



**Washington State
Department of Transportation**

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Federal Transit Administration – Region 10
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To whom it may concern:

We are pleased to present you with the 2022 Washington State Department of Transportation's (WSDOT) Ferries Division Transit Asset Management Plan (TAMP). Prepared in accordance with 49 CFR 625.31, this TAMP outlines our asset management practices by providing an in-depth look at how we maintain and preserve our ferry vessel and terminal assets within a limited budget. The Ferries Division manages the largest vehicle-ferry system in the U.S., with 21 active vessels moving more than 24 million passengers (pre-pandemic) per year. Our system is classified as a Tier 2 agency per the FTA criteria because we own less than 100 vehicles.

This plan documents the strategic, systematic practices of procuring, operating, inspecting, maintaining, rehabilitating, and replacing WSF capital assets. It supports WSF efforts to manage capital asset performance, risks and costs over their lifecycles in order to provide safe, cost-effective and reliable public transportation. Washington state continues to experience significant growth, placing an increased strain on our aging infrastructure along with an added desire for capacity. Recognizing funding is a finite resource, asset management is a critical practice to ensure WSF's investments return the highest amount of benefit at the least amount of cost.

This Transit Asset Management Plan is effective immediately and will remain in effect until it is superseded by an updated plan in 2026.

Sincerely,

A handwritten signature in blue ink that reads "Patty K. Rubstello".

Patty K. Rubstello, PE
Assistant Secretary, WSDOT Ferries Division
Accountable Executive

Enclosure:

WSDOT Ferries Division 2022 Transit Asset Management Plan

cc:

WSDOT Capital Program Development and Management

WSF Finance & Administration Department

WSF Terminal Engineering Department

WSF Vessel Engineering & Maintenance Department

Puget Sound Regional Council

Skagit Council of Governments



2022 Washington State Ferries Transit Asset Management Plan

OCTOBER 2022

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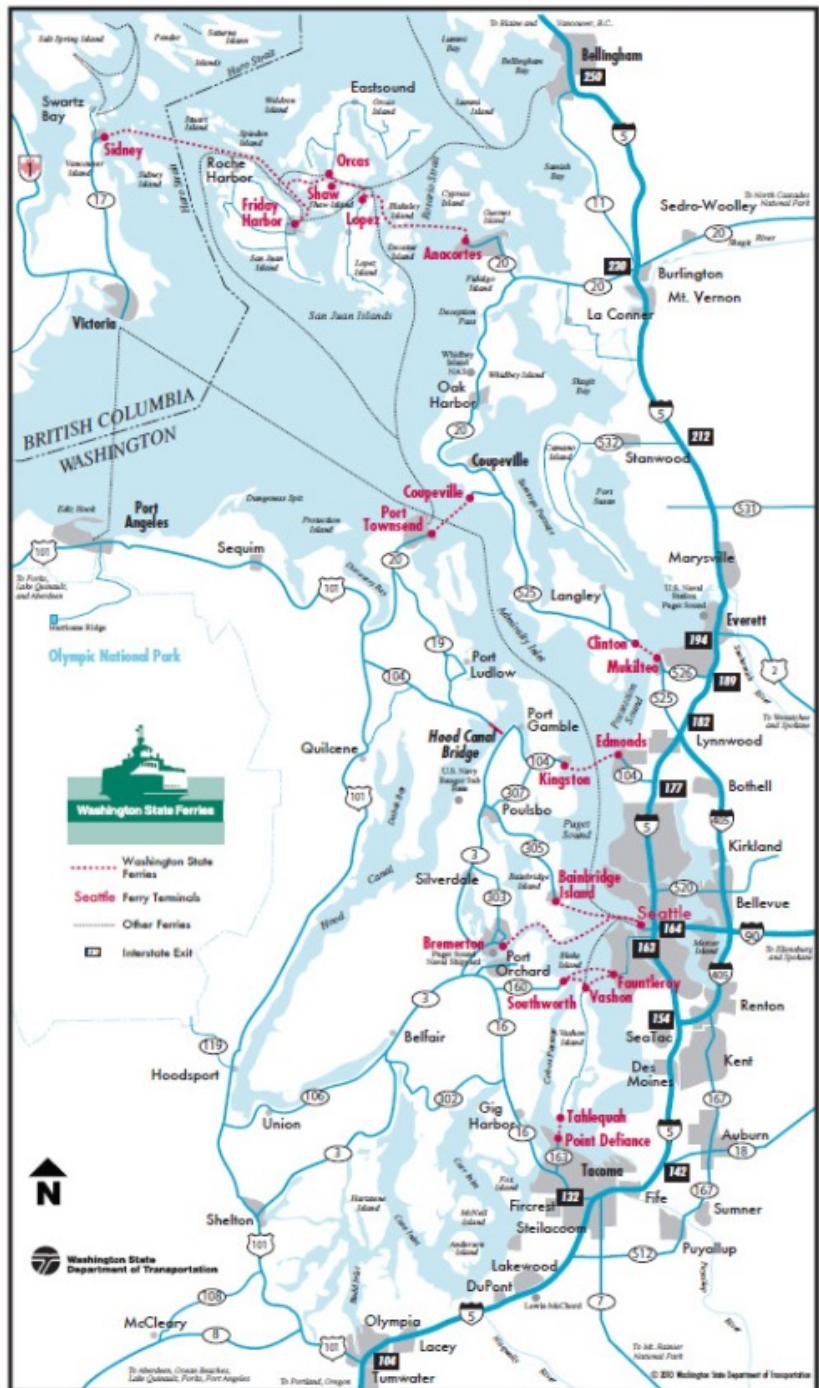
Introduction

WSF SYSTEM OVERVIEW

Washington State Ferries (WSF) plays an important role in the state's transportation system. It is a critical link in east-west highways carrying people and freight from one side of Puget Sound to the other. The Washington State Ferries marine highway system serves as the transportation backbone providing automobile, passenger, and vital commercial connections to the Olympic Peninsula, Puget Sound Island communities, and Canada. With a current valuation of \$4.8 B, the system provides 24.5 million trips annually serving business, commuters, and leisure travelers.

A division of Washington State Department of Transportation (WSDOT), WSF operates ten ferry routes equivalent to 200 miles of highway bridges. WSF's vessels make nearly 450 sailings per day over the routes that include travel on 21 vessels and the system's 20 terminals. Figure 1 shows a map of this system. WSF includes routes on the National Highway System (NHS) as well as routes that are not on the National Highway System which are other principal routes and a trans-national link to Canada.

Figure 1: The WSF system, including routes and terminals.



Background

One key initiative in WSDOT's strategic plan is resilience, through which asset management is an important strategy. WSDOT utilizes asset management to build resilience and reduce vulnerabilities in the transportation system while proactively managing the preservation and maintenance of assets necessary to achieve and sustain a state of good repair.

Implementing effective asset management strategies supports WSF in project prioritization by selecting the appropriate preservation work at the right time to effectively manage agency assets and minimize life cycle costs. WSF's asset management planning reflects the costs and benefits of assets in order to lengthen their service life when used in conjunction with preservation activities and timely maintenance. To this end, WSF uses a risk-based life cycle management process for precisely timed preventative maintenance with the aim to extend the useful life of its assets and keep them operating effectively. This strategy helps defer costly rehabilitation or reconstruction projects.

This plan documents the strategic practices of operating, inspecting, maintaining, rehabilitating, and replacing WSF capital assets. The plan supports WSF's systemic efforts to manage capital asset performance, risks, and costs over their lifecycles to provide safe, cost-effective, and reliable public transportation. In short, this plan lays the foundation for sustained system reliability at Washington State Ferries.

This Asset Management Plan documents current-state asset management processes while inventorying all required WSF assets and explaining the asset condition, along with prioritizing future asset development. In addition, this document includes methods and activities that WSF uses to analyze potential future needs through decision tools and processes. Through these activities, WSF is committed to taking a systematic and comprehensive approach to maturing transportation asset management.

As an agency that owns, operates, and manages capital assets used to provide public transportation and receives federal financial assistance under 49 U.S.C. Chapter 53 as a recipient or subrecipient, WSF is required to develop a transit asset management plan that includes the five following asset management elements:

- Performance Targets
- Asset Inventory
- Condition Assessment
- Decision-Support Tools
- Project-based Prioritization of Investments

Annual Performance Targets

In 2012, [MAP-21](#) mandated that FTA develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The [TAM Final Rule 49 USC 625](#) became effective on October 1, 2016 and established performance measures for each of the capital asset types (rolling stock, equipment, facilities, and infrastructure). For the WSF system, ferryboat vessels (hereafter referred to as “vessels”) are defined by the FTA as rolling stock and WSF’s terminals are defined as facilities.

In determining the performance measure for rolling stock, the Useful Life Benchmark (ULB) is utilized. ULB is the average age-based equivalent of a 2.5 rating on the FTA Transit Economic Requirements Model (TERM) 5-point scale. Per [FTA Circular 5010.1e](#), the ULB for vessels is 60 years. Meeting this ULB represents maintenance of assets in a state of good repair (SOGR). Although 60 years is the standard, Washington State Ferries will need to retire the Issaquah Class ferries early, at approximately 50 years of age. These vessels have had neither sufficient out-of-service time, nor funding to complete the preservation requirements of the Lifecycle Cost Model. Currently at 40-43 years in age, these vessels are experiencing reliability issues and structural steel degradation that will shorten their attainable service life.

For facilities, the performance measure is the percentage of terminals that are rated below condition 3 on the TERM scale. Table 1 outlines WSF’s performance targets, based on WSF’s internal Asset Management Plans.

Table 1: 2023 WSF Performance Targets by Asset Category

Asset	Performance Target 2023
Vessels	90% < ULB
Terminals	0% lower than 3 on TERM scale

Capital Asset Inventory

The system is comprised of two FTA asset categories: rolling stock vessels and terminal facilities. WSF is responsible for managing 21 vessels and 20 terminals throughout Puget Sound. A summary of vessel and terminal assets is included in Table 2 below. This summary includes all assets in the system owned by WSF with a replacement value greater than \$50,000. A more detailed description of each asset can be found in the next section.

Table 2: Asset Inventory Summary

Asset Category/Class	Total Number	Avg Age	Avg Mileage	Avg Replacement Cost/Value	Total Replacement Cost/Value
Revenue Vehicles (Ferryboat vessels)	21	32	38,794	\$198 m	\$4,160.m
Facilities	20	56	N/A	-	\$1,539 m
Maintenance	1	52	N/A	\$147 m	\$147 m
Passenger Facilities	19	56	N/A	\$73 m	\$1,392 m

Detailed Inventory and Condition Assessment

VESSELS

To assess the condition of vessels, the ULB of 60 years is used for all vessel classes except for the Issaquah, for which 50 years is used. The average age of WSF's vessels is 32.2 years old and one vessel, the Tilikum, exceeds its ULB. The performance target is to have

90% of WSF vessels below the ULB. Table 3 lists each vessel and its condition details. All WSF vessels operate within the Puget Sound Regional Council (PSRC) Metropolitan Planning Organization (MPO).

Table 3: Detailed Inventory and Asset Condition: Vessels

Asset Name	Vessel Class	Age (Yrs)	Useful Life Benchmark (Yrs)	Average Vehicle Mileage	Past Useful Life Benchmark	MPO
Suquamish	Olympic	4	60	43,815	No	PSRC
Chimacum	Olympic	5	60	51,075	No	PSRC
Samish	Olympic	7	60	47,196	No	PSRC
Tokitae	Olympic	8	60	33,240	No	PSRC
Chetzemoka	Kwa-di Tabil	12	60	21,674	No	PSRC
Tacoma	Jumbo Mark II	25	60	52,166	No	PSRC
Sealth	Issaquah	40	50	29,835	No	PSRC
Issaquah	Issaquah	43	50	28,028	No	PSRC
Tillikum	Evergreen State	63	60	35,214	Yes	PSRC
Chelan	Issaquah	41	50	48,777	No	PSRC
Kaleetan	Super	55	60	61,352	No	PSRC
Yakima	Super	55	60	51,146	No	PSRC
Walla Walla	Jumbo	50	60	45,826	No	PSRC
Kittitas	Issaquah	42	50	32,519	No	PSRC
Cathlamet	Issaquah	41	50	33,080	No	PSRC
Spokane	Jumbo	50	60	36,890	No	PSRC
Puyallup	Jumbo Mark II	24	60	51,407	No	PSRC
Wenatchee	Jumbo Mark II	24	60	49,941	No	PSRC
Kitsap	Issaquah	42	50	46,830	No	PSRC
Salish	Kwa-di Tabil	11	60	24,312	No	PSRC
Kennewick	Kwa-di Tabil	11	60	24,390	No	PSRC

TERMINALS

To assess the condition of terminals, FTA guidelines utilized the TERM Scale. The TERM Scale is a five (5) category rating system used in the Federal Transit Economics Requirement Model to describe the condition of an asset: 5.0 – Excellent, 4.0 – Good, 3.0 – Adequate, 2.0 – Marginal, 1.0 – Poor. Of the 20 facilities, fourteen are rated a 3 on the TERM scale, five are rated a 4, and one is rated a 5. WSF’s performance target is to have less than 5% rated lower than a 3. Table 4 outlines this scale and Table 5 lists each facility and its condition details. The Anacortes Terminal is

located in Skagit Council of Governments (SCOG), while the rest of the terminals are in the PSRC.

Table 4: The TERM Scale used by FTA to assess condition of facilities

Scale Number	Description
5	Excellent
4	Good
3	Adequate
2	Marginal
1	Poor

Table 5: Detailed Inventory Asset Condition: Terminals

Asset Class	Asset Name	ID/Serial No	Year Built	TERM Scale Condition	MPO
Passenger Facilities	Anacortes Ferry Terminal Facility	6227	1955	3	SCOG
Passenger Facilities	Bainbridge Island Ferry Terminal Facility	6230	1972	3	PSRC
Passenger Facilities	Bremerton Ferry Terminal Facility	6231	1980	3	PSRC
Passenger Facilities	Clinton Ferry Terminal Facility	6232	1990	4	PSRC
Passenger Facilities	Coupeville Ferry Terminal Facility	6233	1979	3	PSRC
Maintenance	Eagle Harbor Ferry Maintenance Facility	6234	1970	3	PSRC
Passenger Facilities	Edmonds Ferry Terminal Facility	6235	1971	3	PSRC
Passenger Facilities	Fauntleroy Ferry Terminal Facility	6236	1957	3	PSRC
Passenger Facilities	Friday Harbor Ferry Terminal Facility	6237	1968	3	PSRC
Passenger Facilities	Kingston Ferry Terminal Facility	6238	1968	3	PSRC
Passenger Facilities	Lopez Island Ferry Terminal Facility	6239	1964	3	PSRC
Passenger Facilities	Mukilteo Ferry Terminal Facility	6242	1982	5	PSRC
Passenger Facilities	Orcas Island Ferry Terminal Facility	6243	1959	3	PSRC
Passenger Facilities	Point Defiance Ferry Terminal Facility	6244	1958	4	PSRC
Passenger Facilities	Port Townsend Ferry Terminal Facility	6245	1982	3	PSRC
Passenger Facilities	Seattle Ferry Terminal Facility	6246	1938	3	PSRC
Passenger Facilities	Shaw Island Ferry Terminal Facility	6247	1955	4	PSRC
Passenger Facilities	Southworth ferry Terminal	6248	1957	4	PSRC
Passenger Facilities	Tahlequah Ferry Terminal Facility	6249	1958	4	PSRC
Passenger Facilities	Vashon Island Ferry Terminal Facility	6250	1957	3	PSRC

Decision Support

Decision Support Tools

ASSET MANAGEMENT TOOLS AND ANALYSIS

To make investment decisions, WSF manages its asset data using an enterprise asset management software MPET, the Vessel Lifecycle Cost Model, the Asset Management Model, and other preservation data. MPET is used primarily for maintenance data, which is soon being replaced by a new system called Enterprise Asset Management (EAM). The Lifecycle Cost Model is used primarily for preservation data. In addition, WSF Financial data is managed in the agency's enterprise financial management system. Asset operational performance data is captured in the agency's Automated Operations Support System (AOSS) application and On-Time Performance Tool. Several other tools are used to lesser degrees.

MPET – Maintenance Productivity Enhancement Tool

MPET is an enterprise Computerized Maintenance Management System (CMMS) used by both Vessel Engineering and Terminal Engineering. It is hosted at WSF Headquarters, managed by the vessels department, and supports all WSF. A dedicated maintenance program analyst/administrator coordinates the effective use of MPET throughout the agency. This analyst works directly with the software provider to maintain and update the software, improve functionality, and resolve software problems. The major processes used in MPET include maintenance scheduling and documentation, inventory management and procurement.

Various stakeholders throughout the organization enter data into the system, including the vessel crew, procurement officials, maintenance managers, warehouse staff, and the Eagle Harbor Maintenance Facility.

MPET provides a history of maintenance requests and maintenance performed by the WSF Eagle Harbor Maintenance Crew, contractors, and vendors. These requests are for both routine and reactive terminal maintenance. This tool is updated daily as needed.

The MPET tool also serves as a method of communication between vessel captains, the Eagle Harbor Maintenance crew, and the Terminal Engineering Staff. A vessel captain needs to request MPET repairs at the terminal through the Terminal Supervisor.

EAM – Enterprise Asset Management

EAM is scheduled to replace MPET at the beginning of next year. EAM is a cloud-hosted Enterprise Asset Management System delivered via a Software as a Service (SaaS) model. The SaaS model will ensure WSF has access to the most current version of EAM with system updates provided by the vendor. The new EAM system will be capable of measuring all key metrics for asset and equipment performance which will allow identification and performance of maintenance and preservation activities that are fiscally responsible, reliability-centered, and evidence-based. Detailed information about equipment and maintenance history will be recorded by employees performing the work and this information will be available to maintainers and managers through EAM's dashboard, KPI's, metrics, and reports.

EAM will be used by managers and employees across Washington State Ferries to support maintenance workflow management, purchasing, warehouse and spare parts management, and Life Cycle Cost Modeling. The maintenance program analyst will serve as the EAM system administrator and will have an expanded role in data analysis due to the additional data that will be captured. The EAM system will be used to request, plan, schedule, and document work performed on WSF vessels and terminals by Eagle Harbor Maintenance crews, Vessel Engine and Deck personnel, Terminal Department, Safety Department, contractors, and vendors. EAM will also be used by WSF's Purchasing and Warehouse Departments to procure and manage parts providing full visibility from the initial request through the time a part is placed into service. Life Cycle Cost Modeling is an important new capability of EAM that will bring together maintenance data, condition assessments, and investment planning into one system and will be used by vessel engineering for capital investment planning.

Vessel Lifecycle Cost Model (LCCM)

The vessel LCCM is a capital budget development tool. It is an Excel-based tool used to record the expected lifecycle and associated replacement/investment cost of each vessel system listed in the model. It is also used to record the results of asset inspections, which are performed every two years. The output of the LCCM is a high-level forecast of capital funding requirements and a snapshot of fleet condition by vessel or LCCM work category. A condition rating matrix was developed using remaining useful life (the probability factor) and the consequence factor described above to determine an item or system's overall condition rating.

The LCCM breaks each vessel asset down into approximately 100 inventory items, each with a unique inventory ID number. The inventory item listing is similar for each vessel and consists of vessel systems and major equipment. There is no structured asset hierarchy within the inventory item listing, but they are grouped by vessel and by work category. There are 21 vessels and 8 work categories as shown in Table 6

Table 6: Vessels LCCM Work Categories

1	Communication, navigation and lifesaving equipment
2	Major mechanical and electrical systems
3	Passenger and crew spaces
4	Piping replacement
5	Propulsion system
6	Security
7	Steel replacement
8	Structural preservation (paint)

Other Vessel Preservation Data

Vessel asset stewards maintain several additional spreadsheets to record inspection data. These include:

- Hull, Deck and Bulkhead steel thickness
- Bilge and void inspection results
- Topside paint
- Dry-docking reports that include inspection data for underwater hull paint, rudders, propeller hubs, propulsion shafting, and the cathodic protection system.
- Sewage Tanks
- Potable Water Tanks
- Engine Hour data
- Propulsion generator and motor data

Economics Based Life Cycle Planning – Terminals Asset Management Model (AMM)

The WSF Terminal Engineering Asset Management Model is a tool to aid Terminal Engineering in prioritizing projects for preservation. This tool also provides a method to evaluate different methods of preservation, such as refurbishment, partial refurbishment, or replacement. Inputs into the model include:

- Condition of an asset, based on inspection reports.

- Use of an asset. Some terminals have more traffic than other terminals; some assets within a terminal see more traffic than other assets within a terminal.
- The likelihood of failure of an asset. Risks due to such factors as storms or wind, likelihood of mechanical or electrical failure, vessel impact, scour, or seismic risk.
- Consequence of failure of an asset. This includes the impact to the traveling public of an asset/ terminal being out of service, including the length of time an asset is out of service.
- Maintenance costs.
- Capital costs for replacement or refurbishment of an asset.
- The output result from the model is the optimal replacement timing in each year for each asset, along with a benefit/cost calculation for assets that are at the end of useful life. The model is updated as assets are improved and condition ratings change.

Terminal Annual Report

The Terminal Annual Report is an internal publication summarizing key information on terminal assets and terminal-related ferry trip cancellations. The following are some of the important sections of the report: service impacts, inspections conducted, preventative maintenance completed, condition ratings, and inspection plan for next year. For project prioritization, Terminal Engineering uses this report to analyze these elements as well as events that have led to a loss of trips or delays. Such analyses help in prioritizing projects for the future design of terminal systems and how to mitigate the occurrence of such events in the future.

Automated Operations Support System (AOSS)

The AOSS is a database for information on ferry operations. The system tracks employees who work on vessels and monitors various vessel information such as the number of trips, vessel miles traveled, cancellations, etc. The application is also used to track the reasons for trip delays and cancellations.

Investment Priorities

The following table summarizes the proposed investments for vessels and terminals (Table 7) at the asset class level. These investments are developed using the decision support tools outlined above and are prioritized by biennium and projected for the next 5 years. Detailed project lists for each asset class are located in the appendix, where prioritized projects for vessels are shown in Table 8 and prioritized projects for terminals are shown in Table 9.

Table 7: Summary of Investment Priorities

Asset Class	21-23	23-25	25-27	Total
Vessels	\$161,405,000	\$347,957,000	\$498,448,000	\$1,007,810,000
Terminals	\$247,918,000	\$162,685,000	\$181,857,000	\$592,460,000

Appendix A

Proposed Investments: Detailed Prioritized Project Lists

Tables 8 and 9 provide planning-level estimates for projects totaling \$10,000 or more. More detailed information can be found in budget documents.

Table 8: Proposed Investments for Vessels

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
124 Auto Hybrid Electric Ferry Pre-Design Study	PSRC	-	1,200,000	-	1,200,000
Computerized Maintenance Management System (CMMS) Transition	PSRC	3,022,000	-	-	3,022,000
Emergency Repair-MV Yakima Dockside (FY22)	PSRC	173,000	-	-	173,000
Ferries Schedule System Replacement	PSRC	-	1,000,000	100,000	1,100,000
Globe Fleetwatch Application and AIS Replacement	PSRC	150,000	-	-	150,000
Hybrid Electric - 144 Auto Ferry #2	PSRC	-	-	128,334,000	128,334,000
Hybrid Electric - 144 Auto Ferry #3	PSRC	-	-	23,040,000	23,040,000
MV Cathlamet (23-25) Minor Preservation Propeller Hubs	PSRC	-	866,000	-	866,000
MV Cathlamet 21-23 Biennium Minor Preservation Projects	PSRC	8,000	-	-	8,000
MV Cathlamet 21-23 Biennium Misc Improvements	PSRC	31,000	-	-	31,000
MV Cathlamet 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	6,667,000	-	-	6,667,000
MV Cathlamet 21-23 Improvement-Minor Diesel Energy Efficiency Propellers	PSRC	599,000	-	-	599,000
MV Cathlamet 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	265,000	-	265,000
MV Cathlamet 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	4,178,000	-	4,178,000
MV Cathlamet 23-25 Biennium Preservation, Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Cathlamet 23-25 Biennium Preservation, Steering System	PSRC	-	837,000	-	837,000
MV Cathlamet 23-25 Biennium Preservation, Information Technology/ Security	PSRC	-	21,000	-	21,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Cathlamet 25-27 Biennium Minor Preservation Projects	PSRC	-	-	316,000	316,000
MV Cathlamet 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Cathlamet 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	2,560,000	2,560,000
MV Cathlamet Improvement (19-21)	PSRC	56,000	-	-	56,000
MV Cathlamet Preservation (21-23) Port Security	PSRC	13,000	-	-	13,000
MV Cathlamet Preservation Propeller Hubs	PSRC	37,000	829,000	-	866,000
MV Chelan (23-25) Minor Preservation Propeller Hubs	PSRC	-	-	216,000	216,000
MV Chelan 21-23 Biennium Improvement (Commercial Shipyard)	PSRC	315,000	-	-	315,000
MV Chelan 21-23 Biennium Minor Preservation Projects	PSRC	3,846,000	-	-	3,846,000
MV Chelan 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	5,424,000	-	-	5,424,000
MV Chelan 23-25 Biennium Preservation Information Technology/Security	PSRC	-	1,220,000	-	1,220,000
MV Chelan 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	434,000	-	434,000
MV Chelan 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	10,319,000	-	10,319,000
MV Chelan 23-25 Biennium Preservation, Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Chelan 23-25 Biennium Preservation, Reduction Gear #1 & #2 Overhaul	PSRC	-	2,925,000	-	2,925,000
MV Chelan 25-27 Biennium Minor Preservation Projects	PSRC	-	-	1,991,000	1,991,000
MV Chelan 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Chelan 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	16,117,000	16,117,000
MV Chelan Improvement (19-21)	PSRC	56,000	-	-	56,000
MV Chelan Preservation Propeller Hubs	PSRC	31,000	690,000	-	721,000
MV Chelan, 23-25 Biennium, Preservation, Steering System	PSRC	-	837,000	-	837,000
MV Chetazemoka 23-25 Biennium Preservation, IT & Security	PSRC	-	1,032,000	-	1,032,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Chetzemoka 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	500,000	-	500,000
MV Chetzemoka 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	3,113,000	-	-	3,113,000
MV Chetzemoka 21-23 Biennium Preservation Regulatory Shipyard, OFE	PSRC	316,000	-	-	316,000
MV Chetzemoka 23-25 Biennium Preservation (Commercial Shipyard)	PSRC	-	73,000	-	73,000
MV Chetzemoka 25-27 Biennium Minor Preservation Projects	PSRC	-	-	537,000	537,000
MV Chetzemoka 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Chetzemoka 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	4,345,000	4,345,000
MV Chetzemoka Commercial Drydock	PSRC	261,000	-	-	261,000
MV Chetzemoka Improvement (19-21)	PSRC	57,000	-	-	57,000
MV Chetzemoka Preservation (21-23) Port Security	PSRC	102,000	-	-	102,000
MV Chimacum 23-25 Biennium Preservation CPP Hub #1 & #2 Install	PSRC	-	604,000	201,000	805,000
MV Chimacum 23-25 Biennium Preservation Fuel Meter Install	PSRC	-	237,000	78,000	315,000
MV Chimacum 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	80,000	-	80,000
MV Chimacum 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	187,000	933,000	1,120,000
MV Chimacum 23-25 Biennium Preservation Regulatory Shipyard, Secondary	PSRC	-	100,000	273,000	373,000
MV Chimacum 23-25 Biennium Preservation Regulatory Shipyard OFE	PSRC	-	100,000	256,000	356,000
MV Chimacum 25-27 Biennium Minor Preservation Projects	PSRC	-	-	943,000	943,000
MV Chimacum 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	8,489,000	8,489,000
MV Chimacum Improvement (19-21)	PSRC	55,000	-	-	55,000
MV Chimacum Preservation (21-23) Port Security	PSRC	102,000	-	-	102,000
MV Issaquah (23-25) Minor Preservation Propeller Hubs	PSRC	-	866,000	-	866,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Issaquah 21-23 Biennium Minor Preservation Projects	PSRC	3,881,000	-	-	3,881,000
MV Issaquah 21-23 Biennium Misc Improvements	PSRC	84,000	-	-	84,000
MV Issaquah 21-23 Improvement-Minor Diesel Energy Efficiency Propellers	PSRC	599,000	-	-	599,000
MV Issaquah 23-25 Biennium Preservation IT/Security	PSRC	-	1,243,000	-	1,243,000
MV Issaquah 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	290,000	-	290,000
MV Issaquah 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	6,558,000	-	6,558,000
MV Issaquah 23-25 Biennium Preservation, CPP #1 & #2 Hub installation	PSRC	-	805,000	-	805,000
MV Issaquah 23-35 Biennium Preservation, Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Issaquah 25-27 Biennium Minor Preservation Projects	PSRC	-	-	197,000	197,000
MV Issaquah 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Issaquah 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	1,588,000	1,588,000
MV Issaquah Improvement (19-21)	PSRC	56,000	-	-	56,000
MV Issaquah Improvement (21-23) Port Security	PSRC	8,000	-	-	8,000
MV Issaquah Preservation (19-21)	PSRC	3,102,000	-	-	3,102,000
MV Issaquah Preservation (21-23) Port Security	PSRC	95,000	-	-	95,000
MV Issaquah Preservation Propeller Hubs	PSRC	37,000	829,000	-	866,000
MV Kaleetan 21-23 Biennium Minor Preservation Projects	PSRC	339,000	-	-	339,000
MV Kaleetan 21-23 Biennium Misc Improvements	PSRC	87,000	-	-	87,000
MV Kaleetan 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	3,108,000	-	-	3,108,000
MV Kaleetan 23-25 Biennium Preservation Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Kaleetan 23-25 Biennium Preservation Information Technology/Security	PSRC	-	50,000	-	50,000
MV Kaleetan 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	829,000	-	829,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Kaleetan 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	1,514,000	-	1,514,000
MV Kaleetan 25-27 Biennium Minor Preservation Projects	PSRC	-	-	532,000	532,000
MV Kaleetan 25-27 Biennium Misc Improvements	PSRC	-	-	330,000	330,000
MV Kaleetan 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	4,299,000	4,299,000
MV Kaleetan Improvement (19-21)	PSRC	90,000	-	-	90,000
MV Kaleetan Preservation (21-23) Port Security	PSRC	95,000	-	-	95,000
MV Kennewick 21-23 Biennium Minor Preservation Projects	PSRC	763,000	-	-	763,000
MV Kennewick 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	3,239,000	-	-	3,239,000
MV Kennewick 21-23 Biennium Rudder Overhaul	PSRC	432,000	-	-	432,000
MV Kennewick 23-25 Biennium Misc Improvements	PSRC	-	329,000	-	329,000
MV Kennewick 23-25 Biennium Preservation (Commercial Shipyard)	PSRC	-	2,309,000	-	2,309,000
MV Kennewick 23-25 Biennium Preservation Information Technology/ Security	PSRC	-	1,032,000	-	1,032,000
MV Kennewick 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	501,000	-	501,000
MV Kennewick 25-27 Biennium Minor Preservation Projects	PSRC	-	-	17,000	17,000
MV Kennewick 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Kennewick 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	139,000	139,000
MV Kennewick Improvement (19-21)	PSRC	57,000	-	-	57,000
MV Kennewick Improvement (21-23) Port Security	PSRC	10,000	-	-	10,000
MV Kitsap (23-25) Minor Preservation Propeller Hubs	PSRC	-	-	721,000	721,000
MV Kitsap 21-23 Biennium Minor Preservation Projects	PSRC	732,000	-	-	732,000
MV Kitsap 21-23 Improvement-Minor Diesel Energy Efficiency Propellers	PSRC	599,000	-	-	599,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Kitsap 23-25 Biennium Preservation Information Technology/Security	PSRC	-	1,437,000	-	1,437,000
MV Kitsap 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	3,901,000	-	3,901,000
MV Kitsap 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	7,299,000	-	7,299,000
MV Kitsap 23-25 Biennium Preservation, Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Kitsap 23-25 Biennium Preservation, Reduction Gear #1 & #2 Overhaul	PSRC	-	1,545,000	-	1,545,000
MV Kitsap 23-25 Biennium Preservation, Steering System	PSRC	-	756,000	-	756,000
MV Kitsap 25-27 Biennium Minor Preservation Projects	PSRC	-	-	335,000	335,000
MV Kitsap 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Kitsap 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	2,703,000	2,703,000
MV Kitsap Improvement (19-21)	PSRC	56,000	-	-	56,000
MV Kitsap Improvement (21-23) Port Security	PSRC	8,000	-	-	8,000
MV Kitsap Preservation Propeller Hubs	PSRC	37,000	829,000	-	866,000
MV Kittitas 21-23 Biennium Minor Preservation Projects	PSRC	384,000	-	-	384,000
MV Kittitas 21-23 Biennium Misc Improvements	PSRC	95,000	-	-	95,000
MV Kittitas 21-23 Biennium OFE Procurement	PSRC	1,057,000	-	-	1,057,000
MV Kittitas 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	6,737,000	-	-	6,737,000
MV Kittitas 21-23 Improvement-Minor Diesel Energy Efficiency Propellers	PSRC	599,000	-	-	599,000
MV Kittitas 23-25 Biennium Preservation Information Technology/Security	PSRC	-	24,000	-	24,000
MV Kittitas 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	165,000	-	165,000
MV Kittitas 23-25 Biennium Preservation, Alarm & Monitoring System	PSRC	-	900,000	-	900,000
MV Kittitas 23-25 Biennium Preservation, Fuel Meter Install	PSRC	-	316,000	-	316,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Kittitas 23-25 Biennium Preservation, Nav/Communication/Life Saving	PSRC	-	991,000	-	991,000
MV Kittitas 23-25 Biennium Preservation, Steering System	PSRC	-	837,000	-	837,000
MV Kittitas 23-25 Biennium Preservation, Alarm/Monitoring System Upgrade	PSRC	-	1,087,000	-	1,087,000
MV Kittitas 25-27 Biennium Minor Preservation Projects	PSRC	-	-	515,000	515,000
MV Kittitas 25-27 Biennium Misc Improvements	PSRC	-	-	33,000	33,000
MV Kittitas 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	4,253,000	4,253,000
MV Kittitas Improvement (19-21)	PSRC	56,000	-	-	56,000
MV Kittitas Preservation (21-23) Port Security	PSRC	13,000	-	-	13,000
MV Kittitas Preservation Propeller Hubs	PSRC	37,000	829,000	-	866,000
MV Puyallup 23-25 Biennium Improvement Regulatory Shipyard, Primary	PSRC	-	173,000	-	173,000
MV Puyallup 23-25 Biennium Preservation Information Technology/Security	PSRC	-	1,443,000	-	1,443,000
MV Puyallup 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	271,000	-	271,000
MV Puyallup 23-25 Biennium Preservation Regulatory Shipyard, OFE	PSRC	-	396,000	-	396,000
MV Puyallup 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	7,796,000	-	7,796,000
MV Puyallup 23-25 Biennium Preservation, Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Puyallup 25-27 Biennium Minor Preservation Projects	PSRC	-	-	39,000	39,000
MV Puyallup 25-27 Biennium Misc Improvements	PSRC	-	-	330,000	330,000
MV Puyallup 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	322,000	322,000
MV Puyallup Hybrid Electric Conversion	PSRC	3,360,000	10,589,000	30,120,000	44,069,000
MV Puyallup Improvement (19-21)	PSRC	76,000	-	-	76,000
MV Puyallup Preservation (21-23) Port Security	PSRC	919,000	-	-	919,000
MV Puyallup Propulsion Control Preservation	PSRC	1,826,000	1,261,000	17,908,000	20,995,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Salish 21-23 Biennium Minor Preservation Projects	PSRC	461,000	-	-	461,000
MV Salish 23-25 Biennium Preservation Fuel Meter Install	PSRC	-	316,000	-	316,000
MV Salish 23-25 Biennium Preservation Information Technology/Security	PSRC	-	1,032,000	-	1,032,000
MV Salish 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	612,000	-	612,000
MV Salish 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	4,126,000	-	4,126,000
MV Salish 23-25 Biennium Preservation Regulatory Shipyard OFE	PSRC	-	104,000	-	104,000
MV Salish 25-27 Biennium Minor Preservation Projects	PSRC	-	-	107,000	107,000
MV Salish 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Salish 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	859,000	859,000
MV Salish Improvement (19-21)	PSRC	57,000	-	-	57,000
MV Samish 23-25 Biennium Preservation (Commercial Shipyard)	PSRC	-	9,536,000	-	9,536,000
MV Samish 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	1,145,000	-	1,145,000
MV Samish 25-27 Biennium Minor Preservation Projects	PSRC	-	-	223,000	223,000
MV Samish 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	2,003,000	2,003,000
MV Samish Improvement (19-21)	PSRC	55,000	-	-	55,000
MV Samish Preservation (21-23) Port Security	PSRC	19,000	-	-	19,000
MV Samish Preservation Propeller Hubs	PSRC	653,000	710,000	-	1,363,000
MV Samish Preservation Propeller Hubs 21-23 and 23-25	PSRC	1,363,000	-	-	1,363,000
MV Sealth (23-25) Minor Preservation Propeller Hubs	PSRC	-	866,000	-	866,000
MV Sealth 21-23 Biennium Minor Preservation Projects	PSRC	3,670,000	-	-	3,670,000
MV Sealth 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	6,645,000	-	-	6,645,000
MV Sealth 21-23 Improvement-Minor Diesel Energy Efficiency Propellers	PSRC	599,000	-	-	599,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Sealth 23-25 Biennium Preservation Information Technology & Security	PSRC	-	1,243,000	-	1,243,000
MV Sealth 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	6,815,000	-	6,815,000
MV Sealth 23-25 Biennium Preservation, Alarm & Monitoring System Upgrade	PSRC	-	1,087,000	-	1,087,000
MV Sealth 23-25 Biennium Preservation, CPP #1 & #2 Hub Install	PSRC	-	805,000	-	805,000
MV Sealth 23-25 Biennium Preservation, Fuel Meter Install	PSRC	-	316,000	-	316,000
MV Sealth 23-25 Biennium Preservation, Reduction Gear #1 & #2 Overhaul	PSRC	-	1,545,000	-	1,545,000
MV Sealth 23-25 Biennium Preservation, Steering System Install	PSRC	-	837,000	-	837,000
MV Sealth 23-25 Biennium Preservation, Nav/Communication/Life Saving	PSRC	-	834,000	-	834,000
MV Sealth 25-27 Biennium Minor Preservation Projects	PSRC	-	-	1,525,000	1,525,000
MV Sealth 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Sealth 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	12,341,000	12,341,000
MV Sealth Impr Future Placeholder	PSRC	-	-	-	-
MV Sealth Improvement (19-21)	PSRC	56,000	-	-	56,000
MV Sealth Improvement (21-23) Port Security	PSRC	8,000	-	-	8,000
MV Sealth Pres Future Placeholder	PSRC	-	-	-	-
MV Sealth Preservation (21-23) Port Security	PSRC	13,000	-	-	13,000
MV Sealth Preservation Propeller Hubs	PSRC	37,000	829,000	-	866,000
MV Spokane (21-23) Propulsion Control System Preservation	PSRC	26,000	-	-	26,000
MV Spokane 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	4,737,000	-	-	4,737,000
MV Spokane 23-25 Biennium Minor Preservation Projects	PSRC	-	-	-	-
MV Spokane 23-25 Biennium Misc Improvements	PSRC	-	-	-	-
MV Spokane 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	750,000	-	750,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Spokane 23-25 Biennium Preservation, Steering System	PSRC	-	837,000	-	837,000
MV Spokane 23-25 Biennium Preservation, Information Technology/Security	PSRC	-	21,000	-	21,000
MV Spokane 25-27 Biennium Minor Preservation Projects	PSRC	-	-	685,000	685,000
MV Spokane 25-27 Biennium Misc Improvements	PSRC	-	-	330,000	330,000
MV Spokane 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	5,549,000	5,549,000
MV Spokane Impr Future Placeholder	PSRC	-	-	-	-
MV Spokane Improvement (19-21)	PSRC	76,000	-	-	76,000
MV Spokane Improvement (21-23) Port Security	PSRC	10,000	-	-	10,000
MV Spokane Pres Future Placeholder	PSRC	-	-	-	-
MV Spokane Preservation (19-21)	PSRC	1,000	-	-	1,000
MV Spokane Preservation (21-23) Port Security	PSRC	95,000	-	-	95,000
MV Spokane Propulsion Control Alarm Preservation (19-21)	PSRC	14,000	-	-	14,000
MV Suquamish 21-23 Biennium Misc Improvements	PSRC	345,000	-	-	345,000
MV Suquamish 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	925,000	-	-	925,000
MV Suquamish 23-25 Biennium Preservation Information Technology/Security	PSRC	-	21,000	-	21,000
MV Suquamish 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	203,000	-	203,000
MV Suquamish Improvement (19-21)	PSRC	55,000	-	-	55,000
MV Suquamish Improvement (21-23) Port Security	PSRC	8,000	-	-	8,000
MV Suquamish Preservation (21-23) Port Security	PSRC	19,000	-	-	19,000
MV Tacoma 21-23 Biennium Minor Preservation Projects	PSRC	280,000	-	-	280,000
MV Tacoma 21-23 Preservation (Commercial Shipyard)	PSRC	6,845,000	3,574,000	-	10,419,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Tacoma 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	235,000	-	235,000
MV Tacoma 23-25 Biennium Preservation Information Technology/Security	PSRC	-	1,450,000	-	1,450,000
MV Tacoma 25-27 Biennium Minor Preservation Projects	PSRC	-	-	480,000	480,000
MV Tacoma 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Tacoma 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	3,891,000	3,891,000
MV Tacoma Hybrid Electric Conversion	PSRC	5,815,000	-	-	5,815,000
MV Tacoma Hybrid Electric Conversion - Carbon Emission Reduction	PSRC	-	36,680,000	1,247,000	37,927,000
MV Tacoma Improvement (19-21)	PSRC	76,000	-	-	76,000
MV Tacoma Preservation (21-23) Port Security	PSRC	197,000	-	-	197,000
MV Tacoma Preservation (21-23) Port Security	PSRC	826,000	-	-	826,000
MV Tacoma Propulsion Control Preservation	PSRC	4,816,000	11,765,000	4,161,000	20,742,000
MV Tacoma Propulsion Control Replacement	PSRC	106,000	-	-	106,000
MV Tillikum 23-25 Biennium Preservation Information Technology/Security	PSRC	-	21,000	-	21,000
MV Tillikum 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	113,000	-	113,000
MV Tillikum 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	3,000,000	17,000,000	-	20,000,000
MV Tillikum 25-27 Biennium Misc Improvements	PSRC	-	-	329,000	329,000
MV Tillikum Preservation (21-23) Port Security	PSRC	13,000	-	-	13,000
MV Tokitae 21-23 Biennium Misc Improvements	PSRC	364,000	-	-	364,000
MV Tokitae 21-23 Biennium Preservation (Commercial Drydocking)	PSRC	612,000	-	-	612,000
MV Tokitae 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	1,993,000	-	-	1,993,000
MV Tokitae 23-25 Biennium Preservation Fuel Meter Install	PSRC	-	316,000	-	316,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Tokitae 23-25 Biennium Preservation Information Technology/Security	PSRC	-	339,000	-	339,000
MV Tokitae 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	1,234,000	-	1,234,000
MV Tokitae 23-25 Biennium Preservation Regulatory Shipyard OFE	PSRC	-	2,300,000	-	2,300,000
MV Tokitae 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	5,778,000	-	5,778,000
MV Tokitae 23-25 Biennium Preservation CPP Hub #1 & #2 Install	PSRC	-	805,000	-	805,000
MV Tokitae 25-27 Biennium Minor Preservation Projects	PSRC	-	-	152,000	152,000
MV Tokitae 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	1,368,000	1,368,000
MV Tokitae Impr Future Funds	PSRC	-	-	-	-
MV Tokitae Improvement (19-21)	PSRC	55,000	-	-	55,000
MV Tokitae Preservation (21-23) Port Security	PSRC	19,000	-	-	19,000
MV Tokitae Preservation Propeller Hubs	PSRC	695,000	755,000	-	1,450,000
MV Walla Walla 21-23 Biennium Misc Improvements	PSRC	116,000	-	-	116,000
MV Walla Walla 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	4,822,000	-	-	4,822,000
MV Walla Walla 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	3,810,000	-	3,810,000
MV Walla Walla 23-25 Biennium Preservation, Fire Screen Doors	PSRC	-	690,000	-	690,000
MV Walla Walla 23-25 Biennium Preservation, Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Walla Walla 23-25 Biennium Preservation, Heating Boiler Replacement	PSRC	-	360,000	-	360,000
MV Walla Walla 23-25 Biennium Preservation, Propulsion Controls	PSRC	-	1,087,000	-	1,087,000
MV Walla Walla 23-25 Biennium Preservation, Steering System	PSRC	-	837,000	-	837,000
MV Walla Walla 25-27 Biennium Minor Preservation Projects	PSRC	-	-	607,000	607,000
MV Walla Walla 25-27 Biennium Misc Improvements	PSRC	-	-	330,000	330,000
MV Walla Walla 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	4,898,000	4,898,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Walla Walla Improvement (19-21)	PSRC	76,000	-	-	76,000
MV Walla Walla Improvement (21-23) Port Security	PSRC	10,000	-	-	10,000
MV Walla Walla Preservation Information Technology & Security	PSRC	-	1,231,000	-	1,231,000
MV Walla Walla Preservation Navigation/Communication/Life Saving Equip	PSRC	-	726,000	-	726,000
MV Walla Walla Propulsion Control Alarm Preservation (19-21)	PSRC	3,380,000	-	-	3,380,000
MV Wenatchee 21-23 Biennium Improvement (Commercial Shipyard)	PSRC	10,496,000	-	-	10,496,000
MV Wenatchee 21-23 Biennium Minor Preservation Projects	PSRC	362,000	-	-	362,000
MV Wenatchee 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	2,304,000	-	-	2,304,000
MV Wenatchee 21-23 Biennium Preservation (Commercial Shipyard) Secondary	PSRC	523,000	-	-	523,000
MV Wenatchee 23-25 Biennium Minor Preservation Projects	PSRC	-	109,000	-	109,000
MV Wenatchee 23-25 Biennium Misc Improvements	PSRC	-	330,000	-	330,000
MV Wenatchee 23-25 Biennium Preservation (Commercial Shipyard)	PSRC	-	885,000	-	885,000
MV Wenatchee 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	235,000	-	235,000
MV Wenatchee 23-25 Biennium Preservation,Information Technology/Security	PSRC	-	1,509,000	-	1,509,000
MV Wenatchee 25-27 Biennium Minor Preservation Projects	PSRC	-	-	427,000	427,000
MV Wenatchee 25-27 Biennium Misc Improvements	PSRC	-	-	330,000	330,000
MV Wenatchee 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	3,459,000	3,459,000
MV Wenatchee Hybrid Electric Conversion	PSRC	12,408,000	25,790,000	-	38,198,000
MV Wenatchee Hybrid Electric Conversion - Carbon Emission Reduction	PSRC	-	9,212,000	-	9,212,000
MV Wenatchee Improvement (19-21)	PSRC	76,000	-	-	76,000

Project Title	MPO	21 - 23	23 - 25	25 - 27	Total
MV Wenatchee Preservation (21-23) Port Security	PSRC	945,000	-	-	945,000
MV Wenatchee Propulsion Control Preservation	PSRC	5,618,000	12,658,000	7,635,000	25,911,000
MV Wishkah (Hybrid Electric Olympic Class 144 Auto Ferry #1)	PSRC	5,768,000	46,818,000	178,528,000	231,114,000
MV Yakima 21-23 Biennium Preservation (Commercial Shipyard)	PSRC	200,000	16,436,000	-	16,636,000
MV Yakima 23-25 Biennium Preservation Information Technology/Security	PSRC	-	50,000	-	50,000
MV Yakima 23-25 Biennium Preservation Nav/Communication/Life Saving	PSRC	-	760,000	-	760,000
MV Yakima 23-25 Biennium Preservation Regulatory Shipyard, Primary	PSRC	-	2,800,000	-	2,800,000
MV Yakima 23-25 Biennium Preservation, Fuel Meter Installation	PSRC	-	316,000	-	316,000
MV Yakima 25-27 Biennium Minor Preservation Projects	PSRC	-	-	571,000	571,000
MV Yakima 25-27 Biennium Misc Improvements	PSRC	-	-	320,000	320,000
MV Yakima 25-27 Biennium Preservation (Commercial Shipyard)	PSRC	-	-	4,613,000	4,613,000
MV Yakima Improvement (19-21)	PSRC	90,000	-	-	90,000
MV Yakima Preservation (21-23) Port Security	PSRC	114,000	-	-	114,000
MV Yakima Preservation (21-23) Port Security	PSRC	13,000	-	-	13,000
Standardized Vessel Maintenance and Preservation Contract Specification	PSRC	1,500,000	-	-	1,500,000
Vessel Electrification Program Support	PSRC	702,000	1,380,000	1,380,000	3,462,000
Vessel Project Support	PSRC	4,198,000	8,311,000	-	12,509,000
Vessels Security -2018 PGSP- Access Control/Video Monitoring	PSRC	1,702,000	-	-	1,702,000
WSF/Administrative Support (Allocated to W2)	PSRC	3,038,000	3,879,000	4,031,000	10,948,000
Total		\$161,227,000	\$347,920,000	\$498,450,000	\$1,007,597,000

Table 9: Proposed Investments for Terminals

Project Title	21 - 23	23 - 25	25 - 27	Total
WSF/Systemwide - Ferry Vessel and Terminal Preservation	4,200,000	4,171,000	4,216,000	12,587,000
WSF Systemwide - ORCA Participation in Regional Program	2,383,000	-	-	2,383,000
WSF/Systemwide Terminals - Maritime Security Infrastructure Preservation	524,000	-	-	524,000
WSF/Systemwide Terminal Security - Preservation	900,000	2,870,000	384,000	4,154,000
WSF/Systemwide - Dispatch System Replacement	4,000,000	10,000,000	-	14,000,000
WSF/Administrative Support (Allocated to W1) - Out Biennia Placeholder	5,934,000	2,681,000	2,242,000	10,857,000
Terminal Energy Efficiency Project - Ameresco	79,000	-	-	79,000
DPS/Trm Project Support - Primavera/PMRS Out Biennia Placeholder	47,000	375,000	-	422,000
DPS/Trm Project Support - PMRS/Primavera Implementation	367,000	-	-	367,000
DPS/Terminal Project Support - Out Biennia Placeholder	-	8,521,000	9,295,000	17,816,000
DPS/Trm Project Support - TE Supervision, Office Support & Supplies	2,588,000	-	-	2,588,000
DPS/Trm Project Support - Regulatory Compliance & Inspections	2,452,000	-	-	2,452,000
DPS/Trm Project Support - Terminal Engineering Studies	525,000	-	-	525,000
DPS/Trm Project Support - Terminal Program Planning & Design Standards	604,000	-	-	604,000
DPS/Trm Project Support - Terminal Engineering Technical Support	318,000	-	-	318,000
DPS/Trm Project Support - Terminal Engineering Project Controls	1,658,000	-	-	1,658,000
WSF Systemwide - TWIC Security Access Control System	796,000	-	-	796,000
Computerized Maintenance Management System (CMMS) Transition	620,000	136,000	-	756,000
WSF/IT EFS Preservation	196,000	-	-	196,000
WSF/Systemwide - Ladder Safety	222,000	-	-	222,000
WSF/IT Terminal Telecommunications	550,000	-	-	550,000
Life Extension of Electronic Fare System (EFS)	11,000	-	-	11,000

Project Title	21 - 23	23 - 25	25 - 27	Total
SR 160/Vashon Trm - Future Preservation Placeholder	-	2,959,000	5,763,000	8,722,000
SR 160/Vashon Trm Slip 2 - Vehicle Transfer Span Rehabilitation	768,000	1,659,000	-	2,427,000
SR 160/Vashon Trm Slip 3 - Timber Outer Dolphin Replacement	81,000	579,000	931,000	1,591,000
SR 160/Vashon Trm - Building Renovation	44,000	191,000	-	235,000
SR 160/Vashon Trm - Maritime Security Upgrades	279,000	-	-	279,000
SR 163/Tahlequah Trm-Replacement of Network Infrastructure	12,000	-	-	12,000
SR 163/Tahlequah Trm - BridgeSeat Replacement	-	204,000	932,000	1,136,000
SR 163/Tahlequah Trm - Facility ADA Compliance Improvements	397,000	-	-	397,000
SR 163/Tahlequah Trm - Shoreline Slope Stabilization	659,000	-	-	659,000
SR 163/Tahlequah Trm - Maritime Security Upgrades	-	78,000	-	78,000
SR 163/Tahlequah Trm - Timber Trestle Replacement	-	-	870,000	870,000
SR 160/Southworth Trm - Maritime Security Upgrades	275,000	-	-	275,000
SR 160/Southworth Trm - Timber Trestle & Trm Bldg Replacement	12,604,000	5,867,000	2,893,000	21,364,000
SR 20 Spur/Shaw Island Trm - Trestle Replacement	-	386,000	1,751,000	2,137,000
SR 20 Spur/Shaw Island Trm-Replacement of Network Infrastructure	12,000	-	-	12,000
SR 519/Seattle Trm - Future Preservation Placeholder	-	2,903,000	1,230,000	4,133,000
SR 519/Seattle Trm - Terminal Electrification	8,200,000	-	-	8,200,000
SR 519/Seattle Trm - Electrical Connection for Hybrid	3,700,000	-	-	3,700,000
SR 519/Seattle Trm Slip 1 - Overhead Loading Rehabilitation	-	305,000	732,000	1,037,000
SR 339/Seattle Trm - Passenger-Only Ferry Facilities Replacement	287,000	-	-	287,000
SR 519/Seattle Trm - Terminal Bldg & N. Trestle Replacement	129,520,000	3,491,000	-	133,011,000
SR 519/Seattle Trm Slip 3 - OHL & Transfer Span Replacement	325,000	-	-	325,000
SR 519/Seattle Trm Slip 2 - Passenger Overhead Loading Replacement	361,000	1,121,000	8,220,000	9,702,000
SR 519/Seattle Trm - Maritime Security Upgrades	52,000	-	-	52,000

Project Title	21 - 23	23 - 25	25 - 27	Total
SR 519/Seattle Trm Slip 2 - Vehicle Transfer Span Rehabilitation	85,000	263,000	1,969,000	2,317,000
SR 99/Seattle Trm - Marion St Pedestrian Bridge (WSF PIN)	800,000	-	-	800,000
SR 20/Port Townsend Trm - Future Preservation Placeholder	-	669,000	-	669,000
SR 20/Port Townsend - Toll Booth 2, Hazmat & Storage Building Buildings	-	-	100,000	100,000
SR 20/Port Townsend Trm Slip 2 - Timber Dolphin Replacement	-	113,000	529,000	642,000
SR 20/Port Townsend Trm Slip 2 - Vehicle Transfer Span Replacement	-	42,000	2,270,000	2,312,000
SR 20/Port Townsend Trm - Maritime Security Upgrades	292,000	-	-	292,000
SR 163/Point Defiance Trm - Future Preservation Placeholder	-	-	1,171,000	1,171,000
SR 163/Point Defiance Trm - Toll Booth 1	-	72,000	276,000	348,000
SR 163/Point Defiance Trm - Timber Trestle & Trm Bldg Replacement	-	273,000	1,385,000	1,658,000
SR 163/Point Defiance Trm - Maritime Security Upgrades	-	245,000	-	245,000
SR 163/Point Defiance Trm - Emergency Generator Improvement	104,000	-	-	104,000
SR 20 Spur/Orcas Island Trm - ADA Compliance Improvements Phase 2	757,000	-	-	757,000
SR 20 Spur/Orcas Island Trm - Vehicle Transfer Span Rehabilitation	595,000	1,375,000	-	1,970,000
SR 20 Spur/Orcas Island Trm - Timber Trestle Replacement	-	213,000	975,000	1,188,000
SR 20 Spur/Orcas Island Trm - Visual Paging System Improvements	250,000	-	-	250,000
SR 525/Mukilteo Trm (Proviso) - Multimodal Ferry Terminal Relocation	5,864,000	58,000	-	5,922,000
SR 525/Mukilteo Trm-Replacement of Network Infrastructure	51,000	-	-	51,000
SR 20 Spur/Lopez Island Trm - Trestle Retrofit & Transfer Span Rehab	428,000	9,071,000	-	9,499,000
SR 104/Kingston Trm - Future Preservation Placeholder	-	8,333,000	-	8,333,000
SR 104/Kingston Trm - Slips 1 & 2 Wingwalls	-	-	1,470,000	1,470,000

Project Title	21 - 23	23 - 25	25 - 27	Total
SR 104/Kingston Trm-Gangway-Bridge Seat & Tower Retrofit - Elect & Mech	-	-	820,000	820,000
SR 104/Kingston Trm- Hazmat and Storage Building 1, 2, and 3	-	163,000	-	163,000
SR 104/Kingston Trm - Slip 1/2 OHL Elect & Mech Systems	-	6,663,000	-	6,663,000
SR 104/Kingston Trm Slip 1/2 Seismic Retrofit/Trestle Approach Imp	3,653,000	13,487,000	-	17,140,000
SR 104/Kingston Trm - Maritime Security Infrastructure Preservation	248,000	-	-	248,000
SR 104/Kingston Ferry Trm Slip 1 - Bridge Seat Scour Repair	153,000	-	-	153,000
SR 104/Kingston Trm Holding Area - Restroom Building Replacement	-	1,086,000	-	1,086,000
SR 104/Kingston Trm-Replacement of Network Infrastructure	12,000	-	-	12,000
SR 20/Coupeville - Toll Booth 2	-	-	71,000	71,000
SR 20/Coupeville Trm - Slip 1 Transfer Span Mech & Elect	-	994,000	3,519,000	4,513,000
SR 20/Coupeville Trm-Replacement of Network Infrastructure	11,000	-	-	11,000
SR 20/Coupeville Trm - Agent's Office	596,000	-	-	596,000
SR 20/Coupeville Trm - Timber Dolphin Replacement	-	151,000	736,000	887,000
SR 20/Coupeville Trm - Maritime Security Upgrades	263,000	-	-	263,000
SR 20 Spur/Friday Harbor Trm - Future Preservation Placeholder	-	-	1,159,000	1,159,000
SR 20 Spur/Friday Harbor Trm Slip 1 - Bridge Seat Rehabilitation	500,000	1,099,000	-	1,599,000
SR 20 Spur/Friday Harbor Trm - Crew Living Quarters Bldg Replacement	-	346,000	-	346,000
SR 20 Spur/Friday Harbor Trm - Visual Paging System Improvement	250,000	-	-	250,000
SR 20 Spur/Friday Harbor Trm - Maritime Security Upgrades	-	285,000	-	285,000
SR 160/Fauntleroy Trm - Future Preservation Placeholder	-	2,279,000	-	2,279,000
SR 160/Fauntleroy Trm-Replacement of Network Infrastructure	31,000	-	-	31,000
SR 160/Fauntleroy Trm - Maritime Security Upgrades	271,000	-	-	271,000

Project Title	21 - 23	23 - 25	25 - 27	Total
SR 160/Fauntleroy Trm - Trestle & Transfer Span Replacement	9,546,000	12,105,000	70,016,000	91,667,000
SR 104/Edmonds Trm - Future Preservation Placeholder	-	6,628,000	-	6,628,000
SR 104/Edmonds Trm-Replacement of Network Infrastructure	61,000	-	-	61,000
SR 104/Edmonds Trm - Maritime Security Infrastructure Preservation	271,000	-	-	271,000
SR 104/Edmonds Trm - Tower Replacement	-	500,000	2,277,000	2,777,000
SR 104/Edmonds Trm - Trestle & Transfer Span Replacement	-	3,910,000	4,664,000	8,574,000
SR 104/Edmonds Trm Bulkhead - Ground Stabilization Seismic Retrofit	80,000	-	-	80,000
SR 104/Edmonds Trm - Tollbooth Replacement	-	73,000	421,000	494,000
SR 104/Edmonds Trm - Unocal Property Environmental Monitoring	436,000	-	-	436,000
SR 305/Eagle Hbr Maint Facility - Future Preservation Placeholder	-	8,486,000	1,155,000	9,641,000
SR 305/Eagle Hbr Maint Facility-Replacement of Network Infrastructure	19,000	-	-	19,000
SR 305/Eagle Hbr Maint Facility - Hazmat Storage Building Replacement	-	-	-	-
SR 305/Eagle Hbr Maint Facility - Physical Security Project Installation	284,000	-	-	284,000
SR 305/Eagle Hbr Maint Facility - Automatic Transfer Switch Upgrade	-	799,000	3,236,000	4,035,000
SR 305/Eagle Hbr Maint. Fac. Slip F - Drive-on Tie-up Slip Improvement	6,221,000	592,000	-	6,813,000
SR 305/Eagle Hbr Maint Facility - Welding Shop Building Replacement	371,000	842,000	-	1,213,000
SR 305/Eagle Hbr Maint Facility Tie-up Slips - Wing Dolphin Replacement	-	242,000	2,706,000	2,948,000
SR 305/Eagle Hbr Maint Facility Slip E - Timber Wingwall Replacement	-	109,000	552,000	661,000
SR 525/Clinton Trm - Future Preservation Placeholder	-	4,520,000	1,283,000	5,803,000
SR 525/Clinton Trm Trestle and Traffic Lane Paving	-	362,000	1,878,000	2,240,000
SR 525/Clinton Trm-Replacement of Network Infrastructure	11,000	-	-	11,000

Project Title	21 - 23	23 - 25	25 - 27	Total
SR 525/Clinton Trm - Pedestrian Sidewalk Enhancements	9,000	-	-	9,000
SR 525/Clinton Trm - Maritime Security Infrastructure Preservation	251,000	-	-	251,000
SR 525/Clinton Trm - Park and Ride Lot Expansion	-	396,000	3,757,000	4,153,000
SR 525/Ferry Dock Rd - Passenger Drop-Off & ADA Improvements	746,000	-	-	746,000
SR 525/Clinton Trm - Passenger Overhead Loading Improvement	-	1,336,000	3,555,000	4,891,000
SR 304/Bremerton Trm - Future Preservation Placeholder	-	3,349,000	-	3,349,000
SR 304/Bremerton Trm - Slip 1 Transfer Span Elec/ Mech Systems	-	766,000	4,231,000	4,997,000
SR 304/Bremerton Trm - Illumination System Rebuild	-	121,000	-	121,000
SR 304/Bremerton Trm - Olympic Class Dolphin Modifications	55,000	-	-	55,000
SR 304/Bremerton Trm Slip 2 - Left Inner Dolphin Replacement	18,000	67,000	1,053,000	1,138,000
SR 304/Bremerton Trm - Maritime Security Infrastructure Preservation	120,000	-	-	120,000
SR 304/Bremerton Trm Slips 1 & 2 - Dolphin Replacement	1,249,000	3,560,000	-	4,809,000
SR 304/Bremerton Trm Slips 1 & 2 - Vehicle Transfer Span Replacement	2,155,000	15,999,000	6,067,000	24,221,000
SR 305/Bainbridge Island Trm - Future Preservation Placeholder	-	7,358,000	1,332,000	8,690,000
SR 305/Bainbridge Island Trm OHL - Pedestrian Fixed Walkway Replacement	18,411,000	-	-	18,411,000
SR 305/Bainbridge Island Trm - NE Parking Lot Pavement Rehabilitation	2,942,000	150,000	-	3,092,000
SR 305/Bainbridge Trm - Maritime Security Infrastructure Preservation	203,000	-	-	203,000
SR 305/Bainbridge Island Trm - Overhead Loading Cab Rehabilitation	7,513,000	-	-	7,513,000
SR 305/Bainbridge Island Trm - Toll Booths 1 - 4 & Upland Paving	-	347,000	2,244,000	2,591,000
SR 305/Bainbridge Island Trm- Replacement of Network Infrastructure	14,000	-	-	14,000
SR 305/Bainbridge Island Trm - Illumination System Rebuild	32,000	-	-	32,000

Project Title	21 - 23	23 - 25	25 - 27	Total
SR 20 Spur/Anacortes Trm-Maritime Security Infrastructure Preservation	213,000	-	-	213,000
SR 20 Spur/Anacortes Trm - VMS Electronic Reader Boards Replacement	-	-	-	-
SR 20 Spur/Anacortes Trm - Emergency Power Improvements	32,000	-	-	32,000
SR 20 Spur/Anacortes Trm Bldg Vic - Underground Storage Tank Remediation	14,000	-	-	14,000
SR 20 Spur/Anacortes Trm - Tollbooth Replacement	2,482,000	780,000	-	3,262,000
SR 20 Spur/Anacortes Trm - DHS/CBP Compound Canopies Replacement	2,111,000	-	-	2,111,000
SR 20 Spur/Anacortes Trm Slip 2 - Timber Trestle Replacement	-	524,000	1,395,000	1,919,000
SR 20 Spur/Anacortes Trm Slip 1 - Timber Trestle Replacement	780,000	2,989,000	14,124,000	17,893,000
SR 20 Spur/Anacortes Trm-Replacement of Network Infrastructure	18,000	-	-	18,000
SR 20 Spur/Anacortes Trm - Replace Building & Site Improvements	47,000	-	-	47,000
Total	\$258,479,000	\$172,687,000	\$181,855,000	\$613,021,000

Appendix B

Compliance checklist

Tier II Agency

Requirement	Met
Do I have a TAM plan that covers a four-year period?	Yes, this document serves as the TAM plan for the next four years.
Was the TAM plan updated within the last four years?	Yes. This plan is the current update dated October 2022.
Do I have a TAM plan that includes all of the required elements, including:	
An asset inventory for all assets used in the provision of public transportation	Yes, pages 6-8
A condition assessment of all assets in my asset inventory for which I have direct capital responsibility.	Yes, pages 7 & 8
An investment prioritization that: <ol style="list-style-type: none"> 1. Ranks projects to improve or manage the state of good repair over the horizon period, 2. Includes all capital assets for which I have direct capital responsibility, and 3. Is at the asset class level 	Yes, pages 12-36
Did I document the analytical processes and decision support tools used in developing my TAM plan?	Yes, pages 9-11
Do I have documentation that I calculated performance for:	
Equipment (non-revenue service vehicles): the percentage of those vehicles that have either met or exceeded their ULB for all assets for which I have direct capital responsibility.	N/A
Rolling Stock (revenue vehicles): the percentage of revenue vehicles by vehicle type that have either met or exceeded their ULB for all assets for which I have direct capital responsibility.	Yes, page 7
Infrastructure (rail fixed-guideway, track, signals, and systems): the percentage of track segments with performance restrictions for all assets for which I have direct capital responsibility.	N/A
Facilities: the percentage of facilities within an asset group rated below condition 3 on the TERM scale for all assets for which I have direct capital responsibility. Condition assessments have been conducted within the last four years.	Yes, page 8

Requirement	Met
Do I have documentation that I set performance targets annually to project the following fiscal year for:	
Equipment	N/A
Rolling Stock	Yes, pages 5-6
Infrastructure	N/A
Facilities	Yes, pages 5-6
Did my Accountable Executive approve the performance targets?	Yes
Did I make my TAM plan, any supporting records or documents, performance targets, investment strategies, and the annual condition assessment report available to the State and/or MPO that provides my funding?	N/A

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