

2017-2019 Capital Improvement and Preservation Program

September 2016



Roger Millar
Secretary of Transportation

Cover Design

The cover, designed by Diana Lessard of the Communications Office, shows a photo of WSDOT staff inspecting the Deception Pass Bridge.

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2017-19 Capital Improvement and Preservation Program

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Summary and Highlights

enacted CW transportation package requires Practical Solutions for those projects funded through the 16-year package. WSDOT is implementing this direction through a comprehensive approach that involves Least Cost Planning and Practical Design throughout the entire project lifecycle.

Our 2017-19 budget request aligns with our strategic plan, which includes:

- Strategic Investments - Effectively manage system assets and multimodal investments on corridors to enhance economic vitality.
- Modal Integration - Optimize existing system capacity through better interconnectivity of all transportation modes.
- Environmental Stewardship - Promote sustainable practices to reduce greenhouse gas emissions and protect natural habitat and water quality.
- Organizational Strength - Support a culture of multi-disciplinary teams, innovation and people development through training, continuous improvement and Lean efforts.
- Community Engagement - Strengthen partnerships to increase credibility, drive priorities and inform decision making.
- Smart Technology - Improve information system efficiency to users and enhance service delivery by expanding the use of technology.

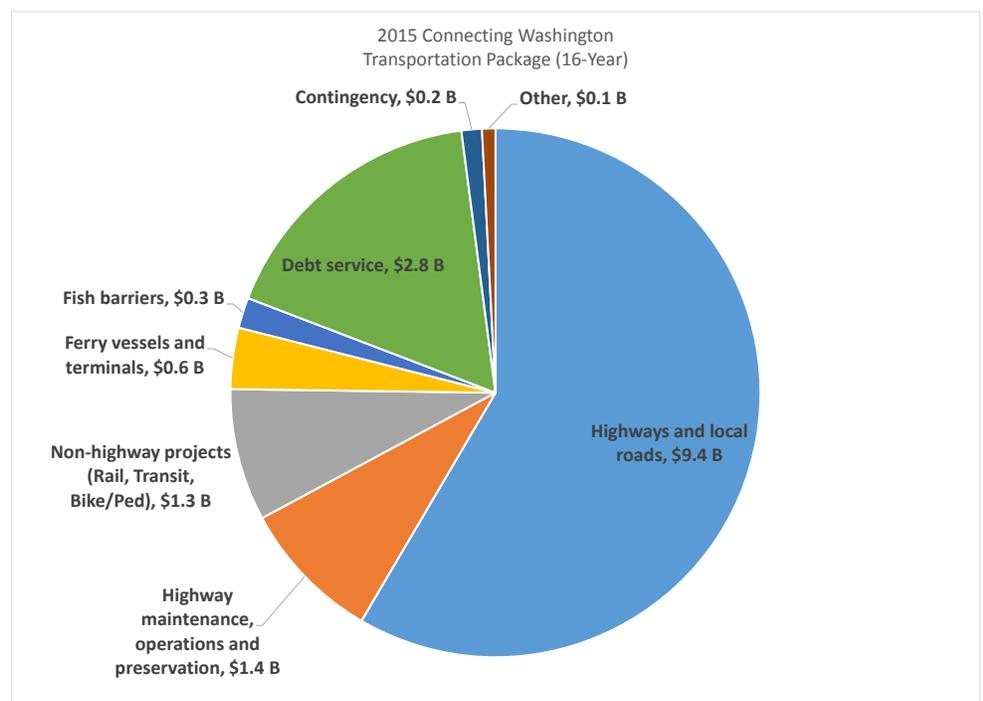
Additionally, the Department has identified three emphasis areas. These emphasis areas do not replace our Results WSDOT strategic plan. Rather, they support, expand on, and in some cases, speed up the work already in progress. Agency emphasis areas include:

- Inclusion - making sure there are fair and equal opportunities to participate in WSDOT employment contracts and decision making, and that every voice is heard.
- Workforce development - addressing recruitment and retention issues and succession planning for our agency's future.
- Practical solutions - ensuring efficient delivery of programs and projects with fewer resources; funding for future preservation and emergent needs makes this a critical focus area.

II. Implementing the Connecting Washington Transportation Package

Over the next sixteen years, the CW transportation package will make critical investments in our state's multimodal transportation system, helping to finish projects in key corridors to preserve infrastructure and reduce congestion in densely populated areas. It provides funding to improve freight mobility and support multimodal transportation options through projects that make walking and bicycling safer and more convenient with better connections to transit, rail and ferries. The package also provides additional local options for transit, addresses the most critical needs for bridges and enhances salmon recovery efforts by removing fish barriers.

CW requires Practical Solutions on projects funded through the 16-year program. We will meet legislative direction by providing guidance to planners, designers and construction practices to implement least cost planning and practical design principles throughout all phases of project delivery. One of the primary objectives is to do more projects and address more problems more quickly. This performance-based approach looks for lower cost solutions that produce the best return on investment in order to meet outcomes that



communities and stakeholders have identified. Practical Solutions allows more flexibility and freedom to innovate and considers incremental solutions to address uncertainties in future scenarios.

Our efforts are expanding the approach to find Practical Solutions in all aspects of our business process, asset management, multimodal transportation systems operations, planning and design, and project construction practices. Some key characteristics of Practical Solutions is:

- Moving to a performance based approach to solving transportation problems.
- Using data, new tools and best practices to preserve and maintain existing assets so that they last longer.
- Using more comprehensive tools and performance measures to support decision making, rather than using limited data such as volume of current traffic or safety history.
- Establishing a multidisciplinary, multijurisdictional, collaborative approach to decision making so that we don't just consider highways, but look at the entire transportation system.
- Enhancing community engagement efforts to craft least-cost solutions within the context of land use.
- Considering operational demand management strategies before high cost capital projects are committed
- Implementing low-cost solutions sooner, rather than waiting years for a high cost project to be funded
- Using sustainable transportation practices to preserve the environment, promote transportation efficiency, seek fiscally efficient solutions, improve and protect public health, conserve energy and reduce greenhouse gases.

Practical Solutions is a priority for WSDOT and work is underway to integrate it within various programs in the agency, with an emphasis on outreach, community engagement and training. Continuing our Results WSDOT work and making progress implementing Practical Design includes development of design guidance, training and oversight of CW projects through an executive oversight committee. We are making significant progress to transform policies and programs to make this paradigm shift towards managing assets and working with our partners to develop low cost solutions to improve mobility throughout the state. Some highlights of the work completed and underway:

- Developed a plan that aligns delivery method decision making with other project management activities to demonstrate thoughtful decisions that result in more efficient project delivery statewide.
- Developing a statewide asset management program as part of an agency-wide effort to collaboratively manage assets while taking into account customer needs.
- Developing criteria for prioritizing future capacity improvement projects that will improve links between WSDOT planning and programming.

Community engagement is key factor in helping to develop practical solutions. The goal is to fully engage partners and the affected community in the decision making process by working together to identify the purpose of action, assess data from all parts of the system, and examine a range of options before investment decisions are made.

III. Project Delivery Plan

WSDOT uses a nationally recognized long range, six-year highway construction planning method to program investments in our transportation infrastructure and to comply with the Federal requirement for the state to program four years of projects in the State Transportation Improvement Program (STIP). This planning approach was introduced in our 2016 Supplemental Budget request. Previously, the Department provided a two-year, detailed list of projects as required in the biennial budget process. The six-year plan is updated annually following each legislative session. This timing allows for incorporating new legislative direction prior to working with planning organizations on updating the STIP. The six-year plan includes projects that exceed available revenue as a planning and delivery tool. This approach allows us to have priority projects ready to utilize project savings or additional revenue that may become available, such as redistributed federal funding. These over-programmed projects are not included in our agency budget assumptions.

Federal program delivery assumptions: The federal funding levels assumed in the Department's 2017-19 biennial budget request is based on the Transportation Revenue Forecast Council's (TRFC) June 2016 Federal Forecast and the Governor's Fixing America's Surface Transportation (FAST) workgroup, which recommended how federal funds should be distributed between WSDOT and local jurisdictions by federal program. The 2016 Legislative Project list assumed Moving Ahead for Progress in the 21st Century (MAP-21) level of funded with a 20% reduction that approximated Washington state's contribution to the federal Highway Trust Fund.

The following assumptions were used to program federal funds for the highway construction program.

- The federal expenditure plan assumed in the Department's request is based on the June 2016 Federal Forecast.
- The distribution of Federal-Aid Highway Program funding is consistent with the results of the Governor's (FAST) workgroup.
- Obligation Authority is consistent with the June 2016 Federal Forecast.

Additionally, the Department's 2017-19 capital budget proposal updates investment level reserves in the outer years, for investment areas such as intersection spot improvements, roadway preservation, and bridge preservation. Reserve amounts are based on projected needs and historical funding levels.

Asset management and performance measures: In July 2012, MAP-21 codified asset management principles into law. This legislation establishes a performance-based highway program with the goal of improving how federal transportation funds are allocated amongst states. In addition, MAP-21 requires each state department of transportation to develop, at a minimum, a risk-based Transportation Asset Management Plan. Plan development process must be reviewed and recertified at least every four years. The penalty for failure to implement this requirement is a reduced Federal share for National Highway Performance program projects in that year (65 percent instead of the usual 80 percent).

The Department is developing an asset management plan that satisfies the federal requirement, but then expands to include other highway and modal assets. The current draft of the plan serves as a framework for financially sustainable infrastructure and service delivery. It clarifies connections between assets, stewardship, risk management, performance management, and long-term financial planning. Using asset specific performance measures, triggers are established to identify when maintenance or preservation is required. Because there is not enough funding, the challenge is to not delay routine maintenance so long that assets continue to age and deteriorate. Delay too long and it may require costly reconstruction or replacement. WSDOT's approach is to consider the potential risk of failure along with the historic asset performance to prioritize problem areas before they become critical.

IV. Challenges

Although, CW provided exceptional funding for important transportation activities, there are still areas that have challenges in the near future.

- Fish barrier removal
- Ferries vessel and terminal preservation, emergency increase
- Capital funding restrictions
- Americans with Disabilities Act (ADA)
- Alaskan Way Viaduct construction transit mitigation
- Litigation

Fish barrier removal: Continuing critical investment in court ordered fish passage. Although WSDOT has received funding averaging \$80 million per biennium through 2030 the department will need additional funding in order to make significant progress in reaching injunction requirements.

Capital funding restrictions: The transportation funding structure continues to present challenges to the Department, with increasing pressures on the operating budgets, both state and federal funds have become over restrictive and inefficient to manage. Restricted provisos are not a sustainable long term

approach to deliver a robust, flexible 21st century program that demands flexibility as a practical solutions approach. In the future we will see an urgent need on the operating side due to this lack of flexibility on the Capital side, both state and federal funds.

Americans with Disabilities Act (ADA): WSDOT is implementing a two-pronged transition plan to achieve ADA compliance within a reasonable time period. Consistent with Federal Highway Administration (FHWA) guidance, WSDOT will continue addressing curb ramps and signals on capital transportation projects to the maximum extent feasible. This transition plan will produce policies and procedures, supported by funded programs, with a goal to bring WSDOT into compliance with the American with Disabilities Act by 2032, and to provide pedestrian connectivity to WSDOT's transportation system with a sustainable commitment. To meet the transition plan goals an investment of approximately \$60 million over the next six years is needed, which shifts some focus from other areas in the safety program such as collision prevention/reduction. This transition plan includes the following:

- Develop a long-term approach to collect data from design and construction.
- Describe methods and programs to address accessibility barriers.
- Outline a schedule for achieving completion, with an annual identification of planned steps for each year.
- Provide an annual update of the status of projects and an itemization of completed projects.

Alaskan Way Viaduct (AWV) construction transit mitigation: In 2015-17, WSDOT was provided \$18.7 million to mitigate impacts from the construction of the Alaskan Way Viaduct. The Department expects additional transit mitigation funding due to the change in the construction completion date for the project.

Litigation: \$5 million is added for legal related matters that are not eligible for payment from the Self-Insured Liability Account.

V. Risks and Delivery Concerns

With a limited amount of Nickel and Transportation Partnership projects left to deliver, cash-flow balancing becomes challenging. The Nickel Account's ability to pay debt service is assumed to be fully exhausted leaving no flexibility to address increases on Nickel projects.

Flexibility for project delivery: Currently, there is no flexibility to adjust biennial cash flow funding on CW funded projects to accommodate unanticipated changes in actual project delivery. WSDOT requests budget flexibility similar to what is provided for TPA and Nickel funded projects. Without flexibility, it complicates the Department's ability to deliver projects and depending on timing it may result in potentially delaying the start of a project.

Additionally, there is an expectation with the Connecting Washington Transportation Package that the Department increase its use of Design-Build construction methodology. However, there are two issues that WSDOT experiences when cash flow is limited on design-build projects. First, if the Department enters into a design-build contract informing the design-builder that they are limited to specific cash flow through the use of maximum performance specifications, the State restricts the design-builder's ability to innovate. Without the restriction the design-builder may come up with an innovative solution that either saves money or delivers the project sooner that requires a different cash flow. Requiring a maximum performance specification may also result in higher costs because the contractor would be required to secure interim financing while he waits for state reimbursement. Second, if we are in the last six months of the biennium and a CW design-build project is spending more than projected, the Department has no flexibility to address the issue.

Inflation assumptions and construction costs: Each year as part of the budget development process, WSDOT reviews current inflation data and compares it to the assumptions used to inflate estimates by phase. The project estimates for the 2017-19 budget submittal are based on the following sources:

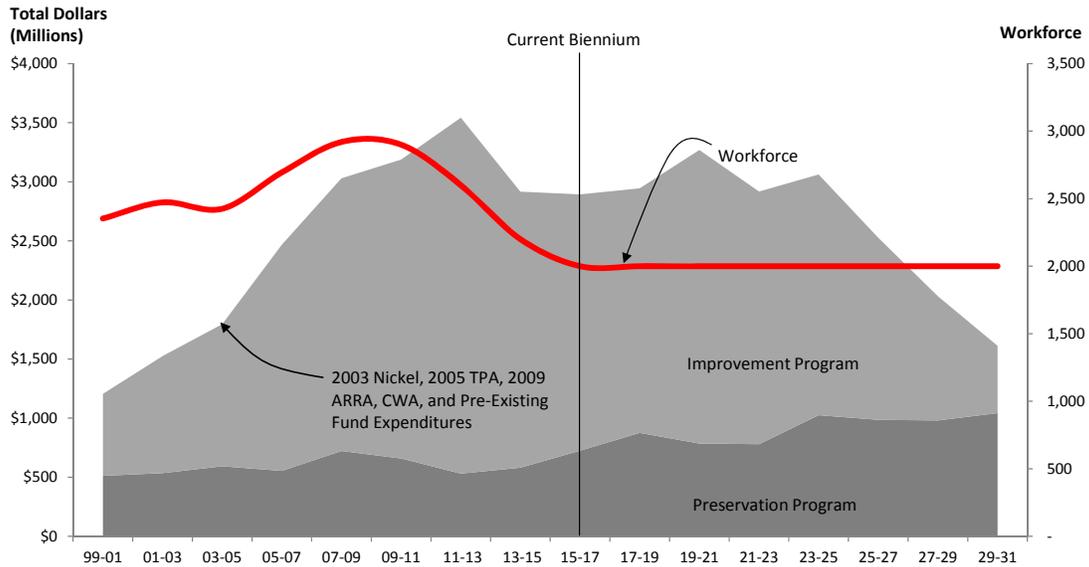
- Preliminary Engineering phase – June 2016 Global Insight forecast for Engineering, Architectural, and Surveying salaries.
- Right of Way phase – Moody's analysis forecast of the Federal Housing and Finance Administration housing price index for the state of Washington.

- Construction phase – June 2016 Global Insight Forecast of Construction Cost Index.

Workforce impacts: As the Department completes the Nickel and Transportation Partnership Packages, there is an impact to workforce at the program and regional levels. In implementing the Connecting Washington Transportation package, the Department assumes maintaining the 2,000 FTE's in the Highway Construction program with additional workforces needs being addressed by consultants. The chart on the right shows the forecasted state workforce based on the Department's 2017-19 budget proposal.

**2017 Agency Budget Request- Highway Construction Program
Program Expenditures and Workforce Projection**

*Includes the Improvement and Preservation programs with two exceptions:
Excludes expenditures in the Improvement program reimbursed by Sound Transit.*



Capital Program Highlights

I. Highway Program

Significant project changes

- Alaskan Way Viaduct increase of \$223 million of which \$60 million in TPA funds in 2017-19.
- Additional Construction mitigation funding for local transit services for AWW of \$15.3 million in 2017-19 assumed to continue through March 2019.
- I-90 Snoqualmie Pass advances \$19m of TPA into 15-17 to support better than anticipated project delivery.

Safety Investment

- Implementing strategies included in Target Zero.
- Safety investment no longer tied to the Paving program and not an element of the Federal Highway Administration stewardship agreement.
- Investment adjusted to align with state share of the FAST HSIP funds.

Other investment areas

- Continue with Legislative investment levels for bridge seismic retrofits.
- Weigh stations investment increased to a minimum of \$5 million a biennium.
- Wireless communication system replacement investment of \$23m in 19-21 to complete the project.
- Fish barrier removal investment increased in the out biennia to min of \$80m/biennium.
- Americans with Disability Act (ADA) investment increased to include work that triggers ADA requirements.

Connecting Washington Investments

- 2016 Legislative cash flow assumed for all Connecting Washington funded projects.
- WSDOT title and description interpretation provided in Tab 15 of the CIPP.
- Preservation investment in 2017-19 split 40% Roads, 43% Bridges, and 17% Other highway preservation.

II. Ferries Program

Terminals

- Terminals have been working to add functionality to the LCCM, in conformance with MAP-21, to quantify risk and use it to optimize the service life of its assets. The transition to this approach is currently underway; the outputs of this analysis are the basis for the preservation projects. The new approach has resulted in deferral of many of the assets coming “due” since their probability of failure and consequences of failure do not warrant full replacement. By virtue of this, the previous backlog has been reduced, and the project list is focused strategically on the assets posing the highest risk to the system.

Highlights of the budget request include:

- Additional funding is provided for the Seattle Terminal project. The project recently completed the 60% estimate which indicates a \$40 million increase in the base cost of the project. The project team is working with the GC/CM contractor to define, refine and mitigate known risks.
- Bainbridge Overhead Loading funding is requested to replace the timber overhead walkway with a walkway that is ADA compliant and is designed to meet current earthquake codes. Bainbridge Island has the greatest number of walk-on passengers in the system; the new walkway will be sized to accommodate this traffic.

- Southworth and Fauntleroy Trestles funding is requested to begin and further the environmental documentation. These two projects are the next trestle priorities based on the condition, seismic stability, and the performance of the Triangle Route.

Vessels

- The ferry fleet continues to age faster than it is being recapitalized. The M/V Suquamish is scheduled for delivery in June 2018, marking the end of current Olympic Class new construction program. With the three remaining Super Class vessels approaching the end of their service life, it is essential to begin the recapitalization process for these vessels this biennium. The 2017-2019 Project List includes all pre-design activities for WSF's next class of ferries, including Needs Statement, Alternatives Analysis, Project Definition and RFP development. Continuation of the Olympic Class program under a new contract will be one of the options considered.
- The three Jumbo Mark II Class vessels are facing significant obsolescence of the diesel electric propulsion system. The 2017-2019 Project List includes development of a project plan and RFP for the design, construction and lifecycle support to ensure system reliability through the end of the vessels' 60-year service life.
- The 2017-2019 Vessel Preservation Project List is sized at \$65M, just under 70% 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% 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.

Emergency Funding

- The department is seeking an increase in the emergency funding level from \$4M to \$7M per biennium based on recent data that show an increased number of events and increased repair costs. This higher level of funding is needed to attain service level targets.

Other

- Ticketing System funding is requested to support the acquisition, installation, and deployment of a new ticketing and reservation system. WSF plans to acquire an off-the-shelf ticketing and reservation system that has been successfully implemented at other ferry systems of similar size. This system will replace the aging EFS/Wave2Go ticketing system and its adjunct Save A Spot reservation solution. In addition, this will fund WSF's participation in the regional ORCA card system replacement that is being led by Sound Transit and King County Metro.
- Dispatch System funding is requested 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 (AOSS) that does not meet the processing and reporting needs of WSF.
- Increase administrative support by \$400k for additional staffing for Federal Grant and work order management.
- Increase terminal project support by approximately \$800k for regulatory compliance and engineering studies.

III. Rail Program

- The Department requests that the state funds provided in the 2015-17 biennium be made available in 2017-19 for the administration and closeout of the ARRA program. The Federal Railroad Administration (FRA) will not pay for any costs incurred and billed after July 2017. Funding is needed to process invoices before the ARRA program ends on September 30, 2017.

IV. Capital Facilities Program

- Funding level maintained at 2016 budget levels.

V. Traffic Operations Program

- Projects being develop within funding available.

VI. Local Programs

- Safe Route to Schools Grant Program increases to reflect a request to continue funding from the Highway Safety Account.

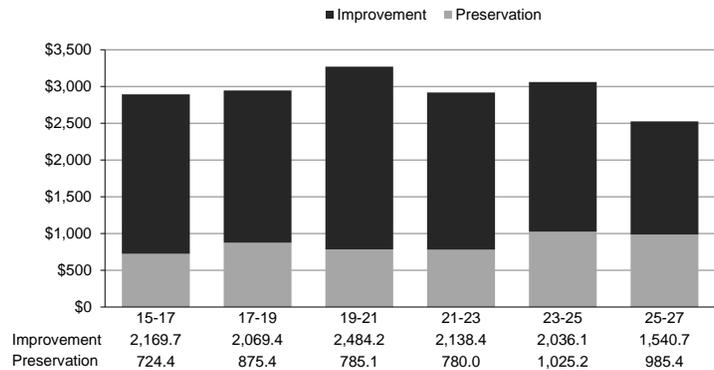
Capital Programs Overview

Highways Capital Program

The Highways component of WSDOT's Capital Program provides for improvements to, and preservation of, the state highway system.

Projects in the preservation program are intended 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. Highways improvements include projects to reduce delay and to improve safety on the highway system.

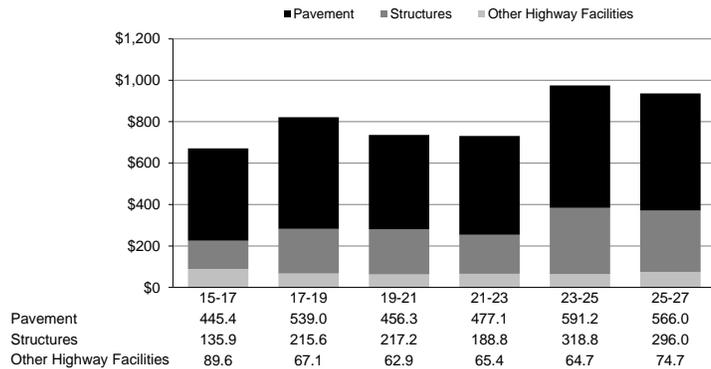
**Highway Construction Program
10 Year Plan for Highway Preservation and Improvement
(Dollars in millions)**



Highway Preservation

Highway preservation projects consist of targeted investments to preserve the structural integrity of the state highway system. Preservation projects, while focused on extending the service life of existing assets, also include low cost spot improvements to the system that improve traffic flow or make the highway environment safer for the traveling public.

**Highway Preservation Investment Categories
10 Year Plan for Biennial Funding
(Dollars in millions) Excludes P5 DPS**



Highway Preservation Subprograms

Roadway Preservation	Structures Preservation	Other Facilities
Subcategories		
Paving	Structures Preservation	Rest Area Preservation
	Catastrophic Reduction	Unstable Slopes
		Weigh Stations
		Program Support
		Major Drainage/Electrical Systems

Pavement Preservation (P1) Program

The objective of this program is to preserve pavements at the lowest life cycle cost, in compliance with RCW 47.05. If a rehabilitation project is done too early, pavement life is wasted. If done too late, pavement failures occur, requiring additional costly repairs.

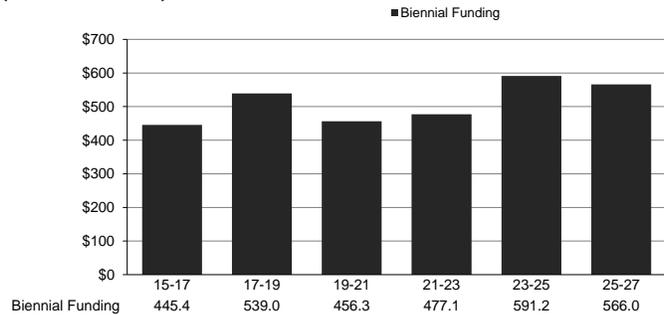
Pavement Preservation Overview

WSDOT categorizes pavements based on three primary surface types: chip seal, asphalt and concrete. The pavement type selected varies based on its ability to cost-effectively meet performance under anticipated traffic volumes, the number of trucks, underlying foundation materials, and regional climate conditions.

The table at right shows the average life and cost of these pavement types. A simple annual cost can be calculated by dividing the cost by the life. The annual costs can then be compared for a cost-effectiveness analysis. Low- to mid-volume roads are often most cost-effectively managed with chip seal, while mid- to high-volume roads lend themselves to asphalt.

Concrete is most cost-effective in high-volume and special cases, such as mountain passes or urban corridors

**Pavement Preservation
10 Year Plan for Biennial Funding
(Dollars in millions)**



<i>Pavement Type</i>	<i>Average Life (Time Between Treatments Needed)</i>	<i>Average Primary Treatment Cost per Lane-Mile</i>	<i>Simple Annual Cost per Lane-Mile</i>
Chip Seal	7	\$45,000	\$6,429
Asphalt	15	\$225,000	\$15,000
Concrete	50	\$2,500,000	\$50,000

A reasonable estimate of annual average pavement preservation need can be calculated using the average life, the number of lane-miles by primary surface type of the state highway system, and average treatment cost. There are currently 6,084 lane miles of chip seal, 10,145 lane miles of asphalt, and 2,450 lane miles of concrete. Approximately 370 lane miles of the concrete are concrete bridge decks, which are managed under the Structures (P2) Preservation Program. Using the above table and multiplying the simple annual cost per lane-mile by the total lane miles of each surface type, the average annual need is estimated at approximately \$295 million.

The annual average need estimate can be reduced by accounting for the effects of cost-effective strategies being implemented by WSDOT. First, it can be reasonably estimated that the maintenance applied under the Strategic Preservation initiative extends the life of chip seal and asphalt roads by two years, at a cost of \$2,500 to \$5,000 per lane mile. Second, WSDOT's chip seal conversion program is expected to convert at least 1,500 more lane-miles. Third, using triage to extend the life of concrete extends its service life by 15 years. Finally, using crack, seal and overlay (CSOL) instead of concrete reconstruction is expected for approximately 260 lane miles over the next 10 years. Taking all of these into account the annual average need is \$244 million per year, a savings of \$51 million per year. See the section Integrated Approach to Pavement Preservation for a broad overview of each of these strategies.

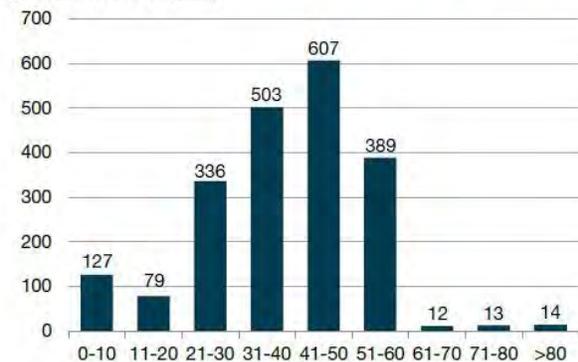
<i>Treatment Type</i>	<i>Average Life</i>	<i>Average Cost</i>	<i>Applicable Lane Miles</i>	<i>Annual Average Need (in Millions)</i>
Chip Seal with Maintenance	9	\$4,750	7,580	\$40
Asphalt with Maintenance	17	\$230,000	8,570	\$116
Concrete with Triage	65	\$2,900,000	1,820	\$81
Triage then CSOL	65	\$1,810,000	260	\$7
Total				\$244

Concrete Pavements Are at Critical Age Levels

Actual timing of pavement preservation for an individual section is not based on averages, but on annual monitoring and individual project decisions based on the age and condition of the pavement. This maximizes the cost-effectiveness of WSDOT's pavement preservation program. Over the last decade, WSDOT has capitalized on this and delivered acceptable performance without funding pavement preservation near the baseline level.

WSDOT has taken advantage of the performance of the concrete network. Over the last 20 years, concrete preservation funding has been substantially lower than the average need would indicate. This has not created a surplus of poor condition concrete because significant portions of the concrete network are just now approaching critical age levels. Until recently, the concrete system has not been old enough to require annual average pavement preservation levels. This is no longer the case. Using an age of 70 as the critical life for concrete pavements, WSDOT needs to reconstruct 40 lane-miles per year for the next 30 years to manage this aging infrastructure.

Fifty percent of concrete pavement over 40 years old 2015; Concrete lane miles of state-owned pavement in Washington grouped by age (in years)



Data source: WSDOT Pavement Office.

Note: Data in graph does not include concrete bridge decks.

Integrated Approach to Pavement Preservation

WSDOT takes an integrated approach to pavement preservation by emphasizing the coordination between maintenance and capital preservation, with the following goals in mind: Extend roadway surfacing service life, maintain serviceable roadway surface, minimize reactive preservation needs, and integrate and support Capital Preservation Projects.

Pavement treatments can be divided into three categories: maintenance, rehabilitation and reconstruction. Maintenance treatments are inexpensive but only last a short period of time. Pavement rehabilitation (which includes resurfacing asphalt and chip seal pavements) is more expensive, but last for a longer amount of time. The most expensive treatment is reconstruction. To evaluate all of these treatments on a cost-effective basis, WSDOT considers both the expense of construction and the number of years of service it provides when determining the annual cost.



There are four primary cost-effective strategies WSDOT implements including:

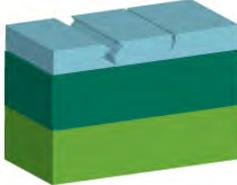
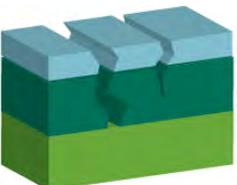
1. Convert asphalt surfaces to chip seal. The life cycle annual cost for a chip seal surfaced pavement is approximately one-third the cost of an asphalt surface.
2. Implement practical design as our performance-based approach that looks for lower cost solutions in order to meet specific performance criteria. For example, instead of paving roadways "shoulder to shoulder", only the general through traffic lanes in need are resurfaced. This often means that shoulders, turn lanes, medians and outside lanes are only resurfaced as needed.
3. Implement a strategic pavement maintenance approach that emphasizes performing

maintenance treatments at the appropriate time (before rehabilitation is needed) to extend pavement life and results in lower annual cost. In August 2014, WSDOT implemented a policy that no pavement rehabilitation should take place without first using strategic maintenance to extend pavement life.

- Prioritize cost effective projects. WSDOT's prioritization process avoids reconstruction, emphasizes lower annual cost, and takes into consideration traffic volume.

Current Conditions

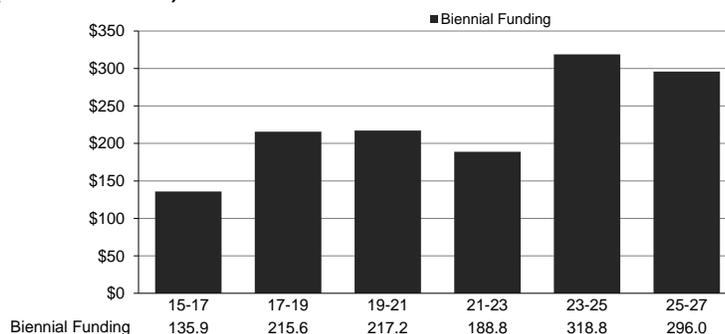
Because of the cost-effective strategies and management of WSDOT's pavement preservation program, the percentage of pavements in acceptable (fair or better condition) has remained relatively steady for the last ten years and met performance goals of 90% fair or better. Because of the critical age of the concrete network and decreased likelihood of implementing similar cost-effective strategies as were developed over the last ten years, the ability of WSDOT to meet expected performance goals for pavement preservation is unlikely if funded at levels less than the annual need.

What Drivers See	What is Happening		2013	2014
<p>Good/Very Good</p> 		<p>This pavement is in good condition with minimal deterioration</p> <p><i>Motorists experience a smooth road with minimal cracks, ruts or potholes</i></p>	76.6%	75.1%
<p>Fair</p> 		<p>The most cost effective time to resurface or repair a road is when the surface shows wear, yet before the underlying structure is damaged. This means the agency is managing by Lowest Life Cycle Cost.</p> <p><i>Preventive preservation repairs are a good strategy to maximize the road's service life</i></p>	16.7%	18.3%
<p>Poor</p> 		<p>Waiting until a road is in poor condition costs more, because damage to the underlying structure requires more expensive pavement restoration (1.5 to 2 times the LLCC).</p> <p><i>Poor and very poor roads cause more wear on vehicles and higher fuel use</i></p>	5.0%	4.7%
<p>Very Poor</p> 		<p>Delaying rehabilitation further can lead to deep pavement failure which requires more expensive reconstruction (3 to 4 times the LLCC).</p> <p><i>This road requires reactive repairs to hold it together until reconstruction, not a good long-term cost saving strategy</i></p>	1.7%	1.9%

Bridge Preservation Program (P2)

The bridge preservation program addresses the overall preservation of bridges and structures on the state highway system. Sub-categories of work include a variety of rehabilitation and risk reduction items such as: 3rd party damage repair, special element repair (expansion joints, Floating Bridge Anchor Cable replacement, etc.), movable bridge repair, concrete bridge deck repair and overlay, steel bridge painting, scour mitigation, seismic strengthening, total bridge replacement and rehabilitation and miscellaneous structures (Bridges < 20ft in length /Tunnels / Sign Bridges / High Mast Luminaires).

**Structures Preservation
10 Year Plan for Biennial Funding
(Dollars in millions)**



Condition Ratings of State Structures

WSDOT is measuring the bridge conditions by deck area in alignment with the Moving Ahead for Progress in the 21st Century (MAP-21) and results Washington. Both of these programs have set a goal of having no more than 10 percent of bridges (measured by deck area) in poor condition, which was met in 2015 and 2016. As of June 2016, 91.2 percent of the state-owned bridges (by deck area) were in fair or better condition and 8.8 percent were in poor condition. The number of bridges in each category is: Good - 1,678, Fair - 1,462, Poor - 154. Measuring the bridge conditions by deck area is a more comprehensive measure than counting the number of bridges. WSDOT Ferry Terminals structures that carry vehicular traffic are also included in the overall condition ratings.

Bridge structural condition rating

Condition ratings by fiscal year (based on the deck area of bridges)

	Description	2011	2015	2016
Good	A range from no problems to some minor deterioration of structural elements.	31.1%	36.3%	37%
Fair	All primary structural elements are sound but may have deficiencies such as minor section loss, deterioration, cracking, spalling, or scour.	59.7%	54.4%	54.4%
Poor	Advanced deficiencies such as section loss, deterioration, cracking, spalling, scour, or seriously affected primary structural components. Bridges rated in poor condition may have truck weight restrictions.	9.2%	7.9%	8.8%

Source: WSDOT Bridge and Structures Office

System Inventory and Inspection

WSDOT has a comprehensive bridge inspection program that complies with the Federal Highway Administration (FHWA) requirements. The majority of State Owned bridges (over 20 feet in length and carry vehicular traffic) are inspected on a 2 year cycle. There are some specific bridges that are inspected annually due to a declining condition.

Inspectors follow standards established in the FHWA "Recording and Coding Guide for the Structural Inventory and Appraisal of the Nation's Bridges", to determine the rating for the main elements of the

bridge. The ratings of the three main bridge element categories (Deck, Superstructure and Substructure) are used to determine the overall condition of the bridge.

The overall bridge inventory is summarized in the table.

WSDOT Inventory of Bridges and Structures
Inventory of state and local bridges as of June 2016

	Number
Vehicular bridges longer than 20 feet	3,114
Structures less than 20 feet long	418
Culverts longer than 20 feet	125
Pedestrian structures	81
Ferry terminal structures	69
Tunnels and lids	47
Border bridges maintained by border state	6
Border bridges maintained Washington	5
Railroad bridges now owned by WSDOT	5
Total WSDOT bridge structures	3,870

Bridge Preservation Strategies:

The bridge preservation program uses specific strategies to preserve the state’s bridges and miscellaneous structures and maximize their remaining service life. Funds are allocated for these strategies based on priorities recommended by WSDOT’s Bridge and Structure’s office.

3rd Party Bridge damage repair

Bridges on state highways are frequently damaged by truck impacts. The damage can result in bridge span collapse (I-5 Skagit River Bridge in 2012) or closure of a bridge (I-5 Chamber Way Bridge, SR410 White River Bridge and I-5 Koontz Road over I-5) or lane restrictions. One of the most common issues is the damage of prestress concrete girders damaged by over-height truck impacts. These repairs are normally addressed with ER federal funding if the repair costs meet the ER funding threshold. One of these bridges (I-5 Koontz Rd Overcrossing) has been closed since the initial damage due to the severity of the damage.

Border Bridges

Washington shares the responsibility for preserving, maintaining and operating nine bridges with Oregon and one bridge with Idaho. Both states make the future preservation of these bridges a top priority in their bridge programs. The upcoming projects include the completion of painting the US101 Columbia River bridge in Astoria, replacing a movable bridge Trunion on the I-5 Columbia River bridge near Vancouver and Portland and the replacement of the lightweight concrete deck on the steel truss spans of the I-82 Columbia River bridge near Umatilla.

Bridge Scour Mitigation

Bridge foundations experience “Scour” when high volumes of water remove soil from bridge foundations. Scour is the leading cause of bridge failures in Washington State and nationwide. WSDOT evaluates bridge over water for risk of future scour. The three next highest scour priorities include the US101 Chehalis R bridge, SR529 Union Slough bridge and the US2 South Fork Skykomish R bridge.

Bridge Repair

Specific bridge elements requiring repair that are beyond what WSDOT Region Maintenance can address (due to complexity and funding) are prioritized for replacement or repair in this category. Examples include deteriorated concrete columns, anchor cables on floating bridges, timber and steel

deck replacements and large steel expansion joints.

Movable Bridge Repair

There are sixteen movable bridges on the State system that allow marine traffic to pass under a bridge on the waterway. Three of these movable bridges are also border bridges.

Steel Bridge Painting

Steel bridge elements need periodic painting to protect against corrosion in order to maintain their structural integrity. Currently, there are 99 bridges identified as past-due or due for painting with an estimated cost of \$394 million.

Concrete Bridge Deck Preservation

The majority of WSDOT managed bridges have reinforced concrete bridge decks. Corrosive substances used for winter de-icing can deteriorate the steel reinforcing bars in the deck resulting in spalls and deterioration in the concrete. Decks with over 2% of the deck area previously patched by maintenance or currently delaminated are prioritized to be repaired and overlaid. Currently, there are 86 concrete bridge decks that are past due or due for rehabilitation with an estimated cost of \$124.9 million.

Bridge Replacement or Rehabilitation

WSDOT is currently focusing on bridges classified as structurally deficient. Functionally obsolete bridges have a lower priority. There are 153 bridges on the inventory which are classed as structurally deficient.

Bridge Seismic Strengthening

Washington State is in a Region that is vulnerable to Earthquakes. Bridges prior to the mid to late 1980's were not designed to current seismic standards and need seismic retrofits.

Miscellaneous Structures

The smallest category in the bridge preservation program, this group includes sign support structures, tunnels, and bridges under 20 feet long.

Other Highway Facilities (P3) Preservation Program

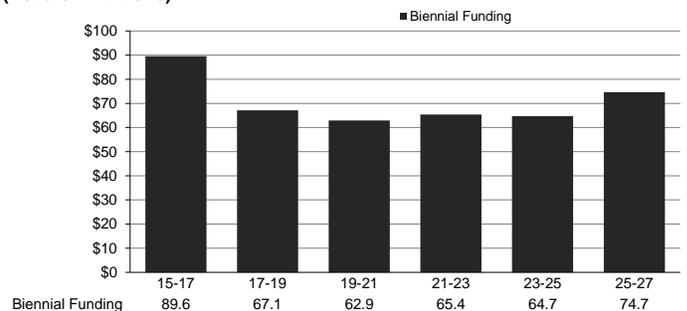
This sub-program addresses five different categories:

1. Safety Rest Areas Preservation

WSDOT owns 47 safety rest area facilities within the State Highway System that provide opportunities for highway users to stop, rest, and rejuvenate in an effort to reduce fatigue-related traffic collisions. This program replaces or rehabilitates facility assets in the following priority groups: water systems, sewer systems, buildings and structures, parking facilities, and grounds.



**Other Facilities Preservation
10 Year Plan for Biennial Funding
(Dollars in millions)**



2. Major Drainage System Rehabilitation

Major drainage rehabilitation includes the replacement or refurbishment of storm water drainage systems including catch basins, culverts, detention/retention basins, and ditches.

3. Highway Slopes and Embankments

WSDOT has identified over 3,100 unstable slopes that have the potential to adversely affect highway travel. An Unstable Slope Management System is used to track and rate unstable slopes and then to identify potential projects. Projects are prioritized using a simple benefit-cost analysis that considers traffic delay and site maintenance cost versus remediation cost. Sites with a benefit-to-cost ratio greater than one are eligible for this program.

4. Major Electrical System Rehabilitation

Major electrical systems are critical for lighting roadways and tunnels, powering traffic control devices, cameras and traveler information systems, collecting data, and powering movable bridges. WSDOT's condition inventory is used to track equipment age, time spent maintaining the system, and the cost of system maintenance. Projects are established in this category when maintaining an old system becomes inefficient.

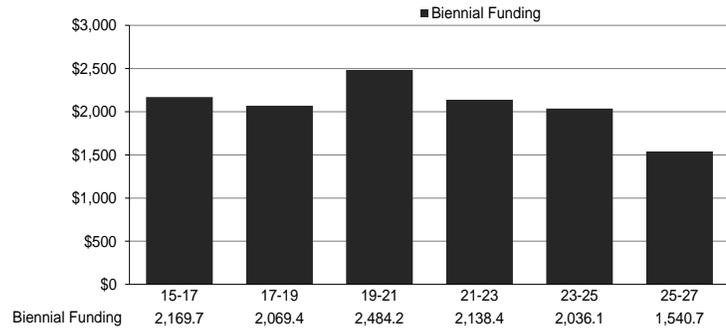
5. Weigh Stations Replacement and Preservation

Weigh stations protect roadway pavements and bridges by identifying and removing overweight trucks from the system. They also promote the safe travel of commercial vehicles on state highways. Washington State currently has 52 permanent-scale weigh stations. Sixteen are located on interstate highways. This program provides all sites, facilities, and utilities to accommodate the Washington State Patrol's permanent scales, portable scales, and weigh-in-motion scales. It purchases right-of-way, constructs on and off ramps, installs signs and lighting systems, and erects scale houses.

Highway Improvement

Improvement Projects increase a highway's capability to move people, freight and goods, correct highway safety performance gaps, and reduce environmental impacts resulting from highway construction projects.

**Highway Improvement Program
10 Year Plan for Biennial Funding
(Dollars in millions)**



Highway Improvement Subprograms

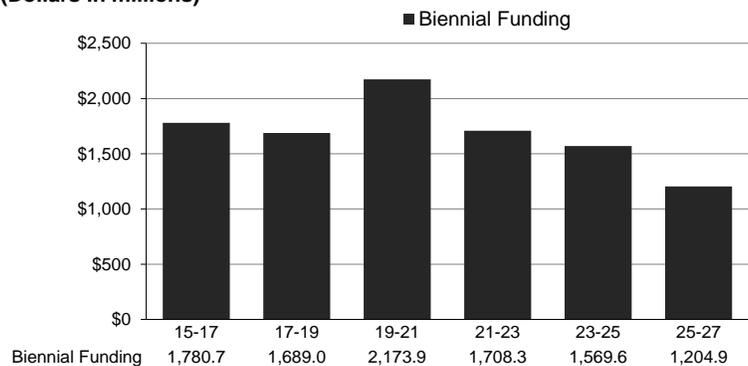
Mobility	Safety	Economic Vitality	Environmental Retrofit
Subcategories			
Urban	Collision Reduction	Freight & Goods	Storm Runoff
Rural	Collision Prevention	Trunk System Completion	Fish Barrier Removal
Urban Bike Connection		New Safety Rest Area	Noise Reduction
Core HOV Lanes		Scenic Byways	Plant Management
		Bicycle Touring Routes	Chronic Environ. Deficiency
			Wildlife Connectivity

Mobility Improvement (I1) Program

Investments to move people, goods, and reduce congestion, by managing demand effectively, operating transportation systems efficiently, improving local network, changing policies when necessary before considering adding infrastructure capacity.

Projects that are designed to increase capacity at strategic locations by removing bottlenecks and chokepoints are one type of mobility improvement; they may include constructing new roadways to fill-in system gaps and serve new developments.

**Mobility Improvement
10 Year Plan for Biennial Funding
(Dollars in millions)**



WSDOT's goal is to achieve maximum throughput of vehicles whenever possible. Maximum throughput speed is the baseline speed WSDOT uses for congestion and capacity performance measurement. It is the speed at which the highest number of vehicles can move through the highway segment. Maximum throughput is achieved when vehicles travel at speeds of between 42 and 51 mph (roughly 70% to 85% of a posted 60 mph speed). At maximum throughput speeds, highways operate at peak efficiency because more vehicles are passing through the segment than at the posted speed limit. This happens because drivers at maximum

throughput speeds can safely travel with a shorter distance between vehicles than they can at posted speeds. WSDOT aims to provide and maintain a system that maximizes capacity and yields the most productivity and efficiency.

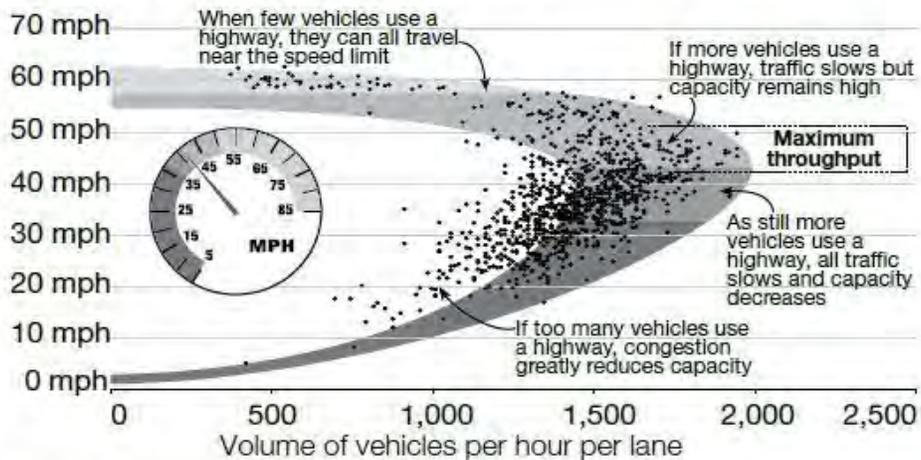
Mounting Delay and Deteriorating Mobility

During recent years in Washington State, in other urban locations around the United States and in much of the rest of the world, the growth in population, employment, and associated travel demand placed on transportation systems have far outpaced the investment in expanding capacity of transportation facilities. Economic constraints make it impractical and inefficient to try to keep traffic flowing at the posted speed 24 hours per day. Therefore, WSDOT has set a more reasonable goal; manage the State's highway system to maximum throughput. Our aim is to provide and maintain a system that maximized capacity and yields the most productivity and efficiency.

WSDOT's Core Philosophy: Maximize System Capacity

Understanding maximum throughput: An adaptation of the speed/volume curve

Speed limit 60 mph; Maximum throughput speed ranges between 70%-85% of posted speed



Data source: WSDOT Northwest Region Traffic Office.

Maximum throughput speed is the baseline speed WSDOT uses for congestion and capacity performance measurement. It is the speed at which the highest number of vehicles can move through a highway segment.

Congestion on the rise since 2009

Although statewide traffic congestion (vehicle hours of delay) has been on an upward trajectory for the past five years, 2014 annual congestion (32.3 million hours) remained 8% below the 2007 pre-recession levels (35.1 million hours). The central Puget Sound region did not follow this 2014 trend and congestion there was 19% higher than pre-recession levels.

- Of the five monitored freeway corridors in the central Puget Sound region, three (I-5, I-405, I-90) saw congestion increases. Tolling and carpooling reduced congestion on SR520 and SR167 by 71% and 24% respectively, in 2014 compared to 2007 pre-recession levels.

Central Puget Sound accounts for 90% of the delay

Estimated annual travel delay and cost of delay on state highways by urban area

2010 through 2014; Delay in hours; Cost of delay in millions (2014 dollars)

Urban area	2,010	2011	2012	2013	2014 %\	2012 vs.2014
Central Puget Sound (King and Snohomish counties)	28,857,500	29,662,500	28,955,000	30,235,000	29,235,000	1.0%
South Puget Sound (Pierce and Thurston counties)	1,470,000	1,080,000	795,000	1,145,000	1,627,500	104.7%
Spokane (Spokane County)	97,500	82,500	77,500	105,000	142,500	83.9%
Tri-Cities (Benton and Franklin counties)	155,000	155,000	140,000	150,000	172,500	23.2%
Vancouver (Clark County)	157,500	167,500	160,000	130,000	200,000	25.0%
Other areas	485,000	400,000	351,500	327,500	518,750	47.6%
Statewide annual delay	31,645,000	31,970,000	30,900,000	32,450,000	32,332,500	4.6%
Annual cost of delay	\$ 791	\$ 799	\$ 773	\$ 811	\$ 808	4.6%

Data source: WSDOT Multimodal Planning Division

Note: Delay numbers might not match previous year's reports, as segmentation changes were made to better compare years.

Average Hours of Delay

The picture on the right presents the average hours of delay per day encountered by Washington drivers for a given segment of highway. The higher the spike, the greater the delay. The highest spike is located at the interchange for I-5 and I-90 in Seattle. This figure illustrates that the greatest delay on the state highway system is found in the Central Puget Sound area. Tri-Cities, Vancouver and Spokane also see significant delays.

While some level of congestion during peak hours should be expected and is acceptable to most people, severe congestion

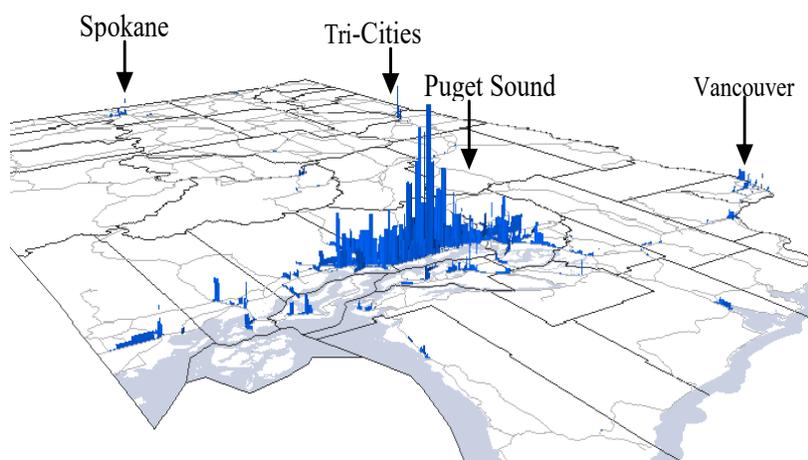
affects citizens' daily lives and almost every sector of economic activity in the most congested corridors in the state. Work commutes are time-consuming and aggravating. Users of Washington's highway system waste over 160,000 hours a day sitting in traffic. Non-work trips, too, must be planned to avoid congestion or with extra time allowed to compensate for the lack of reliability in travel times (reliability can be improved by implementing demand management, operational improvements, and using public transportation). Freight shipments become costly and unreliable (scheduling freight shipment during off peak hours and using alternative modes can potentially reduce cost and increase reliability). Air pollution is exacerbated by cars and trucks stuck in traffic (air quality can be improved by implementing demand management, operational improvements, and using public transportation.) Even rural areas that have never seen traffic jams are penalized when highway congestion associated with urban areas blocks their agricultural products from reaching ports and customers. (see above re freight)

The statewide population is expected to increase by 2.3 million (from just 5.9 million in 2000 to about 8.2 million in 2030). Most of this growth is projected to occur in the state's metropolitan areas.

This population growth will translate into substantial increases in travel demand and travel delay. At our current capacity travel delay would quadruple in 2025. The 2015 Connecting Washington Revenue Package will allow WSDOT to move forward with critical projects throughout the state to reduce the severity of congestion, enhance economic development, improve safety, eliminate fish passage barriers and address preservation needs.

Total Daily Vehicle Hours of Delay Per Lane Mile across the State of Washington.

Source: WSDOT



Results WSDOT set the agency's direction and priorities.

Results WSDOT is the agency's strategic plan and aligns with Results Washington. This plan focuses on maximizing capacity for the entire multimodal system and emphasizes working across all modes and strives to provide and support safe, reliable and cost effective transportation options to improve livable communities and economic vitality for people and businesses.

Results Washington performance measures related to system performance and commute methods include:

1. **Alternative Commute methods:** Increase the percentage of Washington's using alternative commute methods to 29% by 2020. Increasing the use of alternative modes of transportation improves reliability and helps maximize capacity on the entire transportation system.
 - WSDOT uses a variety of strategies to manage demand on the transportation system, which include incorporating demand management strategies into project design and corridor planning studies, Commute Trip Reduction, and improving bicyclist and pedestrian safety.
2. **Travel and Freight Reliability:** Ensure travel and freight reliability (impacted by economic growth) on strategic corridors does not deteriorate beyond 5% from 2012 level through 2017. Reliability is an important metric because it provides information that allows travelers to plan for on-time with a higher degree of certainty. Maintaining reliable trip times for people and freight movement is important to the region's economic vitality.
 - WSDOT strategies for improving travel and freight reliability include implementing Practical Solutions to enable more flexible and sustainable transportation investment decisions, promoting multimodal transportation options, and integrating tolling and High Occupancy Toll (HOT) lanes.
3. **System Efficiency:** Operate strategic corridors at 90% efficiency or higher through 2017. Commuters value efficiency across all transportation modes because it allows them to make better use of their own time, while shippers and freight carriers require an efficient system to remain competitive. By tracking throughput productively, WSDOT can monitor and prioritize efficiency needs.
 - WSDOT's strategies for improving system efficiency are the same as the strategies for travel and freight reliability. WSDOT averages the throughput productivity percentages for 20 locations on central Puget Sound corridors during the daytime travel period. An increase in throughput productivity indicates that system efficiency has improved, meaning more people and/or goods are being moved per corridor mile.

WSDOT prioritizes clean transportation WSDOT also has an interest in the clean transportation measures that fall under the sustainable energy and a clean environment goal area in Results Washington plan. The performance measures including, reducing transportation-related greenhouse gas (GHG) emissions, reducing average CHG emissions for each vehicle mile traveled in Washington, improving the fuel efficiency of Washington passenger vehicle and light duty truck fleet, and increasing the number of plug in vehicles.

Traffic incident management is another key strategy for maximizing highway system performance. Traffic incidents such as collisions are responsible for nearly half of non-recurrent congestions. Traffic incident management is nationally recognized as a best practice for reducing or preventing non-recurrent congestion. WSDOT estimates that Incident Response crew's proactive management of incident scenes provided an economic benefit of \$74.1 million to travelers and businesses using Washington highways during 2014. These benefits are provided by clearing incidents as quick as possible, and by proactively managing traffic at incident scenes. The IR crews reduce the risk of secondary incidents caused by distracted driving or sudden changes in traffic conditions.

Making multimodal connections work

WSDOT is building on the existing *core philosophy* to maximum the movement of people and goods, to expand its application to multiple travel modes. This takes into account the capacity available on other modes along with that of the highway system and incorporated multimodal performance measures to supplement the existing transportation system analysis. The multimodal measures include:

- Transit-oriented performance measures, such as total ridership, single occupancy vehicle miles avoided, highway lane capacity used along the high demand commute corridors.
- Greenhouse gas emissions per person during peak periods on commute corridors.
- Person-based measures, such as miles traveled, hours of delay in traffic, along with per person trip travel time on commute corridors.

WSDOT uses maximum throughput speed standard as a basis for measurement to assess travel delay relative to highways most efficient condition at maximum throughput speeds (85% of posted speed). The following performance measures are used to evaluate the system:

- Total vehicle delay and per person delay
- Percent of highway lane miles delayed and/or congested
- Lost productivity throughput
- Maximum Throughput Travel Time Index
- Duration of the congested period
- Commute congestion cost

System Performance: Federal Law MAP 21 emphasizes system performance and Results Washington focuses on performance and accountability. WSDOT manages performance measures related to sustainable, efficient infrastructure, which falls within the prosperous economy goal area.

Benefits from Current Programmed Projects

- Connecting Washington projects will enhance statewide multimodal transportation system while continuing to address critical infrastructure needs. Connecting Washington reform efforts support WSDOT's continuous improvements including practical solutions to reduce costs, increase efficiencies that save time and money, improve coordination with our transit partners and communities and improve our transportation system's multimodal capacity and safety.
- Every Connecting Washington project will be evaluated to determine the extent to which Practical Solutions can be applied to the project. The Secretary's Practical Solutions Committee will provide multidisciplinary senior management review of the process to implement projects in Connecting Washington and provide a learning/sharing forum in support of project delivery, look for best practices for statewide implementation.
- The committee will engage in a conversation of how we will meet expectations at the lowest cost:
 - Discuss the problem or problems that need to be addressed by the project
 - Discuss how the community was engaged and partnerships formed
 - Discuss the strategies that were explored including multimodal, demand management and operational strategies and incremental solutions

Mobility Projects with Significant Construction in 2017-19

The following mobility projects are programmed with substantial expenditures in 2017-19:

Corridor	New 2017-19 CN Start	Project Title
I-5, Port of Tacoma- Core HOV		I-5/Port of Tacoma Rd to King Co Line HOV
I-5, Puget Sound Area - Improvements	✓	I-5 JBLM Corridor Improvements

I-5, Olympia Freeway		I-5/Marvin Road/SR 510 Single Point Urban Interchange
SR 99, Seattle - Alaskan Way Viaduct		SR 99 - Viaduct Replacement
I-405, Corridor Improvements		I-405 Renton to Lynnwood Widening - ExpressToll Lanes. I-405 Kirkland Vicinity Stage 2 Widening
I-90/ Western Washington		I-90/ Eastside Restripe Shoulders
SR 167/SR 509 Tacoma to Puyallup		SR 167/509 Puget Sound Gateway new four lane alignment
SR 520, Seattle Corridor Improvement	✓	SR 520 West End completes improvement between I-5 West High Rise
US 12 Tri Cities to Walla Walla Corridor Improvements	✓	US 12 Walla Walla 4 lane new alignment Nine Mile Hill to Frenchtown Vicinity
US 395 North Spokane Corridor	✓	US 395 Francis Ave to interim connection with I-90

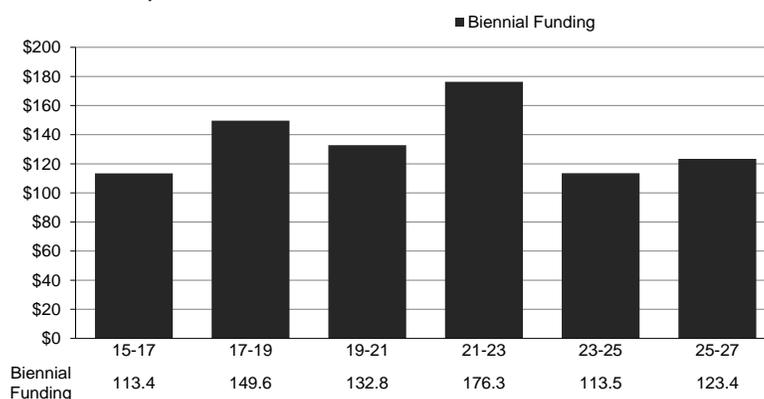
Safety Improvements (I2) Program

Investments to improve the safety and security of transportation customers and the transportation system.

Vigilantly reduce risks and increase safety on all state-owned transportation modes; reduce fatalities and serious injuries; and assist local communities in identifying effective solutions to transportation safety needs.

Safety is addressed in every highway project. The Safety Improvement program consists of targeted highway safety investments that make the highway environment safer for the traveling public.

**Safety Improvements
10 Year Plan for Biennial Funding
(Dollars in millions)**



Traffic Fatalities Increase in 2014 & 2015

Washington State traffic fatality rates are among the lowest in the nation. This record is due in part to state laws, including the seat belt law; increased enforcement, such as speed and DUI patrols; and significant investment in highway safety projects such as cable median barrier, rumble strips and intersection modifications such as installation of roundabouts. However, after several years of steady decline, 2014 and 2015 experienced an increase in fatal crashes. Higher numbers of rear end, opposite direction, enter at angle and pedestrian crashes accounted for the majority of the increases.

Washington’s Strategic Highway Safety Plan: Target Zero

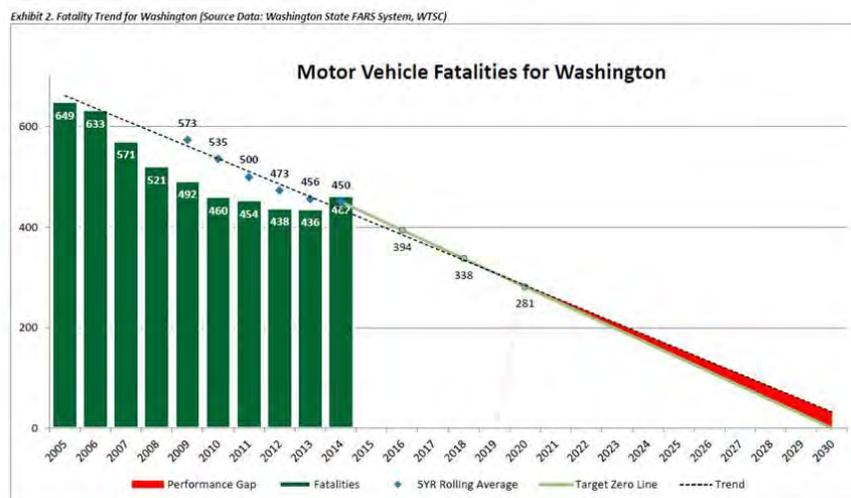
The Washington State Department of Transportation, together with its partners developed a strategic highway safety plan (SHSP) called “Target Zero” (<http://www.targetzero.com>). The goal of Washington’s plan is achieve zero fatal and serious injury crashes for all roadways in Washington State by 2030. The plan creates a shared safety vision and culture that recognizes the urgency of fatal and serious crash reduction and the necessity to work together to achieve the state’s mutual safety goal.

The Target Zero plan uses careful data analysis to identify and prioritize leading crash contributing factors and types. Each priority has associated strategies in education, enforcement, engineering, emergency services, and evaluation (e.g., the 5Es). The highest priorities in Target Zero, Priority 1 items, include

factors occurring in at least 30% of total fatalities or serious injuries. The following crashes are included as Priority 1 items: Impairment involved, speeding involved, young driver (16-25) involved, lane departure and intersection related crashes. The first 3 factors are addressed primarily by enforcement and education. WSDOT's focus on engineering solutions leads us to concentrate on the lane departure and intersection related crashes.

WSDOT adopted Target Zero's goals and strategies for the development of the WSDOT Capital Safety Investment Plan. WSDOT evaluates these strategies to select a program of projects that may return the greatest benefit in terms of fatal and serious crash reduction within Governor-proposed and legislatively-mandated budget levels. Department and stakeholders are only part of the safety equation. WSDOT and the Target Zero community recognize that to achieve the Target Zero vision, the public will need to embrace a culture of good driving and take action to reduce driver behaviors that contribute to fatal and serious crashes on all roads.

WSDOT implemented risk based methodologies to identify locations, intersections and corridors that have a high potential for fatal and serious crash increases. These locations were ranked by the highest expected average crash frequency of fatal and serious injury crashes. WSDOT scopes safety improvement projects with cost effective and efficient project based on detailed safety analysis.



WSDOT also focuses on risk prevention in a system-wide series of lower cost and effective Target Zero strategies to avoid and prevent future fatal and serious injury crashes. The program specifically addresses lane departure crash types that include all run off the road, head on, and intersection related crashes, representing the majority of fatal and serious injury crashes.

The following list of network-wide solutions is currently being implemented by WSDOT and has included the completion of these solutions into the 6 Year Capital Investment Safety Plan:

- Centerline rumble strips on rural two-lane highways.
- Shoulder rumble strips on selected rural two-lane highways.
- Conversion of selected three-strand high tension cable median barrier runs to four-strand high tension cable, based on analysis.
- Four-strand high tension cable on the remaining sections of divided, access-controlled, multi-lane highways.
- Basic pedestrian features such as signing, pavement markings and lighting on state highways at locations adjacent to schools, senior centers, and medical facilities.
- Oversized or Active Traffic Warning signs on horizontal curves

- Guardrail on roadways with high fills and steeper than 2:1 side slopes (based on analysis).
- Intersection System Improvement Program (ISIP)
- Field Assessment Program

American with Disabilities Act (ADA): pedestrian safety program

WSDOT is implementing a project-specific direction to those responsible for designing and retrofitting existing accessible pedestrian facilities within the public right of way. The WSDOT ADA Transition Plan incorporates flexibility to integrate both existing and future physical and programmatic accessibility needs for people with disabilities.

As a result, WSDOT is actively removing barriers to equal access in its public right of way through: (1) a robust paving program that addresses accessibility, (2) developing best practices, and perhaps most importantly (3) a diligent effort to educate the engineering communities on accessibility requirements. From these, a variety of design and policy solutions are being instituted to improve the overall quality of WSDOT’s ADA compliance program. This program provides a mechanism of accountability and transparency for those who are charged with ADA accessibility oversight.

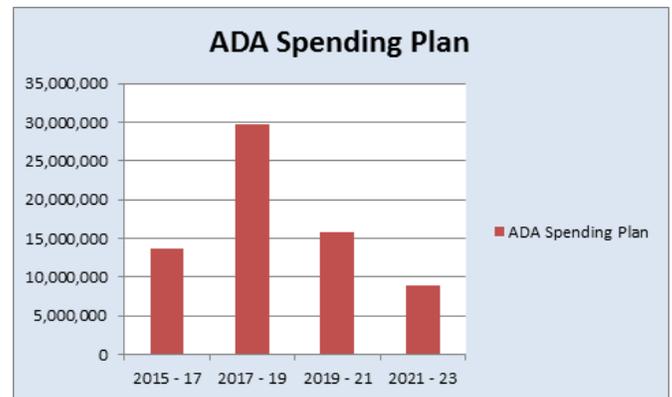
In order to ensure success, WSDOT relies upon partnerships with the disability community and other stakeholders, including cities, counties and transit districts, who share a common interest with WSDOT in addressing ADA needs. WSDOT solicits the necessary input from those who are affected by the usability of our facilities.

Railway-Highway Crossing Safety Program

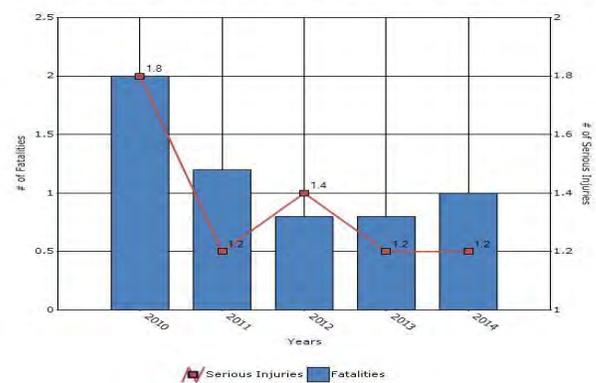
Title 23 of United States Code (USC) Section 130 provides funding to States annually for the elimination of hazards at railway-highway crossings. The focus of the WSDOT Railway-Highway Crossing program continues to be primarily upgrading crossing locations to active warnings, with occasional grade crossing elimination projects. The focus area from 2012 through 2017 has been on state highway crossing locations. Beginning in 2018 the focus will shift to local road crossing locations.

The projects are selected based on a prioritized structure that is created using a risk-based approach.

The risk is based on the potential for collision, state highway crossings hazard, or risk matrix that ranks projects based on the risk of a collision. WSDOT follows the methodology prescribed by federal laws which bases improvements on diagnostic review and recommendations. The diagnostic team includes WSDOT, the applicable railroad, FHWA, and the Utilities and Transportation Commission. WSDOT uses a mix of federal and state crossing inventories and independently verifies data at each location that competes for funding.



Number of Fatalities and Serious Injuries for last 5 years



Economic Initiatives (I3) Program

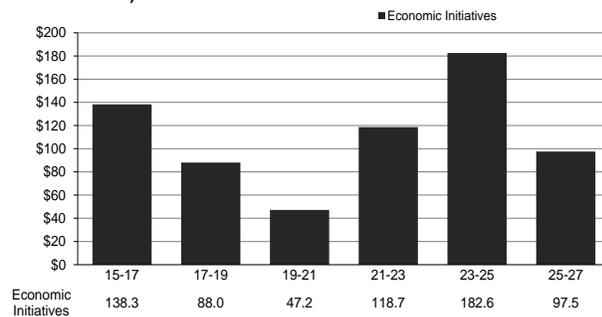
Promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy. Economic Initiatives support freight movement and tourism development through the construction of new rest areas and bicycle touring facilities along scenic and recreational highways.

To achieve the program goals, the Economic Initiatives program is subdivided into the following subcategories:

1. Freight (upgrading all-weather pavements and bridges with restricted vertical clearance).
2. Community Livability and Economic Vitality.
3. Scenic and Recreational Highways.

Seasonal weight restrictions have been essentially eliminated by projects constructed in this program.

**Economic Initiatives
10 Year Plan for Biennial Funding
(Dollars in millions)**

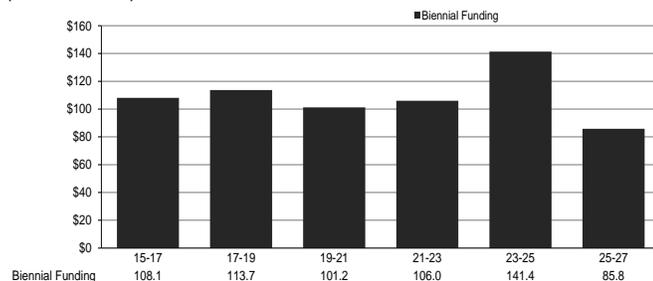


Environmental Retrofit (I4) Program

Enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment.

Environmental Retrofit projects reduce or eliminate environmental impacts of existing highway systems to meet environmental requirements that have emerged since the highways were built.

**Environmental Retrofit
10 Year Plan for Biennial Funding
(Dollars in millions)**



Environmental Retrofit Program Categories

1. Fish Barriers

In cooperation with the Washington Department of Fish and Wildlife (WDFW), WSDOT created a prioritized inventory of state-owned culverts. As of June 1, 2016 the inventory currently lists 1,989 culverts that were barriers to fish passage and required replacement or modification. Of the identified culverts, 996 are subject to the federal injunction and must be corrected by March 2030. Although WSDOT has received funding averaging over \$80 million per biennium through 2030 the department will need additional funding in order to comply with the injunction.

WSDOT identifies and corrects fish passage barriers using three strategies: 1) combining the barrier removal with highway projects when the barrier is within the projects limits and a Hydraulic Project Approval (HPA) is required for a culvert, 2) using dedicated Environmental Retrofit budget funds for the highest priority culverts listed in the Fish Barrier Removal Plan, and 3) repairing failing culverts as they are identified.

Of the culverts addressed, the priorities are primarily based on the highest benefit-cost, but also consider input from tribes and opportunities to partner with others. Benefit-cost, in this case, is defined as the length of fish habitat opened up that yield the greatest potential for fish production

for specific species versus the cost of the barrier removal.

2. Chronic Environmental Deficiency

Chronic Environmental Deficiencies are locations on the highway system where recent, frequent and repetitive maintenance repairs to the highway impact fish and fish habitat. Repetitive maintenance is considered “chronic” when three or more repairs are necessary within a 10-year period. The process for selecting and prioritizing Chronic Environmental Deficiencies on the highway system is a collaborative process between engineering, biological, construction, maintenance, and policy disciplines that evaluate the benefit-cost for a specific site. This process can be complex due to the dynamic nature of the physical site (e.g. changing hydraulic and/or unstable geological conditions), and the delicate nature of fish and fish habitat. Benefits are based on the reduced cost of repetitive maintenance and emergency repairs, ongoing disturbance of the fish habitat, and quality of fish habitat recovered compared to the overall project cost.

3. Plant Management

This program category ensures the continued success of constructed wetlands and other environmental mitigation sites funded by the Highway Construction Program. In the past, individual projects were kept open years after the construction date to pay for plant management or other work required by permit. The problem with this was that projects never appeared to be completed as they kept expending funds for an extended period of time. This category covers funding to satisfy the plant establishment and other permit requirements of various agencies. It covers the work needed after the contractor’s one-year warranty on plant establishment is met—typically one year after planting.

Activities for managing environmental mitigation sites that reach the end of the one-year warranty period and still have not reached the point of being considered established include:

1. *Site Monitoring—covers inspection and record-keeping by biologists and other environmental and regulatory specialists to track the success or failure rate of the constructed mitigation measures. These include:*
 - a. Fish passage structures required by Hydraulic Permit Approval (HPA).
 - b. Wetland plant establishment.
 - c. Chronic environmental remediation such as stream bank stabilization.
 - d. Wildlife connectivity crossings.
 - e. Stormwater bio-treatment sites.
2. *Routine site-management—these are the normal and expected activities that are expected to occur on most sites to keep them in compliance with permit conditions and project success standards. These include:*
 - a. Weed control.
 - b. Minor replanting of vegetation.
 - c. Fence repair.
 - d. Litter and trash pick-up and removal.
3. *On-site Remediation—these activities are initiated when projects have fallen out of compliance with permit conditions and project success standards. These include:*
 - a. Re-grading.
 - b. Major replanting of vegetation.
 - c. Installation of temporary irrigation system.
 - d. Installation of fencing.

4. *Major Remediation*—this category is established for the rare instances when a mitigation site is a catastrophic failure and it becomes necessary to completely design or redesign and construct or reconstruct the mitigation site to meet permit requirements. These include:
 - a. Site reconnaissance and negotiation with agencies.
 - b. Property acquisition.
 - c. Site construction.

Initial mitigation activities, such as plantings, are not included in Management of Environmental Mitigation Sites. Once mitigation sites are considered established, the Maintenance Program assumes routine maintenance duties.

4. Stormwater Runoff

Most highways were built prior to stormwater regulations and have no (or substandard) runoff treatment or flow control facilities associated with them. Regulations requiring that highway runoff be treated to remove pollutants and control peak flows took effect for WSDOT in 1991. As construction of most of Washington's highways predate such regulations, the water running off these highways is not treated. This lack of treatment results in large amounts of dirty stormwater discharging from the highway system at thousands of outfalls. The water from these outfalls potentially degrade receiving water bodies used for drinking, recreation, fish habitat, and other beneficial uses.

This category of the Environmental Retrofit program addresses stand-alone stormwater retrofit projects.

5. Noise Reduction

This category provides for retrofits to reduce noise impacts associated with previously constructed projects. The impact of traffic noise on neighborhoods throughout the state was not considered before May 1976, when federal noise regulations were adopted. WSDOT has developed a prioritized retrofit program to construct noise barriers at high-noise locations as funding becomes available. The program improves livability at locations where traffic noise exceeds certain levels and negatively impacts residential areas and other noise-sensitive areas such as schools and parks. Highways built, widened, or realigned since 1976 are typically not included in this program since they are required to provide mitigation at the time they are built—if that is reasonable and feasible to do so and desired by the adjacent property owners.

6. Wildlife Connectivity

WSDOT annually records about 3,000 vehicle collisions with deer and elk on state highways. This program category is for stand-alone projects that accommodate wildlife movement and address animal/car collisions at specific high collision locations. Projects may enlarge stream crossing structures, construct wildlife crossing structures, install animal detection and warning systems, or add fencing.

Traffic Operations

The Traffic Capital Program delivers Intelligent Transportation System (ITS) projects that improve commercial vehicle operations, traveler information, and safety and congestion relief by applying advanced technology to transportation. Typical Intelligent Transportation System Projects include:

Commercial Vehicle Information Systems and Networks (CVISN)

Projects automatically weigh and check commercial vehicle credentials at freeway speeds, reduce delays, and ensure security at international borders.

Communications Backbone

The backbone of the Intelligent Transportation System is communications. Washington State Department of Transportation (WSDOT) operates a communication system composed of radio, microwave, and fiber optics elements that touches all sections of the road network. It provides radio communications for those maintaining the roads and data transmission for those managing the roads. The data that is transmitted over the system comes from many ITS elements that are part of our overall traffic management efforts.

Traffic Cameras

WSDOT operates an extensive network of closed-circuit television across the state to help detect congestion and accidents, and to be constantly aware of traffic and road conditions. The camera images are sent to our traffic management centers for operations monitoring, to the web for traveler information, and to the media.

Variable Message Signs (VMS)

A variable message sign is an electronic traffic sign used on roadways to provide motorists with important information about traffic congestion, incidents, roadwork zones, travel times, special events, or speed limits. They may also recommend alternative routes, limit travel speed, warn of duration and location of problems, or simply provide alerts or warnings.

Highway Advisory Radios (HAR)

Highway advisory radios are licensed low-power AM radio stations installed along the roadway to provide alerts and general information regarding traffic and travel. The presence of a HAR transmitter is marked by a roadway sign instructing motorists to "Tune to 1610 AM." The 1610 frequency is one of several used by HAR radios and identified on the signs.

Road/Weather Information Systems (RWIS)

Road/weather Information Systems are installed along the roadway with instruments and equipment which provide weather and road surface condition observations. This information is used to make decisions on maintenance strategies and to provide information to drivers. A typical RWIS station may measure air and road surface temperature, barometric pressure, humidity, wind speed and direction, precipitation, visibility and road surface condition (dry, wet, freezing).

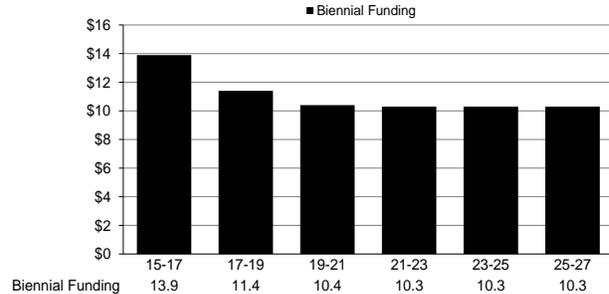
Ramp Meters

Ramp meters are traffic signals on freeway on-ramps which alternate between red and green to control the flow of vehicles entering the freeway mainline. Metering rates are automatically adjusted by the system, based on prevailing freeway traffic conditions.

Traffic Data Collectors

Traffic data detectors are one of the key set of tools used to keep track of what is happening on the roadways. Detectors are used to measure traffic speeds and volumes. The detection data is sent from the roadside to WSDOT traffic management centers to monitor operations and provide traffic conditions to the web and the WSDOT 511 traffic information hotline.

Traffic Operations Capital Program
10 Year Plan for Biennial Funding
(Dollars in millions)



Vision and Goals: *Moving Washington* and WSDOT's Strategic Plan

Moving Washington is a three-part strategy to reduce traffic congestion in our state. The strategy details three complementary elements: adding capacity strategically, efficiently operating the existing system, and providing choices that help manage demand. Intelligent Transportation Systems are a cost effective solution in two of the three strategic elements:

1. Operating efficiently means getting the most out of the infrastructure we already have. Much of this is done using relatively low cost traffic ITS technologies such as electronic tolling, Traffic Management Centers (TMCs), traffic cameras and other surveillance devices, Variable Message Signs (VMS), Highway Advisory Radios (HAR), and ramp meters.
2. Managing demand means promoting and sponsoring travel options for travelers that result in greater efficiency for the transportation system. ITS strategies to help manage demand include real-time traffic information displayed for drivers on variable message signs and variable tolling based on traffic volume or time of day. These options shift demand away from the parts of the system that are overburdened, on a particular route or at a particular time of the day.

Project Prioritization and Selection Process:

The Program's first priority is to set aside a sufficient portion of the motor vehicle account—state appropriation for federal grants that require matching state funds.

Any remaining state funds are allocated to projects based upon a prioritization process. Region traffic offices identify their 2, 6 and 10-year ITS project needs and forward their lists to headquarters traffic. HQ compiles a list of all of the 2-year unfunded projects that are roughly \$500,000 or less, that can be constructed in the upcoming biennium. For ITS projects meeting that criteria, benefits are derived using a set of measures in areas such as traveler safety, traveler mobility, system efficiency, operational efficiency, and system continuity. The projects are then scored and ranked. Since available funds are extremely limited, roughly only a third of these low-cost projects receive funding from the Q3 subprogram.

In order to receive funding, the project must (a) be in the Statewide Intelligent Transportation System (ITS) Plan, and (b) have a relative high benefit to cost ratio. Other considerations for project selection include: (a) Projects leveraging federal and/or local grants are given a higher priority, (b) the readiness of a project "shovel ready," (c) the logical sequencing of ITS projects with a high B/C ratio, and (d) Project cost in relation to available funding.

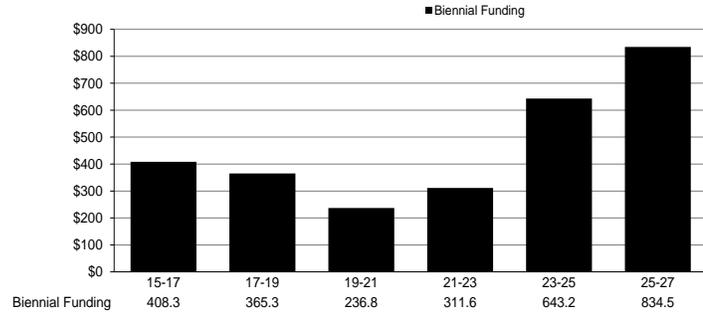
WSF Construction Program

Ferry System Overview

Transportation Role

The 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 Ferry System serves the region's commuters in eight counties. Ferries provide island to mainland and inter-island transportation. Finally, ferries provide access to recreational areas. In 2015, 23.9 million riders and 10.5 million vehicles used the System's terminals and vessels. Based on the number of vessel sailings and riders, WSF is the largest ferry service provider in the United States and the second largest transit organization in the State of Washington.

Washington State Ferries Construction Program
10 Year Plan for Biennial Funding
(Dollars in millions)



Strategic Framework

As a division of the Department of Transportation, WSF is strategically aligned with the Department's Strategic Plan – *Results WSDOT: Moving Washington Forward*. The strategic goals include:

Strategic Investments: Effectively manage system assets and multimodal investments on corridors to enhance economic vitality.

Modal Integration: Optimize existing system capacity through better interconnectivity of all transportation modes.

Environmental Stewardship: Promote sustainable practices to reduce greenhouse gas emissions and protect natural habitat and water quality.

Organizational Strength: Support a culture of multidisciplinary teams, innovation and people development through training, continuous improvement and Lean efforts.

Community Engagement: Strengthen partnerships to increase credibility, drive priorities and inform decision making.

Smart Technology: Improve information system efficiency to users and enhance service delivery by expanding the use of technology.

WSF's Mission

The Washington State Department of Transportation (WSDOT) assigns to its Ferries Division the mission of providing marine high-capacity transportation linkages for people and goods throughout the Greater Puget Sound Region and to Vancouver Island.

WSF Construction Program's Mission

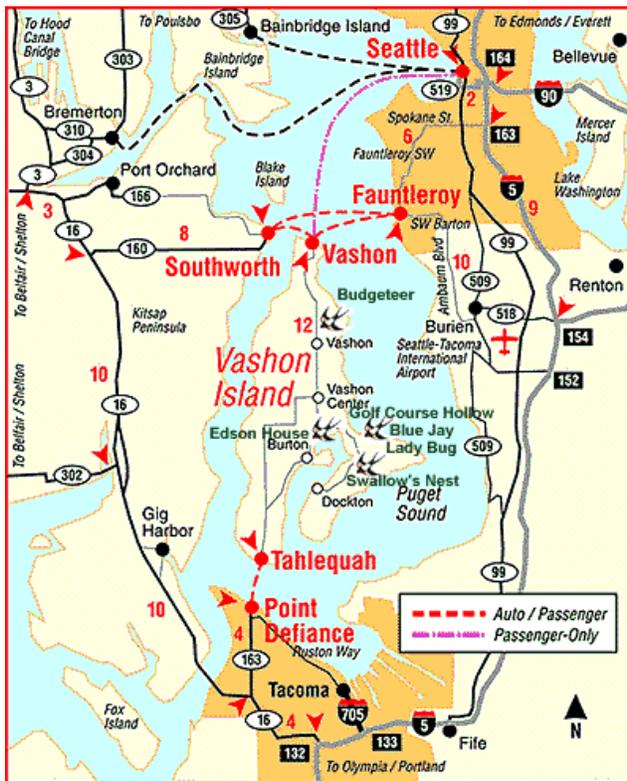
WSDOT makes capital investments in the Ferry System through the WSF Construction Program. The program's mission is to effectively and efficiently use limited resources to acquire, preserve, and improve infrastructure that maximizes the Ferry System's ability to deliver reliable and responsible marine transportation services to its customers. It accomplishes this mission through investments that are guided by consideration of travel demand forecasts, levels of service objectives, and pricing and operational strategies.

WSF Assets

WSF's infrastructure includes terminals, vessels, and maintenance facilities. The Ferry System operates 20 terminals that provide vessel reception; customer access to and clearance of terminal facilities; vehicle and passenger staging, holding, loading and unloading for vessels; and connections with other modes of transportation. The current fleet consists of 22 vessels. One new vessel will be delivered in the 2015-17 biennium with the last new vessel to be delivered in 2017-19 biennium. Although 2 vessels are being added to the fleet, two older vessels will be decommissioned keeping the number of vessels in the fleet at 22. These vessels accommodate vehicles and passengers. Finally, the System operates a major maintenance facility at Eagle Harbor.

WSF Routes

WSF operates ten ferry routes. These routes are equivalent to 200 miles of highway bridges. WSF's vessels make nearly 450 sailings per day over these routes. See the figure below.



Strategic Long-Term Investment Process

WSDOT makes capital investments in the Ferry System in a manner that balances meeting service targets with the long-term need to preserve and improve the state's transportation system. WSF accomplishes this through sound fiscal planning, asset management, and the development of strategic investment programs. The Legislature, the Governor and regulatory agencies provide guidance to WSF's investment process. The Legislature has enacted laws beginning with ESHB 2358, Laws of 2007 that specify how the capital program should be administered. The Governor considers capital investments in terms of the Priorities of Government. Regulatory agencies focus on protecting people, the environment and capital infrastructure and therefore emphasize preservation of "vital" components of terminals and vessels.

WSF's investment decisions are based on a comprehensive asset management approach. Beginning with the preservation requirements of Lifecycle Cost Model, the pending improvement opportunities, and assessment of emergency funds requirements, a work plan is presented to the Assistant Secretary for Ferries and the Capital Committee. The Assistant Secretary, assisted by the Ferries Capital Committee, reviews the work plan and establishes financial constraints based on the financial plan. The final work package is adjusted to meet these constraints based on risk management principles. The funded list of projects for a ten-year period constitutes WSF's Ten-Year Capital Program, also referred to as the Capital Improvement and Preservation Program (CIPP). WSF measures its performance in executing this program. Successful execution of the Capital Program ensures that WSF's terminals and vessels will provide reliable and responsible service to Ferry System riders.

WSF Capital Investment Strategies

WSDOT makes capital investments in the Ferry System using five strategies:

Emergency Repairs

WSDOT earmarks funds for use in responding to and minimizing service interruptions caused by unanticipated damage to terminals and vessels and for addressing unanticipated changes in regulatory requirements. (For example, WSF reacts quickly to reopen a ferry terminal that is closed to traffic after a vessel makes a hard landing).

Protection of People and the Environment

WSDOT makes investments that ensure the safety of people and protection of the environment (e.g., implementation of US Coast Guard Sub-chapter W Regulations).

Targeted Investments in Terminal and Vessel Systems

WSDOT renovates or replaces systems of terminals and vessels in order to ensure that the assets are able to provide reliable and responsible marine transportation services (e.g., replace motors on a vessel when they reach the end of their life cycle). It also improves terminals and vessels by removing capacity bottlenecks or providing additional mobility options (e.g., increase the capacity of the vehicle holding area to facilitate loading vessels).

Major Terminal and Vessel Investments

WSDOT invests financial resources to replace existing terminals and vessels (e.g., construct replacements for the Evergreen State Class vessels), or to improve capacity and mobility options (e.g., construct a multimodal terminal).

Governmental Efficiency and Effectiveness

WSDOT invests in the Ferry System to make program delivery more efficient and effective. Examples of this are investments that result in cost savings or avoidance (e.g., installing more fuel-efficient propellers) or provide benefits to customers and the general public (e.g., installing wireless internet connections on vessels and at terminals).

Program and Project List Structure

The Legislature established the WSF Construction Program for the purpose of "...improving the Washington state ferries system, including, but not limited to, vessel construction, major and minor vessel preservation, and terminal preservation, construction and improvements."

The WSF Construction Program consists of three sub-programs: Terminal Construction, Vessel Construction, and Emergency Repairs. The official project list used by the Office of Financial Management (OFM) and the Legislature groups projects in a structure that mirrors the major areas of interest that emerged from the Ferry Financing Study and were reflected in ESHB 2358, Laws of 2007.

<i>Program-Sub-program Structure</i>		
Terminal Construction	Vessel Construction	Emergency Repairs
<i>Project List Structure</i>		
Terminal Improvements	Vessel Improvements	Emergency Repairs
Terminal Preservation	Vessel Preservation	Administrative
	New Vessels	System-wide

Terminal Construction includes capital investments in WSF terminals and the Eagle Harbor Maintenance Facility. Investments are made to ensure WSF facilities are in compliance with requirements of regulatory agencies; are structurally, mechanically and electrically sound; function efficiently and effectively; and have the capacity and mobility options to meet the demand for ferry service.

Vessel Construction includes capital investment in WSF’s fleet. As above, investments are made to ensure WSF vessels are in compliance with requirements of regulatory agencies; are structurally, mechanically and electrically sound; function efficiently and effectively; and have the capacity to meet the demands for ferry service.

Emergency Repairs address either damage to a terminal or vessel that is not the result of deterioration or wear that could be reasonably anticipated or is due to an unanticipated change in regulatory requirements. WSF may use statutory provisions to expedite repairs to put a damaged facility or vessel back into service as quickly as possible.

Preservation extends the life of assets that are in the Ferries Life Cycle Cost Model (LCCM) by replacement or refurbishment. It does not change the program use of the asset.

Improvements are made to achieve a program goal, such as changing or improving the characteristics of an existing asset to meet new program requirements; or acquiring a new asset through construction, lease or purchase. Typical improvements include improving conditions and accommodating changes in service or clientele.

New vessels refers to the acquisition of new vessels to replace existing vessels or to add new capacity to the fleet.

Administrative support consist of activities which support the development and delivery of the construction program; such as, contract administration, budget and program development, planning, human resources management, finance and administration, communications services, project controls and reporting, engineering technical services, development of design standards, regulatory compliance and inspections, and supervision of engineering staff. Support budgets are developed using zero-based budgeting methods. Costs are distributed to terminal and vessel projects using a cost allocation methodology approved by OFM.

System-wide refers to capital projects that involve multiple terminals and/or vessels but are handled as a single project. These projects are used to facilitate oversight and reduce project management costs.

Significant highlights for the 2017-2019 Biennium

Vessels

The ferry fleet continues to age faster than it is being recapitalized. The M/V Suquamish is scheduled for delivery in June 2018, marking the end of current Olympic Class new construction program. With the three remaining Super Class vessels approaching the end of their service life, it is essential to begin the recapitalization process for these vessels this biennium. The 2017-2019 budget request includes all pre-design activities for WSF’s next class of ferries, including needs statement, alternatives analysis, project definition and RFP development. Continuation of the Olympic Class program under a new contract will be one of the options considered.

The three Jumbo Mark II Class vessels are facing significant obsolescence of the diesel electric propulsion system. The 2017-19 Project List includes development of a project plan and RFP for the design, construction and lifecycle support to ensure system reliability through the end of the vessels' 60 year service life.

The 2017-19 Vessel Preservation project list is sized at \$65M, just under 70% 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% of the documented need. Even with this increase, the backlog of systems operating beyond their life cycle will continue to grow an estimated 4% in the 2017-19 biennium. This consistent underfunding of preservation has put the fleet at risk of not attaining the targeted 60 year vessel service life.

Emergency Repair

The department is seeking an increase in the emergency funding level from \$4M to \$7M per biennium based on recent data that show an increased number of events and increased repair costs. This higher level of funding is needed to attain service level targets.

Terminals

Terminals has been working to add functionality to the Life Cycle Cost Model (LCCM), in conformance with MAP-21, to quantify risk and use it to optimize the service life of its assets. The transition to this approach is currently underway; the outputs of this analysis are the basis for the preservation projects identified. The new approach has resulted in a deferral of many of the assets coming "due" since their probability of failure and consequences of failure do not warrant full replacement. By virtue, the previous backlog has been reduced, and the project list is focused strategically on the assets posing the highest risk to the system.

- Per Results Washington, the Terminals Action Plan is to control the percent of ferry terminal systems that are past due for replacement from increasing over 6% by 2020.
- 6% percent of the value of Terminals System assets will be beyond their optimal life cycle by the end of the Biennium. According to the proposed plan, this percentage will rise to a peak of 8.6% in 2022, just before the Colman Dock project is completed in 2023. After 2023, the percentage drops below 5% and continues to fall through the duration of the planning horizon. (Note that these percentages do not include the results of the seismic risk assessment, which is ongoing. Ferries anticipates that the backlog will increase once this work is completed.)

Other project list highlights for terminals are:

Seattle Ferry Terminal: The project recently completed the 60% estimate which indicates a \$40M increase in the base cost of the project. As such, the Department is requesting \$40M additional funding at this time to allow the project to move forward with material procurement in January 2017. WSDOT is working with the GC/CM contractor to define, refine and mitigate known risks. The risk numbers may change. The Department will provide an update on the total project costs including risks in November at the time of 90% design completion and will work with OFM to update the budget request accordingly.

Mukilteo Ferry Terminal: The request is for construction funding to build the multimodal terminal. The project replaces the aging facility and will improve efficiency, encourage multimodal travel and accommodate future ridership projections. The project has recently completed 60% design. The project team will participate in a practical design workshop and complete a CEVP update this fall. The Department will provide an update on the anticipated costs for the project in November and will work with OFM to update the budget request accordingly.

Bainbridge Overhead Loading: funding is requested to replace the timber overhead walkway with a walkway that is ADA compliant and is designed to meet current earthquake codes. Bainbridge Island has

the greatest number of walk-on passengers in the system; the new walkway will be sized to accommodate this traffic.

Southworth and Fautleroy Trestles: the request is to begin and further the environmental documentation for the next two priority trestles. Condition, seismic stability, and the performance of the triangle route has caused these trestles to prioritize high.

Decision Packages:

Ticketing System –funding is requested to support the acquisition, installation, and deployment of a new ticketing and reservation system. WSF plans to acquire an off-the-shelf ticketing and reservation system that has been successfully implemented at other ferry systems of similar size. This system will replace the aging EFS/Wave2Go ticketing system and its adjunct Save A Spot reservation solution. In addition, this will fund WSF’s participation in the regional ORCA card system replacement that is being led by Sound Transit and King County Metro.

Dispatch System – funding is requested 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 (AOSS) that does not meet the processing and reporting needs of WSF.

Additional Information about the WSF Construction Program

OFM’s budget instructions require the department to provide specific information about the Ferries capital program and its budget request. This information is contained in TAB F of the department’s 2017-19 Budget Request Book. Below is a listing of the topics covered.

<i>Additional Information about the WSF Construction Program 2017-19 WSDOT Budget Request, Tab F</i>	
Capital Basics	Improvement-Needs Assessment
Life Cycle Cost Model	Vessel Improvements
Preservation-Condition Assessment	Vessel Deployment Plan
Preservation-Needs Assessment	Capital Impacts on Operating Budget
Preservation-Backlog Reduction Plan	System-wide and Administrative Capital
Preservation-Major Vessel Preservation (Rebuilding the Boat)	Program Costs and Cost Allocation
Preservation Budget Overview	Administrative Overhead Decision Packages

Rail Capital Program

The Rail Capital program provides support, administration, coordination, and planning for both passenger rail and freight rail improvements.

Passenger Rail Capital

WSDOT has been making capital improvements to support intercity passenger rail service on the Amtrak Cascades corridor since 1994.

Significant capital improvement projects are currently occurring in the 2015-2017 biennium, funded through a multi-year \$766.6 million federal grant. This federal funding runs through September 31, 2017, the end of the federal fiscal year. However, all of WSDOT's projects funded under this federal grant are scheduled for completion by July 1, 2017 in order to allow sufficient time to submit invoices for federal reimbursement. Therefore, ongoing improvements and maintenance to the passenger rail corridor in the 2017-2019 biennium will be state-funded.

Federal Funds for High Speed Passenger Rail Projects

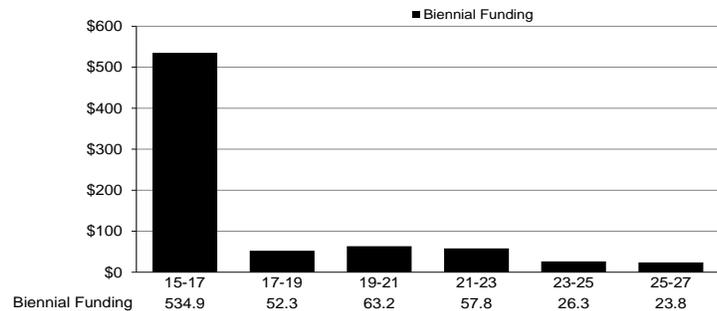
Beginning in 2011, the U.S. Department of Transportation awarded Washington state capital construction grants to support improvements to the Amtrak Cascades service. Over the last five years, WSDOT has been working with the BNSF Railway, Sound Transit, and the Federal Railroad Administration to deliver a series of construction projects funded through these federal American Recovery and Reinvestment Act (ARRA) High-Speed Intercity Passenger Rail grants.

These investments provide critical rail improvements to increase ridership on the Amtrak Cascades service, improve reliability of the service by reducing rail congestion on the main line, and provide future expansion of the passenger rail corridor. In addition, the construction of a new Amtrak Cascades station in Tacoma, the delivery of eight new locomotives, and the acquisition and installation of new positive train control safety measures will provide key infrastructure and equipment upgrades to carry us forward in the future. Upon the completion of all of the projects in 2017, WSDOT will be adding two additional round trips between Seattle and Portland for a total of six daily, improving on-time reliability, and shortening travel times.

One of the federally-funded projects that soon will be completed is landslide prevention work undertaken at six locations along the railroad tracks near Mukilteo and Everett. As a result of the improvements, no landslides reached the tracks at these six locations, helping to significantly reduce the number of landslide disruptions to the Amtrak Cascades service. Moreover, WSDOT convened a Landslide Mitigation Work Group composed of representatives from 17 different agencies, including BNSF Railway, Sound Transit, Amtrak, and several state agencies and municipalities. This project and the participation of the Work Group have been so successful that the Legislature provided funds to continue this landslide mitigation work through Connecting Washington. For the 2017-2019 biennium, \$4.567 million has been allocated for Cascades corridor slide prevention and repair. This funding will be allocated to:

- Use the results of a survey of slide prone areas to implement mitigation work at additional sites along the rail corridor that would most benefit from slope stabilization or catchment walls to prevent future disruption of train service.
- Implement low-cost fixes by working with property owners and cities to mitigate actions (such as landscaping, drainage, or further development) that might contribute to landslides
- Install more high-tech slide prediction tools which provide data to help identify potential landslides before they happen

Rail Capital Program
10 Year Plan for Biennial Funding
(Dollars in millions)



- Continue community outreach and education campaign focused on residents and businesses in coastal bluff areas that are vulnerable to landslides

Ongoing state support for High Speed Passenger Rail Projects

In addition to the funding received from the federal grants, the state also provides capital funding to support its high speed passenger rail program. In the 2017-2019 biennium, a total of \$20 million is allocated for capital improvements, including: positive train control, locomotive service equipment, existing passenger rail equipment, Point Defiance Bypass revenue service, operational modifications for new service, and high speed passenger rail program closeout.

One million dollars in funding for positive train control (PTC) is allocated for the technology equipment and implementation of the federally-mandated safety system for passenger trains that must be implemented by December 31, 2018. Most of the costs associated with this system will be paid for with ARRA funding. However, there may be additional costs that will occur in the 2017-2019 biennium that may be outside the ARRA funding eligibility period.

Servicing of the new locomotives and existing rail cars and equipment will minimize service outages and maintain reliability. A total of \$7.5 million in funding (\$5 million for locomotives and \$2.5 million for existing equipment) will be used to provide the infrastructure and ongoing maintenance necessary to maintain the fleet of equipment.

Federal ARRA funding is being used to create a new inland bypass from Tacoma to DuPont that will separate passenger and freight trains, alleviate a major chokepoint on the Amtrak Cascades corridor, decrease travel times for passengers, and build a new passenger rail station in Tacoma. To fully implement this project, \$15 million in state monies will provide funds to move into the new station, mitigate risks from track and signal construction that may occur outside the federal funding period, and finalize the testing and commissioning of the new corridor.

Operational modifications for the new service may be necessary to address safety, accessibility, track and signal upgrades, traffic/pedestrian mitigation, or other project-related elements that may arise beyond the federal funding eligibility period. Two million is allocated for these modifications.

Final closeout of the nearly \$800 million high speed passenger rail program will require archiving, final reporting, database updates, and administrative management that may occur beyond the federal funding eligibility period. One million in state funding will support WSDOT staffing to carry out these closeout activities.

Freight Rail Capital Projects

Connecting Washington provides funding for six projects in the 2017-2019 biennium focused on specific local rail improvements.

The largest of these projects will continue the rehabilitation of the state-owned Palouse and Coulee City (PCC) rail line. Since 2012, this 297-mile rail system in central Washington has received incremental funding to make some upgrades, including rehabilitation work, track replacement, and basic maintenance. During the 2017-2019 biennium, Connecting Washington funds totalling \$6.696 million will allow for significant improvements to this key agricultural rail line, including replacement of bridges, track rehabilitation, crossing upgrades, and improvement of curves to increase speeds. These upgrades will bring significant portions of the rail line into a state of good repair, permitting the support of modern 286,000 lb. rail cars at 25 mph.

Additional local rail projects allocated Connecting Washington funds in 2017-2019 include:

- Port of Moses Lake (\$5.4 million)
- West Vancouver Freight Access (\$1.425 million)
- Port of Warden Rail Infrastructure Expansion (\$1.75 million)
- Connell Rail Interchange (\$5 million)
- Grays Harbor Rail Corridor Safety Study (\$300,000)

Freight Rail Grants and Loans

The Freight Rail Capital Program provides grant and loan assistance to railroads, port districts and local governments to keep freight rail services viable throughout the state. Examples include funding track repairs and enhancing business access to rail service. The Freight Rail Assistance Projects (FRAP) is a grant program, while the Freight Rail Investment Bank (FRIB) provides loans. New projects are selected each biennium through a competitive application process, based on the amount of funding available. A request for proposals (RFP) for future freight projects for the 2017-2019 biennium will be prepared by WSDOT for both FRAP and FRIB. WSDOT will review the proposals and provide the Legislature and the Office of Financial Management with a prioritized list and associated project cost estimates.

A total of \$12.04 million was allocated for these two programs for the 2017-2019 biennium. This includes \$4.29 million in Connecting Washington funds for FRAP grants, \$2.75 million in new law funding for FRAP grants, and \$5 million for FRIB loans.

As an example of the types of projects that are funded under these two programs, during the 2015-2017 biennium, 10 new grant projects were funded under the Freight Rail Assistance Projects (FRAP) program, including:

- Yakima Central – Branchline Safety & Preservation
- Port of Columbia – Prescott to Dayton Rail Improvements
- Port of Whitman Co – Wilma Rail Terminal Improvements
- Cascade & Columbia – Wenatchee to Entiat Rehabilitation
- Mount Vernon – Terminal Railway – Mt Vernon Yard Expansion
- Columbia Basin RR – Schrag Rail & Tie Replacement Phase II
- Snohomish Co – 240th St/SR9 Grade Crossing Improvements
- Tidewater Transportation-Pasco Rail-to-Barge Transload
- Kennewick Terminal – Industrial Rail Rehabilitation
- Watco Inc. – PCC Rail Bridge Repairs

The new 2015-2017 Freight Rail Investment Bank (FRIB) loan projects included:

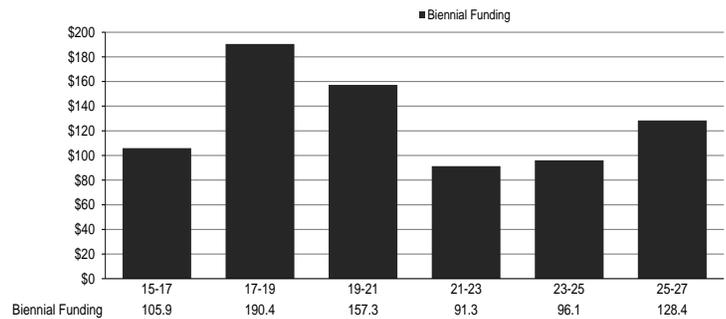
- Tacoma Rail - East Lead Low Side Rebuild
- Tacoma Rail - West Lead High Side Rebuild
- Tacoma Rail - Transfer Yard Connection
- Tacoma Rail - Edwards Crossover Rehabilitation
- Tacoma Rail - Taylor Way Wye Rehabilitation
- Port of Whitman Co – Wilma Rail Terminal Improvements
- Port of Everett – Marine Terminal Rail Improvements – Phase III
- Port of Walla Walla – Wallula Gap Business Park Lead Track

Local Programs

Local Programs is responsible for administration and management of all federal and state funds that support local agency transportation systems. By providing engineering and technical assistance to cities, counties, ports, tribal governments, transit, metropolitan and regional planning organizations, Local Programs helps build and improve local transportation systems using a practical solutions approach to improve processes and complete projects in a timely and cost-effective manner. This includes

incorporating inclusion into the practical solutions strategies by actively managing the Disadvantaged Business Enterprise (DBE) participation to attain the federal goal.

Local Programs
10 Year Plan for Biennial Funding
(Dollars in millions)



New Investments and Work in Progress for the 2015-2017 Biennium

The 2015-2017 transportation budget established new funding for investments in local priority projects and continued funding for a number of projects underway.

15-17 Biennium Local Investments:

- \$47.6M Connecting Washington Account
- \$9.9M Pedestrian and Bicycle Tiered Selections
- \$24.2M Pedestrian and Bicycle Safety Program
- \$33.7M Safe Routes to School Program
- \$11.6M Legislative Earmarks

New Investments and Projects in the 2017-2019 Biennium

Local Programs Office is programming new Pedestrian Safety/Safe Routes to School projects that will reduce fatalities and increase biking and walking, and increase the number of children walking and biking to school safely. In addition local investments continue in the Connecting Washington Account established in the 15-17 Transportation budget for specific improvements in communities throughout the state.

17-19 Biennium Local Investments:

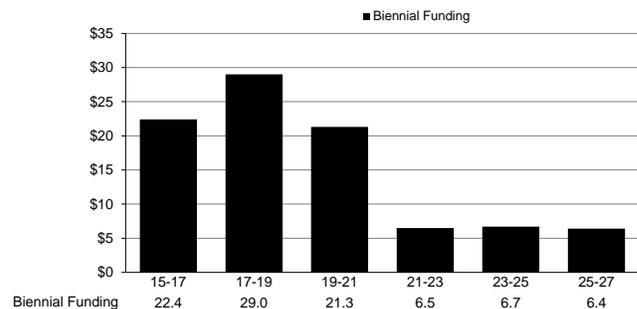
- 94.7M Connecting Washington Account
- 11.9M Pedestrian Bicycle Tiered Selections
- 26.0M Pedestrian and Bicycle Safety Program
- 35.6M Safe Routes to School Program

Capital Facilities

WSDOT's Capital Facilities Program maintains, operates, and is responsible for improvement and preservation of 963 department-owned buildings and structures at 291 separate sites across the state. These 'facilities assets' are valued in excess of \$1 billion dollars and support staff across all programs that construct, maintain, and operate state highways.

Facilities assets, which contain many unique uses and complex building systems, include region headquarters complexes, traffic management centers, maintenance crew facilities, commercial vehicle repair facilities, welding and fabrication shops, project engineer offices, testing laboratories, materials storage and wireless communications sites.

Facilities Capital Program
10 Year Plan for Biennial Funding
(Dollars in millions)



Asset Management throughout the Life Cycle

Biennial condition assessments identify and quantify deficiencies, and track the backlog of work to be done at existing facilities. Maintenance management assures that the life of facilities systems is maximized. Selective renovation projects preserve assets and delay replacement.

Programming

Priorities are driven by life-safety, code compliance, asset preservation and mission support needs. Opportunities to consolidate geographically, to move closer to operational centers, and collocate with others are also considerations. Financial analysis models are tools used to assist in making long-term decisions.

Capital Facilities major replacement projects are prioritized considering support of strategic goals of the organization, impact on operations, impact on building condition and project success factors, feasibility and opportunities.

Capital Facilities minor projects are currently prioritized using condition assessment data identifying building system and structural repair, roofing and building envelope, paving, siding, lighting and electrical replacement, and other improvement and preservation deficiencies.

Sustainability assessment

The Capital Facilities Office is currently providing data and technical support to the agency's Sustainable Transportation initiatives, including:

- Reporting of statewide energy consumption estimates in response to RCW 70.235,
- Benchmarking and establishing Energy Use Indexes for certain buildings in response to RCW 19.27A.190 and Governor's Executive Order 12-06, and
- Implementing building and construction practices in response to Governor's Executive Order 05-01 on Green Buildings for state facilities.

There is a continual effort to look for energy savings opportunities within budget allowances and better ways to measure energy performance.

OFM Six-Year Planning

The Capital Facilities Office continues to coordinate with the Office of Financial Management (OFM) Facilities Oversight to provide facilities needs information for long-range planning and management (see RCW 43.82.055).

Facility Inventory Condition Assessment Program (FICAP)

The Capital Facilities Office has expanded the implementation of FICAP software application to include Safety Rest Areas. FICAP is a product developed by the Washington State University (WSU) Extension Energy Program and offered through the Plant Operations Support Consortium. The software application is used to centralize and track building condition, illustrate a preservation backlog, identify potential projects and create initial project budgets. This tool consolidates the existing WSDOT Facility Work Request and Condition Assessment processes, making system and data management more efficient. Previously, data was hand calculated and time-intensive to manage.

Projects

Olympic Region Headquarters Maintenance and Administration Facility

Estimated Biennial Expenditure: \$21.0M *(Total Project Cost \$40.0M)*

Replace the existing Olympic Region Maintenance and Administrative Facility with a new facility at the WSDOT owned property on Marvin Road.

Euclid Ave Administration Facility Consolidation Project

Estimated Biennial Expenditure: \$2.0M *(Total Project Cost: \$12.0M)*

Construct a new admin facility at Euclid Ave and allow DOT to move off the property at Wenatchee Ave. If any of this appropriation remains unspent at the completion of this project the appropriation may be used for the SR 285, North Wenatchee Improvements. The department may not sell the Wenatchee Ave site that will be vacated as part of this facility consolidation project until such time as the city in which the Wenatchee Ave site is located has provided a development plan for this site to the department.

Olympic Region

Headquarters Facility Site Acquisition Debt Service

Estimated Cost: \$0.566 million

First phase of the Olympic Region Headquarters replacement was completed and land was purchased in the City of Lacey. Acquisition was funded through Certificates of Participation and debt payments are planned for 20 years ending in 2025.

Preservation and Improvement Minor Works Projects

Estimated Cost: \$4.341 million

Minor improvement and preservation projects are performed at facilities statewide that improve, maintain, preserve and extend the life of existing state facilities and assets and do not significantly change the programmed use of the facility. This funding assists in keeping facilities operational for staff that operate, maintain, design, and construct the transportation infrastructure.

NPDES Facility Projects

Estimated Cost: \$0.250 million

The funding is for ongoing minor infrastructure improvements at existing capital facilities to meet stormwater permit requirements.

Facilities Condition Assessment Ratings and Deficiency Backlog

The Capital Facilities Program focuses on high-priority preservation and improvement projects for 284 primary buildings that contain 85% of the square footage of WSDOT owned facilities, excluding Ferries and safety rest areas. Facility condition assessments (FCA) are conducted every two years. The condition assessments evaluate the number of buildings in poor, fair, or good condition. This information becomes the basis for determining the repair backlog and provides a factor used in facility replacement priorities.

In 2014, assessments identified that 42% of the primary buildings were rated 'poor'. This is a 2% increase since 2012.

The preservation and repair backlog is primarily due to the fact that sixty-eight percent of these primary facilities are more than 25-years-old, with a \$208.7 million dollar backlog (see table below). Thirty percent of the buildings exceed 50 years. Major building systems – such as heating, plumbing, lighting, roofing and structural elements—require substantial repair or replacement around the 20- to 25-year point in a building's lifetime. Further, older buildings are more likely to be inefficient or unsuitable for today's operations, plagued by problems that range from an inadequate number of vehicle bays and bay sizes too small for modern trucks, to insufficient crew facilities and material storage.

Capital Facilities primary building condition

Condition	2010	2012	2014
Good	24 (8%)	22 (8%)	19 (7%)
Fair	150 (52%)	150 (52%)	147 (52%)
Poor	113 (40%)	117 (40%)	118 (42%)
Total	287	289	284

Data Source WSDOT Capital Facilities Office. Only includes primary buildings.

Note: The changes in building count from 2012 are due to two building demolition projects (So. Bellevue PE Office, Wenatchee Traffic/RES Office) and three buildings that have been moved out of the D Program (Eastmont PE Offices).

Capital Facilities primary building age and backlog

As of July 2014; Dollars in millions

Age of buildings	Number	Backlog		
		Percent of total	per building	Total backlog
25 years or less	89	31%	\$0.28	\$24.6
26 to 50 years	109	38%	\$0.99	\$107.8
Over 50 years	86	30%	\$0.89	\$76.3
Total	284			\$208.7

Data source: WSDOT Capital Facilities Office

Direct Project Support

2017-19 Capital Improvement and Preservation Program

Direct Project Support

August 23, 2016

Explanation of Direct Project Support Costs and Program Delivery Management and Support Costs (WSDOT)

Direct Project Support Capital Program Costs: Direct Project Support (DPS) costs are allocated for the Improvement Program in **Subprogram I5** and for the Preservation Program in **Subprograms P4 and P8**. These support packages are included as BINs in the department's proposed project lists. Budget projections for future biennia are based on spending levels for the two-year budget period, adjusted for unusual circumstances and then increased for inflation in each future biennium (seven future biennia). However, it should be emphasized that projected out-biennia budgets are only place holders and are recalibrated each budget cycle.

In the 2015-2017 biennium, \$5 million of the Motor Vehicle Account state appropriation was provided solely for extraordinary costs incurred from litigation awards, settlements, or dispute mitigation activities not eligible for funding from the self-insurance fund. For the 2017-2019 biennium, WSDOT is again seeking \$5 million for the purposes described above.

DPS funding is provided to WSDOT support organizations based on the work activities necessary to develop and deliver the capital program. Attached is the office DPS budgets for the 2015-2017 biennium.

2015-17 Biennium DPS Budgets by Office

(dollars in thousands)

Office/Organization	Total
HeadQuarters	
Project Development	16,425
Bridge Office	20,428
CPDM	7,667
Construction Office	5,629
Mats Lab	2,556
Office of Equal Opportunity	3,165
Audit Office	1,105
Transportation Data and GIS Office	800
Human Resources/Training	1,391
Traffic Operations	600
Policy Innovation	282
Environmental Service Office	1,229
Facilities Office/Safety Rest Areas	220
Highways & Local Programs	66
Communications Office	78
Emergent Needs	1,480
Settlement Litigation (unallotted)	5,000
Statewide Activities (CTR)	347
Lean Process Improvement	65
Office of Information Technology	397
Accounting and Financial Services	166
Attorney General	1,500
Toll Division	1,500
Practical Design	102
Regions	
<i>(Developer Review, Pits & Quarry, Right of Way, Project Definition, etc)</i>	
NWR	9,724
NCR	3,080
OR	6,160
SWR	5,360
SCR	4,540
ER	4,790
Total	105,569
Distributed to Projects	22,964

Project Reappropriations

2017-19 Capital Improvement and Preservation Program Project Reappropriations – All Capital Programs September 2016

The Department is requesting a re-appropriation of funds for work that was expected to be done in 2015-17 but did not progress as planned and will need to be done in the 2017- 19 biennium. The delays happen for a variety of reasons but there are some common trends that include:

- Acquiring right-of-way is taking longer than expected;
- Favorable bids within BINs. The savings are then applied to the BIN instead of being released as would be the case on a stand-alone project;
- Cost estimates and delivery schedules refined and updated during the project development process.

A few of the larger re-appropriations are as follows:

- Intersection & Spot Improvements (\$13.6 million) 0BI2002 – 15-17 expenditure estimates are revised to reflect delays associated with railroad agreements, right of acquisition, and increased public involvement;
- SR 520/ Bridge Replacement and HOV (\$42 million) 8BI1003 – 15-17 expenditure estimates are revised to reflect risk not realized in the biennium and for continuation of program management for the West Approach Bridge North project into 17-19;
- Fish Passage Barrier (\$8.7 million) 0BI4001 – 15-17 expenditure estimates are revised to reflect updated engineer's estimates, delayed right of way acquisition, and revised delivery plans;
- Structurally Deficient and At Risk Bridges (\$32 million) L1000068 – 15-17 expenditure estimates are revised to reflect a realistic delivery plan for this legislatively directed investment.

Specific explanations by project can be found in the Department's 313 report to OFM and the Legislature. Providing a re-appropriation of funds will allow projects to continue toward completion allowing the full benefits of the project to be realized.

**2017-19 Capital Improvement and Preservation Program
Project Reappropriations - All Capital Programs**

		16LEGFIN	17DOT001	Variance	16LEGFIN	17DOT001	Variance
		15 - 17	15 - 17	15 - 17	17 - 19	17 - 19	17 - 19
Facilities Capital (\$ in Thousands)							
D309701	Preservation and Improvement Minor Works Projects	4,230	3,909	(321)	4,340	3,639	(701)
D399301	Olympic Region Headquarters Facility Site Debt Service	566	566	(0)	565	565	0
Program Total		4,796	4,475	(321)	4,905	4,204	(701)

Highway Improvement (\$ in Thousands)							
053255C	SR 532/Camano Island to I-5 Corridor Improvements (TPA)	16,204	16,127	(77)	330	362	32
099955F	Fish Passage Barriers (TPA)	12,772	11,358	(1,414)	4,340	4,150	(190)
0BI2002	Intersection & Spot Improvements	78,431	64,784	(13,647)	229	88,162	87,933
0BI2003	Guardrail Retrofit Improvements	2,000	1,155	(845)	9,542	2,985	(6,557)
0BI2005	Median Cross-Over Protection Improvements	7,280	6,345	(935)	8,101	14,883	6,782
0BI2007	Roadside Safety Improvements	472	403	(69)	88	283	195
0BI4001	Fish Passage Barrier	58,393	49,645	(8,748)	43,198	55,809	12,611
0BI4002	Noise Wall & Noise Mitigation Improvements	204	41	(163)	1,886	2,665	779
0BI4003	Stormwater & Mitigation Site Improvements	3,611	3,198	(413)	2,282	4,363	2,081
0BI4ENV	Environmental Mitigation Reserve - Nickel/TPA	4,276	3,778	(498)	1,909	2,028	119
100904B	SR 9/176th Street SE to SR 96 - Widening	4,464	1,524	(2,940)	7,157	8,305	1,148
152201C	SR 522/I-5 to I-405 - Multimodal Improvements	4	3	(1)	7	7	(0)
154229G	SR 542/Nooksack River - Redirect River and Realign Roadway	6,064	6,063	(1)	41	41	(0)
202800D	SR 28/Jct US 2 and US 97 to 9th St, Stage 1 - New Alignment	797	784	(13)	425	437	12
300344D	SR 3/Belfair Area - Widening and Safety Improvements	12,622	12,615	(7)	24	32	8
310107B	US 101/Shore Rd to Kitchen Rd - Widening	1,648	1,391	(257)	76	91	15
420511A	I-205/Mill Plain Interchange to NE 18th St - Build Interchange - Stage 2	22,429	20,888	(1,541)	-	1,541	1,541
450208W	SR 502/I-5 to Battle Ground - Add Lanes	16,050	15,468	(582)	1,847	2,429	582
501203X	US 12/Frenchtown Vicinity to Walla Walla - Add Lanes	230	67	(163)	-	118	118
501210T	US 12/Nine Mile Hill to Woodward Canyon Vic - Build New Highway	2,004	562	(1,442)	-	1,442	1,442
508208M	I-82/Red Mountain Vicinity - Pre-Design Analysis	444	393	(51)	843	903	60
600010A	US 395/North Spokane Corridor	47,166	46,768	(398)	10,564	11,111	547
809940B	SR 99/Viaduct Project - Construction Mitigation	18,676	18,676	(0)	-	15,327	15,327
816701E	SR 167/Express Toll Lanes Continuous Access	105	69	(36)	-	37	37
840502B	I-405/SR 181 to SR 167 - Widening	512	140	(372)	146	133	(13)
840541F	I-405/I-90 to SE 8th St - Widening	5,000	-	(5,000)	-	5,000	5,000
88I1001	I-405/South Renton Vicinity Stage 2 - Widening (Nickel/TPA)	181	82	(99)	26	34	8
88I1002	I-405/Kirkland Vicinity Stage 2 - Widening (Nickel/TPA)	42,117	41,052	(1,065)	39,056	39,056	0
88I1003	SR 520/ Bridge Replacement and HOV (Nickel/TPA)	424,155	381,670	(42,485)	18,275	60,142	41,867
88I1006	I-405/Renton to Bellevue Widening and Express Toll Lanes	20,839	19,189	(1,650)	-	1,755	1,755
L1000033	Lake Washington Congestion Management	2,528	800	(1,728)	-	199	199
L1000158	US 2 Trestle IJR	1,500	900	(600)	-	600	600
L2200042	SR 20 Race Road to Jacob's Road	2,924	2,753	(171)	1,526	54	(1,472)
Program Total		816,102	728,690	(87,412)	151,918	324,482	172,564

Highway Preservation (\$ in Thousands)							
099960P	Statewide Safety Rest Area Minor Projects and Emergent Needs	237	153	(84)	350	350	-
0BP1001	Chip Seal Roadways Preservation	61,996	58,167	(3,829)	2,954	40,471	37,517
0BP1003	Concrete Roadways Preservation	58,732	39,227	(19,505)	41,353	63,785	22,432
0BP2001	Bridge Replacement Preservation	7,243	6,602	(641)	7,816	17,894	10,078
0BP2002	Bridge Repair Preservation	64,976	62,677	(2,299)	65,741	108,748	43,007
0BP2003	Bridge Scour Prevention Preservation	1,720	661	(1,059)	7,163	8,956	1,793
0BP2004	Bridge Seismic Retrofit Preservation	6,710	6,701	(9)	13,894	13,894	0
0BP3002	Unstable Slopes Preservation	10,602	10,552	(50)	10,189	14,457	4,268
0BP3003	Major Electrical Preservation	4,461	2,858	(1,603)	1,265	1,167	(98)
0BP3004	Major Drainage Preservation	4,187	3,227	(960)	1,182	3,231	2,049
0BP3005	Rest Areas Preservation	3,457	2,185	(1,272)	3,348	2,249	(1,099)
0BP3007	Statewide Paving Project Basic Safety Features	11,916	9,959	(1,957)	5,157	6,288	1,131
100934R	SR 9/Pilchuck Creek - Replace Bridge	540	528	(12)	20	20	(0)
102047A	SR 20/Alta Vista Dr to SR 9 - Paving	357	215	(142)	1,542	962	(580)
152099V	SR 520/Evergreen Point Floating Bridge R&R - Preservation	1,730	1,066	(664)	790	271	(519)
152526B	SR 525/Bayview Road Vic to Lake Hancock - Paving	1,343	1,326	(17)	1,983	1,954	(29)
153900P	SR 539/I-5 to Kellogg Road - Paving	134	-	(134)	3,473	1,512	(1,961)
316725A	SR 167/Puyallup River Bridge - Bridge Replacement	5,113	5,104	(9)	60	69	9
410110P	Astoria-Megler Bridge - South End Painter	7,369	5,984	(1,385)	5,245	4,196	(1,049)
541002R	SR 410/Nile Valley Landslide - Establish Interim Detour	232	227	(5)	79	79	0
629001D	SR 290/Spokane River E Trent Br - Replace Bridge	1,205	1,199	(6)	1,608	1,613	5
690400J	SR 904/Mullenix Rd to Betz Rd - Paving	471	471	(0)	1,535	1,535	0
L1000068	Structurally Deficient and At Risk Bridges	39,667	6,728	(32,939)	14,833	16,949	2,116
Program Total		294,398	225,816	(68,582)	191,580	310,651	119,071

Traffic Operations Capital (\$ in Thousands)							
000005Q	Reserve funding for Traffic Operations Capital Projects	2,008	219	(1,789)	9,614	5,377	(4,237)
202000W	SR20/Wauconda Summit - RWIS and Camera	186	186	(0)	97	97	(0)
450317Q	SR 503 ATIS Infill-I/S Bypass; 4th Plain to Main St. and Signal Study	1,101	115	(986)	-	985	985
Program Total		3,295	519	(2,776)	9,711	6,459	(3,252)

Ferries Capital (\$ in Thousands)							
900002H	Tahlequah Tml Improvement	96	96	(0)	423	505	82
900022J	Lopez Tml Improvement	531	186	(345)	23	378	355
900026Q	Orcas Tml Improvement	1,204	1,203	(1)	34	90	56

		<u>16LEGFN</u>	<u>17DOT001</u>	<u>Variance</u>	<u>16LEGFN</u>	<u>17DOT001</u>	<u>Variance</u>
		<u>15 - 17</u>	<u>15 - 17</u>	<u>15 - 17</u>	<u>17 - 19</u>	<u>17 - 19</u>	<u>17 - 19</u>
902020D	Anacortes Tml Improvement	739	723	(16)	1,821	2,377	556
910413R	Edmonds Tml Improvement	766	715	(51)	4,131	4,086	(45)
910414P	Kingston Tml Preservation	1,385	1,385	(0)	48	1,430	1,382
916008R	Southworth Tml Preservation	1,382	875	(507)	13,580	2,145	(11,435)
944401D	MV Issaquah Preservation	3,039	2,871	(168)	2,923	2,646	(277)
944403D	MV Kitsap Preservation	605	143	(462)	842	4,458	3,616
944404D	MV Cathlamet Preservation	900	815	(85)	301	4,826	4,525
944406D	MV Sealth Preservation	11,804	11,587	(217)	3,490	1,295	(2,195)
944412D	MV Klahowya Improvement	44	8	(36)	-	66	66
944441B	MV Walla Walla Preservation	3,079	2,884	(195)	1,523	1,758	235
944442B	MV Spokane Preservation	17,810	13,707	(4,103)	953	5,209	4,256
952516S	Clinton Tml Improvement	189	188	(1)	173	173	0
998901J	WSF/Administrative Support - Allocated to W1	3,324	3,301	(23)	7,116	6,896	(220)
998925A	Security System Upgrades Placeholder for W1	2,796	1,483	(1,313)	-	400	400
L2000006	Vessel Project Support	3,396	3,396	(0)	3,522	6,431	2,909
L2000007	Terminal Project Support	6,578	6,505	(73)	5,680	7,380	1,700
		59,667	52,071	(7,596)	46,583	52,549	5,966
Rail Capital (\$ in Thousands)							
750210A	Snohomish Co - 240th St/SR9 Grade Crossing Improvements (2015 FRAP)	184	129	(55)	-	55	55
L1000143	Freight Rail Assistance Projects	970	-	(970)	4,290	4,290	-
P02001A	Cascades Train Sets - Overhaul	2,039	1,897	(142)	-	500	500
	Program Total	3,193	2,026	(1,167)	4,290	4,845	555

Project Variance

Washington State Department of Transportation
2017 Agency Budget Proposal
Project Variance Report

SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
Facilities Capital															
D3	100010T	Northwest Region TMC Improvements	1,043,000	1,042,957	-43				14,000,000	14,000,000					
D3	D300701	Statewide Administrative Support	884,000	884,000					932,000	931,821	-179				
D3	D309701	Preservation and Improvement Minor Works Projects	4,230,000	4,230,000	0	4,340,000	4,340,000		43,444,000	53,227,498	9,783,498		X		Additional future bienniums added to the program.
D3	D311701	NPDES Facilities Projects	281,000	281,000					250,000	250,000					
D3	D398136	NPDES Facilities Construction and Renovation	480,000	588,311	108,311				1,150,000	1,258,657	108,657				
D3	D398898	Existing Facilities Building Codes Compliance	835,000	834,998	-2				2,103,000	2,075,244	-27,756				
D3	D399301	Olympic Region Headquarters Facility Site Debt Service	566,000	565,928	-72	565,000	565,018	18	6,122,000	6,122,900	900				
D3	L1000151	Olympic Region Maintenance and Administration Facility	4,000,000	4,000,000		21,000,000	21,000,000		40,000,000	40,000,000					
D3	L2000079	Euclid Ave Administration Facility Consolidation Project	10,000,000	10,000,000		2,000,000	2,000,000		12,000,000	12,000,000					
Highway Improvement															
I1	000015R	Dept of Revenue - Sales Tax on Projects on Federal/Tribal land	24,000	12,845	-11,155				110,000	98,347	-11,653			X	Payments to Department of Revenue for incorrect sales tax payments.
I1	099904Q	Future Federal Earmarks for Improvement Program	20,000,000	20,000,000		20,000,000	20,000,000		140,000,000	180,000,000	40,000,000		X		Place holder for unanticipated federal funds.
I1	099905Q	Future Local Funds for Improvement Program	10,000,000	10,000,000		10,000,000	10,000,000		70,000,000	90,000,000	20,000,000		X		Place holder for unanticipated federal funds.
I1	0B11002	Pedestrian & Bicycle Improvements	3,000	491,329	488,329				3,233,000	491,329	-2,741,671		X	X	CMAQ funding awarded to WSDOT by PSRC to fund a new project.
I1	0B1100A	Mobility Reappropriation for Projects Assumed to be Complete	37,000	108,646	71,646				14,085,000	14,155,900	70,900				
I1	100011P	SR 539/SR 9 Advanced Traveler Information System (ATIS)							2,809,000		-2,809,000	Deleted	X	X	Project completed in prior biennium.
I1	100067T	I-90 Comprehensive Tolling Study and Environmental Review							3,464,000		-3,464,000	Deleted	X	X	Project completed in prior biennium.
I1	100098T	Direct Staff Support for Joint Transportation Executive Council (JTEC)							100,000		-100,000	Deleted		X	Project completed in prior biennium.
I1	100098U	WA-BC Joint Transportation Action Plan - Int'l Mobility & Trade Corridor	85,000	85,026	26				250,000	250,000					
I1	100098V	WA-BC Joint Transportation Action Plan-Border Policy Research Institute	46,000	46,193	193				100,000	100,000					
I1	100502B	I-5/SR 161/SR 18 Interchange Improvements - Stage 2	1,427,000	1,426,938	-62				2,500,000	2,500,000					
I1	100521W	I-5/NB Seneca St to SR 520 - Mobility Improvements	1,430,000	1,429,635	-365				2,766,000	2,765,154	-846				
I1	100522B	I-5/Express Lane Automation							6,923,000		-6,923,000	Deleted	X	X	Project completed in prior biennium.
I1	100536D	I-5/SR 525 Interchange Phase							20,010,000	20,010,000					
I1	100537B	I-5/196th St (SR 524) Interchange - Build Ramps	42,000	59,954	17,954				31,548,000	31,565,358	17,358				
I1	100543M	I-5/SR 526 to Marine View Drive - Add HOV Lanes	45,000		-45,000				220,041,000		-220,041,000	Deleted	X	X	Project completed in prior biennium.
I1	100553N	I-5/172nd St NE (SR 531) Interchange - Rebuild Interchange							33,120,000		-33,120,000	Deleted	X	X	Project completed in prior biennium.
I1	100589B	I-5/ITS Advanced Traveler Information Systems	13,000	6,208	-6,792				2,665,000	2,657,938	-7,062				
I1	100598C	I-5/Blaine Exit - Interchange Improvements							22,491,000		-22,491,000	Deleted	X	X	Project completed in prior biennium.
I1	100900F	SR 9/212th St SE to 176th St SE, Stage 3 - Add Lanes	1,500,000	901,114	-598,886				54,130,000	53,531,622	-598,378		X		Project completed under budget. Savings released.
I1	100904B	SR 9/176th Street SE to SR 96 - Widening	4,464,000	1,523,616	-2,940,384	7,157,000	8,304,616	1,147,616	13,038,000	13,262,952	224,952				
I1	100912F	SR 9/Marsh Road to 2nd Street Interchange - Widening	44,000	44,383	383				553,000	553,750	750				
I1	100914G	SR 9/SR 96 to Marsh Rd - Add Lanes and Improve Intersections	231,000	208,748	-22,252				29,510,000	29,488,786	-21,214				
I1	100916G	SR 9/Lake Stevens Way to 20th St SE - Improve Intersection	169,000	168,750	-250				11,823,000	11,822,760	-240				
I1	100917G	SR 9/Lundeen Parkway to SR 92 - Add Lanes and Improve Intersections	9,000	9,439	439				25,540,000	25,539,949	-51				
I1	100921G	SR 9/SR 528 - Improve Intersection							7,847,000	7,847,000					
I1	100922G	SR 9/84th St NE (Getchell Road) Improve Intersection	206,000	209,691	3,691				6,736,000	6,740,375	4,375				
I1	100928G	SR 9/SR 531-172nd St NE - Intersection Improvements	46,000	279,318	233,318				7,978,000	8,211,625	233,625				
I1	101100F	SR 11/I-5 Interchange-Josh Wilson Rd - Rebuild Interchange							10,018,000		-10,018,000	Deleted	X	X	Project completed in prior biennium.
I1	101100G	SR 11/Chuckanut Park and Ride - Build Park and Ride							11,843,000		-11,843,000	Deleted	X	X	Project completed in prior biennium.
I1	102039A	SR 20/Fredonia to I-5 - Add Lanes							102,549,000		-102,549,000	Deleted	X	X	Project completed in prior biennium.
I1	109061D	I-90/Sunset I/C Modifications - Modify Facility to Full Access I/C							96,735,000		-96,735,000	Deleted	X	X	Project completed in prior biennium.
I1	116100C	SR 161/Jovita Blvd to S 360th St, Stage 2 - Widen to Five Lanes							26,012,000		-26,012,000	Deleted	X	X	Project completed in prior biennium.
I1	140504C	I-405/SR 167 Interchange - Direct Connector	10,062,000	10,062,000					41,613,000	41,613,000					
I1	152040A	SR 520/W Lake Sammamish Parkway to SR 202, Stage 3 - Widening							77,652,000		-77,652,000	Deleted	X	X	Project completed in prior biennium.
I1	152201C	SR 522/I-5 to I-405 - Multimodal Improvements	4,000	2,967	-1,033	7,000	6,937	-63	22,541,000	22,541,409	409				
I1	152219A	SR 522/University of Washington Bothell - Build Interchange							46,769,000		-46,769,000	Deleted	X	X	Project completed in prior biennium.
I1	152234E	SR 522/Snohomish River Bridge to US 2 - Add Lanes	4,997,000	9,633,533	4,636,533	3,872,000	29,000	-3,843,000	145,571,000	145,619,619	48,619				
I1	153160A	SR 531/43rd Ave NE to 67th Ave. NE - Widening	286,000	306,755	20,755				1,850,000	1,870,856	20,856				
I1	153900M	SR 539/I-5 to Horton Road - Access Management	59,000	58,862	-138				3,009,000	3,007,419	-1,581				
I1	153902B	SR 539/Horton Road to Tenmile Road - Widen to Five Lanes		82	82				67,595,000	67,595,773	773				
I1	153910A	SR 539/Tenmile Road to SR 546 - Widening	1,347,000	597,049	-749,951				103,502,000	102,751,117	-750,883		X		Reduction due to saving on Right of Way acquisition.
I1	153915A	SR 539/Lynden-Aldergrove Port of Entry Improvements	240,000	353,216	113,216	11,000	13,471	2,471	7,376,000	7,492,331	116,331				
I1	190098U	SR 900/SE 78th St Vic to I-90 Vic - Widening and HOV		73	73				43,793,000	43,791,422	-1,578				
I1	1B/1001	SR 520/Bellevue Corridor Improvements - East End	638,000	1,873,345	1,235,345	1,236,000		-1,236,000	3,974,000	3,973,545	-455				
I1	200291O	US 2/N Wenatchee - Easy Street Feasibility Study		11	11				7,000	6,750	-250				
I1	202800D	SR 28/Ict US 2 and US 97 to 9th St, Stage 1 - New Alignment	797,000	784,382	-12,618	425,000	436,767	11,767	40,087,000	40,085,916	-1,084				
I1	202802J	SR 28/Wenatchee to I-90 - Study	51,000	51,210	210				100,000	100,000					
I1	202802V	SR 28/E End of the George Sellar Bridge - Construct Bypass	180,000	202,890	22,890				28,292,000	28,314,865	22,865				
I1	228500A	SR 285/George Sellar Bridge - Additional EB Lane							17,592,000		-17,592,000	Deleted	X	X	Project completed in prior biennium.
I1	228501X	SR 285/W End of George Sellar Bridge - Intersection Improvements	238,000	87,287	-150,713				17,585,000	17,433,549	-151,451				
I1	300302F	SR 3/SR 304 - Interchange Improvements	210,000	209,567	-433				501,000	500,000	-1,000				
I1	300344C	SR 3/Belfair Bypass - New Alignment							3,386,000		-3,386,000	Deleted	X	X	Project completed in prior biennium.
I1	300344D	SR 3/Belfair Area - Widening and Safety Improvements	12,622,000	12,614,903	-7,097	24,000	32,193	8,193	23,046,000	23,046,132	132				
I1	300504A	I-5/Tacoma HOV Improvements (Nickel/TPA)	299,024,000	299,024,000		244,731,000	244,731,000		1,478,546,000	1,478,546,000					
I1	300581A	I-5/Grand Mound to Maytown - Add Lanes and Replace Intersection	53,000	114,246	61,246				115,407,000	115,468,795	61,795				
I1	300596S	I-5/IJBLM Corridor - Early Design	4,359,000	4,359,192	192				9,550,000	9,550,000					
I1	300596T	I-5/SR 510 to SR 512 - Mobility Improvements	15,000	42,735	27,735				22,113,000	22,140,776	27,776				
I1	301636A	SR 16/I-5 to Tacoma Narrows Bridge - Add HOV Lanes							126,650,000		-126,650,000	Deleted	X	X	Project completed in prior biennium.
I1	301639C	SR 16/Rosedale St NW Vicinity - Frontage Road	154,000	154,727	727				422,000	423,051	1,051				

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SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
I1	310101F	US 101/Dawley Rd Vic to Blyn Highway - Add Climbing Lane							3,211,000	3,211,000					
I1	310102F	US 101/Gardiner Vicinity - Add Climbing Lane							2,560,000	2,560,000					
I1	310107B	US 101/Shore Rd to Kitchen Rd - Widening	1,648,000	1,391,333	-256,667	76,000	90,607	14,607	51,044,000	50,801,395	-242,605				
I1	316118A	SR 161/24th St E to Jovita - Add Lanes	3,151,000	3,631,204	480,204				50,782,000	51,261,693	479,693				
I1	316118C	SR 161/36th to Vicinity 24th St E - Widen to 5 lanes							31,386,000	31,386,000					
I1	316706C	SR 167/SR 410 to SR 18 - Congestion Management		32,032	32,032		4,982,968	4,982,968		5,015,000	5,015,000	New	X	X	New project funded by grant from PSRC.
I1	316718A	SR 167/SR 509 to I-5 Stage One - New Freeway	110,000	109,707	-293				111,569,000	111,567,828	-1,172				
I1	316718H	SR 167/Tacoma to Puyallup - New Freeway	1,667,000	1,672,817	5,817				2,994,000	3,000,000	6,000				
I1	316718S	SR 167/Tolling Feasibility Study							727,000		-727,000	Deleted	X	X	Project completed in prior biennium.
I1	330216A	SR 302/Elgin Clifton Rd to SR 16 - Corridor Study	48,000	1,002	-46,998				2,500,000	2,453,333	-46,667				
I1	341015A	SR 410/214th Ave E to 234th - Add Lanes							19,234,000		-19,234,000	Deleted	X	X	Project completed in prior biennium.
I1	351025A	SR 510/Yelm Loop - New Alignment	4,000	3,958	-42				29,340,000	29,340,255	255				
I1	370401A	SR 704/Cross Base Highway - New Alignment		0	0				40,886,000	40,885,510	-490				
I1	400506A	I-5/Columbia River Crossing/Vancouver - EIS							183,477,000		-183,477,000	Deleted	X	X	Project deleted
I1	400506H	I-5/NE 134th St Interchange (I-5/I-205) - Rebuild Interchange	1,030,000	466,381	-563,619				85,972,000	85,407,005	-564,995		X		Project was operationally complete early, and the biennial and total cost decrease is due to the retirement of risk reserves and savings.
I1	400506I	I-5/SR 501 Ridgefield Interchange - Rebuild Interchange	17,000	17,259	259				24,064,000	24,063,559	-441				
I1	400508W	I-5/Mellen Street I/C to Grand Mound I/C - Add Lanes	27,268,000	25,726,322	-1,541,678				154,516,000	152,973,634	-1,542,366		X		Decrease due to retirement of risk reserve.
I1	400510A	I-5/SR 432 Talley Way Interchanges - Rebuild Interchanges	14,000	14,000	0				34,905,000	34,904,962	-38				
I1	401409W	SR 14/Camas Washougal - Add Lanes and Build Interchange	303,000	428,368	125,368				48,531,000	48,656,173	125,173				
I1	420511A	I-205/Mill Plain Interchange to NE 18th St - Build Interchange - Stage 2	22,429,000	20,888,201	-1,540,799		1,540,812	1,540,812	40,645,000	40,645,911	911				
I1	450208W	SR 502/I-5 to Battle Ground - Add Lanes	16,050,000	15,468,281	-581,719	1,847,000	2,429,367	582,367	84,339,000	84,339,030	30				
I1	501203X	US 12/Frenchtown Vicinity to Walla Walla - Add Lanes	230,000	67,170	-162,830		117,920	117,920	51,694,000	51,650,086	-43,914				
I1	501204C	US 12/SR 124 to McNary Pool - Add Lanes	5,000	4,821	-179				12,092,000	12,091,649	-351				
I1	501210T	US 12/Nine Mile Hill to Woodward Canyon Vic - Build New Highway	2,004,000	562,321	-1,441,679		1,441,882	1,441,882	5,346,000	5,345,775	-225				
I1	502402E	SR 24/I-82 to Keys Rd - Add Lanes	4,000	4,314	314				50,506,000	50,506,379	379				
I1	508208O	I-82/US 12 Interchange to Yakima Ave - Add lanes and Replace Bridges	1,012,000	1,012,324	324				2,000,000	2,000,000					
I1	509016J	I-90/Golf Course Rd - Improve Park & Ride Lot		25,500	25,500					25,500	25,500	New		X	Local expenditures incurred in the highway program.
I1	518202H	I-182/Road 100 Interchange Vicinity - Improvements							2,918,000		-2,918,000	Deleted	X	X	Project completed in prior biennium.
I1	524002F	SR 240/I-182 to Richland Y - Add Lanes	3,000	2,574	-426				22,447,000	22,446,480	-520				
I1	524002G	SR 240/Richland Y to Columbia Center I/C - Add Lanes	8,000	7,752	-248				41,008,000	41,007,675	-325				
I1	582301S	SR 823/Selah Vicinity - Re-route Highway							9,094,000		-9,094,000	Deleted	X	X	Project completed in prior biennium.
I1	600001A	US 395/NSC-Francis Ave to Farwell Rd - New Alignment	489,000	2,879	-486,121				209,895,000	209,408,519	-486,481				
I1	600003A	US 395/NSC-US 2 to Wandermere and US 2 Lowering - New Alignment	5,000		-5,000				122,208,000		-122,208,000	Deleted	X	X	Project completed in prior biennium.
I1	600010A	US 395/North Spokane Corridor	47,166,000	46,767,641	-398,359	10,564,000	11,110,920	546,920	229,415,000	229,580,841	165,841				
I1	609049B	I-90/Spokane to Idaho State Line - Corridor Design	5,309,000	2,809,468	-2,499,532				10,510,000	8,009,746	-2,500,254		X	X	Funding moved from this project to the I-90 Barker Rd I/C project as part of development of the six year plan.
I1	609049N	I-90/Sullivan Rd to Barker Rd - Additional Lanes	12,000	12,308	308				19,123,000	19,123,365	365				
I1	800502K	I-5/SR 161/SR 18 - Interchange Improvements	5,013,000	3,047,463	-1,965,537				91,228,000	89,260,348	-1,967,652		X		Savings at project completion.
I1	809936Z	SR 99/Alaskan Way Viaduct - Replacement	526,422,000	532,483,341	6,061,341	253,220,000	313,529,985	60,309,985	3,137,432,000	3,366,877,286	229,445,286		X		Increased costs associated with project delays.
I1	809940B	SR 99/Viaduct Project - Construction Mitigation	18,676,000	18,675,722	-228		15,327,000	15,327,000	26,000,000	41,327,000	15,327,000		X		Project to fund construction mitigation through the 17-19 biennium.
I1	816701B	SR 167 HOT Lanes Pilot Project - Managed Lanes							18,787,000		-18,787,000	Deleted	X	X	Project completed in prior biennium.
I1	816701C	SR 167/8th St E Vic to S 277th St Vic - Southbound Managed Lane	56,272,000	57,147,971	875,971	891,000	13,075	-877,925	83,927,000	83,923,764	-3,236				
I1	816701E	SR 167/Express Toll Lanes Continuous Access	105,000	69,166	-35,834		37,162	37,162	536,000	536,953	953				
I1	816719A	SR 167/S 180th St to I-405 - SB Widening							18,837,000	18,836,625	-375				
I1	840501C	I-405/Tukwila to Lynnwood - Analysis							7,328,000		-7,328,000	Deleted	X	X	Project completed in prior biennium.
I1	840502B	I-405/SR 181 to SR 167 - Widening	512,000	139,811	-372,189	146,000	133,199	-12,801	140,442,000	140,033,011	-408,989				
I1	840503A	I-405/I-5 to SR 181 - Widening							21,960,000	21,959,014	-986				
I1	840508A	I-405/NE 44th St to 112th Ave SE - Widening							5,495,000		-5,495,000	Deleted	X	X	Project completed in prior biennium.
I1	840509A	I-405/112th Ave SE to I-90 - NB Widening							19,955,000	19,954,557	-443				
I1	840541F	I-405/I-90 to SE 8th St - Widening	5,000,000		-5,000,000		5,000,000	5,000,000	179,808,000	179,807,414	-586				
I1	840551A	I-405/NE 8th St to SR 520 Braided Ramps - Interchange Improvements	49,000	18,717	-30,283				203,286,000	203,255,379	-30,621				
I1	840552A	I-405/NE 10th St - Bridge Crossing							63,300,000	63,299,554	-446				
I1	840561A	I-405/SR 520 to SR 522 - Widening							81,191,000	81,190,990	-11				
I1	850901F	SR 509/I-5 to Sea-Tac Freight & Congestion Relief	3,161,000	3,417,318	256,318	256,000		-256,000	31,334,000	31,333,423	-577				
I1	850919F	SR 509/SR 518 Interchange - Signalization and Channelization							5,962,000		-5,962,000	Deleted	X	X	Project completed in prior biennium.
I1	851808A	SR 518/SeaTac Airport to I-5 - Eastbound Widening	273,000	276,447	3,447				36,918,000	36,920,122	2,122				
I1	852006W	SR 520 Westside Design Development	14,000,000	14,000,136	136				24,000,000	23,999,999	-1				
I1	881001	I-405/South Renton Vicinity Stage 2 - Widening (Nickel/TPA)	181,000	81,515	-99,485	26,000	34,213	8,213	164,344,000	164,251,519	-92,481				
I1	881002	I-405/Kirkland Vicinity Stage 2 - Widening (Nickel/TPA)	42,117,000	41,051,866	-1,065,135	39,056,000	39,056,001	1	382,682,000	381,617,980	-1,064,020		X		Cost reduction is the result of contributing funding to another project in the corridor (140561W).
I1	881003	SR 520/ Bridge Replacement and HOV (Nickel/TPA)	424,155,000	381,670,205	-42,484,795	18,275,000	60,142,188	41,867,188	2,735,837,000	2,735,810,852	-26,148				
I1	881006	I-405/Renton to Bellevue Widening and Express Toll Lanes	20,839,000	19,188,733	-1,650,267				21,625,000	21,729,200	104,200				
I1	881009	SR 520/Repayment of Sales Tax for Bridge Replacement							159,180,000	159,400,000	220,000				
I1	L1000033	Lake Washington Congestion Management	2,528,000	799,991	-1,728,009		198,975	198,975	87,302,000	87,302,715	715				
I1	L1000054	SR 520 Avondale Rd and 405							442,000		-442,000	Deleted		X	Project completed in prior biennium.
I1	L1000059	SR 523 Corridor Study	142,000	141,267	-733				313,000	312,500	-500				
I1	L1000098	SR 520/124th St Interchange							40,900,000	40,900,000					
I1	L1000099	I-5/Slater Road Interchange - Improvements							21,100,000	21,100,000					

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I1	L1000110	I-405/NE 132nd Interchange - Totem Lake				8,000,000	8,000,000		75,000,000	75,000,000					
I1	L1000111	I-5/179th St Interchange							50,000,000	50,000,000					
I1	L1000113	I-90/SR 18 Interchange Improvements							150,000,000	150,000,000					
I1	L1000114	SR 531 Expansion Project							39,300,000	39,300,000					
I1	L1000120	SR 18 Eastbound Off-Ramp				15,000,000	15,000,000		15,000,000	15,000,000					
I1	L1000157	SR 14 Access Improvements	1,300,000	1,300,000		6,200,000	6,200,000		7,500,000	7,500,000					
I1	L1000158	US 2 Trestle IJR	1,500,000	900,000	-600,000			600,000	1,500,000	1,500,000					
I1	L1000162	I-405 Northbound Auxiliary Lane - SR 520 to NE 70th PI				10,000,000	10,000,000		15,000,000	15,000,000					
I1	L1000163	I-405 NB Hard Shoulder Running -- SR 527 to I-5		9,500,000	9,500,000	19,000,000	2,000,000	-17,000,000	30,000,000	11,500,000	-18,500,000		X	X	Project cost reduction due to refined and updated engineer's estimate.
I1	L1100048	31st Ave SW Overpass Widening and Improvement	1,094,000	1,093,565	-435				1,100,000	1,100,000					
I1	L1100069	I-5/JBLM to S. 38th St HOV Lane Feasibility Study	200,000	200,000					200,000	200,000					
I1	L1100101	SR 520/148th Ave NE Overlake Access Ramp							68,000,000	68,000,000					
I1	L1100110	I-5/Marvin Road/SR 510 Interchange	14,000,000	14,000,000		37,000,000	37,000,000		72,000,000	72,000,000					
I1	L2000054	ITS/Canadian Border Planning							1,298,000		-1,298,000	Deleted	X	X	Project completed in prior biennium.
I1	L2000057	SR 26/Dusty to Colfax - Add Climbing Lanes							11,150,000	11,150,000					
I1	L2000058	US 195/Colfax to Spangle - Add Passing Lane	1,550,000	1,550,000		10,100,000	10,100,000		11,650,000	11,650,000					
I1	L2000061	SR 28/SR 285, North Wenatchee Area Improvements							23,000,000	23,000,000					
I1	L2000094	I-90/Medical Lake & Geiger Interchanges				4,000,000	4,000,000		26,600,000	26,600,000					
I1	L2000099	I-5/Mill Plain Boulevard							98,700,000	98,700,000					
I1	L2000102	SR 14/Camas Slough Bridge	1,500,000	1,500,000		2,500,000	2,500,000		25,000,000	25,000,000					
I1	L2000107	SR 162 Study/Design	360,000	360,000		90,000	90,000		450,000	450,000					
I1	L2000118	SR 539/Guide Meridian							40,000,000	40,000,000					
I1	L2000119	I-5/Northbound on-ramp at Bakerview				1,300,000	1,300,000		10,000,000	10,000,000					
I1	L2000122	I-90/Henry Road Interchange							26,400,000	26,400,000					
I1	L2000123	I-82/ EB WB On and Off Ramps				9,000,000	9,000,000		34,400,000	34,400,000					
I1	L2000124	I-90/Front Street IJR				2,300,000	2,300,000		2,300,000	2,300,000					
I1	L2000127	US 395/ Ridgeline Intersection				4,000,000	4,000,000		21,000,000	21,000,000					
I1	L2000139	I-5/156th NE Interchange in Marysville							42,000,000	42,000,000					
I1	L2000163	Dolarway Intersection Improvements	3,100,000	3,100,000					3,100,000	3,100,000					
I1	L2000170	9th Street Plaza Roundabout				3,900,000	3,900,000		3,900,000	3,900,000					
I1	L2000175	SR 16/Corridor Congestion Study	3,000,000	3,000,000					3,000,000	3,000,000					
I1	L2000176	SR 3/Restriping	1,300,000	1,300,000		2,900,000	2,900,000		4,200,000	4,200,000					
I1	L2000201	I-90/Eastside Restripe Shoulders	7,000,000	7,000,000		43,700,000	43,700,000		73,200,000	73,200,000					
I1	L2000202	SR 240/Richland Corridor Improvements							5,000,000	5,000,000					
I1	L2000204	I-5/North Lewis County Interchange							50,500,000	50,500,000					
I1	L2000223	I-5/Rebuild Chambers Way Interchange Improvements							75,000,000	75,000,000					
I1	L2000229	I-5 Peak Hour Use Lanes and Interchange Improvements				9,900,000	9,900,000		84,400,000	84,400,000					
I1	L2200087	I-5/Marvin Road Interchange Study	39,000	65,658	26,658				1,100,000	1,126,555	26,555				
I1	L2200093	SR 305/ Suquamish Way Intersection Improvements	2,609,000	1,513,981	-1,095,019				3,069,000	1,974,198	-1,094,802		X	X	Cost reduction due to updated engineer's estimate and good bids.
I1	M00100R	I-5 JBLM Corridor Improvements	26,000,000	26,000,000		138,400,000	138,400,000		494,400,000	494,400,000					
I1	M00400R	SR 520 Seattle Corridor Improvements - West End	44,800,000	44,800,000		187,400,000	187,400,000		1,642,500,000	1,642,500,000					
I1	M00600R	SR 167/SR 509 Puget Sound Gateway	2,500,000	2,500,000		57,500,000	57,500,000		1,875,500,000	1,875,500,000					
I1	M00800R	US 395 North Spokane Corridor	5,000,000	5,000,000		54,000,000	54,000,000		878,900,000	878,900,000					
I1	M00900R	I-405 Renton to Lynnwood - Corridor Widening	65,000,000	65,000,000		225,200,000	225,200,000		1,225,200,000	1,225,200,000					
I1	N00900R	SR 9/Snohomish River Bridge Replacement							142,100,000	142,100,000					
I1	N52600R	SR 526: Hardson Rd Interchange in Everett				3,000,000	3,000,000		47,197,000	47,197,000					
I1	N92040R	SR 9/SR 204 Interchange	5,500,000	5,500,000		17,000,000	17,000,000		69,500,000	69,500,000					
I1	NPARADI	SR 522/Paradise Lake Rd Interchange (Design/Engineering)							10,000,000	10,000,000					
I1	T10300R	SR 28 East Wenatchee Corridor Improvements							58,500,000	58,500,000					
I1	T104000	I-82 West Richland - Red Mountain Interchange	4,100,000	4,100,000		13,800,000	13,800,000		28,400,000	28,400,000					
I1	T20400R	I-5 Federal Way - Triangle Vicinity Improvements							85,000,000	85,000,000					
I1	T20700SC	I-5/116th Street and 88th Street Interchanges - Improvements	8,000,000	8,000,000		17,000,000	17,000,000		50,000,000	50,000,000					
I1	T20900R	US-12/Walla Walla Corridor Improvements	1,000,000	1,000,000		50,807,000	50,807,000		168,807,000	168,807,000					
I1	T21100R	I-82 Yakima - Union Gap Economic Development Improvements							64,413,000	64,413,000					
I1	T30400R	SR 3/Belfair Bypass - New Alignment							66,910,000	66,910,000					
I1	T32700R	SR 510/Yelm Loop Phase 2							58,500,000	58,500,000					
I1	T32800R	SR 518 Des Moines Interchange Improvement	1,515,000	1,515,000		11,940,000	11,940,000		13,455,000	13,455,000					
I2	053255C	SR 532/Camano Island to I-5 Corridor Improvements (TPA)	16,204,000	16,126,501	-77,499	330,000	362,127	32,127	86,352,000	86,307,196	-44,804				
I2	099902I	Safety Project Reserve - Collision Reduction				36,550,000		-36,550,000	176,331,000	199,035,107	22,704,107		X		17-19 reduction in this reserve is due to programming of individual projects. Total increase is due the addition future biennium reserves.
I2	099902J	Safety Project Reserve - Collision Prevention				20,291,000		-20,291,000	176,220,000	330,536,615	154,316,615		X		17-19 reduction in this reserve is due to programming of individual projects. Total increase is due the addition future biennium reserves.
I2	099903N	Bridge Rail Retrofit Program							14,470,000		-14,470,000	Deleted	X	X	Project completed in prior biennium.
I2	099999A	Statewide Roadside Safety Improvements Program (TPA)							29,362,000		-29,362,000	Deleted	X	X	Project completed in prior biennium.
I2	08I2002	Intersection & Spot Improvements	78,431,000	64,784,406	-13,646,594	229,000	88,161,780	87,932,780	145,496,000	385,250,577	239,754,577		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.

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SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
I2	0BI2003	Guardrail Retrofit Improvements	2,000,000	1,154,602	-845,398	9,542,000	2,984,635	-6,557,365	22,049,000	11,084,537	-10,964,463		X	X	Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I2	0BI2004	Bridge Rail Retrofit Improvements	2,000,000		-2,000,000	7,000,000		-7,000,000	16,000,000		-16,000,000	Deleted	X	X	Project completed in prior biennium. No planned expenditures in future biennia.
I2	0BI2005	Median Cross-Over Protection Improvements	7,280,000	6,344,908	-935,092	8,101,000	14,882,844	6,781,844	39,165,000	32,434,435	-6,730,565		X	X	Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I2	0BI2007	Roadside Safety Improvements	472,000	402,650	-69,350	88,000	283,086	195,086	1,224,000	2,597,102	1,373,102		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I2	0BI2008	Rumble Strip Improvements	2,002,000	4,908,440	2,906,440	1,535,000	6,268,375	4,733,375	9,114,000	18,802,569	9,688,569		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I2	0BI2009	Redirectional Landform Improvements	21,000		-21,000				1,264,000		-1,264,000	Deleted	X	X	Project completed in prior biennium. No planned expenditures in future biennia.
I2	100210E	US 2/Bickford Avenue - Intersection Safety Improvements		327,361	327,361		5,000	5,000	3,274,000	3,605,991	331,991				
I2	100224I	US 2 High Priority Safety Project	34,000	34,046	46				9,061,000	3,581,236	-5,479,764		X	X	Project decrease at completion.
I2	100552W	I-5/Marysville to Stillaguamish River - ITS							3,817,000		-3,817,000	Deleted	X	X	Project completed in prior biennium.
I2	100585Q	I-5/36th St Vicinity to SR 542 Vicinity - Ramp Reconstruction	23,000	3,188	-19,812				22,496,000	22,476,371	-19,629				
I2	102017H	SR 20/Libby Rd Vic to Sidney St Vic - Realignment and Widening							5,995,000		-5,995,000	Deleted	X	X	Project completed in prior biennium.
I2	102029S	SR 20/Sharpes Corner Vicinity - New Interchange							1,602,000		-1,602,000	Deleted	X	X	Project has been shelved.
I2	120311G	SR 203/Corridor Safety Improvements - Snohomish County							1,735,000		-1,735,000	Deleted	X	X	Project completed in prior biennium.
I2	154205G	SR 542/Everson Goshen Rd Vic to SR 9 Vic - Intersections Improvements	22,000	22,042	42				5,824,000	5,823,709	-291				
I2	200200T	US 2/Stevens Pass Summit - Pedestrian Safety							3,303,000		-3,303,000	Deleted	X	X	Project completed in prior biennium.
I2	200201J	US 2/East Wenatchee N - Access Control	292,000	292,189	189				364,000	364,000					
I2	200204M	US 2/Stevens Pass - Variable Message Signs	46,000	45,498	-502				944,000	943,962	-38				
I2	201701G	SR 17/Adams Co Line - Access Control	62,000	62,760	760				102,000	102,050	50				
I2	202801J	SR 28/E Wenatchee - Access Control	3,041,000	3,041,000					3,041,000	3,041,000					
I2	209700H	US 97/N of Daroga State Park - Turn Lanes							403,000		-403,000	Deleted		X	Project completed in prior biennium.
I2	209700W	US 97/Cameron Lake Road - Intersection Improvements	35,000		-35,000				1,449,000		-1,449,000	Deleted	X	X	Project completed in prior biennium.
I2	209703E	US 97/Blewett Pass - Passing Lane							1,395,000		-1,395,000	Deleted	X	X	Project completed in prior biennium.
I2	209790V	US 97A/North of Wenatchee - Ohme Gardens Roundabout							435,000		-435,000	Deleted		X	Project completed in prior biennium.
I2	310116D	US 101/Lynch Road - Safety Improvements	257,000	256,515	-485				1,000,000	1,000,000					
I2	316130A	SR 161/Clear Lake N Rd to Tanwax Creek - Spot Safety Improvements							2,051,000		-2,051,000	Deleted	X	X	Project completed in prior biennium.
I2	316218A	SR 162/Orting Area - Construct Pedestrian Tunnel	549,000	548,692	-308				850,000	850,000					
I2	330215A	SR 302/Key Peninsula Highway to Purdy Vic - Safety & Congestion	78,000	1,160	-76,840				4,839,000	4,762,101	-76,899				
I2	350728A	SR 507/Vicinity East Gate Rd to 208th St E - Safety	15,000	14,999	-1				2,819,000	2,020,562	-798,438		X	X	Savings at project completion.
I2	400507S	I-5/N Fork Lewis River Bridge to Todd Road Vicinity - Safety							942,000		-942,000	Deleted	X	X	Project completed in prior biennium.
I2	401404D	SR 14/Marble Rd Vicinity to Belle Center Rd - Safety Improvements	249,000	248,960	-40				8,011,000	8,010,319	-681				
I2	450000A	SR 500/St Johns Blvd - Build Interchange	44,000	88,034	44,034				44,965,000	45,008,621	43,621				
I2	501208J	US 12/Old Naches Highway - Build Interchange							38,439,000		-38,439,000	Deleted	X	X	Project shelved
I2	501212I	US 12/SR 124 Intersection - Build Interchange	100,000	99,551	-449				21,310,000	21,309,608	-392				
I2	502201U	SR 22/I-82 to Toppenish - Safety Improvements							4,881,000		-4,881,000	Deleted	X	X	Project completed in prior biennium.
I2	508202I	I-82/Terrace Heights Off-Ramp - Improvements	21,000	20,398	-602				1,300,000	1,299,528	-472				
I2	509702O	US 97/Satus Creek Vicinity - Safety Work		72,824	72,824				2,485,000	2,558,209	73,209				
I2	524002E	SR 240/Beloit Rd to Kingsgate Way - Widen Roadway							9,678,000		-9,678,000	Deleted	X	X	Project completed in prior biennium.
I2	619509I	US 195/Cheney-Spokane Rd to Lindeke St - New City Arterial	1,353,000	1,353,359	359				3,133,000	3,132,950	-50				
I2	L1000034	Alaskan Way Viaduct - Automatic Shutdown	71,000	37,774	-33,226				4,143,000	4,108,733	-34,267				
I2	L1000112	SR 20/Sharpes Corner Vicinity Intersection	3,500,000	3,500,000		8,900,000	8,900,000		13,400,000	13,400,000					
I2	L2000074	SR 14/ Wind River Junction	650,000	650,000		5,168,000	5,168,000		6,300,000	6,300,000					
I2	L2000091	SR 432 Longview Grade Crossing				1,500,000	1,500,000		85,000,000	85,000,000					
I2	L2000128	US 395/Safety Corridor Improvements				5,000,000	5,000,000		15,000,000	15,000,000					
I2	L2000161	US 101/Lynch Road Intersection Improvements				5,000,000	5,000,000		5,000,000	5,000,000					
I2	L2000169	SR 20/Oak Harbor to Swantown Roundabout							30,000,000	30,000,000					
I2	L2200042	SR 20 Race Road to Jacob's Road	2,924,000	2,753,463	-170,537	1,526,000	53,921	-1,472,079	5,873,000	4,229,815	-1,643,185		X	X	Cost reduction due to good bids and local participation..
I2	L2200086	US 395/Lind Road Intersection							623,000		-623,000	Deleted	X	X	Project completed in prior biennium.
I2	L2200092	SR 150/No-See-Um Road Intersection - Realignment	6,190,000	6,190,000		400,000	400,000		7,300,000	7,300,000					
I2	N00200R	US Hwy 2 Safety							17,000,000	17,000,000					
I2	N30500R	SR 305 Construction - Safety Improvements				10,700,000	10,700,000		36,800,000	36,800,000					
I3	100955A	SR 9/Nooksack Rd Vicinity to Cherry St - New Alignment	27,000	26,868	-132				17,764,000	17,764,547	547				
I3	101820C	SR 18/Maple Valley to Issaquah/Hobart Rd - Add Lanes		80	80				127,211,000	127,212,669	1,669				
I3	101822A	SR 18/Issaquah/Hobart Rd to Tigergate - Add Lanes	97,000	96,946	-54				3,022,000	3,021,784	-216				
I3	101826A	SR 18/Tigergate to I-90 - Add Lanes	112,000	112,234	234				3,019,000	3,019,298	298				
I3	209700Y	US 97/N of Riverside - NB passing Lane							1,241,000		-1,241,000	Deleted	X	X	Project completed in prior biennium.
I3	209703H	US 97/North of Brewster - Passing Lane	40,000		-40,000				1,430,000		-1,430,000	Deleted	X	X	Project completed in prior biennium.

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SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
I3	300310S	SR 3/SR 16 Grst Practical Design - Planning Study	401,000	400,000	-1,000				401,000	400,000	-1,000				
I3	400012I	I-5/Lewis County Detour for Freight Mobility - ITS Projects							2,265,000		-2,265,000	Deleted	X	X	Project completed in prior biennium.
I3	508201O	I-82/Valley Mall Blvd - Rebuild Interchange	27,000	26,828	-172				34,784,000	34,785,080	1,080				
I3	508201S	I-82/South Union Gap I/C - Improvements	380,000	499,536	119,536	981,000	860,698	-120,302	3,153,000	3,152,633	-367				
I3	508208M	I-82/Red Mountain Vicinity - Pre-Design Analysis	444,000	392,911	-51,089	843,000	903,304	60,304	2,946,000	2,954,310	8,310				
I3	509004U	I-90/Ellensburg Interchange - Feasibility Study							353,000		-353,000	Deleted		X	Project completed in prior biennium.
I3	509009B	I-90/Snoqualmie Pass East - Hyak to Keechelus Dam - Corridor Improvement	112,158,000	131,879,134	19,721,134	79,038,000	73,555,305	-5,482,695	564,859,000	564,890,983	31,983				
I3	851902A	SR 519/ I-90 to SR 99 Intermodal Access Project - I/C Improvements							82,716,000		-82,716,000	Deleted	X	X	Project completed in prior biennium.
I3	L110004S	SR 518/Des Moines Memorial Drive							249,000		-249,000	Deleted		X	Project completed in prior biennium.
I3	L2000117	SR 501/I-5 to Port of Vancouver				1,300,000	1,300,000		6,000,000	6,000,000					
I3	L222006Z	SR 14/Bingen Overpass	1,400,000	1,400,000		2,000,000	2,000,000		22,900,000	22,900,000					
I3	M00500R	I-90 Snoqualmie Pass - Widen to Easton	2,000,000	2,000,000		9,400,000	9,400,000		426,400,000	426,400,000					
I3	N01200R	Schouweiler Road Improvements	1,550,000	1,550,000					1,550,000	1,550,000					
I3	PASCO	US 12/A St and Tank Farm Rd Interchange planning							299,000		-299,000	Deleted		X	Project completed in prior biennium.
I4	099902F	Environmental Retrofit Project Reserve - Fish Barrier Passage							124,195,000	165,951,967	41,756,967		X		BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I4	099902K	Environmental Retrofit Project Reserve - Stormwater Runoff	1,000,000	1,000,000					9,907,000	10,383,000	476,000				
I4	099902N	Project Reserve - Noise Reduction							4,000,000	3,252,128	-747,872		X	X	BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I4	099902Q	Environmental Retrofit Project Reserve - Chronic Environment Deficiency	3,000,000	3,000,000		2,722,000		-2,722,000	15,790,000	8,730,000	-7,060,000		X	X	BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I4	099955F	Fish Passage Barriers (TPA)	12,772,000	11,357,708	-1,414,292	4,340,000	4,149,740	-190,260	42,125,000	40,515,589	-1,609,411		X		Delivery plan adjustment. Various project increases. Added a new project to BIN to participate with local project that will replace a state owned fish barrier at a greatly reduced cost.
I4	0B14001	Fish Passage Barrier	58,393,000	49,644,854	-8,748,146	43,198,000	55,808,560	12,610,560	236,822,000	341,951,137	105,129,137		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I4	0B14002	Noise Wall & Noise Mitigation Improvements	204,000	40,898	-163,102	1,886,000	2,664,998	778,998	5,236,000	4,808,769	-427,231				
I4	0B14003	Stormwater & Mitigation Site Improvements	3,611,000	3,198,344	-412,656	2,282,000	4,362,610	2,080,610	26,237,000	35,803,915	9,566,915		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I4	0B14004	Chronic Environmental Deficiency Improvements	6,024,000	10,516,805	4,492,805	30,000	7,140,078	7,110,078	17,836,000	63,215,908	45,379,908		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
I4	0B14ENV	Environmental Mitigation Reserve - Nickel/TPA	4,276,000	3,777,585	-498,415	1,909,000	2,028,427	119,427	10,803,000	10,560,630	-242,370				
I4	100525P	I-5/5th Ave NE to NE 92nd St - Noise Wall	52,000	51,728	-272				8,970,000	8,970,076	76				
I4	153037K	SR 530/Sauk River Bank Erosion - Realign Roadway							4,815,000		-4,815,000	Deleted	X	X	Project completed in prior biennium.
I4	154229G	SR 542/Nooksack River - Redirect River and Realign Roadway	6,064,000	6,063,457	-543	41,000	40,900	-100	20,515,000	20,514,021	-979				
I4	310141H	US 101/Hoh River (Site #2) - Stabilize Slopes	58,000	47,440	-10,560				4,817,000	4,807,259	-9,741				
I4	310408B	SR 104/Hood Canal Bridge - Noise Study							89,000		-89,000	Deleted		X	Project completed in prior biennium.
I4	310918A	SR 109/Moclips River Bridge - Replace Bridge							6,070,000		-6,070,000	Deleted	X	X	Project completed in prior biennium.
I4	3161XXX	SR 161/ Noise Wall							1,453,000		-1,453,000	Deleted	X	X	Project completed in prior biennium.
I4	400506M	I-5/Chehalis River Flood Control	1,878,000	1,877,547	-453				6,789,000	6,788,739	-261				
I4	410503A	SR 105/Norris Slough - Culvert Replacement							3,023,000		-3,023,000	Deleted	X	X	Project completed in prior biennium.
I4	800524H	I-5/Boston St to E Shelby St - SB I-5, Westside - Noise Wall							8,244,000		-8,244,000	Deleted	X	X	Project completed in prior biennium.
I4	800524Z	I-5/Ship Canal Bridge - Noise Mitigation Study	623,000	4,042	-618,958				5,536,000	4,916,511	-619,489		X	X	Project completed in prior biennium.
I4	L1100066	Fish Culverts	17,500,000	17,500,000		37,500,000	37,500,000		300,000,000	300,000,000					Savings at project completion.
I4	L2000160	I-5/Ship Canal Noise Wall							3,500,000	3,500,000					
I4	WESTV	I-5/Westview School Noise Wall							987,000		-987,000	Deleted	X	X	Project completed in prior biennium.
I5	095901X	Set Aside for Improvement Program Support Activities - Improvements	28,963,000	28,963,000		28,963,000	28,963,000		304,130,000	333,093,000	28,963,000		X		Planned expenditures for 2031-33 biennium added.
I7	TN8001A	SR16/ Repayment of Sales Tax for New Tacoma Narrows Bridge							57,627,000	57,627,000					
Highway Preservation															
P1	000014R	Dept of Revenue - Sales Tax on Projects on Federal/Tribal Land	149,000		-149,000				713,000		-713,000	Deleted	X	X	Project completed in prior biennium.
P1	0BP1001	Chip Seal Roadways Preservation	61,996,000	58,167,388	-3,828,612	2,954,000	40,471,025	37,517,025	177,101,000	307,071,534	129,970,534		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P1	0BP1002	Asphalt Roadways Preservation	92,747,000	186,196,573	93,449,573	204,801,000	178,854,840	-25,946,160	1,304,921,000	2,742,513,203	1,437,592,203		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.

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SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
P1	0BP1003	Concrete Roadways Preservation	58,732,000	39,227,166	-19,504,834	41,353,000	63,784,702	22,431,702	323,884,000	269,771,159	-54,112,841		X	X	Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P1	0BP1004	Safety Features Preservation	21,000	4,524	-16,476				6,576,000	826,149	-5,749,851		X	X	Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P1	100551B	I-5 SB 88th St Off Ramp Vicinity to SR 531 SB On Ramp Vicinity - Paving	1,704,000	1,704,961	961	2,761,000	2,761,147	147	4,607,000	4,607,876	876				
P1	100553X	I-5/NB SR 531 Vic to Portage Creek Bridge Vic - Paving	1,271,000	1,004,625	-266,375				1,386,000	1,119,918	-266,082			X	Project savings due to favorable bids.
P1	100553Y	I-5/SB SR 531 I/C Vic to SR 531 SB On Ramp - Paving	57,000	538,892	481,892	1,349,000	750,898	-598,102	1,406,000	1,289,790	-116,210				
P1	100581B	I-5 NB/Nulle Rd to Samish Highway Vic - NB Paving	1,745,000	1,139,319	-605,681				1,801,000	1,195,422	-605,578		X	X	Project savings due to favorable bids.
P1	100595G	I-5/NB Nooksack River to Blaine - Paving	6,419,000	6,447,486	28,486				6,698,000	6,726,527	28,527				
P1	101800D	SR 18/SR 99 Vic to Auburn Black Diamond Rd I/C - Paving	23,000	6,060	-16,940				3,820,000	3,803,528	-16,472				
P1	102027E	SR 20/Deception Pass Park Vic to Lunz Rd Vic - Paving	1,322,000	793,736	-528,264				3,468,000	2,939,757	-528,243		X	X	Project savings at completion.
P1	102047A	SR 20/Alta Vista Dr to SR 9 - Paving	357,000	215,289	-141,711	1,542,000	962,296	-579,704	1,899,000	1,177,585	-721,415		X	X	Reduction due to revised engineer's estimate.
P1	109051C	I-90/WB Mercer Slough to W Lake Sammamish Parkway - Paving	5,158,000	5,492,847	334,847				5,424,000	5,758,908	334,908				
P1	109079B	I-90/SR 202 I/C to S Fork Snoqualmie River - Paving	2,887,000	2,408,693	-478,307				3,013,000	2,534,805	-478,195			X	Cost decrease due to favorable bids.
P1	109936G	SR 99/Spokane St Br to Alaskan Way Viaduct - Concrete Pavm't Rehab	71,000	5,693	-65,307				1,286,000	1,220,972	-65,028				
P1	109970N	SR 99/SR 525 Interchange Vic to Lincoln Way Vic - Paving	1,928,000	2,390,546	462,546				1,966,000	2,428,102	462,102				
P1	116718P	SR 167/I-405 I/C Vic to SW 7th St Vic - Paving							1,066,000		-1,066,000	Deleted	X	X	Project completed in prior biennium.
P1	118108B	SR 181/S 180th St to Southcenter Blvd - Paving	288,000	288,812	812				2,227,000	2,228,829	1,829				
P1	150916A	SR 509/S Normandy Rd Vic to S Normandy Rd Wye Connection - Paving	1,060,000	1,058,284	-1,716				2,232,000	2,231,460	-540				
P1	150922C	SR 509/SB S 160th St Vic to S 112th St Vic - Paving	335,000	116,856	-218,144				1,923,000	1,704,406	-218,594			X	Savings at project completion.
P1	151532A	SR 515/SR 516 to SE 232nd St Vic - Paving							2,478,000		-2,478,000	Deleted	X	X	Project completed in prior biennium.
P1	152218D	SR 522/Hall Rd Vicinity to Kaysner Way - Paving							1,051,000		-1,051,000	Deleted	X	X	Project completed in prior biennium.
P1	152526B	SR 525/Bayview Road Vic to Lake Hancock - Paving	1,343,000	1,325,996	-17,004	1,983,000	1,953,883	-29,117	3,326,000	3,279,879	-46,121				
P1	152601B	SR 526/SR 525 to Boeing Access Rd Vic - Paving	50,000	50,377	377	1,182,000	1,182,263	263	1,232,000	1,232,640	640				
P1	153900P	SR 539/I-5 to Kellogg Road - Paving	134,000		-134,000	3,473,000	1,511,621	-1,961,379	3,607,000	3,672,085	65,085				
P1	200201I	US 2/West of Wenatchee - Paving							2,005,000		-2,005,000	Deleted	X	X	Project completed in prior biennium.
P1	200202F	US 2/Leavenworth Vicinity - Paving				70,000		-70,000	1,257,000	1,507,301	250,301				
P1	202002B	SR 20/North Cascades Highway - Chip Seal							3,694,000		-3,694,000	Deleted	X	X	Project completed in prior biennium.
P1	202800A	SR 28/East Wenatchee Area - Paving	19,000	19,426	426				2,188,000	2,188,160	160				
P1	202801H	SR 28/E Wenatchee to Rock Island - Pave	77,000	77,467	467				3,362,000	3,363,382	1,382				
P1	209709A	US 97A/Wenatchee to South of Rocky Reach Dam - Paving							1,616,000		-1,616,000	Deleted	X	X	Project completed in prior biennium.
P1	300520B	I-5/SR 121 to N of Tumwater Blvd - Paving							2,918,000		-2,918,000	Deleted	X	X	Project completed in prior biennium.
P1	310144G	US 101/S of Mansfield Rd to W of Shore Rd - Paving	3,303,000	3,351,672	48,672				3,716,000	3,763,700	47,700				
P1	330314D	SR 303/S of WM E Sutton Rd to Silverdale Way - Paving	419,000	475,184	56,184				3,083,000	3,138,863	55,863				
P1	400507B	I-5/E Fork Lewis River Bridge to Todd Road Vicinity - Paving							5,143,000		-5,143,000	Deleted	X	X	Project completed in prior biennium.
P1	501214J	US 12/SR 128 Vicinity to Snake River Bridge - Paving	110,000	145,293	35,293	868,000	905,861	37,861	978,000	1,051,154	73,154				
P1	501214K	US 12/Cameron St Vicinity to Dayton Ave Vicinity - Paving				295,000	331,617	36,617	799,000	899,499	100,499				
P1	501214T	US 12/Indian Creek Vic to Wildcat Creek Bridge Vic - Paving	280,000	280,006	6	2,024,000	2,015,164	-8,836	2,304,000	2,295,170	-8,830				
P1	501215B	US 12/E Pasco to Tank Farm Road - Paving	1,289,000	899,580	-389,420				1,300,000	910,706	-389,294			X	Updated Engineers Estimate and delivery plan.
P1	501215I	US 12/Tieton River Bridges to Naches - Chip Seal	619,000	814,355	195,355				919,000	1,114,079	195,079				
P1	501215J	US 12/Turner Rd Vic to Messner Road Vic - Chip Seal	149,000	76,969	-72,031				507,000	435,709	-71,291			X	Updated engineer's estimate.
P1	508207F	I-82/Badger Road Interchange - Chip Seal	48,000		-48,000				361,000		-361,000	Deleted	X	X	Project completed in prior biennium.
P1	508207G	I-82/Locust Grove Road Interchange - Chip Seal	2,000		-2,000				166,000		-166,000	Deleted	X	X	Project completed in prior biennium.
P1	508207T	I-82/US 12 to Valley Mall Blvd Vic - Paving							3,777,000		-3,777,000	Deleted	X	X	Project completed in prior biennium.
P1	508208K	I-82/Valley Mall Blvd Vic to Yakima River Bridge - Paving	574,000	574,149	149	800,000	800,129	129	1,435,000	1,434,870	-130				
P1	509702N	US 97/Satus Creek Vicinity - Paving		313,698	313,698				1,707,000	2,019,712	312,712				
P1	512402I	SR 124/South Lake Road to Charbonneau Park Vicinity - Chip Seal	183,000	84,740	-98,260				739,000	641,407	-97,593			X	Reduction due to updated engineer's estimate prior to advertisement.
P1	512901X	SR 129/2nd Street to Highland Ave - Paving	1,490,000	1,720,342	230,342				1,490,000	1,720,342	230,342				
P1	512902F	SR 129/Oregon State Line to 1.2 Miles S of Cemetery Rd - Chip Seal							2,321,000		-2,321,000	Deleted	X	X	Project completed in prior biennium.
P1	539503T	US 395/Foster Wells Road Vic to E Elm Road - Paving	265,000	56,385	-208,615				2,459,000	2,249,132	-209,868				
P1	58P100I	I-90/Concrete Rehabilitation (Nickel)	30,744,000	32,666,677	1,922,677	15,995,000	13,791,389	-2,203,611	52,262,000	52,264,000	2,000				
P1	600228R	US 2/Ict I-90 to Euclid Ave - Paving	340,000	340,543	543	4,036,000	4,036,147	147	4,376,000	4,376,690	690				
P1	602117A	SR 21/Vic. Malo to Kettle River - Paving							1,799,000		-1,799,000	Deleted	X	X	Project completed in prior biennium.
P1	602118D	SR 21/1.1 Miles N of Rin Con Creek Rd to Canada - Paving							2,458,000		-2,458,000	Deleted	X	X	Project completed in prior biennium.
P1	609019V	I-90/Grant Co Line to SR 21 - Paving	1,000		-1,000				6,004,000		-6,004,000	Deleted	X	X	Project completed in prior biennium.
P1	619400E	SR 194/Almota to Goose Creek Rd - Paving				2,520,000		-2,520,000	11,861,000		-11,861,000	Deleted	X	X	Project completed in prior biennium.
P1	619400K	SR 194/Almota to Jct US 195 - Chip Seal							1,892,000		-1,892,000	Deleted	X	X	Project completed in prior biennium.
P1	619503A	US 195/Colfax to Dry Creek - Paving	1,849,000	1,893,684	44,684				2,881,000	2,825,779	-55,221				
P1	6290000	SR 290/Hamilton St to Mission Ave - Paving				206,000	2,120,331	1,914,331	2,184,000	2,121,332	-62,669				
P1	629001K	SR 290/Sullivan Rd to Idaho State Line - Paving	3,070,000	3,069,947	-53				4,462,000	4,461,351	-649				
P1	690400J	SR 904/Mullenix Rd to Betz Rd - Paving	471,000	470,551	-449	1,535,000	1,535,058	58	2,006,000	2,005,609	-391				
P1	800515C	Concrete Rehabilitation Program (Nickel)	11,855,000	12,800,767	945,767	55,465,000	57,226,019	1,761,019	192,714,000	192,714,949	949				
P1	L110007I	Highway System Preservation	76,563,000	76,563,000		164,060,000	164,060,000		1,224,983,000	1,224,983,000					
P2	000061M	I-5/Downtown Seattle Sign Bridges							2,502,000		-2,502,000	Deleted	X	X	Project completed in prior biennium.
P2	099955H	Seismic Bridges Program - High & Med. Risk (TPA)							50,570,000		-50,570,000	Deleted	X	X	Project completed in prior biennium.

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SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
P2	OBP2001	Bridge Replacement Preservation	7,243,000	6,602,199	-640,801	7,816,000	17,894,271	10,078,271	131,522,000	332,415,123	200,893,123		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P2	OBP2002	Bridge Repair Preservation	64,976,000	62,677,095	-2,298,905	65,741,000	108,748,366	43,007,366	468,901,000	1,638,465,000	1,169,564,000		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P2	OBP2003	Bridge Scour Prevention Preservation	1,720,000	661,430	-1,058,570	7,163,000	8,956,382	1,793,382	15,881,000	42,022,875	26,141,875		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P2	OBP2004	Bridge Seismic Retrofit Preservation	6,710,000	6,700,695	-9,305	13,894,000	13,894,000	0	195,872,000	193,212,484	-2,659,516		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P2	100205E	US 2/43rd Ave SE Vic to 50th Ave SE Vic - Bridge Rehabilitation							4,239,000		-4,239,000	Deleted	X	X	Project completed in prior biennium.
P2	100521Z	I-5/Downtown Seattle - Expansion Joint Replacement		1,308,884	1,308,884		2,948,150	2,948,150	2,530,000	4,257,034	1,727,034		X		15-17 and total increase is the result of work included in the original scope being removed from the contract due to the need for additional engineering and that work is now ready for delivery under a new contract. The previously removed work is being added back into this BIN to reflect the originally approved project scope.
P2	100562S	I-5/Spokane Street Interchange Vicinity - Special Bridge Repair							4,010,000		-4,010,000	Deleted	X	X	Project completed in prior biennium.
P2	100586S	I-5/Vic Lakeway Drive - Replace Sign Br							228,000		-228,000	Deleted	X	X	Project completed in prior biennium.
P2	100595E	I-5/Nooksack River Bridges - Painting	742,000	654,593	-87,407				4,631,000	4,543,989	-87,011				
P2	100923C	SR 9/Getchell Road Bridge - Seismic		9,305	9,305				352,000	195,643	-156,357			X	Total project decrease due to savings at project closure.
P2	100934R	SR 9/Pilchuck Creek - Replace Bridge	540,000	527,597	-12,403	20,000	19,798	-202	15,813,000	15,799,394	-13,606				
P2	101812M	SR 18/Green River (Neely) Bridge - Painting	1,965,000	1,965,206	206				2,213,000	2,213,865	865				
P2	109935A	SR 99/Spokane St Bridge - Replace Bridge Approach	230,000	41,842	-188,158				10,672,000	10,483,302	-188,698				
P2	109947B	SR 99/George Washington Bridge - Painting	18,400,000	18,400,308	308	18,347,000	18,347,021	21	45,662,000	45,661,923	-77				
P2	152099V	SR 520/Evergreen Point Floating Bridge R&R - Preservation	1,730,000	1,066,000	-664,000	790,000	271,000	-519,000	318,230,000	391,972,800	73,742,800		X		Adjustments to R&R plan with out biennia added to list.
P2	152908E	SR 529/Ebey Slough Bridge - Replace Bridge	921,000	1,045,217	124,217				32,894,000	33,018,679	124,679				
P2	153203D	SR 532/General Mark W. Clark Memorial Bridge - Replace Bridge	90,000	90,694	694	31,000	30,324	-676	18,821,000	18,820,215	-785				
P2	200201K	US 2/Wenatchee River Bridge - Replace Bridge	68,000	135,853	67,853				8,130,000	8,197,493	67,493				
P2	200201L	US 2/Chiwaukum Creek - Replace Bridge	91,000	162,340	71,340				6,488,000	6,559,782	71,782				
P2	215301E	SR 153/Methow River Bridge - Deck Rehabilitation	667,000		-667,000	533,000		-533,000	1,201,000		-1,201,000	Deleted	X	X	Project completed in prior biennium.
P2	310407B	SR 104/Hood Canal Bridge - Replace E Half	497,000	415	-496,585				519,117,000	518,619,979	-497,021				
P2	310407D	SR104/Port Angeles Graving Dock Settlement and Remediation	12,000	150,099	138,099	12,000	134,151	122,151	6,089,000	375,000	-5,714,000		X	X	Adjustment at project completion
P2	310710B	SR 107/Chehalis River Bridge - Seismic Retrofit							1,976,000		-1,976,000	Deleted	X	X	Project completed in prior biennium.
P2	316219A	SR 162/Puyallup River Bridge - Replace Bridge	2,692,000	2,691,130	-870				10,602,000	10,602,208	208				
P2	316725A	SR 167/Puyallup River Bridge - Bridge Replacement	5,113,000	5,104,001	-8,999	60,000	69,169	9,169	31,241,000	32,242,056	1,001,056		X		Additional funds added to cover potential costs associated with repurposing the old steel truss bridge. Special interest groups that would be interested in obtaining the bridge have 4-years to accomplish this change in ownership
P2	330311A	SR 303/Manette Bridge Bremerton Vicinity - Replace Bridge	5,000		-5,000				59,565,000		-59,565,000	Deleted	X	X	Project completed in prior biennium.
P2	400411A	SR 4/Abemathy Creek Br - Replace Bridge							10,000,000	10,000,000					
P2	400612A	SR 6/Rock Creek Br E - Replace Bridge	1,425,000	1,333,903	-91,097				10,316,000	10,224,457	-91,543				
P2	400612B	SR 6/Rock Creek Br W - Replace Bridge	859,000	933,652	74,652				7,076,000	7,151,111	75,111				
P2	400694A	SR 6/Willapa River Br - Replace Bridge	103,000	102,645	-355				7,025,000	7,024,036	-964				
P2	410104A	US 101/Middle Nemah River Br - Replace Bridge	11,000	70	-10,930				4,953,000	4,941,559	-11,441				
P2	410108P	US 101/ Astoria-Megler Bridge- North End Painter		16,942	16,942				7,766,000	7,670,301	-95,699				
P2	410110P	Astoria-Megler Bridge - South End Painter	7,369,000	5,983,626	-1,385,374	5,245,000	4,195,654	-1,049,346	22,243,000	19,807,684	-2,435,316		X	X	Cost decrease due to favorable bids.
P2	410194A	US 101/Bone River Bridge - Replace Bridge							9,031,000		-9,031,000	Deleted	X	X	Project completed in prior biennium.
P2	410510A	SR 105/Smith Creek Br - Replace Bridge	335,000	335,199	199				9,818,000	9,818,007	7				
P2	410510B	SR 105/North River Br - Replace Bridge	284,000	554,498	270,498				12,942,000	13,213,619	271,619				
P2	414210A	SR 142/Glenwood Road Vicinity - Replace Falling Box Culvert							433,000		-433,000	Deleted		X	Project completed in prior biennium.
P2	501211N	US 12/Tieton River W Crossing - Replace Bridge	13,000	14,232	1,232				5,999,000	5,999,976	976				
P2	501211P	US 12/Tieton River E Crossing - Replace Bridge	1,000	1,010	10				5,020,000	5,021,597	1,597				
P2	509703L	US 97/Satus Creek Bridge - Bridge Replacement		458,377	458,377				9,298,000	9,756,701	458,701				
P2	602110J	SR 21/Keller Ferry Boat - Replace Boat	267,000	202,773	-64,227				14,266,000	14,202,098	-63,902				
P2	619503K	US 195/Spring Flat Creek - Bridge Replacement							3,302,000		-3,302,000	Deleted	X	X	Project completed in prior biennium.
P2	629001D	SR 290/Spokane River E Trent Br - Replace Bridge	1,205,000	1,198,603	-6,397	1,608,000	1,613,481	5,481	19,861,000	19,860,000	-1,000				
P2	L1000068	Structurally Deficient and At Risk Bridges	39,000,000	6,727,558	-32,272,442	14,300,000	16,949,354	2,649,354	53,300,000	53,300,000			X	X	Cash flow changes due to updated delivery plan.
P2	L2000018	SR 9/Snohomish River Bridge - EIS	1,000	93	-908				1,502,000	1,501,030	-970				
P2	L2000075	US 12/ Wildcat Bridge Replacement	700,000	700,000		2,600,000	2,600,000		12,000,000	12,000,000					
P2	L2000116	SR 107/Chehalis River Bridge (S. Montesano Bridge) Approach and Rail Rep	2,700,000	2,700,000		9,800,000	9,800,000		12,500,000	12,500,000					

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Project Variance Report

SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete a	±\$500,000	±10% Change	Comments
P2	L2000174	SR 241/Mabton Bridge				5,970,000	5,970,000		11,970,000	11,970,000					
P2	L2000203	SR 155/Omak Bridge Rehabilitation							11,000,000	11,000,000					
P2	TNBPRES	SR 16/Tacoma Narrows Bridge R&R - Preservation	4,564,000	4,564,000		3,091,000	3,091,000		31,026,000	31,026,000					
P3	090600A	SR 906/Travelers Rest - Building Renovation							716,000		-716,000	Deleted	X	X	Project completed in prior biennium.
P3	099902D	Other Facilities Project Reserve - Major Drainage/Electrical Systems							105,765,000	96,846,132	-8,918,868		X		Reserve reduced in future biennia as projects have been scoped, prioritized, and programmed.
P3	099906Q	Set Aside for Local funds - Preservation	4,000,000	4,000,000		4,000,000	4,000,000		28,000,000	36,000,000	8,000,000		X		Place holder for unanticipated local funds.
P3	099907Q	Set Aside for Federal Discretionary Funds - Preservation	10,000,000	10,000,000		10,000,000	10,000,000		70,000,000	90,000,000	20,000,000		X		Place holder for unanticipated federal funds.
P3	099915E	Safety Rest Areas with Sanitary Disposal - Preservation Program		1,153,610	1,153,610		250,960	250,960	4,220,000	7,979,938	3,759,938		X		Reserve adjusted to balance to the current and future investment targets for the rest area preservation program.
P3	099960K	Emergency Slide & Flood Reserve	20,000,000	20,000,000		20,000,000	20,000,000		140,000,000	180,000,000	40,000,000		X		Reserve for emergent slide and flood projects.
P3	099960P	Statewide Safety Rest Area Minor Projects and Emergent Needs	237,000	152,745	-84,255	350,000	350,000		3,333,000	3,248,412	-84,588				
P3	OBP3001	Emergency Relief Preservation	2,420,000	17,214,317	14,794,317	5,000	8,430	3,430	15,676,000	25,177,351	9,501,351		X		Programmatic BIN increase due to emergency projects being added.
P3	OBP3002	Unstable Slopes Preservation	10,602,000	10,552,392	-49,608	10,189,000	14,457,309	4,268,309	180,798,000	127,667,561	-53,130,439		X	X	Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P3	OBP3003	Major Electrical Preservation	4,461,000	2,857,657	-1,603,343	1,265,000	1,167,372	-97,628	29,909,000	24,565,256	-5,343,744		X	X	Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P3	OBP3004	Major Drainage Preservation	4,187,000	3,226,908	-960,092	1,182,000	3,230,911	2,048,911	21,231,000	23,395,343	2,164,343		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P3	OBP3005	Rest Areas Preservation	3,457,000	2,185,384	-1,271,616	3,348,000	2,248,552	-1,099,448	15,985,000	16,300,873	315,873				Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P3	OBP3006	Weigh Stations Preservation	5,000,000	5,000,000	0	5,000,000	5,000,000	0	27,755,000	34,886,000	7,131,000		X		BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P3	OBP3007	Statewide Paving Project Basic Safety Features	11,916,000	9,958,669	-1,957,331	5,157,000	6,287,656	1,130,656	33,748,000	47,684,259	13,936,259		X		Cash flow adjustments in 15-17 reflecting current project delivery assumptions. BIN total changes are the result of future biennium program development and prior biennium completed projects being removed from the list.
P3	100555B	I-5/Smokoey Point NB/SB Safety Rest Area - RV Sewage System Rehab	22,000		-22,000	88,000		-88,000	126,000	126,021	21				
P3	153034C	SR 530/Skaglund Hill Slide							13,255,000		-13,255,000	Deleted	X	X	Project completed in prior biennium.
P3	200200V	US 2/Stevens Pass West - Unstable Slopes	142,000	173,700	31,700				7,377,000	7,409,688	32,688				
P3	209790E	US 97A/0.5 Mile So of Rocky Reach Dam - Unstable Slope	64,000	93	-63,907				3,823,000	3,758,591	-64,409				
P3	311240A	SR 112/Deep Creek to West Twin River - Unstable Slope Corridor Study	20,000	20,146	146	20,000	20,000		403,000	403,203	203				
P3	401206B	US 12/Rimrock Tunnel Vicinity - Stabilize Slope		231	231				1,446,000	1,446,763	763				
P3	401206E	US 12/Rimrock Lake Vicinity - Stabilize Slope	397,000	1,680,086	1,283,086	1,232,000		-1,232,000	1,950,000	2,002,725	52,725				
P3	541002R	SR 410/Nile Valley Landslide - Establish Interim Detour	232,000	227,214	-4,786	79,000	79,500	500	14,620,000	14,620,854	854				
P3	541002T	SR 410/Nile Valley Landslide - Reconstruct Route	116,000	126,972	10,972	25,000	20,000	-5,000	8,002,000	8,003,196	1,196				
P3	609030B	I-90/Spokane Port of Entry - Weigh Station Relocation	5,000	4,744	-256				11,423,000	11,422,052	-948				
P3	L2000187	SR 167/HOT Lanes Tolling Equipment R&R	1,000,000	1,000,000					1,000,000	1,000,000					
P4	095901W	Set Aside for Preservation Activities	53,508,000	53,508,000		48,615,000	53,615,000	5,000,000	592,988,000	646,603,000	53,615,000		X		Funding increase to cover anticipated legal settlements. Planned expenditures added in outer biennia.
Traffic Operations Capital															
Q3	000005Q	Reserve funding for Traffic Operations Capital Projects	2,008,000	218,884	-1,789,116	9,614,000	5,377,252	-4,236,748	51,668,000	46,842,069	-4,825,931		X	X	Reserve PIN adjusted to reflect allocation to new projects funded or increased/decreased costs.
Q3	000510Q	CVISN-CVISN-Deployment Stations along I-5, I-90, and I-82	190,000	19,574	-170,426				3,200,000	3,028,736	-171,264				
Q3	000515Q	Expanded CVISN-automated Infrared Roadside Screening	670,000	0	-670,000				1,000,000	329,708	-670,292		X	X	Project completed and reduced to actual expenditures.
Q3	000516Q	Expanded CVISN-Replace iSINC WIM Computers	1,000,000	1,000,000					1,000,000	1,000,000					
Q3	000600Q	Statewide LED Roadway Lighting Energy Reduction Project		1,000,172	1,000,172					1,000,172	1,000,172	New	X	X	Project funded out of reserve 000005Q.
Q3	100014Q	Traffic Signal Controller Integration - Multiple Locations							125,000		-125,000	Deleted		X	Project completed in prior biennium.
Q3	100015Q	SR 527 & SR 96 Adaptive Signal Control System (County lead)	135,000	132,300	-2,700				135,000	132,300	-2,700				
Q3	100017Q	I-5 & I-90 Ramp Meter Enhancement					340,000	340,000		340,000	340,000	New		X	Project funded out of reserve 000005Q.
Q3	100056Q	SR 543/I-5 to International Bndry.								289,203	289,203	New		X	Project funded out of reserve 000005Q.
Q3	100503Q	I-5 Ramps Meters from Tukwila to Federal Way							1,511,000		-1,511,000	Deleted	X	X	Project completed in prior biennium.
Q3	100513Q	I-5/NB Vicinity Southcenter - VMS Replacement	300,000	373,000	73,000				300,000	373,000	73,000				
Q3	100515Q	I-5/Northbound vicinity Marysville - Ramp Meters	950,000	950,000					950,000	950,000					
Q3	100516Q	I-5/CCTV Enhancement S 272nd St to NE 85th St - Cameras					300,000	300,000		300,000	300,000	New		X	Project funded out of reserve 000005Q.
Q3	100517Q	I-5/SB NE 130th St to NE 45th St - Ramp Meters					775,000	775,000		775,000	775,000	New	X	X	Project funded out of reserve 000005Q.
Q3	100519Q	I-5/Express Lanes Enhancements	49,000	84,900	35,900				300,000	336,036	36,036				
Q3	100522Q	I-5/Mercer Street NB and SB Ramp Meter Systems	34,000	34,983	983				191,000	192,750	1,750				

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Q3	100528Q	I-5/SB N 145th St Vicinity - Variable Message Sign Installation	316,000	262,275	-53,725				1,060,000	1,005,962	-54,038				
Q3	100555Q	I-5/North Everett to SR 528 - ITS		0	0				2,367,000	2,367,007	7				
Q3	101812Q	SR 18/WB Ramps & SE 304th Street Intersection	61,000	60,750	-250				61,000	60,750	-250				
Q3	102020Q	SR 20/Oak Harbor and SR 20 Spur to I-5 - Signal Integration	8,000	8,427	427				500,000	500,000					
Q3	140541Q	I-405/SB Coal Creek Interchange - ITS Improvements	26,000	1,933	-24,067				325,000	301,147	-23,853				
Q3	152711Q	SR 527/Bothell to Dumas Rd - Pedestrian & Bicycle Improvements		128,517	128,517					128,517	128,517	New		X	Project funded out of reserve 000005Q.
Q3	200001I	NCR 700 MHz Radio System Expansion							99,000	98,617	-383				
Q3	200004M	Stage 1 - NCR Basin ITS Communications Upgrade								255,232	255,232	New		X	Project funded out of reserve 000005Q.
Q3	200004N	Stage 2 - NCR Basin ITS Communications and Travelers Information	272,000	275,593	3,593				353,000	357,113	4,113				
Q3	200202T	US2/Stevens Pass - ITS Emergency Power	233,000	229,461	-3,539				265,000	261,105	-3,895				
Q3	200208Q	US 2/W of Wenatchee - VMS	400,000	400,000					400,000	400,000					
Q3	200209Q	US 2/W of Leavenworth VMS and Camera Installation	151,000	211,172	60,172				151,000	211,172	60,172				
Q3	200210Q	US 2/W of Stevens Pass Camera installation					185,000	185,000		185,000	185,000	New		X	Project funded out of reserve 000005Q.
Q3	202000W	SR20/Wauconda Summit - RWIS and Camera	186,000	185,927	-73	97,000	96,730	-270	283,000	282,657	-343				
Q3	202090A	SR 20/Winthrop VMS	206,000	177,134	-28,866				273,000	244,769	-28,231			X	Adjustment at project completion
Q3	202400Q	NCR Basin ITS Phase 3					429,000	429,000		429,000	429,000	New		X	Project funded out of reserve 000005Q.
Q3	300044Q	Region Wide HAR Improvements and Fiber Expansion	590,000	684,295	94,295		58,484	58,484	590,000	742,779	152,779				
Q3	300533Q	I-5/49th St to 38th St - Fiber Communications	122,000		-122,000	289,000		-289,000	411,000		-411,000	Deleted		X	Project completed in prior biennium.
Q3	300543Q	I-5/Trosper Road to Marvin Road - Signal Upgrade	30,000	27,059	-2,941				412,000	408,946	-3,054				
Q3	316706Q	SR 167/SR 410 to SR 18 - ITS		10,169	10,169		989,831	989,831		1,000,000	1,000,000	New	X	X	Matching funds for new project funded by grant from PSRC.
Q3	351207Q	SR 512/SR 7 to I-5 - Congestion Management	1,316,000	1,395,004	79,004				1,470,000	1,548,369	78,369				
Q3	351207R	SR 512/I-5 to SR 7 EB - Congestion Management					408,412	408,412		495,000	495,000	New		X	
Q3	400004Q	Advanced Traveler Information System Phase II Deployment							250,000		-250,000	Deleted		X	Project completed in prior biennium.
Q3	400008Q	Advanced Traveler Information Freeway Improvements							300,000		-300,000	Deleted		X	Project completed in prior biennium.
Q3	400009Q	I-5 Traveler Information and Incident Management							1,042,000		-1,042,000	Deleted	X	X	Project completed in prior biennium.
Q3	400014Q	I-205 Traveler Information, Padden Pkwy to 134th							1,295,000	1,294,974	-26				
Q3	400016T	Vancouver Urban ITS Device Infill	875,000	897,112	22,112				875,000	897,112	22,112				
Q3	400017F	SWR Legacy Fiber Upgrade		26,728	26,728		25,272	25,272		52,000	52,000	New		X	Project funded out of reserve 000005Q.
Q3	400017Q	Clark County CMAQ VAST Projects		118,252	118,252					118,252	118,252	New		X	Project funded out of reserve 000005Q.
Q3	400017R	SWR Ramp Meter Study 2016 - Vancouver Metro Area		90,000	90,000					90,000	90,000	New		X	Project funded out of reserve 000005Q.
Q3	400019R	I-5/I-205 Urban Ramp Meter - Phase 1					475,000	475,000		475,000	475,000	New		X	Project funded out of reserve 000005Q.
Q3	400019V	Regional Video Sharing					150,000	150,000		150,000	150,000	New		X	Project funded out of reserve 000005Q.
Q3	400515Q	I-5/I-205 Bi-State Corridor Travel Time - Add Signing		443	443					948,000	949,217				
Q3	401412Q	SR 14/Traveler Information Enhancements Phase II							360,000		-360,000	Deleted		X	Project completed in prior biennium.
Q3	401413Q	SR 14 Traveler Information, 164th Ave to NW 6th Ave	1,285,000	1,168,707	-116,293				1,400,000	1,283,806	-116,194				
Q3	409716Q	US 97/Centerville Rd to Yakima Co - Variable Message Signs	425,000	425,000					425,000	425,000					
Q3	450313Q	SR 503 Traveler Information - Incident Management and Communications	109,000	11,160	-97,840				1,003,000	906,592	-96,408			X	Savings at project completion.
Q3	450317Q	SR 503 ATIS Infill-I/S Bypass; 4th Plain to Main St. and Signal Study	1,101,000	114,651	-986,349		985,349	985,349	1,101,000	1,100,000	-1,000				
Q3	509018Q	I-90/Snoqualmie Pass to Vantage - Install VMS and Traffic Cameras							523,000		-523,000	Deleted	X	X	Project completed in prior biennium.
Q3	509050Q	I-90/Snoqualmie Summit and Rye-grass - Traveler Information	82,000		-82,000				175,000	92,795	-82,205			X	Project completed in prior biennium.
Q3	509091Q	I-90/Ellensburg Vicinity - Install VMS and Traffic Cameras	525,000	552,132	27,132				525,000	552,132	27,132				
Q3	524001Q	SR 240/Jadwin Ave to I-182 - Install Traffic Cameras		278,991	278,991		20,070	20,070		299,061	299,061	New		X	Project funded out of reserve 000005Q.
Q3	524002Q	SR 240/Hagen Road - Traffic Lights		564,879	564,879					564,879	564,879	New	X	X	Project funded out of reserve 000005Q.
Q3	600024Q	Eastern Region CCTV Systems - New Installs					200,000	200,000		200,000	200,000	New		X	Project funded out of reserve 000005Q.
Q3	600227Q	US 2/Hayford Rd to I-90 - ITS	387,000	549,939	162,939				400,000	562,851	162,851				
Q3	609002Q	I-90/Sullivan Rd East to Vic Idaho State Line - ITS							2,165,000		-2,165,000	Deleted	X	X	Project completed in prior biennium.
Q3	609004Q	I-90/Sprague Rest Area Traveler Information	36,000	36,261	261				132,000	132,074	74				
Q3	609006Q	Spokane Area Traffic Volume Collection	150,000	150,000					150,000	150,000					
Q3	609007Q	Spokane Area Traffic Volume Collection					600,000	600,000		600,000	600,000	New	X	X	Project funded out of reserve 000005Q.
Q3	609011Q	I-90 & US 2 Variable Message Signs Replacement - ITS							1,019,000		-1,019,000	Deleted	X	X	Project completed in prior biennium.
Q3	609049Q	I-90 CCTV Upgrades	17,000		-17,000				117,000	100,278	-16,722			X	Project completed in prior biennium.
Q3	619501Q	US 195/Hatch Rd to Cheney-Spokane Rd - Congestion & Safety Mngmnt - ITS							871,000		-871,000	Deleted	X	X	Project completed in prior biennium.
Q3	639516Q	US 395/Hawthorne Rd - Intersection Improvements	362,000	1,024,486	662,486				453,000	1,115,401	662,401			X	Updated Engineers Estimate and adjustment to award amount.
Q3	L2000230	SR 240/Hagen Road - Traffic Lights	350,000		-350,000				350,000		-350,000	Deleted		X	Project completed in prior biennium.
Washington State Ferries Construction															
W1	900001G	Point Defiance Tml Preservation							12,476,000	11,769,000	-707,000		X		Delivery plan updated and additional future biennium work added. Prior biennium completed projects may have been removed.
W1	900001H	Point Defiance Tml Improvement	265,000	267,000	2,000	265,000	265,000		1,131,000	532,000	-599,000		X	X	Delivery plan updated and additional future biennium work added. Prior biennium completed projects may have been removed.
W1	900002G	Tahlequah Tml Preservation							64,332,000	15,907,000	-48,425,000		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900002H	Tahlequah Tml Improvement	96,000	97,000	1,000	423,000	508,000	85,000	772,000	954,000	182,000				
W1	900005M	Fauntleroy Tml Preservation					2,923,000	2,923,000	103,073,000	108,061,000	4,988,000		X		Increase due to an additional biennium of future planned expenditures being added to the future placeholder.
W1	900005N	Fauntleroy Tml Improvement							544,000	84,000	-460,000			X	This project is completed and the cost was adjusted to actuals.

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W1	90006S	Vashon Tml Preservation	13,740,000	13,743,000	3,000	51,000	130,000	79,000	37,684,000	38,405,000	721,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	90006T	Vashon Tml Improvement	67,000	68,000	1,000				194,000	101,000	-93,000			X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900010L	Seattle Tml Preservation	38,923,000	42,373,000	3,450,000	114,310,000	114,312,000	2,000	316,807,000	360,521,000	43,714,000		X		Increase due to updated base estimate for the project.
W1	900010M	Seattle Tml Improvement	1,686,000	1,762,000	76,000				11,112,000	5,551,000	-5,561,000		X	X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900012K	Port Townsend Tml Preservation				426,000		-426,000	27,225,000	18,999,000	-8,226,000		X	X	This projects total decrease was a result of rescoping for the Terminal Slip 2 Dolphins which reduced the cost. Also, some of the projects realized cost savings at completion.
W1	900012L	Port Townsend Tml Improvement	39,000	40,000	1,000	17,000	18,000	1,000	1,062,000	58,000	-1,004,000		X	X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900022I	Lopez Tml Preservation					14,000	14,000	8,381,000	10,271,000	1,890,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900022J	Lopez Tml Improvement	531,000	187,000	-344,000	23,000	379,000	356,000	1,124,000	566,000	-558,000		X	X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900024F	Shaw Tml Preservation							3,601,000	3,570,000	-31,000				The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900024G	Shaw Tml Improvement	34,000	35,000	1,000	16,000	17,000	1,000	73,000	52,000	-21,000			X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900026P	Orcas Tml Preservation				145,000		-145,000	13,226,000	13,931,000	705,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900026Q	Orcas Tml Improvement	1,204,000	1,206,000	2,000	34,000	90,000	56,000	1,339,000	2,040,000	701,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	900028U	Friday Harbor Tml Preservation	50,000		-50,000	257,000		-257,000	11,382,000	9,923,000	-1,459,000		X	X	Delivery plan updated and additional future biennium work added. Prior biennium completed projects may have been removed.
W1	900028V	Friday Harbor Tml Improvement	97,000	98,000	1,000	46,000	46,000		1,078,000	144,000	-934,000		X	X	The total decrease is due to savings realized at completion of the project.
W1	900040N	Eagle Harbor Maint Facility Preservation					85,000	85,000	67,170,000	48,186,000	-18,984,000		X	X	This projects total cost decrease is from the adjustment of the project based on the LCCM. Also contributing to the projects decrease was the deferral of the ad dates on the project in order to stay within the anticipated state fund resources.
W1	900040O	Eagle Harbor Maint Facility Improvement					1,241,000	1,241,000	3,048,000	14,873,000	11,825,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	902017K	Coupeville (Keystone) Tml Preservation	1,833,000	1,834,000	1,000	1,088,000		-1,088,000	15,238,000	18,004,000	2,766,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	902017M	Coupeville (Keystone) Tml Improvement	65,000	67,000	2,000	29,000	180,000	151,000	640,000	287,000	-353,000			X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	902020C	Anacortes Tml Preservation	4,335,000	4,336,000	1,000	1,889,000		-1,889,000	102,434,000	82,628,000	-19,806,000		X	X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	902020D	Anacortes Tml Improvement	739,000	728,000	-11,000	1,821,000	2,382,000	561,000	7,504,000	8,527,000	1,023,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.

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W1	910413Q	Edmonds Tml Preservation							25,403,000	57,212,000	31,809,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	910413R	Edmonds Tml Improvement	766,000	718,000	-48,000	4,131,000	4,089,000	-42,000	31,707,000	31,484,000	-223,000				
W1	910414P	Kingston Tml Preservation	1,385,000	1,385,000		48,000	1,432,000	1,384,000	32,754,000	65,904,000	33,150,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	910414S	Kingston Tml Improvement	134,000	134,000					277,000	134,000	-143,000			X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	916008R	Southworth Tml Preservation	1,382,000	877,000	-505,000	13,580,000	2,146,000	-11,434,000	29,079,000	44,093,000	15,014,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	916008S	Southworth Tml Improvement					2,056,000	2,056,000	371,000	22,238,000	21,867,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	930410T	Bremerton Tml Preservation				1,146,000		-1,146,000	36,351,000	45,600,000	9,249,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	930410U	Bremerton Tml Improvement	53,000	63,000	10,000	627,000	1,071,000	444,000	814,000	1,255,000	441,000				
W1	930513G	Bainbridge Island Tml Preservation	1,858,000	1,991,000	133,000	12,212,000	14,103,000	1,891,000	48,800,000	61,179,000	12,379,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	930513H	Bainbridge Island Tml Improvement	205,000	205,000					430,000	205,000	-225,000			X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	952515O	Mukilteo Tml Preservation							4,360,000		-4,360,000	Deleted	X		Delivery plan updated and additional future biennium work added. Prior biennium completed projects may have been removed.
W1	952515P	Mukilteo Tml Improvement	50,041,000	50,047,000	6,000	69,600,000	69,601,000	1,000	155,064,000	154,974,000	-90,000				
W1	952516R	Clinton Tml Preservation							25,509,000	24,868,000	-641,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	952516S	Clinton Tml Improvement	189,000	190,000	1,000	173,000	174,000	1,000	24,967,000	34,102,000	9,135,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	998521A	RFP Development and Installation of a One Account-Based Ticketing System	325,000	325,000			782,000	782,000	325,000	26,847,000	26,522,000		X		Funding for the installation of the ticketing system added.
W1	998521B	Life Extension of Electronic Fare System (EFS)	465,000	465,000					465,000	465,000					
W1	998901J	WSF/Administrative Support - Allocated to W1	3,324,000	3,301,000	-23,000	7,116,000	6,747,000	-369,000	48,617,000	43,136,000	-5,481,000		X	X	
W1	998901O	WSF/Systemwide - Dispatch System Replacement					1,779,000	1,779,000		4,404,000	4,404,000	New	X		Decision Package
W1	998925A	Security System Upgrades Placeholder for W1	2,796,000	2,144,000	-652,000		657,000	657,000	3,661,000	2,751,000	-910,000		X	X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	998926A	WSF/Systemwide Terminals - Out Bienna Security LCCM Preservation Needs	1,000		-1,000	2,531,000		-2,531,000	9,870,000	12,319,000	2,449,000		X		The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	L1000016	Primavera Project Management System	323,000	323,000		335,000	277,000	-58,000	2,716,000	2,660,000	-56,000				
W1	L1000168	Seattle Tml - Slip 2 and LCCM							57,594,000	47,684,000	-9,910,000		X	X	The total cost change is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W1	L2000007	Terminal Project Support	6,578,000	6,508,000	-70,000	5,680,000	6,483,000	803,000	68,820,000	92,041,000	23,221,000		X		Delivery plan updated and additional future biennium work added. Prior biennium completed projects may have been removed. \$800K decision package added.
W1	L2000041	Reservation System	616,000	658,000	42,000				6,961,000	7,005,000	44,000				
W1	L2000042	Communications	729,000	712,000	-17,000				3,625,000	3,611,000	-14,000				
W1	L2000110	Ferry Vessel and Terminal Preservation				4,192,000	4,192,000		29,348,000	29,348,000					
W1	L2000166	Clinton Tml Road Improvements	600,000	600,000		2,400,000	2,400,000		3,000,000	3,000,000					
W1	L2200083	ADA Visual Paging Project	886,000	1,087,000	201,000				2,202,000	2,407,000	205,000				
W2	944401D	MV Issaquah Preservation	3,039,000	2,870,900	-168,100	2,923,000	2,646,000	-277,000	52,945,000	57,394,682	4,449,682		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944401E	MV Issaquah Improvement	44,000	222,535	178,535	39,000	75,000	36,000	1,885,000	1,876,431	-8,569				

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W2	944402D	MV Kittitas Preservation	504,000	504,000		2,180,000	5,683,000	3,503,000	44,588,000	54,000,173	9,412,173		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944402E	MV Kittitas Improvement	44,000	44,000		39,000	150,000	111,000	2,134,000	1,851,159	-282,841			X	Prior biennium expenditures removed.
W2	944403D	MV Kitsap Preservation	605,000	143,000	-462,000	842,000	4,458,000	3,616,000	32,397,000	46,350,117	13,953,117		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944403E	MV Kitsap Improvement	44,000	44,000		39,000	150,000	111,000	2,268,000	1,862,525	-405,475			X	Prior biennium expenditures removed.
W2	944404D	MV Cathlamet Preservation	900,000	815,000	-85,000	301,000	4,826,000	4,525,000	31,895,000	49,838,546	17,943,546		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944404E	MV Cathlamet Improvement	44,000	44,000		39,000	150,000	111,000	1,955,000	1,862,352	-92,648				
W2	944405D	MV Chelan Preservation	1,713,000	1,918,000	205,000	872,000	3,356,000	2,484,000	49,996,000	66,464,613	16,468,613		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944405F	MV Chelan Improvement	44,000	257,580	213,580	39,000	335,975	296,975	2,116,000	2,242,711	126,711				
W2	944406D	MV Sealth Preservation	11,804,000	11,586,600	-217,400	3,490,000	1,295,000	-2,195,000	50,008,000	63,724,122	13,716,122		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944406E	MV Sealth Improvement	44,000	44,000		39,000	75,000	36,000	1,970,000	1,737,859	-232,141			X	Prior biennium expenditures removed.
W2	944410F	MV Evergreen St Preservation	57,000	57,000					2,638,000	270,234	-2,367,766		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944410G	MV Evergreen St Improvement	1,000	1,000					384,000	10,320	-373,680			X	Prior biennium expenditures removed.
W2	944412C	MV Klahowya Preservation	244,000	244,000			50,000	50,000	6,426,000	849,177	-5,576,823		X	X	The decrease was funds transferred to Kennewick Preservation for the OFE procurement and MV Kennewick USCG drydocking thru a PCRf.
W2	944412D	MV Klahowya Improvement	44,000	7,885	-36,115		66,141	66,141	606,000	96,077	-509,923		X	X	Prior biennium expenditures removed.
W2	944413B	MV Tillikum Preservation	465,000	465,000		2,789,000	1,413,000	-1,376,000	14,696,000	2,409,000	-12,287,000		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944413C	MV Tillikum Improvement	44,000	44,000		39,000	75,000	36,000	2,377,000	1,843,000	-534,000				
W2	944431D	MV Hyak Preservation	3,521,000	3,521,000	0	803,000	1,462,000	659,000	48,919,000	5,261,856	-43,657,144		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944431E	MV Hyak Improvement	44,000	44,000		39,000	150,000	111,000	2,577,000	200,822	-2,376,178		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944432G	MV Elwha Preservation	1,861,000	2,449,400	588,400	2,867,000	3,422,000	555,000	77,912,000	10,500,356	-67,411,644		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944432H	MV Elwha Improvement	44,000	141,810	97,810	39,000	75,000	36,000	2,094,000	2,093,877	-123				
W2	944433D	MV Kaleyetan Preservation	5,962,000	8,184,000	2,222,000	1,912,000	4,021,000	2,109,000	55,193,000	37,459,429	-17,733,571		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944433E	MV Kaleyetan Improvement	44,000	404,000	360,000	39,000	75,000	36,000	2,820,000	2,284,271	-535,729		X	X	Prior biennium expenditures removed.
W2	944434D	MV Yakima Preservation	2,497,000	2,497,000		1,012,000	2,634,000	1,622,000	60,481,000	50,793,206	-9,687,794		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944434E	MV Yakima Improvement	44,000	44,000		39,000	150,000	111,000	2,196,000	1,928,496	-267,504			X	Prior biennium expenditures removed.
W2	944441B	MV Walla Walla Preservation	3,079,000	2,883,971	-195,029	1,523,000	1,758,000	235,000	73,310,000	46,725,652	-26,584,348		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944441C	MV Walla Walla Improvement	44,000	239,029	195,029	39,000	75,000	36,000	3,257,000	2,005,150	-1,251,850		X	X	Prior biennium expenditures removed.
W2	944442B	MV Spokane Preservation	17,810,000	13,707,445	-4,102,555	953,000	5,209,000	4,256,000	85,375,000	58,865,317	-26,509,683		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944442C	MV Spokane Improvement	44,000	248,435	204,435	39,000	75,000	36,000	3,449,000	1,961,854	-1,487,146		X	X	Prior biennium expenditures removed.
W2	944451C	MV Hiyu Preservation							599,000	14,196	-584,804		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944451D	MV Hiyu Improvement	1,000	1,000					8,000	1,152	-6,848			X	Prior biennium expenditures removed.

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W2	944470A	64-Car Class Ferry Construction							209,018,000	2,604,479	-206,413,521		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944471A	MV Chetzemoka Preservation	86,000	86,000		1,031,000	2,200,000	1,169,000	21,930,000	47,051,188	25,121,188		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944476B	MV Chetzemoka Improvement	44,000	44,000		39,000	75,000	36,000	2,217,000	2,253,753	36,753				
W2	944477A	MV Salish Preservation	216,000	216,000		2,831,000	3,161,000	330,000	30,986,000	57,993,959	27,007,959		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944477B	MV Salish Improvement	44,000	44,000		39,000	75,000	36,000	2,982,000	2,694,810	-287,190			X	Prior biennium expenditures removed.
W2	944478B	MV Kennewick Preservation	181,000	181,000		1,953,000	463,000	-1,490,000	23,543,000	56,547,244	33,004,244		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944478C	MV Kennewick Improvement	44,000	44,000		39,000	75,000	36,000	3,320,000	3,229,442	-90,558				
W2	944499C	MV Puyallup Preservation	1,701,000	1,530,000	-171,000	10,765,000	2,133,000	-8,632,000	61,636,000	92,340,000	30,704,000		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944499D	MV Tacoma Preservation	10,048,000	10,883,000	835,000	7,619,000	13,295,000	5,676,000	85,245,000	122,511,358	37,266,358		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944499E	MV Wenatchee Preservation	3,890,000	4,227,410	337,410	8,068,000	1,490,000	-6,578,000	75,696,000	122,787,547	47,091,547		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	944499F	MV Puyallup Improvement	44,000	44,000		39,000	75,000	36,000	2,934,000	2,647,000	-287,000				
W2	944499G	MV Tacoma Improvement	44,000	44,000		39,000	75,000	36,000	2,788,000	1,780,323	-1,007,677		X	X	Prior biennium expenditures removed.
W2	944499H	MV Wenatchee Improvement	44,000	44,000		39,000	75,000	36,000	2,850,000	2,486,738	-363,262			X	Prior biennium expenditures removed.
W2	990040W	MV Chumacum Preservation				50,000	1,000	-49,000	14,418,000	40,301,000	25,883,000		X		Programmed funding for new vessel preservation
W2	990041W	MV Chumacum Improvement				162,000		-162,000	2,625,000	1,963,000	-662,000		X	X	Programmed funding for new vessel improvements
W2	990051X	New Replacement Vessel							1,329,032,000	1,329,032,000					
W2	998951A	WSF/Administrative Support - Allocated to W2	6,764,000	6,764,000	0	2,448,000	3,003,000	555,000	64,752,000	85,828,000	21,076,000		X		Admin costs are split between W1 and W2 using a cost allocation methodology. Applying this methodology results in a changing distribution of costs between the two subprograms depending on the size of each subprogram in a particular biennium. So, variances should be measured for the total costs, not a particular subprogram.
W2	998951F	Security System Upgrades Placeholder for W2	2,937,000	2,937,000	0		600,000	600,000	4,326,000	4,925,908	599,908		X		Additional funding to meet Coast Guard security requirements with respect to "Critical Restricted" doors.
W2	998951P	New CMAQ Grants Placeholders								255,000	255,000	New		X	
W2	L1000006	MV Tokitae Preservation	50,000	50,000		93,000	25,000	-68,000	28,419,000	27,771,000	-648,000		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	L1000007	MV Samish Preservation	50,000	50,000		50,000	50,000		23,578,000	34,563,000	10,985,000		X		The total cost increase is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	L1000008	MV Tokitae Improvement	44,000	44,000		70,000	75,000	5,000	3,200,000	1,434,111	-1,765,889		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	L1000009	MV Samish Improvement	44,000	44,000		162,000	75,000	-87,000	2,669,000	2,082,462	-586,538		X	X	The total cost decrease is from projected cost to complete the project which includes the current anticipated needs per the LCCM in the future and cost/inflation.
W2	L1000030	144 Auto Vessel							72,190,000	72,189,296	-704				
W2	L1000063	#3 - 144-Capacity Vessel (MV Chumacum)	90,545,000	90,545,000			75,000	75,000	123,000,000	123,074,523	74,523				
W2	L1100038	LNG Security Planning and Outreach	380,000	380,000			1,000	1,000	848,000	849,523	1,523				
W2	L2000006	Vessel Project Support	3,396,000	3,396,000	0	3,522,000	6,431,195	2,909,195	38,521,000	41,429,467	2,908,467		X		The total cost increase is due to projected cost for support which includes the current anticipated needs in the future.
W2	L2000109	#4 - 144 capacity vessel	82,000,000	82,000,000		40,000,000	40,000,000		122,000,000	122,000,000					
W2	L2200038	#1 - 144-Capacity Vessel (MV Tokitae)	2,500,000	2,500,000					124,152,000	124,150,755	-1,245				
W2	L2200039	#2 - 144-Capacity Vessel (MV Samish)	2,900,000	2,900,000					119,266,000	119,266,508	508				
W3	999910K	Emergency Repair	7,000,000	7,000,000	0	4,000,000	7,000,000	3,000,000	61,782,000	82,685,750	20,903,750		X		This project is a emergency contingency placeholder. The total cost increase is from projected cost for unanticipated emergency repairs needs in the future.

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Rail															
Y4	70000E	ARRA Program Management	22,323,000	25,216,000	2,893,000		2,600,000	2,600,000	44,369,000	49,862,000	5,493,000		X		Increase is due to the complexity of the task and the increased use of consultants. This increase is funded by a redistribution from PIN 798999F.
Y4	70000F	Corridor Reliability Supplemental Work (ARRA)	12,230,000	11,918,000	-312,000				16,916,000	16,604,000	-312,000				
Y4	70001C	New Locomotives (8) (ARRA)	58,251,000	52,680,000	-5,571,000				65,181,000	59,610,000	-5,571,000		X		This reduction resulted from moving excess funds to the programmatic contingency (798999F)
Y4	727016A	West Vancouver Freight Access Project (ARRA)							12,735,000		-12,735,000	Deleted	X	X	Project completed in prior biennium.
Y4	730220A	Tacoma- D to M Street Connection (ARRA)							21,281,000	21,281,000					
Y4	730310A	Tacoma- Point Defiance Bypass (ARRA)	114,677,000	168,998,000	54,321,000		20,000	20,000	129,540,000	183,881,000	54,341,000		X		Increase due to updated estimate. Funding for this increase provided by ARRA programmatic contingency (798999F).
Y4	751014A	Advanced Signal System (ARRA)	12,385,000	1,533,000	-10,852,000				57,550,000	46,698,000	-10,852,000		X	X	Reducing to actual expenditures and placing the remainder in a Programmatic Contingency bucket (798999F)..
Y4	751020A	Vancouver- Yard Bypass Track (ARRA)	19,896,000	12,127,000	-7,769,000				38,787,000	31,018,000	-7,769,000		X	X	Reducing to actual expenditures and placing the remainder in a Programmatic Contingency bucket (798999F)..
Y4	751021A	Vancouver - New Middle Lead (ARRA)	3,689,000	-33,000	-3,722,000				11,931,000	8,209,000	-3,722,000		X	X	Reducing to actual expenditures and placing the remainder in a Programmatic Contingency bucket (798999F)..
Y4	751030A	Kelso Martin's Bluff- New Siding (ARRA)	32,042,000	55,203,000	23,161,000				33,788,000	56,949,000	23,161,000		X		Final Design identified that additional funding are needed to construct this project. Additional funds are needed to account for changes in the design that occurred between Preliminary Engineering and Final Design. Changes include Environmental Mitigation - Wetland Mitigation Bank Credits and Environmental Enhancements for Unnamed Tributary 3 (UT3) Culvert. Funding for this increase provided by ARRA programmatic contingency (798999F).
Y4	751031A	Kelso Martin's Bluff- Toteff Siding Extension (ARRA)	36,643,000	30,353,000	-6,290,000				54,662,000	48,372,000	-6,290,000		X	X	Reducing to actual expenditures and placing the remainder in a Programmatic Contingency bucket (798999F)..
Y4	751032A	Kelso Martin's Bluff- Kelso to Longview Jct. (ARRA)	80,323,000	75,914,000	-4,409,000				85,508,000	81,099,000	-4,409,000		X		Reducing to actual expenditures and placing the remainder in a Programmatic Contingency bucket (798999F)..
Y4	751040A	Corridor Reliability Upgrades- South (ARRA)	21,338,000	19,645,000	-1,693,000				87,079,000	85,386,000	-1,693,000		X		Reducing to actual expenditures and placing the remainder in a Programmatic Contingency bucket (798999F)..
Y4	752000A	Corridor Reliability Upgrades - North_(ARRA)	9,617,000	4,794,000	-4,823,000				35,804,000	30,981,000	-4,823,000		X	X	Reducing to actual expenditures and placing the remainder in a Programmatic Contingency bucket (798999F)..
Y4	754041A	Blaine - Swift Customs Facility Siding (ARRA)	1,515,000	1,515,000					7,022,000	7,022,000					
Y4	770220A	Seattle- King Street Station Track Upgrades (ARRA)	50,139,000	34,770,000	-15,369,000				51,149,000	35,780,000	-15,369,000		X	X	A portion of unneeded Task Contingency funding is being transferred to Programmatic Contingency (798999F) in order to be used for other AARA tasks that do need additional funding.
Y4	798999F	ARRA Unallocated Contingency	23,066,000	908,000	-22,158,000				23,066,000	908,000	-22,158,000		X	X	Risk rand contingency funds that were no longer needed on other projects were transferred back into this reserve.
Y4	L1000144	Point Defiance Rail Bypass - Lakewood Safety	2,000,000	2,000,000					2,000,000	2,000,000					
Y4	L1000167	Bridge 12 (Salmon Creek) Replacement	300,000	300,000					300,000	300,000					
Y4	L2200027	Higher Speed Rail Reserve - State funds					8,000,000	8,000,000	40,000,000	40,000,000					
Y4	L2220057	Cascades Corridor Slide Prevention and Repair	1,031,000	1,031,000			4,567,000	4,567,000	33,000,000	33,000,000					
Y4	P01005A	Vancouver - Rail Bypass and W 39th Street Bridge	1,092,000	1,092,000					117,234,000	117,234,000					
Y4	P01008C	Tacoma - Bypass of Pt. Defiance	613,000	613,000					16,664,000	16,664,000					
Y4	P01101A	Mt Vernon - Siding Upgrade	2,842,000	2,613,000	-229,000				10,159,000	9,930,000	-229,000				
Y4	P01105A	Blaine - Customs Facility Siding	7,054,000	7,054,000					9,552,000	9,552,000					
Y4	P02001A	Cascades Train Sets - Overhaul	2,039,000	1,897,000	-142,000		500,000	500,000	8,642,000	9,000,000	358,000				
Y5	700410B	Palouse Grain Growers - Palouse Rail Loadout Improvements (2015 FRAP)	538,000	538,000					538,000	538,000					
Y5	700420A	Washington & Idaho RR - P&L Bridge Repair: MP 36-59 (2016 FRAP)	221,000		-221,000				221,000		-221,000	Deleted		X	Project Complete
Y5	701301A	Statewide - Washington Produce Rail Car Pool	467,000	467,000					1,974,000	1,974,000					
Y5	710112A	Clark County - Vancouver to Barberton Rail Improvements (2013 FRAP)							675,000	675,000					
Y5	710310A	Yakima Central - Branchline Safety & Preservation (2015 FRAP)	202,000	202,000					202,000	202,000					
Y5	711010N	Tacoma Rail - SR 509 Track Rebuild Project (2014 FRIB)	1,032,000	1,032,000					1,038,000	1,038,000					
Y5	722211A	Port of Columbia - Prescott to Dayton Rail Improvements (2015 FRAP)	271,000	271,000					271,000	271,000					
Y5	722220A	Port of Columbia - Blue Mountain Station - Phase I (2016 FRAP)	230,000		-230,000				230,000		-230,000	Deleted		X	Project Complete
Y5	725910A	Ridgefield Rail Overpass					900,000	900,000		900,000		New	X	X	Grade separation of Pioneer Avenue into the Port of Ridgefield waterfront area. This project is related to the Ridgefield Rail Overpass project L2000064 in Highways and Local Programs.
Y5	727610A	Port of Whitman Co - Wilma Rail Terminal Improvements (2015 FRAP)	500,000	500,000					500,000	500,000					
Y5	740210A	Cascade & Columbia - Wenatchee to Entiat Rehabilitation (2015 FRAP)	498,000	498,000					498,000	498,000					
Y5	740310A	Mount Vernon -Terminal Railway - Mt Vernon Yard Expansion (2015 FRAP)	392,000	392,000					392,000	392,000					
Y5	741411A	Columbia Basin RR - Schrag Rail & Tie Replacement Phase II (2015 FRAP)	206,000	206,000					206,000	206,000					
Y5	742110A	Kettle Falls International Railway_ - Barstow to Laurier Phase 1 (2016 FR	384,000		-384,000				384,000		-384,000	Deleted		X	Project Complete

Washington State Department of Transportation
2017 Agency Budget Proposal
Project Variance Report

SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
Y5	750210A	Snohomish Co - 240th St/SR9 Grade Crossing Improvements (2015 FRAP)	184,000	129,000	-55,000		55,000	55,000	184,000	184,000					
Y5	755110B	Tidewater Transportation-Pasco Rail-to-Barge Transload Facility (2015 FRAP)	346,000	346,000					346,000	346,000					
Y5	758810A	Kennewick Terminal - Industrial Rail Rehabilitation (2015 FRAP)	268,000	268,000					268,000	268,000					
Y5	762110A	Watco Inc. - PCC Rail Bridge Repairs (2015 FRAP)	367,000	367,000					367,000	367,000					
Y5	764510A	Central WA Railroad - Rail Rehab - Union Gap (2016 FRAP)	135,000		-135,000				135,000		-135,000	Deleted		X	Project Complete
Y5	F01000A	Statewide - Freight Rail Investment Bank	5,000,000	5,000,000		5,000,000	5,000,000		41,776,000	41,776,000					
Y5	F01001A	Statewide - Emergent Freight Rail Assistance Projects	51,000	51,000		2,750,000	2,750,000		16,551,000	16,551,000					
Y5	F01030C	Bellingham - Waterfront Restoration	25,000		-25,000				495,000		-495,000	Deleted		X	Project Complete
Y5	F01111B	Palouse River and Coulee City RR - Rehabilitation	1,948,000	1,948,000		705,000	705,000		11,648,000	11,648,000					
Y5	L1000143	Freight Rail Assistance Projects				4,290,000	4,290,000		30,030,000	30,030,000					
Y5	L1000146	Grays Harbor Rail Corridor Safety Study				300,000	300,000		300,000	300,000					
Y5	L1000147	South Kelso Railroad Crossing				900,000	900,000		25,000,000	25,000,000					
Y5	L1100064	Port of Everett (FRIB 2013)	548,000	548,000					900,000	900,000					
Y5	L1100080	Port of Moses Lake	1,000,000	1,000,000		5,400,000	5,400,000		20,900,000	20,900,000					
Y5	L1100082	West Vancouver Freight Access	475,000	475,000		1,425,000	1,425,000		1,900,000	1,900,000					
Y5	L1100083	Port of Warden Rail Infrastructure Expansion	250,000	250,000		1,750,000	1,750,000		2,000,000	2,000,000					
Y5	L2000112	Palouse Rail Loadout Improvements	300,000	300,000					300,000	300,000					
Y5	L2000172	West Whitman Railroad Improvement Project	280,000	280,000					280,000	280,000					
Y5	L2000173	Connell Rail Interchange	5,000,000	5,000,000		5,000,000	5,000,000		10,000,000	10,000,000					
Y5	L2000179	Highline Grain LLC - PCC Central WA Branch Rehab (2015 FRAP)	1,467,000	1,467,000		1,467,000	1,467,000		7,337,000	7,337,000					
Y5	L2000191	Palouse River and Coulee City RR - Rehabilitation - New Law	345,000	345,000		6,696,000	6,696,000		47,000,000	47,000,000					
Local Programs															
Z2	0LP500Z	State Infrastructure Bank	1,293,000	1,293,000		511,000	511,000		10,323,000	10,323,000					
Z2	1LP611A	SR 908 - Pavement Rehabilitation	1,077,000	1,077,000					3,777,000	3,777,000					
Z2	L100003Z	Lake Forest Park Park and Ride							25,000	25,000					
Z2	L1000055	SR 522 Improvements / 61st Ave NE and NE 181st Street	938,000	938,000					1,750,000	1,750,000					
Z2	L1000081	Community Facilities District Improvements (Redmond)	5,000,000	5,000,000					5,000,000	5,000,000					
Z2	L1000087	I-5/Port of Tacoma Road Interchange				3,000,000	3,000,000		22,300,000	22,300,000					
Z2	L1000089	Mottman Rd Pedestrian & Street Improvements							7,608,000	7,608,000					
Z2	L1000092	SR 99/Burlington N Overpass Replacement	2,000,000	2,000,000					2,000,000	2,000,000					
Z2	L1000094	Issaquah-Fall City Road				3,500,000	3,500,000		5,000,000	5,000,000					
Z2	L1000096	Mackaye Harbor Rd Relocation Study	350,000	350,000					350,000	350,000					
Z2	L1000132	SR 163/N 46th St. to N 54th St.	2,500,000	2,500,000					2,500,000	2,500,000					
Z2	L1000152	Bicycle and Pedestrian Project List	9,900,000	9,343,000	-557,000	11,373,000	11,930,000	557,000	89,006,000	89,006,000					
Z2	L2000017	SR 516/Wax Rd to 185th Ave SE - Improvements	838,000	838,000					2,800,000	2,800,000					
Z2	L2000064	Ridgefield Rail Overpass	300,000	300,000		7,468,000	7,468,000		7,768,000	7,768,000					
Z2	L2000065	SR 502 Main Street Project/Widening	1,000,000	1,000,000		3,800,000	3,800,000		7,700,000	7,700,000					
Z2	L2000066	Lewis Street Bridge							26,000,000	26,000,000					
Z2	L2000067	East-West Corridor Overpass and Bridge							50,044,000	50,044,000					
Z2	L2000080	SR-203/Coe-Clemons Culvert Replacement	500,000	500,000					500,000	500,000					
Z2	L2000104	Covington Connector				8,000,000	8,000,000		24,000,000	24,000,000					
Z2	L2000120	Orchard Street Connector				3,500,000	3,500,000		10,000,000	10,000,000					
Z2	L2000132	Duportail Bridge				38,000,000	38,000,000		38,000,000	38,000,000					
Z2	L2000133	228th & Union Pacific Grade Separation (City of Kent)	13,000,000	13,000,000		2,000,000	2,000,000		15,000,000	15,000,000					
Z2	L2000134	41st Street Rucker Avenue Freight Corridor Phase 2							36,500,000	36,500,000					
Z2	L2000135	Edmonds Waterfront At-Grade Waterfront Crossing	500,000	500,000					500,000	500,000					
Z2	L2000136	Harbour Reach Extension				10,100,000	10,100,000		15,100,000	15,100,000					
Z2	L2000137	Sammamish Bridge Corridor				4,000,000	4,000,000		8,000,000	8,000,000					
Z2	L2000164	Brady Road							6,000,000	6,000,000					
Z2	L2000171	35th Street Mill Creek				4,000,000	4,000,000		4,000,000	4,000,000					
Z2	L2000181	South Lander Street	7,000,000	7,000,000					7,000,000	7,000,000					
Z2	L2000182	Street Improvements near School for the Blind	50,000	50,000					50,000	50,000					
Z2	L2000200	28th/24th Street Sea-Tac	2,000,000	2,000,000					2,000,000	2,000,000					
Z2	L2000205	I-5/Mellen Street Connector	2,000,000	2,000,000		2,533,000	2,533,000		4,533,000	4,533,000					
Z2	L2000218	Jovita Seismic Wall	1,000,000	1,000,000					1,000,000	1,000,000					
Z2	L2220059	SR 516/Jenkins Creek to 185th Avenue - Widening	3,500,000	3,500,000		10,022,000	10,022,000		13,522,000	13,522,000					
Z2	NS2400R	SR 524: 48th Ave W - 37th Ave W Widening	2,094,000	2,094,000		12,770,000	12,770,000		14,864,000	14,864,000					
Z2	NEDMOND	SR 99 Revitalization in Edmonds							10,000,000	10,000,000					
Z2	NRUCKER	41st St Rucker/Ave Freight Corridor in Everett	1,500,000	1,500,000					1,500,000	1,500,000					
Z2	RVRSIDE	Riverside Ave Extension Project.	326,000	326,000					2,400,000	2,400,000					
Z2	T10600R	Complete SR 522 Improvements-Kenmore							12,000,000	12,000,000					
Z8	O1F035A	S 228th Street Extension & Grade Separation	3,265,000		-3,265,000	3,265,000	3,265,000	3,265,000	8,623,000	8,623,000					
Z9	G2000001	Lake Forest Park Traffic Study	475,000	475,000					475,000	475,000					
Z9	L1000052	South Wapato and McDonald Road Intersection Safety	485,000		-485,000				500,000	15,000	-485,000			X	Project reduced to actual expenditures.
Z9	L1000056	SR 432 Rail Realignment and Highway Improvements	841,000	841,000					2,000,000	2,000,000					
Z9	L1000133	Lyon Creek Culvert	875,000	875,000					875,000	875,000					
Z9	L1000148	SR 523 145th Street							25,000,000	25,000,000					
Z9	L1000165	Traffic Avenue / SR 410 Interchange	300,000	300,000					300,000	300,000					
Z9	L1000166	North Bend Street Overlay	100,000		-100,000		100,000	100,000	100,000	100,000					
Z9	L1100049	Scott Avenue Reconnection Project	953,000	953,000					2,000,000	2,000,000					
Z9	L2000188	Pedestrian and Bicycle Safety Grant Program	24,232,000	16,657,000	-7,575,000	18,380,000	25,955,000	7,575,000	178,599,000	194,599,000	16,000,000		X		Updated program delivery plan.
Z9	L2000189	Safe Routes to Schools Grant Program	33,703,000	24,020,000	-9,683,000	19,150,000	35,583,000	16,433,000	192,358,000	239,608,000	47,250,000		X		Updated program delivery plan.

Washington State Department of Transportation
2017 Agency Budget Proposal
Project Variance Report

SubPgm	PIN	Project Title	16LEGFN 15 - 17	17DOT001 15 - 17	Variance 15 - 17	16LEGFN 17 - 19	17DOT001 17 - 19	Variance 17 - 19	16LEGFN Total	17DOT001 Total	Variance Total	New/Delete	±\$500,000	±10% Change	Comments
Z9	L2000228	Thornton Road Overpass	3,000,000	3,000,000					19,167,000	19,167,000					
Z9	L2200040	Parker Road - SR 20 Realignment and Transit Park	763,000	763,000					896,000	896,000					
Z9	L2200089	City of Bellingham - Slater Road Bridge	350,000		-350,000		350,000	350,000	350,000	350,000					

Section 601 Summary

2015-17 Section 601 Nickel/TPA Project Transfers Summary September 2016

Transfer Requests

Section 601 of Engrossed Substitute House Bill 2524 authorizes the Director of Financial Management to approve allocation adjustments for highway projects funded with Transportation 2003 Account (Nickel) and/or Transportation Partnership Account (TPA) appropriations.

Consistent with the process established by the Office of Financial Management, the department submits the necessary documentation for review and approval of these requests. These adjustments address cash flow issues that would otherwise prevent project delivery.

Administrative Transfers

Section 601, Subsection 1(g) of Engrossed Substitute House Bill 2524 authorizes the department to make transfers between projects if the amount being transferred does not exceed \$250,000 or 10 percent of the total project cost. Furthermore, any transfers made are to be reported quarterly to the Director of Financial Management, and the Chairs of the Legislative Transportation committees.

The following is a summary of Section 601 transfers requested and administrative transfers reported for the 2015-17 biennium to date:

Section 601 Transfers Summary

2015-17 Quarter 1

Projects requiring additional funding	Nickel	TPA	Total	Description
SR 9/SR 531-172nd St NE - Intersection Improvements	-	465,631	465,631	Project cost increase due to correction to sales tax due and other project closure costs.
I-405/Renton to Bellevue Widening and Express Toll Lanes	500,213	14,499,700	14,999,913	Apply corridor savings to advance the PE and RW effort necessary to meet the RFP date for the Renton to Lynnwood CWA project.
Total	500,213	14,965,331	15,465,544	

Projects providing cash flow	Nickel	TPA	Total	Description
SR 9/212th St SE to 176th St SE, Stage 3 - Add Lanes	(1,190,710)	-	(1,190,710)	Savings at project closure.
I-405/SR 167 Interchange - Direct Connector	-	(6,757,153)	(6,757,153)	Project savings.
I-405/Kirkland Vicinity Stage 2 - Widening (Nickel/TPA)	-	(12,162,339)	(12,162,339)	Project savings and revised aging.
Total	(1,190,710)	(18,919,492)	(20,110,202)	

2015-17 Quarter 2

No submittals this quarter

2015-17 Quarter 3

No submittals this quarter

2015-17 Quarter 4

Projects requiring additional funding	Nickel	TPA	Total	Description
SR 522/Snohomish River Bridge to US 2 - Add Lanes	4,600,000	-	4,600,000	This project is completed. However, the potential for contractor claims has necessitated the advancement of the project's risk reserves into the 15-17 biennium. These funds are needed to close out the contract.
Total	4,600,000	-	4,600,000	

Projects providing cash flow	Nickel	TPA	Total	Description
I-405/I-90 to SE 8th St - Widening	(4,600,000)	-	(4,600,000)	Deferred project expenditures
Total	(4,600,000)	-	(4,600,000)	

Section 601 Administrative Transfers Summary

2015-17 Quarter 1

Projects requiring additional funding	Nickel	TPA	Total	Description
US 2/Chiwaukum Creek - Replace Bridge	-	405	405	Minor cost adjustment at project closure.
SR 285/W End of George Sellar Bridge - Intersection Improvements	-	447	447	Minor cost adjustment at project closure.
SR 161/24th St E to Jovita - Add Lanes	238,178	-	238,178	Additional administrative costs for pending contractor claim.
I-5/Grand Mound to Maytown - Add Lanes and Replace Intersection	53,228	-	53,228	Minor cost adjustment at project closure.
SR 167/SR 509 to I-5 Stage One - New Freeway	-	109,707	109,707	Minor cost increase to address property management activities.
SR 302/Key Peninsula Highway to Purdy Vic - Safety & Congestion	-	8,498	8,498	Minor cost adjustment at project closure.
US 12/SR 124 to McNary Pool - Add Lanes	292	-	292	Minor cost adjustment at project closure.
SR 24/I-82 to Keys Rd - Add Lanes	426	-	426	Minor cost adjustment at project closure.
I-405/South Renton Vicinity Stage 2 - Widening (Nickel/TPA)	90,971	-	90,971	Minor cost adjustment at project closure.
Total	383,095	119,057	502,152	

Projects providing additional cash flow	Nickel	TPA	Total	Description
SR 9/212th St SE to 176th St SE, Stage 3 - Add Lanes	(1,190,710)	-	(1,190,710)	Savings at project closure.
SR 9/Pilchuck Creek - Replace Bridge	-	(2,059,923)	(2,059,923)	Project savings at completion.
Total	(1,190,710)	(2,059,923)	(3,250,633)	

2015-17 Quarter 2

No submittals this quarter

2015-17 Quarter 3

Projects requiring additional funding	Nickel	TPA	Total	Description
SR 9/SR 531-172nd St NE - Intersection Improvements	-	233,318	233,318	Correction of retail sales tax payment.
I-5/196th St (SR 524) Interchange - Build Ramps	-	17,954	17,594	Minor cost adjustment at project closure.
I-5/Grand Mound to Maytown - Add Lanes and Replace Intersection	23,205	-	23,205	Minor cost adjustment at project closure.
Total	23,205	251,272	274,477	

Projects providing additional cash flow	Nickel	TPA	Total	Description
SR 9/176th Street SE to SR 96 - Widening	-	(972,491)	(972,491)	Updated expenditure plan..
I-5/SR 526 to Marine View Drive - Add HOV Lanes	(45,000)	-	-	Project savings at final closure.
Total	(45,000)	(972,491)	(1,017,491)	

Section 601 Administrative Transfers Summary

2015-17 Quarter 4

Projects requiring additional funds	Nickel	TPA	Total	Description
SR 509/I-5 to Sea-Tac Freight & Congestion Relief	-	250,000	250,000	Increases property management costs.
Total	-	250,000	250,000	

Projects providing additional cash flow	Nickel	TPA	Total	Description
I-5/Ship Canal Bridge - Noise Mitigation Study	-	(250,000)	(250,000)	Reduction at project completion.
Total	-	(250,000)	(250,000)	

Project Advancements

**2017-19 Capital Improvement and Preservation Program
Project Advancements – All Capital Programs
September, 2016**

The Department is not requesting any specific project advancements in this budget proposal.

There are a number of projects which are progressing faster than anticipated in the 2016 Legislative Transportation Budget. Some examples are as follows:

- I-90/Snoqualmie Pass East - Hyak to Keechelus Dam - Corridor Improvement requires a cash flow adjustment advancing \$19.7 million into 15-17 to accommodate the contractor's revised schedule.
- I-405 NB Hard Shoulder Running -- SR 527 to I-5 requires a cash flow adjustment advancing \$9.5 million into 15-17 to take advantage of the anticipated availability of funds in the 405 Tolling Account and deliver this high priority project early.

Information on all projects is available in the budget variance report.

Nickel/TPA Project Delivery

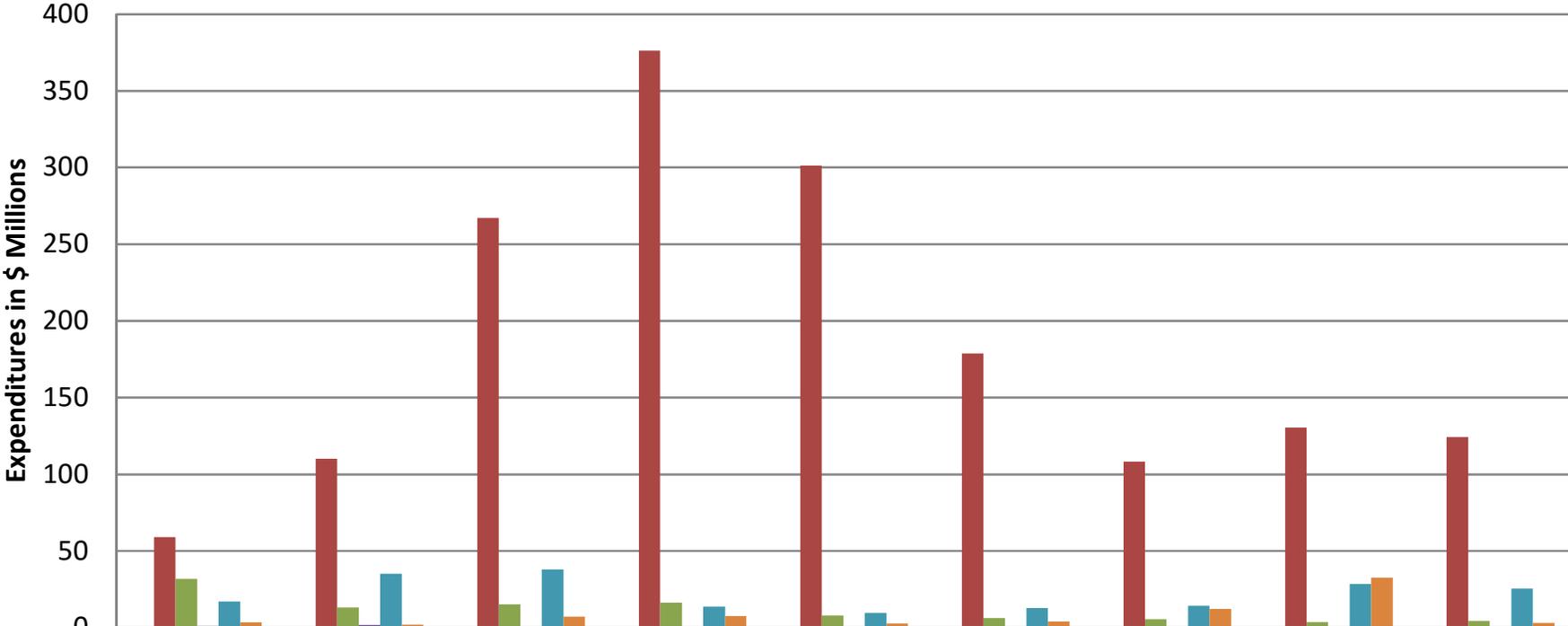
Seperate report due to file size

Mega-Project Status

Seperate report due to file size

Consultant Usage

Consultant Usage Expenditures



	2001-03	2003-05	2005-07	2007-09	2009-11	2011-13	2013-2015	2015-2017	2017-2019
D	0.46	0.37	0.61	0.37	0.33	0.69	0.80	0.65	0.84
I	58.99	109.97	267.17	376.22	301.24	178.70	108.10	130.39	124.36
P	31.72	13.09	15.08	16.33	7.80	6.29	5.57	3.50	4.23
Q	1.20	1.72	0.79	0.35	-	-	-	-	-
W	16.99	34.99	37.94	13.69	9.55	12.79	14.25	28.39	25.33
Y	3.42	1.98	7.24	7.52	2.62	4.12	12.05	32.43	3.17

Grant Programs

Pedestrian & Bicycle Safety Program

Local Programs (Program Z)

2017-19 Budget Submittal

Program purpose and restrictions:

The grant program supports pedestrian and bicycle safety mobility projects such as pedestrian and bicycle paths, sidewalks and crossing improvement in downtown areas for people who choose to walk or bike. The program funding helps stimulate economic revitalization and healthy community initiatives by improving safety and reducing modal conflicts in community centers.

Authorization:

State funds have been identified for the program beginning with the 2005 revenue package and have been authorized in each succeeding transportation budget since that time by providing appropriation authority from the Multi-Modal Account and from the Transportation Partnership Account. The Connecting WA package also provided additional revenue in the Multi-Modal Account. In the 2015-17 biennia the program was separated from the Safe Routes to School program.

Selection Criteria:

All complete proposals are reviewed and evaluated by an advisory group utilizing criteria to identify projects that will help promote healthy communities, stimulate economic revitalization, improve safety and reduce modal conflicts in community centers. Site visits are conducted by Local Programs staff to ensure the proposed projects address the issues outlined in the proposals. Projects that focus on long term solutions and can be delivered will have a higher rating.

Timeline for awards:

The call for projects was issued in January 2016 with proposals due before the end of May 2016. Proposals are reviewed and prioritized from June-November 2016. A priority listing of projects is submitted to the Governor's office and legislature by December 15, 2016.

Performance measures, outcomes and goals:

The program provides an opportunity to increase investments in multimodal transportation and reduce modal conflicts (pedestrians, transit, motor vehicles, freight, bicyclists, etc.). It provides resources to make strategic investments, advance modal integration and the opportunity for enhanced community engagement through stakeholder collaboration.

Administration of the Grant Program:

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

Program Funding: (This is the amount available or planned to award to new grants by fund source and expected reappropriations by fund source. The total of the columns should add to your approved (2015-17) or planned (2017-19) budget amounts without consideration of cash flow adjustments.)

\$ in millions	09-11	11-13	13-15	15-17	17-19	19-21
New Awards						
TPA-S		1.088	3.46			
MVA-F						
MMA-S		7.603	3.174	6.274	18.38	18.38
HSF-S						
TOTAL		\$8.691	\$6.634	\$6.274	\$18.38	\$18.38
Reappropriations						
TPA-S		2.188	1.868	2.436	1.143	
MVA-F		6.83				
MMA-S		13.499	1.997	7.947	6.432	
HSF-S						
TOTAL		\$22.517	\$3.865	\$10.383	\$7.575	

Expected cash flow by fund source: (Please estimate the amount of actual expenditures per biennium by fund source. Generally, this should be lower than the awarded amount of the grants.)

\$ in millions	09-11	11-13	13-15	15-17	17-19	19-21
TPA-S		3.276	6.634	2.436	1.1	
MVA-F		6.83				
MMA-S		21.102	5.171	14.221	19.8	
HSF-S						
Total		\$31.208	\$10.499	\$16.657	\$20.9	

Number of Completed Projects:

	09-11	11-13	13-15	15-17	17-19	19-21
Actual	22	28	20	8		
Planned				12		

Safe Routes to School Program

Local Programs (Program Z)
2017-19 Budget Submittal

Program purpose and restrictions:

The grant program helps fund cost-effective projects within two miles of primary, middle and high schools (K-12) to provide children a safe and healthy alternative to riding the bus or being driven to school. The purpose of the program is to improve safety and mobility for children by enabling and encouraging them to walk and bicycle to school. Successfully implemented projects which provide improved walk routes that increase the number of children walking and bicycling to school.

Authorization:

State and federal funds have been identified for the program beginning with the 2005 revenue package and have been authorized in each succeeding transportation budget since that time by providing appropriation authority from the Motor Vehicle Account-Federal and the Multi-Modal Account. Also in 2012 the legislature appropriated funds from the Highway Safety Account. The Connecting WA package also provided additional revenue in the Multi-Modal Account. In the 2015-17 biennia the program was separated from the Pedestrian & Bicycle Safety program.

Selection Criteria:

All complete proposals are reviewed and evaluated by an advisory group utilizing criteria to identify projects that will increase the number of children walking and biking to school safely. Proposals are evaluated for projects that will help stimulate economic revitalization and healthy communities' initiatives by improving safety and reducing modal conflicts near schools.

Timeline for awards:

The call for projects was issued in January 2016 with proposals due before the end of May 2016. Proposals are reviewed and prioritized from June-November 2016. A priority listing of projects is submitted to the Governor's office and legislature by December 15, 2016.

Performance measures, outcomes and goals:

The number of children walking and biking to school is measured before and after the safety and mobility improvements. This program also provides an opportunity to increase investments in multimodal transportation and reduce modal conflicts.

Administration of the Grant Program:

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

Program Funding: (This is the amount available or planned to award to new grants by fund source and expected reappropriations by fund source. The total of the columns should add to your approved (2015-17) or planned (2017-19) budget amounts without consideration of cash flow adjustments.)

\$ in millions	09-11	11-13	13-15	15-17	17-19	19-21
New Awards						
TPA-S						
MVA-F		4.952	4.611	6.303	11.4	11.4
MMA-S				0.925	7.75	7.75
HSF-S		0.092	2.218	4.69	6.75	6.75
TOTAL		\$5.044	\$6.829	\$11.918	\$25.9	\$25.9
Reappropriations						
TPA-S						
MVA-F		4.822	5.101	7.507	6.372	
MMA-S			1.009	0.26	0.923	
HSF-S			1.800	4.569	2.388	
TOTAL		\$4.822	\$7.910	\$12.1028	\$9.683	

Expected cash flow by fund source: (Please estimate the amount of actual expenditures per biennium by fund source. Generally, this should be lower than the awarded amount of the grants.)

\$ in millions	09-11	11-13	13-15	15-17	17-19	19-21
TPA-S						
MVA-F		9.774	9.712	13.810	14.5	
MMA-S			1.009	1.185	6.0	
HSF-S		0.092	4.018	9.259	5.5	
Total		\$9.866	\$14.739	\$24.254	\$26.0	\$14.8

Number of Completed Projects:

	09-11	11-13	13-15	15-17	17-19	19-21
Actual	9	21	36	22		
Planned				20		

Freight Rail Assistance Program

Rail Capital – Program Y

Program purpose and restrictions (if any)

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

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

Authorization

The program is authorized by RCW 47.76.250 (8), with amounts designated by proviso in the transportation budget.

Selection Criteria

Points are awarded using the following point system:

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

Timeline for awards

The most recent call for projects was issued on June 6, 2016. Submissions were due on July 15, 2016. WSDOT will review submissions based on stated criteria above and ensure projects meet environmental and project delivery requirements. The recommendations are a joint product from WSDOT, Washington Department of Commerce, Freight Mobility Strategic Investment Board, Washington Public Ports Association, and BNSF. The recommendations are approved by WSDOT's senior executives and submitted to OFM by November 15, 2016. The final list is approved by OFM.

Program Issues

N/A

Program Funding

(Dollars in thousands)

	2015-17	2017-19
	Enacted	Proposed
New Awards		
02M-1 Essential Rail Assistance Account - State	\$270	\$24
094-1 Transportation Infrastructure Account - State	\$455	\$367
218-1 Multimodal Transportation Account - State	\$5,484	\$8,116
Total	\$6,209	\$8,507
Reappropriations		
02M-1 Essential Rail Assistance Account - State	\$75	\$0
218-1 Multimodal Transportation Account - State	-\$75	\$55
094-1 Transportation Infrastructure Account - State	\$51	\$0
Total	\$51	\$55
Total	\$6,260	\$8,562

Freight Rail Investment Bank

Rail Capital – Program Y

Program purpose and restrictions

The Freight Rail Investment Bank provides loans for smaller rail capital projects. Loans are available in amounts up to \$250,000; applications are open to loans of any size within the maximum amount available. Projects must have a matching source of at least 20 percent. The program is restricted to publicly-owned rail infrastructure projects due to a constitutional restriction on loaning funds to private entities.

Authorization

The program is not specifically authorized in statute but appropriations for the Freight Rail Investment Bank are designated biennially, by proviso, in the transportation budget – most recently in ESHB 2524 Section 310 (2), Chapter 14, Laws of 2016.

Selection Criteria

The following criteria are used to evaluate and prioritize proposals:

1. Value to community, which includes all of the state or a region of the state, and/or local community in the freight system, in dollar terms. Up to 40 points
2. Strategic benefit – for example, the degree to which a project is integral to future development of the rail line, the area, the specific business, etc. Up to 35 points
3. Matching funds scaled according to the contribution. Up to 25 points

Timeline for awards

The most recent call for projects was issued on June 6, 2016. Submissions were due on July 15, 2016. WSDOT will review submissions based on stated criteria above and ensure projects meet environmental and project delivery requirements. The recommendations are a joint product from WSDOT, Washington Department of Commerce, Freight Mobility Strategic Investment Board, Washington Public Ports Association, and BNSF. The recommendations are approved by WSDOT's senior executives and submitted to OFM by November 15, 2016. The final list is approved by OFM.

Program Issues

N/A

Program Funding

(Dollars in thousands)

	2015-17	2017-19
	Enacted	Proposed
New Awards		
094-1 Transportation Infrastructure Account - State	\$5,000	\$5,000
Total	\$5,000	\$5,000
Reappropriations		
094-1 Transportation Infrastructure Account - State	\$1,580	\$0
Total	\$1,580	\$0
Total	\$6,580	\$5,000

Jobs Impact Estimate

Job Estimates for the 2017-2019 Transportation Capital Budget Proposal

- The proposed 2017-2019 Transportation Capital Budget (I, P, D, Q, Y, W) (excluding I6,) is \$3.6 billion.
- The estimated job impact for the 2017-2019 biennium averages about 16,730 jobs per year.
- The estimated job impact for fiscal years 2016-2019 averages about 18,565 jobs per year.
- The peak expenditure year of the 2017-19 biennium is (FY2019) creates approximately 17,570 direct, indirect and induced jobs.

Notes

- This job estimate is based on estimated project expenditures as submitted on August 25, 2016.
- I6 which is included in the capital budget has been excluded.
- This estimate has been rounded for ease of communication.
- This estimate includes direct, indirect and induced jobs.
- The term “job” does not necessarily refer to a unique FTE or individual working a full-time, full-year schedule. Individuals can work multiple years, either part time or full time and can be double counted. Hence, communication should not say these projects gave 16,730 individual people jobs, but rather, these projects provided an estimated 16,730 direct, indirect and induced jobs for the economy.

Background Information

How does WSDOT estimate the number of jobs created or saved?

WSDOT worked with the Governor’s Office of Financial Management (OFM) economists to estimate the number of jobs created or saved for highway construction projects. For the purpose of this estimate, it is assumed that most of the work to be accomplished will be very similar to typical highway construction activities. OFM maintains a nationally recognized model that is based on state data—typically updated every 5-10 years—that can be used to estimate the employment impact of highway construction projects.

Expenditures and the number of jobs created vary with each phase of the project, such as:

- Preliminary engineering (planning, design, cost estimating)
- Right-of-way purchasing
- Construction

These phases can occur over a number of years and carry different job-creation multipliers that are updated periodically by OFM.

For multi-year projects, WSDOT based estimates on the year with the greatest expenditures and the job multipliers for the project phase(s) in that year. In other words, this is the peak expenditure-year job estimate. This number was used to avoid over- or double-counting jobs.

Smaller, single-season construction project employment estimates are based on the total project cost. This is sometimes called a “job-years” estimate. This approach was taken because the fiscal year ends on June 30th, which is in the middle of the highway construction season.

Any time a multiplier is used, it is important to remember that it is only an estimate. Using the job multiplier at the beginning of a project gives a statewide “ballpark” estimate of the total number of jobs created or saved.

What types of jobs are included in the estimate?

The estimate produced by the multiplier includes more than just direct, on-the-project jobs; it also includes indirect and induced jobs.

- **Direct Jobs:** The actual jobs created or saved from the new investment in highway construction. Examples of these types of jobs include highway construction workers and project engineers.

- **Indirect Jobs:** These are jobs created or saved in industries supporting the direct spending. Examples of these types of jobs include workers in industries supplying asphalt and steel.
- **Induced Jobs:** These are jobs created by the re-spending of worker income on consumer goods and services, including food, clothing, and recreation.

Risk Reserves and Contingencies

2017-19 Capital Improvement and Preservation Program
Project Contingency and Risk
September, 2016

Project Contingency

Contingency is included in the overall cost of a project to handle unforeseen changes during construction. Washington State Department of Transportation (WSDOT) policy, as outlined in the Plans Preparation Manual, is to add 4% of the contract amount for all of WSDOT contracts. A copy of the WSDOT policy is provided.

Project Risk

Attached is a spreadsheet detailing which projects have set up risk reserves and the amount remaining as of the 15-17 biennium and beyond. Per WSDOT's policy, all projects are to publish a risk matrix and the risk matrix should support any established risk reserves. Only projects with a total cost of \$10 million may set up risk reserves. A copy of WSDOT's policy is attached as well as a page from the risk matrix of the I-5 Tacoma HOV project provided for illustrative purposes.

When determining mobilization for a project, consideration should be given to location, complexity, the need for specialized equipment, the type of work, and the working season if it extends over more than one construction season. Projects that would probably require a higher mobilization percentage include rural vs. urban; projects with multiple work sites; projects with numerous preparatory removal items; projects with large quantities of excavation; or projects extending over two seasons where the contractor would be expected to shut down operations and move out.

(2) Engineering and Contingency Percentages

“Contingency percentages” are set up to handle unforeseen changes in a project during construction, including additional work, quantity over-runs, and additional items. Contingencies are currently limited to 4% of the total contract amount for all WSDOT contracts. For local agency projects administered by WSDOT off the state highway system, no contingency percentage will be set up.

“Engineering percentages” are the monies set up in each contract for WSDOT’s operating costs to administer that project. These percentages will vary by type of work and total dollar amount of the contract. On average, the department has been running around 15% engineering on all projects in the Improvement and Preservation programs. Therefore, when starting an estimate for a project, enter 15% as a beginning point for construction engineering and adjust it up or down before final PS&E submittal. To choose the appropriate engineering percentage, see the engineering tables in the [EBASE manual](#).

The Region Program Development/Management staff can, based on appropriate justification, approve any changes in the construction engineering percentages for a project different from the rates listed.

Copies of the approved justification letter shall be submitted with the final PS&E submittal for advertisement.

**Projects with Risk Funding
as of July 31, 2016**

BIN	Project Title	SR	SubPgm	Total
053255C	SR 532/Camano Island to I-5 Corridor Improvements (TPA)	532	I2	4,245,941
140504C	I-405/SR 167 Interchange - Direct Connector	405	I1	13,816,000
152234E	SR 522/Snohomish River Bridge to US 2 - Add Lanes	522	I1	1,309,228
300504A	I-5/Tacoma HOV Improvements (Nickel/TPA)	005	I1	26,490,000
420511A	I-205/Mill Plain Interchange to NE 18th St - Build Interchange - Stage 2	205	I1	1,820,000
509009B	I-90/Snoqualmie Pass East - Hyak to Keechelus Dam - Corridor Improvement	090	I3	27,253,233
800502K	I-5/SR 161/SR 18 - Interchange Improvements	005	I1	966,445
809936Z	SR 99/Alaskan Way Viaduct - Replacement	099	I1	3,177,717
8BI1002	I-405/Kirkland Vicinity Stage 2 - Widening (Nickel/TPA)	405	I1	40,844,031
8BI1003	SR 520/ Bridge Replacement and HOV (Nickel/TPA)	520	I1	78,756,173
900005M	Fauntleroy Tml Preservation	160	W1	15,248,000
900006S	Vashon Tml Preservation	160	W1	627,883
900010L	Seattle Tml Preservation	519	W1	13,500,000
900012K	Port Townsend Tml Preservation	020	W1	440,000
902020C	Anacortes Tml Preservation	020	W1	980,000
930513G	Bainbridge Island Tml Preservation	305	W1	500,000
952515P	Mukilteo Tml Improvement	525	W1	5,716,755
952516S	Clinton Tml Improvement	525	W1	5,900,000
M00900R	I-405 Renton to Lynnwood - Corridor Widening	405	I1	17,200,000
List Total				258,791,406



Signature on file

Linea Laird, Chief Engineer
Assistant Secretary of Engineering
and Regional Operations

February 23, 2012

Date
Expires: May 31, 2015
Extended on February 18, 2015

Use of Risk-Based Project Estimates for Budgeting and Project Management

I. Introduction

The Secretary of Transportation directs project management requirements in the following Secretary's Executive Orders:

- [E 1032.01 Project Management](#)
- [E 1042.00 Project Management and Reporting System \(PMRS\)](#)
- [E 1053.01 Project Risk Management and Risk Based Estimating](#)

A. Purpose

The purpose of this Instructional Letter is to provide Washington State Department of Transportation (WSDOT) project management staff with information necessary for the use of risk-based estimating on projects over \$10 million, and to require that all projects regardless of cost shall have a risk matrix to support any established risk reserves. This Instructional Letter covers inflation rates, market conditions, percentile selection, estimate updates, and establishment and use of risk reserves. It also identifies data requirements for documenting this information in the Capital Program Management System (CPMS).

For projects over \$10 million, this Instructional Letter directs project management staff to:

- Achieve project costs that are as close as possible to the base cost estimate.
- Manage to the base cost estimate.
- Establish a separate risk reserve to pay for risks realized during the course of project delivery.

For projects less than \$10 million, generally, separate risk reserves will not be established and will require approval by Headquarters (HQ) Capital Program Development and Management (CPDM) staff.

All projects, regardless of size, should have a published Risk Matrix regardless of project total cost and the Risk Matrix should support any established risk reserves.

B. Supersession

This Instructional Letter supersedes and replaces IL 4071.01 *Risk-Based Project Estimates for Inflation Rates, Market Conditions, and Percentile Selection* dated May 7, 2010. All references to the superseded IL 4071.01 now reference IL 4071.02 *Use of Risk-Based Project Estimates for Budgeting and Project Management*.

C. What Has Changed

Minor grammatical and definition changes have been made. The following table indicates major changes from the previous Instructional Letter:

Description	IL 4071.01 Version Dated May 7, 2010	IL 4071.02 This Version
Title	<i>Risk-Based Project Estimates for Inflation Rates, Market Conditions, and Percentile Selection</i>	<i>Use of Risk-Based Project Estimates for Budgeting and Project Management</i>
Funds for risk reserves	Silent	Requires CPDM approval for use of federal funds to establish risk reserves
Estimate format	Silent	Requires use of standard format for estimates

II. Rules and Procedures

This Instructional Letter establishes the following rules and procedures.

A. Use and Reporting of Risk-Based Estimating Results

1. Establish base cost estimate (cost to design and build today, if project development proceeds through preliminary engineering (PE), right-of-way (RW), and construction (CN) phases as planned and no significant risks materialize).

Early in the project development process for projects estimated to cost \$10 million or more, a Cost Estimate Validation Process (CEVP), Cost Risk Assessment (CRA) workshop, or a self-modeling process (depending on project size), is planned and conducted to provide the project manager with a validated base cost estimate that will be used as a baseline to measure delivery performance.

The cost lead, risk lead, subject matter experts, and project team review the estimate. Based on experience, bid tab data, and recent projects in the area, unit costs and quantities may be revised. This reviewed and validated estimate becomes the base cost estimate for the risk-based estimating process and for the project.

2. Establish the 60th percentile cost estimate.

For WSDOT projects over \$10 million, the estimate should always be expressed as a range determined through risk-based estimating. The low end of the range is the base cost estimate; the high end of the range is the 60th percentile cost from the risk based estimate.

3. Establish a risk reserve, which is the difference between the base cost estimate and the 60th percentile estimate. Use of federal funds for risk reserves is discouraged and will require HQ CPDM approval.

4. Evaluate the estimate every six months or sooner if any of the following occur:
 - New information is gathered or processed (quantity change or new items).
 - Major design levels are completed (for example at 30 percent, 60 percent, 90 percent design).
 - Volatile price fluctuations occur.
 - Highest cost items change.
 - To comply with updated versions of the *Cost Estimating Manual for WSDOT Projects M 3034*.
5. If warranted, update the estimate. The level of effort for estimate updates is scalable and should be appropriate for the amount of change.
6. Assess possibilities for mitigation of risk, and develop an estimate for the project that reflects the mitigated results and include it with the project mitigation plan.
7. Enter uninflated base cost estimates (initial and updated estimates) and the uninflated risk reserve estimate in CPMS. CPMS will inflate as appropriate, using currently authorized rates. (If you wish to calculate a year of expenditure estimate in your estimating process, use the CPMS authorized rates, but enter only your uninflated estimate in CPMS.).

The risk reserve may be entered either by project phase or as a single number in the construction phase, either aged across the phase(s) or aged in the 25th month for later re-aging. Project reports and agency budget requests will use the 60th percentile estimate, inflated by CPMS to year of construction.

If at any time during the life of the project the 60th percentile represents a change from the previously approved budget or the last estimate approved by the department, the new estimate will be subject to the normal change management process through Regional and HQ Program Management. If the change is approved, it will then be sent to the legislature as a budget request by HQ. Any changes to the base cost estimate or the risk reserve will be documented in CPMS.

8. Manage to the base cost estimate.

Project managers are responsible for managing their projects to the base cost estimate, inflated by CPMS. The risk reserve will be held in reserve for use if risks materialize. All changes in the base cost estimate assumptions shall be documented in the Basis of Estimate.

9. Use and adjust the risk reserve, if needed. Established risk reserves and associated Risk Matrices should be reviewed at least quarterly by the project manager and region program manager and adjusted as risks are realized or mitigated.

If risks materialize, the project manager submits a request to Region Program Management for funds to be transferred from the risk reserve to the authorized project funding. If the risk reserve nears depletion or is depleted, despite active risk management on the part of the project team, the 60th percentile estimate should be reviewed and, if necessary, the risk reserve and estimate should be updated.

If identified risks do not materialize, the region program manager should release associated risk reserves for use on other projects within the state. A thorough review of risks still outstanding should be conducted at the time of contract award, so that any available funds can be released.

B. Project File Documentation

Documentation needed to support the estimate shall include:

1. Basis of estimate (assumptions):
www.wsdot.wa.gov/projects/projectmgmt/riskassessment/information.htm
2. Current base cost estimate for the project, using the estimating template at
www.wsdot.wa.gov/projects/projectmgmt/riskassessment/information.htm.
3. A description of each significant risk, including threats and opportunities, which have been identified. Include the potential impacts to the project cost and schedule.
4. A plan for managing and/or mitigating each of the significant risks that have been identified, as determined through an updated risk-based estimate model output.

C. Inflation and Market Conditions

1. Inflation rates.

The inflation rates for CN, RW, and PE used in risk-based estimating to inflate current year dollars (CY\$) to the year of expenditure dollars (YOES) must be the current (at time of the risk-based estimating) CPMS inflation rate tables for RW or PE, and the Construction Cost Index (CCI) table at:

www.wsdot.wa.gov/ppsc/pgmmgt/cpms/tables.asp

2. Market conditions.

Market conditions are the consequence of supply and demand factors which determine prices and quantities in a market economy and which are separate from inflation. Market conditions include things like: competitive environment during bidding and contracting; the labor market; resource availability; etc.

Market conditions for a project may be influenced by several factors. The following factors must be documented and mitigation strategies proposed when preparing cost estimates if the project team determines that special market conditions are applicable to their project.

- a. Bidding environment and other construction market conditions.
 - (1) Bidding environment refers to how the number of potential bidders for a project might impact the estimate for construction. The project team must document whether the project might be subject to a “non-competitive” bidding environment and develop mitigation strategies for this risk. Conversely, any potential of a favorable (highly competitive) bidding environment must also be captured.
 - (2) Other market condition risks for construction are to be captured through the risk elicitation process. A well-documented explanation must be provided that describes why the project is subject to additional market condition risks. Potential response strategies to these risks must be provided.

b. Right-of-way market condition risks.

Right-of-way market condition risks must be obtained from subject matter experts. The project team must document information that affects the project including right of way, zoning, speculation, and other market condition risks that may be obtained from a variety of sources such as real estate services or planning. Comparable recent real estate transactions must be a primary source of RW cost data.

c. Preliminary engineering market condition risks.

Preliminary engineering market condition risks must be identified and documented. Sources for characterization of the risk must be clearly stated in the documentation describing why this project is at risk (e.g., availability of skilled labor or specialty professional services).

D. CPMS Data Requirements

Project teams must provide specific data to the Region Program Management Office for inclusion into CPMS, both at the time of original budget request and at the time that estimates are changed. The required data includes:

1. Project schedule that is current, has been regularly reviewed, and includes the following milestone dates:
 - Project summary completion.
 - Begin preliminary engineering.
 - Environmental document complete.
 - Right-of-way certification.
 - Project advertisement.
 - Operationally complete.

Schedule risk activity (similar to a buffer in critical chain), if appropriate and if significant schedule risk is identified (i.e. time critical work that is subject to limited work windows, such as weather or fish windows a schedule risk activity can be included in the scheduled so that it can be tracked and managed).

2. Estimated cost in CY\$ for each Project Item Number (PIN) and for each funding source (state, local, private). CPMS will inflate.
 - Project base estimates for:
 - Design cost.
 - Right-of-way cost.
 - Construction cost.
 - Project risk reserve.
3. Current estimate and Basis of Estimate form. See Attachment D, and the template at: www.wsdot.wa.gov/projects/projectmgmt/riskassessment/information.htm

E. Exceptions

Exceptions to the use of the 60th percentile requirement in this Instructional Letter must use one of the following approval processes. See also Attachment A.

1. Projects with an executive oversight committee (EOC).
 - a. The project manager presents the results of the CEVP to the EOC along with a recommendation, including supporting information on the percentile level requested to be included in management plans and budget.
 - b. If the EOC approves, regional executive management will request in writing and obtain written approval from the Assistant Secretary of Engineering and Regional Operations.
 - c. Project manager provides a copy of the written approval to Region Program Management and HQ CPDM.
2. Projects without an EOC:
 - a. The project manager presents the results of the CEVP or CRA to regional executive management and provides supporting information on the percentile level requested to be included in management plans and budgets.
 - b. Regional executive management will request in writing and obtain written approval from the Assistant Secretary, Engineering and Regional Operations.
 - c. Project manager provides a copy of the written approval to Region Program Management and HQ CPDM.

III. Contact Information

For information regarding this IL, please contact the HQ CPDM Office at 360-705-7130 or the Strategic Analysis and Estimating Office at 360-705-7452 or visit the Web page:

www.wsdot.wa.gov/projects/projectmgmt/riskassessment

IV. References and Resources

- Secretary's Executive Order E 1032 *Project Management*
wwwi.wsdot.wa.gov/publications/policies/fulltext/1032.pdf
- Secretary's Executive Order E 1042 *Project Management and Reporting System (PMRS)*
wwwi.wsdot.wa.gov/publications/policies/fulltext/1042.pdf
- Secretary's Executive Order E 1053 *Project Risk Management and Risk Based Estimating*
wwwi.wsdot.wa.gov/publications/policies/fulltext/1053.pdf
- *Cost Estimating Manual for WSDOT Projects M 3034*
www.wsdot.wa.gov/publications/manuals/m3034.htm
- *Plans Preparation Manual M 22-31*
www.wsdot.wa.gov/publications/manuals/m22-31.htm
- Basis of Estimate
www.wsdot.wa.gov/projects/projectmgmt/riskassessment/information.htm
- CPMS Inflation Rate Tables
wwwi.wsdot.wa.gov/ppsc/pgmmgt/cpms/tables.asp

- Glossary of Cost Risk Estimating
www.wsdot.wa.gov/publications/fulltext/cevp/glossary.pdf
- Guidelines for CRA CEVP Workshops
www.wsdot.wa.gov/projects/projectmgmt/riskassessment/
- Project Management Online Guide
www.wsdot.wa.gov/projects/projectmgmt/pmog.htm
- Project Risk Management Guidance for WSDOT Projects
<http://www.wsdot.wa.gov/publications/fulltext/cevp/projectriskmanagement.pdf>
- Training: Introduction to Cost Estimating Course Code CZV
- Training: Risk-Based Transportation Cost and Schedule Estimate Evaluations Course Code CZ2

V. Attachments

A. Approval Process for Using a Different Percentile

B. Statement on Inflation Rates

C. How to Implement This Instructional Letter

D. Basis of Estimate

VI. Executive Review and Update Requirements

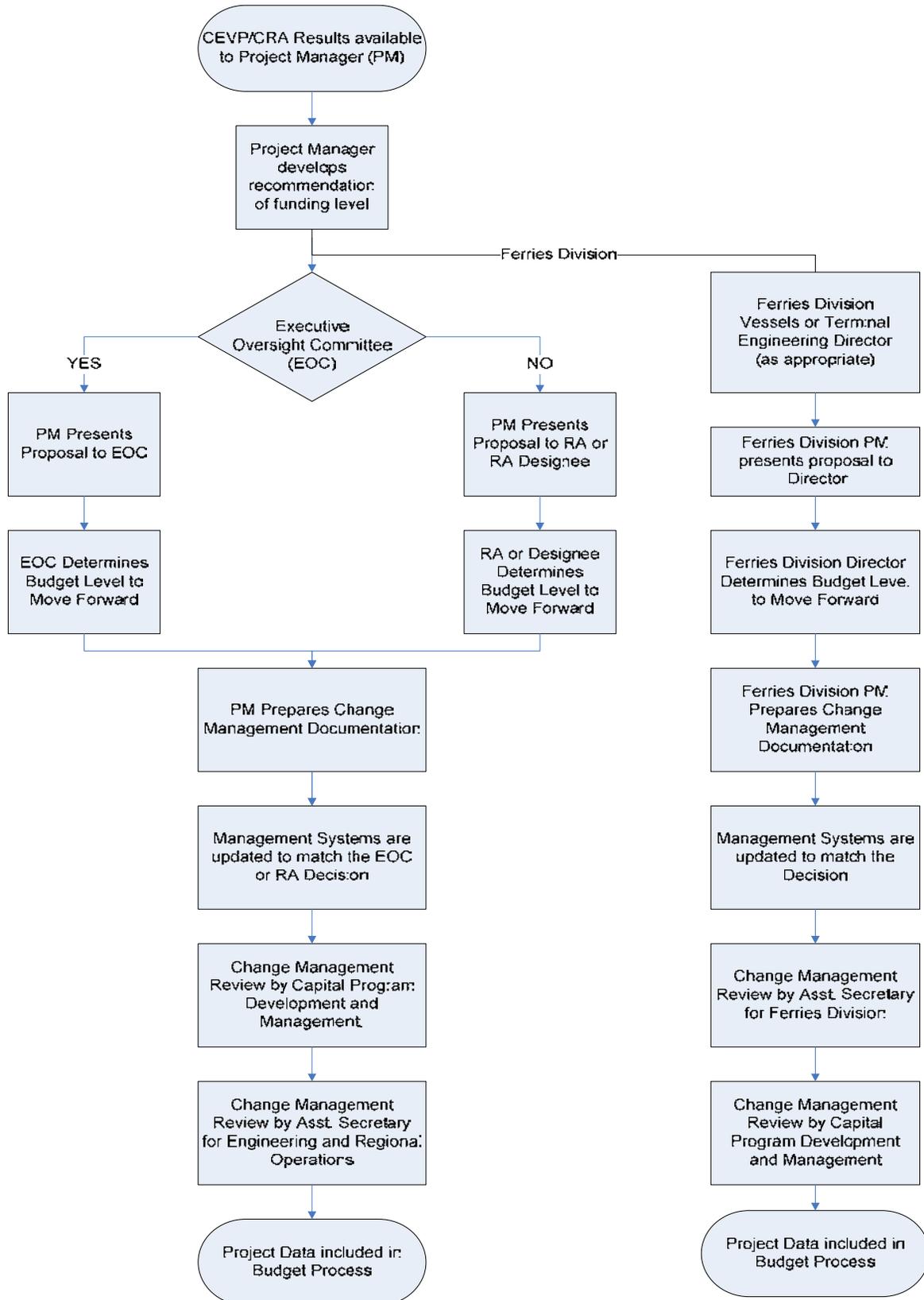
All executives are responsible for informing the Assistant Secretary, Engineering and Regional Operations, of changes needed for the maintenance of this document.

The Assistant Secretary, Engineering and Regional Operations, is responsible for periodic review and updates to this document.

Americans with Disabilities Act (ADA) Information

Materials can be provided in alternative formats: large print, Braille, cassette tape, or on computer disk for people with disabilities by calling the Office of Equal Opportunity (OEO) at 360-705-7097. Persons who are deaf or hard of hearing may contact OEO through the Washington Relay Service at 7-1-1.

Attachment A: Approval Process for Using a Different Percentile



Attachment B: Statement on Inflation Rates¹

WSDOT requires the use of CPMS inflation tables posted at the time of the estimating process, for any calculations of YOES\$. The projections in the inflation tables are provided by experts in PE, RW, and construction. When the recommendations of these experts change, their recommendations are reviewed by WSDOT management, and if appropriate, the tables in CPMS are changed.

The Region Program Management Office enters project estimates in CY\$ into CPMS, which then inflates project estimates to YOES\$. Model forecasts prepared following CRA and CEVP workshops will also use the CPMS inflation tables. It is important that the most current CPMS tables are used and the date of these tables well documented in the CRA or CEVP report.

It is not allowed for project estimators or the participants at CRA and CEVP workshops to unilaterally establish inflation forecasts. Therefore, the discussion of inflation and uncertainty is not an effective use of time at CRA and CEVP workshops. The responsibility for inflation rates rests with the HQ CPDM. The rates to be used are those posted in CPMS at the time of the estimate:

- WSDOT CPMS Inflation Rate Tables
wwwi.wsdot.wa.gov/ppsc/pgmmgt/cpms/tables.asp

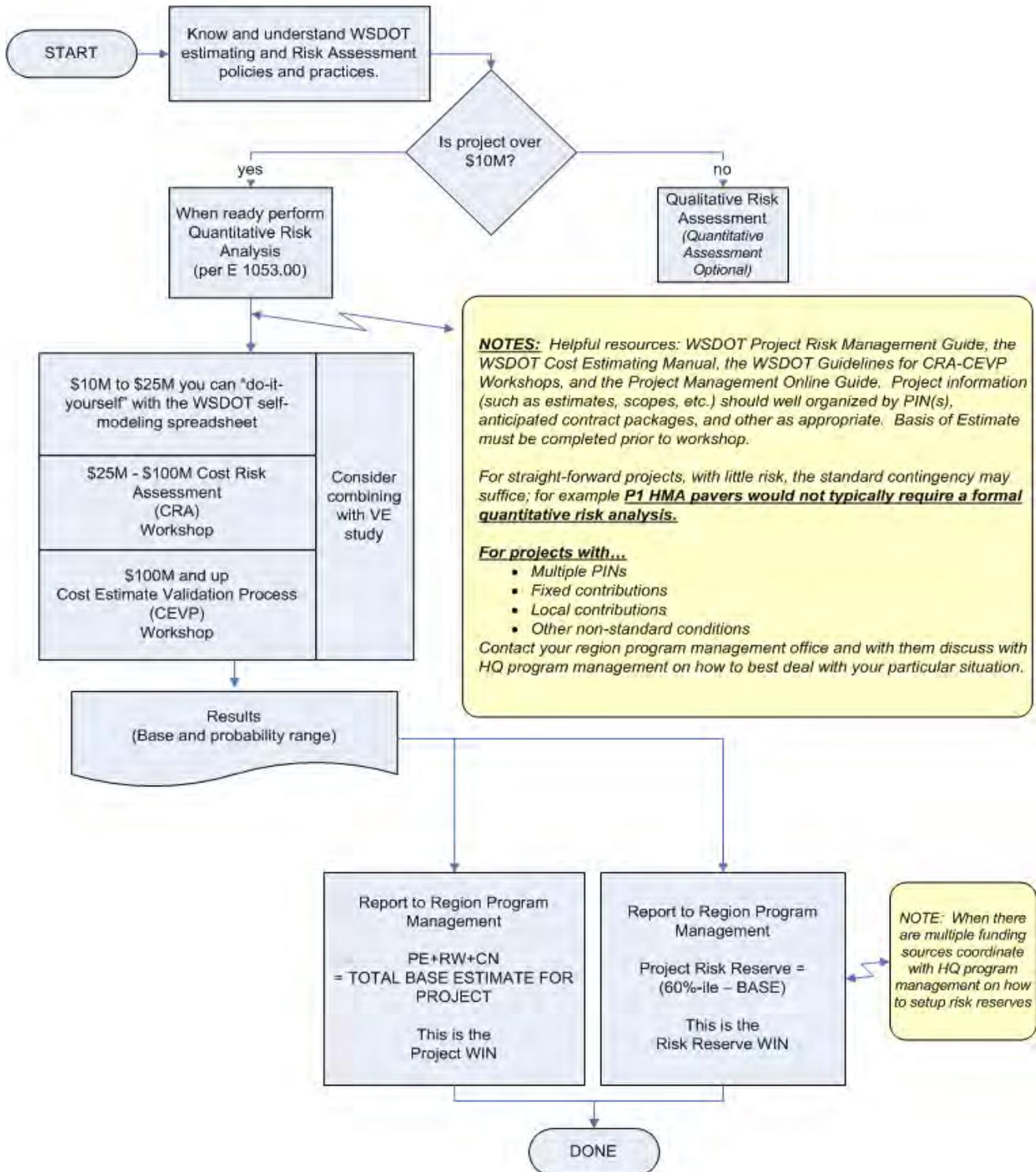
To use the CPMS inflation rate tables to convert the CY\$ estimate to YOES\$ estimate:

1. Find the CCI factor for the month and year of the CY\$.
2. For PE and RW phases, find the appropriate index factor for the month and year that is the mid-point between the WIN phase start date and the WIN phase end date. For the CN phase, find the mid-point between the award date and the operationally complete date.
3. Divide the factor for the mid-point by the CY\$ factor.
4. Multiply the result by the CY\$ estimate. The result is the inflated YOES\$ estimate.

Liberal use of market condition risks creating a “range” of inflation rates is not allowed. Workshops need not discuss inflation rates and should focus on areas of respective expertise for the project.

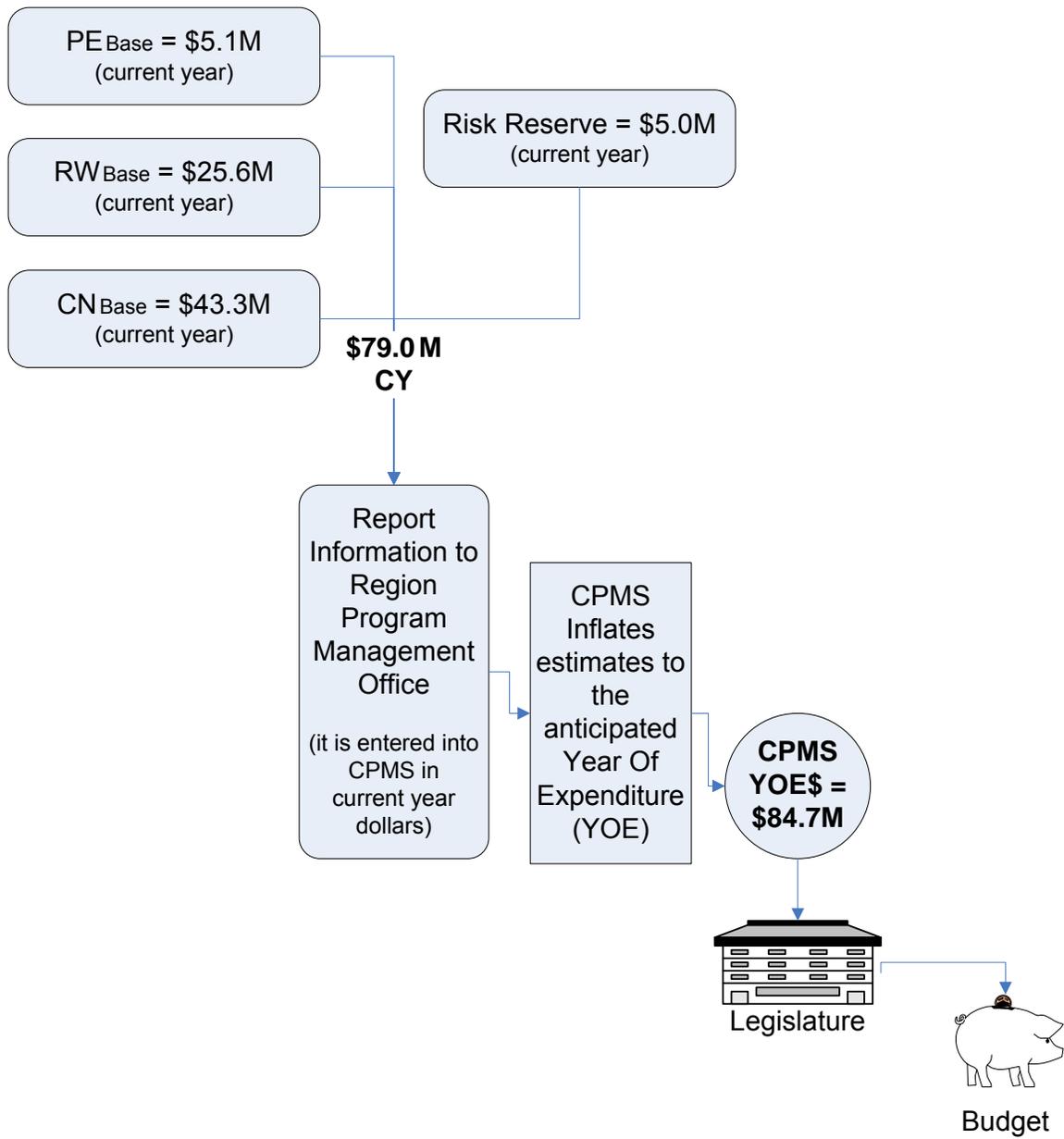
¹CPMS inflation tables do not currently apply to Ferries Division vessel engineering projects.

Attachment C: How to Implement This Instructional Letter



The table below illustrates typical output from a risk-based estimate model and how to use the results.

Example of typical output for risk-based estimate.			Notes:	
Project Estimate (opinion of cost at this time)	Estimated Project Cost (Current Year/CY) YYYY \$M	Total Project Cost Year-Of- Expenditure \$M	Use of risk based estimating results.	
Base Cost Est.	74.0	80.0	Reviewed/validated base estimate Base = 'if project goes as planned'	
Mean	77.4	83.0	Risk reserve = 60%-ile – Base = \$79.0 M – \$74.0 M = \$5.0 M Report estimates as follows: PEBASE = \$5.1 M RWBASE = \$25.6 M CNBASE = \$43.3 M ===== Estimate Project BASE = \$74.0 M Risk Reserve WIN = \$ 5.0 M ===== Total available for project = \$79.0 M	
Std Dev	6.5	7.2		
Percentiles				
1%	62.3	66.2		
5%	67.3	71.7		
10%	69.2	73.8		
20%	72.0	76.9		
25%	73.1	78.2		
30%	74.0	79.2		
40%	75.7	81.1		
50%	77.3	82.9		
60%	79.0	84.7		Figure submitted for budgeting
70%	80.6	86.6		
75%	81.7	87.8		



Setting Up Risk Reserves in CPMS

- Overview: The objective of identifying a risk reserve in CPMS is to more fully integrate risk-based estimating with normal business practices at WSDOT. CPMS is the official repository for project cost estimates. It is used for expenditure planning, bond sale sizing, and budget and program building. It is important for the department to understand how much project risk is addressed in our program estimates. This can be done by differentiating between the base estimate and risk reserve in CPMS, for those projects with risk reserves. This is particularly important for high visibility projects with line-item appropriations in the legislatively approved transportation budget. These projects need to be “self-insured” against risk from a budget standpoint. However, it should be noted that estimate details (base estimate dollars and risk estimate dollars) are not reported externally in the Gray Notebook or in budgetary documents.
- Base and risk estimates are first established by use of a risk-based estimating process. The results of a CRA or CEVP workshop or of a self-modeling process need to be sufficiently detailed to feed CPMS requirements. The results must provide the base cost estimates by phase, by PIN, and by WSDOT/Local Agency contribution. The total percentile estimates also need to be broken down by PIN and funding agency when more than one exists.
- For line-item projects, reserves are set up on a Work Item Number (WIN) in CPMS under the budgeted PINs. A project which employs risk-based estimating will now have a minimum of two WINs associated with it: One WIN containing the project’s base cost estimate, (the cost that can reasonably be expected if no significant risks materialize), and the other WIN containing the risk reserve estimate.
- A “project” as assigned to a project manager may occasionally have more than one PIN associated with it. The Regional Program Manager will establish one risk reserve WIN for each PIN needing a reserve. The project manager will be responsible for managing the risk register for his project and for providing the Regional Program Manager with guidance for proper sizing and maintenance of each risk reserve for each PIN.
- Each risk reserve WIN may be subdivided into three phases: PE, RW, and CN. At least one phase must be designated. The simplified default phase for a risk reserve is CN. The project manager and Regional Program Manager will decide if it is desirable to establish more than one phase in a risk WIN (e.g., if a relatively large RW risk exists, it may not be appropriate to put all the risk in the CN phase especially if RW and CN phases occur in different biennia).
- Typically, the fund types budgeted for the project or authorized for the current phase will be the same as those used in the risk reserve. These may include “local” funds if a local agency is participating in the project. However, the use of pre-existing funds (PEF) or federal funds for risk reserves is discouraged and requires HQ CPDM approval. Please contact Funds Management in HQ CPDM when in doubt.

Aging a Risk Reserve in CPMS

- For simplicity and ease of data maintenance in CPMS, most risk reserves may be aged in the 25th month of the biennium in which they will most likely be spent. This aging approach is very appropriate when the project manager believes that active risk management may preclude the need to expend risk funds.

- CPMS has the flexibility to age risk reserves in the months in which they are most likely to be spent. For any individual risk, if the project manager believes it will most likely materialize in a specific month(s), risk funds should be aged accordingly. The balance of the risk reserve may be left in the appropriate 25th month.
- At least six months before the end of the biennium, the reserve balance in the 25th month should be evaluated by the project manager and reduced or re-aged as appropriate into the next biennium by the Regional Program Manager.

Managing the Base Cost and Risk Reserve Estimates

- After a risk-based estimate is created, the base cost estimate will be reviewed (and updated if necessary) by the project manager at least every six months. Insignificant changes to the base cost estimate WIN can be implemented without regard to the risk reserve WIN.
- Significant changes to the base cost estimate WIN may require adjustment of the risk reserve WIN. A significant increase to the base may be accommodated by a corresponding decrease to the risk reserve WIN.
- When transferring funds from the risk reserve to the base WIN, consideration should be given to the reason the base is increasing. If the increase is due to an identified risk, the transfer of funds is appropriate and the total project cost (60th percentile) is unchanged.
- If a significant increase in the base estimate was caused by an unanticipated occurrence not identified in the risk reserve, consider seeking a budget increase. This might be the decision if the magnitude of the unanticipated increase is large in comparison to the size of the risk reserve.
- The cumulative effect of numerous small increases (or decreases) to the base cost estimate may require adjustment of the risk reserve. It may be appropriate to reevaluate the size of the risk reserve if the reserve is being depleted but significant time and risk issues remain on the project. Consider updating the risk-based estimate model.

Accessing Risk Reserve Funds

- The base cost estimate and the risk reserve estimate may be updated by the project manager at any time. The region program manager will reflect those changes in CPMS in a timely manner. Most changes will likely involve the transfer of estimated dollars from the reserve WIN to the base estimate WIN. HQ CPDM should be notified of significant changes by the region program manager. HQ CPDM will perform a quarterly review of risk reserves with the region program manager.
- Transfers from the reserve WIN will require authorization to spend the transferred dollars. Additional PE funds may be needed to complete PS&E, additional RW funds may be needed for a pending real estate purchase, or additional CN funds may be needed due to executed change orders. In these cases, a Work Order must be processed to authorize the funds for expenditure. The Work Order justification should mention the reason for the increase and the amount that is being transferred from the risk reserve.

Attachment D: Basis of Estimate (Assumptions)

The Basis of Estimate is required documentation for all project cost estimates from planning through PS&E. The Basis of Estimate provides a clear history of project assumptions as the project passes from one group to another, or as team members change. The project estimate file including the Basis of Estimate should follow the project through the various stages so that each new estimate can be easily tied to the previous one.

A well-documented Basis of Estimate used in the development of a project estimate can eliminate overlap of future estimate assumptions and provide a document trail regarding what is known about the project. This allows project “knowns” and “unknowns” to be clearly identified. This document enables the agency to easily track changes to project scope, cost, and schedule.

The Basis of Estimate form is available at:

www.wsdot.wa.gov/projects/projectmgmt/riskassessment/information.htm

Facilities Maintenance Backlog Reduction Plan

Maintenance Backlog Reduction Plan for Facilities

Section 3.1 of the 2015-25 Capital Budget Instructions requires agencies to meet the requirements of RCW 43.88.030 and include in their capital budget “a prioritized list of specific facility deficiencies and capital projects to address the deficiencies for each agency, cost estimates for each project, a schedule for completing projects over a reasonable period of time, and identification of normal maintenance activities to reduce future backlogs.”

The instructions also say the plan must include the following:

- 1) Prioritized list of specific facility deficiencies and capital projects to address the deficiencies.
- 2) Cost estimates for each project.
- 3) Schedule for completing projects over a reasonable period of time.
- 4) Identification of normal maintenance activities to reduce future backlogs.
- 5) Identification of operating budget resources available to complete all the identified activities.

Items 1, 2, and 3 in the above list are presented in Table 1 below.

The table presents a 20-year plan to reduce the current priority backlog of Major Facility Replacements and Minor Improvement & Preservation needs. The plan factors in 3 additional FTE's needed to complete the work. This plan reduces, but does not eliminate, the existing backlog.

In addition, the Gray Notebook for March 2016 contains an annual report on capital facilities and is available on the WSDOT website at:

<http://wsdot.wa.gov/publications/fulltext/graynotebook/Mar16.pdf>

Items 4 and 5 of the required content for the maintenance backlog plan for facilities are presented below.

Identification of normal maintenance activities to reduce future backlogs

Normal maintenance activities fall into two major categories: preventive maintenance and corrective maintenance.

Preventive Maintenance (PM) is any code compliance, preplanned, or regularly scheduled maintenance work necessary to prevent equipment breakdown and maintain proper facilities and equipment operations. Inspection, calibration, adjustment, cleaning, lubrication, and parts replacement are components of PM work. The most important part of preventive maintenance is that it is *planned* work. Equipment and systems are inspected, and worn out items are replaced *before* the system fails.

PM activities are sorted into nine categories, prioritized in descending order, with Life Safety (category 10) having the most importance. Failure to complete Life Safety or Code Compliance (category 9) activities would jeopardize employee health or safety. Categories 8, 7 and 6 ensure operation of critical systems and are completed as budget allows. Categories 5 and below are not funded within the current budget. Please refer to Gray Notebook 51, beginning on page 3, for more information.

Corrective Maintenance (CM): Aging facilities assets and limited funding in the Capital Facilities Construction Program put added pressure on the CM budget. Currently 66 percent of occupied buildings are 25 years or older and require a significant amount of maintenance and repair. Corrective Maintenance is *unplanned*, but generally must be performed once the problem emerges.

Identification of operating budget resources available to complete all the identified activities

WSDOT owns 2.6 million square feet of facilities, of which 2.3 million square feet have substantial preservation deficiencies. Many facilities are severely neglected and in an accelerated state of decay, leading to safety and building code compliance issues. Currently, there is a total backlog of \$473 million in repair and replacement needs. Of this amount, \$229 million has been identified as the highest-priority projects that need to be addressed in the next 20 years to ensure that buildings remain safe and functional to support the delivery of department programs and projects.

As of the 2016 legislative session, the 2015-17 transportation budget provides \$4.2 million in capital funds to replace systems that are beyond their useful life, and in the operating budget. \$4.6 million is budgeted for preventive maintenance and \$5.5 million is budgeted for corrective maintenance. This budget does not fund all the activities identified and recommended and is not adequate considering the age of the buildings. The majority of the department's buildings are beyond their useful life and normal maintenance activities will not reduce future maintenance backlogs. The department routinely defers preventative maintenance in order to perform corrective maintenance to deal with roof, heating, cooling, electrical, and plumbing system failures that are occurring with increased frequency.

CWA Project Interpretation

			WSDOT Project Interpretation Note
Reg. BIN	Project Title	Project Description	
Headquarters			
L1100066	Fish Culverts	Funding is provided to add habitat for fish.	Programmatic Investment - funding is provided to complete as much work as possible within the amount provided.
L1100071	Highway System Preservation	Funding is provided for roadway system preservation.	Programmatic Investment - funding is provided to complete as much work as possible within the amount provided.
Northwest			
L2000118	SR 539/Guide Meridian	TBD	This project will make intersection improvements and widen SR 539 where needed to a 4/5 lane highway between Birch Bay-Lynden Rd and the International Boundary.
L2000229	I-5 Peak Hour Use Lanes and Interchange Improvements	Funding is provided for northbound hard shoulder running from Marine View Drive to SR 528 during peak congestion, installs ITS and ramp meters in the corridor, and completes the current half interchange by constructing a new I-5 NB off ramp onto SR 529 and new SB on ramps from SR 529 to I-5.	No additional clarification needed or assumption made.
L1000098	SR 520/124th St Interchange	Interchange improvements	The funding is provided to begin preliminary engineering and right-of-way. The cost to complete the project will be identified by the Legislature at a later date.
L1000099	I-5/Slater Road Interchange - Improvements	Interchange Improvements	No additional clarification needed or assumption made.
L1000110	I-405/NE 132nd Interchange - Totem Lake	This project will construct half-diamond interchange ramps at NE 132nd Street.	No additional clarification needed or assumption made.
L1000112	SR 20/Sharpes Corner Vicinity Intersection	This project will reduce the risk of collisions and provide relief at the Sharpes Corner and Fidalgo Bay Road intersections. Multiple options will be considered.	The project scope includes addressing the Miller-Gibraltar Road intersection.
L1000113	I-90/SR 18 Interchange Improvements	The I-90/SR 18 interchange experiences severe congestion during peak traffic periods at the existing ramp terminal locations. This project constructs improvements to the ramp and SR 18 including a westbound I-90 to westbound SR 18 flyover ramp and widening on SR 18 to Deep Creek.	No additional clarification needed or assumption made.
L1000114	SR 531 Expansion Project	Highway Projects	SR 531 will be widened between 43rd Ave NE and 67th Ave NE.
L1000120	SR 18 Eastbound Off-Ramp	Constructs an eastbound SR 18 off-ramp with connection to SR 164.	It is currently unclear if the funding provided is sufficient to construct the project.
L1100101	SR 520/148th Ave NE Overlake Access Ramp	Improve eastbound off-ramp operations and safety by constructing a grade separated through movement at this interchange ramp terminal for the eastbound off-ramp.	No additional clarification needed or assumption made.
L2000119	I-5/Northbound on-ramp at Bakerview	The over crossing at I-5 and Bakerview Rd. experiences significant congestion. This project will construct a northbound on-ramp on the east side of I-5 to address congestion, enhance regional multimodal transportation circulation and support economic development in northwestern Bellingham.	No additional clarification needed or assumption made.
L2000124	I-90/Front Street IJR	Intersection justification report	No additional clarification needed or assumption made.

			WSDOT Project Interpretation
Reg. BIN	Project Title	Project Description	Note
L2000139	I-5/156th NE Interchange in Marysville	The project would convert the 156th St. NE Overcrossing (recently completed) to a full Single Point Urban Interchange. Removes stress at BNSF at-grade crossings (88th St NE, 116th St NE. Improves access to North Marysville, Quil Ceda Village, and Smokey Point employment centers.	No additional clarification needed or assumption made.
L2000160	I-5/Ship Canal Noise Wall	This project constructs noise walls to reduce noise associated with I-5 in the Eastlake neighborhood of Seattle.	No additional clarification needed or assumption made.
L2000169	SR 20/Oak Harbor to Swantown Roundabout	Builds a roundabout to reduce the cost of maintenance and the severity of collisions.	No additional clarification needed or assumption made.
L2000201	I-90/Eastside Restripe Shoulders	Restripe the roadway to allow for EB and WB shoulder use during peak periods between Eastgate and West Lake Sammamish Parkway.	Widens Westbound between Eastgate and SR900 and widens Eastbound between Eastgate and West Lake Sammamish Parkway.
M00900R	I-405 Renton to Lynnwood - Corridor Widening	Continues widening of the I-405 corridor between Renton and Bellevue; including the implementation of Express Toll Lanes (ETL) and rebuilding impacted interchanges. Also builds the first segment of the I-405/SR 167 interchange master plan by constructing a direct connector on northbound and southbound lanes between SR 167 HOT and I-405 express toll lanes. This project would complete a 40 mile corridor wide express toll facility.	No additional clarification needed or assumption made.
N00200R	US Hwy 2 Safety	This project will provide safety enhancements on US 2 between Snohomish and Skykomish.	No additional clarification needed or assumption made.
N00900R	SR 9/Snohomish River Bridge Replacement	Constructs a second bridge over the Snohomish River to increase capacity and safety in the corridor.	No additional clarification needed or assumption made.
N52600R	SR 526: Hardeson Rd Interchange in Everett	Construct access ramps on SR 526 at Hardeson Road to improve traffic flow on SR 526 and local streets within the SW Everett industrial area. Access will be provided for SR 526 traffic to/from the east. The westbound off ramp will access 80th Street SW instead of Hardeson Road due to the location of the Federal Post Office Facility.	No additional clarification needed or assumption made.
N92040R	SR 9/SR 204 Interchange	Constructs improvements at the SR 9 and SR 204 intersection.	No additional clarification needed or assumption made.
NPARADI	SR 522/Paradise Lake Rd Interchange (Design/Engineering)	Provides design funding for the construction of a new interchange at SR 522 and Paradise Lake Road.	Funding is for preliminary engineering only.
T20400R	I-5 Federal Way - Triangle Vicinity Improvements	Constructs the next stage of the project to add SB CD lanes to improve congestion and safety.	The funding provided appears sufficient to complete the next two stages of the interchange improvements.
T20700SC	I-5/116th Street and 88th Street Interchanges - Improvements	Complete the 116th interchange improvements (including the ramp work) and to provide a contribution to the 88th street interchange project.	Contribution to the local lead to complete the project.
T32800R	SR 518 Des Moines Interchange Improvement	Constructs an eastbound off ramp at the Des Moines Memorial Drive.	No additional clarification needed or assumption made.
North Central			
L2000061	SR 28/SR 285, North Wenatchee Area Improvements	The project will relieve congestion and provide safety enhancements through intersection improvements, access revisions, pedestrian and transit improvements, ITS solutions, and environmental work.	No additional clarification needed or assumption made.

			WSDOT Project Interpretation
Reg. BIN	Project Title	Project Description	Note
L2000203	SR 155/Omak Bridge Rehabilitation	Removes existing sidewalks and railings from bridge, adds structural support members and constructs driving lane/shoulder in place of sidewalks. Adds separated bike/pedestrian structure.	No additional clarification needed or assumption made.
L2200092	SR 150/No-See-Um Road Intersection - Realignment	Constructs a 4-leg round-a-bout relocating the existing No-See-Um intersection approximately 530 feet west of its existing location.	No additional clarification needed or assumption made.
T10300R	SR 28 East Wenatchee Corridor Improvements	Widens SR 28 between 9th Street and 23rd Street and improves mobility and safety.	No additional clarification needed or assumption made.
Olympic			
L1100069	I-5/JBLM to S. 38th St HOV Lane Feasibility Study	Funding is provided to study the feasibility of added HOV lanes on I-5 between JBLM and S. 28th St in Tacoma. The study must include a cost estimate.	No additional clarification needed or assumption made.
L1100110	I-5/Marvin Road/SR 510 Interchange	Funding is provided for a Single-Point Urban Interchange (SPUI), with a southbound I-5 slip-ramp to the Hawks Prairie Business District.	Funding provided appears to be insufficient to construct the identified scope without potential scope modifications.
L2000107	SR 162 Study/Design	Study congestion on SR 162 to make recommendations for improvements.	No additional clarification needed or assumption made.
L2000116	SR 107/Chehalis River Bridge (S. Montesano Bridge) Approach and Rail Rep	The timber structure portion of the bridge has deteriorated and needs replacement. Additionally, the bridge railing is outdated and needs replacement also. This project will replace the timber structure which is on the south approach and replace all of the bridge railing.	No additional clarification needed or assumption made.
L2000161	US 101/Lynch Road Intersection Improvements	Makes safety improvements in a congested intersection	No additional clarification needed or assumption made.
L2000175	SR 16/Corridor Congestion Study	Study congestion on SR 16 between SR 3 and the Tacoma Narrows Bridge.	No additional clarification needed or assumption made.
L2000176	SR 3/Restriping	Restripe two southbound lanes of SR 3.	No additional clarification needed or assumption made
M00100R	I-5 JBLM Corridor Improvements	Implements southbound hard shoulder running between the Berkeley and Mounts Rd interchanges, reconstructs the Thorne and Berkeley interchanges, and subsequently adds northbound hard shoulder running.	Funding provided appears to indicate additional assumptions or options beyond what is identified in the legislative scope.
M00600R	SR 167/SR 509 Puget Sound Gateway (OR)	Constructs a new four lane alignment on SR 167 between I-5 in Tacoma and SR 161 in Puyallup; connects SR 509 south from SeaTac to I-5.	Based on funding levels provided, it is assumed that the project will also fund a new connection on SR 167 between SR 509 at the Port of Tacoma and I-5.
N01200R	Schouweiler Road Improvements	Constructs channelization and turn-lanes to improve movement and safety at the intersection.	No additional clarification needed or assumption made
N30500R	SR 305 Construction - Safety Improvements	Constructs safety and mobility improvements on SR 305 from the Bainbridge Ferry Terminal to Hostmark Street.	No additional clarification needed or assumption made.
T30400R	SR 3/Belfair Bypass - New Alignment	A new alignment is needed around the town of Belfair to relieve traffic congestion. This project represents the remaining funding needs for purchasing right-of-way and constructing the bypass. When complete, this project will relieve congestion and improve the flow of traffic.	No additional clarification needed or assumption made.
T32700R	SR 510/Yelm Loop Phase 2	Completes the remaining eastern portion of the bypass.	No additional clarification needed or assumption made.

Southwest

L1000157	SR 14 Access Improvements	Funding is provided for access improvement projects along the SR 14 corridor, to include roundabouts at 15th and 32nd, in the vicinity of Washougal, and for an access options study in the vicinity of 27th.	No additional clarification needed or assumption made.
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			WSDOT Project Interpretation
Reg. BIN	Project Title	Project Description	Note
400411A	SR 4/Abernathy Creek Br - Replace Bridge	Replace the functionally obsolete existing bridge with a new bridge designed to current standards and realign Cameron Creek Road at the west end of the bridge.	No additional clarification needed or assumption made.
L1000111	I-5/179th St Interchange	Highway Projects Constructs interchange area improvements to increase capacity and facilitate local economic development. Includes moving frontage road intersections away from ramp terminals.	No additional clarification needed or assumption made.
L2000064	Ridgefield Rail Overpass	Provides safe, unobstructed, and direct access into Ridgefield waterfront area.	No additional clarification needed or assumption made.
L2000065	SR 502 Main Street Project/Widening	Provides congestion relief at the intersection of SR 502 and SR 503.	No additional clarification needed or assumption made.
L2000074	SR 14/ Wind River Junction	Construct the new intersection between Wind River Road and SR 14.	No additional clarification needed or assumption made.
L2000091	SR 432 Longview Grade Crossing	This project will improve congestion and safety by constructing a grade crossing to separate rail and motor vehicle traffic for economic development.	No additional clarification needed or assumption made.
L2000099	I-5/Mill Plain Boulevard	Reconstruction of the existing interchange to address capacity needs, as well as modifications to the on/off ramps to facilitate the movement of larger commercial vehicle traffic.	No additional clarification needed or assumption made.
L2000102	SR 14/Camas Slough Bridge	Congestion along this section of SR-14 has caused mobility levels below the service objective. This project will improve mobility and safety in the corridor. It will also increase capacity and reduce travel time on SR 14 to accommodate expected residential, commercial and industrial growth.	No additional clarification needed or assumption made.
L2000117	SR 501/I-5 to Port of Vancouver	Oversized freight traffic from the Port of Vancouver Currently, commercial traffic must divert from this section of SR 501 on to local streets due to deficiencies in the roadway geometrics and limited overhead clearances. This project will reconstruct the roadway to remove high points in the roadway and reconstruct traffic signals which prevent movement of large freight vehicles with limited ground clearance. The project also reconstructs traffic signals to increase clearance, adds pedestrian crosswalks, addresses ADA requirements and provides bicycle safety enhancements.	No additional clarification needed or assumption made.
L2000204	I-5/North Lewis County Interchange	Completes a new interchange on I-5. Provides improved access to the Port of Centralia.	No additional clarification needed or assumption made.
L2000205	I-5/Mellen Street Connector	Enhances connectivity to I-5.	No additional clarification needed or assumption made.
L2000223	I-5/Rebuild Chambers Way Interchange Improvements	Rebuilds Chamber Way Interchange (\$40M) and builds auxiliary lanes between Chamber Way and Mellen Street (\$35M).	No additional clarification needed or assumption made.
L2220062	SR 14/Bingen Overpass	A grade-separated rail crossing in Bingen.	No additional clarification needed or assumption made.
South Central			
L2000075	US 12/ Wildcat Bridge Replacement	Replaces bridge.	No additional clarification needed or assumption made.
L2000123	I-82/ EB WB On and Off Ramps	The I-82 South Union Gap interchange is currently a partial interchange with only a westbound off-ramp and an eastbound on-ramp. This project would provide for full access to the south Union Gap area and complete the interchange by constructing a westbound on-ramp and eastbound off-ramp.	No additional clarification needed or assumption made.

			WSDOT
Reg. BIN	Project Title	Project Description	Project Interpretation Note
L2000127	US 395/ Ridgeline Intersection	Constructs a new intersection in Kennewick.	An intersection already exists at this location. It is assumed that the funding is provided to make improvements at the existing location.
L2000128	US 395/Safety Corridor Improvements	Eltopia interchange, Foster Wells interchange , and additional safety enhancements on a critical freight corridor	Eltopia and Foster Wells are both existing intersections - not interchanges. It is assumed that funding is provided to make intersection improvements at these and other locations in the corridor.
L2000174	SR 241/Mabton Bridge	Retrofits two load restricted bridges.	No additional clarification needed or assumption made.
L2000202	SR 240/Richland Corridor Improvements	SR 240 in Richland is experiencing increased congestion at several existing intersections. This project will construct intersection improvements along the SR 240 corridor in Richland to improve the safety and operational efficiency of this route. These improvements will include acceleration and deceleration lanes, new channelization and signal system upgrades. These upgrades are at the intersections of Van Giesen and SR 240, Swift and SR 240, and Duportail and SR 240.	No additional clarification needed or assumption made.
M00500R	I-90 Snoqualmie Pass - Widen to Easton	Completes the widening from the end of the existing funded projects (MP 62) to Easton.	No additional clarification needed or assumption made.
T10400O	I-82 West Richland - Red Mountain Interchange	Constructs a roundabout at the SR 224/SR 225 and I-82 ramp terminals. In addition to the SR 224/SR 224 improvements, this constructs a new interchange to provide improved access to commercial and industrial properties and area vineyards.	No additional clarification needed or assumption made.
T20900R	US-12/Walla Walla Corridor Improvements	Completes the US 12 four lane highway new alignment from Nine Mile Hill to Frenchtown Vicinity (phase 7). Provides design and right of way for the final remaining four lane section, Wallula to Nine Mile Hill (phase 8)	Cost to complete the construction of the project will be identified by the Legislature at a later time.
T21100R	I-82 Yakima - Union Gap Economic Development Improvements	Widen I-82 to six lanes between North First Street and Yakima Avenue and improve connections to the local system.	No additional clarification needed or assumption made.
L2000163	Dolarway Intersection Improvements	At the four way stop of US 97 and Dolarway Road a right turn lane is added to the westbound I-90 offramp, a roundabout is constructed at the US 97 Dolarway intersection, a lane is added to northbound US 97 between the I-90 off ramp and Dolarway Road and accessibility is increased to local businesses.	No additional clarification needed or assumption made.
L2000170	9th Street Plaza Roundabout	9th Street Plaza Roundabout - Walla Walla	No additional clarification needed or assumption made.
Eastern			
L2000122	I-90/Henry Road Interchange	Completes new interchange.	No additional clarification needed or assumption made.
L2000057	SR 26/Dusty to Colfax - Add Climbing Lanes	Add climbing lanes in increasing and decreasing directions.	No additional clarification needed or assumption made.
L2000058	US 195/Colfax to Spangle - Add Passing Lane	Add passing lanes in increasing and decreasing directions.	No additional clarification needed or assumption made.

			WSDOT Project Interpretation Note
Reg. BIN	Project Title	Project Description	
L2000094	I-90/Medical Lake & Geiger Interchanges	Rebuilds the interchange with several roundabouts to respond to recently proposed and constructed private developments.	This project will also include improvements to local roads as needed.
M00800R	US 395 North Spokane Corridor	Completes the corridor from Francis Avenue to an interim connection with I-90. In addition to completing the corridor to the Trent Avenue interchange, this investment would also complete an interim connection with I-90.	No additional clarification needed or assumption made.
Ferry Program			
900010L	Seattle Tml Preservation	Replacement of the main terminal building and north timber trestle. Replacement of Slip 3 OHL and transfer span. Interim preservation of slip 2 bridge and OHL assets.	No additional clarification needed or assumption made.
952515P	Mukilteo Tml Improvement	Replace existing terminal with a new terminal.	No additional clarification needed or assumption made.
L2000109	#4 - 144 capacity vessel	New Funding for a 4th 144 car Olympic class vessel.	No additional clarification needed or assumption made.
L2000110	Ferry Vessel and Terminal Preservation	This project provides new funding for ferry vessel terminal preservation work. Any existing state or federal funds supplanted as a result of this funding should remain within the ferry capital preservation program.	Programmatic Investment - funding is provided to complete as much work as possible within the amount provided.
L2000166	Clinton Tml Road Improvements	Ferry Dock Road Passenger Drop-Off and ADA Improvements	No additional clarification needed or assumption made.
SR 520 Program			
M00400R	SR 520 Seattle Corridor Improvements - West End	Completes corridor improvements between I-5 and the West High Rise to address congestion and safety needs of the corridor.	No additional clarification needed or assumption made.
Facilities Program			
L1000151	Olympic Region Maintenance and Administration Facility	Replace the existing Olympic Region Maintenance and Administrative Facility with a new facility at the Marvin Road site.	No additional clarification needed or assumption made.
L2000079	Euclid Ave Administration Facility Consolidation Project	Construct a new admin facility at Euclid Ave and allow DOT to move off the property at Wenatchee Ave. If any of this appropriation remains unspent at the completion of this project the appropriation may be used for the SR 285, North Wenatchee Improvements. The department may not sell the Wenatchee Ave site that will be vacated as part of this facility consolidation project until such time as the city in which the Wenatchee Ave site is located has provided a development plan for this site to the department.	No additional clarification needed or assumption made.

Assumptions:

1. List only includes standalone projects in the D, I, P, and W programs.
2. Some projects may go through the Title and Project Description change procedures directed in RCW 47.01.480 as Practical Design options are identified in conjunction with local partners and stakeholders.
3. Some projects may require approval from federal agencies before they can proceed.
4. The funding that was provided is assumed to construct all necessary work unless otherwise specifically identified.

Attachment: ESHB 2012 Sec.1. related to implementation of practical design.

Attachment

ENGROSSED SUBSTITUTE HOUSE BILL 2012

State of Washington

64th Legislature

2015 Regular Session

By House Transportation (originally sponsored by Representatives Orcutt, Clibborn, Hargrove, Hayes, Pike, Zeiger, Muri, and Wilson)

READ FIRST TIME 02/27/15.

1 AN ACT Relating to the department of transportation
2 implementation of practical design; reenacting and amending RCW
3 43.84.092 and 43.84.092; adding a new section to chapter 47.01 RCW;
4 adding a new section to chapter 46.68 RCW; providing a contingent
5 effective date; providing a contingent expiration date; and declaring
6 an emergency.

7 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

8 NEW SECTION. **Sec. 1.** A new section is added to chapter 47.01
9 RCW to read as follows:

10 (1)(a) For projects identified as connecting Washington projects
11 and supported by revenues under chapter . . . (Engrossed Substitute
12 Senate Bill No. 5987), Laws of 2015 3rd sp. sess., it is the priority
13 of the legislature that the department deliver the named projects.
14 The legislature encourages the department to continue to
15 institutionalize innovation and collaboration in design and project
16 delivery with an eye toward the most efficient use of resources. In
17 doing so, the legislature expects that, for some projects, costs will
18 be reduced during the project design phase due to the application of
19 practical design. However, significant changes to a project title or
20 scope arising from the application of practical design requires
21 legislative approval. The legislature will utilize existing

1 mechanisms and processes to ensure timely and efficient approval.
2 Practical design-related changes to the scope may be proposed by the
3 department, for the legislature's approval, only if the project's
4 intended performance is substantially unchanged and the local
5 governments and interested stakeholders impacted by the project have
6 been consulted and have reviewed the proposed changes.

7 (b) To the greatest extent practicable, a contract for the
8 construction of a project with any change to the title or scope,
9 whether significant or not, arising from the application of practical
10 design must not be let until the department has provided a detailed
11 notice describing the change to the chairs and ranking members of the
12 house of representatives and senate transportation committees or, if
13 during the interim, to the joint transportation committee.

14 (c) To determine the savings attributable to practical design,
15 each connecting Washington project must be evaluated. For design-bid-
16 build projects, the evaluation must occur at the end of the project
17 design phase. For design-build projects, the evaluation must occur at
18 the completion of thirty percent design. Each year as a part of its
19 annual budget submittal, the department must include a detailed
20 summary of how practical design has been applied and the associated
21 savings gained. The annual summary must also include for each
22 project: Details regarding any savings gained specifically through
23 changes in the cost of materials, changes in the scope of a project
24 and associated impacts on risk, the retirement of any risk reserves,
25 and unused contingency funds.

26 (2)(a) The transportation future funding program is intended to
27 provide for future emergent transportation projects, accelerating the
28 schedule for existing connecting Washington projects, and highway
29 preservation investments, beginning in fiscal year 2024, based on
30 savings accrued from the application of practical design and any
31 retired risk or unused contingency funding on connecting Washington
32 projects.

33 (b) Beginning July 1, 2016, the department must submit a report
34 to the state treasurer and the transportation committees of the
35 legislature once every six months identifying the amount of savings
36 attributable to the application of practical design, retired risk,
37 and unused contingency funding, and report when the savings become
38 available. The state treasurer must transfer the available amounts
39 identified in the report to the transportation future funding program
40 account created in section 2 of this act.

1 (c) Beginning in fiscal year 2024, as a part of its budget
2 submittal, the department may provide a list of highway improvement
3 projects or preservation investments for potential legislative
4 approval as part of the transportation future funding program.
5 Highway improvement projects considered for inclusion under the
6 transportation future funding program may include new connecting
7 Washington projects, or accelerate the schedule for existing
8 connecting Washington projects, and must: Address significant safety
9 concerns; alleviate congestion and advance mobility; provide
10 compelling economic development gains; leverage partnership funds
11 from local, federal, or other sources; or require a next phase of
12 funding to build upon initial investments provided by the
13 legislature.

14 (d) It is the intent of the legislature that if savings
15 attributable to the application of practical design are used to
16 accelerate existing connecting Washington projects, savings must also
17 be used for new connecting Washington projects of equal cost.

18 NEW SECTION. **Sec. 2.** A new section is added to chapter 46.68
19 RCW to read as follows:

20 The transportation future funding program account is created in
21 the connecting Washington account established in chapter . . .
22 (Engrossed Substitute Senate Bill No. 5987), Laws of 2015 3rd sp.
23 sess. Moneys in the account may be spent only after appropriation.
24 Expenditures from the account must be used only for preservation
25 projects, to accelerate the schedule of connecting Washington
26 projects identified in chapter . . . (Engrossed Substitute Senate
27 Bill No. 5988), Laws of 2015 3rd sp. sess., for new connecting
28 Washington projects, and for principal and interest on bonds
29 authorized for the projects. It is the legislature's intent that
30 moneys not be appropriated from the account until 2024 and that
31 moneys in the account be expended in equal amounts between
32 preservation and improvement projects. Moneys in the account may not
33 be expended on the state route number 99 Alaskan Way viaduct
34 replacement project.

35 **Sec. 3.** RCW 43.84.092 and 2014 c 112 s 106, 2014 c 74 s 5, and
36 2014 c 32 s 6 are each reenacted and amended to read as follows:

Toll Credit Report

**History of Certified Toll Credits, Usage, and Remaining Balance
Washington State**

Federal Fiscal Year	Certified Toll Credits	WSDOT Toll Credits Used	Highways & Local		Toll Credits Used (Expenditures)	Balance Available
			Programs Toll Credits Used	Toll Credits Used on Transit Projects		
1992	\$67,185,000				\$0	\$67,185,000
1993	\$52,052,405				\$0	\$119,237,405
1994	\$57,074,132				\$0	\$176,311,537
1995	\$52,639,290				\$0	\$228,950,827
1996	\$78,119,000				\$0	\$307,069,827
1997	\$80,438,000	\$2,884,072			\$2,884,072	\$384,623,755
1998	\$81,079,000	\$7,598,023			\$7,598,023	\$458,104,732
1999	\$0	\$23,558,370			\$23,558,370	\$434,546,362
2000	\$91,649,000	\$23,707,001			\$23,707,001	\$502,488,361
2001	\$0	\$10,019,994			\$10,019,994	\$492,468,367
2002	\$0	\$5,009,080			\$5,009,080	\$487,459,287
2003	\$124,630,645	\$1,860,464			\$1,860,464	\$610,229,468
2004	\$293,406,134	\$24,984,942	\$1,024,247		\$26,009,189	\$877,626,413
2005	\$255,959,167	\$48,565,953	\$2,600,390		\$51,166,343	\$1,082,419,237
2006	\$274,905,358	\$37,143,644	\$7,761,956		\$44,905,600	\$1,312,418,995
2007	\$216,732,756	\$47,827,282	\$9,272,562		\$57,099,844	\$1,472,051,907
2008	\$202,809,151	\$44,095,000	\$14,430,000		\$58,525,000	\$1,616,336,058
2009	\$177,481,021	\$35,797,353	\$10,880,601		\$46,677,954	\$1,747,139,125
2010	\$157,622,463	\$35,093,759	\$10,796,020		\$45,889,779	\$1,858,871,809
2011	\$152,215,338	\$44,291,567	\$6,691,346	\$4,057	\$50,986,970	\$1,960,100,177
2012	\$316,401,909	\$37,870,377	\$7,050,386	\$1,040,574	\$45,961,338	\$2,230,540,749
2013	\$518,238,810	\$42,738,945	\$5,372,961	\$1,647,735	\$49,759,641	\$2,699,019,918
2014	\$0	\$57,141,668	\$7,288,208	\$1,618,822	\$66,048,698	\$2,632,971,220
2015	\$0	\$56,153,586	\$448,211	\$2,951,554	\$59,553,351	\$2,573,417,869
Totals	\$3,250,638,579	\$586,341,079	\$83,616,890	\$7,262,742	\$677,220,711	\$2,573,417,869

2016 Toll Credit Calculations will be prepared by end of calendar year 2016.

\$2,573,417,868.62

* \$316,401,909 the amount of toll credit certified in 2012 is being recertified in 2015 to account for -\$9,935,817 revenue adjustment on TNB.

Practical Design Report

Seperate Report due to file size

Bike Ped Tiered Project Report

LEAP Transportation Document
2016-4 Tiered Project Status Report
ESHB 2524 Section 311(5)(a)

Background:

In WSDOT-Local Programs Program Z Capital Budget the following proviso was included to provide a report annually with its budget submittal.

Section 311(5)(a) \$9,900,000 of the multimodal transportation account—state appropriation is provided solely for bicycle and pedestrian projects listed in LEAP Transportation Document 2016-4 as developed March 7,2016. Funds must first be used for projects that are identified as priority one projects. As additional funds become available or if a priority one project is delayed, funding must be provided to priority two projects and then to priority three projects. If a higher priority project is bypassed, it must be funded in the first round after the project is ready. If funds become available as a result of projects being removed from this list or completed under budget, the department may submit additional bicycle and pedestrian safety projects for consideration by the legislature. The department must submit a report annually with its budget submittal that, at a minimum, includes information about the listed bicycle and pedestrian projects that have been funded and projects that have been bypassed, including an estimated time frame for when the project will be funded.

Current Status:

The ten projects that were provided funding in the 2016 supplemental are on target to deliver the majority of the funds. Minor delays in expenditures are anticipated due to other fund sources being utilized in delivering the projects, as reflected below. The Tier 1 King Co – Wilburton Reconnection project is being delivered by WSDOT in coordination with an I-405 project and is anticipated to be under construction in the 2019-21 biennia.

		2015-17	
2016 Legislative Appropriation		9,900	
1	Gravelly Lake Non-Motorized Trail	250	Design underway
2	U District Gateway Bridge	300	Finalizing design early 2017
3	Wilburton Reconnection Project	-	WSDOT constructing with I-405 project in 2019-21
4	Yakima Greenway Bike Trail	2,000	Construction underway
5	54th Street Project	745	Design start Fall 2016
6	Cirque Drive - Sunset to 83rd	380	Design start Fall 2016
7	Cowiche Canyon Trail	200	Design underway
8	Mountains to Sound Greenway	-	Alternative funding strategies proposed
9	Schuster Parkway Trail	-	Scheduled for 2019-21 & 2021-23 delivery
10	SR 520 Trail Grade Separation at 40th Street	2,108	Design start Fall 2016
11	Steel Lake Park to Downtown Trail	300	Design underway
12	Bay Street Pedestrian Project	260	Design underway with FHWA funds
20	SR 520 Regional Bike Path and Trail	2,800	Construction underway (legislative direction)
		9,343	
	Tier 1 projects		
	Tier 2 projects		
	Tier 3 projects		

WSDOT is providing delivery options under separate cover, per Section 311(5)(b), for consideration of these vital multimodal community improvements.