising process. These sales will also reduce the department's liability and put properties back on the local tax rolls.

Performance Measure Detail

In calendar year 2010, the WSDOT Property Management Disposal Office brought approximately forty properties to market through auctions and negotiated sales. The goal is to double the number of parcels brought to market, which will be tracked monthly. The tracking will include the number of parcels sold and revenue generated compared to prior biennia.

Identify important connections or impacts related to this proposal.

Stakeholders impacted will be the citizens of the state of Washington, cities, and counties. The sale of properties results in increased revenue for transportation purposes. Local agencies will benefit from increased revenue from real estate property taxes.

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

One alternative explored was the possibility of redirecting resources from other property- management activities, such as work on leases and encroachments. However, statewide Real Estate Services has already reduced its FTEs. As part of that deceleration, the office has already reprioritized these other property management activities to the minimum level while balancing staffing requirements to deliver existing projects.

The alternative of not increasing the staffing would be out of compliance with Legislative direction and with commitments made by WSDOT.

What are the consequences of not funding this request?

The requested alternative was selected in an effort to fulfill the intent of the legislative proviso, generate additional revenue, and reduce liability exposure as well as ongoing expenses associated with owning and maintaining unnecessary surplus properties. If not approved, there will be fewer properties brought to market, generating less revenue.

Expenditure Calculations and Assumptions

The following is needed to provide the necessary statewide resources across the state to bring properties to market; increase the number of discipline-specific property reviews, appraisals, and plan revisions; and conduct other activities that accelerate the sales process.

- 1.50 FTE - Property & Acquisition Specialist, Technicians, Engineers, and discipline-specific experts with assumed Salary and Benefit Costs of $148,000 per-year
- Personal service contracts (Object C) are primarily contracts for property valuations, which are assumed to cost $211,000 annually. This estimate is based on the assumption that there will be approximately 42 appraisals each year, at a cost of $5,008 per-appraisal, accomplished by fee appraisers.
- Goods and Services (Object E) costs are primarily for environmental assessments, outreach, marketing, and advertising activities; assumed to cost $23,000 annually.
- Travel and activities associated with bringing properties to auction (Object G), as well as Transportation Equipment Fund (TEF) rentals, are expected to cost $20,000 annually.

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

All costs are assumed to be ongoing.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Surplus Property Disposal

Base Budget: Currently, $1.6 million and 8.75 FTEs are allocated to the surplus property disposal program in Program H, Program Delivery Management and Support. The budget is appropriated from Motor Vehicle Account-State (108-1) funds, which is the repository for the surplus property sales proceeds.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Completed sales returns property to the tax rolls, which benefits local taxing jurisdictions.
Other local gov't impacts?	Yes	Please see above.
Tribal gov't impacts?	Yes	If tribal governments are qualified, there will be greater opportunities to acquire WSDOT surplus properties.
Other state agency impacts?	Yes	If other state agencies are interested, there will be greater opportunities to acquire WSDOT surplus properties.
Responds to specific task force, report, mandate, or exec order?	Yes	This responds to the Legislative assumptions regarding revenue to support the 2015 Connecting Washington transportation package.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:

Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.
RCW 47.12.063 allows WSDOT to sell its surplus properties to the above entities foregoing the processes prescribed by RCW 47.28.050 and 47.12.283.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G4 SAO Audit Staff Increase
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: B – Toll Operations & Maintenance

Agency Recommendation Summary Text:

The May 2016 Washington State Auditor's Office audit on Improving the Toll Collection System asserts, "It is crucial that WSDOT and its Toll Division continue to evaluate and improve the management of the tolling program, not only to address current issues but particularly before embarking on projects such as toll facility expansion and the procurement of a new toll system." To that end, WSDOT is requesting $658,000 to add critical staff positions.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 09F-1 HOT-State	8,000	8,000	16,000	8,000	8,000
Fund 16J-1 520-State	150,000	150,000	300,000	150,000	150,000
Fund 511-1 TNB-State	90,000	90,000	180,000	90,000	90,000
Fund 595-1 I405-State	81,000	81,000	162,000	81,000	81,000
Total Cost	329,000	329,000	658,000	329,000	329,000
Staffing FTEs	3.0	3.0	3.0	3.0	3.0
Program B - Operating					
Fund 09F-1 HOT-State	8,000	8,000	16,000	8,000	8,000
Fund 16J-1 520-State	150,000	150,000	300,000	150,000	150,000
Fund 511-1 TNB-State	90,000	90,000	180,000	90,000	90,000
Fund 595-1 I405-State	81,000	81,000	162,000	81,000	81,000
Total by Fund	329,000	329,000	658,000	329,000	329,000
Staffing FTEs	3.0	3.0	3.0	3.0	3.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	237,000	237,000	474,000	237,000	237,000
B. Employee Benefits	92,000	92,000	184,000	92,000	92,000
Total Cost	329,000	329,000	658,000	329,000	329,000
Program B - Operating					
A. Salaries and Wages	237,000	237,000	474,000	237,000	237,000
B. Employee Benefits	92,000	92,000	184,000	92,000	92,000
Total by Program	329,000	329,000	658,000	329,000	329,000

Package Description

The department's Toll Program continues to grow and mature with the addition of new toll facilities and traffic and revenue growth in existing tolled corridors. In the May 2016 SAO audit, the auditors found, "issues affecting the toll system resulted from WSDOT's limited attention to several key activities:

- Adding staff or contractors with the necessary expertise to develop and manage the toll system
- Establishing key management functions and processes
- Completing tolling system development

More attention to these leadership and management activities would have helped the Toll Division complete development of the toll collection system; prevented the toll system's processing, collection, reporting and security issues; and engaged key stakeholders to build trust and support for the program."

The department has identified three key staff positions which are necessary to address the leadership, decision making, and stakeholder management issue pointed out by the SAO audit. The three positions are new requests and will address specific SAO recommendations for improvement.

The three new positions include:

- **One quality/process improvement staff member, WMS 3 – Quality Assurance/Risk Mitigation/Lean Manager**
  WSDOT has made an investment in pursuing process improvement through the application of lean principles and techniques. The SAO audit, as well as other internal reviews, has shown that active management of quality – from standardizing policies and procedures to identifying risks and mitigation strategies – is crucial to a successful program. This new staff position will support quality, risk identification and mitigation and process improvement through lean principles with the goal of improving project delivery and cost performance. This position is expected to report to the Deputy Director to ensure quality is managed at a senior level within the division.
- **One data analysis and reporting staff member, TE 3 – Data/Reporting Analyst**
  Tolling produces a significate amount of data that requires expert knowledge of databases to extract to support reporting deliverables conducting data analytics to support evaluation of effective business practices. This staff position will facilitate data collection, data analysis and transactional and financial reporting requirements.
- **One communications and outreach staff member, CC 3 – Communications Specialist**
  The SAO audit, as well as recent media reporting, highlights the importance of two-way communication with stakeholders and customers. This positon will address the increased need for presence on various social media, which is a strategy leading customer service experts are finding to be the best way to address issues and also get information to customers. Even elected officials have turned to social media as a way to get their messages out to the constituents.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Funding this request will provide consistent and continued operations and ongoing development (leadership, reporting, and quality control) for tolled facilities. It funds additional staff for the executive and core management team for the Toll Operations and Maintenance Program.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.
See the attached OFM addendum.

What alternatives were explored, and why was this alternative chosen?
Alternatives considered by the department are outlined below.

- Not funding these positions and not addressing the items highlighted in the audit report.
- Funding these positions solely from Motor Vehicle Account-State (MVA) gas tax or other state funding. With this option the department would need to reprioritize its use of MVA (or other) funding from other projects and activities.

What are the consequences of not funding this request?
Not funding this package would hinder the department's ability to meet its commitments to customers, bondholders, the Washington State Legislature and other external stakeholders. Further, not funding this package would force WSDOT to reconsider the suboptimal alternatives above.

Specifically, if this funding is not approved, the Toll Operations and Maintenance program would not have the resources to determine direction, lead the program, and make future strategic and cost effective decisions. Support for the Legislature, Transportation Commission, Citizen Advisory Committee, toll rate setting, and audits would be substantially diminished. Toll facilities would have a greater likelihood of falling out of compliance with federal reporting, certification, and tracking requirements. Without sufficient staffing it may be difficult to maintain compliance with state and federal accounting requirements.

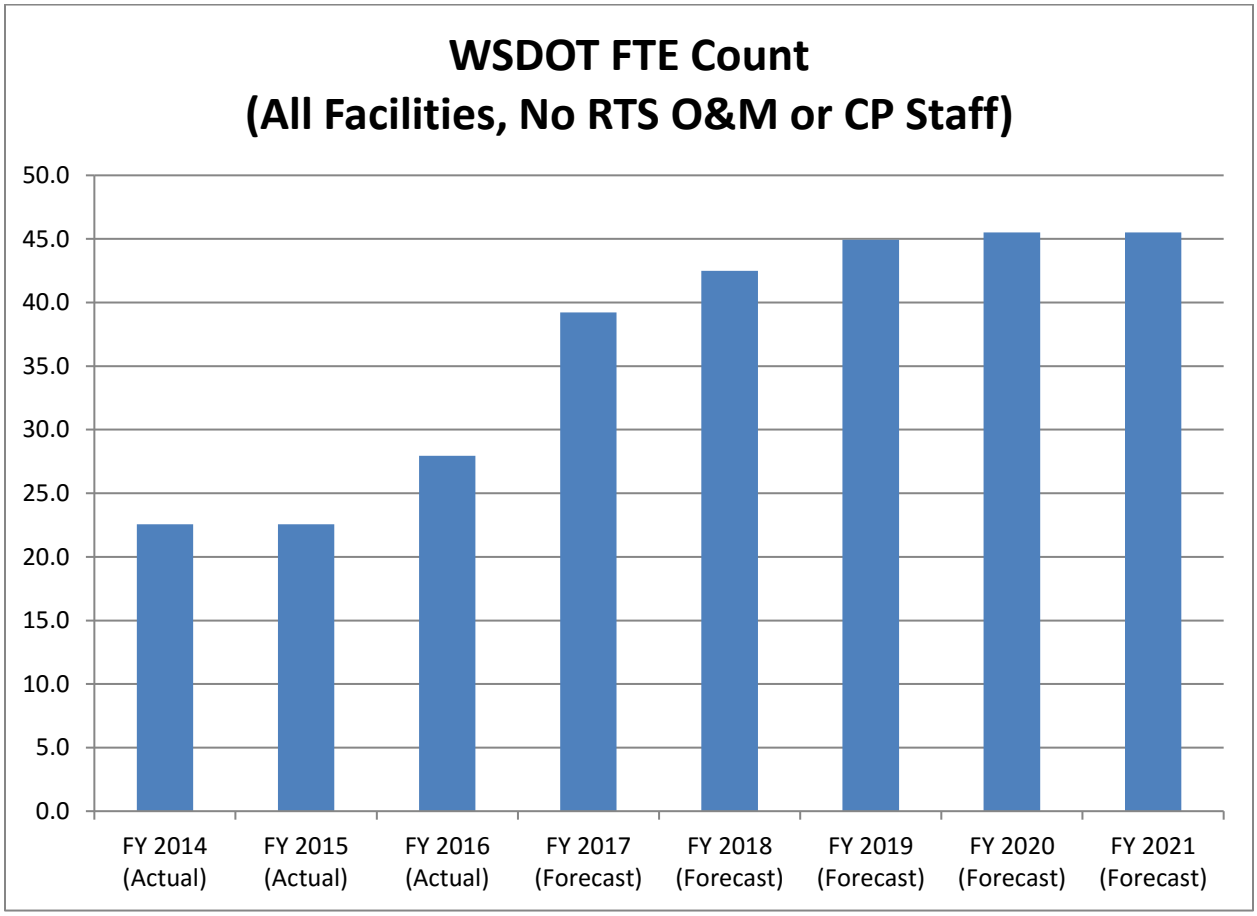
Expenditure Calculations and Assumptions
The costs for each position (salary and benefits) were calculated using the WSDOT labor tool which estimates 2017-19 salaries based on the currently funded salary ranges and benefit levels for state staff. These costs were distributed across the toll facilities using the current cost allocation methodology.

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

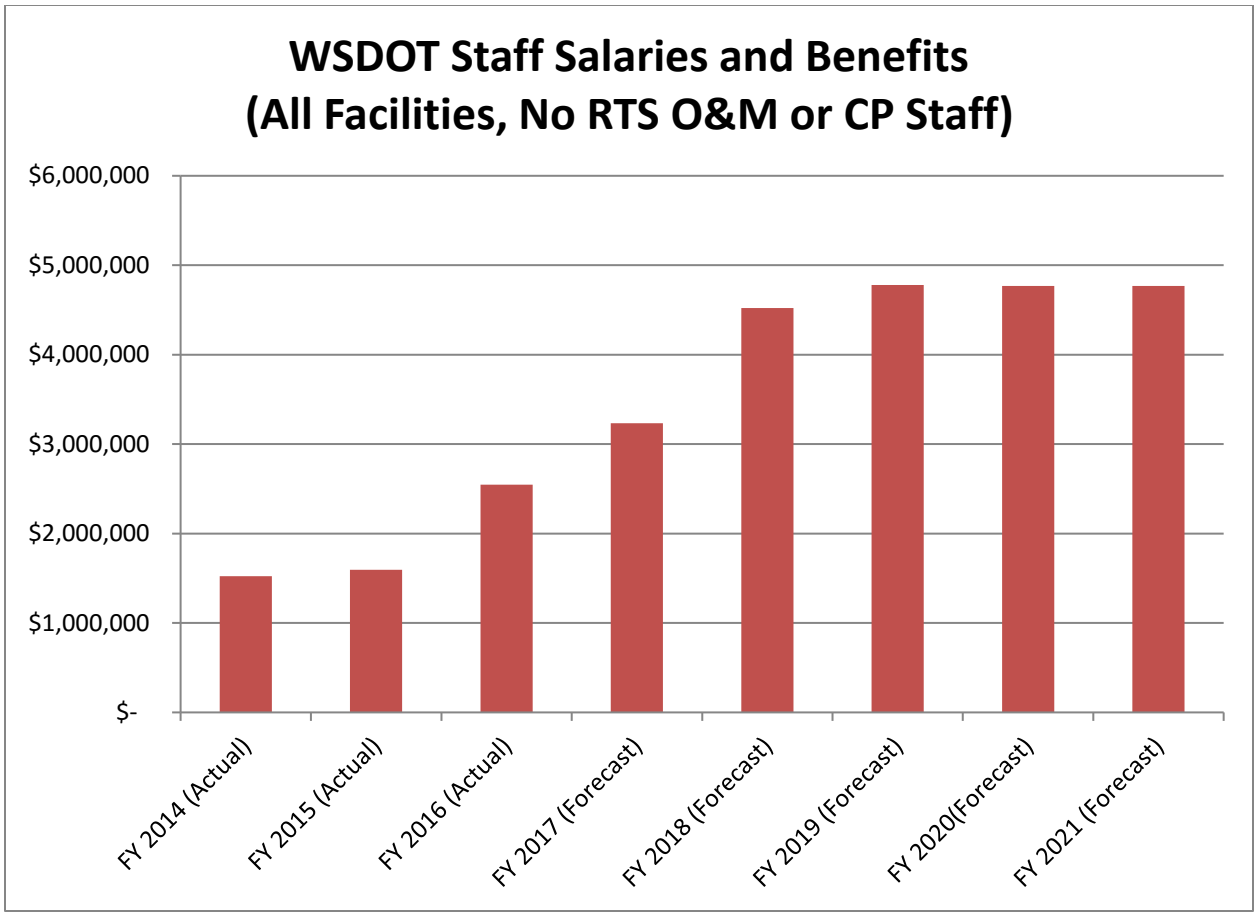
Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: G4 SAO Audit Staff Increase

Base Budget: The chart below details the FTE count history for fiscal years 2014-2016 and forecasted counts for fiscal years 2017-2021. The increase seen in fiscal year 2017 reflects WSDOT's intention to replace several vacant positions by the end of fiscal year 2017. The growth in fiscal year 2018 represents the addition of the three new positions requested in response to the SAO audit. Growth in fiscal years 2019-2021 is related to the addition of three additional staff members to support the workload growth expected with the addition of SR 99 Tunnel to the tolling program. Staff counts below do not include staff who support the civil penalty program or maintenance of the roadway toll systems.



Similarly to the FTE count chart above, the chart below details the staff salaries and benefits history and forecast for fiscal years 2014-2021. Again, costs related to civil penalty and roadway toll system staff are not included in this chart.



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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	Identify: Tolling has become an integral part of regional transportation planning. As such, adequate resources to deliver the level of service requested by both customers and other stakeholders is critical for success.
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	Identify: WSDOT tolling works with several other agencies, such as Treasury, State Patrol, and DOL. These business partnerships require

		active engagement to meet the day-to-day operational needs.
Responds to specific task force, report, mandate, or exec order?	Yes	Identify: The May 2016 SAO audit on the CSC system implementation made several recommendations which this package directly addresses.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G5 Vessel & PCI Network Support Upgrade
Budget Period: 2017-19 Regular Session
Budget Level: PL– Performance Level
Program: C – Information Technology

Agency Recommendation Summary Text:

Funding is requested for Washington State Ferries (WSF) network enhancements and two additional network support staff (Information Technology Specialist 3) for ongoing support of the WSF network upgrades, and ongoing annual hardware support costs for new equipment, which is necessary to improve vessel connectivity and Payment Card Industry Data Security Standards (PCI DSS) compliance. These upgrades address two critical areas of technology infrastructure:

- The federally-funded improvements in vessel connectivity; and
- The network changes and upgrades (new network firewall devices) required for compliance with evolving PCI DSS.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	355,600	251,600	607,200	251,600	251,600
Total Cost	355,600	251,600	607,200	251,600	251,600
Staffing FTEs	2.0	2.0	2.0	2.0	2.0
Program C - Operating					
Fund 108-1 MVA-State	355,600	251,600	607,200	251,600	251,600
Total by Fund	355,600	251,600	607,200	251,600	251,600
Staffing FTEs	2.0	2.0	2.0	2.0	2.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	136,000	136,000	272,000	136,000	136,000
B. Employee Benefits	57,000	57,000	114,000	57,000	57,000
E. Goods and Services	48,600	58,600	107,200	58,600	58,600
J. Capital Outlays	114,000	0	114,000	0	0
Total Cost	355,600	251,600	607,200	251,600	251,600
Program C - Operating					
A. Salaries and Wages	136,000	136,000	272,000	136,000	136,000
B. Employee Benefits	57,000	57,000	114,000	57,000	57,000
E. Goods and Services	48,600	58,600	107,200	58,600	58,600
J. Capital Outlays	114,000	0	114,000	0	0
Total by Program	355,600	251,600	607,200	251,600	251,600

Package Description

The department is requesting additional funding to provide sufficient staffing levels for Ferries Information Technology (IT) network support. The current staff level of one network technician and one supervisor does not provide adequate support for the 45 sites comprising the WSF-focused network (23 vessels, 20 terminals, including the Eagle Harbor maintenance facility, Ferries headquarters, and one

point of presence in Rich Passage). On-call coverage for afterhours work is difficult to schedule and provide given the current staffing levels. The limited network staff support the multiple Ferries networks [the general business network; the subnet dedicated to the security solution; and the secure network for credit card transactions, also known as the Cardholder Data Environment].

This funding will provide two additional network support staff to maintain critical networking solutions that meet safety, security, and general business processing needs. The vessel network fortifies the Marine Access and Security Control solution, vessel maintenance and repair application, and general business functions (e.g. email and real-time reporting of vessel and atmospheric conditions). The PCI DSS network supports credit card processing and the privacy of customer information. The requested staff would be funded at the Information Technology Specialist 3 level.

This package also requests funding for ongoing maintenance for the equipment being acquired for both PCI DSS network firewalls, new routers, and radios and antennas for vessel connectivity that are acquired under federal grants. These are described below.

Many network infrastructure improvements planned for the 2017-19 biennium are funded by a 2015 Federal Emergency Management Agency grant for port security. These improvements include up to nine new shore-side network point-of-presence sites that must be maintained after the upgrade project is completed, bringing the total number of network sites to 53.

Improvements for protecting the credit card processing network comprise changes in architecture and the installation of additional network firewalls that support the evolving PCI DSS for network traffic isolation. Specifically, each of thirteen terminals that employ handheld portable ticket scanners will require an additional and separate firewall to isolate wireless revenue traffic from the wired, tollbooth-based traffic.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The department expects the additional staffing requested will provide both improved staff capability to respond to network events and the ability to service the additional shore-side stations and expanded network installations that will be required for continuing PCI DSS compliance.

Funding in support of equipment maintenance will ensure that equipment will be properly serviced and supported by the vendor.

Performance Measure Detail

Two significant metrics will be substantially improved through the additional funding in the package:

- Time to respond to network-generated errors and incidents will be reduced, as coverage hours when staff are on-site will be increased. These added hours will particularly impact network issues that arise at terminals that require local visits.
- Planned network enhancement projects will be more accurately forecast and completed in less time, as there will be less disruption caused by the two current staff spread thin when they have to respond to operational issues in addition to project work.

Identify important connections or impacts related to this proposal.

Use of the network, requirements for bandwidth, and continuous connection are increasing to meet safety, efficiency, and Department of Homeland Security-mandated activity. The network upgrade supports essential job needs of the shipboard crew, such as:

- Safety and security concerns require ever-better video surveillance at high resolution with the ability to observe potential threats remotely at any point during a vessel voyage.
- Engineering staff are expected to keep databases current at headquarters so that purchases and maintenance planning can be centrally managed. Without a well-maintained network, this team suffers substantial work production loss.
- This matrix of demands in support of multiple million-dollar investments in network functionality, security, and complexity cannot be met with the number of networking staff allocated in 2005.

The additional staff will provide much needed additional support to better manage the complexities of supporting multiple networks for WSF operations (one for shipboard and general business use, a second for the security installation, and a third for revenue/credit card transaction processing). The current staffing model essentially creates competition for staff attention.

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

The alternative to agency staff providing these services is outsourcing to a consulting firm or independent contractors. Hiring additional internal staff is preferable for two reasons:

1) Cost. With market-rate and profit included for a third party, monthly costs to augment current staff would typically surpass $25,000 per month (see Expenditure Calculations and Assumptions section).
2) Lost expertise. Third-party consultants and contract firms would likely provide good service and bring some new perspective to the support equation. However, this expertise will be transient for the agency and will not be guaranteed by the service provider; that is, contract staff member 'B' will not necessarily bring the same skillset to support that we expect based on work by contract staff member 'A.'

What are the consequences of not funding this request?

If this package is not funded, the network supporting the vessel connectivity and the Alternate Security Plan for WSF and the credit card processing network will degrade and possibly become only partly operational.

The reprioritization/reassignment of Ferries' IT staff that are currently supporting other areas is not practical; the existing staff are working on other critical components of the Ferries IT infrastructure.

Expenditure Calculations and Assumptions

To provide the services described in concert with the existing staff, market-level fees are between $110 and $145 per hour. To provide service for one-half of typical break/fix work in the enhanced network (representing that portion of the work currently not handled by the two staff available), approximately 130 hours per month of billed time is expected (totaling $171,600 to $226,200 per year). Additionally, one-half the time needed for general and preventive maintenance and network monitoring is calculated at 75 hours per month at the lower rate of $90 to $120 per hour (totaling $81,000 to up to $108,000). These two functions combined would cost from $252,600 to $334,200 per year, versus the FTE costs of $193,096.

	Lower Contracted Rate	Higher Contracted Rate
Annual cost of two break/fix contractors	@ $110/hr:$171,600	@ $145/hr: $226,200
Annual cost of two maintenance/monitoring contractors	@ $90/hr: $81,000	@ $120/hr: $108,000
Total annual contractor costs	$252,600	$334,200
Annual cost of two ITS 3 FTEs	$193,000	$193,000
Difference -- Contractor vs Employee	**$59,600**	**$141,200**

Costs for capital outlays are based on current WaTech contracts negotiated for the network equipment described.

Costs for Goods and Services that cover hardware maintenance for the networking equipment for both PCI DSS compliance included in this package and also the equipment acquired under Federal grants for vessel connectivity are based on rates for Cisco Smartnet support in current WaTech contracts.

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

All costs are ongoing. Staff costs are predictable for near-term biennia. Support and maintenance fees are similarly known for the next two biennia (through fiscal year 2021). This request has capital outlays that appears as one time. The department expects a lifecycle replacement cost associated with this purchase; however, ongoing costs are not yet known. A separate lifecycle maintenance decision packed is anticipated for the 2019-21 biennium.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Vessel & PCI Network Support Upgrade

Base Budget: WSDOT's current support for the functions in this Decision Package are:

Description	Annual	FTE count
Security System Support for Ferries Division	$223,900	2.0
Total	**$223,900**	**2.0**

Many network infrastructure improvements planned for the 2017-19 biennium are funded by a 2015 Federal Emergency Management Agency grant for port security; however, funding was not provided for ongoing maintenance of the equipment being acquired. These improvements include up to nine new shore-side network point-of-presence sites that must be maintained after the upgrade project is completed, bringing the total number of network sites to 53.

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

Use of the network and requirements for bandwidth and continuous connection are increasing to meet safety, efficiency, and DHS-mandated activity. The network upgrade supports essential job needs of the shipboard crew:

- ✓ Safety and security concerns require ever-better video surveillance at high resolution and the ability to observe potential threats remotely at any point during a vessel voyage
- ✓ Engineering staff are expected to keep data bases current at headquarters so that purchases and maintenance planning can be centrally managed. Without a well-maintained network, this team suffers substantial work production loss
- ✓ This matrix of demands in support of multiple million-dollar investments in network functionality, security, and complexity cannot be met with the networking staff allocated in 2005.

The complexities involved in supporting essentially two separate networks for WSF operations (one for shipboard and general business use and the second for revenue/credit card transaction processing) create contention for staff attention that leads to best effort-level support, rather than predictable, high-priority support when the need arises. General maintenance, above and beyond break/fix support, keeps the network operating efficiently and reliably, and includes network monitoring to find discrepancies in the network before they become issues that impact operations.

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	The resources requested in this package will have a material impact on the service levels provided to terminals and the passengers who use those terminals in San Juan, Island, Kitsap, Jefferson, Snohomish, King, and Pierce Counties. The WSDOT network connects the Revenue Collection system for Washington State Ferries to

		the Regional ORCA card network under security standards set by banks and credit card companies. Network incidents that impact these connections must be resolved in a timely manner.
Other local gov't impacts?	Yes	Local municipalities are especially impacted by network incidents at Ferries terminals, particularly when those incidents affect tollbooths. When equipment or other IT issues slow tollbooth operations, traffic can back up onto city streets and cause congestion.
Tribal gov't impacts?	No	
Other state agency impacts?	Yes	The Washington State Patrol relies upon the WSDOT network that connects WSP officers to each terminal and vessel, including vessels underway connected via the Wireless Over Water network.
Responds to specific task force, report, mandate, or exec order?	No	
Does request contain a compensation change?	No	
Does request require a change to a collective bargaining agreement?	No	
Facility/workplace needs or impacts?	No	
Capital Budget impacts?	No	
Is change required to existing statutes, rules or contracts?	No	
Is the request related to or a result of litigation?	No	
Is the request related to Puget Sound recovery?	No	
Identify other important connections		The network that supports Washington State Ferries is actually three software-defined networks (SDNs) comprising the general business network, a

		separate network for revenue (known as the Cardholder Data Environment (CDE) network), and a third network to support the Security system. Support for these networks is complex across 45 sites (23 vessels, 20 terminals (including the Eagle Harbor Maintenance Facility), the 2901 WSF headquarters building in Seattle, and one point of presence in Rich Passage. Support for these networks is complex and requires an experienced skillset and a number of technicians to maintain performance and network security. Substantial upgrades to the vessel Wireless Over Water network are continuing through fiscal year 2017 and 2018 under a Department of Homeland Security Port Security Grant. This enhanced network will provide more network reliability for the vessels and will utilize new technology (both hardware and software) that requires the attention of skilled technicians.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
A: Salaries	136,000	136,000	136,000	136,000
B: Benefits	57,000	57,000	57,000	57,000
E: Goods and Services	48,600	58,600	59,600	58,600
J: Capital outlays/equipment	114,000	0	0	0
Total Cost	**355,600**	**251,600**	**251,600**	**251,600**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☐Yes ☒ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G6 CSC Systems and Operator RFPs
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: B – Toll Operations & Maintenance

Agency Recommendation Summary Text:

The department is requesting funding to procure a new toll back office system. The existing customer service vendor was contracted in 2009 to provide hosted software ranging from customer account management to adjudication management and support for customer service center (CSC) activities. The system is considered the first generation in customer account management. The current contract expires June 30, 2018, which provides WSDOT the opportunity to improve its CSC operations and to implement a CSC system that is more flexible to the changing needs of the customer and an expanding toll program.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 09F-1 HOT-State	202,354	465,455	667,809	0	0
Fund 16J-1 520-State	3,502,985	8,048,696	11,551,681	0	0
Fund 511-1 TNB-State	1,508,102	3,457,525	4,965,627	0	0
Fund 535-1 AWV-State	1,972,801	4,546,728	6,519,529	0	0
Fund 595-1 I405-State	1,309,881	2,985,473	4,295,354	0	0
Total Cost	8,496,123	19,503,877	28,000,000	0	0
Staffing FTEs	7.0	8.0	7.4	0.0	0.0
Program B - Operating					
Fund 09F-1 HOT-State	202,354	465,455	667,809	0	0
Fund 16J-1 520-State	3,502,985	8,048,696	11,551,681	0	0
Fund 511-1 TNB-State	1,508,102	3,457,525	4,965,627	0	0
Fund 535-1 AWV-State	1,972,801	4,546,728	6,519,529	0	0
Fund 595-1 I405-State	1,309,881	2,985,473	4,295,354	0	0
Total by Fund	8,496,123	19,503,877	28,000,000	0	0
Staffing FTEs	7.0	8.0	7.4	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	567,000	631,000	1,198,000	0	0
B. Employee Benefits	222,000	250,000	472,000	0	0
C. Professional Service Contracts	1,449,600	3,264,652	4,714,252	0	0
E. Goods and Services	6,257,523	15,358,225	21,615,748	0	0
Total Cost	8,496,123	19,503,877	28,000,000	0	0
Program B - Operating					
A. Salaries and Wages	567,000	631,000	1,198,000	0	0
B. Employee Benefits	222,000	250,000	472,000	0	0
C. Professional Service Contracts	1,449,600	3,264,652	4,714,252	0	0
E. Goods and Services	6,257,523	15,358,225	21,615,748	0	0
Total by Program	8,496,123	19,503,877	28,000,000	0	0

Package Description

Current problem: The CSC back office system (BOS) manages the customer relationship and financial management aspects of WSDOT's Tolling Program and the Good To Go! toll payment program. The current system is approaching the end of its contract term. The existing contract with Electronic Transaction Consultant Corporation (ETCC) for CSC operations and the BOS was executed on December 22, 2009, with an initial contract termination date of June 30, 2014. The contract provisions allow the department to exercise options for two additional two-year extensions, or until June 30, 2018. WSDOT intends to negotiate an eighteen-month additional extension of this contract to mid-fiscal year 2020 to allow for sufficient time to design, develop and implement the new CSC BOS and transition a new CSC operator (through a separate toll CSC operator procurement also funded by this funding request).

The current CSC BOS lacks the flexibility to scale to meet expected changes in the department's tolling business model over the next several years. The incumbent toll CSC vendor was contracted to provide hosted software capable of account management, transponder inventory management, website administration, image reviews, adjudication management, pay-by-mail invoice generation and distribution, and collection oversight and accounting.

The current CSC BOS is considered the first generation in customer toll transactions processing for the department. With the potential integration of toll technology as an alternative payment method on the Washington State Ferries system, the use of the toll technology would be expanded into a second generation of toll transaction processing and customer relationship management. The current system would require significant modifications to support the second generation business requirements. These modifications would be highly complex, very costly and risky to implement.

The current BOS also has several key functional and technical limitations in terms of its support for the current Toll Division operations. The current BOS is comprised of several databases, including two critical databases that communicate with each other. Typically toll systems are designed for either prepaid revenue, or post-paid transactions which capture violators of the toll facility. When WSDOT procured the current system in 2009, none were available to handle both prepaid and post-paid (invoice type transaction) in a single database system. The department's current system design contains a modification of the toll system vendor's violation system, which is designed to support a post-paid transaction as an accounts receivable transaction, until and if, the customer did not pay the toll. If/when the toll is not paid, then the transaction would be treated as a violation.

However, over the past five years of operations, it has been determined this two database approach is a design flaw. Customers of WSDOT toll facilities may move between being prepaid and post-paid customers due to changes in account status. In addition, when a transaction moves from post-paid to the civil penalty phase, due to nonpayment, no customer account information is maintained, only the transaction information. Therefore, customers have been in situations in which they believed they paid all transactions, but due to the fact that a single customer account does not exist for post-paid transactions, outstanding transactions may exist. This is just one example of an older system design that is not appropriate for the current tolling concept of operations.

As documented in a Washington State Auditor's Office report released on May 4, 2016, the current CSC system has a number of other deficiencies including:

- Lack of a data warehouse or other similar system separate from the real-time transaction processing system, to perform analysis of tolling data;

- No collections module deployed within the system. The current vendor has a collections module within their software suite but this module was not deployed at WSDOT;
- Lack of automated system functionality to process write-offs based on predefined WSDOT business rules;
- Limited data entry controls; and
- Limited automated financial reconciliation capabilities.

Solution to Current Problem: The solution to the current business problem is procurement of a new CSC BOS. The new CSC system will provide the full functionality of the existing system, address key limitations with the existing system and support several key enhancements to program functionality including the concept of a single customer account for both prepaid and post-paid transactions. It will integrate with Washington State Ferries to allow *Good To Go!* to potentially be used as a payment option on Washington State Ferries.

WSDOT has identified two key aspects of BOS components:

- Operational BOS where the image review is performed, the trip is built, and the completed toll transaction is created; and
- Commercial BOS where the customer information is stored and customer relationship management and tolling related financial functions are performed.

This toll system architecture approach could combine the expertise and experiences of multiple system vendors into a forward-looking solution to meet the department's objectives.

The operational back office will validate toll transactions paid for with a transponder (prepaid transactions) and send these transactions to the commercial back office for posting to a customer account. If a toll transaction is not associated with a valid transponder, optical character recognition will be utilized in the lane. For those images that are not processed automatically, the operational back office shall have an image review system to identify the vehicle license plate for manual image review to be performed prior to sending the transaction to the commercial back office. The operational back office will assign the lowest possible dollar value (which currently is the transponder rate) to a transaction prior to sending the transaction to the commercial back office.

The operational back office will also include management reporting capabilities that will integrate data from the lane management systems at the toll facilities with information from the operational back office, commercial back office, and potentially other WSDOT management systems, such as the TRAINS financial system, for management reporting and analysis in support of the Tolling Program.

The commercial back office will perform the customer relationship management and financial management functions for the *Good To Go!* program. Functions in the commercial back office include:

- Account set-up,
- Account management and billing,
- Transponder order management and inventory management,
- Accounts receivable,
- Adjudication, and
- Financial reporting.

The commercial back office will include a robust collections module within the CSC BOS, as well as the capability for bi-directional integration with third party collections systems.

The commercial back office will also include an automated write-off module. This module will identify transactions meeting criteria for write-off for final review by department accounting staff through an electronic workflow system generation of the various journal entries which are required to allocate toll revenue to various fund accounts and further automation of the analysis processes used to establish the allowance for doubtful accounts. The commercial back office will be integrated with WSDOT's TRAINS financial system and act as the tolling subsystem for the department's financial management system. The new CSC BOS will also be designed to support future integration with the planned 'One Washington' statewide financial system. It will also integrate with the Office of State Treasurer, banks and other third party systems as required.

The commercial back office will be responsible for making any required adjustments to the value of a toll transaction established by the operational back office. An example of an adjustment is when a transaction is identified at a pay-by-mail rate based upon a license plate read, but when compared to customer account, it is determined the transaction is a pay-by-plate transaction with a lower toll rate requiring no toll bill to be sent.

Based on market research performed as part of our pre-implementation planning activities, the department expects that much of the functionality in the commercial back office will be configuration-based and potentially some extension of commercial off-the-shelf based software solutions found in enterprise resource planning (ERP) and/or customer relationship management (CRM) software solutions. The functionality in the operational back office, on the other hand, is likely to consist of more built for purpose functionality specific to the tolling industry.

For purposes of estimating the implementation and ongoing operational cost of the CSC BOS, the department has assumed the following elements to be in-scope:

- Licensing of a commercial off-the-shelf system and/or toll-industry specific software solutions;
- Systems integration services including:
    - Software configuration,
    - Design and development of required customizations,
    - Design and development of interfaces,
    - Design and development of data conversions including data migration support from the existing CSC BOS systems operator,
    - Planning and execution of testing including unit, system, user acceptance, security and performance testing,
    - Preparation of training materials, user documentation and technical documentation,
    - Delivery of user training in a train-the-trainer format,
    - Organizational change management advisory support to assist in preparing an organizational change management strategy/plan, and
    - Design, development and testing of Tolling data warehouse as an optional element.
- Establishment and ongoing management/operations of a development, production and disaster recovery environment (development and production will be in a vendor managed data center, while the disaster recovery environment will either be at a vendor data center, or a state managed site);
- Establishment and ongoing operations of the CSC telephony system including the interactive voice response system;

- Provision of local area network, work stations and other peripherals (printers, credit card readers, magnetic ink character readers, etc.) for the CSC and all walk-in sites; and
- Ongoing support of the application system and all aspects of the technical environment including the telephony system, work stations and other peripherals at the CSC.

Out-of-scope items include the cost for transitioning to a new CSC, the associated facilities acquisition and build out cost, and the ongoing CSC operating cost.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Tolling is in process of developing the Key Performance Indicators as part of the RFP requirements. However, the following are the proposed performance outcomes for the new CSC BOS:

- Provide the opportunity to increase customer satisfaction for WSDOT Toll Division customers through an enhanced customer website for self-service transactions and improved system capabilities which will allow customer service representatives to provide faster and more efficient service to walk-in and telephone customers;
- Increase overall WSDOT Toll Division service reliability through automation of many existing manual processes and through improved access to lane system and CSC information through a new Tolling Data Warehouse;
- Promote effective government through a next generation system which improves the efficiency and effectiveness of Toll Division operations while ensuring business continuity;
- Ensure fiscal responsibility through strong financial reporting and controls in the CSC BOS system design; and
- Promote accountability through enhanced availability to Toll Division information for management reporting and analysis.

Performance Measure Detail

Tolling is still developing specific measurements, but in conjunction with WSDOT's Strategic Goal # 6 – Smart Technology: *Improve information system efficiency to users and enhance service delivery by expanding the use of technology.* The department has defined the following performance measures to evaluate project outcomes for the new CSC BOS:

- For current transaction volume, achieve a 10 percent reduction in CSC call volumes through improved website functionality to enable more customer self-service;
- For current operation facilities, achieve a 10 percent increase in the number of customer issues resolved in the first call to the CSC through enhanced tools available within the system for use by customer service representatives to analyze and resolve customer issues;
- Obtain a 15 percent increase in the amount of revenue collected from delinquent accounts through implementation of a more robust collections program;
- Increase the volume of tolls processed through the system and support implementation of additional toll facilities (State Route 99), without requiring additional customer service representatives;
- Increase the volume of tolls processed through the system and to implement additional toll facilities without requiring additional accounting staff to support Toll Division operations due to enhanced automation of a number of manual reconciliation activities and revenue allocation processes;

- Improve the overall level of customer service as measured by customer satisfaction surveys and focus groups through:
    - Improved website functionality to enable more customer self-service,
    - Implementation of a single customer account concept, and
    - Enhanced tools available within the system for use by customer service representatives (CSR) to allow for resolving more issues on an initial phone call with a customer;
- Provide improved access to financial and other program information through enhanced management reporting capabilities;
- Provide greater flexibility for the system to scale to meet changing business needs through implementation of the CSC BOS based on a robust, highly configurable system design; and
- Provide for enhanced business continuity support through the implementation of a CSC BOS solution based on proven commercial off-the-shelf based solutions to the extent possible.

Identify important connections or impacts related to this proposal.

The project is being managed by the department's Toll and Ferries divisions in partnership with multiple stakeholders. The Toll Division has the primary responsibility to plan, manage, and coordinate stakeholder communications, decision making, and produce analysis and recommendations.

Washington State Legislature

The Toll Division is required to report to the legislature on a quarterly basis regarding the anticipation of, and preparation for, the CSC procurement.

Tolling Customers

Users of toll facilities are directly impacted by the services and system performance to our customers.

WSDOT Steering Committee

Several WSDOT stakeholder groups are represented on the WSDOT Steering Committee in order to ensure regular stakeholder input and oversight of the project. The following WSDOT and state agencies are represented:

- WSDOT Toll Division
- Washington State Ferries
- WSDOT Accounting and Financial Services
- WSDOT Budget and Financial Analysis
- WSDOT Information Technology
- WSDOT Contracts
- Department of Licensing
- Department of Enterprise Services
- Office of Financial Management
- Office of Administrative Hearings
- Office of the State Treasurer

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

Tolling evaluated the feasibility of, and options for replacing, one or more existing state customer account systems for the most efficient implementation to meet the needs of the state. This is especially timely in light of the need to replace multiple customer account systems across transportation modes in the region. What is the best approach for the state in replacing the various customer account systems, namely the Toll Division and the Washington State Ferries? The evaluation was conducted in alignment with WSDOT's Strategic Goal 6 – Smart Technology: *Improve information system efficiency to users and enhance service delivery by expanding the use of technology.*

Two alternative paths were identified to accomplish the delivery of a customer service center; alternative one addresses the immediate need of the state and alternative two addresses the potential for long range, regional integration.

Alternative path one addresses the state's current CSCs operation contracts within both the Toll Division and Washington State Ferries and has three options:

1) Toll Division moving forward with an RFP for both BOS and operator;
2) Toll Division and the Ferries integration either using Good To Go! as a payment type or though BOS integration; and
3) Toll Division to extend the current CSC contract for BOS and issuing an RFP for a new operator. The integration of the Toll and Ferries systems will be the first step in exploring the possibility of creating multi-modal systems.

What are the consequences of not funding this request?

If the decision package is not funded, stakeholder expectation for service and performance improvements will not be attained.

The following are the key drivers which would be impacted if the decision package is not funded:

- Need to ensure WSDOT business continuity which is dependent upon vendor's providing the system for customer service and for performing customer service center operations;
- The quality of the customer service provided by the vendor;
- The ability of vendor's systems and operations plan to grow as new toll facilities are added. Four toll facilities are operational, and four more are to be added by fiscal year 2025 for a forecasted revenue collection of $854 million by fiscal year 2029 for a total estimated revenue collection between fiscal year 2020 and fiscal year 2029 to $3.106 billion;
- Term of existing vendor's contract is June 30, 2018;
- The ability to support toll operations through the 2020 decade; and,
- Ability to provide single-customer account for multiple transportation modes facilitating choice of travel.

Expenditure Calculations and Assumptions

This package can be thought of in three distinct but related categories:

- Hosted vendor software solution for the CSC BOS (procured first).
- Vendor provided operation of the BOS (procured second and separately).
- State and contracted staff support of both procurements and implementation.

The assumptions for each category are described below.

Hosted vendor software solution for the CSC BOS: Costs for the CSC BOS vendor contract include software, software modification, hardware for the CSC—such as servers and hardware for the main hosted site and the disaster recovery site, data warehouse software, implementation and associated hardware, leasehold improvements to the CSC facility, procurement process for the CSC operator, transition of both vendors and data migration and legacy system operation for six months after system cut over. System implementation includes design, development, testing, and implementation and user acceptance. While WSDOT has prepared a detailed costing estimate to aid in developing this request, it is anticipated that the final procurement contract for this project will detail specific project milestones

for payment rather than discrete system components. The total estimated for the CSC BOS system is $19.4 million.

Vendor provided operation of the CSC BOS: The main ongoing costs for the vendor operation of the CSC BOS is actually already assumed in the base Toll Division budget (assuming decision package BC Customer Service Center Vendor Operations and Maintenance is approved). However, as part of this package and this procurement effort, WSDOT anticipates making facilities improvements, funding to support a transition, and onboarding of a new CSC operator. Those costs total $2.2 million.

State and contracted staff support: The procurement and successful implementation of a CSC BOS will be a multi-year project and is rated as a high risk project for the state. WSDOT and the Toll Division have determined that dedicating key staff and subject-matter experts is crucial to the project's success. Thus, eight FTEs and over 30,000 hours of consultant expertise, including contract quality assurance and independent verification and validation (IV&V) are included in the project budget. The eight state staff are fully backfilled and thus no offsetting savings are assumed in the program's base budget. The total cost estimate for the staff component of the project is $6.4 million.

For purposes of estimating the implementation cost of the CSC BOS, WSDOT has assumed the following elements to be in-scope:

- Licensing of COTS and/or toll-industry specific software solutions;
- Systems integration services including:
  - Software configuration,
  - Design and development of required customizations,
  - Design and development of interfaces,
  - Design and development of data conversions including data migration support from the existing CSC BOS systems operator,
  - Planning and execution of testing including unit, system, user acceptance, security and performance testing,
  - Preparation of training materials, user documentation and technical documentation,
  - Delivery of user training in a train-the-trainer format,
  - Organizational change management advisory support to assist in preparing an organizational change management strategy/plan, and
  - Design, development and testing of Tolling data warehouse as an optional element;
- Establishment and ongoing management/operations of a development, production and disaster recovery environment (development and production will be in a vendor managed data center while the disaster recovery environment will either be at a vendor data center or a State managed site);
- Establishment and ongoing operations of the CSC telephony system including the interactive voice response system;
- Provision of local area network, work stations and other peripherals (printers, credit card readers, magnetic ink character readers, etc.) for the CSC and all walk-in sites; and
- Ongoing support of the application system and all aspects of the technical environment including the telephony system, work stations and other peripherals at the CSC.

WSDOT Staff assumptions: The Tolling Division is requesting seven FTE's in fiscal year 2017 and eight in fiscal year 2018. The additional FTE in fiscal year 2018 is to support the transition of the CSC operations staff under the new operator contract. FTEs to backfill existing positions. This will enable the current (and more experienced) WSDOT staff to be dedicated to the system design, testing, implementation and go-live of the new customer service center. The following positions are proposed as part of the CSC RFP budget, are temporary for two years and will revert to previously held toll operations positions:

- Director of Systems and Engineering – this person will be the WSDOT project manager and responsible for delivery of the new BOS and on-boarding of new CSC operations vendor.
- Toll Systems Accounting Solutions Manager – currently this position is toll funded and is part of AFS. However, AFS has assigned this person to be fully dedicated to the system design, testing, implementation and cut over the old system to the new system. AFS will backfill current toll funded position with another person until the project is complete.
- Customer Service Center Manager – this person will be responsible for ensuring toll operation business are updated, designed, tested and implemented for the new BOS and represents the official user of the system. As with all positions, this position will be drawn from existing staff with the current position backfilled during system implementation.
- Customer Service Center Manager – this person will be responsible for ensuring the new operator of the call system onboards and trains staff accordingly. As with all positions, this position will be drawn from existing staff with the current position backfilled during system implementation.
- IT Specialist - currently this position is toll funded and is part of OIT. This person is to be fully dedicated to the system design, testing, implementation and cut over the old system to the new system. OIT will backfill current toll funded position with another person until the project is complete.
- Transportation Engineer – currently this position is toll funded. This person is to be fully dedicated to the system design, testing, implementation and cut over the old system to the new system. Tolling will backfill current toll funded position with another person until the project is complete.
- Contracts Specialist – currently this position is toll funded. This person is to be fully dedicated to the system design, testing, and implementation to ensure any and all contract issues are met during system and operator implementation. Tolling will backfill current toll funded position with another person until the project is complete.
- Auditor – currently this position is toll funded and in WSDOT Internal Audit Division. This person is to be fully dedicated to the system design, testing, implementation to ensure IV&V and quality assurance are met.

The following table details the budget assumption for the staff positions.

Costing - New CSC Contract (Systems and Operator)								Systems		Operator	
Category	Sub Task	Time (years)	FTE Base Hours/yr	Total Hours	Resources (#)	Rate ($/hr or $/yr)	Total ($)	2018	2019	2018	2019
A & B	Director of Systems and Engineering	2	2080	4160	1	147,204	$ 294,408	$ 110,403	$ 110,403	$ 36,801	$ 36,801
	Toll Systems Accounting Solutions Manager	2	2080	4160	1	90,645	$ 181,290	$ 67,984	$ 67,984	$ 22,661	$ 22,661
	CSC Manager	2	2080	4160	1	92,606	$ 185,212	$ 69,455	$ 83,345	$ 23,152	$ 10,609
	CSC Manager	1	2080	2080	1	92,606	$ 92,606		$ 23,152		$ 69,455
	IT Specialist	2	2080	4160	1	114,485	$ 228,970	$ 85,864	$ 85,864	$ 28,621	$ 28,621
	Transportation Engineer 4	2	2080	4160	1	112,063	$ 224,126	$ 84,047	$ 84,047	$ 28,016	$ 28,016
	Contracts Specialist 3	2	2080	4160	1	98,673	$ 197,346	$ 74,005	$ 74,005	$ 24,668	$ 24,668
	Auditor WMS 02	2	2080	4160	1	130,526	$ 261,052	$ 97,895	$ 97,895	$ 32,632	$ 32,632
	Sub Total Staff and Benefits						**$ 1,665,010**	$ 589,652	$ 626,694	$ 196,551	$ 253,462

Personal Services Assumptions: The following consultants have been identified to support WSDOT during the implementation of the CSC system and operator design, development, testing and implementation:

- General Toll Consultant (GTC) – services to include oversight of system design, development, testing, data migration, and implementation, for both the BOS and for the data warehouse. In addition, the GTC services to include CSC Operator RFP development, participation in solicitation, transition and go-live planning for the new CSC system, operator and facility.
- Expert Review Panel – services of the five-member industry expert review panel are for quarterly reviews to validate the implementation of the new BOS and CSC operator.
- Independent Verification and Validation (IV&V) – in accordance with the State Office of Chief Information Office risk assessment, this project qualifies as a level 3 risk and requires IV&V. The purpose of IV&V is to verify that user requirements are met alongside the design, development, testing and implementation of both the CSC system and the data warehouse.
- Quality Assurance – in accordance with the State Office of Chief Information Office, IT projects are to retain a quality assurance consultant to ensure the quality of the project meets WSDOT's requirements.

The following table identifies the budget assumptions used.

Costing - New CSC Contract (Systems and Operator)								Systems		Operator	
Category	Sub Task	Time (years)	FTE Base Hours/yr	Total Hours	Resources (#)	Rate ($/hr or $/yr)	Total ($)	2018	2019	2018	2019
C	GTC	2	1960	19600	10	170	3,332,000	$ 1,332,800	$ 1,332,800	$ 333,200	$ 333,200
	ERP	2	1000	2000		145	290,000	$ 108,750	$ 108,750	$ 36,250	$ 36,250
	IV&V	2	1960	7840	2	130	1,019,200	$ 509,600	$ 509,600		
	QA	2	1960	980	0.5	125	122,500	$ 61,250	$ 61,250		
	Sub Total Personal Services						**$ 4,763,700**	$ 2,012,400	$ 2,012,400	$ 369,450	$ 369,450

Good and Services: Goods and services make up the remainder of the budget request. The following table itemizes the proposed budget, but it should be noted that these are estimated costs and the final price will not be known until proposals are received and price is determined.

Activity	Estimated Price
CSCS Application Customization to include base modules, modifications, integrations, data migration (current and new vendor) plus contingency	$16,158,042
Hardware to include equipment, licenses and maintenance for development server, main hosted site, disaster recovery site, customer service center, to include server, peripherals and CSR workstations	$1,351,000
Delivery of data warehouse to include software, design, development, implementation, licenses and hardware	$1,903,900
Leasehold improvement of new co-location site and walk-in center	$325,000
Transition of current and old vendors	$850,000
CSC new operator on-boarding	$982,000
Total	$21,569,942

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

All costs are assumed to be one time. The annual recurring costs are identified in separate decision packages.

Washington State Department of Transportation

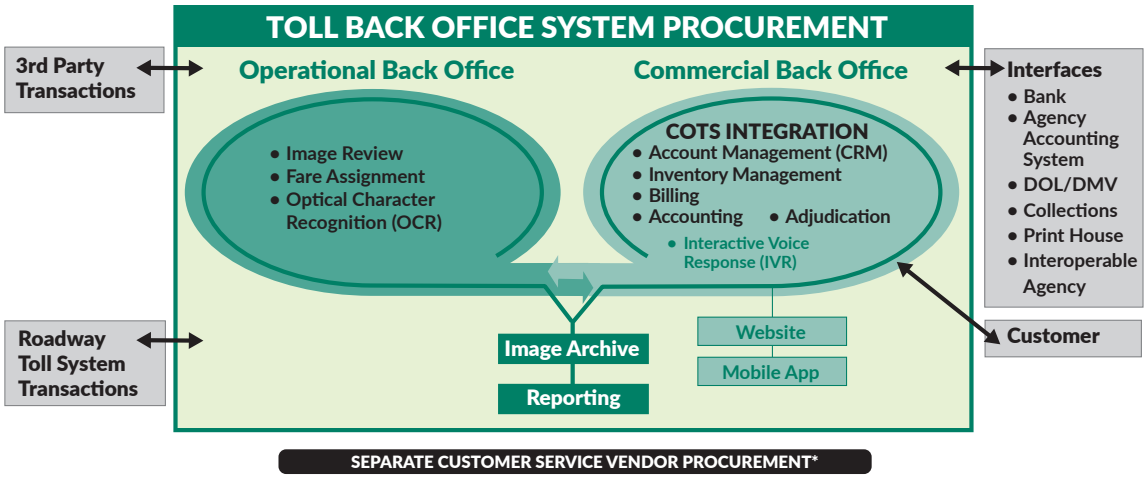
JULY 2016

WSDOT Toll Back Office System Replacement

OVERVIEW

In December 2016, the Washington State Department of Transportation will issue a request for proposals (RFP) for a vendor to design, operate and maintain a toll back office system for its statewide *Good To Go!* program. The toll back office system concept combines two distinct, yet integrated subsystems:

- The operational back office performs toll transaction management
- The commercial back office is planned to be an integrated enterprise resource planning (ERP) and customer relationship management (CRM) functions.



COTS = Commercial Off the Shelf DOL = Department of Licensing DMV = Department of Motor Vehicles

* After the toll back office system contract is awarded, WSDOT will release a separate RFP for the *Good To Go!* customer service operations vendor (staffing for call center, mail processing, image review, etc.).

KEY MILESTONES

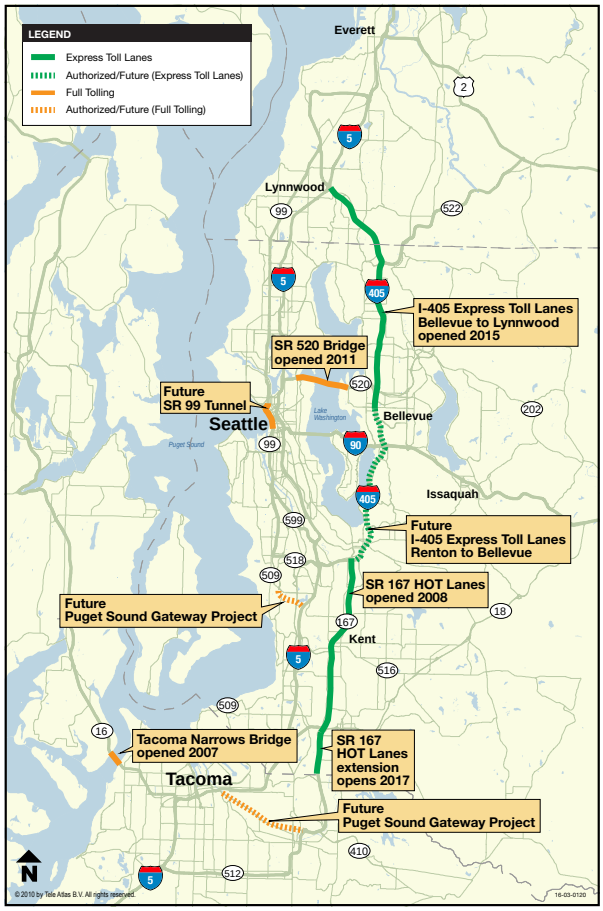
Sept. 2016	Release Request for Qualifications
Oct. 2016	Release Draft RFP for Industry Comment
Oct. 2016	Announce Short-list of Pre-Qualified Proposers
Dec. 2016	Release RFP to Pre-Qualified list
April 2017	Final Proposals Due
June 2017	Announce Apparent Successful Vendor

Scope of toll back office system

- In fiscal year 2015 WSDOT processed 37.6 million toll transactions and $138 million in revenue
- In the next 10 years, WSDOT projects to process 742 million toll transactions and $2.3 billion in potential revenue
- Ability to integrate with Washington State Ferries to offer *Good To Go!* as an alternate payment method for ferry trips.
- Design, develop and test a tolling data warehouse as an optional element.
- WSDOT intends to maximize industry potential by encouraging partnering between tolling, financial and customer management integrators.
- WSDOT intends to maximize COTS integration into the commercial back office, while specifically avoiding a fully customized "in-house" double entry general ledger accounting solution.

Elements of new toll back office system

- Systems integration services including software, development and configuration customizations, interfaces, data conversions, testing, training, organizational change management.
- Establishment and ongoing management and operations of a development testing environment, production and disaster recovery environment.
- Establishment and ongoing operations of the customer service center telephone system including the interactive voice response system.
- Provision of local area network, work stations and other equipment for the customer service center and all customer walk-in offices.
- Ongoing support of the application system and all aspects of the technical environment including work stations and other equipment at the customer service center.



Back Office System Goals

Goal 1: Implement back office infrastructure that is sustainable, configurable and scalable throughout the full-term of the contract including all potential contract extensions.

Goal 2: Implement an integrated solution that maximizes the use of commercial off-the-shelf products to provide multi-user and multi-tasking capabilities.

Goal 3: Provide data that is transparent, flexible and meets the needs of all users.

Goal 4: Optimize the use of modern adaptive technology to enhance customer service functionality to the benefit of the customer, which is customer driven and incorporates continuous improvement of the customer experience.

Goal 5: Support the capability to integrate with multimodal systems, including ferries, and potentially future parking and transit systems, and be interoperable with other toll agencies.

MORE INFORMATION

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Good To Go!™

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16-06-0242

Costing - New CSC Contract (Systems and Operator)											Systems		Operator		
Category	Cost Center	Task	Sub Task	Sub Task	Time (years)	FTE Base Hours/yr	Total Hours	Resources (#)	Rate ($/hr or $/yr)	Total ($)	2018	2019	2018	2019	Total
A & B				Director of Systems and Engineering	2	2080	4160	1	147,204	$ 294,408	$ 110,403	$ 110,403	$ 36,801	$ 36,801	
				Toll Systems Accounting Solutions Manager	2	2080	4160	1	90,645	$ 181,290	$ 67,984	$ 67,984	$ 22,661	$ 22,661	
				CSC Manager	2	2080	4160	1	92,606	$ 185,212	$ 69,455	$ 83,345	$ 23,152	$ 10,609	
				CSC Manager	1	2080	2080	1	92,606	$ 92,606		$ 23,152		$ 69,455	
				IT Specialist	2	2080	4160	1	114,485	$ 228,970	$ 85,864	$ 85,864	$ 28,621	$ 28,621	
				Transportation Engineer 4	2	2080	4160	1	112,063	$ 224,126	$ 84,047	$ 84,047	$ 28,016	$ 28,016	
				Contracts Specialist 3	2	2080	4160	1	98,673	$ 197,346	$ 74,005	$ 74,005	$ 24,668	$ 24,668	
				Auditor WMS 02	2	2080	4160	1	130,526	$ 261,052	$ 97,895	$ 97,895	$ 32,632	$ 32,632	
				Sub Total Staff and Benefits						**$ 1,665,010**	$ 589,652	$ 626,694	$ 196,551	$ 253,462	$ 1,666,358
C			3,332,000	GTC	2	1960	19600	10	170	3,332,000	$ 1,332,800	$ 1,332,800	$ 333,200	$ 333,200	
			290,000	ERP	2	1000	2000		145	290,000	$ 108,750	$ 108,750	$ 36,250	$ 36,250	
			1,019,200	IV&V	2	1960	7840	2	130	1,019,200	$ 509,600	$ 509,600			
			122,500	QA	2	1960	980	0.5	125	122,500	$ 61,250	$ 61,250			
				Sub Total Personal Services						**$ 4,763,700**	$ 2,012,400	$ 2,012,400	$ 369,450	$ 369,450	$ 4,763,700
E															
	CSC Application Customization														
	Vendor	System Development	CSC Application Customization	Modules (ERP: CRM, Cash Mgmt., GL, INV, AP, AR)	2	Per Module		6	300,000	1,800,000	$ 900,000	$ 900,000	$ -	$ -	
				Operational Back-Office	2	LS		1	3,000,000	3,000,000	$ 1,500,000	$ 1,500,000	$ -	$ -	
				System Integration (PM)	2.5	1960	4900	1	150	735,000	$ 367,500	$ 367,500	$ -	$ -	
				System Integration (Deputy PM)	2.5	1960	4900	1	150	735,000	$ 367,500	$ 367,500	$ -	$ -	
				System Integration (Functional Analysts)	2.5	1960	4900	2.5	150	1,837,500	$ 918,750	$ 918,750	$ -	$ -	
				System Integration (Tech Architect/DBA)	2.5	1960	4900	1.5	150	1,102,500	$ 551,250	$ 551,250	$ -	$ -	
				System Integration (Data Reporting)	2.5	1960	4900	1	150	735,000	$ 367,500	$ 367,500	$ -	$ -	
				System Integration (LS interface development hrs.)	2.5		4000	1	150	600,000	$ 300,000	$ 300,000	$ -	$ -	
				System Integration (Customizations)	2.5	1960	4900	3	150	2,205,000	$ 1,102,500	$ 1,102,500	$ -	$ -	
				Data Migration (Vendor)	1	2080	2080	2	150	624,000	$ 312,000	$ 312,000	$ -	$ -	
				Data Migration (ETCC)	1	2080	2080	2	225	936,000	$ 468,000	$ 468,000	$ -	$ -	
				Contingency						1,848,042	$ 462,011	$ 1,386,032	$ -	$ -	
				Subtotal CSC Application Customization						**16,158,042**	$ 7,617,011	$ 8,541,032	$ -	$ -	$ 16,158,042
	Hardware (Development Server)														
			Hardware	Development Setup (equipment & licenses)	1					100,000	$ -	$ 100,000			
				Maintenance and Support	2				40,000	80,000	$ 40,000	$ 40,000			
				Subtotal CSC Application Customization						**180,000**	$ 40,000	$ 140,000	$ -	$ -	$ 180,000
	Hardware (Main Site)														
			Hardware (Main Site)	E-commerce-Web Server	1	LS			100,000	100,000	$ -	$ 100,000			
				Voice/IVR Server	1	LS			75,000	75,000	$ -	$ 75,000			
				Database/Application Server	1	LS			150,000	150,000	$ -	$ 150,000			
				Business Intelligence/Reporting Server	1	LS			100,000	100,000	$ -	$ 100,000			
				Subtotal CSC Application Customization						**425,000**	$ -	$ 425,000	$ -	$ -	$ 425,000
	Hardware (Disaster Recovery Site))											-			
			Hardware (Disaster Recovery Site)	E-commerce-Web Server	1	LS			100,000	100,000	$ -	$ 100,000			
				Voice/IVR Server	1	LS			75,000	75,000	$ -	$ 75,000			
				Database/Application Server	1	LS			150,000	150,000	$ -	$ 150,000			
				Business Intelligence/Reporting Server	1	LS			100,000	100,000	$ -	$ 100,000			
				Subtotal CSC Application Customization						**425,000**	$ -	$ 425,000	$ -	$ -	$ 425,000
	Hardware (Customer Service Center Site)											-			
			Hardware (CSC Site)	Workstations (100)	1	800	170	units	136,000	136,000	$ -	$ 136,000			
				Peripherals (Micro, CC, printer etc.)	1	LS			50,000	50,000	$ -	$ 50,000			
				Telephony	1	LS			125,000	125,000	$ -	$ 125,000			
				Dashboard	1		2	units	10,000	10,000	$ -	$ 10,000			
				Subtotal CSC Application Customization						**321,000**	$ -	$ 321,000	$ -	$ -	$ 321,000
	Data Warehouse Application Development														
	Vendor	Application	Project Lead		0.75	1960	1470	1	180	264,600	$ 88,200	$ 176,400			
			Analyst Developer		0.75	1960	1470	1	150	220,500	$ 73,500	$ 147,000			
			Analyst Developer		0.75	1960	1960	1	150	294,000	$ 98,000	$ 196,000			
			DBA		0.75	1960	1470	0.5	180	132,300	$ 44,100	$ 88,200			
			Contingency							250,000		$ 250,000			
				Subtotal CSC Application Customization						**1,161,400**	$ 303,800	$ 857,600	$ -	$ -	$ 1,161,400
	Data Warehouse Database Licensee														
			BI Tools	Software Licenses - 25 users		LS		1	300,000	300,000	$ 50,000	$ 250,000			
			Database Licenses	Licenses - 25 users				25	500	12,500	$ -	$ 12,500			
				Subtotal CSC Application Customization						**312,500**	$ 50,000	$ 262,500	$ -	$ -	$ 312,500
	Hardware (Data Warehouse)														
			Hardware	Development Server						100,000	$ -	$ 100,000			
				Production BI Environment	2					150,000	$ 75,000	$ 75,000			
				DR BI Environment						150,000	$ -	$ 150,000			
				Database Licenses	Server		LS		1	30,000	$ 30,000	$ -			
				Subtotal CSC Application Customization						**430,000**	$ 105,000	$ 325,000	$ -	$ -	$ 430,000
	Facilities Leasehold Improvements														
				Walk in center improvements	1				75,000	75,000				$ 75,000	
				New location improvements for WSDOT co-location	1				250,000	250,000		$ 125,000		$ 125,000	
				Subtotal CSC Application Customization						**325,000**		125,000		200,000	$ 325,000
	Transition														
Systems															
	Old Vendor			Legacy System Operational 6 months	0.5				1,200,000	600,000		$ 600,000			
	New Vendor			Miscellaneous (development bullpen)	1	LS			250,000	250,000		$ 250,000			
				Subtotal CSC Application Customization						**850,000**		850,000			$ 850,000
	CSC New Operator On Boarding														
Systems															
				Design and testing of new back office system	1.5	1960	2940	3	100	**882,000**			$ 441,000	$ 441,000	
				Onboarding Transition Plan	1	LS			100,000	**100,000**			$ 50,000	$ 50,000	
				Subtotal CSC Application Customization						**982,000**			$ 491,000	$ 491,000	$ 982,000
															$ 28,000,000

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: CSC Systems & Operator RFPs

Base Budget: The proposal is an expansion of CSC request for proposal (RFP) procurement appropriation. Previous appropriation was provided for planning the scope of work, drafting the RFP and solicitation of the RFP. The 2017-19 request is to contract with the back office systems vendor, oversee the design, development, testing and implementation of the back office system. In addition, the operator of the back office will be procured and retained to aid in design of the system.

What are other important connections or impacts related to this proposal? Please complete the following table and provide detailed explanations or information below:

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	
Other local gov't impacts?	No	
Tribal gov't impacts?	No	
Other state agency impacts?	No	
Responds to specific task force, report, mandate, or exec order?	Yes	State Auditor's Office audit reports, legislative requests for increased customer service performance.
Does request contain a compensation change?	No	
Does request require a change to a collective bargaining agreement?	No	
Facility/workplace needs or impacts?	Yes	During the 2017-19 biennial budget year, WSDOT will discuss co-location with both system vendor and CSC vendor program management to ensure program delivery.
Capital Budget impacts?	No	

Is change required to existing statutes, rules or contracts?	Yes	New contracts will be issued for two vendors, the system vendor and the CSC operator. In addition, as part of this project, the current CSC vendor will need an 18-month contract extension.
Is the request related to or a result of litigation?	No	
Is the request related to Puget Sound recovery?	No	
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No STOP

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
CSC Application Customization	7,985,000	7,986,600	0,000	0,000
Hardware (Development server)	40,000	140,000	0,000	0,000
Hardware (Main Site)	0	425,000		
Hardware (Disaster Recovery site)	0	425,000		
Hardware (CSC Site)	0	425,000		
Data Warehouse Application Development	386,495	690,295		
Database licenses	50,000	292,500		
Hardware (Data Warehouse)	75,000	325,000		
Total Cost	**8,536,495**	**10,605,395**	**Enter Sum**	**Enter Sum**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☒Yes ☐ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

NOTE: WSDOT Tolling Division is working with OCIO and submitted a draft Investment Plan in May 2016.

It should also be noted the decision package is for the customer service center, which includes the operating system, E-commerce Web Server, Voice/IVR Server, Database/Application Server and Business Intelligence/Reporting Server. The back office system provider is asked to provide the back office system, telephony system and all peripherals associated with a customer call center.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G7 Workforce & Leadership Development
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: S – Transportation Mgmt & Support

Agency Recommendation Summary Text:

Training for leadership strengthens organizations and provides continuity of operations. Washington State Department of Transportation (WSDOT) has identified a need to have one (1) staff dedicated to the facilitation and implementation of leadership training. This includes implementing a two-phase leadership training beyond the introductory supervisor training currently mandated for all new supervisors. This training is essential to create and maintain a highly efficient and effective organization. Additionally, this proposal helps WSDOT build and sustain a workplace culture that focuses on performance, accountability, and results.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	705,000	705,000	1,410,000	705,000	705,000
Total Cost	705,000	705,000	1,410,000	705,000	705,000
Staffing FTEs	1.0	1.0	1.0	1.0	1.0
Program S - Operating					
Fund 108-1 MVA-State	705,000	705,000	1,410,000	705,000	705,000
Total by Fund	705,000	705,000	1,410,000	705,000	705,000
Staffing FTEs	1.0	1.0	1.0	1.0	1.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	90,000	90,000	180,000	90,000	90,000
B. Employee Benefits	33,000	33,000	66,000	33,000	33,000
E. Goods and Services	571,000	571,000	1,142,000	571,000	571,000
G. Travel	10,000	10,000	20,000	10,000	10,000
J. Capital Outlays	1,000	1,000	2,000	1,000	1,000
Total Cost	705,000	705,000	1,410,000	705,000	705,000
Program S - Operating					
A. Salaries and Wages	90,000	90,000	180,000	90,000	90,000
B. Employee Benefits	33,000	33,000	66,000	33,000	33,000
E. Goods and Services	571,000	571,000	1,142,000	571,000	571,000
G. Travel	10,000	10,000	20,000	10,000	10,000
J. Capital Outlays	1,000	1,000	2,000	1,000	1,000
Total by Program	705,000	705,000	1,410,000	705,000	705,000

Package Description

Like many state agencies, WSDOT is at a crossroads. Over forty percent of our workforce is, or soon will be, eligible for retirement. Advanced leadership from within the current workforce will provide continuity of the operations. Well-prepared managers have a positive impact on their employees,

clients, services provided, citizens, other agencies, and other governmental entities. WSDOT understands that people are the source of our innovation and success. Investing in the WSDOT workforce is essential to create and maintain a highly efficient and effective organization; this helps WSDOT build and sustain a workplace culture that focuses on performance, accountability, and results.

To undertake this agency-wide training and development effort, WSDOT has identified a need for one Human Resources Manager dedicated to the facilitation and implementation of leadership training and succession planning for WSDOT. This staff will use a combination of internally prepared and delivered, WSDOT-centric courses and materials, e-learning resources, and resources available through external providers, as needed and appropriate. A more specific training agenda is listed below:

1. Develop and deliver Leadership Foundations training to all WSDOT leaders; standardize expectations, assess developmental needs, and create Individual Development Plans for each participant.
2. Provide the Supervision Essentials training class from Department of Enterprise Services (DES) to all new supervisors.
3. Provide DES's new Five-Tier Leadership Development program, the first phase of the pilot program will be available in fall of 2016.
4. Continue to use National Transportation Management Conference and National Transportation Leadership Institute classes to train selected employees.
5. Continue to provide Leading at the Speed of Trust.
6. Coordinate and oversee delivery of Four Lenses™ Assessment training.
7. Develop and offer the following services:
    - A Leadership Resources page on the intranet.
    - Leadership Lunch Lectures using in-house expertise.
    - Leadership Workshops around the state.
    - Leadership Speaker Series, to collaborate with local business leaders/retired agency leaders, speaking on relevant topics.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Leadership training will build the strength of the organization, provide current employees and managers opportunities to strengthen their leadership skills and advance within the department, inspire public trust, and ensure WSDOT is operating efficiently and effectively. This training also leads to constant improvement of customer service, accountability, and morale. This culminates in a quality work product and demonstrates our commitment to improvement in maintaining a stellar work force and good stewardship of public resources.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

N/A

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

In developing this plan, the department considered alternative methods of providing training to employees. There was not one strategy that addressed every need identified by the department. The department recommends using a combination of these strategies (hired staff, e-learning, and contracted support) to leverage the best outcome for the organizational need identified by the department. The following options were considered:

Using training available through DES: DES coordinates and provides the introductory supervisor training for all new state managers. Choices for other leadership training are limited, and prices can vary depending on the topic. There is not an option for leadership training within the state beyond entry-level at present time.

Opting exclusively for an e-learning solution: The department's SkillSoft system is an electronic learning system, which is used to make leadership training available to all department staff. Although cost effective, many learners are not comfortable with e-learning (SkillSoft), and the availability of courses can be limited depending upon topic. E-learning does not facilitate the sharing of ideas and collaboration is not ideal in this environment. The organization intends to use a hybrid approach allowing for some online training coupled with facilitated training that would allow collaboration amongst future leaders within the department.

Hiring outside vendors: costs, especially on courses that are WSDOT-specific, can be prohibitive.

Collaborating with other agencies: WSDOT has explored this option and to date, there has not been a great deal of interest in sharing production or creation costs.

What are the consequences of not funding this request?

The proposed investment for one staff and associated training session costs is necessary for WSDOT to have a successful and coordinated leadership training program across the department. Not funding this investment, may increase recruitment time, costs, and a missed opportunity to optimize the workforce thus creating a less engaged workforce.

Expenditure Calculations and Assumptions

Using the current costs from vendors and current salary base for FTE, and approximating the number of current supervisors and managers. The human resources manager costs out at WMS 2, range 589a, and step Z. The standard FTE related costs for this position are $11,500 per year.

Workforce and Leadership Development
Expenditure Calculations and Details

$57,750/Year	DES (Department of Enterprises Services) Supervision Essentials - $385/person x 150/year
$37,500/Year	DES Leadership Series - $250/person x 150/year
$30,000/Year	Leadership Foundations - $250/person x 120 (offered 6 classes /year; 20 person/class)
$250,000/Year	NTMC = $5,000/per person x 50 – (National Transportation Management Conference)
$50,000/Year	NTLI = $10,000/person x 5 – (National Transportation Leadership Institute)
$10,000/Year	Travel, training materials, printing costs, etc.
$5,000/Year	Four Lenses Training; materials, supplies and expenses
$60,000/Year	Speed of Trust Training: 30 kits*$200*10 months
$40,000/Year	Leadership Workshops (Quarterly in Northwest Region, Olympic Region/Headquarters, Southwest Region, Eastern Region, North Central/South Central, and Washington State Ferries)
$30,000/Year	Leadership Conference = (HR portion)
$123,000/Year	Salary and benefits for one (1) Human Resources Manager FTE
$11,500/Year	Standard FTE-related costs such as standard IT costs and support; supplies and materials; communication costs (telephone line & postage); and professional development.
$704,750/Year	Total yearly expenditures

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

These are ongoing costs.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Workforce &Leadership Development

Base Budget:

Base Budget for Headquarters' Human Resources Office
Workforce & Leadership Development Decision Package
From Fiscal Year 2016 Expenditures for WSDOT Agency-Wide Training

Agency	Fund	Org Code	Organization Code Name	Work Order	Object	Annual Total by Object
405	108	464002	Construction Trainers	MT0543	A&B	$ 212,231
405	108	314010	Human Resources & Safety	MT0543	C	$ 141,116
405	108	314010	Human Resources & Safety	MT0543	E	$ 11,309
405	108	314010	Human Resources & Safety	MT0543	G	$ 6,319
						$ 370,975

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:

Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections	**None**	

Please provide a detailed discussion of connections/impacts identified above.
N/A

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: G8 Wave2Go and ORCA Ticketing & Reservations
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: W – Ferries Construction

Agency Recommendation Summary Text:

The department requests appropriation authority to support the acquisition, installation, and deployment of a new ticketing and reservation system for Washington State Ferries (WSF). WSF plans to acquire an off-the-shelf ticketing and reservation system that has been successfully implemented at other ferry systems of similar size. The new system will replace the current electronic fare system (EFS), Wave2Go, and its adjunct Save A Spot reservation solution. The request will also provide the resources needed to participate in the regional ORCA card system replacement and the ability to accept *Good To Go!* at ferry terminals.

In addition to acquiring the new ticketing, reservation, and ORCA systems, this package will cover the preservation of the existing ticketing system until it is replaced, These preservation costs are to replace equipment that has reached the end of its useful life.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 099-1 PSCC-State	354,000	428,000	782,000	5,103,000	18,125,000
Total Cost	354,000	428,000	782,000	5,103,000	18,125,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program W - Capital					
Fund 099-1 PSCC-State	354,000	428,000	782,000	5,103,000	18,125,000
Total by Fund	354,000	428,000	782,000	5,103,000	18,125,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
J, Capital Outlays	354,000	428,000	782,000	5,103,000	18,125,000
Total Cost	354,000	428,000	782,000	5,103,000	18,125,000
Program W - Capital					
J, Capital Outlays	354,000	428,000	782,000	5,103,000	18,125,000
Total by Program	354,000	428,000	782,000	5,103,000	18,125,000

Package Description

The department's Ferries Division is in need of a replacement electronic fare system (EFS), commercially known as Wave2Go. EFS is a ticketing system deployed in 2005 and is nearing functional obsolescence. In addition, the regional transportation system, One Regional Card for All (ORCA), will be replaced when the existing ORCA contract ends in 2021. Finally, this decision package will provide the equipment and software integration necessary to accept *Good To Go!*

as a form of payment at ferry terminals, The ability to efficiently collect fares is critical to an organization with approximately $360 million in fare revenue collections in the 2015-17 biennium, which is projected to continue to increase in future biennia.

WSF collects fares by means of EFS/Wave2Go and the Puget Sound Region's ORCA smart card program. WSF accepts ORCA for full-fare passengers and drivers, as well as monthly passes.

Besides the simple aging of the system, there are a number of issues that illustrate the urgency of replacing EFS.

While EFS is generally working and available most of the time, there are significant functional deficiencies that lead to long-term problems. At the time of its procurement, WSF's goal was to procure a system as much off-the-shelf as possible and then tailor it to meet WSF's operational and financial needs (specifically, to provide an interface to TRAINS and to support WSF's complex fare structure). It is felt that, with the lessons learned from the EFS deployment, along with a better understanding of marketplace offerings and a more rigorous requirements definition process completed prior to procurement, a new system would be implemented more efficiently.

The shortcomings of EFS include:

- **Difficulty making changes.** A significant problem with EFS is that it is a proprietary system with code that cannot be accessed or modified by WSDOT. The vendor does not provide an Application Programming Interface, with the exception of the Internet sales processing engine. Thus, all modifications to the system (such as the ORCA integration) must be done by the original vendor. Because ferries are not the vendor's main line of business, the cost of programming changes for WSF cannot be spread over other customers, leading to higher costs and longer turnaround times for WSF. This means that WSF cannot respond nimbly to fluctuations in ridership and product demand. In short, the business environment is continuously changing but the EFS system leaves WSF unable to change along with it.
- **Aging system.** EFS was built on a foundation of aging but inexpensive software designed in the 1980s for much smaller, simpler ticketing applications (for example, an amusement park has a simple ticketing structure with limited entry points). Some modules of EFS were built in MS-DOS and retain its characteristics, making it difficult and costly to adapt to new business needs and the changing environment of WSF.
- **Dated software architecture.** Because the core of EFS pre-dates many software advances of the past 20 years, several layers of software have been required to address deficiencies. Additionally, multiple individual programs of EFS do not work well in a standard Windows 7 or Windows 10 environment (as used by WSDOT), requiring WSDOT to internally develop customized work-arounds to force these modules to behave more like modern Windows Services.
- **Suboptimal system security.** Security is less robust in EFS than would be expected in a modern enterprise-class solution. The point-of-sale software is not integrated with the enterprise directory of users, and so must maintain a separate set of passwords and permissions for the users, in addition to permissions secured by the corporate Microsoft

Active Directory. This shortcoming is both a security risk and an added burden to administrators.

- **No social media or mobile device capability**. WSDOT is at a disadvantage with the current system in terms of carrying out meaningful integration with social media tools and mobile devices. These integrations are not supported by the current vendor.
- **Intensive maintenance requirements.** Frequent user help requests significantly strain internal IT resources. Examples of support tasks are: diagnosing terminal device problems (printers, ticket kiosks, video recorders, etc.), resolving customer transactions when something in the system hangs, assisting ticket sellers when problems emerge during end-of-shift closing and reconciliation, and assisting with general use of the system. Employees who are called upon outside normal business hours are compensated with exchange time, adding to the ongoing cost of the system.

On the external, customer side, WSF passengers include frequent riders/commuters, infrequent resident riders, and infrequent visitor riders. Each of these customer groups have different service and information needs. Frequent riders/commuters interested in easy-to-use, account-based systems that offer services such as automatic replenishment of pass value and loyalty programs or other perks. However, infrequent riders are interested in a user-friendly reservation system that allows them to either plan and pay for trips in advance, or access easy-to-use emerging technologies such as mobile ticketing, which allows them to make travel decisions on-the-fly. With social media and smart phones becoming the norm, passengers expect to have access to on-the-fly service status updates and trip-planning capabilities. As internal customer and passenger expectations grow and evolve, EFS is unable to grow and evolve with them, and the effort to maintain the status quo further strains WSF support staff.

Discussions with WSF stakeholders have also identified the following shortcomings of the current EFS:

- **Lack of integration with reservations.** WSF currently accepts reservations on a limited number of routes using a reservations module developed by in-house staff that is integrated with EFS only in tollbooth processing. Prepaid reservations have the dual benefits of rapid check-in and reduced terminal queuing, and are becoming a common offering in the industry.
- **Lack of customer relationship management functionality.** There is currently no way for WSF's many frequent customers to maintain an account with WSF for their travel purchases. Customers cannot streamline their travel purchases by establishing a customer profile or linking a payment method. Similarly, when customers call for assistance, there is no way for WSF to view their travel or purchase history or previous communications with WSF.
- **No ability to integrate with *Good To Go!*** The statewide electronic toll program, which has been branded as *Good To Go!,* enables tolls to be collected as vehicles pass through a facility at freeway speeds with the use of a transponder or license plate photo. *Good To Go!,* is not currently deployed at WSF terminals. WSF has assessed *Good To Go!* as a potential fare payment option but, due to the age and proprietary nature of EFS, it has not been cost-effective to pursue any integration with *Good To Go!*

- **Lack of flexibility to support other enhancements.** WSF's most popular routes can experience significant queuing and wait times. The ability to integrate with intelligent transportation systems (ITS), which are widely used by WSDOT for traffic management, to detect queuing and provide notifications to travelers, along with service change alerts through a variety of media, have the potential to provide a greatly enhanced customer experience. EFS has none of these capabilities.

At its core, the WSF ticketing and reservation system must provide the basic functionality for customers to make reservations, buy tickets, and create an account-based customer profile. The current EFS system is not integrated with reservations to issue tickets tied to a specific reservation. These core functions are now widely available in the industry as off-the-shelf elements and can be readily customized for various fare structures, routes, and vessel types.

In addition to these core functions, WSF highly desires third-party fare/revenue system integrations, including with *Good To Go!* and ORCA. The current investment in ORCA interoperability is representative of WSF's position as a public transit agency in the region. The desired integration with *Good To Go!* is reflective of the department's desire for a single customer account system.

Additionally, WSF seeks a system that can integrate with a number of traveler information systems, including roadway intelligent transportation systems (ITS), and 511 Interactive Voice Response systems, as well as operations-enhancing systems such as advanced load management functions and automated height, weight, and length detection for oversized vehicles. ITS would include systems to monitor back-ups at the terminals; posting customer alerts on variable message signs throughout travel corridors to the terminals; and disseminating notifications via Interactive Voice Response, the WSF web site, email, and text.

WSF plans to acquire an off-the-shelf ticketing and reservation system that has been successfully implemented at other ferry systems of similar size.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The current ticketing and reservation systems have suboptimal system security and intensive maintenance requirements. With this decision package, WSF will achieve integration with the Tolling Division at ferry terminals, replace aging Wave2Go and ORCA systems, and be able to integrate with third-party systems. The new system will increase efficiency with enhanced customer communications, a fully integrated ticketing and reservation system, and implied Customer Relationship Management System (CRM),

The replacement ticketing system will give WSF the ability to accept the Tolling Division's *Good To Go!* pass from customers traveling in their vehicles, This would provide increased customer convenience as well as a unified WSDOT user fee payment approach.

WSF currently accepts reservations on a limited number of routes using a reservations module developed in-house that is only partially integrated with EFS, From the customer perspective, the

reservation and ticketing systems are not integrated, Ideally, customers would be able to purchase fares as an integral step in making a reservation, providing benefits of rapid check-in, single reservation/ticket redemption, and reduced terminal queuing.

Part of the replacement ticketing and reservation system will be implementing a queue detection system at every terminal that can determine the vehicle congestion approaching the ferry terminal. This information will be relayed to the WSDOT's website and smart phone application. In addition, it is envisioned that this information will be displayed on strategically placed variable message signs approaching the terminals, allowing customers to make decisions about when to travel and assist customers to switch to less congested routes.

This decision package will support WSF's participation in the regional ORCA card system replacement that is being led by Sound Transit and King County Metro.

Performance Measure Detail
N/A

Identify important connections or impacts related to this proposal.
The implementation of a replacement ticketing and reservation system is critical to WSF to continue to collect revenue at its ferry terminals and to maintain current levels service that meet the expectations of customers. The Tolling Division has already begun its procurement process for a new back office. Approval of this decision package will provide the design and development for WSF to integrate with the Tolling Division's back office. This integration will allow WSF to begin accepting *Good To Go!* as a form of payment at ferry terminals. In addition, this package provides the ability to allow customers to pay their fares with mobile devices.

Funding is also necessary for WSF to participate in the regional ORCA program. Since the regional ORCA program is nearing the end of its useful life, the region has begun its process to develop system requirements so they can start the procurement, design, development, and implementation of a new system by 2021 when the contract with the current vendor ends. This requested budget authority is needed to continue to allow customers to pay their ferry fares with the regional ORCA card, providing seamless travel for multi-modal customers.

What alternatives were explored, and why was this alternative chosen?
There are no alternatives since the current ticketing system is nearing its end of life.

What are the consequences of not funding this request?
If this decision package is not approved, and WSF continues investment in the current system, the department would not achieve the following goals:

- The ability to accept *Good To Go!* as a form of payment at ferry terminals.
- Integrate with *Good To Go!* with a single account.
- Provide a fully integrated ticketing and reservation system where customers can purchase tickets in conjunction with vehicle reservations.
- The ability for WSF to participate in the regional ORCA program, providing customers easy multimodal travel.
- The ability to integrate with third-party systems, such as the regional ORCA program.

- The ability to readily, and in a cost-effective manner, expand the ticketing/reservation systems to offer new technologies or functionality that is prevalent in the transportation industry. Examples include paying fares by Near Field Communication phones, Apple/Google Pay, automated queue detection, and others.

Expenditure Calculations and Assumptions

The expected cost of the system is summarized in Attachment A and is based on the following:

- 2014 Joint Toll and Ferry Customer Service Center Feasibility Study. Costs were identified in this study to integrate the replacement system with *Good To Go!*'s back-office and purchase the equipment necessary at the ferry terminals in order to accept *Good To Go!* as a form of payment.
- 2014 Business Case for Ticketing and Reservations System Replacement. A technical consultant, IBI Group, evaluated the resources needed to procure a new system based on experience with other large transportation systems. In addition, from the IBI Group's experience, expected expenditures by major milestones have been identified, based on the request for proposals being advertised in July 2019:
    - 20 percent at design completion (May 2020)
    - 25 percent at development completion (November 2020)
    - 10 percent at integration testing completion (December 2020)
    - 15 percent at the time of pilot route installation (March 2021)
    - 20 percent at the time all equipment is fully implemented (June 2021)
    - 10 percent at system acceptance (December 2021)
- WSF internal agency costs were based on actual costs to implement the existing ticketing and reservation systems and applying the following assumptions:
    - **Project Manager**. Cost of contractor is assumed to be $15,000 per-month
    - **Quality Assurance.** Cost of contractor is assumed to be $10,000 per-month
    - **System Design/Development/Integration.** This is time for department staff to integrate existing databases into the new ticketing system. For example, agency staff will have to develop the revenue flow from the new ticketing system to the Great Plains revenue accounting system currently used by WSF. Also, the department's data warehouse team will have to import this new data flow. WSDOT's IT resources have full-time jobs and, therefore, they will need to be relieved of these to fulfill the obligations related to the replacement ticketing system. The department expects to hire contractors during these development periods.
    - **Agency Testing.** Cost to hire two outside contractors to write use cases and test the vendor's system.
    - **Customer Communication.** Cost of staff and resources needed to communicate upcoming changes related to replacing the ticketing system, including signage at the terminals and on the vessels. In addition, staff will ride sailings on each route, informing Ferries' customers about changes and answering questions.
    - **Training & Go-Live Support.** These costs are related to the time for the training department to create training materials, train staff, and provide on-site support during the first two weeks of going live.
- Preservation costs for the current Wave2Go system are based on the equipment life cycle for the existing ticketing system. Originally, WSF expected to begin the procurement process for the new ticketing/reservation systems in July 2017. The current schedule, which extends the use of the current system, requires resources to preserve equipment through the 2017-19 biennium.

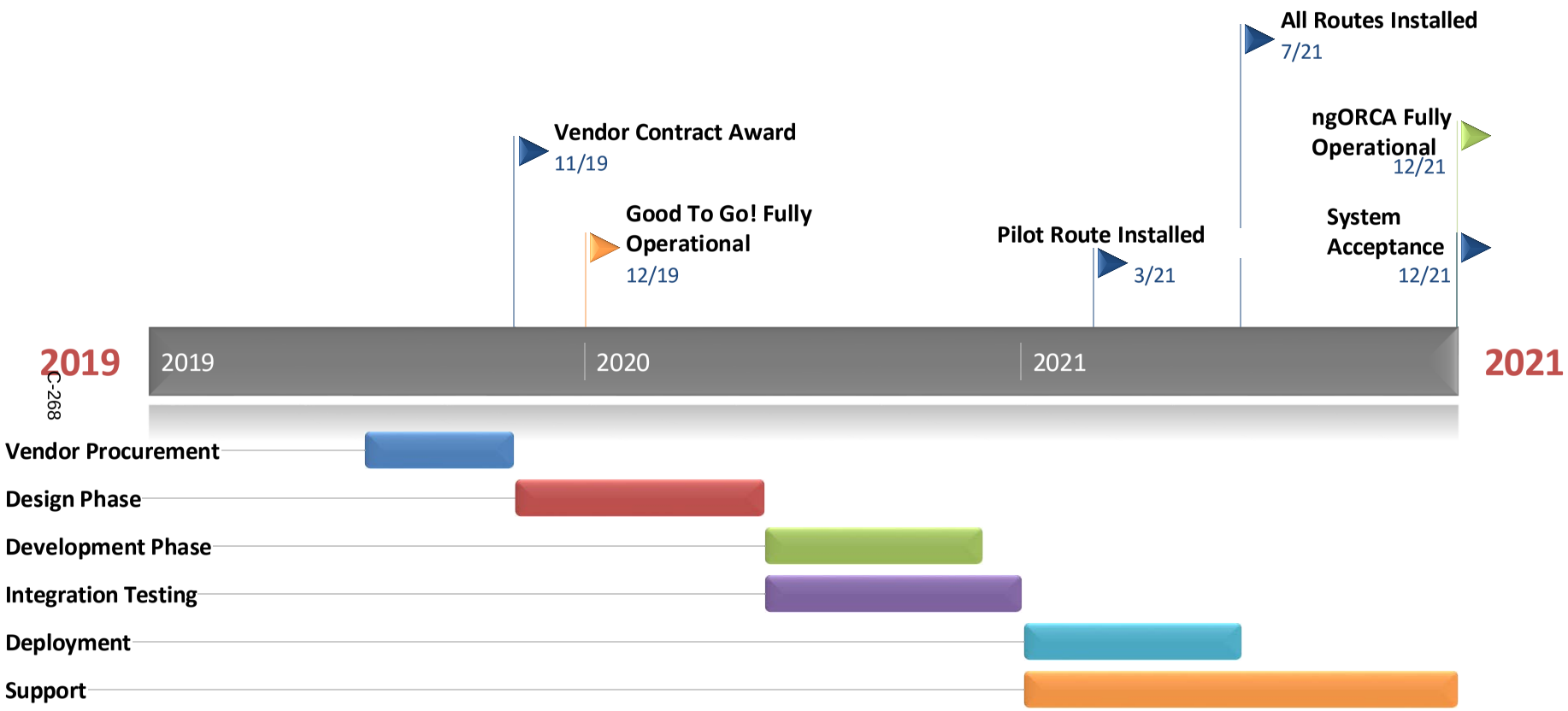
- Self-service kiosks that sell tickets and provide ticket balance ($287,000 in fiscal years 2018 and 2019)
- Main operating servers ($72,000 in fiscal years 2018 and 2019)
- Replacement of optical turnstiles ($48,000 in fiscal years 2018 and 2019)
- Tollbooth outdoor displays ($65,000 in fiscal years 2018 and 2019)
- Handheld devices to redeem Wave2Go and ORCA fares ($235,000 in fiscal years 2018 and 2019)
- Replacement of turnstile computers ($65,000 in fiscal year 2020)
- Replacement of turnstile displays ($21,000 in fiscal year 2020)

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

Costs identified are for the procurement, design, development, and implementation of the replacement ticketing and reservation systems, as well as extended preservation of the current system through fiscal year 2020, These are one-time costs and do not include ongoing maintenance and operation costs of the new system.

After the system is built, costs to cover ongoing maintenance of the system will be required. Currently-budgeted amounts in Programs C and W for operating and maintenance costs, and for hardware replacement, will continue to be needed after the new ticketing/reservation systems are in place.

Wave2Go Next Generation Timeline



Attachment A

Wave2Go and ORCA Next Generation
Capital Budget Request - July 2019 RFP Advertisement

Biennium	**2017-19**		**2019-21**		**2021-23**		**Total**
Fiscal Year	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	
Wave2Go Next Generation							
RFP Development	-	-	-	-	-	-	-
Vendor - Core System Plus *Good To Go!*	-	-	2,588,000	9,058,000	1,294,000	-	12,940,000
Internal Agency Costs							
Project Manager	-	-	180,000	180,000	90,000	-	450,000
Quality Assurance	-	-	120,000	120,000	60,000	-	300,000
System Design/Development/Integration	-	-	164,000	441,000	15,000	-	620,000
Agency Testing	-	-	-	215,000	-	-	215,000
Customer Communication	-	-	-	85,000	-	-	85,000
Training & Go-Live Support	-	-	-	672,000	-	-	672,000
15% Contingency - Internal Agency Costs	-	-	70,000	257,000	25,000	-	352,000
Wave2Go Next Generation - Core System	-	-	3,122,000	11,028,000	1,484,000	-	15,634,000
Vendor - Optional Features							
IVR Software Integration	-	-	115,000	403,000	58,000	-	576,000
Variable Message Signs	-	-	965,000	3,375,000	483,000	-	4,823,000
Load Management Software	-	-	92,000	322,000	46,000	-	460,000
Queuing Detection	-	-	630,000	2,202,000	315,000	-	3,147,000
EFS1 System Preservation	354,000	353,000	85,000	-	-	-	792,000
Wave2Go Next Generation Total Cost	**354,000**	**353,000**	**5,009,000**	**17,330,000**	**2,386,000**	**-**	**25,432,000**

Biennium	**2017-19**		**2019-21**		**2021-23**		**Total**
Fiscal Year	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	
Next Generation ORCA							
Vendor Costs	-	75,000	94,000	714,000	113,000	-	996,000
Internal Agency Costs							
Agency Testing	-	-	-	49,000	-	-	49,000
Customer Communication	-	-	-	11,000	11,000	-	22,000
Training & Go-Live Support	-	-	-	10,000	-	-	10,000
15% Contingency - Internal Agency Costs	-	-	-	11,000	2,000	-	13,000
Next Generation ORCA Total Cost	**-**	**75,000**	**94,000**	**795,000**	**126,000**	**-**	**1,090,000**

Biennium	**2017-19**		**2019-21**		**2021-23**		**Total**
Fiscal Year	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	
Wave2Go Next Generation Total Cost	354,000	353,000	5,009,000	17,330,000	2,386,000	-	25,432,000
Next Generation ORCA Total Cost	-	75,000	94,000	795,000	126,000	-	1,090,000
Total Costs	**354,000**	**428,000**	**5,103,000**	**18,125,000**	**2,512,000**	**-**	**26,522,000**
Budget by Biennium		782,000		23,228,000		2,512,000	26,522,000

Draft 8/5/2016

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Wave2Go and ORCA Ticketing & Reservations

Base Budget: The proposal is for a replacement system, rather than an expansion or alteration.

The IT program's existing operating and maintenance costs, and associated FTEs, will continue to be needed after the transition is made to the next generation systems. Those existing operating and maintenance costs are not included in this budget request. The Ferries-capital budget for the life-cycle replacement of capitalized hardware components – such as cash registers, kiosks, etc. – will also continue to be needed.

Existing budget:

Program C – Information Technology Motor Vehicle Account-state (108-1)	FTEs	Annual Budget	Biennial Budget
Employees	5.5	$679,500	$1,359,000
Contract Labor		112,500	225,000
Hardware and Software Vendor Support		442,000	884,000
TOTAL Program C	5.5	$1,234,000	$2,468,000

Program W PS Capital Construction Acct.-state (099-1)	FTEs	Annual Budget	Biennial Budget
Life-cycle hardware replacement	0.0	$232,500	$465,000

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	Yes	The new ticketing system is needed to integrate with the next generation of ORCA that is being planned by WSF's six Puget Sound transit partners.
Other local gov't impacts?	Yes	Please see above.
Tribal gov't impacts?	No	Identify:

Other state agency impacts?	Yes	Within the agency, the WSF system will eventually integrate with the Tolling division's back office, which will allow WSF to accept *Good To Go!* as a form of payment at ferries' vehicle tollbooths.
Responds to specific task force, report, mandate, or exec order?	Yes	By way of budget proviso (ESHB 2524), the Tolling Program has been directed to address the replacement of the Wave2Go ferry ticketing system by developing functional and technical requirements that integrate WSF ticketing into the new tolling division customer service center toll collection system. The first step is for WSF to accept *Good To Go!* tags and then integrate back offices. The 2014 feasibility study recommended the integration wait until WSF implements a new ticketing system.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	Yes	During the acquisition of the replacement ticketing system, WSF will evaluate what changes need to occur at the tollbooth. At this time, the only major change is adding tolling equipment in most vehicle lanes to ready the *Good To Go!* tag.
Capital Budget impacts?	No	No impact on the state's capital budget.
Is change required to existing statutes, rules or contracts?	Yes	Some potential tariff changes may be considered to simplify the WSF tariff. This will depend on the software capabilities of the replacement system. In addition, the replacement ticketing system will replace the existing contract with Gateway Ticketing Systems.
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Next Generation ORCA Software	0,000	75,000	94,000	94,000
Next Generation ORCA Hardware/Installation	0,000	0,000	0,000	620,000
Next Generation ORCA Agency IT Testing/Support	0,000	0,000	0,000	48,000
Next Generation Wave2Go Project Manager	0,000	0,000	207,000	207,000
Next Generation Wave2Go Quality Assurance (x 2)	0,000	0,000	138,000	138,000
Next Generation Wave2Go Internal Agency System Design, Development & Integration to Existing Systems	0,000	0,000	189,000	507,000
Next Generation Wave2Go Internal Testing	0,000	0,000	0,000	247,000
Next Generation Wave2GoVendor Software	0,000	0,000	2,300,000	8,050,000
Next Generation Wave2Go Vendor Hardware	0,000	0,000	2,065,000	7,229,000
Current Wave2Go Preservation – Hardware (replace self-service kiosks, handheld devices, and optical turnstiles)	353,350	353,350	0,000	0,000
Current Wave2Go Preservation – Hardware (replace turnstile computers and displays)	0,000	0,000	85,000	0,000
Total Cost	**353,350**	**428,350**	**5,078,000**	**17,140,000**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☒Yes ☐ No

2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: N2 Labor System Replacement
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: C – Information Technology

Agency Recommendation Summary Text:

The department request funding to implement the existing state owned EmpCenter time and attendance system. This system will impact all WSDOT employees, including all Ferries employees, as it will replace the current WSDOT Labor Distribution Systems and Marine Labor System. This system replacement will ensure compliance with the agency's 13 Collective Bargaining Agreements (CBA) and the need to provide detailed payroll data in response to grievances, lawsuits, legislative and public inquiry. This implementation will carry out the State Auditor's Office recommendation to adopt a new system for better controls, especially for Ferries' 11 unique CBAs. This will also position WSDOT to participate in the One Washington project.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	5,103,000	5,409,000	10,512,000	4,958,000	1,674,000
Total Cost	5,103,000	5,409,000	10,512,000	4,958,000	1,674,000
Staffing FTEs	9.0	9.0	9.0	9.0	4.3
Program C - Operating					
Fund 108-1 MVA-State	5,103,000	5,409,000	10,512,000	4,958,000	1,674,000
Total by Fund	5,103,000	5,409,000	10,512,000	4,958,000	1,674,000
Staffing FTEs	9.0	9.0	9.0	9.0	4.3

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	657,000	657,000	1,314,000	657,000	317,000
B. Employee Benefits	267,000	267,000	534,000	267,000	129,000
C. Professional Service Contracts	3,614,000	3,837,000	7,451,000	3,561,000	841,000
E. Goods and Services	473,000	576,000	1,049,000	401,000	361,000
G. Travel	72,000	72,000	144,000	72,000	18,000
J. Capital Outlays	20,000	0	20,000	0	8,000
Total Cost	5,103,000	5,409,000	10,512,000	4,958,000	1,674,000
Program C - Operating					
A. Salaries and Wages	657,000	657,000	1,314,000	657,000	317,000
B. Employee Benefits	267,000	267,000	534,000	267,000	129,000
C. Professional Service Contracts	3,614,000	3,837,000	7,451,000	3,561,000	841,000
E. Goods and Services	473,000	576,000	1,049,000	401,000	361,000
G. Travel	72,000	72,000	144,000	72,000	18,000
J. Capital Outlays	20,000	0	20,000	0	8,000
Total by Program	5,103,000	5,409,000	10,512,000	4,958,000	1,674,000

Package Description

The project approach is to leverage the extensive work done to date by WSDOT and the Washington State Department of Ecology to move forward with configuring the solution for all non-marine employees (5,000 employees and three CBAs) while documenting business and technical requirements, and configuring the system for Ferries employees (1,800 employees and 11 CBAs). The department will implement the solution incrementally through six deployments over a 39-month period. This incremental approach will deploy to increasingly complex employee groups and CBAs. This minimizes risk of errors while ensuring enough time for communication and training to more geographically diverse employee groups. The EmpCenter solution allows configuration specific to each CBA without impact to other CBAs.

The approach has been divided into three high-level functional groups referred to as:

- Non-Marine – All WSDOT employees except for Ferries employees,
- Marine – All Ferries Division employees, and
- Labor/Payroll Cost Distribution – The processes and functionality to distribute all labor/payroll costs within the WSDOT accounting system.

The timeline for implementation is as follows:

2017/2019 WSDOT Labor Systems Replacement Timeline

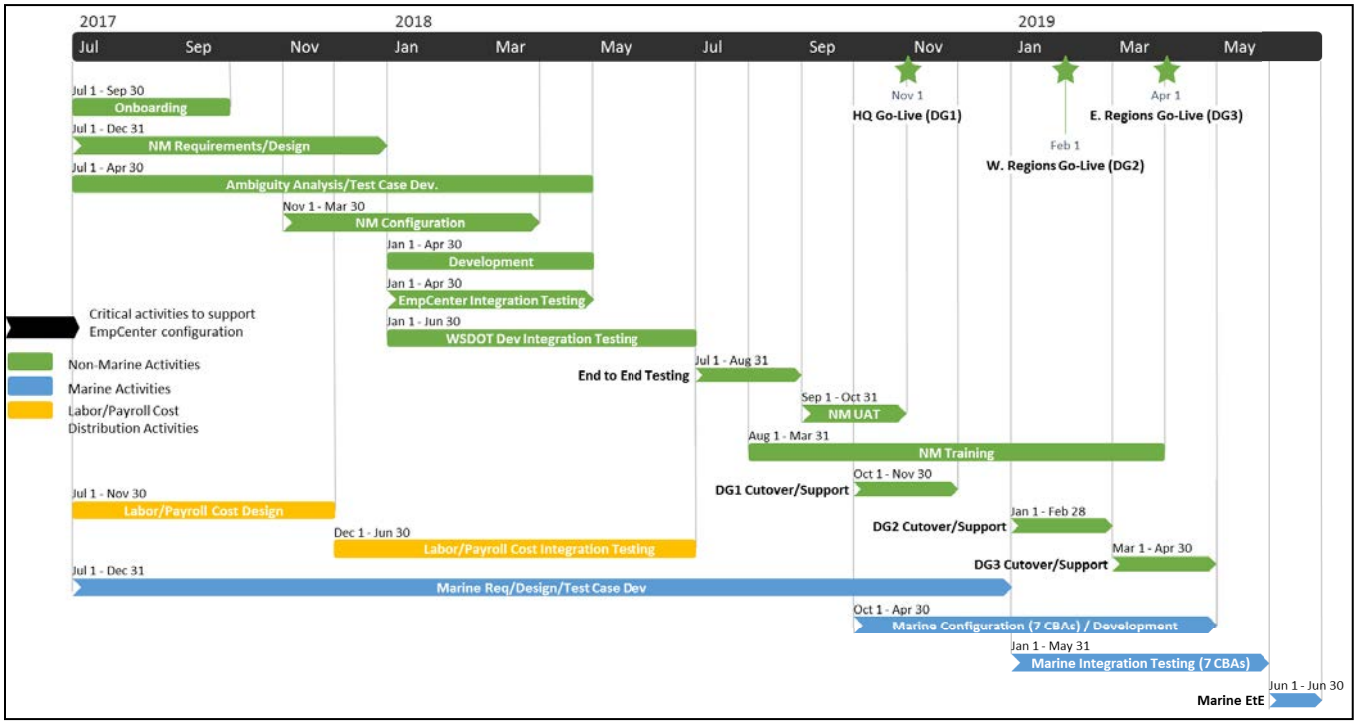


Figure 1 - 2017/2019 Timeline

2019/2021 WSDOT Labor Systems Replacement Timeline

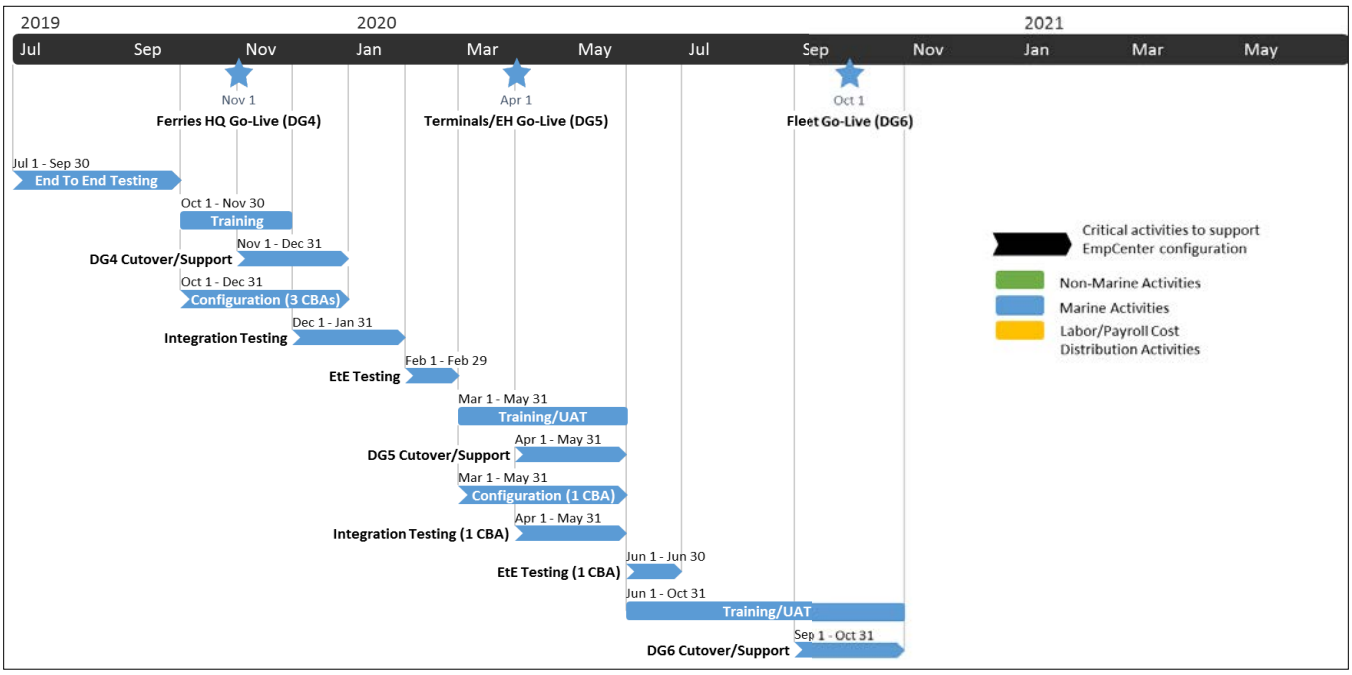


Figure 2 - 2019/2021 Timeline

CBA Name	CBA Type	HQ	Western Regions (NW/SW/OLY)	Eastern Regions (SC/NC/ER)	Ferries HQ	Ferries Terminals/EH/ Whse	Ferries Fleet	Total
Non-Represented/WMS/Exempt	N/A	733	364	129	120	5		**1351**
WFSE	General Government	390	1152	826	11	1		**2380**
PTE Local 17	General Government	232	876	315	21			**1444**
Carpenters	Marine					23		**23**
FASPAA	Marine				2	33		**35**
IBU	Marine				34	335	541	**910**
MEBA Licensed	Marine				3		237	**240**
MEBA Unlicensed	Marine						192	**192**
Metal Trades Unions	Marine					78		**78**
MM&P Masters	Marine				3		72	**75**
MM&P Mates	Marine				2		87	**89**
MM&P Watch Supervisors	Marine				6			**6**
OPEIU	Marine				52	4		**56**
SEIU	Marine					6		**6**
***As of 2/29/16**		**1355**	**2392**	**1270**	**254**	**485**	**1129**	**6885**

Figure 3 - Deployments by CBA and Employee Count (figures in yellow show the initial configuration of the CBA)

As depicted in Figure 3 above, the first implementation builds a strong foundation for the agency by leveraging the Department of Ecology's work and configuring for three employee groups; (1) Non-represented (Non-rep), (2) Washington Federation of State Employees (WFSE), and (3) Professional and Technical Employees Local 17 (PTE Local 17) representing 75 percent of WSDOT's employees. This is concurrent to the design, communication, and training development for all other employee groups (depicted in Figure 1). Once complete, the configuration can then be deployed to each subsequent employee group, minimizing risk with each deployment by rolling the solution out to a controlled number of employees for the first appearance of each CBA. For example, the Inland Boatman's Union of the Pacific (IBU) CBA configuration will be deployed to the 34 employees located at Ferries HQ prior to deploying to the 335 IBU employees located at Ferries' terminals and Eagle Harbor.

Leveraging key lessons learned, this decision package includes necessary key resources (project management, business analysis, external project quality assurance, dedicated test engineering resources, and organizational change management) and accounts for limited backfill of several in-kind FTEs required to support the effort.

Project Background

During the 2011-13 biennium WSDOT was one of two agencies (the other being the Department of Ecology) selected to implement a statewide, configurable, best-of-breed time and attendance system in collaboration with the Office of Financial Management (OFM) and the Department of Enterprise Services (DES). Over the course of the enterprise Time, Leave and Attendance (TLA) project, the state acquired project assets (Workforce EmpCenter Software) and devoted significant time and effort towards enterprise and agency activities, including the development of business requirements, interfaces, testing, training, organizational change management, and functional design. Near the end of the 2013-15 biennium, it was determined by the Office of the Chief Information Officer (OCIO) that an enterprise solution was not the best approach for managing agency-specific time and attendance needs and the enterprise TLA project was discontinued. However, it was decided that agencies could leverage the purchased licenses to implement the solution on a case-by-case basis.

The department requested funding in the 2016 supplemental budget to use existing enterprise assets and complete the implementation of the EmpCenter time and attendance system for non-marine employees providing the foundation for future implementation of all WSDOT employees. The request to implement the system was not funded; however, a small amount of funding was provided with a proviso that the funding be used to develop a 2017-19 budget request to include implementation of <u>all</u> WSDOT employees and include costs to cover software hosting and maintenance services, hardware, configuration, testing, training, deployment, and support costs necessary to deploy the system agency wide.

In support of a new time and attendance system WSDOT focused its efforts to move from using weighted labor rates to recording full labor/payroll costs. However, as this effort progressed during 2016 it became clear that the existing mainframe system (TRAINS) had performance limitations that would force less than desired business decisions. The ultimate solution in the interim (while waiting for EmpCenter implementation) is to refine the existing weighted labor rates and adjust rates more frequently. This 2017-19 request includes costs to implement other alternatives to get WSDOT full distribution of payroll costs. This work stream is shown in Figure 1 as the Labor/Payroll Cost Distribution Activities work stream.

Key Issues to Address

Implementation of the EmpCenter time and attendance system will transform time and attendance activities for all WSDOT employees and will address these key issues:

- Findings and recommendations by the State Auditor's Office (SAO). The SAO recommended implementation of a new labor distribution system with functionality capable of processing for all WSDOT employees. The new system should also address the control objectives outlined below:
    - Improve internal controls surrounding the time entry process
    - Electronic time entry and approval
    - Eliminate duplication of efforts
    - Reduce payroll processing errors to reduce or eliminate CBA grievances
    - Improve accountability

    - Improve information reporting capabilities
    - Properly safeguard timesheets in an electronic environment
- Concerns around compliance with Family and Medical Leave Act (FMLA) leave accruals and liquidations. This is an area of substantial risk as WSDOT uses manual processes to ensure compliance with FMLA standards.
- Inconsistencies and labor intensive nature of the Ferries time audit process. Currently this is a manual comparison between paper timesheets and the current dispatch system. This is time consuming and error prone, and has been the source of grievances by employees negatively impacted by errors. This process is currently supplemented by two part-time resources every payroll period.
- Incomplete and inaccurate timekeeping and payroll data by employee. This impedes timely data-driven decision making which impacts daily operations and impairs the ability to effectively bargain labor issues and manage state resources.
- WSDOT labor systems that were built with heavily customized mainframe common business-oriented language (COBOL) programming in the early 1980s. Due to the customized solution and limited access to additional COBOL developers it is increasingly more difficult for WSDOT to update the existing labor systems to effectively enforce the provisions of WSDOT's 13 CBAs. This has led to numerous grievances, lawsuits and negative media publicity resulting in settlements with the employees and unions.
    - Currently payroll has 29 manual processes/tracking to ensure compliance with CBA regulations that have potential to be automated. In the last five years, WSDOT has been involved in 28 grievances or settlements affecting 120 employees.
- Lack of internal controls in timekeeping processes. This results in the ineffective use of resources to have some level of compensating controls, as well as increased risks for overpayments, underpayments and miscoded charges.
- Lack of alignment with other state agencies. WSDOT is in support of the One Washington project. Moving from the weighted labor rate to full labor/payroll distribution will align WSDOT with other state agencies.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

- Use of a configurable rules engine will enforce consistency and compliance with CBAs, statutes, and rules. Today compliance with CBA is dependent on manual processes that are inconsistent and inefficient. The number of inaccurate or late time entry and labor cost allocations will reduce due to daily entry of time keeping data by personnel.
- Compliance with FMLA leave accruals and liquidations.
- Employees are paid accurately and on time, which will reduce overpayments, underpayments, manual calculations, manual corrections of data and the issuance of petty cash checks.
- With the implementation of EmpCenter, automated reports will be created to compare time and leave information to the existing dispatch system and will integrate even more closely with the future Ferries dispatch system. This drastically increases accuracy and reduces the time spent by the Ferries Division. Efficiency will increase due to effective and efficient internal controls. This will reduce the breadth and volume of the manual compensating controls the department currently has in place.

- The labor systems (LDS and MLS), both built in the early 1980s, will be decommissioned thereby reducing the risk for catastrophic system failure.
- Distribution of actual labor costs each pay period rather than estimated labor costs, thus achieving better alignment and consistency with how other state agencies record labor costs.
- All department staff will have immediate access to the EmpCenter time and attendance system via a workstation or timekeeping device. This will facilitate timely recording of hours worked and leave taken. Efficiency will increase due to personal entry of time, leave, and attendance data using automated workflow.
- All department staff will have real time access to leave balances which will provide them with the ability to more effectively plan and manage their leave balances. This ensures that the department does not pay employees when they should be in leave without pay status.
- Management will have robust exception and performance reporting of time and attendance activities.
- Simplicity of updating CBA contract changes in the system and having them in place on time to reflect properly on the first impacted pay period for the change. Historically, there has been a four- to five-month lag between approved CBA changes and the updates in the timekeeping systems.

Performance Measure Detail

- Reduction in errors for employee pay. During fiscal year 2016, approximately 5,000 errors were corrected by payroll, an average of 210 per pay period.
- Reduction in the number of petty cash checks issued on pay day. During fiscal year 2016, the department issued over 400 petty cash checks.
- Reduction in grievances and payouts due to inconsistent application of CBA rules. In the last five years, the department has been involved in 28 grievances or settlements affecting 120 employees. Reduction in time spent by the Human Resources and Labor Relations offices responding to and resolving grievances related to system limitations of supporting CBA rules.
- Ability to respond to requests for payroll information (legislative, union, audit, public) more timely and with greater accuracy. Currently, limitations on the availability of data in the system reduce the department's ability to bargain effectively.
- Elimination of timesheets that must be manually entered into the system. Currently an average of 32,000 timesheets are keyed by timekeepers and payroll staff into WSDOT labor systems every pay period. Department staff can have multiple timesheets when their time is coded to different projects and work orders. There would be no physical timesheets thereby eliminating double entry (completing the timesheet and keying into the system).
- Reduction in the number of overpayments. On average, payroll staff handle 20 overpayments to employees each pay period.
- Reduction of the 29 manual processes currently needed to comply with CBAs.
- Better use of timekeeper resources. Timekeeping is just one of many tasks performed by support staff. The time they currently spend keying timesheets for office staff will be available to work on other key activities and project deliverables for the office. The department has 175 staff who spend 2-4 days a month on timekeeping activities for WSDOT's 640 organizations.
- Reduction in paper usage. Currently, approximately 5,000 pieces of paper are used each month to print required reports and over 63,000 pieces of paper are used to print timesheets.

Identify important connections or impacts related to this proposal.

It is important to note that the WSDOT Ferries Division is procuring a new dispatch and advanced scheduling system. This new labor system (EmpCenter) will align with their implementation timeline and provide a solid foundation for data integration between the systems.

This decision package also aligns with WSDOT Information Technology Division's Business Intelligence Support Decision Package. The reporting solutions, personnel, and software being used for the Labor Systems Replacement project also provide a key foundation for other WSDOT reporting and business intelligence needs. If implemented, this functionality would benefit the rest of the agency by providing a platform to deliver better and faster data for all other systems in use. There is no duplication of software, hardware, or personnel between this (LSR) decision package and the Business Intelligence Support Decision Package.

The following have been identified as key stakeholders impacted by this proposal.

- State of Washington taxpayers
- WSDOT employees
- Office of Financial Management
- Department of Enterprise Services
- Washington Technology Services (WaTech)
- State Auditor's Office (SAO)
- Collective bargaining units

This decision package provides remediation to the following:

- 2005 Critical Applications Modernization and Integration Strategy
- 2007 WSDOT Administration and Overhead Performance Audit conducted by the SAO
- 2009 Critical Applications Implementation – Feasibility Study
- 2009 Time, Leave, and Labor Distribution Feasibility Study

This decision package also supports the significant time and effort WSDOT has spent on enterprise and agency activities, including the development of business requirements, interfaces, testing, training, organizational change management, and functional design as part of the following:

- 2011-15 Time, Leave and Attendance Enterprise Project
- 2014-16 Weighted Labor to Actual Labor Project

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

Alternative 1 - Invest in WSDOT's current labor systems (LDS and MLS).
The WSDOT labor systems were built in the early 1980s and built with COBOL programming language operating on a mainframe platform. History has proven that modifying these programs to handle the complexities of the CBAs is very difficult and expensive. Making modifications to the labor systems also involves modifications to other interfacing financial systems. Because the department has very limited access to COBOL programmers and a limited number on staff, dedicating these resources to working on upgrading the current labor systems would limit support for other critical WSDOT applications.

Alternative 2 - Use the existing EmpCenter time and attendance solution.
The state of Washington purchased EmpCenter in 2015 as part of the TLA Enterprise Project. The department has devoted significant time and effort to the development of the business requirements, interfaces, testing, training, organizational change management and functional design. During this time

the department also invested significant work effort to convert from its weighted labor rate to actual labor in preparation for the implementation of EmpCenter.

In addition, WSDOT will leverage the work already completed by the Department of Ecology which is currently implementing EmpCenter. This implementation includes the configuration of EmpCenter for two CBAs that are also used by the department.

The department recommends Alternative 2, as it is the most appropriate alternative for the following reasons:

- The State of Washington already purchased EmpCenter.
- The Department of Ecology is currently implementing EmpCenter.
- The department can use some of the CBA configurations set up by the Department of Ecology.
- EmpCenter provides the ability to have real time access to scheduling and leave balances.
- The department will be able to retire its antiquated labor systems (LDS and MLS).
- The department can leverage previous efforts of development of business requirement and functional design.
- EmpCenter provides ease of configuration for changes to CBA rules allowing for reduced grievances and lawsuits.
- EmpCenter is built on a modern scalable technology which allows for greater payroll detail than existing systems.

What are the consequences of not funding this request?

Substantial Risks:

- The department may be found non-compliant with the mandatory federal and state requirements for tracking FMLA leave accruals and liquidations increasing the risk of grievances and potential loss of federal funding.
- The department may be found non-compliant with CBAs increasing the risk of grievances being filed and of labor unions raising a past practices argument during labor negotiations.
- The department could face catastrophic labor system failure, resulting in the inability to accurately pay WSDOT employees.
- WSDOT systems are manual and labor intensive with limited validations at the time of entry, resulting in the miscalculation of pay, overtime being earned but not paid, and overuse of leave.
- The department's existing systems will continue to lack adequate internal controls. As noted in the SAO's 2007 WSDOT Administrative and Overhead Performance Audit, WSDOT's current timekeeping systems lack a number of typical controls such as having a systematic process for reviewing and approving changes to time sheets, and an audit trail of initial entries and any subsequent changes.

Moderate Risks:

- The department may be found non-compliant with the Federal Fair Labor Standards Act, which mandates that all employees need to submit time records for hours worked and leave taken. Because the current systems do not have electronic signature capability, agencies are either using a separate system to track time sheets or printing, signing and storing paper time sheets for all overtime eligible employees.
- The department has limited ability to obtain COBOL programmers to support the existing labor systems.

Expenditure Calculations and Assumptions

Budget Assumptions:

- A Gantt (timeline) chart was developed using MS Project and broken out by month for the entire duration of the project.
- The budget was built based off of detailing each role, license, and service required with a specific rate for each.
- Each role was costed out month by month for every month of the project based on the timeline. This allowed for estimates specific to the month, activities, and other dependencies to be built in.
- Once the detail was calculated, the totals, by fiscal year, were summarized and categorized for inclusion in this request.
- A total of nine agency FTE roles were added to support the project covering specific roles in information technology, human resources, and financial services divisions. This is in addition to funding to support/backfill agency subject matter experts (including Ferries Division). These roles are a combination of project and backfill positions.
- After project implementation, these agency resources will shift to more proactive, analytical roles in support of other critical project delivery and business process support.
- Any savings related to decommissioning the old LDS and MLS systems are assumed to be negligible. These systems are only two out of dozens that are supported by a small number of IT staff.

Project Assumptions:

- The retroactive dating functionality in HRMS will be completed as part of the Department of Ecology implementation.
- Configuration from the Department of Ecology implementation will be used in the WSDOT implementation.
- The actual labor functionality would leverage EmpCenter as the new labor system.
- Scope of work does include coordination with Ferries on the implementation of a new advanced scheduling and dispatch system that will integrate with EmpCenter. The Scope of work does not include the cost of an advanced scheduling and dispatch solution. Those costs will be included in the Dispatch System Decision Package.
- Scope includes exception time reporters (staff not required to submit detailed time records and positive time reporters (staff who are required to submit detailed time records).
- Project management, business analysis, organizational change management, and software quality assurance resources have in-depth knowledge of the WSDOT configuration, historical project information, and possess expert level skillsets.
- WSDOT will train and maintain EmpCenter configuration resources to ensure the agency has skilled system support resources after implementation.
- Costs do not include any interagency payments other than resources to execute project work.
- The contracts for vendor services (e.g. WorkForce Software) used for the non-marine will be extended for the marine implementations.
- During the peak season for Ferries
    - Cutover and go live is not possible.
    - End user training is possible, but at extended durations to accommodate schedules.
    - All project resources are available with the exception of limited availability of subject matter experts, change agents, and end user stakeholders

- Organizational Change Management (OCM) is a critical component to success. Outreach to stakeholders and union representatives will be emphasized.
- WSDOT implementation will use Department of Ecology enterprise integration elements put into place by WaTech for integration with EmpCenter.
- Inhabits a separate instance of the solution and therefore does not have dependencies on other instances configuration, master data, etc. (e.g. Ecology).

Cost Breakouts

Table 1: Project Objects of Expenditure ($1,000)
Amounts below do not include maintenance & operations costs. M&O costs are shown in tables 5 and 6 below.

	OBJECT OF EXPENDITURE DETAIL					
Object of Expenditure	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**2017-19**	**2019-2021**
A - Salaries and Wages	657	657	657	218	1,314	875
B - Benefits	267	267	267	89	534	357
C - Personal Service Contracts	3,614	3,837	3,561	841	7,451	4,402
E - Goods and Services	473	576	401	246	1,049	647
G - Travel	72	72	72	18	144	90
J - Capital Outlay	20	0	0	0	20	0
Total by Object	**5,103**	**5,409**	**4,958**	**1,412**	**10,512**	**6,371**

Table 2: Project Salary and FTE Detail FTEs Dollars* ($1,000)

Positions by Classification	FY 2018	FY 2019	FY 2018 Dollars	FY 2019 Dollars	Total Dollars
Fiscal Analyst 5 (Subject Matter Expert)	1.0	1.0	93	93	185
Fiscal Analyst 5 (Subject Matter Expert)	1.0	1.0	93	93	185
Fiscal Analyst 3 (Subject Matter Expert)	1.0	1.0	82	82	164
Human Resource Consultant 4 (Configurator)	1.0	1.0	97	97	193
Human Resource Consultant 4 (Subject Matter Expert)	1.0	1.0	97	97	193
IT Specialist 5 (Extract, Transform, Load Analyst)	1.0	1.0	114	114	229
IT Specialist 5 (Business Intelligence Reporting Specialist)	1.0	1.0	114	114	229
IT Specialist 5 (Business Analyst)	1.0	1.0	114	114	229
WMS Band 2 (Ferries Subject Matter Expert)	1.0	1.0	121	121	241
Total	**9.0**	**9.0**	**924**	**924**	**1,849**

*Backfill FTE Salaries only

Table 3: Project Costs by Area ($1,000)

Amounts below do not include maintenance & operations costs. M&O costs are shown in tables 5 and 6 below.

PROJECT COSTS BY AREA						
	FY2018	FY2019	FY2020	FY2021	2017-19	2019-21
Agency Resources & Backfill	924	924	924	308	1,849	1,232
Business Analysis	346	461	461	115	806	576
Data Warehouse Maintenance	0	74	146	146	74	292
Data Warehouse Upgrade	383	369	0	0	752	0
Extract, Transform, Load/Reporting	144	192	120	16	336	136
External Project Quality Assurance	86	115	115	38	202	154
Hardware	20	0	0	0	20	0
Information Technology	163	163	163	54	326	218
Organizational Change Management	545	569	569	176	1,114	745
Project Management	468	540	540	156	1,007	695
Solution Configuration	778	979	806	94	1,757	900
Solution Hosting	62	87	157	61	149	218
Solution Maintenance	28	46	98	39	74	137
Testing/Software Quality Assurance	374	499	499	146	874	645
Travel	72	72	72	18	144	90
WaTech	337	217	216	32	365	248
WSDOT Development	373	102	71	14	475	85
Grand Total	**5,103**	**5,409**	**4,958**	**1,412**	**10,512**	**6,370**

Table 4: Project Costs by Category ($1,000)

Amounts below do not include maintenance & operations costs. M&O costs are shown in tables 5 and 6 below.

PROJECT COSTS BY CATEGORY						
	FY2018	FY2019	FY2020	FY2021	2017-19	2019-21
Data Warehouse Upgrade	383	369	0	0	752	0
Data Warehouse Upgrade Maintenance	0	74	146	146	74	292
EmpCenter	62	87	157	61	149	218
EmpCenter Maintenance	28	46	98	39	74	137
Hardware	20	0	0	0	20	0
Personnel	4,538	4,761	4,485	1,148	9,299	5,633
Travel	72	72	72	18	144	90
Grand Total	**5,103**	**5,409**	**4,958**	**1,412**	**10,512**	**6,370**

Table 5: Maintenance & Operations Out Biennia FTE Dollars ($1,000)

OUT BIENNIA FTES				
	FTEs		Dollars	
Positions by Classification	**2019-21**	**2021-2023**	**2019-21**	**2021-2023**
Fiscal Analyst 5 (Subject Matter Expert)	0.0	0.0	0	0
Fiscal Analyst 5 (Subject Matter Expert)	0.0	0.0	0	0
Fiscal Analyst 3 (Subject Matter Expert)	0.0	0.0	0	0
Human Resource Consultant 4 (Configurator)*	0.3	1.0	59	178
Human Resource Consultant 4 (Subject Matter Expert)	0.0	0.0	0	0
IT Specialist 5 (Extract, Transform, Load Analyst)*	0.3	1.0	76	232
IT Specialist 5 (Business Intelligence Reporting Specialist)	0.0	0.0	0	0
IT Specialist 5 (Business Analyst)	0.0	0.0	0	0
WMS Band 2 (Ferries Subject Matter Expert)	0.0	0.0	0	0
Total	**0.7**	**2.0**	**135**	**411**

*Agency resources to provide ongoing support for the EmpCenter configuration and reporting infrastructure

Table 6: Maintenance & Operational Costs* ($1,000)

COST OBJECT	TITLE	FY2021	FY2022	FY2023	2019-21	2021-23
A	**Salaries & Wages**	96	145	149	96	293
B	**Employee Benefits**	39	58	60	39	117
C	**Personal Services Contract**	0	0	0	0	0
E	**Goods & Services**	119	377	388	119	765
	Hosting fee	80	133	137	80	270
	Maintenance (EmpCenter)	39	98	101	39	199
	Time capture hardware annual support	0	0	0	0	0
	Data Warehouse Maintenance	0	146	150	0	296
	Other fees	0	0	0	0	0
G	**Travel**	0	0	0	0	0
J	**Capital Outlays**	8	8	8	8	16
T	**Interagency Reimbursements**	0	0	0	0	0
	TOTAL	**262**	**587**	**605**	**261**	**1,192**

*Costs include an annual 3% increase

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

One-time costs include salaries and benefits, personal service contracts, and travel as detailed in the tables above. Ongoing costs include goods and services for EmpCenter licensing and hosting fees, data warehouse environment upgrade maintenance fees, and hardware (server) replacement (4-year cycle). Maintenance and operational costs are detailed at the end of this document. Maintenance and operations costs include a fulltime resource to maintain and manage the EmpCenter configuration (support and updates to CBAs) and a BI Reporting specialist to manage the extensive reporting infrastructure put into place by the project.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: N2 WSDOT Labor System Replacement

Base Budget: Currently there are multiple staff supporting the existing labor systems at the department and support for the labor systems is just one of the many activities completed by staff. Since the department does not budget at this granular level (in other words, we don't budget or record expenses for staff support directly for the two labor systems), we aren't able to provide the base budget exclusive to the two existing labor systems. However, once the project is implemented, support duties for the new system will simply replace support duties for the existing systems.

In addition, support for the labor systems is included in staff duties with support for numerous other systems including, but not limited to:

- Minor Capital
- Consumable Inventory System
- CAPS - Contract Admin and Payment Sys
- Employee Master File/Personnel Information System
- Budget Expend and Revenue Sys (WSF)
- Trans Allotment and Allocation Control System
- TRAINS
- Interfaces:
    - OMWBE
    - BATS (Materials Lab)
    - IRIS (Real Estate)
    - TARTS (OFM)
    - ETCC (Tolling)
    - eSnoopi (Permits)
- Contractor Pre-Qualification System
- Construction Contracts Info Sys (CCIS)
- Monthly Construction Reporting
- Capital Program Management Sys (CPMS)
- Federal Reporting System
- Transportation Information Planning and Support System (TRIPS)
- System Development Center Routines (SDC) Common Routines
- IT Account Master
- Administrative Support
- Central Operations Support
- Employee Phone Book

What are other important connections or impacts related to this proposal? Please complete the following table and provide detailed explanations or information below:

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	Yes	This initiative will improve the department and state's ability to make data-driven business decisions through access to timely, complete and accurate timekeeping data driven by automated controls. This includes better data for OFM, the Legislature, and the Federal government in matters of implementing new labor initiatives and reporting on labor specifics from the department.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	This request uses functionality previously put into place at/by WaTech. Additional changes are not expected. This request also includes funding for WaTech resources to support the testing efforts for the project, but only the WaTech systems. All other aspects will be handled by the project.

Responds to specific task force, report, mandate, or exec order?	Yes	• Findings and recommendations by the State Auditor's Office (SAO). SAO recommended implementation of a new labor distribution system with functionality capable of processing all WSDOT employees. The new system should also address the control objectives outlined below:
		  o Improve internal controls surrounding the time entry process
		  o Electronic time entry and approval
		  o Eliminate duplication of efforts

		o Reduce payroll processing errors to reduce or eliminate CBA grievances o Improve accountability o Improve information reporting capabilities o Properly safeguard timesheets in an electronic environment • Concerns around compliance with Family and Medical Leave Act (FMLA) leave accruals and liquidations. This is an area of substantial risk as WSDOT uses manual processes to ensure compliance with FMLA standards.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	This request would be implementing the current provisions of the collective bargaining agreements, and any future changes.
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		It is important to note that WSDOT Ferries Division is procuring a new dispatch and advanced scheduling system. This new labor system (EmpCenter) will align with their implementation timeline and provide a solid foundation for data integration between the systems. This decision package also aligns with WSDOT Information Technology Division's Business

		Intelligence Support Decision Package. The reporting solutions, personnel, and software being used for the Labor Systems Replacement project also provide a key foundation for other WSDOT reporting and business intelligence needs. If implemented, this functionality would benefit the rest of the agency by providing a platform to deliver better and faster data for all other systems in use. There is no duplication of software, hardware, or personnel between this (LSR) decision package and the Business Intelligence Support Decision Package. The following have been identified as key stakeholders impacted by this proposal. • The state of Washington taxpayers • WSDOT employees • OFM • DES • Washington Technology Services (WaTech) • SAO • Collective bargaining units This decision package provides remediation to the following: • 2005 Critical Applications Modernization and Integration Strategy • 2007 WSDOT Administration and Overhead Performance Audit conducted by the SAO • 2009 Critical Applications Implementation – Feasibility Study • 2009 Time, Leave, and Labor Distribution Feasibility Study This decision package also supports the significant time and effort WSDOT has spent on enterprise and agency activities, including the development of business requirements, interfaces, testing, training, organizational

		change management, and functional design as part of the following: • 2011-15 Time, Leave and Attendance Enterprise Project • 2014-16 Weighted Labor to Actual Labor Project

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

	FY 2018	FY 2019	FY 2020	FY 2021	2017-2019	2019-2021
Agency Backfill	343	343	343	114	687	458
Business Analysis	346	461	461	115	806	576
Data Warehouse Maintenance	0	74	146	146	74	292
Data Warehouse Upgrade	383	369	0	0	752	0
ETL/Reporting	144	192	120	16	336	136
External Project QA	86	115	115	38	202	154
Hardware	20	0	0	0	20	0
IT	163	163	163	54	326	218
OCM	545	569	569	176	1,114	745
Project Management	468	540	540	156	1,007	695
Solution Configuration	778	979	806	94	1,757	900
Solution Hosting	62	87	157	61	149	218
Solution Maintenance	28	46	98	39	74	137
Testing/QA	374	499	499	146	874	645
WaTech	337	217	216	32	365	248
WSDOT Development	373	102	71	14	475	85
Grand Total	**4,278**	**4,739**	**4,305**	**1,202**	**9,017**	**5,507**

The costs in the above table are the IT-specific costs for this project. The in-kind costs or agency backfill for non-IT (i.e. Human Resources Consultants and Fiscal Analysts) are excluded from this table. Those costs are, however, itemized in the decision package.

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☒Yes ☐ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☒Yes ☐ No

   If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: N4 Design-Build Project Delivery
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: H – Program Delivery Mgmt & Support

Agency Recommendation Summary Text:

The department requests spending authority to improve implementation of design-build project delivery. The proposal is based on preliminary recommendations from the *2016 Review of WSDOT's Implementation of Design-Build Project Delivery*, conducted by Hill International for the Joint Transportation Committee.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 108-1 MVA-State	241,000	237,000	478,000	237,000	237,000
Total Cost	241,000	237,000	478,000	237,000	237,000
Staffing FTEs	2.0	2.0	2.0	2.0	2.0
Program H - Operating					
Fund 108-1 MVA-State	241,000	237,000	478,000	237,000	237,000
Total by Fund	241,000	237,000	478,000	237,000	237,000
Staffing FTEs	2.0	2.0	2.0	2.0	2.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	154,000	154,000	308,000	154,000	154,000
B. Employee Benefits	61,000	61,000	122,000	61,000	61,000
E. Goods and Services	14,000	14,000	28,000	14,000	14,000
J. Capital Outlays	12,000	8,000	20,000	8,000	8,000
Total Cost	241,000	237,000	478,000	237,000	237,000
Program H - Operating					
A. Salaries and Wages	154,000	154,000	308,000	154,000	154,000
B. Employee Benefits	61,000	61,000	122,000	61,000	61,000
E. Goods and Services	14,000	14,000	28,000	14,000	14,000
J. Capital Outlays	12,000	8,000	20,000	8,000	8,000
Total by Program	241,000	237,000	478,000	237,000	237,000

Package Description

This request is to put into place improvements to WSDOT's support structure and processes needed to effectively deliver design-build projects, consistent with preliminary recommendations from the *2016 Review of WSDOT's Implementation of Design-Build Project Delivery*, conducted at the request of the Joint Transportation Committee. The additional appropriation authority will enable the department to develop policies, guidance, and provide training to support delivery of WSDOT's design-build construction contracts.

Currently, the WSDOT Headquarters group provides design and construction oversight for design-build projects but has limited design-build policy or guidance in place. With the recent Connecting Washington funding package, coupled with clear legislative direction to utilize design-build as a delivery method, WSDOT anticipates a significant expansion in the number of design-build projects. The delivery of design-build projects in Regions that have not previously used design-build delivery adds to the immediate need for an established agency-wide approach. Providing headquarters-level guidance in these areas ensures consistent behavior across the state in how design- build projects are developed, procured, and administered.

The design-build group in the State Construction Office currently consists of two staff members. Approval of the request will allow the creation of two positions added to this group. This staffing increase is necessary to adequately resource the design-build group and to ensure that policy, guidance, and training is developed quickly. The department anticipates that many design-build projects will be delivered over the next several years; developing the policy, guidance, and training on an aggressive schedule will get this support in place ahead of these upcoming projects.

In addition to the need for initial development of the policy, guidance, and training, there is also a long-term need for support of design-build delivery, consistent with the recommendations outlined in the *2016 Review of WSDOT's Implementation of Design-Build Project Delivery*. This includes the ongoing efforts to update and improve policy and guidance over time, headquarters oversight and stewardship responsibilities on design-build projects, and outreach with industry groups such as the Association of General Contractors and the American Council of Engineering Consultants.

Please see attachment A for a summary of the preliminary recommendations. Approval of this decision package will enable the department to largely address those needs identified in the first section of the recommendations, found on page one of the attachment.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Approval of the request will allow WSDOT to develop and implement design-build policy, guidance, and training using an aggressive schedule that ensures those tools are in place as quickly as possible to support the anticipated increase in design-build delivery. Some of the major items of work include:

- Developing HQ Construction and FHWA approved design-build contract language that can be used by all project offices delivering design-build projects.
- Producing a Design-Build Manual that outlines how WSDOT administers design-build projects. This will cover all aspects of design-build delivery, including preliminary design, procurement, design review, construction administration, quality, and project closeouts.
- Developing training modules to provide WSDOT staff with the education and information they need to successfully deliver design-build projects.
- Restructuring how WSDOT measures quality on design-build projects. The tools currently used to measure quality are outdated and lack the functionality of modern tools available to owners of design-build projects.

In addition to these major work items, this appropriation authority will also support:

- Continual updating and improvement of the elements described above.
- Development of tools to streamline the procurement process for smaller design-build projects ($20 million and less), as the current design-build procurement process is overly complex for smaller projects.
- Direct support to design-build projects during project development, procurement, and contract administration.
- Ongoing outreach with industry partners related to design-build delivery.
- Establishment of simple databases to share lessons learned and a catalogue of Alternative Technical Concepts (ATCs) submitted by contractors during the procurement process.

One of the primary roles of the State Construction Office is to ensure consistent and uniform behavior in how construction contracts are administered across the state. Consistent behavior by WSDOT is critical to promote contractor interest in WSDOT projects and to ensure the department is getting the most competitive bids possible. Establishing the design-build policy, guidance, and training is an important step in achieving this consistent behavior. An increase in efficiency is also expected as the work products developed with approval of this package will significantly reduce the effort it takes for a project office to develop and deliver a design-build project.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

This proposal is expected to be a benefit to all stakeholders. No negative impacts are anticipated. The increased support in design-build policy, guidance, and training is consistent with the preliminary recommendations of the *2016 Review of WSDOT's Implementation of Design-Build Project Delivery*.

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

WSDOT considered using short-term consultants to assist with developing the design-build policy, guidance, and training. The pros with this option are that it could address the immediate need of generating the necessary documentation of needed policy and guidance, as well as the training modules. The cons are that this does not provide the needed level of long-term support for the design-build program. Also, short-term consultants would not be familiar with the WSDOT organization or be able to provide direct support to design-build projects during project development, procurement, and contract administration. Finally, using short-term consultants is not consistent with the preliminary results of the Joint Transportation Committee study that indicates that WSDOT has an inadequate staffing level for a design-build program of our size.

What are the consequences of not funding this request?

The consequence of not funding this package is that it will take considerably longer to develop design-build policy, guidance, and training. Delaying development of these materials means that robust guidance will not be in place for the projects that will be delivered in the next several years. This will extend inefficiencies and lack of consistency in how design-build projects are developed and administered. In addition, without the additional resources, it will be difficult for the State Construction Office to provide direct support to design-build projects during project development, procurement and contract administration.

Expenditure Calculations and Assumptions

Expenditures assumptions include salaries and benefits for one Transportation Engineer 4 and one Transportation Planning Specialist 3 as well as standard FTE-related expenses for supplies and materials, telephone and postage, and computer and IT equipment totaling $241,000 in fiscal year 2018 and $237,000 per-year thereafter.

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

One-time costs for computer purchases in the amount of $2,000 per-FTE are shown in year one (fiscal year 2018). All other costs are assumed to be ongoing.

Summary of Recommendations

	Recommendation	Implementation					Benefits
		Action	Timing	Cost*	Difficulty	Status	
(1) Staffing	Increase DB Headquarters staff	Policy	Short-term	$$	M	Underway	❶ ❷
	Designate technical experts within DOT to support DB teams	Policy	Intermediate	$	L	Underway	❶ ❷
	More widely disperse DB skills and expertise across the Regions	Policy	Long-term	$$$	H	---	❸ ❹ ❺ ❻
	Offer DB credentials and experience (rotation) as part of career development/retention plans	Policy	Short-term	$$$	H	---	❸ ❹
	Optimize use of consultants	Policy	Intermediate	$	L	---	❷ ❹
(2) Training	Develop formal statewide training materials (Basics & Advanced Topics)	Policy	Intermediate	$$	M	Underway	❷
	Conduct DB training	Policy	Long-term	$$	M	---	❷ ❹
	Conduct project-specific workshops for large or complex DB projects	Policy	Intermediate	$	M	---	❷ ❸ ❹
	Expand mentoring, shadowing, and peer-to-peer exchanges	Policy	Long-term	$	M	---	❷ ❸ ❹
(3) Policies and Procedures	Finalize standard procurement and contracting templates, while considering: - Introducing more flexibility - Incorporating performance requirements	Policy	Short-term	$	M	Underway	❷ ❸
	Finalize and issue updated DB manual	Policy	Intermediate	$$	M	---	❷
	Develop and implement an internal and external rollout strategy for programmatic documents	Policy	Intermediate	$	L	---	❷ ❸

*Note: This is cost of implementation and may or may not require an appropriation

	Recommendation	Implementation					Benefits
		Action	Timing	Cost*	Difficulty	Status	
(4) Project Development	Perform appropriate levels of front-end investigation	Policy	Short-term	$$	L	---	❻ ❼
	Develop and implement performance specifications	Policy	Intermediate	$$	M	---	❻ ❽
	Consider market conditions and availability of DOT resources when determining the scope and size of contract packages	Policy	Long-term	$	L	---	❼ ❾
(5) Project Delivery and Procurement	Streamline procurement process for small DB projects (e.g., expand shortlist, pass/fail qualifications criteria, or use an accelerated process)	Legislative / Policy	Intermediate	$$	M	---	❸ ❻ ❾
	Experiment with alternative DB delivery and procurement methods (e.g., bundling, low bid, single step)	Legislative / Policy	Intermediate	$$	M	---	❸ ❺
	Refine evaluation criteria: - Assign greater weight to qualifications and technical evaluation criteria when seeking innovation - Include the prior working relationship of the DB team	Policy	Short-term	$	L	---	❼ ⓫ ⓬
	Develop guidance to address Practical Design reviews for DB projects (including how process ties to scoping and project development)	Legislative / Policy	Short-term	$$	M	Underway	❻

*Note: This is cost of implementation and may or may not require an appropriation

	Recommendation	Implementation					Benefits
		Action	Timing	Cost*	Difficulty	Status	
(6) Performance Monitoring	Conduct a systematic comparison of DB, design-bid-build, and GC/CM and refine manual and PDMSG as appropriate	Policy	Long-term	$$$	M	---	❸
	Establish a database of DB lessons-learned	Policy	Long-term	$$	M	Underway	❶ ❷ ❸
	Examine if Engineer Estimates are resulting in an over-allocation of funds and refine estimating process as necessary	Policy	Long-term	$$	M	---	❿
	Establish a database of ATCs	Policy	Long-term	$$	M	Underway	❷ ❸
(7) Budgeting	Conduct informational meetings with legislative staff and WSDOT OFM to consider adjustments in appropriations for DB projects	Policy	Short-term	$	M	---	❿
(8) Project Execution	Dedicate staff as necessary to the full project-lifecycle (design and construction phases)	Policy	Short-term	$	M	---	❸ ❹ ⓬
	Dedicate experienced staff with delegated authority to the design oversight function	Policy	Intermediate	$$	M	---	❷ ❸ ❹
	Optimize quality management for smaller projects	Policy	Intermediate	$	L	---	❸ ❻

*Note: This is cost of implementation and may or may not require an appropriation

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Design Build Project Delivery

Base Budget: This proposal seeks to expand staffing levels from two to four FTEs.

The State Construction Offices design-build unit currently consists of the Design Build Program Manager (WMS3) and one Design Build Engineer (TTE).

2015-17 Base Budget

Program H - Operating	FY 2016	FY 2017	2015-17 Total
Fund 108-1 MVA-State	289,000	294,000	583,000
Staffing FTEs	2.0	2.0	2.0

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	Yes	The tools and documents produced from this effort will be available for use by other local agencies.
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	Yes	Joint Transportation Committee Report, *Review of WSDOT's Implementation of Design-Build Project Delivery*
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:

Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections	None	

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Computer workstations (2), year 1 only	4,000	0	0	0
Standard FTE-related IT costs (data, software licenses, support, etc.), ongoing	8,000	8,000	8,000	8,000
Total Cost	**12,000**	**8,000**	**8,000**	**8,000**

Note: Source is WSDOT budget office "Standard Cost 2015" guidance document for estimating standard FTE related IT costs.

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☐Yes ☒No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: N6 WSF Dispatch System Replacement
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: W – Ferries Construction

Agency Recommendation Summary Text:

This request is for the acquisition and implementation of a new, off-the-shelf, employee crew dispatch system to be purchased from an outside vendor. It will replace the existing ferry crew Automated Operation Scheduling System that does not meet the processing and reporting needs of Washington State Ferries (WSF).

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 099-1 PSCC-State	681,000	1,098,000	1,779,000	1,241,000	1,384,000
Total Cost	681,000	1,098,000	1,779,000	1,241,000	1,384,000
Staffing FTEs	1.0	1.0	1.0	0.0	0.0
Program W - Capital					
Fund 099-1 PSCC-State	681,000	1,098,000	1,779,000	1,241,000	1,384,000
Total by Fund	681,000	1,098,000	1,779,000	1,241,000	1,384,000
Staffing FTEs	1.0	1.0	1.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
A. Salaries and Wages	86,000	86,000	172,000	0	0
B. Employee Benefits	32,000	32,000	64,000	0	0
C. Professional Service Contracts	555,000	723,000	1,278,000	688,000	342,000
E. Goods and Services	0	0	0	45,000	135,000
J. Capital Outlays	8,000	257,000	265,000	508,000	907,000
Total Cost	681,000	1,098,000	1,779,000	1,241,000	1,384,000
Program W - Capital					
A. Salaries and Wages	86,000	86,000	172,000	0	0
B. Employee Benefits	32,000	32,000	64,000	0	0
C. Professional Service Contracts	555,000	723,000	1,278,000	688,000	342,000
E. Goods and Services	0	0	0	45,000	135,000
J. Capital Outlays	8,000	257,000	265,000	508,000	907,000
Total by Program	681,000	1,098,000	1,779,000	1,241,000	1,384,000

Package Description

The department's Ferries Division employs over 1,500 employees to provide safe and reliable ferry service on nine different routes, providing important transportation links for Puget Sound communities. The department is currently operating with a ferry crew dispatch system, the Automated Operation Scheduling System (AOSS) that no longer meets the processing and reporting needs of the department. Appropriation authority is requested to acquire and implement a new ferries crew dispatch system to

replace AOSS, which cannot be cost effectively modified to meet the current business needs of the ferry system.

The Governor has expressed concern over the number of sailings that have been cancelled due to a shortage of crew, often a failure of the dispatching system. Improving the dispatching process should reduce the number of sailings cancelled due to a crew shortage and should also reduce the amount of overtime labor including the increased mileage costs currently paid, by having a system that identifies employees who are closer to the relief location. Dispatching is critical to ferry system operations. It requires a match of sufficiently qualified United States Coast Guard (USCG) required crew to the regular service schedule, as well as other system needs such as movement of vessels to shipyards and to Eagle Harbor for maintenance and repair. Dispatching affects year-round employees, regular reliefs, and on-call staff, and is challenging because of union rules governing who can be dispatched, in what order, the ability of employees to turn down assignments, and limited ability to move employees.

WSDOT is requesting appropriation authority for the acquisition and implementation of a new, off-the-shelf, employee crew dispatch system to be purchased from an outside vendor. It will replace the existing ferry crew AOSS that does not meet the processing and reporting needs of WSF. The AOSS architecture is incompatible with Washington state human resource systems and WSF marine payroll systems. This makes validation of crew timesheets and pay requests a manual inspection process, which is labor-intensive and increases the risk of error. The system does not integrate with other WSF and department information systems, and it is not web based. It has limited reporting capabilities. The base architecture needs to be streamlined as it does not easily accommodate changes in business rules such as updates to union and regulatory requirements. It does not support terminal dispatch and does not allow for automated tracking of licensure and training to verify employee credentials for assignment, per USCG requirement.

The proposed new system will be a web-based system compatible with existing state systems. This will eliminate manual validation of crew timesheets and pay requests. It will include above- and below-deck and terminal operations dispatch features that will integrate with human resources and payroll systems as well as other department information systems. It will facilitate exception reporting for payroll audit functions and fully automate USCG mandated licensure, certification, and training requirement verification. It will automate Terminal Operations' dispatch functions and will accommodate emerging regulations and rules along with changes to collective bargaining agreements. The dispatch system will be centralized. The web-based system would allow quarterly job bidding and scheduling for the terminal staff in addition to the deck staff. It will align with the WSDOT Labor System Replacement project timeline, will support data integration with the new labor system (EmpCenter), improve maintenance and support, and be cost effective to meet business needs of the ferry system.

A prior project, WINDS (Washington State Ferries Integrated Dispatch System), which was requested and approved in the 2007-09 biennium, to replace the dispatch system was not successful. As a result of that experience, the department has identified the following features that have been incorporated into the current request to ensure a successful outcome:

- Executive sponsorship and support;
- Project management oversight;
- Quality assurance;
- A dedicated ferry business program liaison; and
- Organizational change management (OCM).

The current proposal addresses these features in the following ways:

- Quality assurance will be addressed by engaging experienced professionals in multiple disciplines: a business analyst; an external quality assessor; and a dedicated tester. The business analyst will be a key resource to capture and validate requirements during the design phase and through the build-out. This person will constantly monitor the functions of identified product features to ensure that functionality can be traced back to the original requirements. The dedicated contract test engineer will ensure that each requirement has a user case that can be executed leading up to, and during, product implementation. An external quality assessor will be engaged on this project to provide regular review of the processes and procedures being used to meet the project goals; this role conforms to requirements of the state's Office of the Chief Information Officer (OCIO) for projects of this scope.
- Strong project management and oversight will be achieved with the attention of a dedicated project manager and steering committees from the project, program, and executive levels to evaluate the course of the project, and identify and mitigate risks.
- A dedicated ferry business liaison position will be established to ensure that organizational change management is fully addressed through the project. This person will handle all issues arising from changes required in WSF's complex operations and the contracted services and products, in order to assist in communicating system needs and requirements. The business liaison will assure that training and fundamental concept-of-operations of the new system are communicated throughout the division and understood by all affected teams and staff. This person will work directly with The Howells Group, external OCM consultants, to assure management that activities and communications are consistent and complementary. The funding requested for this position will be used to backfill the activities and duties of a current staff person, thus freeing up an individual with extensive WSF business operations' knowledge to serve as a liaison for the duration of the project.

The changes in quality assurance efforts, combined with organization change management, will address the previous gaps from the WINDS project.

In addition to the cost of the off-the-shelf software and equipment acquisition, this proposal includes resources for a project manager for the duration of the development, rollout, testing and implementation of the system. A ferry program business liaison, a business analyst, quality assurance review, and a contract test engineer are also incorporated into the budget request. It is assumed that the department will require contingency funding as well as a support contract with the software vendor. It is estimated that this project can be delivered and be fully functional by December 2020.

After the first year the project is underway (in summer 2018), WSF management will review progress and significant project roles to gauge if any modifications in the plan for quality assurance, testing, and OCM are advised.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

Improving the dispatching process should reduce the number of sailings cancelled due to a crew shortage and should also mitigate future increases in the amount of overtime labor – including the increased mileage costs currently paid – by having the system identify employees who are closer to the relief location.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Unions, WSDOT Ferries Division, customers, and employees will be favorably impacted by this proposal. The change will allow for more rapid implementation of changing regulatory requirements imposed by federal agencies such as USCG and Homeland Security, as well as changes to collective bargaining agreements. Management reports will be readily available and more accurate, and the amount of time it takes to generate them will be reduced due to data integration. Data integrity will be maintained. The new dispatch system will support data integration with the new labor system (EmpCenter), which will streamline access to and accuracy of information agency-wide, as well as with partner state agencies such as the Office of Financial Management, State Human Resources Division. The off-the-shelf system will have an easily accessed and utilized report generator that will allow the end user to manage the system without needing assistance from information technology experts.

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

An alternative is to keep the current system. This is not advised as WSF is under regulatory requirements from the USCG to integrate terminal dispatch into an automated system. In addition, reporting would remain manual, which increases the risk of inaccuracies.

A second alternative would be to modify the existing system to support these new features and functions. The existing system uses an antiquated architecture and is not compatible with existing information systems. An off-the-shelf system used by other agencies such as Department of Corrections and Alaska Ferries that can address complex staffing and reporting requirements is preferable.

Another option would be to revive the prior project, WINDS, and build on it. While this is possible, it would require a new contract with the vendor, and substantial investment in bringing the existing work forward in one step to current technology. That is a heavy lift, probably costing $300,000 - $500,000 just to get started. Rather than reviving the prior project, the department intends to use the initial WINDS requirements as a starting point and improve the design focus from there.

Contract with an outside party to provide ferries crew dispatching. This option was rejected for a number of reasons including; risks of issues about data security and access to sensitive WSDOT systems, and an unknown cost.

The recommended alternative of an off-the-shelf system will give WSF:

- the system it needs to run its business,
- a system that can be modified to respond to new requirements
- a standard used by other agencies, and
- a broader based user community.

What are the consequences of not funding this request?

If this request is not approved, the department will need to continue to use a system that is not efficient and does not meet business needs. For example, WSF would have to continue to rely on a system that does not adequately provide the information needed to cost-effectively dispatch qualified employees to operate vessels, resulting in the risk of interrupted service to customers. WSF will also be out of compliance with the USCG and other regulatory agencies. In addition, the department will not be able to manage the costs of operations in the most efficient manner.

Expenditure Calculations and Assumptions

The project will need one WMS1 for the first two years for the position of Ferry Program Business Liaison. This position is assumed to cost $86,000 per-year for salary and $32,000 per-year for benefits.

Personal services contracts are anticipated for the Project Manager, the Business Analyst, the quality assurance review, and the Contract Test Engineer. The contracts are based on the following assumptions:

- Project Manager: $150 per-hour for 1,000 hours per-year
- Business Analyst: $125 per-hour for 1,824 hours per-year
- Quality assurance review: $175 per-hour for 35 hours per-month
- Contract Test Engineer: $80 per-hour for 1,824 hours per-year in fiscal years 2019 and 2020, and 912 hours in fiscal year 2021
- Contingency based on 15 percent of internal agency costs

The contract with the software vendor to support the system is estimated to cost approximately 18 percent of the accumulated cost of the off-the-shelf software and is not anticipated to begin until fiscal year 2021. These costs will span the life of the system and will be incurred by operating programs once the project is completed.

Procurement of off-the-shelf software and integration into the current dispatch system is based on experience with other projects. In addition, approximately $15,000 per-biennium is required for equipment costs. based on experience with other projects.

No increase is being requested for organizational change management since this activity is already underway on a larger scale at WSF.

Estimated costs by fiscal year:

Program W - Fund 099-1	FY18	FY19	2017-19	FY20	FY21
Object A&B					
Ferry Program Business Liaison - 1 WMS1	118,000	118,000	236,000	-	-
Object C					
Consultant for Project Mgmt	150,000	150,000	300,000	150,000	150,000
Consultant for Business Analyst	228,000	228,000	456,000	228,000	-
QA for Medium Risk (Level 2)	74,000	74,000	148,000	74,000	74,000
Contract test engineer	-	146,000	146,000	146,000	73,000
15% Contingency - Internal Agency Costs	103,000	125,000	228,000	90,000	45,000
Object E					
Support Contract w/ Software Vendor	-	-	-	45,000	135,000
Object J					
Cost of Off-the-Shelf Software	-	250,000	250,000	500,000	900,000
Equipment costs	8,000	7,000	15,000	8,000	7,000
Total Program W - Fund 099-1	**681,000**	**1,098,000**	**1,779,000**	**1,241,000**	**1,384,000**
FTEs	1.0	1.0	1.0	0.0	0.0

The estimated timeline is based on experience with similar projects:

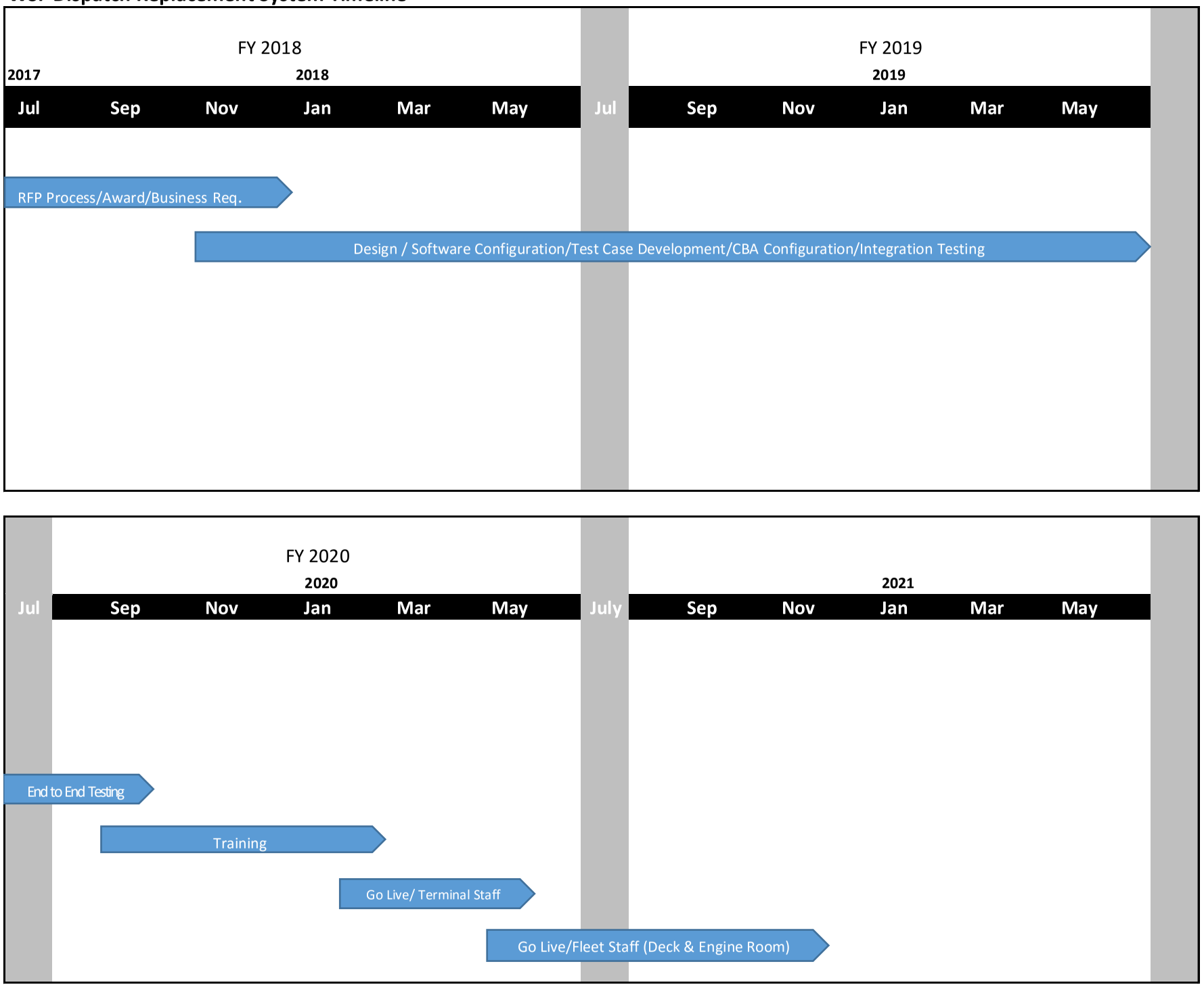
1) Contract development, including specifications and requirements - six months; July 2017 through December 2018.
2) Design, software configuration, test case development, collective-bargaining agreements' configuration, integration testing – 20 months; November 2018 through June 2019.
3) End-to-end testing – 3 months; July 2019 through September 2019.
4) Training – 6 months; September 2019 through February 2020.
5) Go live, terminal staff – 4 months; February 2020 through May 2020.
6) Go live, fleet (deck and engine room) – 8 months; May 2020 through December 2020.

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

All of the costs in this package are one-time costs for building the system with the exception of the warranty; however, they cross biennial lines. Beginning in fiscal year 2022, after the system is built, costs to cover ongoing maintenance of the system will be required. These include approximately $300,000 per-year for a support contract with the software vendor, $125,000 for an Information Technology Specialist 6 (ITS6), and $6,100 equipment costs. The cost for equipment and the ITS6 are assumed in the base for the current dispatch system, but the same amounts will be needed for the new system once it is complete.

Attachment A

WSF Dispatch Replacement System Timeline



Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: WSF Dispatch System Replacement

Base Budget: The proposal is for a replacement system, not an expansion or alteration. The existing operating and maintenance costs, including FTEs, are expected to still be needed when the transition to the new dispatch system is complete. Those existing operating and maintenance costs are not included in this requested increase, as they are part of the base budget. Program C (Information Technology program) provides the current system $131,100 a year in IT support for an ITS6 position and equipment.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	Yes	Other state agencies, such as the statewide HR office, that rely on accurate and accessible labor data should be favorably affected. The OCIO will be involved in the project in an oversight and coordination role.
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:

Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		Unions, WSDOT Ferries Division, customers, and employees will be impacted by this proposal. The change will allow for more rapid implementation of changing federal regulatory requirements from the USCG and Homeland Security, as well as changes to collective bargaining agreements. Management reports will be readily available and more accurate. The new dispatch system will support data integration with the new labor system (EmpCenter). The off-the-shelf system will have an easily accessed and utilized report generator that will allow the end user to manage the system without needing assistance from information technology experts.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☐ No

☒ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 IT Addendum

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. Be as specific as you can. (See chapter 12.1 of the operating budget instructions for guidance on what counts as "IT-related costs")

Information Technology items in this DP *(insert rows as required)*	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Ferry Program Business Liaison - 1 WMS1	118,000	118,000		
Consultant for Project Mgmt	150,000	150,000	150,000	150,000
Consultant for Business Analyst	228,000	228,000	228,000	
QA for Medium Risk (Level 2)	74,000	74,000	74,000	
Contract test engineer		146,000	146,000	73,000
15% Contingency - Internal Agency Costs	103,000	125,000	90,000	45,000
Support Contract w/ Software Vendor			45,000	135,000
Cost of Off-the-Shelf Software		250,000	500,000	900,000
Equipment costs	8,000	7,000	8,000	7,000
Total Cost	**681,000**	**1,098,000**	**1,241,000**	**1,384,000**

Part 2: Identifying IT Projects

If the investment proposed in the decision package is the development or acquisition of an IT project/system, or is an enhancement to or modification of an existing IT project/system, it will also be reviewed and ranked by the OCIO as required by RCW 43.88.092. The answers to the three questions below will help OFM and the OCIO determine whether this decision package is, or enhances/modifies, an IT project:

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? ☒Yes ☐ No
2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No
3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☒Yes ☐ No

If you answered "yes" to *any* of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to chapter 12.2 of the operating budget instructions for more information.

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: N8 Non-Routine Vessel Maintenance
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

This decision package requests appropriation authority of Federal Transit Administration (FTA) funds for several areas of maintenance that need to be addressed in the 2017-19 biennium. This work is not routine and, as such, does not fit within an ongoing baseline level of maintenance.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-2 Federal	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000
Total Cost	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-2 Federal	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000
Total by Fund	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Revenue	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Fund 099-2 Federal	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000
Total Cost	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000
Program X - Operating					
E. Goods and Services	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000
Total by Program	4,371,000	4,372,000	8,743,000	3,305,000	3,306,000

Package Description

For the 2017-19 biennium, Washington State Ferries (WSF) needs to perform non-routine maintenance above the ongoing level that includes the following:

- Injectors for various classes of vessels ($844,000)
- The incremental cost of turbochargers for new versus refurbished parts, based on new information about performance ($1.7 million)
- Engine overhauls ($6.2 million)

To accomplish this work additional appropriation authority is necessary for parts, materials, and contract support. The spending increase is requested using available FTA funds.

In the 2015-17 biennium, the department received one-time appropriation authority of $5.9 million in federal funds for the Ferries Operations program (Program X), for similar non-routine work that qualified as an eligible use of FTA funds. The program experienced difficulties accessing those funds, primarily related to changes in the federal agency's grant processing system and procedures. It is expected that the difficulties will be resolved well in advance of the 2017-19 biennium.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The work described in this decision package is expected to contribute to improved vessel reliability and reduced unscheduled vessel out-of-service time.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

WSF has a robust, ongoing vessel maintenance program, which currently maintains a fleet of 23 vessels with service that is essentially 24 hours a day, 365 days per-year. Vessel maintenance is an integral part of providing ferry services. Continual maintenance of vessels is required for U.S. Coast Guard (USCG) certifications.

WSF delivers service with 99.5 percent trip reliability for 450 trips per-day. This high standard would not be achieved without the needed levels of investment in the vessel maintenance program.

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

Vessel maintenance is a required activity and is essential for ferry service. The alternative would be either an increased reliance on state dollars, which are fully committed for other purposes, or an increased number of emergency repairs, which is a costlier, less efficient, and more disruptive option. Vessel preservation engineers estimate that emergency work costs approximately 25 percent more than routine service. This is primarily due to lack of competition in bids and because emergency contracts are often awarded on a time and materials basis, with vendor selection weighted more heavily to availability and willingness to perform work in a rapid manner than to cost.

What are the consequences of not funding this request?

Approval of this package lowers the risk of vessels breaking down or failing a USCG inspection. If a vessel were not available for service, the result would be reduced ferry capacity, an inability to maintain ferry-service schedules, and an increase in wait times.

Expenditure Calculations and Assumptions

The budget request is based on estimates of costs for parts, materials, and contract support. Costs of the necessary repairs or replacements are based on historical procurement data and vendor price quotes. The 2017-19 biennial activities are those that must be accomplished, by vessel class and by component, according to the current schedule based on engine operating hours and projected operations for the biennium. Out-biennia costs are an estimate of upcoming schedules and activities and may be adjusted in future budget requests. The biennium-to-biennium total costs fluctuate because these activities occur not monthly, or annually, but on a one-time basis or on an extended schedule.

Repairs will fall into one of three categories:

- **Injectors:** Marine diesel engines require that the fuel injector assemblies be renewed every 8,000 operating hours (roughly 1.5 years) to comply with current air emissions requirements. The expected 2017-19 biennial costs are $844,000.
- **Turbochargers:** A turbocharger is an essential part of the marine diesel engine, which compresses intake air to the cylinders. This equipment must be replaced every six to ten years. Replacement with new turbochargers is preferable to rebuilding because of better performance and enhanced reliability. Rebuilt turbochargers have had a high rate of failure on all Mark II class vessels. This high rate of failure is not sustainable; only new turbochargers should be used in this critical duty location. The expected 2017-19 biennial costs are $1.7 million.
- **Engine Overhauls:** Overhauls are a required activity as part of the engine life. Washington State Ferries (WSF) often is able to extract longer lives from engines than those experienced by other operators due to the high level of ongoing maintenance but the engines must be rebuilt eventually. Engine overhauls typically occur after 30,000 to 40,000 hours of operation, or approximately every six to eight years. Without this work, the engine will fail and the performance and reliability of vessels will suffer. The expected 2017-19 biennial costs are $6.2 million.

The total expected 2017-19 biennial costs are $8.7 million. The table in Attachment A displays the activities, by vessel class, by unit cost, and by biennium that make up the estimated cost increases.

Source of Funds

The spending increase is requested using available FTA funds. In the 2015-17 biennium, the department experienced difficulties accessing FTA funds, related to the replacement of FTA's platform used to award and manage federal grants and associated adjustments in procedures.

The 2015-17 difficulties accessing FTA funds are not expected to persist into the 2017-19 biennium.

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

This request is ongoing, on varying maintenance and replacement cycles.

First-Time Maintenance or Replacement on New Vessels

				2017-19		2019-21	
Vessel Class	**Component**	**Frequency**	**Unit Cost**	**# Units**	**Total Cost**	**# Units**	**Total Cost**
Olympic	Main engine injectors - sets	8,000 hrs / 1.5 yrs	$48,000	10	$480,000	12	$576,000
Kwa-di Tabil	Main engine injectors - sets	8,000 hrs / 1.5 yrs	$39,200	8	$313,600	8	$313,600
Kwa-di Tabil	Controllable pitch propeller oil distribution control box	5 years	$25,000	2	$50,000	2	$50,000
Kwa-di Tabil	Berg Propulsion computers	2-3 years	$42,000	-	-	2	$84,000
Total cost of first-time maintenance or replacement on new vessels					$844,000		$1,024,000

Turbochargers

				2017-19		2019-21	
Vessel Class	**Component**	**Frequency**	**Unit Cost**	**# Units**	**Total Cost**	**# Units**	**Total Cost**
Super	Turbos	every 6-10 years	$25,000	4	$100,000	2	$50,000
Jumbo	Turbos	every 6-10 years	$116,000	3	$348,000	6	$696,000
Jumbo Mark II	Turbos	every 6-10 years	$160,000	4	$640,000	4	$640,000
Kwa-di Tabil	Turbos	every 6-10 years	$155,000	2	$310,000	2	$310,000
Evergreen State	Turbos	every 6-10 years	$160,000	2	$320,000	-	-
Total cost of turbochargers					$1,718,000		$1,696,000

Engine Overhauls

				2017-19		2019-21	
Vessel Class	**Component**	**Frequency**	**Unit Cost**	**# Units**	**Total Cost**	**# Units**	**Total Cost**
Super	Engine Overhauls	every 5 years	$291,000	4	$1,164,000	2	$582,000
Jumbo	Engine Overhauls	every 5 years	$214,000	3	$642,000	6	$1,284,000
Jumbo Mark II	Engine Overhauls	every 5 years	$231,000	3	$693,000	3	$693,000
Kwa-di Tabil	Engine Overhauls	every 5 years	$240,000	2	$480,000	2	$480,000
Olympic	Engine Overhauls*	every 5 years	$426,000	-	-	2	$852,000
Issaquah	Engine Overhauls*	every 5 years	$354,000	8	$2,832,000	-	-
Evergreen State	Engine Overhauls	every 5 years	$185,000	2	$370,000	-	-
Total cost of engine overhauls					$6,181,000		$3,891,000

* The cost of turbos on the Olympic and Issaquah class vessels is included in engine overhauls.

Total Request	**$8,743,000**	**$6,611,000**

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: Non-Routine Vessel Maintenance

Base Budget: The funding proposal is for new funding and is one-time for the 2017-19 Biennium. The funding is from Federal Transit Administration grants. In 2015-17 WSF received budget authority of $5.9 million for the same activity and funding source. Because that appropriation was one-time, and zeroed out at carry-forward level for the 2017-19 biennium, there is no federal authority in the Program X base budget.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	No	Identify:
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:
Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):

Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		Washington State Ferries (WSF) has a robust, ongoing vessel maintenance program, which currently maintains a fleet of 23 vessels with service that is essentially 24 hours a day, 365 days per-year. Vessel maintenance is an integral part of providing ferry services. Continual maintenance of vessels is required for U.S. Coast Guard (USCG) certifications.

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)

2017-19 Biennium Budget
Decision Package

Agency: 405 Department of Transportation
Decision Package Code/Title: N9 B10 Ferries Fuel Test
Budget Period: 2017-19 Regular Session
Budget Level: PL – Performance Level
Program: X – Ferries Maintenance & Operations

Agency Recommendation Summary Text:

Appropriation authority is requested for a Washington State Ferries (WSF) pilot project to study the feasibility of using ten percent biodiesel as ferry fuel.

Fiscal Summary:

Operating Expenditures	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
Washington State Department of Transportation (WSDOT) Total					
Fund 109-1 State	673,000	0	673,000	0	0
Total Cost	673,000	0	673,000	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0
Program X - Operating					
Fund 109-1 State	673,000	0	673,000	0	0
Total by Fund	673,000	0	673,000	0	0
Staffing FTEs	0.0	0.0	0.0	0.0	0.0

Object of Expenditure	FY 2018	FY 2019	2017-19 Total	FY 2020	FY 2021
E. Goods and Services	673,000	0	673,000	0	0
Total Cost	673,000	0	673,000	0	0
Program X - Operating					
E. Goods and Services	673,000	0	673,000	0	0
Total by Program	673,000	0	673,000	0	0

Package Description

The Washington State Ferry system is the largest ferry system in the U.S and is a large consumer of fuel in the Puget Sound region.

Through this request, WSF proposes to launch a pilot project to study the feasibility of using up to 10 percent biodiesel to fuel ferries. Specifically, appropriation authority is requested to fuel one vessel (MV Tacoma) with 10 percent biodiesel for one year. This effort will support the department's plan to continue increasing the use of biodiesel as an alternative fuel.

Although WSF is exempt, according to RCW 43.19.642, since June 1, 2009, state agencies have been required to use a minimum of 20 percent biodiesel as compared to total volume of all diesel purchases made by agencies for the operation of the agencies' diesel-powered vessels, vehicles, and construction equipment. The RCW requires WSF to use a minimum of five percent biodiesel as compared to total volume of all diesel purchases made by WSF for the operation of WSF diesel-powered vessels, as long as

the price of a B5 biodiesel blend does not exceed the price of conventional diesel fuel by five percent or more.

According to the U.S. Environmental Protection Agency (EPA), substituting biodiesel, which is derived from vegetable oils and animal fat-based oils, for petroleum-based diesel can reduce smog-forming emissions from particulate matter, hydrocarbons, and carbon monoxide. Hydrocarbons are greenhouse gases (GHG) that contribute to climate change. Increasing the use of biofuels, such as biodiesel, is a widely accepted strategy for slowing climate change. Since biodiesel is derived from plant matter, it is not a fossil fuel, so it is renewable. Biofuels come from plants and trees, which need CO_2 to grow. Using biofuels doesn't add as much CO_2 to the atmosphere; it recycles it.

State statute (RCW 70.235.020) sets forth the levels of GHG reductions the state must achieve by 2020, by 2035, and by 2050 – at which point, the state will reduce overall emissions to 50 percent below the 1990 levels.

The department considers sustainability practices to help reduce GHG emissions. WSDOT initiatives in place to reduce carbon emissions and conserve natural resources include:

- Fueling agency fleet vehicles, such as work trucks, dump trucks and snowplows, with up to 20 percent biodiesel.
- Changes in ferry-vessel operations, such as reducing speeds along some routes; testing reduced-throttle push turns at the dock during loading; and using five percent biodiesel for all vessels to conserve fuel and reduce emissions.
- EnviroStars certification for state ferry terminals in King, Jefferson, Kitsap, Pierce, and Skagit counties, and state ferry vessels certified by the National Passenger Vessel Association Waters Program.
- Completion of Washington's section of the West Coast Green Highway; an ongoing initiative is furthering Washington's fast-charge Electric Highway infrastructure, in partnership with Oregon.
- A federally funded pilot project to address climate and extreme weather risks to transportation systems, such as flooding in the Skagit River Basin.
- A pilot project to incorporate adaptive light-emitting-diode lighting (LED) systems on state highways.
- Multiple projects that protect and restore natural habitats near state transportation facilities.

The purpose of the pilot program is to monitor the impact of extending the use of biodiesel on the components on the vessel that are in contact with the modified fuel. There are a total of 23 components including filters, fuel oil purifiers, strainers, and hoses. The use of biodiesel introduces oxygen and organic compounds into the fuel stream that can act like a solvent to release soluble metals and sludge. The acids and their compounds can attack seals and the lining of hoses and other components made of different rubbers and plastics. The pilot program will closely monitor these components over the course of one year to evaluate the impact of burning 10 percent biodiesel compared to the present level of five percent. It is imperative that the approach is cautious and methodical due to the potential impact on passenger safety, vessel availability, and cost.

Approval of this decision package will inform decision-makers of the likely impact of extending the concentrations of biodiesel in ferry fuel and, ultimately could assist toward meeting the state's phased-in GHG emissions reductions.

Narrative Justification and Impact

What specific performance outcomes does the agency expect?

The pilot project will help the department understand fuel filter usage and fuel efficiency differences in using B10 biodiesel versus B5. This test will not provide information on the long-term effects that fuel might have on engine components, or if engine rebuild cycles need to be shortened with the use of biodiesel.

Performance Measure Detail

N/A

Identify important connections or impacts related to this proposal.

Approval of this request would support the state's efforts to continue reducing GHG emissions.

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

The timing of running the pilot was considered. Due to the limited availability of budget capacity in the 2015-17 biennium for WSF, the pilot project would begin in the 2017-19 biennium rather than in 2015-17.

What are the consequences of not funding this request?

If this decision package is not approved, the department will not be able to perform the pilot test on using B10 biodiesel.

Expenditure Calculations and Assumptions

The total cost of the B10 pilot project is approximately $673,000 with the following assumptions:

- B10 averages $0.3019 more than B5 per-gallon x 1,685,584 gallons per-year for the MV Tacoma = $508,878 additional cost for fuel
- Estimated costs for baseline and final inspection of engines, fuel systems, and tanks is $143,000
- Estimated cost of additional filters needed is $1,500
- Emissions testing and analysis: $10,000
- Project support and documentation: $10,000

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

The costs of the pilot program itself are one-time. However, the purpose of the pilot program is to identify the impact of using B10 fuel on a large ferry. The impact will have a financial component for the future if the use of B10 fuel is adopted. The pilot program will attempt to quantify that impact and present the data as part of a final report.

Addendum for WSDOT 2017-19 Decision Package

Decision Package Code and Title: B10 Ferries Fuel Test

Base Budget: There is no base budget for conducting this pilot project.

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

Impact(s) To:		Identify / Explanation
Regional/County impacts?	No	Identify:
Other local gov't impacts?	No	Identify:
Tribal gov't impacts?	No	Identify:
Other state agency impacts?	No	Identify:
Responds to specific task force, report, mandate, or exec order?	Yes	State statute (RCW 70.235.020) sets forth the levels of GHG reductions the state must achieve by 2020, by 2035, and by 2050 – at which point, the state will reduce overall emissions to 50 percent below the 1990 levels. Approval of this decision package is expected to assist toward these phased-in reductions.
Does request contain a compensation change?	No	Identify:
Does request require a change to a collective bargaining agreement?	No	Identify:
Facility/workplace needs or impacts?	No	Identify:
Capital Budget impacts?	No	Identify:
Is change required to existing statutes, rules or contracts?	No	Identify:

Is the request related to or a result of litigation?	No	Identify lawsuit (please consult with Attorney General's Office):
Is the request related to Puget Sound recovery?	No	If yes, see budget instructions Section 14.4 for additional instructions
Identify other important connections		

Please provide a detailed discussion of connections/impacts identified above.

Information technology: Does this Decision Package include funding for any IT-related costs, including hardware, software, services (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes, continue to IT Addendum and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)