

Program Management Manual

M 3005.02

June 2019

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The Washington State Department of Transportation (WSDOT) is responsible for building, preserving, maintaining, and operating the State highway system and the State ferry system, and working in partnership with others to maintain and improve local roads, railroads, airports, bridges, and multi-modal alternatives to driving. WSDOT operates 18,600 miles of state highway, over 3,300 bridge structures, 47 safety rest areas, 22 ferry vessels and 20 ferry terminals.

One of the department's core responsibilities is to deliver projects that preserve and improve the transportation network. Project delivery begins with programming a given project that is included in the state's Capital Improvement and Preservation Program. It extends throughout design, right of way, and construction activities and terminates once the project is "operationally complete" or ready to serve its purpose.

WSDOT has a long-standing commitment to deliver projects within approved scopes, schedules, and budgets. Performance in delivering projects is an important indicator of how well the department is doing its job. The department's integrated systems for programming, project control, reporting, and management serve a key role in supporting project delivery objectives.

This *Program Management Manual M 3005* replaces the previous '*Project Control & Reporting Manual M-3026.02*.' The Program Management Manual describes the centralized, coordinated development and management of WSDOT's capital programs to achieve the department's strategic goals, objectives, and benefits. We hope it will prove its value over time as a resource for WSDOT staff responsible for delivering capital projects.

The Manual will be updated in July of each year. Technical updates may be issued between annual cycles. These technical updates will be limited to changes that provide clarification or communicate minor procedural changes (such as a change in a work unit's name).

Comments about the manual are always welcome. Users are encouraged to submit the Feedback Form to help guide future updates.

This manual is also available on the WSDOT CPDM Division website at wwwi.wsdot.wa.gov/publications/manuals/fulltext/M3005/PMM.pdf

/s/ Jay Alexander

Jay Alexander

Director of the Capital Program Development &
Management Division

Feedback Form

We appreciate your suggestions for improving the *Program Management Manual*. Please fill out the form and email it to: ScottTh@wsdot.wa.gov or StrunaR@wsdot.wa.gov

Thank you.

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1-1 Introduction to Capital Program Development and Management (CPDM)

The business of the Washington State Department of Transportation (WSDOT) is the operation, maintenance, preservation, and improvement of the state's multimodal transportation network, which includes highways, rail, and the nation's largest ferry system. One of the department's core responsibilities is the delivery of projects that preserve and improve the transportation network. Project delivery begins with the programming of a given project that is included in the state's Capital Improvement and Preservation Program. It extends through design, right of way, and construction activities and terminates once the project is "operationally complete" or ready to serve its purpose.

WSDOT has a long-standing commitment to deliver projects within approved scopes, schedules, and budgets. Performance in delivering projects is an important indicator of how well the department is doing its job. The department's integrated systems for programming, project control, reporting, and management serve a key role in supporting project delivery objectives.

This introductory chapter serves as an overview of [CPDM roles and responsibilities](#). For more information on any included topics, see subsequent chapters, consult the [CPDM website](#) or contact the CPDM Division.

1-2 What is Program Management?

This *Program Management Manual M 3005* supersedes the *Project Control & Reporting Manual M 3026*, which was also known as the PCRO Manual, PCRM Manual, or CPDM Manual.

"Program" is used to mean many different things. In the context of this manual, the word "program" is defined as a set of related projects managed in a coordinated fashion to obtain control and benefits not available by managing them separately.

"Program management," in the context of this manual, is defined as the centralized, coordinated management of a specific program to achieve its strategic goals, objectives, and benefits.

The definitions above may be applied to programs such as WSDOT's Highway Construction Program, Facilities Capital Program, and Washington State Ferries (WSF) Terminal Engineering Program. They may also be applied to all WSDOT's capital programs as a group, and they may be applied to groups of projects which, together, address a particular need. Examples are the Alaskan Way Viaduct Replacement Program, and the SR 520 Bridge Replacement and High Occupancy Vehicle (HOV) Program.

Typical responsibilities¹ performed by a program management group are:

- Identification, monitoring, controlling, and rationalization of the dependencies among the projects in a program.
- Playing a role in determining which issues among the projects in the program should be escalated.

¹ Dr. Paul Sanghera, *Fundamentals of Effective Program Management* (Ft. Lauderdale: J. Ross Publishing, 2008) 38

- Dealing with the escalated issues.
- Tracking the contribution of each project to the consolidated program benefits.
- Tracking the contribution of the program-related, non-project work to the consolidated program benefits.

CPDM is responsible in varying degrees for development and management of the capital construction programs for highways, ferries, and rail, as well as for traffic operations and capital facilities. CPDM develops the highway construction program working with Region program management and project development, and oversees development of the construction programs for all other modes and functional areas, working with staff from those modes and areas. CPDM is also responsible to ensure that all modes and offices deliver their respective construction programs to meet the cost, scope and schedule of legislative intent.

CPDM seeks the most efficient means of utilizing the available funding and workforce resources provided by the Legislature and others to construct the projects that preserve and improve the state transportation system. As projects are scheduled for construction, CPDM allocates funding, monitors progress, and reports results to the Legislature, Governor's Office, WSDOT executives and the public.

When necessary, CPDM adjusts the construction program to maintain expenditures within appropriated amounts, and approves, or seeks approval, for changes to cost, scope and schedule. CPDM works with many others both within and outside the department to ensure the successful delivery of the department's Construction Program.

The [CPDM Roles and Responsibilities](#) document identifies the various CPDM teams and who is accountable for making decisions related to the above work.

1-3 How CPDM Works With Others

Many groups play a role in ensuring that the objectives of the construction program are met, and system needs are addressed. For this effort to succeed everyone must work together as an integrated team and information and decisions must be shared. Below are some of the offices and groups which work with CPDM in developing and delivering the construction program.

- The **Multimodal Planning Office** works with the public and stakeholders on long-range objectives and priorities, developing long-range strategies to address the deficiencies. These are documented in the Highway System Plan, Corridor Sketches, and Planning Studies.
- The **Transportation Safety & Systems Analysis Division (TSSA)** publishes the quarterly Gray Notebook and other performance reports. CPDM provides program and project delivery data for these reports.
- The **Transportation Data, GIS, and Modeling Office (TDGMO)** provides data used to determine which projects should be built and to assess the effectiveness of completed projects in resolving highway system needs.
- The **Environmental Services Office (ESO)** provides information used in planning and programming to help understand environmental and cost effects of project construction. ESO provides technical assistance during project delivery to design, acquire permits, and resolve conflicts, and develops and applies prioritization methodologies for Noise, Fish Barriers, Stormwater and other environmental work. ESO also participates in project scoping.

- The **Project Development Division**, in conjunction with the Federal Highway Administration (FHWA), sets the design standards that must be considered and incorporated into the selected projects.
- The **Bridge and Structures Office** provides preliminary design, schedule and cost estimates for bridge projects, and also helps develop final plans, specifications and estimates for contracts. Also provides condition surveys of structures, asset management, and needs identification. Uses a bridge management system to forecast lowest life-cycle cost. Develops and applies methodologies to identify and rank needs. Provides technical advice to manage change.
- The **Materials Laboratory (Mats Lab)** provides expertise in analyzing soils, pavements, and materials during project planning and design and provides acceptance of materials during construction. Performs pavement condition surveys and uses the Washington State Pavement Management System to determine lowest life-cycle cost; uses unstable slope management system to rank slopes for correction, and provides technical assistance in managing change.
- The **Maintenance Operations Office** provides information on system needs in the Planning, Design and Construction phases, and helps make sure that projects are designed and developed in a manner that ensures they can easily be maintained after construction.
- The **Construction Office** directs and monitors work performed by contractors and others on capital construction projects and helps assess how any project changes might affect the overall construction program. Works with CPDM in the contract Advertisement & Award process.
- The **Traffic Operations Office** contributes information used in prioritizing projects and helps provide conceptual solutions to traffic-related improvement needs for the highway system. These solutions may become projects that are then programmed for construction. Provides technical assistance to CPDM on scope and change management.
- The **Budget and Financial Analysis Office (B&FA)** provides fiscal considerations throughout the program building process; helps generate revenue projections, shares this information with other offices to use in allocating funds to the various subprograms, and works with the Office of Financial Management (OFM) to ensure the department implements the transportation budget and complies with state laws.
- The **Accounting and Financial Services Office (AFS)** assists in ensuring payment transactions are properly set up and paid on time, and performs the billing function to obtain reimbursement from FHWA.
- **Office of Financial Management (OFM)** performs an ongoing role in the planning, analysis, and implementation of the state's operating and capital budgets. It has the primary responsibility for making budget recommendations to the Governor and presenting the Governor's budget proposal to the Legislature and the public. After budgets are approved by the Legislature and signed into law by the Governor, OFM monitors state agency activities for conformance with executive and legislative intent.
- The **Federal Highway Administration (FHWA)** provides funding and design oversight to the department and works with CPDM on processing approvals for federal funding, managing obligation authority, seeking special funding for emergencies, and applying for WSDOT to use funds not spent by other states.

- The **Regions'** (Northwest, North Central, Olympic, Southwest, South Central, Eastern) and **Modes/Divisions**¹ **program management offices** provide the engineering expertise for building, operating and maintaining the state's highway structures which the Legislature authorizes to be constructed. CPDM has responsibility for administering the programs and provides the Region/Modes/Divisions' staff with funding allocations and resources, relying on their capabilities to carry out the construction programs.

1-4 What CPDM Does

The basic functions of CPDM are carried out by the division's executive leadership. The Director, Deputy Director and Managers are responsible for the main tasks of planning and overseeing the capital highway programs. To do this, the executive leadership does the following:

1. Sets strategy, policy and direction for program managers.
2. Allocates capital to the WSDOT programs and project priorities.
3. Builds and leads the work functions within CPDM to support the work of statewide program managers.

CPDM describes its own mission as follows: "Provide excellence in project and program delivery, through facilitating and helping Regions and Modes being successful in delivering projects on-time and on-budget, to maintain and enhance the performance of the Washington State Transportation System."

The primary duties which the Region Program Management and Headquarters CPDM Division perform to support this mission are summarized below. Later chapters in this manual provide details about what is involved in accomplishing each of these functions.

For a more detailed look at CPDM's work allocation, please see the [CPDM Roles and Responsibilities](#) document.

1-4.1 Developing the Capital Construction Program

Each year, CPDM develops a Project Delivery Plan (PDP) that communicates WSDOT's intentions for specific investments in all the transportation infrastructure modes administered by the department for a ten-year period. The plan supports the FHWA's requirement that the state will program four years of projects in the State Transportation Improvement Program (STIP). By exceeding the STIP requirements, the development of the delivery plan improves communication and coordination with local governments. It allows for improved planning and timing concerning project delivery and mitigating traffic disruptions on corridors due to roadway construction.

The projects identified through the development of the Project Delivery Plan are the basis for the department's budget submittal, which also includes additional proposals in program and project delivery for Governor and Legislative consideration. The project list – or program of projects – submitted to the Governor and Legislature typically shows work recommended in the coming ten to sixteen years. The exact period required is determined by OFM.

¹ Aviation, Rail & Freight, Washington State Ferries, Public Transportation, Active Transportation, Local Programs, Quality Assurance & System Safety, Multimodal Planning, Project Development, Construction, Traffic Operations, Maintenance Operations, and Strategic Assessment and Performance Analysis. Mega projects are managed/administered by their own program management groups.

The first ten-year component of the program is project-specific, and the first two years of the program are recommended for funding in the next biennium. Beyond ten years, the remaining years of the program contain a mix of specific projects and funding reserves sized according to needs and objectives.

Developing the program involves prioritizing project needs and solutions, scoping projects, building the construction program, then reviewing and approving the program for submittal as part of WSDOT's budget request to the Governor. CPDM also develops a similar list for supplemental budget sessions, in even-numbered years.

1-4.2 Managing Project Delivery

WSDOT's project management process defines the principles of good project management to support project delivery. During the three phases of project delivery, CPDM employs many discrete sub-processes such as Work Order Authorization (WOA), Federal-aid agreements, change management, reporting, and certifying sufficient funding is available to advertise and award the project. CPDM coordinates preparation for external reporting publications such as the Gray Notebook through the Office of Strategic Assessment and Performance (OSAPA). CPDM uses several computer systems to monitor, analyze and report on project delivery, for example, Capital Program Management System (CPMS), Transportation Executive Information System (TEIS) and Project Management and Reporting System (PMRS). CPDM is also responsible for maintaining, improving and providing ongoing support and training for each of these systems.

1-4.3 Managing Project Funds

After the Legislature has approved the construction program, work begins on individual projects. CPDM prepares and processes work order authorizations and federal aid agreements to commit funds to individual projects. The office tracks project funding, makes adjustments to work orders or federal aid agreements as necessary, and closes out work orders when projects are completed. For more information, see [Chapter 8 Funds Management and Federal-Aid](#).

1-4.4 Managing Change

In addition to managing project funds, CPDM also oversees change at the program, subprogram, and project level. This involves managing and recording changes in project scope, schedule, or cost, monitoring program level expenditures, making adjustments to the program to ensure that available funds are used most efficiently. For more information, see [Chapter 9 Managing Change](#).

1-4.5 Performance Monitoring and Reporting on the Program

CPDM continually measures performance and provides reports to various groups to ensure successful delivery of the Construction Program and to ensure that the completed projects address the needs identified in the Highway System Plan, and the legislative intent. Performance measurements are reported to the Legislature, the Governor, OFM, the Transportation Commission, FHWA, the public, other WSDOT offices, and other state agencies. In addition to these formal reports, CPDM is responsible for an extensive array of project reporting web pages. For more information, see [Chapter 10 on Reporting](#).

1-4.6 Providing Partner Support

CPDM provides various kinds of support to internal and external customers. The office provides formal and informal training, informational and instructional materials, assistance with inputting and maintaining data in computer databases, system documentation, and help with answering questions posed about the Highway Construction Program.

1-5 Rules That Govern the Work

The work done by CPDM is impacted by numerous rules, guidelines, directives, and policies. At the federal level, CPDM must comply with policies and rules set forth by other agencies such as the FHWA, regulations established by the National Environmental Policy Act (NEPA), or the Federal Emergency Management Act (FEMA). When federal legislation is passed, CPDM must take steps to understand the specific requirements of the law and to comply with the federal funding provisions set forth.

At the State level, numerous laws and rules govern project prioritization and program development. OFM has established specific accounting practices by which the department must abide. In addition, the budget passed by the Legislature includes specific provisions regarding funding, and includes requirements for cost, schedule and scope for a number of projects. Finally, legal decisions may impact a given project or program cost, schedule, or scope, or a department practice.

CPDM establishes guidelines for reviewing and approving project changes or additions. CPDM must understand applicable laws, rules, and directives and make sure we accomplish our work in compliance with them. At times, CPDM also takes an active role in seeking ways to help shape the rules by which it operates.

1-6 Key Elements and Concepts

To begin to understand the work of CPDM, it is necessary to have a basic understanding of some key elements and concepts. The following sections describe some of these elements and concepts. These descriptions are not intended to cover every nuance of a given topic but simply to provide a starting point for understanding.

1-7 Practical Solutions

Practical Solutions is a performance-based approach to transportation decision-making. This data-driven approach uses the latest tools and performance measures to support lower cost efficiencies in operating highways, ferries, transit and rail; reduce travel demand to save money; and reduce the need for building costly new infrastructure expansion.

Community engagement is a key factor in helping to develop Practical Solutions. Practical Solutions are found when stakeholders work 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.

Recent WSDOT design policy and technical guidance has created tools and procedures that support the type of performance-based decisions that are consistent with the Practical Solutions approach.

WSDOT has implemented supporting policies and training for our workforce and is using new tools to help keep our existing assets in good condition. The [Practical Solutions](#) approach will continue to evolve as WSDOT works with our partners, communities, citizens and businesses to find ways to bring low cost, effective solutions to keep transportation vital for generations to come.

Practical Solutions starts with a robust asset management program. By maintaining and preserving existing infrastructure in a state of good repair, we can avoid reconstruction.

This folio shows the [Practical Solutions lifecycle](#).

For more information, see the [Practical Solutions external webpage](#) or the [Practical Solutions internal webpage](#).

1-8 Asset Management

Asset management is a strategic, risk-based approach to cost-effectively and efficiently manage the physical assets of Washington's transportation system. WSDOT uses transportation investment strategies to maintain and preserve our transportation system on an ongoing, systematic basis. Preserving the state's transportation assets saves money while maximizing performance across the transportation network.

WSDOT considers asset management a key component of Practical Solutions, as a way to cost-effectively manage the physical assets of the transportation system. Limited funds present challenges to performing routine maintenance and preservation activities. While our assets continue to age and deteriorate, long delays might require costly reconstruction or replacement of an asset.

One of the primary management and communication tools is an asset management plan. CPDM uses asset management plans as a key management tool to make recommendations about where and when to invest state and federal funds in the transportation system. For more information, see [Chapter 2 Asset Management](#).

1-9 Washington's Transportation Plan

The Washington Transportation Plan is developed in two phases. Phase 1 is developed by the Washington State Transportation Commission as the statewide policy document as required by state law. Phase 2 implements Phase 1. It is developed by WSDOT as the long-range statewide multimodal transportation plan as required by federal and state law.

1-9.1 Moving Washington

In August 2012, WSDOT established the Moving Washington framework to help the agency develop a 21st century transportation system through making transparent, cost-effective decisions. WSDOT employees are fundamental to this framework. The Secretary's Executive Order [E 1082](#) for Moving Washington stated the expectation that WSDOT will conduct business in a way that is reliable, responsible and sustainable. All employees are expected to identify new opportunities to get every benefit, every efficiency, and the best use out of limited resources.

To achieve the WSDOT mission, WSDOT has adopted the approach of Practical Solutions. For more information, please see the [Moving Washington forward Practical Solutions](#) webpage.

1-10 Highway System Plan

The Highway System Plan (HSP), developed by the department's Multimodal Planning Division, describes how WSDOT will maintain, operate, preserve and improve one component of the state-owned system—the state highway system—over the next 20 years.

In general, the Highway System Plan identifies a proposed strategy and estimated cost for solving some of the mobility needs. For other needs, the HSP discusses general approaches for how it is consistent with Phase 2 of the [Washington Transportation Plan](#).

1-11 Programming Structure

In 1992, a task force of the Legislative Transportation Committee (LTC) directed the department to develop a programming structure for the highway system, which would allow the Legislature to make investment decisions based on specific action strategies in the Highway System Plan. As a result, a structure was developed with a budget category for most of the action strategies in the HSP. That structure, slightly modified, is still in use today. These programs, their subprograms and categories are listed in Table 1 below. The latest version can be found on the agency's [CPMS Users Guide Field](#) website.

WSDOT builds the program at the Subprogram/Subcategory level to be consistent with the goals and objectives of the approved transportation plans. The Legislature makes investment decisions and funds the program by establishing biennial appropriations at the program level. That is, it sets a maximum spending limit for an express purpose for each program.

The 2003, 2005, and 2015 transportation revenue packages greatly expanded the use of project-specific appropriations. This budgeting mechanism, referred to as line-item budgeting, increased CPDM's change management and reporting responsibilities. The 2005 budget also defined limits on the department's flexibility to transfer funds between projects or accelerate funding on a project. Language in subsequent transportation budgets mandated that the Legislature or the Director of OFM approve funding level increases to all projects subject to line-item appropriations.

For more information on general government operations, see [Appendix 1A](#).

Exhibit 1-1 Capital Construction Program Structure

Program		Subprogram	Subcategory
I	Improvement	I1 - Mobility	IA - Urban Mobility
			IB - Rural Mobility
			IC - Urban Bicycle Connections
			IQ - HOV Lanes
		I2 - Safety	ID - Collision Reduction
			IE - Collision Prevention
		I3 - Economic Initiative	IF - All Weather Hwys/Freight & Goods
			IG - Trunk System Completion
			IH - New Safety Rest Areas
			II - Bridge Restrictions
			IJ - Scenic Byways
			IR - Bicycle Touring Routes
			IS - Interstate Avalanche/Flood Closures
		I4 - Environmental	IK - Stormwater Runoff
			IL - Fish Barrier Removal
			IM - Noise Reduction
			IN - Air Quality
			IO - Wetland Monitoring
			IP - Policy Implementation
			IV - Chronic Environmental
			IW - Wildlife Connectivity
		I5 - DPS/Program Support - I	IX - DPS/Program Support
		I6 - Sound Transit	IT - Sound Transit (Regional Transit Auth)
		I7 - Tacoma Narrows	IU - Tacoma Narrows Project
P	Preservation	P1 - Roadway	PA - Paving/Safety Restoration
		P2 - Structures	PB - Preservation
			PC - Catastrophic Reduction
		P3 - Other Facilities	PD - Rest Areas
			PE - Unstable Slopes
			PF - Weigh Stations/Other
			PG - Pgm Support/Discretionary Buckets
			PH - Major Drainage/Electrical Systems
		P4 - DPS/Program Support - P	PX - DPS/Program Support
Q	Traffic Operations Capital	Q3 - Special Advance Tech	QB - Non-CVISN Projects
			QC - CVISN Projects
			QT - Traveler Information

Exhibit 1-1 Capital Construction Program Structure

Program		Subprogram	Subcategory
P	Preservation	P1 - Roadway	PA - Paving/Safety Restoration
		P2 - Structures	PB - Preservation
			PC - Catastrophic Reduction
		P3 - Other Facilities	PD - Rest Areas
			PE - Unstable Slopes
			PF - Weigh Stations/Other
			PG - Pgm Support/Discretionary Buckets
			PH - Major Drainage/Electrical Systems
		P4 - DPS/Program Support - P	PX - DPS/Program Support
Q	Traffic Operations Capital	Q3 - Special Advance Tech	QB - Non-CVISN Projects
			QC - CVISN Projects
			QT - Traveler Information
W	WSF Construction	W1 - Terminal Construction	WA - WSF Admin Support
			WI - WSF Improvement
			WP - WSF Preservation
			WS - WSF Project Support
		W2 - Vessel Construction	WA - WSF Admin Support
			WI - WSF Improvement
			WP - WSF Preservation
			WS - WSF Project Support
		W3 - Emergency Repairs	WI - WSF Improvement
Y	Public Transportation and Rail	Y4 - Rail Passenger Capital	YA - Rail Capital
			YC - Freight Rail Assistance Grant Program
			YD - Freight Rail Infrastructure Loan Program
			YE - High Speed Rail Grant (ARRA)
			YF - Rail Line Relocation and Improvement (RLR&I)
			YG - Section 130 Funds
			YH - Section 1103 Funds
			YI - Passenger Rail - Misc
			YJ - High Speed Rail - Non ARRA
		Y5 - Rail Assistance	YB - Rail Assistance
			YC - Freight Rail Assistance Grant Program
			YD - Freight Rail Infrastructure Loan Program
			YE - High Speed Rail Grant (ARRA)
			YF - Rail Line Relocation and Improvement (RLR&I)
			YG - Section 130 Funds
			YH - Section 1103 Funds
Z	Local Programs	Z2 Construction	N.A.
		Z8 - FMSIB Projects	
		Z9 - Other Local Projects	

1-12 2003 Transportation Funding Package: “Nickel Program” (Nickel)

In 2003, the Washington State Legislature approved a five-cent per gallon tax increase along with a number of other transportation-related taxes and fees. At the same time that the legislature approved the gas tax package, it drew up a list of specific projects on which the increased revenues must be spent. This list, the centerpiece of the 2003 Transportation Funding Package, contained over 150 separate highway, rail, and ferry projects. In addition to specifying the “Nickel Projects” on which the new revenues must be spent, the legislature also wrote into law new control and reporting requirements for these projects. The Nickel projects are subject to greater legislative oversight and control than projects funded previously.

1-13 2005 Transportation Funding Package: Transportation Partnership Account (TPA)

In 2005, the Washington State Legislature approved the second state gas tax increase since 1991. The centerpiece of the package was a 9.5-cent tax increase per gallon of gasoline implemented over four years.

As with the Nickel funding package, the Legislature identified specific projects and activities on which the new revenues must be spent. The TPA package funded 274 highway, ferry, and rail projects across the state over the 16-year planned construction program. (The actual number of projects funded by Nickel and TPA has changed a small amount from these totals, as projects have split and/or combined.) TPA projects are subject to the same control and reporting requirements as the Nickel projects.

1-14 2015 Connecting Washington Transportation Package (CW)

The Connecting Washington package includes a 16-year spending plan covering highway improvements, highway preservation, state ferry system, fish barrier removal, and other multimodal investments. Connecting Washington projects will be paid for with bond proceeds, increased vehicle related fees, and an increase in the State’s motor fuel excise tax of 11.9 cents that was phased in over two years—7 cents on August 1, 2015 and 4.9 cents on July 1, 2016.

State highway projects constitute the bulk of the planned spending in the Connecting Washington package, with approximately \$10 billion allocated for highway improvement and preservation projects across the state.

More information can be found at the [Connecting Washington Package](#) webpage.

1-15 Previously Existing Funding (PEF) Projects: A Key Subset of the WSDOT Program

While the line-item projects funded through the transportation revenue packages are a highly visible part of the WSDOT program, it is important to keep in mind that hundreds of projects are funded by sources of revenue that existed prior to the enactment of the state’s funding packages. For example, WSDOT’s portion of the original 23-cent fuel tax, federal funds, vehicle license fees, etc. These PEF projects are also subject to WSDOT’s system of project control and reporting, although the business processes and approval levels are not as stringent as for line-item budgeted projects (Nickel, TPA and CW).

Although the department has more flexibility in managing PEF projects compared to line-item budgeted projects (Nickel, TPA, and CW), it is the department's policy to maintain all projects within the budgeted cost, scope and schedule, changing them only when new conditions require change or when it is in the state's best interest to incorporate a change. It is also the policy of the department to report routinely to the legislature on major project changes and the status of the various transportation programs.

1-16 Managing Federal Funds

Washington has a unique approach to splitting federal funds between state and local government. There is a requirement to sub-allocate about half of the Surface Transportation Block Grant Program funding to local entities based on population and there is metropolitan planning money for local organizations. Beyond that, generally speaking, there is no requirement for the state to sub-allocate the rest of the FHWA formula funds it receives each year. With our state's history of collaboration and open discussion, we go above and beyond and provide more money to local governments than required by federal law.

In support of this tradition, the governor convenes an advisory group of legislators, local government entities and various users of the transportation system to review the distributions of federal highway formula funds to the state and local governments when a new federal authorization act is passed. Through this workgroup, federal formula funds are distributed between the state highway construction program and for use by local jurisdictions. CPDM is responsible for managing the federal funds distributed for use by the state Highway Construction Program. For more information, see [Chapter 8 Funds Management and Federal-Aid](#).

1-17 WSDOT's Major Non-Highway Modes

1-17.1 [Washington State Ferries](#)

WSDOT's Washington State Ferries (WSF) division plays an important role in the state transportation system. It is a vital link in east-west highways, carrying people and freight from one side of Puget Sound to the other.

WSF infrastructure includes terminals, vessels, and maintenance facilities. It operates terminals that provide vessel reception; customer access to and clearance of terminal facilities; vehicle and passenger staging, holding, loading, and unloading facilities; and connections with other modes of transportation. WSF manages a fleet of vessels that accommodate vehicles and passengers and operates a major maintenance facility at Eagle Harbor.

WSF's construction program performs the same program and project development, control, and reporting functions as other highway programs and many of its methods and procedures are similar. While the WSF's capital program management occurs largely within the division's organizational structure rather than the highway organizational structure, the program is subject to the same policies and procedures as highway construction programs. CPDM oversees ferries program development and management.

1-17.2 Rail Capital Program

WSDOT's Freight and Passenger Rail and Marine Office (Rail Office) operates in three primary areas: Freight Rail, Rail Safety Improvement, and Passenger Rail.

- **Freight Rail** provides loans and grants to rail districts, port districts, counties, economic development councils, cities, and private railroads to support light-density rail lines; to improve rail access to ports; and to preserve or restore rail corridors and infrastructure. It can do this through loans for essential projects on private property, and through grants and loans for essential projects on public property.
- Rail Safety Improvement administers the federal Railway/Highway Crossing Program, which is a grant program to fund safety improvements to reduce the number of fatalities, injuries, and crashes at public grade crossings. Improvements include grade separation of highway and rail movement.
- **Passenger Rail** partners with local, state, and private sector stakeholders to develop passenger service along the corridor extending from Eugene, Oregon to Vancouver, B. C., as part of a balanced transportation system. Over the next several decades, the state plans to make capital investments including track improvements, safety systems, and train equipment and stations in order to accomplish this.

The WSDOT Rail Office's project development, measurement, and reporting processes parallel those of highways capital programs in many respects. However, there are some significant differences, mostly because rail projects occur on property that is owned by private companies that are responsible for design and construction of the projects.

CPDM oversees rail program development and management.

1-17.3 Traffic Operations

Traffic Operations receives specific funding with which to develop capital projects aimed at improving the efficiency and safety of the existing highway system as opposed to building new capacity. Traffic Operations projects center on the implementation of techniques, such as intersection and freeway management systems, traveler information, weather-sensing technology, weigh-in-motion capacity for freight transportation, and the hardware and software associated with all of these technologies.

Traffic Operations' project development, measurement, and reporting processes parallel those of core department capital programs, with minor exceptions.

1-17.4 Local Programs

Local Programs works in cooperation with and through the region Local Programs Offices. Regional Local Programs Offices are located in each of WSDOT's six regions throughout the state. They are the direct link with local agencies and partners, such as city, county, planning organizations and tribal governments, ports, and transit. The primary responsibility of Local Programs' is for the stewardship and oversight of the federal and state funds available to local agencies, allowing them to be successful in their transportation endeavors. At the same time, Region staff assist agencies in their compliance with program requirements. They guide, counsel, and collaborate with these agencies on project scoping, funding, design, environmental documentation, construction, and project closure.

The Local Programs' project development, measurement, and reporting processes parallel those of core department capital programs in many respects. However, there are some significant differences, due in most part to the fact that local agencies are responsible for project design, right of way acquisition, and construction.

1-17.5 Capital Facilities

WSDOT's Capital Facilities Program provides workplaces to house staff and equipment to design, operate, and/or maintain the state highway system. With 2.5 million square feet of building space, WSDOT is the second largest, general government building owner in the state. WSDOT's 500 sites and 700 buildings are located throughout the state, and the asset replacement value is nearly \$500 million dollars. Equipment and Facilities manages facilities throughout the life cycle (planning, acquisition, design, construction, operations, maintenance, and disposal).

State funding for Capital Facilities is provided in a separate and distinct program. Major capital projects are typically limited to less than 10 per biennium. Equipment and Facilities project development, measurement, and reporting processes parallel those of core department capital programs, utilizing the same core agency systems, plus others, to track expenditures and variances. Delivery is reported in the same manner as other agency capital programs.

1-17.6 Multimodal Development & Delivery Office (M2D2)

This WSDOT office was first established in 2017 and is currently headed by Marshall Elizer, Assistant Secretary. Divisions and modes were brought together to strengthen relationships and build better alignment between project development and delivery, operations, maintenance, and the modes. This office is intended to implement WSDOT's Practical Solutions decision-making framework, ensuring that WSDOT consider all modes of transportation when planning, developing, and delivering transportation systems and projects. In addition, the office oversees the staff responsible for tracking and reporting WSDOT's strategic accountability information, such as The Gray Notebook, quarterly reports, and agency performance scorecard.

M2D2 includes a Deputy Assistant Secretary and comprises 12 modes and divisions:

- Aviation
- Rail and Freight
- Public Transportation
- Active Transportation
- Local Programs
- Quality Assurance & System Safety
- Multi-modal Planning
- Project Development
- Construction
- Traffic Operations
- Maintenance Operations
- Strategic Assessment and Performance Analysis

1-18 Appendices

Appendix 1A General Government Operations

Appendix 1A General Government Operations

Under the State Constitution, the legislative authority of the State is vested in the Legislature, and general elections are held on the first Tuesday in November in each even-numbered year. The State is divided into 49 legislative districts, each of which elects two representatives and one senator.

Senators serve four-year terms, with one-half of the seats open in each general election. Representatives serve two-year terms, with every seat open in each general election. The Legislature convenes annual regular sessions (beginning the second Monday in January) of 105 days in odd-numbered years and 60 days in even-numbered years. The Governor may call an unlimited number of special sessions, each of which is limited to 30 days, and the Legislature itself may call special sessions with a two-thirds' vote of the members of each house.

The State operates on a July 1 to June 30 fiscal year and is required under State law to budget on a biennial basis. State law requires that the Governor submit a balanced budget to the Legislature no later than December 20 in the year preceding the session during which the biennial budget is to be considered. The operating, capital and transportation budgets are prepared separately.

Formulation of the State's biennial budget begins in May of even-numbered years, when the Office of Financial Management (OFM) distributes instructions to state agencies, establishing budget guidelines and information requirements. Formal budget requests from agencies are sent to OFM in late summer, after which they are analyzed and revised by OFM, as appropriate, to match the Governor's policy choices. Alternative methods of delivering services are examined and evaluated, and recommended budget levels, and program and policy choices are prepared for the Governor by the Director of OFM. As described below, State revenues and expenditures are limited by statutes enacted by the Legislature and sometimes are also limited by initiatives or referenda approved by the voters.

Under State law, the Governor's Budget submitted to the Legislature must include estimates of all anticipated revenues and all proposed operating and capital expenditures, including debt service requirements on State general obligation indebtedness. Revenues are estimated for a fiscal period from the sources, and at the rates authorized by law at the time of submission of the budget document, and are based upon the most recent economic and revenue forecast.

A "fiscal period" is the Fiscal Year or biennium for which an appropriation is made, as specified within the act making the appropriation. The Governor must submit a balanced budget to the Legislature. Specifically, State law requires that in the Governor's proposed budget, the total of the beginning undesignated fund balance and estimated revenues, less working capital and other reserves, equal or exceed the total of proposed expenditures without reliance upon increases in indebtedness, changes in existing tax rates or other statutory changes. The Governor also may submit a second, alternative budget for the same fiscal period to include expenditures from revenue sources derived from proposed changes in statutes.

Within a given biennium, the Governor may submit supplemental budgets to the Legislature during the regular session or during any special session. The Legislature has routinely adopted supplemental budgets in response to declining revenues during a biennium, or to increase funding for certain purposes. The Legislature engages in extensive budget deliberations and committee hearings. After revenue and expenditure appropriation bills are passed by the House of Representatives and the Senate, the bills are transmitted to the Governor, who has constitutional authority to veto one or more sections of the bills.

Typically, the Legislature enacts three budgets: an operating budget, a capital budget and a transportation budget. The transportation budget includes both operating and capital transportation-related expenditures. The transportation budget is funded primarily from excise taxes on motor vehicle and special fuels, license fees, bond proceeds, and other state revenues, federal funds and local and private funds. In mid-February (March in odd-numbered years), June, September and November, the Transportation Revenue Forecast Council prepares an official economic and revenue forecast, which may include unofficial alternative forecasts.

The primary component of transportation revenue is excise taxes on motor vehicle and special fuels. In 1921, the Legislature established a motor vehicle fuel tax at a fixed rate of \$0.01 per gallon. The tax rate has been increased several times since then. [Table 1A-1](#) lists the increases in the excise tax on motor vehicle fuel since April 1, 1990. The same rates charged for gasoline are charged per gallon for diesel and alternative fuels. In July 2015, the Legislature increased the excise tax on motor vehicle fuel to fund a list of transportation improvements referred to as “Connecting Washington” projects. The fuel tax increase was phased in over two years. The first increase occurred on August 1, 2015 and the final increase occurred on July 1, 2016.

Table 1A-1 Increases in Excise Tax on Motor Vehicle Fuel Since April 1, 1990

Effective Date of Change	Increase (\$)	Per-Gallon Tax (\$)
4/1/1990	0.040	0.220
4/1/1991	0.010	0.230
7/1/2003	0.050	0.280
7/1/2005	0.030	0.310
7/1/2006	0.030	0.340
7/1/2007	0.020	0.360
7/1/2008	0.015	0.375
8/1/2015	0.070	0.445
7/1/2016	0.049	0.494

When it enacts a biennial budget, the Legislature appropriates funding to State agencies for various purposes. Once the budget bills are signed by the Governor, OFM works with State agency fiscal staff to allot annual and biennial appropriations into monthly amounts. Revenues are also allotted for the biennium, based upon forecasts prepared by the Transportation Revenue Forecast Council and for non-forecasted accounts, based upon information prepared by the administering agencies. Taken together, monthly allotments of expenditure authority and revenue form detailed monthly spending plans within the statutory maximums specified by appropriations in the biennial budget.

State agencies are generally prohibited from incurring cash deficits. State law does allow, however, for temporary negative cash balances in a specific fund or account if the temporary deficiency (1) results from disbursements under a spending plan approved by OFM; (2) was authorized by OFM within a fiscal period; (3) is in a fund or account neither in the State treasury nor in the custody of the Treasurer if the cash deficiency does not continue past the end of the biennium; or (4) is in a construction account and the deficiency is due to seasonal cash deficits pending receipt of proceeds from authorized bond or note sales.

OFM monitors spending plans on a monthly basis and recommends actions the Governor may take to adjust spending and revenue as appropriate. If at any time during the current fiscal period, the Governor projects a cash deficit in a specific fund or account, the Governor may order across-the-board reductions in allotments to that fund or account to prevent the cash deficit. The Legislature may direct that a cash deficit in a particular fund or account be eliminated over one or more fiscal periods. Unused appropriation authority resulting from an across-the-board reduction in a fund or account is placed in reserve status and reverts to the fund of origin at the end of the fiscal period. In addition, the Governor may direct cabinet agencies to limit their discretionary spending.

2-1 Introduction

WSDOT has the responsibility and challenging task of maintaining, preserving and improving transportation assets for current and future generations and doing so in a financially constrained environment. A further challenge is that WSDOT assets continue to age and deteriorate, leading to the costly reconstruction or replacement of an asset.

Asset management is a strategic, risk-based approach to cost-effectively and efficiently manage the physical assets of Washington's statewide transportation system. It is a fundamental component of Practical Solutions being the approach to manage the entire transportation system's physical assets on an ongoing, systematic basis from both a condition and system performance perspective.

Sound asset management practice requires the development of long-term, statewide asset management plans so that assets such as ferry vessels, pavements, locomotives, bridges and information technology systems have long, useful lives and to establish a course for delivering performance outcomes. Such plans are a key management tool for WSDOT to make decisions about where and when to invest limited funds in the transportation system in order to maintain a State of Good Repair.

The Capital Program Development and Management (CPDM) Division has central strategic and operational roles in asset management at WSDOT. From a strategic perspective, the Director of CPDM serves as a primary member of the Practical Solutions Core Team, providing a link between high-level planning and asset management. The Statewide Transportation Asset Manager coordinates with each major asset category to facilitate and develop asset management practices and processes across all assets from all types and modes. From an operational perspective, CPDM's role in planning, reviewing and programming projects benefits from the results of asset management analyses.

This chapter will familiarize agency personnel with CPDM's role in asset management. This includes background, policy, roles and responsibilities, agency activities, and highway activities.

2-2 Background

WSDOT has a rich history of asset management. This dates back to the early 1960s when [RCW 47.05](#) *Priority Programming for Highway Development*, was first established. This established the first pavement condition monitoring that is continued by the agency today. [RCW 47.05](#) was subsequently updated and provides the statutory framework for asset management. Additionally, the budgeting structure used at WSDOT was updated to better track investments relative to major types of work. This was also a forward-looking asset management practice. An excellent summary of this history is in the Federal Highway Administration (FHWA) publication [Comprehensive Transportation Asset Management: The Washington State Experience](#).

In addition to WSDOT's long history of asset management, a national focus on transportation asset management accelerated in the early 2000s and has been steadily increasing. The Moving Ahead for Progress in the 21st Century (MAP-21) federal legislation was passed in 2012, requiring states to develop a risk-based transportation asset management plan for the National Highway System (NHS). The American

Association of State Highway and Transportation Officials (AASHTO) has released two of the most prominently referenced resources on [Transportation Asset Management](#) (TAM), in 2002 and 2012.

WSDOT continues to develop its asset management implementation. Most recently, this has resulted in a new organizational structure for CPDM that includes the addition of a Statewide Transportation Asset Manager and a Highway Asset Manager. Many of the roles and responsibilities identified have recently been formalized as part of an Asset Management Executive Order. The [Section 2-4 Roles and Responsibilities](#) has a good overview of the current organizational framework, and roles and responsibilities for asset management.

2-3 Policy and Guidelines

There are several federal and state laws, executive orders, and directives that establish policies related to asset management.

- Fixing America's Surface Transportation (FAST) Act ([Public Law 114-94](#))
- Moving Ahead for Progress in the 21st Century Act (MAP-21) ([Public Law 112-141](#))
- [23 CFR Part 490](#) National performance management measures
- [23 CFR Part 515](#) Asset management plans
- [23 CFR 515.5](#) Definitions
- [23 CFR 515.7](#) Process for establishing the asset management plan
- [23 CFR 515.9](#) Asset management plan requirements
- [23 CFR 515.13\(b\)](#) Process certification and recertification, and annual plan consistency review
- [23 CFR 667](#) Periodic evaluation of facilities repeatedly requiring repair and reconstruction due to emergency events
- [RCW 47.04.280](#) Transportation system policy goals
- [RCW 47.05](#) Priority programming for highway development
- [23 U.S. Code § 119](#) National Highway Performance Program
- [49 U.S. Code § 5326](#) Transit Asset Management
- [49 CFR Part 625](#) Transit Asset Management
- [49 CFR Part 630](#) National Transit Database
- [RCW 47.06.140](#) Transportation facilities and services of statewide significance—Level of service standards
- [RCW 47.60](#) Puget Sound Ferry and Toll Bridge System (See Sections [47.60.005](#), [47.60.286](#), [47.60.300](#), [47.60.327](#), [47.60.335](#), [47.60.340](#), [47.60.345](#), [47.60.355](#), [47.60.365](#), [47.60.375](#), [47.60.377](#), [47.60.385](#), and [47.60.386](#).)
- [Governor's Executive Order 14-04](#): Washington Carbon Pollution Reduction and Clean Energy Action
- [Governor's Executive Order 13-04](#) Results Washington
- [Directive of the Governor 16-19](#) Preparedness and Response to Earthquakes and Tsunamis in Washington
- [WSDOT Executive Order 1098.00](#) Statewide Transportation Asset Management
- [WSDOT Strategic Plan](#): Results WSDOT

In addition to the federal and state law, here are some key documents or websites related to asset management:

- [AASHTO Transportation Asset Management Guide](#), American Association of State Highway and Transportation Officials (AASHTO), January 2011
- [FHWA: Asset Management](#)
- The [AASHTO Transportation Asset Management \(TAM\) Portal](#)

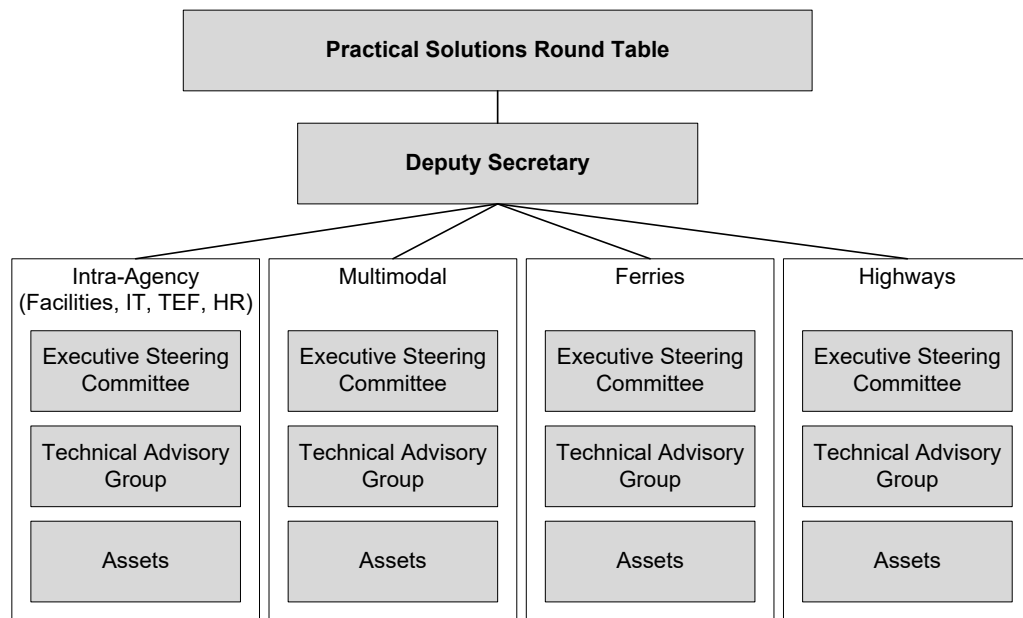
2-4 Asset Management Roles and Responsibilities

2-4.1 Organizational Framework

To understand asset management roles and responsibilities related to CPDM, it is important to put it in the context of the organizational framework for WSDOT as a whole. WSDOT has taken a broad approach to asset management. There are four major asset categories, as shown in Figure 2-1:

- Intra-Agency (Facilities, Information Technology (IT), Transportation Equipment Fund (TEF), Human Resources)
- Multimodal (Local Programs; Multimodal Planning Division; Aviation; Public Transportation; Freight; Rail and Marine; Active Transportation, and Washington State Ferries)

Exhibit 2-1 Organizational Framework for Asset Management



Each group will have an executive steering committee, technical advisory group, and asset classes. Within a class, *asset stewards* lead the management of centralized planning and network analysis. The site or project-specific design or maintenance of assets is done by *asset managers*. It is common for activities completed by an asset steward or asset manager to overlap, making the definition of rigid roles by position sometimes problematic. This fluidity is recognized and accepted within the framework, just as a position may function both in a technical and executive role at times.

A progress tracker spreadsheet of the Asset Management Plan development is scored each quarter for reporting to the Executive Steering Committees. It rates the status of each element in the Asset Management Plan for each asset class.

2-4.2 Operational Framework

Each group is responsible for primary asset management activities, including:

1. Developing and managing an inventory and condition assessment of assets.
2. Developing performance measures that relate to the transportation system policy framework.
3. Defining and establishing state of good repair standards for each asset that relates condition to cost efficiency and performance.
4. Establishing targets and performing gap analysis between measures and targets.
5. Assessing and establishing strategies to achieve the lowest life cycle cost management.
6. Integrating risk management into the asset management structure.
7. Integrating financial planning into the asset management structure.
8. Determining a replacement value for each asset.
9. Providing an interface between categories for cross-asset tradeoff analysis.
10. Providing an interface between broad Practical Solutions initiatives and asset management analyses and processes.

2-4.3 Asset Stewards

The primary responsibility asset stewards have is to ensure that the asset class(es) under their responsibility meet the broad activities defined above in [Section 2-4.2 Operational Framework](#). Because they are listed above, responsibilities are not listed again in this section.

Asset Stewards also work with Asset Managers to develop and implement strategies for existing assets or sub-networks, and work with CPDM to coordinate asset management activities across classes.

2-4.4 Asset Managers

The primary responsibility of asset managers is to ensure that specific assets or sub-networks of assets, usually across several classes, are managed according to operational standards and preserved based on performance and cost-effectiveness.

2-5 CPDM Roles and Responsibilities

2-5.1 Director

The Director serves as the asset management lead on the Practical Solutions Core Team. The Director serves as the primary liaison between the Executive Leadership Team and the Deputy Secretary.

2-5.2 Statewide Transportation Asset Manager

The Statewide Transportation Asset Manager is responsible for the development, implementation and management of the Statewide Transportation Asset Management Plan (STAMP). Responsibilities include guiding the development and integration of asset management with Practical Solutions. This position is also the primary facilitator and process manager for all agency assets. In the context of these categories, asset management responsibilities require this manager to:

- Work closely with the Asset Manager for each major asset category for developing agency-wide asset management frameworks, principles and processes.
- Conduct regular meetings of the Asset Management Technical Advisory Groups (AMTAG).
- Coordinate and collaborate on draft individual Asset Management Plans.
- Coordinate and draft the STAMP.
- Work with the Quality Assurance and Transportation System Safety (QATSS) Office to integrate risk management and asset management.
- Work with the Budget & Financial Analysis Office to develop a financial plan for the STAMP, which includes the development of financial plans for each major asset category.
- Develop the framework for cross-asset tradeoff analysis.

2-5.3 Major Asset Category Manager (e.g. Highway Asset Manager, Ferry Asset Manager, Multimodal Asset Manager, Intra-Agency Asset Manager)

The Major Asset Category Asset Managers are responsible for the development, implementation and management of their respective Major Asset Category Transportation Asset Management Plans. Responsibilities include guiding the development and integration of asset management with Practical Solutions. This position is the primary facilitator and process manager for all assets in their respective categories. In the context of these categories, asset management responsibilities require this manager to:

- Work closely with the Statewide Transportation Asset Manager for developing agency-wide conceptual asset management frameworks, principles and processes.
- Conduct regular meetings of the Asset Management Technical Advisory Group (AMTAG).
- Coordinate and draft individual Asset Management Plans.
- Coordinate and draft the federally required Transportation Asset Management Plan (TAMP).
- Work with the Quality Assurance and Transportation System Safety (QATSS) Office to integrate risk management and asset management.
- Works with the Statewide Transportation Asset Manager to develop framework for cross-asset tradeoff analysis.

2-6 Relationships with Other Programs

CPDM has a variety of relationships with individuals in the roles of Asset Steward and/or Asset Manager. They tend to work in programs throughout the state (e.g. Headquarters programs and Modes, Regions, etc.). See the section above describing the Roles and Responsibilities for Asset Stewards and Asset Managers for additional information.

2-7 Agency Activities

This section summarizes key asset management activities throughout the agency. Many of the ongoing activities are covered under the [Roles and Responsibilities](#) section in this chapter.

2-7.1 *Statewide Transportation Asset Management Plan (STAMP)*

An asset management plan is a key management tool for state DOTs to make decisions about where, when and how to invest state and federal funds in the transportation system. As WSDOT has taken a broad perspective on Transportation Asset Management, assets management plans from all of the major categories will be developed and incorporated into the Statewide Asset Management Plan (STAMP).

The STAMP provides a framework for making management and investment decisions in support of our transportation goals, legislative direction and federal Moving Ahead for Progress in the 21st Century (MAP-21).

The STAMP is used to:

- Identify performance measures and targets.
- Identify assets and their condition.
- Identify gaps between the existing condition and state performance targets.
- Perform life cycle cost and risk management analysis.
- Create a long-term financial plan.
- Describe investment strategies to preserve the asset, using a Practical Solutions approach.

The STAMP SharePoint site (permission required) contains the most recent version of documents and class-specific asset management plans.

2-7.2 *Trade-Off Analysis*

One of the significant outcomes of developing and implementing a robust asset management program is the ability to make informed investment decisions across all assets. This can take several forms, but is often referred to as “trade-off analysis.” CPDM is taking a lead role in using Decision Lens to develop models related to this cross-asset trade-off analysis.

Cross-asset resource allocation can be quite complex. Here are a couple of good resources:

- [Guide to Cross-Asset Resource Allocation and the Impact on Transportation System Performance](#)
- [Defining Cross-Asset Decision Making](#)

2-7.3 Financial Planning

Financial planning is another part of a robust asset management program. The financial plan is not intended to serve as a budgeting tool as much as it is a strategic programming document that illustrates the long-term trends and program amounts affecting infrastructure. The fiscal analysis and financial plan in the STAMP helps to educate partners of the many demands placed upon WSDOT resources and illustrates the financial challenges the agency faces to meet many of its core missions, which is to sustain its critical infrastructure.

The financial plan is used to:

- Allow WSDOT to clearly identify how much revenue is needed to sustain the conditions set out in the asset management plan and how the needs compare to forecasted revenues.
- Enable WSDOT to make more sophisticated projections to forecast the funding needs and the associated timing for the most cost-effective treatments it will have to implement.
- Highlight the differences between the funds needed to sustain the assets for the long-term and the funding that is projected to be available.
- Serve as the central theme to communicate a realistic State of Good Repair that can be achieved with the expected funding available to WSDOT.

2-7.4 Asset Management and WSDOT's Planning

WSDOT coordinates with the public, agencies and organizations representing the state, regions, tribes, counties, local jurisdictions, and various transportation interests. Planning is the early arena for seeking out and incorporating public comment on how to best manage the transportation system. Decisions made in planning must be fed forward in time to other key milestones (environmental permitting, preliminary and design engineering, alternatives analysis, project siting, construction, etc.) and Planning is the point in time where many decisions can be made to minimize duplicative, unnecessary, and costly future steps in these other discipline areas.

WSDOT's STAMP supports a wide array of statewide planning efforts ranging from safety to transportation project delivery. These planning efforts include:

- Strategic Highway Safety Plan – Washington's Strategic Highway Safety Plan (Target Zero) encourages agency partnerships that make the best use of government resources with ultimate goal to reduce the number of serious and fatal crashes.
- Washington Transportation Plan, Phase 2 - A 20-year plan that outlines the service objectives and strategies for maintaining, operating, preserving, and improving the statewide transportation system that system includes public roads, ferries, public transportation, aviation, freight and passenger rail, ports, and active transportation.
- WSDOT's Project Delivery Plan - A long range, 10-year highway construction planning method to program investments in our transportation infrastructure based on a high-benefit, low cost philosophy aimed at improving the operating efficiency of the system.
- Washington State's Statewide Transportation Improvement Program - The State Transportation Improvement Plan identifies the multimodal strategic investments, developed through local, regional, and state partnerships.

- Capital Improvement and Preservation Program (CIPP) - A two-year, detailed list of projects as required in the biennial budget process that incorporates the 2015 Connecting Washington package into applicable program. This requires Practical Solutions for those projects including Least Cost Planning and Practical Design throughout the entire project life cycle.

The STAMP also directly coordinates the management of state-owned and state-interest assets within the modal systems and provides centralized organization and asset planning for these groups. These plans include:

- State-owned Modal Plans
 - Ferry System Plan
 - Highway System Plan
- State-interest Modal Plans
 - Aviation System Plan
 - Bicycle Transportation and Pedestrian Walkways Plan
 - Freight Mobility Plan
 - Public Transportation System Plan
 - State Rail Plan
 - Washington State Electric Vehicle Action Plan

2-7.5 Asset Management and the Priority Process

Asset stewards provide CPDM a list of ranked needs, and collaborate and communicate with CPDM developing criteria used for the ranking process. Criteria are based on objectives and measures identified in the Statewide Transportation Asset Management Plan (STAMP). For preservation projects, needs are primarily based on inventory and condition, with consideration given to the operational performance of an existing asset. For most improvement projects, needs are primarily based on performance for mobility, economic, and environmental goals. Safety needs are identified through an evaluation of location's collision experience or for compliance with legal obligations.

An asset "register" file is an example of a typical table shown in the "Inventory and Condition" chapter of an Asset Management Plan. See the Ferries register below as an example.

Exhibit 2-2 Example of a WSF Ferries Inventory and Condition Table, November 2018

	Quantity		Average Unit Replacement Value	Replacement Value (Millions of \$)	Data Confidence	Condition			
						% Good	% Fair	% Poor	% Unk.
3. Ferry Terminals						\$1,433	-	-	-
Dolphins	141			\$231					
Timber Dolphins	34	Each	\$1,600,000	\$61	90%		20%	74%	
Steel Dolphins	99		\$1,500,000	\$149	90%	52%	45%	3%	
Concrete Floating Dolphins	7		\$3,890,000	\$27.23	90%	100%			
Timber Floating Dolphins KI	1		\$3,890,000	\$4	80%			100%	
Wing walls	35			\$102					
Timber Wing walls-BR	1	Each	\$3,500,000	\$3.50	90%			100%	
Steel Wing walls	33		\$2,860,000	\$84.56	90%	52%	45%	3%	
Floating Wing walls-LD	1		\$3,700,000	\$3.70	90%		100%		
Vehicle Movable Bridges	40			\$366					
Cable Hoist w/ Manual Pins (Type 1/2)	10	Each	\$10,750,000	\$108	90%	14%	58%	28%	
Cable Hoist w/ Hydraulic Pins (Type 3)	15		\$10,750,000	\$161	90%	20%	71%	3%	
Dual Cable Hoist (M-span) (Type 4)	2		\$10,750,000	\$22	90%	34%	58%	8%	
Hydraulic Span (H-span) (Type 5)	3		\$10,750,000	\$32	90%	72%	28%		
Tieup Slip (Type 3/10)	10		\$3,225,000	\$32	90%	7%	83%	10%	
Trestles & Bulkheads	-			\$405					
Timber Trestle	267,021	SF	\$30,855,000	\$147	90%	5%	90%	3%	
Concrete Trestle	430,380	SF	\$30,800,000	\$237	90%	36%	64%		
Bulkheads	25	Each	\$832,500	\$22	90%	15%	74%	11%	
Vehicle Ferry Passenger Loading Systems (Overhead Loading)	8			\$173					
Cable Hoist (Type 6, 7)	4	Each	\$21,608,000	\$86	90%	15%	60%	25%	
Hydraulic Hoist (Type 8)	4	Each	\$21,608,000	\$86	90%	72%	28%	3%	
Passenger Only Ferry Loading System	3			\$11					
Gangways and Floats	3	Each	\$3,700,000	\$11	90%	43%	30%	27%	
Pavement	2,361,600	SF		\$40					
Asphalt	2,057,554	SF	\$13.00	\$35	90%	37%	40%	13%	
Chip Seal	225,902	SF	\$15.00	\$3	90%		91%	9%	
Pervious	11,305	SF	\$17.00	\$0.2	90%	100%			
M.B.R or Gravel	45,879	SF	\$40.00	\$2	90%	17%	60%	23%	
Buildings	137			\$105					
WSF Terminal Asset Management Model LCCM Building Condition Rating									
Main Buildings (A)	15	Each	\$2,392,388	\$43	90%	36%	61%		
Secondary Buildings (B)	43	Each	\$1,213,566	\$44	90%	63%	37%		
Storage Buildings (C)	34	Each	\$131,229	\$4	90%	50%	44%	6%	
Toll Booths (D)	42	Each	\$323,140	\$14	90%	66%	31%		
Systems & Utilities	-			\$12					
Generators	15	Each	\$170,000	\$2.55	90%	21%	43%	36%	
Lighting Systems	10	Terminals	\$71,700	\$1.29	85%	11%	83%	6%	
HVAC	20	Terminals	\$55,900	\$1	75%	50%	50%		
VMS signs	2	Terminals	\$200,000	\$0.40	90%		50%	50%	
Security Gates	21	Each	\$38,000	\$0.50	75%	100%			
Security Systems	16	Each	\$209,000	\$4.30	90%	13%		87%	
Electronic Toll Collection	17	Terminals	\$34,118	\$1.00	80%	22%	2%	76%	
Visual paging	7	Terminals	\$21,800	\$0.20	90%	71%		9%	

Additionally, the criteria are based on risk management principles and life cycle planning approaches also identified in the STAMP.

CPDM communicates these needs and an assessment of funding availability to asset managers (usually Region staff) as scoping instructions (more information on Scoping in [Chapter 3](#)). Scoping instructions inform asset managers of what should be considered when preparing high-level (parametric) scoped projects for programming. Parametric cost estimates are required for projects that are expected to be programmed in the latter part of the delivery plan. Projects proposed for programming in the first four year of the delivery plan are expected to provide a more detailed cost estimate.

Proposed and programmed projects are prioritized based on additional statewide criteria that also meet state and federal goals. Decision Lens models are increasingly being used to prioritize projects, maximize overall performance within the area, and inform executive level decision makers on the gaps and impacts of trade-off analysis of performance scenarios. This finalizes the investments choices assumed in the Project Delivery Plan.

For bridge prioritization, WSDOT regularly inspects bridges and categorizes them by condition. Bridges classified in “Poor” condition are monitored, repaired or replaced. These bridges are prioritized for future work as part of WSDOT’s Bridge Preservation Program. A “Poor” rating is the Federal Highway Administration’s new rating term for bridges previously described as “structurally deficient”.

A bridge in “Poor” condition does not mean the bridge is unsafe for travelers or in danger of collapse. Bridge inspectors have authority to close or restrict any bridge deemed unsafe at any point during an inspection.

The actual number of bridges in “Poor” condition varies as work is completed and bridges are inspected. Depending on inspection schedule timing, a bridge with completed work may remain on the list until the next inspection is completed. The list is updated twice a year, in January and July.

The Legislature provided \$53 million to address Structurally Deficient Bridges, of which \$39 million was provided in the 2015-17 biennium. The current delivery plan for Structurally Deficient Bridges exceeds the amount provided by the Legislature, but will be monitored. High priority projects that are not funded by the investment set-aside by the Legislature will be funded from another funding source available for bridge preservation.

After the ten-year Project Delivery Plan is published, the high level (parametric) projects not programmed are returned to the asset managers (assigned a region approval code) for future updates to the Project Delivery Plan.

As asset management continuously improves at WSDOT, new or improved asset management processes, including updates to systems, are used as this process repeats in the following update to the Project Delivery Plan.

2-8 Asset Management Federal and State Requirements

This section contains information about the federal and state requirements related to asset management.

2-8.1 FHWA Transportation Asset Management Plan

All states are required by FHWA to develop and submit a Transportation Asset Management Plan (TAMP) under federal MAP-21 requirements. Therefore, this is an asset management plan that meets the requirements for federal reporting under [23 CFR Part 515](#). This will be a condensed version of the highway section of the STAMP.

States must submit their initial asset management plans for FHWA review by April 30, 2018. WSDOT officially submitted the initial asset management plan to FHWA on April 27, 2018 and the asset management plan is available upon request from CPDMPriorityProgramming@wsdot.wa.gov. State departments of transportation (DOTs) will then have until June 30, 2019, to submit an asset management plan meeting all requirements of federal code, 23 U.S.C. 119. There are penalty provisions that may apply if a state does not develop and implement an asset management plan consistent with federal rules, including reduced federal funding participation through the federal National Highway Performance Program.

The Highway Asset Manager, in coordination with the Statewide Transportation Asset Manager, is responsible for coordinating and developing the TAMP. This occurs as part of the overall development and coordination of the STAMP.

Compliance with [23 CFR Part 667](#)- Periodic evaluation of facilities repeatedly requiring repair and reconstruction due to emergency events.

The Highway Asset Manager is also responsible for coordinating agency personnel to comply with Part 667. The primary reason for this is that Part 667 was developed in conjunction with Part 515, and also that compliance with Part 667 prescribes risk-based asset management. The Highway Asset Manager will accomplish this by coordinating with the Climate Change Steering Committee, Emergency Operations, and the Federal Aid/ Work Orders manager in the Federal Aid & Budget Program Delivery Group.

2-8.2 Federal Transit Administration (FTA) Transit Asset Management Plan

The Moving Ahead for Progress in the 21st Century Act (MAP-21) required the Secretary of the United States Department of Transportation to develop rules to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, and to establish performance measures, and the Fixing America's Surface Transportation (FAST) Act reaffirmed this requirement. On July 26, 2016, FTA published the Transit Asset Management (TAM) Final Rule.

The TAM rule applies to all transit providers that are recipients or sub-recipients of federal assistance under 49 U.S.C. Chapter 53 that own, operate, or manage transit capital assets used in the provision of public transportation. A Tier I provider must develop its own TAM Plan. A Tier II provider may participate in a Group Plan or opt out and develop its own TAM Plan.

An initial TAM plan must be completed by October 1, 2018, which is no later than two years after the Final Rule's effective date of October 1, 2016. The TAM plan must then be updated in its entirety at least every four years, and it must cover a horizon period of at least four years.

The FTA [Washington State Ferries Transit Asset Management Plan](http://www.wsdot.wa.gov/NR/rdonlyres/6C78A08B-19A1-4919-B6E6-E9EF83E6376D/125510/WashingtonStateFerriesTransitAssetManagementPlan.pdf) was completed in October 2018 and can be found here: <http://www.wsdot.wa.gov/NR/rdonlyres/6C78A08B-19A1-4919-B6E6-E9EF83E6376D/125510/WashingtonStateFerriesTransitAssetManagementPlan.pdf>

Each entity developing a TAM Plan will have to report annually to FTA's National Transit Database (NTD). This submission should include:

1. Projected targets for the next fiscal year.
2. Condition assessments and performance results.
3. A narrative report on changes in transit system conditions and the progress toward achieving previous performance targets.

WSDOT's Public Transportation Division, in coordination with the Statewide Transportation Asset Manager, is responsible for coordinating and developing the Transit Asset Management Plan. This occurs as part of the overall development and coordination of the STAMP.

2-8.3 State law governing transit asset management

As a condition of receiving state funds, publicly owned transit agencies were required to submit an initial asset management plan to the Washington State Transportation Commission for certification in 2005. Agencies must recertify their plan every two years in the form of a letter, verifying that the agency is still following its plan as approved by the Transportation Commission. If there are changes, the agency must identify the changes in the recertification letter and submit the updated plan to WSDOT. The plan must inventory all transportation system assets and provide a preservation plan based on lowest life-cycle cost methodologies. These specific elements make up the framework for the transit asset management plan:

1. A mission statement that includes the guiding principles for asset management.
2. An inventory of the transit agency's assets that includes facilities, vehicles and equipment.
3. A preventative maintenance program, that includes maintenance service based on manufacturer's recommendations and adapted to local conditions, as well as a system to identify, track, and report maintenance, repair and preservation activities and costs.
4. A cost model that reflects the agency's policies and standards that result in the lowest maintenance costs over the life of an asset. The cost model is to ensure that an asset is maintained at an acceptable condition, maximizing safety and useful life of an asset.
5. A Warranty Recovery System (claim) – the process to recover the cost of parts and labor covered under the warranty.

The Public Transportation Division, in coordination with the Statewide Transportation Asset Manager, is responsible for coordinating and developing the state-required Transit Asset Management plan. This plan should support the federally required Transit Asset Management Plan and the Statewide Transportation Asset Management Plan.

An asset framework table describes the pyramid layer structure of assets in a particular asset class. Ferries Terminals is used as an example in the table below.

Table 2-1 Example of an Asset Framework Table

Major Asset Category	Highways	Ferries	Intra-Agency	Multimodal
Asset Class	Terminals			
Asset Group	Vessels			
Asset Sub-group (27 CFR 55)	Dolphins Wingwalls Vehicle Moveable Bridges Trestles/Bulkheads Vehicle Ferry Passenger Loading Systems Passenger Only Ferry Loading Systems Pavement Buildings Systems/Utilities	Timber Steel Concrete Floating Timber Floating Cable Hoist w/ Manual Pins (Type 1,2) Cable Hoist w/ Hydraulic Pins (Type 3) Dual Cable Hoist w-span (Type 4) Hydraulic Span Hoist (Type 5) Tie-up Slip (Type 3,10)	Timber Trestle Concrete Trestle Bulkheads Cable Hoist (Type 6,7) Hydraulic Hoist (Type 8) List- Cable Hoist (Type 6,7) List- Hydraulic Hoist (Type 8) List- Timber Trestle List- Concrete Trestle List- Bulkheads	Main Buildings (A) Secondary Buildings (B) Storage Buildings (C) Toll Booths (D) Generators Lighting Sys. HVAC VMS Signs Security Gates Security Sys. Flew Toll Call Visual Paging
Asset (unit/item)	List- Timber List- Steel List- Concrete Floating List- Timber Floating List- Cable Hoist w/ Manual Pins (Type 1,2) List- Cable Hoist w/ Hydraulic Pins (Type 3) List- Dual Cable Hoist w-span (Type 4) List- Hydr. Span w-span (Type 5) List- Tie-up Slip (Type 3,10)	List- Timber List- Steel List- Floating List- Timber Trestle List- Concrete Trestle List- Bulkheads	List- Cable Hoist (Type 6,7) List- Hydraulic Hoist (Type 8)	List- Main Buildings (A) List- Secondary Buildings (B) List- Storage Buildings (C) List- Toll Booths (D) List- Generators List- Lighting Sys. List- HVAC List- VMS Signs List- Security Gates List- Security Sys. List- Flew Toll Call List- Visual Paging
Major Components, Component Systems, Component Sub-systems				

2-8.4 State law governing Ferries asset management

In 1996, WSF started development of a life cycle cost model (LCCM). In 2001, the Legislature's Joint Task Force on Ferries recommended use of the LCCM for sizing the level of investment needed to meet legislatively determined preservation targets. In the same year, at the request of the Legislature, OFM validated the Ferries LCCM. In 2007, the Legislature enacted laws in RCW 47.60 prescribing an approach for asset management. The following is a summary of those requirements:

1. Employ a strategic planning process for the utilization of and investment in Ferries capital assets that considers: (a) ridership demand forecasts, (b) vehicle level of service standards, (3) operational strategies for the utilization of capital assets and (d) terminal and vessel design standards.
2. Manage the protection of capital assets by: (a) maintaining an LCCM consisting of an inventory of capital assets that have a standard estimated life (life cycle), (b) inspecting assets for condition at least once every three years, (c) adjusting the standard estimated life for assets when inspections are made, (d) using the LCCM to predict preservation needs, (e) employing analytical processes and decision-support tools to prioritize needs and select investments subject to available funding, (f) using the LCCM as the basis for preservation budget requests, (g) preparing pre-design studies for preservation projects exceeding \$5 million, (h) spending appropriations made for preservation projects only on preservation and only when the condition warrants, and (i) measuring asset management success in terms of a reduction in the backlog of capital assets that have reached or exceeded their condition-adjusted life cycles.
3. Manage the improvement of terminals and vessels and the acquisition of new vessels by: (a) adhering to the capital plan, (b) submitting pre-design studies with budget requests and (c) providing required information relating to vessel improvements and vessel acquisition.
4. Provide accountability, visibility and transparency for investments in Ferries capital assets.
5. Milestones: (a) Initial state laws enacted—2007, (b) strategic planning--2017-19 biennium, (c) program and budget development--September even years and October odd years.

The Ferries Division, in coordination with the Statewide Transportation Asset Manager, is responsible for coordinating and developing the state-required Ferries Asset Management Plan. This plan is intended to satisfy the asset management direction (RCW 47.60 Puget Sound Ferry and Toll Bridge System & 49 CFR Part 625 Transit Asset Management) for the Ferries Division and should support Statewide Transportation Asset Management Plan.

2-9 Appendices

Appendix 2A Links to WSDOT Asset Management Websites

Appendix 2A *Links to WSDOT Asset Management Websites*

Below are the links to the WSDOT Asset Management websites.

The Statewide Management Plan

www.wsdot.wa.gov/about/assetmanagement/statewide-asset-management-plan

The Major Asset Categories are Highways, Ferries, Intra-Agency, and Multimodal.

www.wsdot.wa.gov/about/assetmanagement/major-asset-categories

Requirements and Policies (federal and state)

www.wsdot.wa.gov/about/assetmanagement/requirements-and-policies

The Transportation Asset Management Plan

www.wsdot.wa.gov/sites/default/files/2018/08/15/Washington-State-DOT-Initial-Transportation-Asset-Management-Plan.pdf

3-1 Introduction

Scoping is the process of defining the desired outcome—a new or improved system or system component—with specified features and functions to be provided by the project. The project definition describes not just the scope, but the schedule and budget of the project as well. It is based on information from planning and asset needs assessments, and includes estimates of the work to be done to address the need, the schedule to deliver the work, and the preliminary cost of the work. Defining this information occurs in a series of documents referred to as the Project Summary.

The Capital Program Development and Management (CPDM) Division is responsible for the management of projects through the scoping process, while WSDOT Region staff are responsible for scoping individual projects. CPDM gives scoping instructions that guide Region staff on specific types and quantities of projects to start developing a Project Summary and establish a Project Definition in Capital Program Management System (CPMS). There could be several years between the initial project definition and the final step in the scoping process, which is an approved Project Summary.

The scoping process is critical because it serves as the link between planning, asset management and project design. When done well, it considers these aspects throughout its process. This chapter will familiarize agency staff with CPDM's role in scoping, by providing background, policy, roles and responsibilities, and an overview of processes related to scoping.

3-2 Background

At WSDOT, a successful scoping process will result in a common understanding of what is included and excluded in the project. The product of the scoping process is the completed and Headquarters-approved Project Summary form. Scoping of a WSDOT project is not complete until this form, and all required attachments and reports, are complete and approved. This package then defines the WSDOT “approved scope” of the project.

One very important element of the scoping process is timing. The scoping process and the budget building process must work hand-in-hand to produce a list of accurately scoped projects, in time to build a budget request for submittal to the Governor/Governor's office. When WSDOT submits funding requests that are prepared in this way, legislators and the public perceive that WSDOT is a good steward of public funds.

3-3 What is the “Scope” of a Project?

The term “scope” as applied to WSDOT projects is commonly used at many different stages of project development, sometimes resulting in confusion over what is actually being discussed. The word is used in several different ways in WSDOT documents: as a verb (to scope, scoping), an adjective (scoping process) and as a noun (the project scope). The best way to use the term is to include a qualifier, such as “Proposed scope,” “Legislative Budget scope,” or “approved Project Summary scope.”

Following are explanations of these three primary types of scope.

3-3.1 **Proposed Scope**

This is a solution proposed to solve a transportation need. The proposed solution must meet a need identified in the *Highway System Plan*¹. A completed Project Definition, which is part, but not all, of the Project Summary, documents a proposed scope, and includes the following:

- a. Statement of need.
- b. Summary of proposed solution to meet the need (e.g., add one additional lane in each direction from MP XX to MP YY; construct a four-lane bridge; replace a culvert with a bottomless culvert).
- c. Estimated cost by project phase.
- d. Basis of Estimate at time of proposed scope.
- e. Preliminary schedule.

All projects will need a Project Summary, except for the most complex projects. See [Section 3-7](#) Projects Approved for Design.

3-3.2 **Legislative Budget Scope**

This is a statement specifying the legislative intent for a project as written in a legislative budget document or legislatively approved project list, such as the LEGFIN TEIS version dated at the end of the legislative session. A Legislative Budget scope outlines the basic parameters of the project, but is normally not as specific as the details found in a completed Project Definition or Project Summary. It is usually the result of a Project Proposal or legislative direction. If the Legislature has specified the scope for a project, Legislative approval is required to change that scope. Not all projects will have such a scope as defined by the Legislature, e.g., many projects using Pre-Existing Funds (PEF) do not have a Legislative Budget scope.

¹ The Highway System Plan (HSP) has not been updated since late 2008, and therefore some needs identified may not fully match what is in the document. The Highway System Plan is available at www.wsdot.wa.gov/planning/hsp.htm. Programmed projects are always the result of an identified need, which may be identified through several agency processes (subject matter experts, region staff, etc.).

3-3.3 Approved Project Summary Scope

This document is WSDOT's intent for the project, as defined in the CPDM-approved Project Summary and all required attachments, including the Basis of Estimate. The scoping process, and the CPDM-approved scope, are not complete until the Project Summary is approved by CPDM.

3-3.4 Scoping Stakeholders and Partners

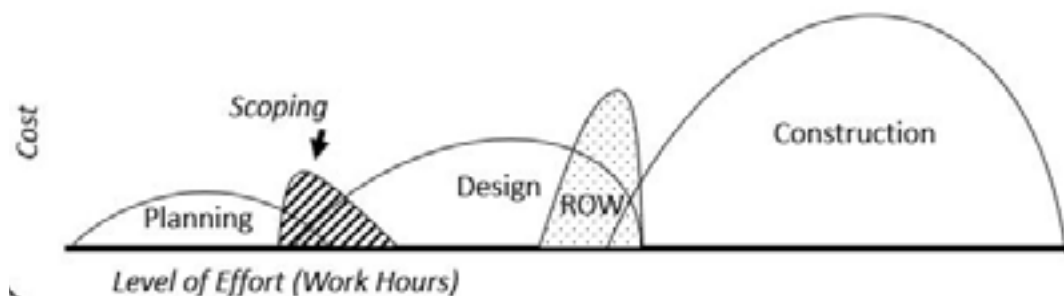
It is important that scoping include interaction and input from stakeholders and partners to realize a successful project¹. The scoping process should include input from impacted organizations such as, but not limited to, Planning, Environmental, Utilities, Real Estate Services, Materials, Federal Highways (FHWA), Architecture, Bridge and Structures, Maintenance, the public, local organizations, and other agencies. A primary conclusion from the [1995 Project Scoping Task Force Final Report](#) was that scoping is most successful with this type of interaction.

3-3.5 Scoping and the Life of a Construction Project

[Figure 3-1](#) is a simplified example of how scoping fits into the life of a construction project. The relative effort (work hours) is depicted on the x-axis, and the relative cost is depicted on the y-axis.

It is important to compare where in the process scoping has the opportunity to influence the final project cost, which declines throughout the process. Therefore, even though the level of effort and cost for scoping is comparatively small to other phases of a project's life, it is critical to maximize system performance in a cost-effective manner.

Exhibit 3-1 Scoping and the Simplified View of the Life of a Transportation Project



¹ WSDOT's updated Community Engagement Plan is at www.wsdot.wa.gov/sites/default/files/2017/02/28/FinalCEP2016.pdf.

3-4 Policy and Guidelines

There are several WSDOT policies that can affect the scoping process. They are listed here with a brief explanation.

3-4.1 ***Revised Code of Washington (RCW 47.05)***

CPDM is responsible to implement the legal requirements of [RCW 47.05](#). Under that law, state transportation funds must be invested based on a policy of priority programming. Priority programming is the rational selection of projects and services according to factual need and an evaluation of life cycle costs and benefits. Projects are to be systematically scheduled to carry out defined objectives within available revenue. Therefore, project scoping is one of the crucial steps taken to insure statewide consistency in conformance with the RCW.

3-4.2 ***WSDOT Design Manual***

The [Design Manual](#) Section 300.06 defines the Project Summary project documentation and required approvals.

3-4.3 ***1995 Scoping Task Force Final Report***

A substantial agency review of scoping at WSDOT was conducted in 1994 and 1995. Many of the conclusions in the document guide scoping today, such as a longer scoping timeline (6-Year Plan was recommended) and the Project Summary database replacing the Project Prospectus. See the sections *Task Force Findings* and *The New Scoping Process* for more information.

3-4.4 ***JLARC Scoping and Cost Estimating for Highway Construction Projects***

In 2009, the [Joint Legislative Audit and Review Committee](#) (JLARC) conducted a review and published a report on scoping and cost estimating. A primary recommendation was to establish an easy-to-follow trail between a cost estimate and budget request.

3-4.5 ***Estimating Resources***

Developing estimates that minimize variance is a key component of successful scoping. Links to much of this documentation are available at [Estimating Information](#).

3-4.6 ***Community Engagement***

Community Engagement is required by federal and state law, and WSDOT policy, and is carried out during the developmental stages of a project including the planning, scoping and design phases. This practice seeks to assure meaningful and inclusive public engagement about both existing and future conditions, and provide an opportunity for feedback. Community Engagement is Goal 5 of [Results WSDOT](#) and the [Community Engagement Plan](#) that was recently updated in 2016.

3-4.7 ***Practical Solutions***

Practical Solutions is a two-part strategy that includes least cost planning and practical design. Practical solutions are considered in the scoping process. The Executive Order [E 1090 Practical Solutions](#) directs employees 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. The WSDOT [Practical Solutions](#) webpage contains additional information.

3-4.8 Implementation of Policy Direction in Scoping Instructions

The Scoping Instructions web page contains direction related to implementation on scoping projects in compliance with agency policy or legal requirements, such as including fish barriers in other transportation projects, seismic retrofit, storm water retrofit, and paths and trails.

For more information on the process for identifying fish barriers within other projects, see [Appendix 3A](#) or visit the Scoping webpage section “Environmental Retrofit – I4” for the link titled Scoping Instructions – Fish Barriers in Other Transportation Projects. wwwi.wsdot.wa.gov/Planning/CPDMO/PlanProgScoping.htm

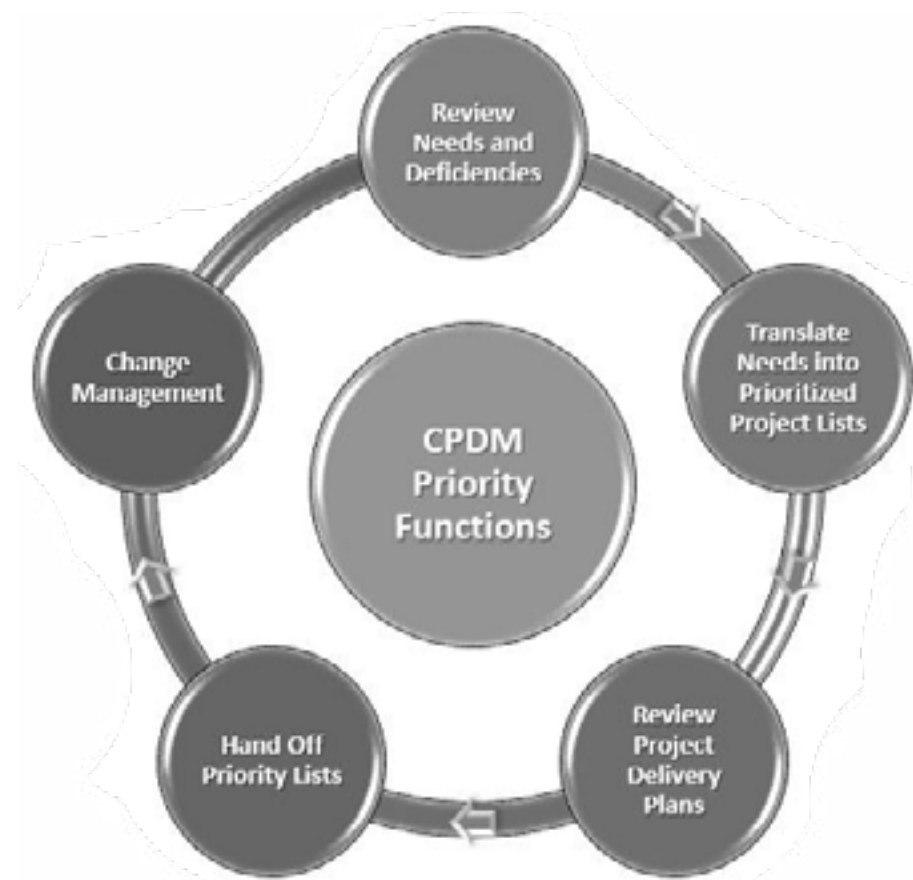
For more information on how WSDOT reports to the Legislature and the public on expenditures for pedestrian and bicycle facility improvements, see paths and trails section in [Appendix 3C](#).

3-5 Roles and Responsibilities

3-5.1 CPDM Roles and Responsibilities

The Priority Programming group is responsible for managing the scoping process for highway construction projects. This includes the following functions, as shown in [Figure 3-2](#).

Exhibit 3-2 Primary Scoping Functions of CPDM



CPDM's primary scoping functions are to:

- Write and deliver scoping instructions. CPDM delivers detailed scoping instructions to Regions by sub-program throughout the year. They conduct an important initial scoping meeting in October, with follow-up status meetings as necessary.
- Monitor scoping progress. Scoping engineers monitor progress of scope development deadlines to ensure they are complete prior to submittal of the governor's budget.
- Coordinate project summary reviews. Coordinate Region and asset steward concerns, support the development of project summary elements, and help resolve issues.
- Review and approve Project Summary. Perform the technical review, and readiness for final Project Summary approval. Approve the Project Summary.
- Maintain Project Summary database. Project summaries are maintained in the FileMakerPro database, though they are moving to the TEIS project management database (planned for Winter 2017/18). The Project Summary database is linked to CPMS project data and technical information provided by specialty and Region engineering groups.

3-5.2 Relationship with Other Offices

CPDM works with Asset Stewards to review the criteria used to develop a list of ranked needs. CPDM reviews and prioritizes the needs using the provided criteria along with other CPDM-established criteria (such as executive direction, funding constraints, etc.). This identifies the list of needs used as the basis of scoping instructions. Here are the primary offices related to scoping instructions by sub-program and investment area:

- I2 (Safety) – Traffic, Development, and Transportation Safety, Quality, and Enterprise Risk Division
- I4 (Environment) – Environmental Services Office
- P1 (Roadway Preservation) – Pavement
- P2 (Bridge Preservation) – Bridge Preservation
- P3 (Other Highway Assets)
 - Unstable Slopes – Geotechnical
 - Major Electrical – Traffic
 - Major Drainage – Hydraulics
 - Weigh Stations – Traffic
 - Rest Areas – Facilities
 - Basic Safety – Development
 - ADA – Development and Equal Opportunity Office

Scoping instructions are issued to Region Program Management, which typically performs the planning/parametric scoping on a project and may perform the detailed scope for less complex projects such as paving. Complex projects are most often scoped by project offices in coordination with technical specialists.

3-6 Overview of Scoping Processes

There are several steps in the scoping process, and these are grouped into Pre-Scoping, Scoping, and Post-Scoping groups. The primary focus of this chapter is the steps listed under the Scoping steps.

The Scoping Team periodically updates the [Scoping](#) webpage as the main location for all directional documents related to scoping.

3-6.1 Pre-Scoping Steps

1. Identify system needs. Asset stewards identify system needs based on asset management and analysis. Additional needs are identified from coordination with Asset Managers, such as Region staff, planning processes and other coordination between CPDM and agency staff.
2. Rank system needs. CPDM, in conjunction with technical specialists, establishes a list of performance-based ranked needs. Ranking system needs is different from project prioritization. Project prioritization takes place after solutions have been proposed and quantified benefits are compared to the estimated cost. However, for some types of preservation work, the technical specialists involved make a planning-level estimate of the solution and its benefit and its cost. In this workflow, conceptual projects are prioritized in conjunction with determination of scoping extent (step 3), and project prioritization (step 11) remains largely similar to the prioritized systems needs scoped.
3. Determine how many projects to scope based on estimated funding availability. CPDM establishes an amount on how much scoping to do. The amount is established based on anticipated funding and consultation with executives regarding the agency's goals and objectives. This is done for each sub-program and category of work in the Capital Improvement and Preservation Program.
4. Issue scoping instructions to Regions. CPDM issues scoping instructions to Regions for the Improvement and Preservation Programs. Scoping instructions may be issued throughout the year.

3-6.2 Scoping Steps

1. Assign scoping project manager. Regions are responsible for delegating project-scoping responsibilities. Some Regions have dedicated scoping teams, while other Regions use their design offices to scope.
2. Initiate and align scoping team. Region project managers are responsible for identifying needed resources to scope their projects. As noted in step 5 above, the project scoping manager may also be the project design manager.
 - Identify scoping team and stakeholders.
 - Acquire scoping resources:
 - Analytical tools for developing conceptual solutions.
 - Cost estimating tools: parametric, historical bid-based, cost-based, and risk-based. (See [Cost Estimating Manual Chapter 3](#))
 - Scoping checklists, procedures and guidelines.

3. Plan the scoping work. Region project manager determines the level of scoping and the tools needed to accomplish scoping. Many tools and procedures are available. Most of the following are required under agency policy but are scalable to be commensurate with project scoping requirements:
 - Use predefined and approved scoping processes. (See the [Scoping](#) webpage for updates.)
 - List the deliverables including a very high-level Work Breakdown Structure (WBS) for the project. (See the [Scoping](#) webpage for updates.)
 - Identify various disciplines/agencies/stakeholders involved and needed coordination.
 - Plan and schedule scoping tasks, meeting, site visits, etc.
 - Estimate cost of scoping.
4. Obtain appropriate endorsements of the scoping plan schedule and budget. Project manager is responsible for developing a scoping plan that is agreeable to CPDM and other stakeholders. Simple paving projects have well established scoping procedures and coordination is only required for non-routine methods or levels of effort. Unusual, controversial, complex or high-cost projects should have their scoping plans endorsed by all necessary parties. Even projects which follow an approved scoping process should communicate with CPDM on specific non-standard methodologies and the level of effort anticipated. Appropriate endorsements can be from:
 - Team members, stakeholders, resource agencies, technical specialists.
 - Region Project Development Engineer.
 - Region Program Manager.
 - CPDM Systems Analysis & Priority Programming Manager as to cost and schedule of complex scoping plans.
5. Scope the project. Scoping team members are responsible for the following:
 - Acquire data necessary to scope.
 - Conduct coordination meetings and site visits as needed.
 - Agree on recommended design elements of conceptual solution.
 - Recommend project staging and consider needed detours.
 - Identify Right of Way (R/W) considerations and utility conflicts.
 - Develop the environmental and permit requirements and level of documentation needed.
 - Document the design matrix to be used, roadway geometrics, design deviations and any other design decisions made during this phase.
 - Consider high-cost and schedule sensitive impact areas such as structure demolition, hazardous materials, wetlands, archeological impacts, tribal issues, storm water regulations and noise wall needs.
 - Develop conceptual project scope and schedule.
 - Develop scoping-level estimate.
 - Identify methodology used and assumptions made.
 - Use risk-based estimating when appropriate.
 - Complete basis-of-estimate form and checklist.
 - Obtain signature on the concurrence form or memo recommending design elements.

6. Complete Project Summary and obtain approvals of the following:
 - Project Summary approval
 - Design Decisions Summary approval
 - Environmental Summary approval
 - Conceptual cost estimate (planning level)
 - Conceptual schedule (planning level)
 - Technical reports

3-6.3 Post-Scoping Steps

1. Prioritize projects. CPDM applies a statewide analysis to determine the most cost-effective solutions. (Note: most projects in the Highway Preservation Program are currently prioritized statewide prior to the beginning of the scoping process by the technical experts responsible for asset management. Cost effective solutions are identified when the needs are ranked by applying parametric estimating techniques. Ranking needs and prioritizing projects occur in one step—at step 2 above.)
2. CPDM programs the highest priority projects, within available funding limits, according to trade off analysis between performance-based assessments of investment amounts at the (sub) program level.
3. CPDM submits program and budget proposal to the Office of Financial Management (OFM) for inclusion in the Governor's budget proposal.
4. Once a project is programmed, CPDM authorizes preliminary engineering (PE) work order upon funding approval.
5. Assistant Regional Administrator issues design approval.
6. Region completes environmental (for National Environmental Policy Acts (NEPA) or State Environmental Policy Acts (SEPA) approval).
7. Region issues project development approval.

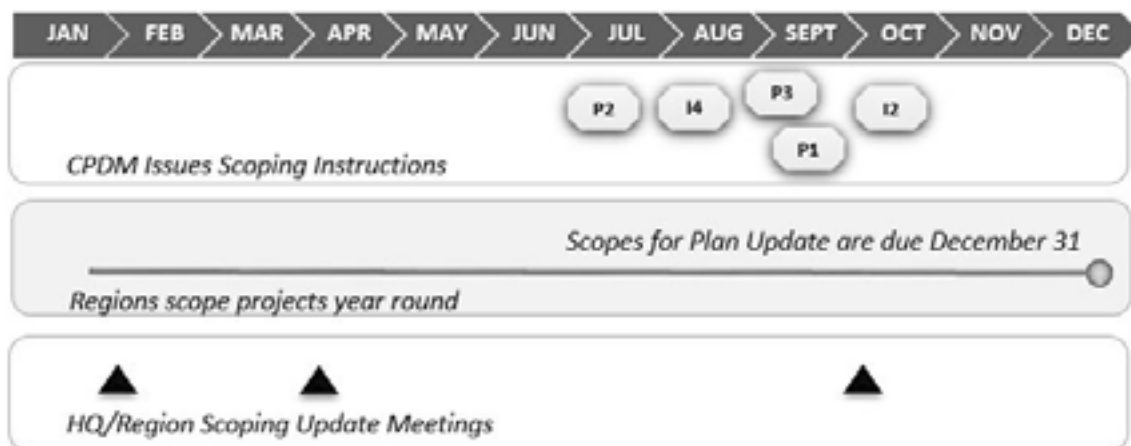
3-6.4 Scoping Instructions

Clear scoping instructions are an important part of the scoping process. Scoping instructions are kept current and are available to WSDOT staff at wwwi.wsdot.wa.gov/Planning/CPDMO/PlanProgScoping.htm.

It is very important that the instructions clearly communicate which needs to address, specificity as to the level of scoping effort needed (parametric, detailed, etc.), the extent of projects to scope (usually a funding amount), and any additional instructions regarding specifics for developing and inputting the information into CPMS and the Project Summary database.

Scoping instructions were previously released on an annual basis. This has moved to a staggered approach for individual sub-programs. [Figure 3-3](#) shows the most recent workflow regarding scoping instructions and project delivery.

CPDM further recognizes the value of releasing scoping instructions on an as-needed basis, and has issued scoping instructions as needs or scenario analysis are completed. At a minimum, scoping instructions for each sub-program will still be issued on an annual basis. This continuous framework allows for a continuous management of the Project Delivery Plan.

Exhibit 3-3 Rolling Annual Scoping Schedule

Current scoping instruction release, along with overall annual scoping process. This process is currently under review and is moving toward a continuous process where scoping instructions are released as needed (at a minimum, annually).

3-6.5 Scoping Deliverables: The Project Summary

An approved Project Summary defines the approved project scope, and is the major deliverable of the scoping process.

The Project Summary is made up of several parts:

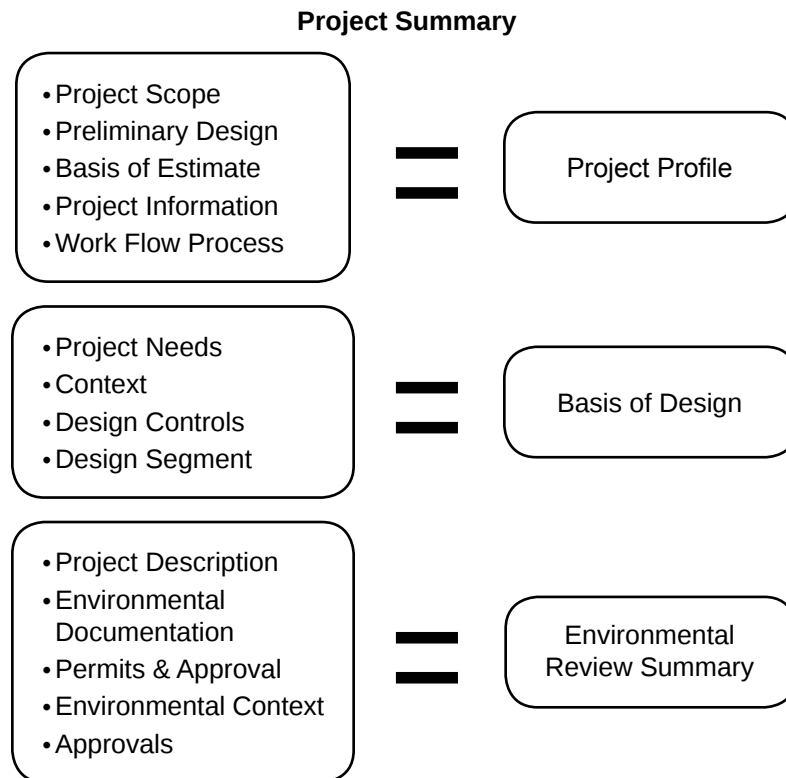
- Project Definition.
- Basis of Estimate¹.
- Basis of Design, if applicable.
- Environmental Review Summary (ERS).

Regional asset stewards and asset managers translate their needs into buildable projects, where the information is used to create a Project Summary. The Project Summary is a package that summarizes the engineering decisions, baseline scope, the estimated cost, and the proposed delivery schedule. Once the Project Definition is completed and submitted along with the preliminary Basis of Design and the Environmental Review Summary (ERS), it then moves into the Project Summary review process, conducted by CPDM scoping engineers.

A collaborative team approach to project documentation is required for a successful process and outcome. Among the reasons for collaboration, this process encourages an honest assessment of the department's ability to estimate costs accurately, and to clearly communicate a high confidence level in those estimates.

Figure 3-4 is a summary of the elements of the Project Profile (Project Definition and Basis of Estimate), Basis of Design, and Environmental Review Summary that form the Project Summary.

¹ The combination of the Project Definition and Basis of Estimate is referred to as the Project Profile. In the FilemakerPro version of the Project Summary database, there are fields for the Project Definition, while the Basis of Estimate is an attachment. In the upcoming TEIS version, there are fields for Project Definition and Basis of Estimate, in a module called the Project Profile.

Exhibit 3-4 Elements of the Project Summary

Note: Project Definition and Basis of Estimate are included in the Project Profile.

3-6.6 Change Management

It is important to be able to describe, and justify if necessary, any change that is perceived to be a change in scope. This is especially critical when it applies to a change from what the Legislature funded to what WSDOT will actually build. See [Chapter 6](#) Managing Project Delivery. It has more information on the change management processes and workflow for documenting and managing this change. This documentation is critical to align WSDOT with the recommendation from the [JLARC Scoping and Cost Estimating for Highway Construction Projects](#) report (see [Section 3-4](#) Policy and Guidelines).

Further guidance on scope change can be found in [Chapter 9](#) and [Appendix 9A](#).

3-6.7 Data Integrity

Accurate and timely Project Summaries are the foundation of a successful Project Delivery Plan. Established processes to manage the integrity of this data are essential. Data integrity is also an area of focus and active improvement for CPDM. This section contains the primary timing and processes for managing data integrity related to projects in the scoping phases.

3-6.8 Project Proposed for Inclusion in the Project Delivery Plan (“Z”-Coded Projects)

Projects that are scoped within the context of Scoping Instructions result in a Project Definition that most often are included in the Project Delivery Plan. When a region first scopes a project for the Project Delivery Plan, it is assigned a “Z” approval code in CPMS. The Priority Programming group monitors CPMS for projects proposed with a “Z” and checks key fields for accuracy, including:

Exhibit 3-5 CPDM Data Validation Fields for Z-Coded Projects

Validate Check for Correct Data	Missing Fields	Missing Milestones
• PIN - Correct sequence (region and state route) • Program Code • Sub-program Code • Subcategory Code • Highway Route • Project Title - Per CPMS Guidelines • Book Description - CPMS • Work Description - CPMS • Improvement Type Code • Review aging relative to milestones	• Beginning Milepost • Ending Milepost • SRMP Date • RRT - if applicable • RRQ - if applicable • Directional Indicator • Location • Contract Delivery Method	• Schedule • M1 - Project Definition • M2 - Begin PE • M3 - Environmental Doc Complete • M4 - RW Certification • MS - Ad Date • Construction Start • M6 - Operationally Complete • Phase End • Urban Area • Area • Legislative District • Congressional District

3-7 Projects Approved for Design

A complete and approved Project Summary is usually necessary to begin the design work of a project. In addition to assuring the information in CPMS is correct, the scope, schedule and cost estimates in the project summary are reviewed, along with making sure any necessary additional reports are completed.

The current standard is for Regions to submit their Project Summary for CPDM review six months prior to the “Begin PE” milestone. CPDM should then complete the review and approve the Project Summary three months prior to the “Begin PE” milestone.

For information on evaluating cost estimates for active delivery projects, please see [Appendix 3B](#).

3-8 Appendices

[Appendix 3A](#) Appendix 3A Process for Identifying Fish Barriers Within Other Projects

[Appendix 3B](#) Evaluating Cost Estimates for Active Delivery projects

[Appendix 3C](#) Update on Paths and Trails Revisions

Appendix 3A *Process for Identifying Fish Barriers Within Other Projects*

3A-1 Background

Federal court permanent injunction requires most fish barriers in the Northwest and Olympic regions to be removed by 2030, with certain exceptions but no later than the end of the culvert's useful life. Funding levels provided for stand-alone fish barrier removal is insufficient to replace barriers at a rate that will meet requirements of the court injunction. Including barrier removal work as part of other projects will allow for greater success in complying with the injunction.

Projects in the mobility, safety, and economic initiative improvement sub-programs were considered as candidate projects for including fish barrier elimination work; in addition to certain concrete preservation projects. A group¹ (the "evaluation team") was established to refine criteria and create a process to determine when barriers within limits of (or in near proximity to) other projects should be included in the scope of those projects. The results of the evaluation team were presented to an oversight team² for review and approval. The oversight team recommended additional/revised criteria and higher thresholds to exempt a barrier from the scope of projects being delivered near barriers. The criteria used to evaluate the projects included:

- Total cost of the project.
- Impact on project cost to add the fish barrier work.
- Whether the location of the barrier was inside or outside the case area.
- Whether salmon or resident trout were impacted.
- Length of potential habitat gain.
- Highway traffic volume.
- Culvert condition (a surrogate measure for remaining life).

The final summary results of the analysis are as follows:

- Number of projects evaluated in the proximity of a fish barrier: 33
 - This list is based on new project starts through 2021-23
- Number of fish barriers in the vicinity of the evaluated projects: 157
- Maximum points possible when applying scores to the criteria: 66
- Minimum points to recommend including the fish barrier work: 40
- Number of projects recommended to add fish barrier work: 26
- Number of fish barriers being added to other projects: 109

¹ NW Region; Olympic Region; CPDM; ESO; and HQ Hydraulics

² Deputy Chief Engineer; Development Office, Director; and CPDM Division, Director

3A-2 Direction from the Leadership Team

The evaluation plan, criteria, and final analysis were presented at the Deputy Secretary's January 17, 2017 Bi-Weekly meeting. The direction from this meeting was to support the outcomes of the evaluation. The leadership team understood that this will result in additional scope being added to existing programmed and funded projects. In some cases, it will result in the need for additional funding to be provided in order to complete the additional scope. It was recommended, and the leadership team agreed, that the change management process be used to either add funding (where needed and justified) or provide greater justification to exclude the barrier work from the project.

The visibility of change management associated with fish barrier funding and/or scope adjustment (removal) will be more robust and transparent than most change management. CPDM is using the Change Management process to evaluate and provide direction on the programming of fish barrier removals within larger projects.

Scoping instructions for fish barriers identified within other transportation projects can be found at: wwwi.wsdot.wa.gov/Planning/CPDMO/PlanProgScoping.htm

Appendix 3B Evaluating Cost Estimates for Active Delivery projects

This document provides program guidance for the frequency to update a project's cost estimates on active delivery projects. Active delivery projects are projects that any phase of the project has been approved for a work order to be authorized. The milestone to begin Preliminary Engineering (PE) marks the start of the project's design process. It is usually the first capital spending activity in the project delivery process and is considered accomplished when the PE Work Order is authorized.

The Capital Program Development and Management (CPDM) Division is responsible for developing and managing WSDOT's Capital Construction Program, which includes highways, ferries, rail, traffic operations and capital facilities. Regions and modes manage projects' delivery and work with program management staff to monitor, analyze, and report on the performance of projects with respect to scope, schedule and budget expectations in accordance with program management guidance and policy for project and program delivery.

As the agency's managerial stewards, it is our (and WSDOT's) mission to "provide safe, reliable and cost-effective transportation options to improve communities and economic vitality for people and businesses."¹ This directly aligns with CPDM's division goals to implement a sustainable framework with effective processes that provide transparent delivery to maintain a strong partnership with our stakeholders.²

The reliability of project cost estimates at every stage in the project development process is necessary for responsible fiscal management. Practical decision making in order to align with budgets, policies and investments is based upon the accuracy of WSDOT's projects and program delivery estimates.

Unreliable cost estimates result in severe problems in WSDOT programming and budgeting, affecting staffing and budgeting decisions that could impair effective use of department resources. Communication with decision- makers on critical budget issues is also adversely affected. To manage the program efficiently, the department requires Regions to evaluate a project's cost estimate every six months for those projects that have been authorized to begin preliminary engineering.

The phase "Estimates Date" should be updated in CPMS if one of the following events occurs:

- New information is gathered or processed (quantity change or new items).
- Major design levels are completed (for example, at 30 percent, 60 percent, or 90 percent design).
- Volatile price fluctuations occur.
- Highest cost items change.
- Other changes that will impact a project's cost.

¹ Results WSDOT 2017-2021

² WSDOT and CPDM Strategic Plan Alignment Framework

If none of these events occurs, and a Region's program management determines that an update to the estimate is not necessary, the only action required is to update the "Estimate Review Date" in CPMS (HC, HP, HR screens). Additional information can be found on the [CPMS Users Guide](#).

The CPMS Users Guide is located below at the following link:
wwwi.wsdot.wa.gov/ppsc/pgmmgt/cpms

Appendix 3C Update on Paths and Trails Revisions

The proviso for Connecting Washington expenditure requirements on reporting for paths, trails, pedestrian and bicycle facility improvements reads as follows:

Section 602 in Engrossed Substitute Senate Bill (ESSB) 6106 (Filed March 29, 2018).

“Sec. 602. 2017 c 313 s 606 (uncodified) is amended to read as follows:

(1) By November 15, 2017, and annually thereafter, the department of transportation must report on amounts expended to benefit transit, bicycle, or pedestrian elements within all connecting Washington projects in programs I, P, and Z identified in LEAP Transportation Document ((2017-2)) 2018-2 ALL PROJECTS as developed March 5, 2018. The report must address each modal category separately and identify if eighteenth amendment protected funds have been used and, if not, the source of funding.

(2) To facilitate the report in subsection (1) of this section, the department of transportation must require that all bids on connecting Washington projects include an estimate on the cost to implement any transit, bicycle, or pedestrian project elements.”

From the *Plans Preparation Manual*

March 2018 Update

Division 7

Section 700.09(6) Paths and Trails

700.09(6) Paths and Trails

WSDOT tracks expenditures for pedestrian and bicycle facility improvements so this information can be reported to the Legislature and the public, per RCW 47.30. The information is also used to measure the performance of WSDOT's transportation system.

The paths and trails percentage needs to be included in your 100% PS&E turn-in cover memo when submitted to the Region Plans Office. Also, send the percentage, and documentation for how the percentage was calculated, to Region program management. Region program management will work with CPDM to track this information statewide. For projects with no paths & trails calculation, use 0%. Communicating 0% ensures the review of the paths and trails percentage occurred. (Underlined added by CPDM for May 2018 publication.)

Paths and Trails Calculations

$$(XY) \times 100 = P\&T\%$$

Where:

X = The summation of paths and trails-related items* (including mobilization, sales tax, engineering, and contingencies).

Y = The grand total of the project cost.

*Includes (but is not limited to) the items listed below.

Features that are specifically for pedestrian and/or bicycle facilities need to be included in the paths and trails calculations. Overlaying an existing shoulder with HMA or bituminous surface treatment (BST) does not constitute the need for paths and trails calculations. Widening of a shoulder(s) that is part of a larger roadway-widening project is not to be included in the paths and trails calculations.

The following are example types of work that are to be included in the paths and trails calculations. (See the Design Manual for definitions of terminology and additional information.)

- Shared-use path
- Structures (specifically for nonmotorized use)
- Sidewalk
- Bike lane
- New curb ramp
- Curb extension
- Pedestrian refuge island
- Buffer strip (only a planter strip that is a minimum of 3 feet wide between the sidewalk and curb can be included)

Following MUTCD guidelines, signing and pavement markings associated with pedestrian and bicycle facilities may include:

- Crosswalks
- School crossings
- In-pavement flashing warning devices
- Preferential lane symbols and signing
- Pedestrian signals/detectors
- Bicycle-specific signals/detectors
- Pedestrian-scale lighting
- Bicycle facilities lighting

For these types of features, the paths and trails calculations shall include the entire cost to complete the work of each feature.

Constructing a dedicated bicycle or pedestrian facility is always preferable to widening shoulders, especially in urban or urbanizing areas. However, paths and trails calculations for bicycle and pedestrian facility improvements shall be calculated for roadway shoulders when all of the following conditions are met:

- The route is identified in a local, regional, or state plan as a priority bicycle connection.
- The widening of a shoulder is a stand-alone project to benefit bicycling and walking and is not part of a larger roadway-widening project or done to achieve other goals.
- The existing shoulder is widened to at least the minimum widths outlined in the Design Manual for accommodating bicyclists and pedestrians.
- The paths and trails calculations for this shoulder-widening work shall be 50% of all the costs included to complete the shoulder widening.

4-1 Introduction

This chapter explains the nature of WSDOT's project prioritization, processes used to create project lists for programming, necessary working relationships and coordination, and deliverables associated with prioritization activities.

"Prioritization" refers to creation and maintenance of ranked projects, generally grouped by specific types of activities, which communicates the pool of projects ready for programming. These prioritized lists are foundational for performance impact assessment and trade-off analysis. A well-scoped project ensures that a good decision is being made at a specific location. Well-done prioritization lists ensure that good decisions are made for an entire program of projects. Therefore, the prioritization process is critical.

4-2 Policies and Guidelines

4-2.1 *Highway Program Structure*

The WSDOT [Highways Program Structure](#) of the Preservation (P) Program and Improvement (I) Program provides the high-level framework for prioritization by subdividing types of activities into functional asset arrays. These arrays consist of sub-programs and categories that provide detail for a specific type of system asset. In the prioritization process, the Priority Programming Group compiles and facilitates development of ranked project lists for the asset groups shown in [Table 4-1](#).

Stormwater retrofit is an example of a Highway Improvement Program subprogram mentioned in Table 4-1 below. For more information about WSDOT's Stormwater Retrofit Program and their approach to prioritizing retrofits, see the [Stormwater Retrofit Management Plan](#).

Exhibit 4-1 Example of Prioritized Project Lists

Preservation Program (P)	Highway Improvement Program (I)
P1: Pavement Management • Chip Seal • Hot Mix Asphalt • Portland Cement Concrete Pavement (PCCP)	I2: Safety Improvements Collision Reduction • Collision Analysis Location (CAL) • Collision Analysis Corridors (CAC) • Pedestrian Collision Locations (PAL) Collision Prevention • Interstate Safety • Risk Reduction • Special Safety Initiatives • New Rest Areas • At Grade Intersection • Signal and Channelization • Pedestrian Risk • Railroad Crossings
P2: Structures Preservation Preservation of Structures • Special Bridge Repair • Major Repair • Moveable Bridge Repair • Steel Bridge Painting • Bridge Deck Rehabilitation • Bridge Rehabilitation/Replacement • Miscellaneous Structures Prevention of Catastrophic Bridge Failure • Seismic • Scour	I3: Economic Initiatives • Freight and Goods • Scenic Byways • Bicycle Touring Routes • All Weather Highways • Interstate Avalanche and Flood Closures • Restricted Bridges Four-lane Trunk System Completion
P3: Other Facilities Preservation • Basic Safety • Unstable Slopes • Weigh Stations • Rest Area Rehabilitation • Major Drainage Rehabilitation • Major Electrical Rehabilitation	I4: Environmental Retrofit • Fish Barrier Removal • Noise Reduction • Stormwater Retrofit • Chronic Environmental Deficiency • Wildlife Connectivity

4-2.2 Legislative Direction

[Revised Code of Washington \(RCW\) 47.05.010](#) defines the Purpose of Priority Programming.

“The legislature finds that solutions to state highway deficiencies have become increasingly complex and diverse and that anticipated transportation revenues will fall substantially short of the amount required to satisfy all transportation needs. Difficult investment trade-offs will be required.”

“It is the intent of the legislature that investment of state transportation funds to address deficiencies on the state highway system be based on a policy of priority programming having as its basis the rational selection of projects and services according to factual need and an evaluation of life cycle costs and benefits that are systematically scheduled to carry out defined objectives within available revenue.”

The Priority Programming Group is responsible for developing the prioritized project lists using methodology described in [RCW 47.05.010](#). In other words, the prioritized lists must account for life cycle costs and carry out the defined objectives (see [RCW 47.04](#) for overall objectives).

4-3 Roles and Responsibilities

4-3.1 Asset Stewards

Asset stewards provide needs lists that serve as the basis for scoped projects, which in turn are prioritized. Asset stewards also work with prioritization engineers to ensure that prioritized projects and assumptions take into account specific asset preservation and performance needs. Asset stewards' roles and responsibilities include:

- Deliver ranked "needs" lists to priority engineers (Capital Program Development and Management Office (CPDM)). These same needs lists are used to develop scoping instructions. Because the projects that end up being scoped and the prioritization process work together, this role and responsibility is also mentioned here.
- Work with asset managers (in the Regions) and the priority engineers to rank needs and set realistic timing for replacements or renovations based on physical condition, or other prioritization standards.
- Serve as a resource for performance impact assessment of funding amounts.
- Review emergent needs work with priority engineers to ensure proper scope and priority.

For more information, see [Chapter 2](#) Asset Management.

4-3.2 Asset Managers

Asset managers have a primary role in scoping projects and reviewing the proposed Project Delivery Plan. For prioritization, asset managers are responsible for:

- Reviewing needs lists to ensure regional timing considerations are accounted for.
- Working with prioritization engineers to identify cross-project performance and delivery efficiencies.
- Coordinate emergent needs and work with asset stewards and priority engineers to ensure proper scope and priority.

4-3.3 CPDM Roles and Responsibilities

A. Director

The CPDM Director is responsible for reviewing and understanding high-level prioritization and trade-off analysis, as communicated in the assumptions document, to ensure that agency policy and executive direction is properly applied.

B. Priority Programming Group

The Priority Programming Group has the primary responsibility for the prioritization process. These same engineers are familiar with a program of projects because they have worked with asset stewards and asset managers throughout the scoping process. Specific to prioritization, the Priority Programming Group is responsible for:

- Project List development and application of prioritization methodologies within each sub-program. This requires close collaboration with asset stewards and asset managers, along with prioritization considerations across highway asset classes.
- Develop methodologies for considering cross-asset performance impacts in the prioritization process.
- Review CPMS project data to ensure data integrity. Data integrity is essential for prioritization processes to function properly.
- Create prioritization lists within each highway activity, as shown in [Table 4-1](#). These lists should clearly communicate priority while keeping programming contexts in mind, such as the upcoming biennium, within the State Transportation Improvement Program (STIP) window (i.e. within the next 4 years), and longer range planning (years 5 through 10 in a 10-year Project Delivery Plan).
- Create and maintain the Project Delivery Plan Assumptions document. Work with the CPDM Funds Management Group to review and document trade-off analysis.
- Review the proposed Project Delivery Plan to ensure that proper timing and prioritization is accounted for after funding constraints are applied.
- Develop performance impact assessments for the funded programmatic amounts in the Project Delivery Plan.
- Review and coordinate proposed change management for proper priority. For more information, see [Chapter 9](#).

C. Funds Management Group

The CPDM Funds Management Group is responsible for understanding the prioritized lists and using them to program projects into the Project Delivery Plan. This group must work closely with the Priority Programming Group to ensure that the programming process properly considers prioritization and trade-off analysis.

For more information, see [Chapter 8](#) Funds Management and Federal Aid.

4-4 Prioritization Process

4-4.1 General Steps

As a project matures through the scoping process (see [Chapter 3](#) Scoping), it is often part of a pool of projects that are proposed for programming. Prior to programming, projects are grouped into like categories and prioritized according to processes established by the CPDM Priority Programming Group in consultation with asset stewards and asset managers.

Various types of reviews are important to the prioritization process, including:

- A comparison of needs lists compared to those provided with scoping instructions, to ensure that the pool of projects to prioritize adequately cover those needs.

- Checks to see that the need is not double-counted (addressed in multiple projects).
- A comparison of the consistency between the results of the prioritization process with the prioritized list from the previous annual update.
- A review that ensures the results of the prioritization process adequately consider timing of delivery. This is especially true of preservation projects that may not be as effective without proper timing. It is also important that the prioritization process not prioritize work before this proper timing, to ensure a maximum use of existing service life.

Once these checks are completed, the prioritization engineers finalize the ranked project lists and deliver them to the Funds Management Group for programming into the Project Delivery Plan.

4-4.2 Major Deliverables

A. Prioritized Project Lists

Following the detailed review, priority engineers provide ranked project lists to the Funds Management Group for financial analysis and application of budget constraints. These lists are communicated as a series of Microsoft Excel spreadsheets.

Figure 4-2 Example of Prioritized Project Lists

Ranked Project List: Major Drainage			
2017 Prioritization	Project	Title	Priority
Major Drainage (58) 3/21/16	100570B	I-5/Lake Samish Vic-Stormwater Pipe Replacement	1
Major Drainage (58) 3/21/16	310102D	US 101/N of Lower Salmon CR - Culvert Replacement	2
Major Drainage (58) 3/21/16	501208V	US 12/White Pass Vicinity - Major Drainage Phase 1	3
Major Drainage (58) 3/21/16	602041T	SR 20/Calispel Lake Drainage - Culvert Replacement	4
Major Drainage (58) 3/21/16	154202S	SR 542/Dewey Rd Vic - Culvert Replacement	5
Ranked Project List: Major Drainage			
2017 Prioritization	Project	Title	Priority
Paving - HMA (384) 4/18/16	450117P	SR 501/I-5 to SW 26th St Ext Vic Including Couplet - Paving	189
Paving - HMA (384) 4/18/16	120305C	SR 203/Eugene St to US 2 - Paving	190
Paving - HMA (384) 4/18/16	152200B	SR 522/NE 78th St to NE 123rd St - Paving	191
Paving - HMA (384) 4/18/16	501215C	US 12/SR 124 to McNary Pool Eastbound - Paving	192
Paving - HMA (384) 4/18/16	443316P	SR 433/Lewis and Clark Br to SR 432 - Paving	193

C. Assumptions Document

In addition to the priority list, a set of assumptions shall provide all information supporting priority lists. The documentation of assumptions considers these elements in developing the rankings:

- Explain the focus and system performance strategy. What is the system performance gain achieved with this set of priorities?
- Explain the methodology used to rank the projects, such as industry software applications, proprietary WSDOT internal processes, and others.
- Consider if there are special legal or legislative requirements setting the ranking of one project higher than another based on considerations other than performance standards.
- Possible project delivery strategies, such as project bundling or reducing large projects into smaller delivery packages.
- Review any important need not addressed due to a projected high cost estimate, or project complexity.

4-4.3 Prioritization Schedule

The development schedule for the Project Delivery Plan is an annual process culminating with needs lists submittals to the Priority Group for review and development into ranked project lists, with a target delivery date of early April. This allows the Funds Management Group proper time to program the projects into the Project Delivery Plan, executive review of the assumptions, and Region review of the Plan.

The 2018 Project Delivery Plan marked the first ten-year detailed plan, up from eight years in 2017 and six years in 2016. During these updates, CPDM has worked with Region program management to continue to improve practices to develop a ten-year project delivery plan that informs both external stakeholders and internal asset management analyses. With scoping underway for the 2019 Project Delivery Plan, CPDM is evaluating new approaches to the ten-year plan in order to increase efficiency and effectiveness.

One approach being evaluated for implementation is to work directly in TEIS with Region program management throughout the plan review period. CPDM will provide Region program management an editable TEIS version of the draft plan, and request that proposals to deviate from the draft plan be communicated directly in the version. TEIS allows for rapid aging of cost information, so that deviations from the Region proposals are immediately apparent to both CPDM and the Region. In other words, an estimate of the cost impacts are managed in real time and are immediately comparable with prior versions of the draft plan.

Once the plan has been finalized, CPMS can be updated once to match the changes, as opposed to piecemeal updates that occurred as part of the creation of the 2018 Project Delivery Plan.

After this and other new approaches are evaluated and agreed upon, CPDM will provide instructions and also be available for just-in-time training to ensure Region staff are comfortable using TEIS to efficiently analyze the Project Delivery Plan.

As an example of the project delivery plan's earlier process, in 2017, the following milestones were targeted for the asset needs, scoping, and prioritization process:

- October 2016. CPDM reviews scoping instructions with Region program management.
- January 2017. Region completes scoping of projects.
- February-March 2017. Priority Programming Group works with asset stewards to review scoped projects to assess needs coverage and prioritization methodology.
- April 2017. Priority Programming Group delivers prioritized lists and draft assumptions document to the Funds Management Group for programming.
- Priority Programming Group has the responsibility to coordinate with planners from Regions, Modes, and the Multimodal Planning division. This allows for a smooth transition from planning to programming.

For information on the stage of estimate, see [Appendix 4A](#).

4-5 Appendices

Appendix 4A Stage of Estimate/Accuracy of Estimate +/-

Appendix 4A Stage of Estimate/Accuracy of Estimate +/-

4A-1 Definitions

Stage of Estimate - A single character code that indicates the progression of the project phase estimate. The Stage of Estimate code is especially significant during budget-building exercises. Only certain codes allow [dollar inflation](#).

Accuracy of Estimate - The accuracy of estimate value is based on the Stage of Estimate value, and is used to indicate WSDOT's confidence range for each project phase estimate. The accuracy of estimate factors are hard-coded into the system and cannot be changed. These values have nothing to do with the values for inflation.

Enter the code in the Stage of Estimate Field on the cost screens, HP, HR, and HC.

4A-2 For budget building

For book new starts only, use the codes with an associated accuracy of estimate (G, N, J, D, Z, or K). The Accuracy % is shown on the cost screen, and will print in the book. For projects with multiple WIN's, the value representing "least confidence" will display in the book.

For book work in progress, use codes 1, 2, 3, 4, 5, 6, 7, 8, or 9. A general statement regarding estimate confidence will be printed in the book. Once the Budget has been approved by the Legislature, all alpha character Stage of Estimate codes should be changed to appropriate numeric codes.

4A-3 Multiple WIN Example

A project with two construction phase WIN's would display as follows:

WIN #1 Estimate from the design file has accuracy of +/- 15%. A "Z" is entered on the HC screen.

WIN #2 Estimate from a scoping effort is +/- 20%. A "J" is entered on the HC screen.

In the book print the Confidence of Estimate displayed is +/- 20%.

Note: For discussion of dollar inflation see the [CPMS Users Guide Learning](#)

Table 4A-1 Stage of Estimate Use and Accuracy

Value	Description	Stage Accuracy	Phase	Will Stage Inflate?
G	Prescoping	+/- 40%	PE, RW, CN	PE, RW & CN-Yes
F	Prescoping	+/- 35%	PE, RW,CN	PE, RW & CN-No
H	Prescoping	+/- 30%	PE, RW,CN	PE, RW & CN-No
I	Prescoping	+/- 25%	PE, RW,CN	PE, RW & CN-No
L	Prescoping	+/- 20%	PE, RW,CN	PE, RW & CN-No
N	Scoping	+/- 30%	PE, RW, CN	PE, RW & CN-Yes
M	Scoping	+/- 25%	PE, RW,CN	PE, RW & CN-No
J	Scoping	+/- 20%	PE, RW, CN	PE, RW & CN-Yes
A	Design File	+/- 30%	RW & CN	No
C	Design File	+/- 25%	RW & CN	No
D	Design File	+/- 20%	PE, RW, CN	Yes
Z	Design File	+/- 15%	PE, RW, CN	Yes
E	Design File	+/- 10%	RW & CN	No
K	PS&E	+/- 10%	CN	Yes
S	PS&E	+/- 5%	CN	No
0	Bids Rejected	--	CN	No
1	Budget Estimate	--	PE, RW, CN	PE, RW & CN-Yes
2	Updated Estimate	--	PE, RW, CN	PE, RW & CN-Yes
3	Design Document Estimate	--	PE, RW, CN	PE, RW & CN-Yes
4	True Cost Estimate	--	RW	No
5	PS&E to DO/HQ Estimate	--	CN	No
6	PS&E to Shelf Estimate	--	CN	Yes
7	PS&E to Ad Estimate	--	CN	No
8	Bid Opening	--	CN	No
9	Award	--	CN	No

4A-4 Update Field Values on These Screens

HC, HP, HR

4A-5 Field Values Displayed on These Screens

HC, HE, HP, HR, QC, QE, QP, QR

4A-6 Valid Values

See the [Stage of Estimate Table](#).

Chapter 5 *Budget Development*

5-1 Overview

This chapter summarizes the processes by which WSDOT projects are planned, programmed and budgeted. The department's business is organized into separate programs for budgetary and management purposes. At the highest level, a distinction is made between operating and capital programs. Because WSDOT projects are funded out of the capital program, this chapter focuses on that aspect of the department's business.

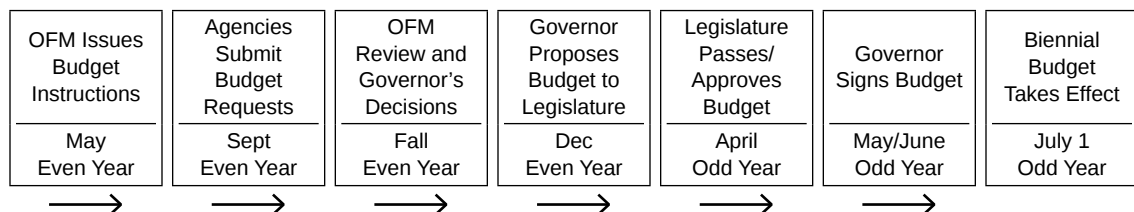
WSDOT program building is an integral part of biennial budget development for the Governor and the State Legislature and is a nearly continuous process. This process is overseen by Capital Program Development and Management Division (CPDM) and supported by a number of other organizations within the WSDOT planning and programming community, including the various regional and program offices for each of the modes.

Long-term transportation system needs and solutions are identified, prioritized, and programmed within the financial constraints of forecasted revenues over the specified planning period (currently 16 years). The planned investment areas in the long-term plan are used as investment targets to program prioritized projects for a near term, detailed project delivery plan.

CPDM works in coordination with the WSDOT Financial Planning and Budget Offices to project available revenue and estimate the funding needs for each program, subprogram, and category. Understanding the budget process allows CPDM to be aware of where the revenue comes from, where those funds are deposited (accounts), and the specific requirements and limitations on the use of those funds. This chapter provides an overview of those revenue sources, transportation funding, transportation accounts and the program budgeting process.

5-1.1 *Budget Development Process*

Exhibit 5-1



5-1.2 Legislative Budget Process and Role of the CPDM Division

Washington State operates on a two-year (biennial) basis. State law requires that the Governor submit a balanced budget¹ to the Legislature no later than December 20 in the year preceding the session during which the biennial budget is to be considered.

Formulation of the state's biennial budget begins in May of even-numbered years, when the Office of Financial Management (OFM) distributes instructions to all state agencies, establishing budget guidelines and information requirements. Formal budget requests from agencies are sent to OFM in late summer, where they are analyzed and revised by OFM as appropriate to match the Governor's policy choices. Alternative methods of delivering services are examined and evaluated, and recommended budget levels and program and policy choices are prepared for the Governor by the OFM Director.

State revenues and expenditures are limited by statutes enacted by the State Legislature and sometimes also are limited by initiatives or referenda approved by the voters. Under state law, the Governor's budget submitted to the Legislature must include estimates of all anticipated revenues and all proposed operating and capital expenditures.

The biennial budget enacted by the Legislature can be modified in any legislative session through changes to the original appropriations. Since the inception of annual legislative sessions in 1979, it has become common for the Legislature to enact annual revisions to the state's biennial budget. These revisions are referred to as supplemental budgets.²

The Governor may submit a second, alternative budget for the same fiscal period to include expenditures from revenue sources derived from proposed changes in statutes. Within a biennium, the Governor may submit supplemental budgets to the Legislature during the regular session or during any special session.

The Governor signs the budget passed by the Legislature, which contains three primary components: the Operating Budget, the Capital Budget, and the Transportation Budget.

- Operating programs are the day-to-day expenses of running non-transportation agencies or programs including salaries, benefits, and goods and services such as supplies and fuel.
- Capital programs pay for state buildings, public school facilities, prisons, parks, etc.
- The Transportation Budget includes both operating and capital transportation related expenditures, such as maintaining, preserving and improving the highway system; operating ferries; motor vehicle registration; and enforcing traffic laws on the state highway system.

The Project Delivery Plan is the agency's long-range (10-year) highway construction planning method to program investments in the state's transportation infrastructure.

The long-range plan includes projects that exceed available revenue as a planning and delivery tool. This approach allows WSDOT to have priority projects ready to use 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. The delivery plan aligns with Legislative direction provided in the last legislatively approved budget.

¹ RCW 43.88 State budgeting, accounting, and reporting system

² OFM, Washington State Budget Process www.ofm.wa.gov/reports/budgetprocess.pdf

WSDOT must also comply with the federal requirement for the state to program four years of projects in the State Transportation Improvement Program (STIP). This plan is updated annually following the each legislative session. The timing allows for incorporating new legislative direction prior to working with planning organizations on updating the STIP.

Each biennium, WSDOT and other transportation agencies are required to submit a transportation budget that balances with the last legislatively adopted financial plan and the list of projects in the Transportation Executive Information System (TEIS).

In 2015-17, approximately 69 percent of the Transportation Budget was appropriated to WSDOT—the remainder is distributed among the Washington State Patrol (WSP), the Department of Licensing, and other smaller transportation agencies and committees.

The Legislature uses the transportation budget to appropriate operating and capital funding to agencies that provide a wide variety of transportation functions and services. About two-thirds of the transportation budget is for capital purposes and one-third is for operating purposes. In the larger agencies, such as WSDOT and the WSP, funding is appropriated by program. Programs are a defined set of activities within an agency.

Additional information is available on the [Joint Transportation Committee](#) webpage, and in the [Transportation Resource Manual](#) which describes in greater detail the legislative role, revenue sources, funds and accounts, agencies, modes and planning.

More fund information is available on the [OFM Fund Reference Manual](#) webpage.

5-2 Project List Development

Regions and technical experts identify needs and propose projects through the planning and scoping process (see [Chapter 3](#) Scoping) to recommend projects to development a statewide project list for the budget submittal process or for emergent projects. Specific needs include:

- Proposed projects for the Current Law (enacted) budget (CLB) or New Law (proposed) budget (NLB) proposals.
- High priority unfunded projects.
- Emergent current biennium projects, including emergency slide repairs, staging of projects, federal earmarks, and unanticipated local agency projects.

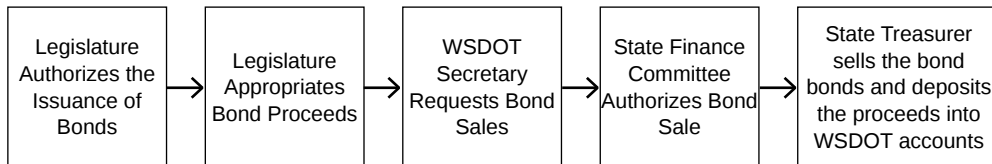
Approval codes (see [Appendix 5A](#)) are used to monitor the status of needs, proposed future biennia road preservation needs, or other un-prioritized subprogram needs.

Approval codes fall into two general categories that differentiate whether a project or activity is proposed for funding, or whether it is already considered funded (or, “programmed”). CPDM uses approval codes to identify project status in developing the agency budget request and in creating the initial agency baseline following a newly created budget by the Legislature.

5-3 The Bond Sales Overview

Bonding is an important source of funding for transportation capital projects. This debt financing increases or decreases depending on the availability of tax revenues and the magnitude of the needed improvements. The use of bond financing to support transportation capital projects follows a rigorous legal process.

Exhibit 5-2



- Bonding Authorizations require 60% majority vote of the Legislature.
- Requests are based on detailed cash flow analysis.
- Bond sales typically occur twice a year, September and February.

Current Transportation Bond Authorizations and Appropriations

- Fuel tax-supported bonds are referred to as “double-barrel” bonds, meaning they are secured by motor fuel taxes and also secured by the full faith and credit of the state. Washington State has maintained a high credit rating from all three of the rating agencies.
- 2015-17 Bond Sales (including SR 520 Bridge) was \$995M, or 18.0% of our total WSDOT enacted budget of \$5.5B.

For more information refer to the Central Budget office document: [Budget and Finance Briefing](#)

5-4 The Capital Improvement and Preservation Program (CIPP)

WSDOT’s capital budget request and proposals are accompanied by a prioritized program of projects in a list called the Capital Improvement and Preservation Program (CIPP), which includes:

- Recommended investment levels by program and subprogram.
- Information about any revenue shortfalls that exist.
- Recommendations on how to allocate existing and proposed revenues among the programs.

The process of developing the CIPP begins with CPDM and the Financial Planning Office projecting available revenue and estimating the funding needs for each program, subprogram, and category. These estimates are developed in coordination with the Budget Office and approved by agency executives.

Once the funding magnitude of a subprogram is established, CPDM determines the number of projects that can be included in the CIPP. The formula for this is: Total Projects = WIP + New Starts. Work-in-progress (WIP) will carry forward into the new biennium. WIP projects represent funding commitments. The cost to complete these projects in the new biennium can be subtracted from the total funding available to the subprogram to fund new project starts in the next two biennia. However, CPDM evaluates the amount of carryover into two biennia in order to determine how many new projects are added in

the next biennium and the following biennium. New projects are then added to the CIPP, based on legal requirements³, agency policy, and the prioritized project lists.

Regions and modes use the Capital Program Management System (CPMS) to build the program. CPMS is the department's scheduling and program management database system. In addition to program building, CPMS is used to track program delivery. As Regions deliver the projects, expenditure data is passed from the agency accounting system (TRAINS) and recorded in CPMS on a monthly basis. At the same time, project expenditures planned for the future are time-phased ("aged") in upcoming months by project phase (PE, RW and CN). Regions and modes are responsible for data entry and updating. For more information, see [Chapter 4](#) on Prioritization and Programming.

The CIPP is used as a base to formulate the Governor's budget request, which is transmitted to the Legislature in December, one month before the Legislature convenes in regular session.

5-5 Inflation Policy and Implementation Overview

5-5.1 Inflation Policy

Each year as part of the capital budget development process the Capital Program Development and Management Office (CPDM) reviews current inflation forecast data and compares it to the assumptions used to inflate project estimates by phase in the Capital Program Management System (CPMS). The forecasts are typically received in the March timeframe. The CPMS inflation tables are to be used for WSDOT projects as referenced in WSDOT Policy Statement P 2047.00.

5-5.2 Basis for Inflation Rates

WSDOT is currently using the following sources as the basis for inflating project estimates;

- **Engineering (design) phase** – Global Insight forecast for Engineering, Architectural, and Surveying salaries.
- **Right-of-Way phase** – Economy.com's forecast of the Federal Housing and Finance Administration housing price index for the state of Washington (Freddie Mac, Fannie Mae).
- **Construction phase** – Global Insight Forecast of the Construction Cost Index.

5-5.3 Criteria for Calculating Year of Expenditure on Project Estimates

Inflation is calculated and applied to unauthorized dollars on work items (WINs) that:

1. Do not have currently authorized dollars on the phase, and
2. Where the inflation indicator is set to "Yes."

WIN level project phases that are currently underway (authorized) are not inflated. These costs, authorized on open work orders, reflect current estimates assumed to complete the scope of work.

³ [RCW 47.05.010](#) Priority Programming for Highway Development

Under certain circumstances, inflation is not added to project cost estimates. As part of the budget development process, CPDM develops instructions for inflating projects. Included in the instructions is a list of “Do Not Inflate Projects”. This list encompasses the individual projects to which inflation should not be applied. Please note that since inflation is driven at the WIN level, a “Do Not Inflate” project and a “Do Inflate” project may be tied to the same WIN – resulting in inflation being calculated if the conditions in the above paragraph apply. The circumstances where a project should not be inflated:

- Fixed contribution toward a partnership project.
- Preliminary planning-level or scoping estimates that include risk or contingency elements. Inflation would begin to be applied once a region estimate is established.
- Highly visible projects where a CVEP or CRA estimate has been established as a control number (AWV).

The “Do Not Inflate” list is reviewed annually as part of the CPMS inflation table update process.

5-5.4 Inflation Calculation Methodology

For eligible cost estimates, inflation is calculated based on the mid-point of the phase dollar aging. Inflation is then added to the current year dollars from the date of the last estimate to the mid-point of the phase. For projects with old estimates, inflation is not only calculated from the current day forward, but also for the period covering the estimate date up to the current date. The mid-point is currently calculated using the following dates:

- Design and right of way – phase start and end dates.
- Construction – phase start and operationally complete dates.

Prior to August 2007, the mid-point on all phases was calculated based on the phase start and end dates.

5-5.5 Calculating the Potential Impact of Inflation Changes

Estimating the impact of inflation rate changes is performed in one of two ways:

- Copying CPMS Production into a test environment and inflating all projects using updated inflation rate tables. Before and after snapshots are then compared to evaluate the impacts on a project and overall program basis.
- Analyzing the change in inflation forecast assumption index change over a set period of time and applying the rate of change to the program size before applying new inflation assumptions.

Under either scenario, neither approach will provide the actual inflation change calculated when the assumptions are applied to estimates in the CPMS production environment. This is due to the constantly changing nature of data within the system.

5-6 Decision Packages

Decision packages are a key set of building blocks to construct the budget request. The agency utilizes decision packages to make a persuasive case for any proposed change. OFM will rely upon this information when evaluating the request.

Decision packages organize and describe proposed cost changes in a way that highlights the budget decisions. The decision package consolidates financial information, supporting justification, and a statement of impact for a specific action or policy proposed in the budget.

Refer to [Chapter 8](#) Federal Funds, for Federal Transit Administration (FTA), Federal Railroad Administration (FRA) and the Federal Aviation Administration (FAA) Funds Decision Packages.

The Budget Development System (BDS) is a database that assists agencies in developing all components of budget decision packages. BDS automatically displays the expenditure, revenue, and Full Time Equivalents (FTE) detail entered by Agencies and summarizes data to the selected level (agency or program) for the decision package report.

5-7 Proviso Requirements

The Transportation Budget Bill includes language that places conditions and limitations on the use of appropriations and requires regular, ongoing reporting to ensure the implementation of the capital budget is consistent with the legislatively--approved project list. The Budget Bill may also create project specific appropriations that restrict expenditures. Here is a list of current proviso reports the agency is required to submit to OFM:

- Quarterly Project Delivery
- Nickel/TPA Project Budget History
- Section 601 Fund Transfers
- Connecting Washington Projects with Benefits to Transit/Bike/Ped
- Tolling Proviso Reporting

5-8 Budget Approval Process

Each summer, WSDOT prepares a budget submittal in accordance with instructions from OFM. OFM coordinates the submittal of agency budget requests and prepares the Governor's budget recommendation to the Legislature. In even-numbered years, the budget submittal is prepared for the upcoming biennial budget. In odd-numbered years, the budget submittal is for the first supplemental budget.

5-8.1 Fund Source Balancing

CPDM identifies and selects fund sources to finance projects in conjunction with program balancing. Project and program funding can be drawn from a number of combinations of available state, federal, and local sources.

Determining the most efficient mix of funds for a project or program is essential in order to gain the greatest return on the state's transportation investments. Funding sources often have specific requirements regarding how, when, and where they will be spent. Thus, it is important to thoroughly understand the statutory obligations associated with such funds. Once a funding source is identified, program managers enter funding information into CPMS.

5-8.2 The Governor's Budget

The Governor's budget may include revisions to WSDOT's proposed budget to reflect the Governor's priorities. The Governor's budget is then delivered to the Legislature by late December for their consideration in the upcoming legislative session. The Governor may also deliver updates to the budget proposal during the legislative session.

5-8.3 The Legislative Budget

Once in session, the House of Representatives and Senate Transportation Committees address the proposed budget separately. The committees hold public hearings and review financial forecasts to confirm that sufficient revenue will be available to cover the budget proposal. Either committee has the authority to revise the amount of funds requested by the Governor for any of the programs.

In addition, the committees publish project lists that may include or exclude additional proposed projects and budget items. Ultimately, one or both of the committees sends a proposed budget bill to the legislative floor for their respective chamber's review and approval.

A budget passed by either chamber requires approval by the other chamber. Normally, a conference committee will reconcile the differences and submit a conference bill to be voted on.

After revenue and expenditure appropriation bills are passed by the House and the Senate, the bills are transmitted to the Governor. The Governor has constitutional authority to veto one or more sections of the bill and can send it back to the Legislature for further action.

5-8.4 Revenues, Funds and Budgets

Revenue Sources for Transportation Budget. The availability and efficient management of revenue is critical to delivering and maintaining a balanced transportation system. The revenues available for transportation purposes are classified into four categories: state funds (including taxes and fees), federal funds, local funds and bond proceeds.

These revenue sources are appropriated through the transportation budget. The appropriations are legislative authorizations to make expenditures and incur obligations from a particular account. Appropriations typically limit expenditures to a specific amount and purpose within a fiscal year or biennial timeframe.

A. State Revenues Sources

Currently, the foremost generator of state transportation revenue is the gas tax, which funds approximately one-third of the state's transportation budget. Other revenue comes from licenses, permits, and fees for using the transportation system. Examples of these fees include truck and car weight fees, driver license fees, vehicle related license fees, and Ferry fares collected from users of the state ferry system.

In 1990, the Legislature increased the state gas tax from 18 cents to 22 cents per gallon. It was increased an additional penny in 1991, making it 23 cents per gallon. For budgeting purposes, this 23 cents is known as pre-existing revenue.

In 2003 and again in 2005, the Legislature enacted restricted gas tax increases as part of the Nickel package and the Transportation Partnership Act (5 cents and 9.5 cents respectively), bringing the total to 37.5 cents per gallon. Most recently, the 2015

Connecting Washington Transportation Package (CW) increased the gas tax by 11.9 cents in 2016 to bring the tax rate to 49.4 cents.

The state revenues generated from these taxes associated with WSDOT's budget are primarily deposited into the Motor Vehicle Account, Transportation 2003 Account (Nickel Account), Transportation Partnership Account (TPA), Puget Sound Ferry Operations Account, Puget Sound Capital Construction Account and the Multimodal Transportation Account. More information on [Transportation Accounts](#) is provided below.

State transportation funds fall into two main categories:

- Funds that are restricted to the 18th Amendment of the State Constitution for highway purposes (including Ferries and traffic enforcement).
- Funds that are more flexible and may be spent on any transportation purpose including state highways, but also including non-highway projects and activities such as transit, passenger and freight rail, and other purposes.

B. Federal Funding

Federal funding is the second largest single source of funding available in the transportation budget. The Federal fuel tax is 18.4 cents per gallon on gasoline and 24.4 cents per gallon on diesel fuel. The relationship between WSDOT and the Federal Highway Administration (FHWA), which administers federal transportation funding, is a funding partnership.

FHWA's Federal-Aid Highway Program is structured as a reimbursable financing program in which states incur charges and are then reimbursed, according to requirements set by FHWA. This approach allows states to decide which programs and projects to deliver, how they should be delivered, and how they should be contracted. The State of Washington has historically received approximately 95 percent of the Federal tax back for transportation expenditures.

Although the majority of federal funding comes from FHWA, WSDOT also receives funding from the Federal Transit Administration (FTA) and the Federal Rail Administration (FRA).

The authorized amounts distributed to WSDOT represent lines of credit that the department can draw upon as federally assisted projects are advanced. Under the Federal-Aid program, the federal government reimburses WSDOT for costs actually incurred on projects, based on a federally established pro rata for determining the federal and state share of formula funds. For example, if the federal share is 86.5 percent, the state share is 13.5 percent for a particular federal formula fund.

Congress may also designate funds for specific projects in the Transportation Authorization Bill or in an annual appropriation bill—a practice referred to as [earmarking](#).

C. Local Funding

Various local revenue allocations round out the remainder of the state's transportation funding. Local funds are reimbursements for work done by WSDOT on the state highway system at the request of other agencies. They come from sources other than the Motor Vehicle Fund. For example, sources for these funds are local agencies (such as cities or counties), or funds received directly from a developer. These funds are only eligible to be spent on the projects specified by the local entity.

D. Bond Funding

Construction projects may be built with borrowed funds, which the State guarantees to repay at a future time. Debt financed by means of bond funds is backed by future State gas tax revenues or federal apportionments. In 2003, \$2.6 billion in bonds were authorized for “Nickel” projects backed by a five-cent increase in the gas tax. In 2005, \$5.1 billion in bonds were authorized for sale to provide funds for construction of projects identified as 2005 Transportation Partnership Projects. These bonds were backed from revenues from a phased-in 9.5 cent per gallon gas tax increase. Bonds may also be authorized and backed by revenues from other transportation accounts. More recently, in 2015, \$5.3 billion in bonds were authorized for the Connecting Washington projects backed by the gas tax increase of 11.9 cent per gallon.

5-9 Transportation Accounts

Revenue generated from these state, federal, and local sources are deposited into state transportation accounts from which distributions are made for a broad range of transportation purposes.

Many smaller transportation agencies and committees are also funded through the transportation accounts including the Transportation Improvement Board (TIB), County Road Administration Board (CRAB), Traffic Safety Commission, and the Joint Transportation Committee.

Appropriations to programs must specify the account and revenue source for a certain purpose. Three basic transportation accounts (funds) are used to manage appropriations for the state’s transportation programs:

5-9.1 Motor Vehicle Fund

All state motor fuel taxes (gas tax) are deposited into the Motor Vehicle Fund, which is maintained solely for Highway, Ferries, and related purposes, as required by [Amendment 18 of the State Constitution](#). This fund also includes the Transportation 2003 Account (Nickel Account), Transportation Partnership Account (TPA), Connecting Washington Account (CW), and the Recreational Vehicle Account to name just a few. Transit, Rail, or air transportation projects cannot be funded from accounts funded by the state’s fuel tax.

5-9.2 Multimodal Transportation Fund

This fund includes the Bicycle and Pedestrian Safety Account, Highway Safety Account, Public Transportation Systems Accounts and the Transportation Infrastructure Account. Accounts in this fund are not subject to the 18th Amendment requirement. As a result, these funds can be used for any and all transportation modes, technologies, and related programs such as high capacity transit, aviation, passenger and freight rail.

5-9.3 Transportation Bond Fund

This fund serves as a repository for Motor Vehicle Fund revenues that are to be used to pay Highway or Ferries bond debt. With the exception of a few non-appropriated accounts, state revenue sources cannot be spent unless it has been appropriated by the Legislature. Federal and local revenue sources can be approved for expenditure by OFM through the unanticipated receipt process. Unanticipated receipts are proposed through the Budget Office and approved by OFM. For more information, see [Chapter 8 Funds Management and Federal-Aid](#).

5-10 Program Balancing

Annually, CPDM prepares a 10-year plan of projects that must balance federal and state fund types. State dollars are planned based on when a project anticipates expending funds, calculating monthly aging over the life of the project. Federal dollars are planned based on the year of obligation with any federal funding associated with a specific project and phase being obligated in full prior to the phase start. This process must be followed to ensure that WSDOT maintains fiscal constraint on federally funded projects. The combination of these two processes results in a 10-year plan.

The 10-year plan is then used to calculate the appropriate level of state appropriation, or the Legislative authority to spend. To assist with this process, CPDM uses an internal report called Convert OA to Expenditures (COAX). The COAX applies historical percentages to estimate the amount of anticipated federal expenditures per year based on prior and current year obligations.

CPDM calculates funding needed to cover carryforward work by analyzing the data in CPMS. Based on the results, the Regions are provided with instructions on which new projects can be started in the future and approximately when they should begin.

See [How to Perform Cost Curve Aging](http://wwwi.wsdot.wa.gov/ppsc/pgmmgt/cpms/learning/learning6.asp) within CPMS : wwwi.wsdot.wa.gov/ppsc/pgmmgt/cpms/learning/learning6.asp

As part of the process, subprogram P1 is over-programmed to compensate for possible changes in federal funding, project advances or delays and cost increases or decreases. Because it is impossible to predict project milestones with 100% accuracy, WSDOT must have shovel-ready projects that require little Preliminary Engineering or Right-of-Way and can be quickly advanced to utilize possible savings. This is particularly important with federal funds as all funding needs to be obligated prior to federal fiscal year end or the funds are withdrawn by FHWA. Over-programmed projects that are not advanced will be started in the following federal fiscal year.

For more information on strategies to over-program federal funds, see [Appendix 5C](#).

The subprograms and programs are balanced to the funding targets and instructions provided by CPDM. Final balancing and formatting of the Capital Improvement and Preservation Program (CIPP) is performed in the Transportation Executive Information System (TEIS) software. More information on CPMS and TEIS can be found in this manual's chapter on IT Systems.

CPDM selects prioritized projects for the Preservation and Improvement Programs. Other state-owned modes similarly prioritize and assemble their programs. The CIPP is balanced to create programs that are based on anticipated and projected revenues by fund source (as derived by the Financial Planning Office).

5-10.1 Program Implementation

A. ***Ensuring implementation of the Capital Budget is consistent with the Legislative project list***

In the Transportation Budget Bill, funding is appropriated at the program or modal level. Traditionally, the agency had the flexibility to manage the budget at the program level rather than at the project level. Pre-existing revenues, the original 23 cent per gallon gas tax, continues to be managed at the program level.

The passage of the 2003 Transportation Funding Package was a substantive change to a more restrictive revenue package. The budget items or “Nickel projects” funded by this package were directly funded and managed on a line-item basis rather than collectively like the projects funded using pre-existing revenues.

This line-item budgeting was also implemented for the projects funded by the 2005 Transportation Revenue Package. Further conditions and limitations on the use of appropriations may be specified in the budget bill or supporting documents in addition to the initial revenue bill.

The 2015 Connecting Washington (CW) funding package similarly identified projects by line-item budgeting for the Improvement program.

B. Ad Hoc TEIS Project List Development

CPDM develops internal reporting project lists to monitor change and identify program delivery issues. Staff create these lists on an ad hoc basis or generate them through the download of CPMS data on a regular schedule.

For these lists to be used properly, it is important to understand their source and the context in which they were developed. Project lists that were transferred from the Legislature, or OFM, may be conveying very specific information, but at the same time they may be missing key data elements required for accurate comparisons to internally generated lists. The following is a sample of key TEIS project lists:

- CPMS Monthend Plan (YearYearMEMonthMonth)
 - Snapshot of CPMS after month end closure. Used to monitor biennial expenditure plans for programmed projects.
- CPMS Monthend Actuals (YYACTLMM)
 - Snapshot of CPMS after month end closure. Used to monitor actual expenditures to date for current active projects.
- CPMS Currently Programmed (CURR-DM)
 - Daily snapshot of CPMS. Used to monitor biennial expenditure plans for programmed projects.
- CPMS Currently programmed projects and projects for Programming (PLAN-DM)
 - Daily snapshot of CPMS that includes currently programmed projects and projects reviewed by Headquarters for programming.
- CPMS Datamart (CPMS-DM)
 - A complete snapshot of all CPMS data, including historical, active, unprogrammed, proposed, and future programmed projects.
 - PROP-DM contains all projects proposed to be programmed. PROP-DM is used to monitor these projects proposed for programming, especially for prioritization and the annual project delivery plan update process.
- Official Capital Budget
 - These lists are created during the budget development process and includes agency proposed (YYDOTNumberNumberNumber), Governor’s request (YYGOVNN), House (YYHTCNNN) and Senate (YYSTCNN) proposals, and the Legislative Final Budget YYLEGFIN).

5-11 Program-wide Performance

As part of the Asset Management policy, CPDM has identified performance measures for the program.

5-11.1 *Identifying funding gaps to be addressed through re-prioritization*

An investment variance report is evaluated monthly by CPDM's Fed Funds & Budget Group. The version comparisons are the current enacted budget compared to TEIS version CURR-DM. If there is funding capacity identified, additional priority projects are advanced to utilize the capacity.

If Investment Level Targets are proposed to change, the Program Delivery Manager and the Priority Manager will provide recommendations to the CPDM Director and Deputy Director for consideration. The CPDM Director will determine if executive leadership, OFM, and/or Legislative Staff approval is required and will establish a timeline for approval.

5-11.2 *Highway Construction Full-Time Equivalents (FTEs)*

Regions balance highway construction projects, both dollars and workforce, within each program for current and future biennia. The agency assumes maintaining the 2,000 FTE's in the Highway Construction Program with consultants addressing any additional workforce needs.

5-11.3 *Bond Eligible Projects*

Projects that are Bond Eligible are projects in programs I (Improvement) and P (Preservation) with a life greater than the 25 years it takes to satisfy the debt service.

5-11.4 *Appropriations*

The Legislature enacts a budget into law which provides the authorized spending authority and level for each agency and fund. These levels, referred to as "Appropriations," are assigned a number and are tied to programs and subprograms within WSDOT.

The information submitted on the Appropriations section provides a list of all the appropriations granted to the agency by the Legislature and OFM (Unanticipated Receipts) and includes:

- State appropriations
- Local appropriations
- Federal appropriations

For more information on unanticipated receipts and reappropriation calculations, see [Appendix 5B](#).

5-11.5 Building, Monitoring and Managing Change in the Capital Program

A. Roles and Responsibilities in Capital Program Development

Upon final passage of the Transportation Budget, CPDM works with the Budget Services Office to distribute and communicate the legislative authorizations and funded budget items to Regions and modes. This helps Regions and modes make final technical adjustments to the legislative project list and finalize the CIPP data.

Once the project data has been corrected and verified, CPDM compiles the final list of approved projects for the biennium and publishes it on their external site. This detailed list is used to establish a baseline for schedules and costs and to monitor and measure project delivery.

Final baseline information is loaded into the Legislature's computer tracking system, the Transportation Executive Information System (TEIS). This allows the Legislature to monitor and track delivery of projects that are funded from the transportation budget.

Each month, CPDM transmits actual expenditure information to OFM and the Legislature. This financial information is provided at the same level of detail as what is provided in the final, legislatively-adopted project list.

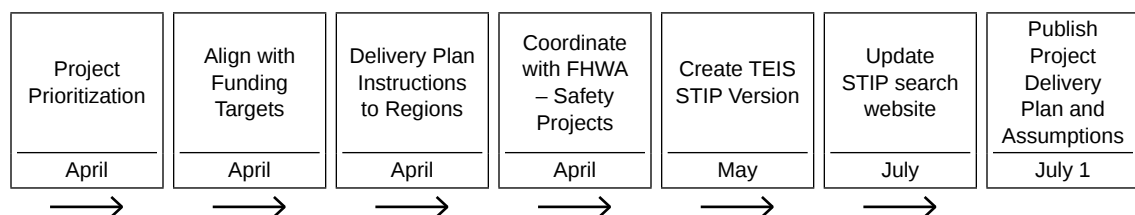
B. Project Delivery Plan (6 – 10-year plan)

In 2018, CPDM transitioned to a 10-year plan as WSDOT's long-range highway construction Project Delivery Plan. The project delivery plan aligns with Legislature direction provided in the last legislatively approved budget, and communicates WSDOT's intention for specific investments in all the transportation infrastructure modes administered by the department.

The Project Delivery Plan is developed utilizing the prioritized project lists (see [Chapter 4](#) Prioritization for details on list development). The new projects scoped and prioritized are used to fill in the gaps of the delivery plan to meet the investment levels that align with the enacted budget and financial plan.

C. Project Delivery Plan Timeline – Annual Update Process

Exhibit 5-3



For more information, see the [WSDOT - Six-Year Project Delivery Plan](#).

D. Approval Codes

CPDM uses approval codes in developing the agency's budget request and in creating the initial agency baseline specified in a newly created budget by the Legislature. Specific needs include identifying:

- Projects established with the Project Action Form (PAF), including:
 - Emergency projects (by state or federal declaration of emergency project)
 - Emerging needs projects
- Future biennium project delivery plan development:
 - Project additions: detailing of the out-year reserve placeholders
 - Project deletions
- Completed and/or closed phases or projects.

Approval codes are used as part of implementing or executing a budget within the current biennium. Approval codes change as the project progresses from planning to project delivery. It provides the status of the project. The meaning of the approval code does not change. Specific needs include identifying the following:

- Large legislatively-approved projects that are split into two or more project identification numbers (PINs) to more effectively manage and oversee project delivery.
- Projects with unanticipated carry-forward across biennial lines.
- Closed projects that need to be re-opened.
- Deleted projects that do not require legislative approval.
- New phases on a previously funded project (no scope change).

See [Appendix 5A](#) for a list of approval codes.

E. Budget Development Process

Approval codes are used in the regional budget development process. The basic steps, in order of execution, are:

- Region identifies needs:
 - Proposed by Region technical experts
 - Captures all proposals
 - Using Region-defined approval codes
- CPDM provides instructions, targets, and/or guidelines to refine needs.
- Region advances subset of projects to Headquarters based on CPDM direction.
 - Proposed for Programming – “Z” approval code
 - Unfunded Project or Phase – “U” approval code
- CPDM:
 - Prioritizes statewide or otherwise selects appropriate priorities
 - Selects budget subset of statewide priorities to advance to Legislature
 - Proposed Current Law Budget – “B” approval code
- Legislature establishes funding levels and identifies intent for proposed projects
- CPDM:
 - Interprets legislative intent and translates into CPMS as baseline for upcoming biennium
 - Uses “L” approval code for legislatively added projects.

F. Legislatively Directed Projects

For projects funded by the legislature through the budget process, the basic steps in order of execution are:

- Regions or Headquarters recognizes and treats as unprogrammed project.
- Region researches legislative intent:
 - Checks first with CPDM for available information and/or instruction
 - Determines appropriate subprogram
 - Defines purpose and need
- Region enters the project into CPMS with preliminary scope, schedule, and budget.
- Region adds approval code “P” in CPMS.
- Headquarters or Region submits Project Action Form (PAF)
 - Current biennium
 - Future biennium
 - Bucket
- Region submits Project Summary to CPDM.
- Once approved, CPDM updates CPMS to approval code “X.”

G. Current Biennium Emergent Projects

For projects that become a high priority need due to unforeseen circumstances, the basic steps in order of execution are:

- Region identifies emergent need (Maintenance, Materials Lab, Traffic, etc.):
 - Provides appropriate documentation submitted to FHWA if funded with Federal Emergency Relief (ER) funds and pre-scope estimate prepared for Region Program Management.
- Using approval code “P,” the Region enters the project in CPMS with preliminary scope, schedule and budget. Region submits Project Action Form (PAF) to CPDM for approval of unprogrammed project.
- CPDM reviews and approves project:
 - Determines if the project is ER and has FHWA approval or if the project should be added to the regular program.
 - Uses “S” approval code.

H. Delivery of Legislatively Approved Projects

For projects that have been approved and funded by the legislature and will be added and monitored as separate budget line items, the basic steps in order of execution, are:

- Add a new Preliminary Engineering (PE) or Right of Way (RW) phase to a PEF or Nickel project when Construction (CN) was approved by the Legislature:
 - Region prepares and submits change management and sends to CPDM.
 - CPDM reviews/concurs if a scope or budget change is involved.
 - CPDM Manager gives final approval by entering approval code “A” in CPMS.

- Add CN Phase to a PEF or Nickel project when PE or RW was approved by the Legislature:
 - Region prepares and submits change management to CPDM.
 - Region adds to CPMS as proposed with approval code “P.”
 - CPDM approves change management.
 - Upon approval, CPDM updates CPMS with approval code “S.”
- Add a new PE or RW phase to a TPA or CW project when CN was approved by the Legislature:
 - No scope or biennial budget changes.
 - Region prepares and submits change management to CPDM.
 - CPDM Manager indicates final approval by updating CPMS with approval code.
- Adding or advancing a CN phase to a TPA or CW project even when PE or RW was approved by the Legislature can only be approved by the Legislature or in accordance with Section 601 requirements.

I. Unanticipated PIN/Phase Expenditures in Current Biennium

Projects that have been closed or completed may incur unexpected expenditures after the work order has been closed. If that occurs, the basic steps in order of execution are:

- Regions will consult with CPDM project delivery assistants on closed projects that incurred expenditures during the past month after the work order was closed. A closed work order with approval code “T” or “H” may be reopened in TRAINS to process an unanticipated expenditure that has been incurred during the month closed project phase. CPMS captures these expenditures on the month-end Approval Code Check Report.

J. Deletion of PEF Projects

For previously proposed projects that may be identified as no longer needed, the basic steps in order of execution, are:

- Current biennium proposals to delete projects may originate with Regions, CPDM, or a technical organization (e.g., the Bridge Office, Washington Department of Fish and Wildlife, Maintenance, Materials Lab, etc.).
- Regions can propose deletion by removing dollars from CPMS, preparing change management, and submitting to CPDM.
- Technical organizations may propose deletions to CPDM or Regions.
- CPDM may request a Region to initiate project deletion to facilitate reprioritization or program rebalancing.
- CPDM may complete the deletion and change management documentation processes without regional assistance.
- CPDM approves changes.
- “W” approval code is applied by CPDM.
- Future biennia deletions are managed through the budget development process.

Notes: Projects with “B” approval codes in CPMS during book-building that were not approved by the Legislature will need to be changed to an “O” approval code HQ to region transfer. Region will then change to a Region-defined code.

K. CPMS Approval Codes Definitions (See [Appendix 5A](#))

Link to web page: [Approval Code](#) (CPMS Users Guide Fields)

L. Primary Programming Actions and Associated Approval Codes

See [Appendix 5A](#).

M. Aligning Program Expenditures to Appropriations

Once the final budget has passed the Legislature, OFM will construct the Expenditure Authority (EA) Schedule for the biennium, or the remainder thereof. The EA schedule assigns a unique appropriation code for each legislative appropriation. All expenditures are coded to these appropriation codes via the work order. There are two types of appropriation code:

- **Programmatic** – A discrete code for each program, account and fund source combination
- **Proviso** – A discrete code for each account and fund source combination identified by proviso in the budget bill. These are usually associated with specific project list line-items with the intent to restrict certain funding amounts to specific purposes.

Allotment plans are developed to show the planned expenditure for the biennium by subprogram and account. The delivery plan (Section 5-9.5, B) is used as a basis to develop the allotment plans. This information is reported quarterly to OFM and the Legislature by the Budget Office.

CPDM staff monitor planned and actual expenditures to ensure that expenditures do not exceed the expenditure authority provided for each appropriation code in the EA Schedule.

5-12 Appendices

Appendix 5A	Approval Codes with Definitions
Appendix 5B	Reappropriation Calculation
Appendix 5C	Strategy for Over-Programming Pavement Preservation Projects
Appendix 5D	Method for Adding a Programmed Project

Appendix 5A Approval Codes with Definitions

CPDM Responsible	Approval Code	Definition	Description of Use and Rules
Project Delivery	A	Administrative Approval	Administrative approval of RW phases that are not in the original plan or PE phases where a CN phase is approved to delivery without a PE phase. This clearly indicates that PE and right of way was not originally planned.
Budget Delivery	B	Proposed Current Law Budget	Currently unfunded phase or project that requires legislative budget approval.
Region	D	Region Defined	Region Defined Internal Use
Budget Delivery	E	Program in STIP	Federally funded and Regionally Significant state-funded new phase starts that are to be programmed in the Federal STIP
Region	F	Region Defined	Region Defined Internal Use
Systems Group	H	History (all phases completed and PIN complete)	Work orders and all phases are closed and posted to History at the end of the biennium.
Budget Delivery	I	Over Programmed Project	Used to show over programmed project in the current federal fiscal year where the project may be delivered if the funding becomes available.
Region	K	Region Defined	Region Defined Internal Use
Budget Delivery	L	Legislatively Approved	Agency proposed project phase specifically approved through legislative budget process.
Budget Delivery	M	HQ Review for Programming	HQ review for programming of selected Z approval code projects.
Budget Delivery	N	Programmed Project	Programmed projects not in the STIP.
Region, Budget Delivery, Priority Group, Project Delivery	O	HQ to Region Transfer	The "O" approval code is a HQ to Region transfer.
Region	P	Proposed - Current Bien	A region proposal to include this project in the current biennium.
Budget Delivery	S	Active Delivery Project	Approval code is used to indicate a project phase has moved to active delivery and funding work orders can be processed.
Systems Group	T	History (phase is complete)	Completed and closed project phase is included in the book to show the total project cost while an active phase is still underway.
Region	U	Unfunded Project or Phase	Unfunded elements of a funded stand alone project.
Budget Delivery	V	History (project is complete - reportable history)	Project is complete (all phases); however the data is needed for future reporting when the project is in a fixed investment.
Budget Delivery	X	Legislative Direction (Agency submitted)	Project was not in the Department's budget request. Project was approved through the legislative budget process.
Region	Z	Proposed for Programming	Regions will scope projects based on needs identified by region engineers and technical experts. Identified projects which are ready for delivery are scoped for all phases – PE, RW, and CN. "Z" code is a signal to CPDM that the project is ready for consideration to be added to the Capital Plan.

Appendix 5B Reappropriation Calculation

Definition and Purpose:

The Office of Financial Management (OFM) provides the following definition of reappropriation:

“Capital budget appropriation that reauthorizes the unexpended portion of previously appropriated funds. Because capital projects often overlap fiscal periods, it is necessary to reauthorize some expenditure authority to ensure project completion.”¹

OFM’s Operating Budget Instructions provide guidance to agencies on submitting decision packages at the Maintenance and Policy/Performance Level.² WSDOT submits its transportation capital decision packages in accordance with the operating budget instructions. Reappropriations are generally considered as a “Recast to activity” and entered at Maintenance Level 2 (ML2). Incremental expenditure changes that do not fall under the definitions of carry-forward or maintenance levels are considered policy or performance changes.

It is WSDOT’s understanding that the intent of calculating the reappropriation is to identify, at the Maintenance Level, the amount needed to complete work that is underway. The funding needed to begin new capital projects is identified in the Performance/Policy Level.

Reappropriation calculations are not reflective of how effectively the department is delivering its capital program. Estimates that support the department’s appropriation request are developed using system generated expenditure curves and do not reflect unique circumstances faced by projects. However, the department does prepare and provide reports that can be used to evaluate the department’s performance.

Issues with Calculating Reappropriations:

The Washington State Department of Transportation’s capital budget includes the following programs:

- Facilities (D)
- Highway Construction Program
 - Improvements (I)
 - Preservation (P)
- Traffic (Q)
- State Ferries (W)
- State Rail (Y)
- Local Program (Z)

¹ “Glossary of Terms.” Washington State Office of Financial Management. Page 16. www.ofm.wa.gov/budget/instructions/glossary.pdf, Accessed September 25, 2017.

² 2017-19 Biennial Budget Instructions.” Washington State Office of Financial Management. Chapter 5. www.ofm.wa.gov/budget/instructions/operating/2017_19/chapter5.pdf, Accessed September 25, 2017.

Spending authority is provided to WSDOT programs in various forms requiring different levels of reporting and oversight. Capital programs may include programmatic investments, appropriation placeholders, and standalone capital projects. Programmatic investments and to an extent, standalone projects can be made up of multiple projects and phases of projects. In ESB 5096, there is more \$125 million in spending authority reserved for emergencies, local funds, and possible increases in federal spending.

Action or direction from the Legislature or the Office of Financial Management may lead to reappropriations. Studies, projects, or investments may be added to the department's capital budget without reflecting a realistic spending plan. Occasionally, the Legislature makes corridor-level investments or requires savings to remain on a corridor. In these situations, if subsequent work is not identified funding continues to be provided without a clear scope of work.

The department develops its budget proposal based on project information available in the summer of each year. Project teams typically provide conservative estimates to avoid overspending their appropriation. As the state moves through the budget deliberation process, the department has updated project information. In past years, this information was shared through updates to the capital project list in November and February. This is no longer common practice. Recently, the department provided updated project information, but the information is not incorporated to avoid significant changes in the project list.

Additionally, the department's program management policies affect the reappropriation calculation. Projects teams are required to establish Risk Reserves for known risks that may occur over the life of the project. Generally, the entire risk amount is placed in the current biennium even if the risk is likely to materialize in a future biennia. Risk that does not materialize is moved to the ensuing biennium.

Reappropriation Calculation:

The department proposes the following approach to communicate the amount of funds for capital work that was expected to be accomplished in 2015-17 that was not expended and is needed to allow the completion of the project. To get an accurate calculation of the amount of "...expenditure authority to ensure project completion", the department evaluated the individual projects that make up the legislative line-item appropriations.

- The work that was not accomplished in 2015-17 is generally assumed to be the first work completed in the 2017-19 biennium.
- Project reserves (identified in TEIS as Route 998) and amounts set-aside for risk reserves on projects are excluded.
- Reappropriations for programmatic investments (i.e. Bridge Replacement Preservation, Unstable Slopes Preservation, Fish Passage Barrier, etc.) are excluded because there is no expectation that programmatic investment levels increase in 2017-19 as a result of underspending in 2015-17.
- The reappropriation amount identified is the lesser of the amount of underspending in 2015-17 and the amount needed in 2017-19 to complete the work.
- Reappropriation analysis at the fund source level can be difficult because of the authority the department has to exchange Pre-Existing fund source (state and federal).

Appendix 5C Strategy for Over-Programming Pavement Preservation Projects

5C-1 Background

Federal funds are released to the State Transportation Agencies (STA) throughout the federal fiscal year, either through appropriation bills, continuing resolutions, extensions, conversion of Emergency Relief funds, or at the end of the federal fiscal year through redistribution of funds from other states and FHWA programs.

STAs may receive unexpected obligation authority from federal programs and infrastructure investments such as the American Reinvestment and Recovery Act (ARRA) or congressional and presidential initiatives.

Federally funded projects in the department's Highway Construction Program may experience favorable bids or lower than expected costs. When this occurs, federal funds are de-obligated, increasing the department's balance of obligation authority.

Federal obligation authority provided to a State Transportation Agency must be used in the year it is provided or risk being lost or redistributed to other states.

5C-2 Process

Due to the wide range of factors, including emergent funding, the federal program is subject to change throughout the course of a year. In order to ensure that WSDOT is able to utilize the full amount of funding provided by the federal government, the department has adopted a strategy of "over-programming" the pavement preservation program. Pavement preservation projects have fewer regulatory issues and can be designed and advertised quickly, which lend themselves to over-programming.

An amount to be over-programmed will be determined by analyzing the historical amount of project savings and redistributed obligation authority received in previous federal fiscal years. The analysis will be shared with the CPDM Director who will determine the amount of over-programming. After which, the Funds Management unit will identify the associated projects.

The Capital Program Development and Management Division uses Approval Codes available in CPMS to identify the construction phase of projects that are considered over-programmed. Projects that are identified as over-programmed are expected to be designed and delivered as if federal funds are available for construction.

Monthly, the Funds Management unit will evaluate the federal program to determine if sufficient federal obligation authority exists to convert the next highest priority, over-programmed construction phase to a programmed approval code. Once this determination is made, CPDM's Funds Management unit will notify the affected region and convert the approval code for the associated project.

The selected projects will be limited to paving projects with an ad date before the end of the federal fiscal year. If obligation authority does not materialize at the levels projected, the advertisement of over-programmed projects will be deferred up to six months. This will allow CPDM to assess the amount of federal funds expected to be received in the new federal fiscal year. If projects are deferred, the funding requirements will be taken into consideration when analyzing the subsequent over-programming amount.

Appendix 5D Method for Adding a Programmed Project

New programmed project

The Project Delivery Plan is updated annually, typically by July. Once the Project Delivery Plan is approved, it becomes the project delivery baseline for performance monitoring. Projects can be programmed¹ outside of the development of the annual Project Delivery Plan using the Project Action Form (PAF) process. This occurs when:

- (1) an emergent need is identified that must be addressed before the development and approval of the next Project Delivery Plan; and
- (2) a legislatively-approved project (BIN) is split into two or more projects in order to more effectively manage and oversee project delivery.

Both instances result in the creation of a new Project Identification Number (PIN).

Approval process

Authority for programming projects is currently delegated by the Assistant Secretary for Region and Mega Programs, and Chief Engineer to the Director of the Capital Program Development and Management Division (CPDM). The approval process is documented by means of the Project Action Form (PAF) process in the Transportation Executive and Information System (TEIS). This process may be initiated in the Region or in CPDM.

- If initiated by the Region, it is processed for review and approval by CPDM.
- If initiated by CPDM, the Region affected will be notified that a PAF note has been created for their area.

Once the PAF is approved, CPDM records the project scope, schedule and budget in the Last Approved (LAPR) version in TEIS. The approval is also annotated by CPDM in the agency's Capital Program Management System (CPMS). Once approved, the project is considered "programmed".

Approval of a PAF is further delegated under certain circumstances, including the following delegation to the CPDM Priority Programming Manager. If necessary, the Priority Programming Manager will consult with other CPDM managers. However, in special cases, the Director may retain approval authority.

- Programming an American with Disabilities ACT (ADA) project that is the result of a Paving (P1) project;
- New project funded by a programmatic BIN where financial capacity exists within the BIN and the level of investment is not exceeded;
- Establishing a new PIN under a legislatively-approved, standalone project (BIN) where the proposed scope clearly aligns with the legislative scope;
- New project funded by the legislature where a PAF process is used by CPDM to document the legislature's approval; and
- Emergency Relief (ER) projects supported by an emergency declaration. A Detailed Damage Inspection Report (DDIR) is required for federally reimbursed ER projects.

¹ Definition: The work is funded in the Project Delivery Plan

The Director of CPDM or the Chief Engineer is the approval authority for Project Action Forms that do not fall within the abovementioned circumstances, including but not limited to:

- Establishing a new PIN under a legislatively-approved, standalone project (BIN) where the proposed scope does not clearly align with the legislative scope. This may also require change management to address adjustments in funding and schedule.
- Emergent work that was not anticipated when the annual Project Delivery Plan was prepared.
- New projects funded within a programmatic BIN or assets added to a programmed project where the investment strategy and prioritization process has not been approved by the Director.

CPDM Roles and Responsibilities pertaining to PAF forms.

Definitions: Accountable (A) – Individual who is accountable and has approval authority. Only one 'A' can be assigned to each activity. It is the responsibility of this person to ensure strong team development occurs between all related units. The Accountable individual does not make unilateral decisions. Responsible (R) – Individual(s) assigned to perform a task; responsible for action/implementation. Multiple R's can be assigned to a task. It is the responsibility of this person to ensure strong partnering occurs between the units. Consulted (C) – Individual(s) who will be involved and informed throughout the process and need to provide input prior to final decisions. Informed (I) – Individual(s) who need to be informed after a decision or action is taken.	Director	Priority Programming Manager	Highway Project Delivery Manager	Capital Program Delivery Manager	Multimodal Program Manager
Project Action Form					
Programming an American with Disabilities ACT (ADA) project that is the result of a Paving (P1) project.		A, R	R	I	I
New project funded by a programmatic BIN where financial capacity exists within the BIN and the level of investment is not exceeded.	I	A, R	R	I	I
Establishing a new PIN under a legislatively-approved, standalone project (BIN) where the proposed scope clearly aligns with the legislative scope.	I	A, R	R	I	I
New project funded by the legislature where a PAF process is used by CPDM to document the legislature's approval.	I	A, R	R	I	I
Emergency Relief (ER) projects supported by an emergency declaration and a Detailed Damage Exception Report (DDIR).	I	A, R	R	R	I
Establishing a new PIN under a legislatively-approved, standalone project (BIN) where the proposed scope does not clearly align with the legislative scope. This may also require change management to address adjustments in funding and schedule.	A	R, C	R	R	I
Emergent work that was not anticipated when the annual Project Delivery Plan was prepared.	A	R, C	R	I	I
New projects funded within a programmatic BIN or assets added to a programmed project where the investment strategy and prioritization process has not been approved by the Director.	A	R, C	R	R	I

We will improve our effectiveness by delivering projects and programs of the highest quality and in a timely and fiscally responsible manner. We will manage the resources taxpayers and the Legislature entrust to us for the highest possible return of value.

—Secretary’s [Executive Order E 1032.02](#), February 1, 2014.

WSDOT’s goal is to deliver capital projects which are of the highest quality and to do so in a transparent, timely and fiscally responsible manner. The Capital Program Development and Management Division (CPDM) manages program delivery by monitoring, controlling and reporting on project-level delivery. The Department strives to ensure that the Washington State Legislature and the taxpayers receive the best value for the dollars they invest in the transportation system. WSDOT works to deliver high benefit solutions for the lowest possible cost. Close coordination between all organizational levels within WSDOT is required to deliver hundreds of capital projects every biennium and meet this expectation.

The project life cycle of a typical WSDOT project is defined by the phases: planning, programming, Preliminary Engineering (PE), Right of Way (RW) and Construction (CN). The three phases may be referred to collectively as the “project delivery phase” — i.e., when the project is implemented. From a management perspective, each step in the project life cycle could be treated as a stand-alone project—with similar project management processes applied to each step.

The phases of the project life cycle are different from the project management processes used to deliver them. Both the project delivery phases (PE, RW, and CN) and the project management processes are discussed below.

This chapter first provides a brief overview of the delivery portion of the project life cycle, that is, the Project Delivery Process. Next reviewed is the Project Management Process—those principles which apply to project delivery. Final discussion is on CPDM’s role and the role of the Regions, Divisions and Modes in the Project Management Processes used in project delivery. Each process is described in the context of the Highway Construction Program. Other modes will be discussed if there are important differences in the project delivery steps, or the application of management procedures.

Because this chapter is CPDM-focused, it does not describe regional or modal activities if they do not directly interface with or impact CPDM processes. Instead, it focuses on those management processes which CPDM uses to monitor, measure, facilitate, and report on the project delivery process. Where there is an interaction between CPDM and a project manager’s organization, the associated roles, responsibilities, and deliverables will be described.

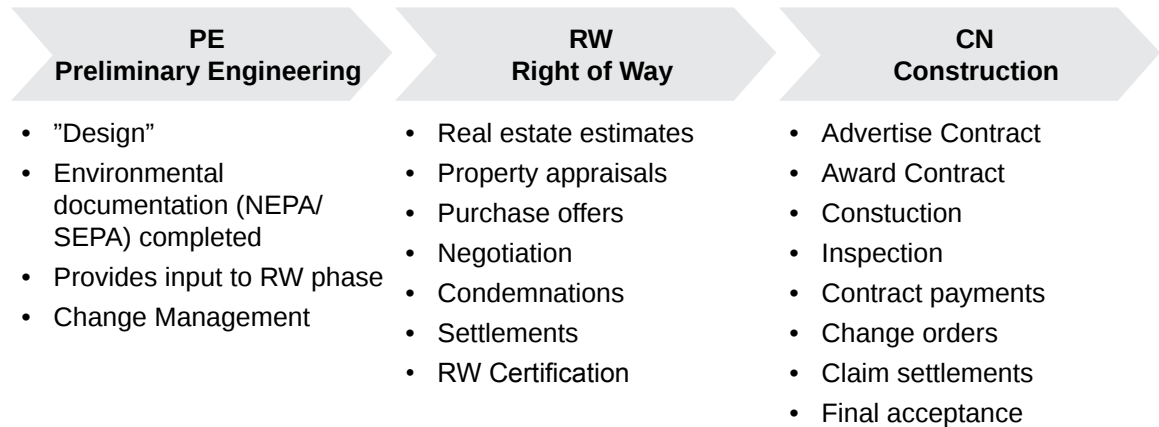
Delivery at the project level is discussed in this chapter. See [Chapter 4](#) for a higher-level look at the delivery of programs of projects.

6-1 Project Delivery Process

Project delivery begins once a project has been programmed in the Project Delivery Plan (formerly known as the Six-year Delivery Plan) and the Project Summary has been approved by CPDM. The project summary defines the limits of the project and the issues to be addressed.

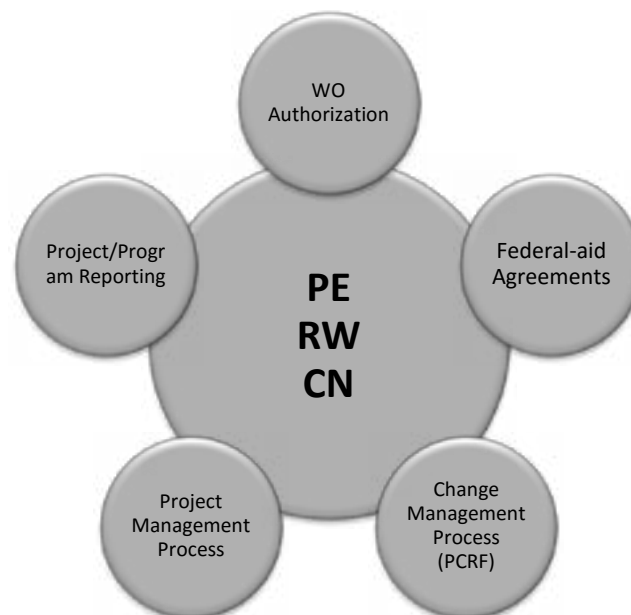
Delivery is comprised of the Preliminary Engineering (PE), Right of Way (RW) and Construction (CN) phases of the typical highway construction project and terminates when the final contract is closed out. (See [Figure 6-1](#))

Figure 6-1 Three Phases of Project Delivery Process



These three phases of project delivery are supported by a number of other specific CPDM processes, which are described in detail in other chapters of this manual. The CPDM processes include budget development, work order processing and Federal Aid agreements, the change management process with Office of Financial Management (OFM) approval requirements, and the reporting process. These management processes are not sequential but support all phases of project delivery, as needed.

Figure 6-2 Management Systems and Processes Supporting PE, RW and CN



The development of complex WSDOT projects are depicted by numerous discrete activities by means of a Work Breakdown Structure (WBS). As the project schedule is built, numerous milestones are associated with the WBS. These milestones are often tied to deliverables. A review of significant milestones will help to illuminate the project delivery process.

One of the most reported and familiar milestones has been the Advertisement Date (ad date) — when a call for bidders is published. This date generally signals the wrap-up of pre-construction (PE and RW) and the onset of construction. But this is only one of several noteworthy steps in project delivery.

Project delivery milestones are used by WSDOT to show the progress during delivery of programmed projects regardless of funding package. The following six milestones are used in conjunction with the above to manage project delivery. They are:

Project Definition Complete*

Begin Preliminary Engineering* (PE)

Environmental Documentation Complete*

Right of Way (RW) Plan Approved

Right of Way Phase Start

Preliminary Engineering (PE) Phase End

Environmental Permits Received

Right of Way Certification*

Advertisement Date*

Award

Right of Way (RW) Phase End

Construction Work Start

Operationally Complete Date*

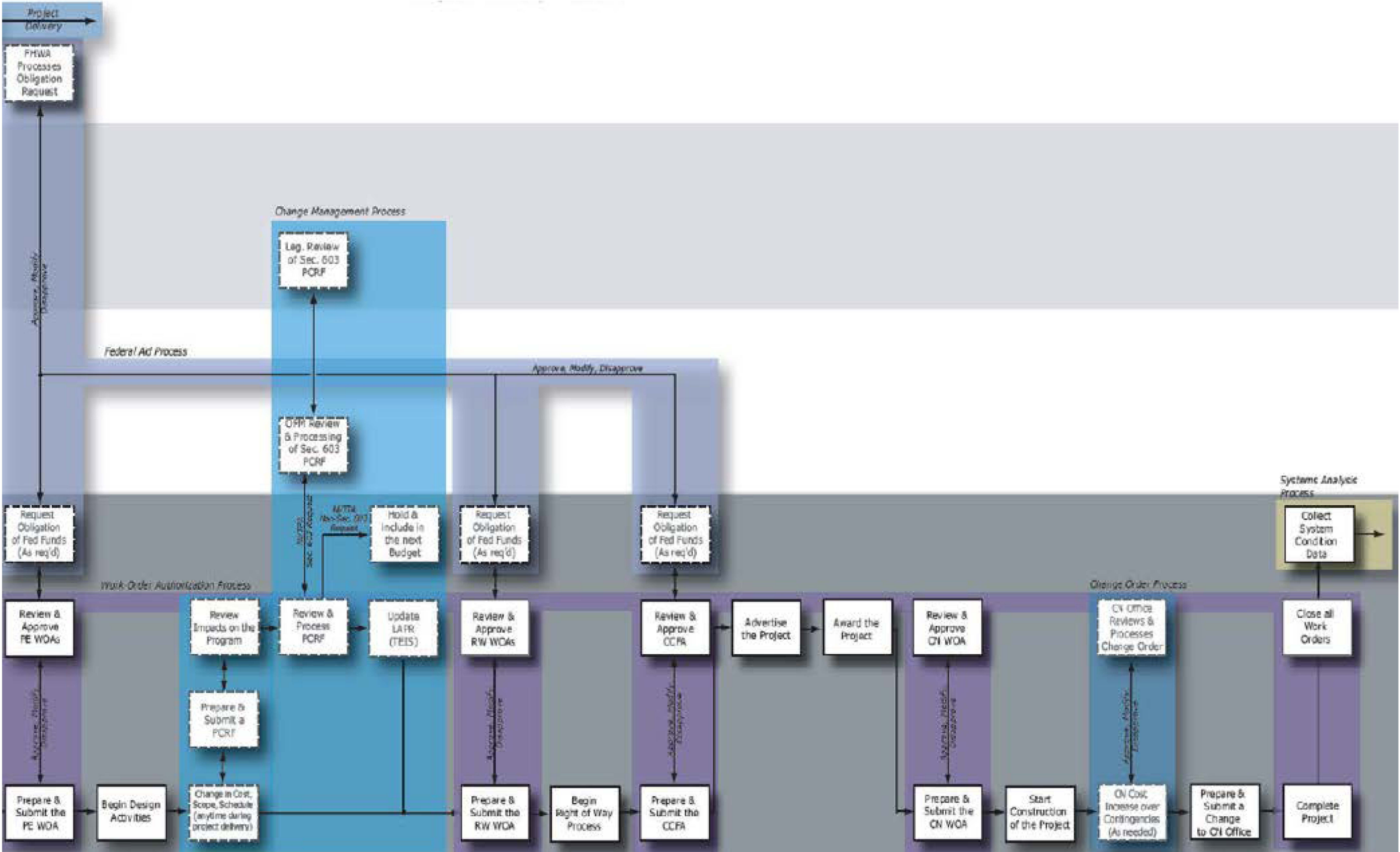
Construction (CN) Phase End

The milestones indicated with an asterisk* are reported externally as part of routine project status updates. The definitions of the milestones are defined here in the sequence they typically occur:

- **Project Definition Complete*:** The project limits and issues the project is addressing have been defined enough to determine a preliminary cost estimate. This milestone is completed prior to the beginning of preliminary engineering.
- **Begin Preliminary Engineering (PE)*:** This milestone marks the start of the project design process. It is usually the first capital spending activity in the project delivery process and is considered accomplished when the project is advertised.
- **Environmental Documentation Complete*:** The environmental documentation is prepared and completed during the PE phase. The Environmental Documentation milestone is considered accomplished when all necessary National and State Environmental Policy Act (NEPA/SEPA) documentation has been submitted by WSDOT Headquarters (HQ) to the appropriate regulatory agencies for approval.

- **Right of Way (RW) Plan Approved:** the Headquarters RW Plans Section makes the final review and then the Plan is stamped and signed by the responsible project engineer. RW acquisition cannot begin without plan approval.
- **Right of Way Phase Start:** This milestone marks the date the work order is set up for the RW phase of the project, and WSDOT Real Estate Services have been notified to proceed with RW acquisition.
- **Preliminary Engineering (PE) Phase End:** This milestone marks the date the work order is closed for the PE phase of the project. Design work is complete and no more charges may accrue against the project for the PE phase.
- **Environmental Permits Received:** This is the date when all environmental permits acquired for a project to go to Ad/Construction have been received.
- **Right of Way Certification*:** This milestone occurs toward the conclusion of the RW phase. The certification indicates the degree to which property acquisition is complete and whether the project can be approved for advertisement. The milestone has been met on the date the RW Certification is signed by the Region Real Estate Services Manager.
- **Advertisement Date*:** This is the date that WSDOT publicly solicits bids from contractors to construct the project. When a project is advertised, it has a completed set of plans and specifications, along with a construction cost estimate. The milestone occurs at the end of the PE and RW phases.
- **Award:** This is the official notice of award of the contract to the successful bidder, and is the Construction Phase Start Date for the project. (For Design-Build projects, this is reported as the Contract Award date.)
- **Right of Way (RW) Phase End:** This milestone marks the date the work order is closed for the RW phase of the project. All real estate work is complete and no more charges may accrue against the project for the RW phase.
- **Operationally Complete Date*:** This is the date when the public has free and unobstructed use of the facility. In some cases, the facility will be open, but minor work items may remain to be completed. For example, a paving project would be considered Operationally Complete when the final lift is laid and the temporary striping is applied, recognizing that final striping will be applied at a later date. Judgment must be used in determining the date the milestone is accomplished, such as when a formal ribbon cutting celebration occurs or the delay of minor work items prevent the actual substantial completion, but the public actually has use of the completed roadway.
- **Construction Work Start:** This is the date when work actually starts on building the project and activity might be seen on the site. See Section 1-08.5 of the *Standard Specifications* and contract special provisions for further details
- **Construction (CN) Phase End:** This milestone marks the date the work order is closed for the Construction phase of the project. All project work is complete, the Final Voucher has been signed by the Secretary of Transportation, and no more charges may accrue against the project.

Figure 6-3 Project Delivery and Management Process (2010)



The steps in project delivery, the supporting management processes, and above milestones are shown in [Figure 6-3](#), Project Delivery and Management Processes. In reviewing this figure, note that the work order process (WOA) and the Change Management process are examples of management processes that support project delivery. As a graphic simplification, they have been shown as occurring at specific points in the sequence. They actually may occur at any point during the project delivery process.

The milestone definitions generally depict the Design-Bid-Build project delivery methodology. There are differences, usually between PE and CN when the Design-Build methodology is used.

Other Modes. The steps in project delivery are quite similar for all modes, although the definitions of major milestones can differ. A highway and a rail project must both be designed. However, rail projects generally do not advertise for bidders, so the Advertisement Date will denote when the construction agreement is signed with the railroad. For all modes, environmental permitting is usually required; RW issues must generally be resolved; CN bids must be solicited; and the facility must be built and opened to service.

6-2 WSDOT's Project Management Process

The over-arching principles of good project management supporting project delivery at WSDOT are embodied in what WSDOT calls its Project Management Process. In addition to these project management concepts, CPDM also employs many discrete sub-processes such as the WOA process and change management process in delivering projects.

WSDOT's project management process includes industry best practices, project management tools, templates, and examples and will enhance communication during pre-construction and construction. The process is based on proven industry standards for project management, such as the Project Management Body of Knowledge ([PMBOK](#)), written by the Project Management Institute (PMI).

[Executive Order E 1032](#) directs WSDOT employees to deliver transportation projects consistent with the principles and practices outlined in the agency's project management process.

The [project management process](#) is a five-step process. The five steps and their sub-elements or deliverables are shown in the Project Management Guide, [Figure 6-4](#).

Figure 6-4 Products/Outcomes of the 5-Step Project Management Process – Project Management Guide



6-3 Roles and Responsibilities in Managing Project Delivery

This section focuses on those aspects of the delivery process that relate to the business functions of CPDM—project management, control and reporting. Topics are presented somewhat chronologically but in actual practice individual management processes may be applied whenever needed during project delivery. Some processes may be repeated as delivery progresses.

Each process topic will first be discussed in terms of the highway construction program, followed by highlights from other modes and programs.

6-4 Transitioning from the Programming Process to Delivery Process

Once a project has been programmed and funded in the Project Delivery Plan, delivery of the project can begin. For more information on the Program Delivery Plan, see [Chapter 4](#) Prioritization.

The normal programming cycle for most projects ends as follows:

1. CPDM prepares the draft Project Delivery Plan (see [Chapter 4](#) Prioritization).
2. WSDOT receives a final project list and funding from the Legislature.¹
3. CPDM compares the project delivery plan with the budget and adjusts the project delivery plan as needed to reflect legislative intent. Where a programmatic reserve was funded by the Legislature, CPDM will add project detail.
4. CPDM makes this list available to the Regions.² The Regions and CPDM verify that scope, schedule, and budget are in agreement. Final technical corrections are made to the project delivery plan. The technical corrections are typically schedule modifications to align with the funding intent of the Legislature.
5. Once the project delivery plan is approved, it becomes the project delivery baseline for performance monitoring. The project delivery plan is updated annually. It is denoted in TEIS by the year, the word “PLAN” and the version such as “01.” For example, 16PLAN01 refers to the project delivery plan approved in 2016. If there is a revision, the new plan would be referred to as 16PLAN02, and so on.

Projects can be programmed and funded after the normal budgeting cycle concludes. This occurs when an emergent need is identified that must be addressed. These projects must be approved by the Secretary of Transportation if they occur between Legislative budget sessions.³

¹Project lists are transmitted by means of TEIS. See [Chapter 11](#) on Information Systems for additional information on TEIS. The list received from the Legislature with an approved budget is called the LEGFIN list, which stands for Legislative Final list. It has a two-digit prefix indicating the session in which it was approved, such as 16LEGFIN.

²'Region' will be used to refer to the responsible entity regardless of whether they are a Region, division, office, or a mode such as Rail or Ferries.

³Approval authority for un-programmed PEF (non-Nickel/non-TPA/ /non-CW) projects is currently delegated to the Assistant Secretary for Engineering & Regional Operations, Deputy Assistant Secretary for Engineering & Region Operations and the Director of CPDM. The approval process is documented by means of the Project Action Form (PAF). This form may be initiated in the Region or in CPDM. It is processed for review and approval by CPDM. Once the PAF is approved, CPDM records the project scope, schedule and budget in an updated baseline list called the Last Approved (LAPR version in TEIS). The approval is also annotated by CPDM in the agency's Capital Program Management System (CPMS) by changing the approval code. Once included in CPMS, projects added through the PAF process are subject to the same data integrity review as described in [Section 3-6.8](#).

The approval process is documented by means of the Project Action Form (PAF). This form may be initiated in the Region or in CPDM. It is processed for review and approval by CPDM. Once the PAF is approved, CPDM records the project scope, schedule and budget in an updated baseline list called the Last Approved (LAPR version in TEIS).⁴ The approval is also annotated by CPDM in the agency's Capital Program Management System (CPMS) by changing the approval code. Once included in CPMS, projects added through the PAF process are subject to the same data integrity review as described in [Section 3-6.8](#).

Projects programmed and funded through the normal budgeting process or annual update to the Project Delivery Plan are annotated in CPMS as “approved” immediately before the beginning of the new biennium. CPDM does this by entering the appropriate approval codes in CPMS. In the case of a supplemental budget, approval is documented shortly after the legislative session. For more information, see [Chapter 5](#) Budget Development.

6-5 Designate a Project Management Region

The Region accountable for delivering, monitoring, controlling, and reporting on the work is called the “Management Region.” This project level designation generally falls within the geographical boundaries of the Region. This required data field is established and maintained for each project, in the Capital Program Management System (CPMS). The Regions may negotiate the transfer of this designation at key points during the life of the project (e.g., a new phase, stage, or budget cycle). This designation can also be transferred for the entire project or for a project phase (PE, RW, CN). This is done to provide efficiency, workforce balancing, etc.

Although the Management Region has sole stewardship of the project, it may receive assistance from another Region in preparing project change management documents; preparing plans, specifications, and estimates (PS&E); environmental services; real estate services; and construction administration.

Headquarters Program Management may designate a different Management Region or the Regions can agree to transfer a project. For reasons of reporting and accountability, the transfer of this designation needs to be formal and Headquarters Program Management notified.

6-6 Assign a Project Manager

The management region will assign a project manager to each project. The project manager may be responsible for project construction or preconstruction management, or both. The project manager may be a Professional Engineer or a Project Management Professional. If they are a licensed engineer, they may be classified as a Project Engineer. In discussing project delivery responsibilities, the terms “Project Manager” and “Project Engineer” are used interchangeably.

Some WSDOT Regions change project engineers as delivery progresses from the Design phase to the Construction phase. Project complexity and desirable skill sets may be a determining factor.

⁴LAPR is a version in TEIS. TEIS may be used to compare LAPR with other versions such as the current delivery plan xxPLANxx or the current budget xxLegFin to show approved project changes made since the version was approved. LAPR only contains projects in active delivery.

6-7 Implement WSDOT's Project Management Process

The project manager is responsible for leading WSDOT's project management process for their assigned phase of the project (see [Figure 6-4](#)). Leading includes initiating and aligning the project team⁵ in accordance with Step One of WSDOT's project management process, and developing and maintaining a useful project management plan.

The Project Management Plan describes both the Project Performance Baseline—the project deliverables and the schedule and budget plans for delivering them—and the Project Management Methods that the project team will use during their delivery. The Project Management Plan (PMP) includes sections containing the Risk Management Plan, Change Management Plan, a Quality Plan, Communication Plan and a Transition and Closure Plan.

It is the project manager's responsibility to deliver the overall project within scope, on budget, and on schedule in accordance with the Project Management Plan (PMP) (see [Figure 6-5](#)). In developing the PMP, team members commit to performing the work within the time frame and for the cost identified in the PMP.

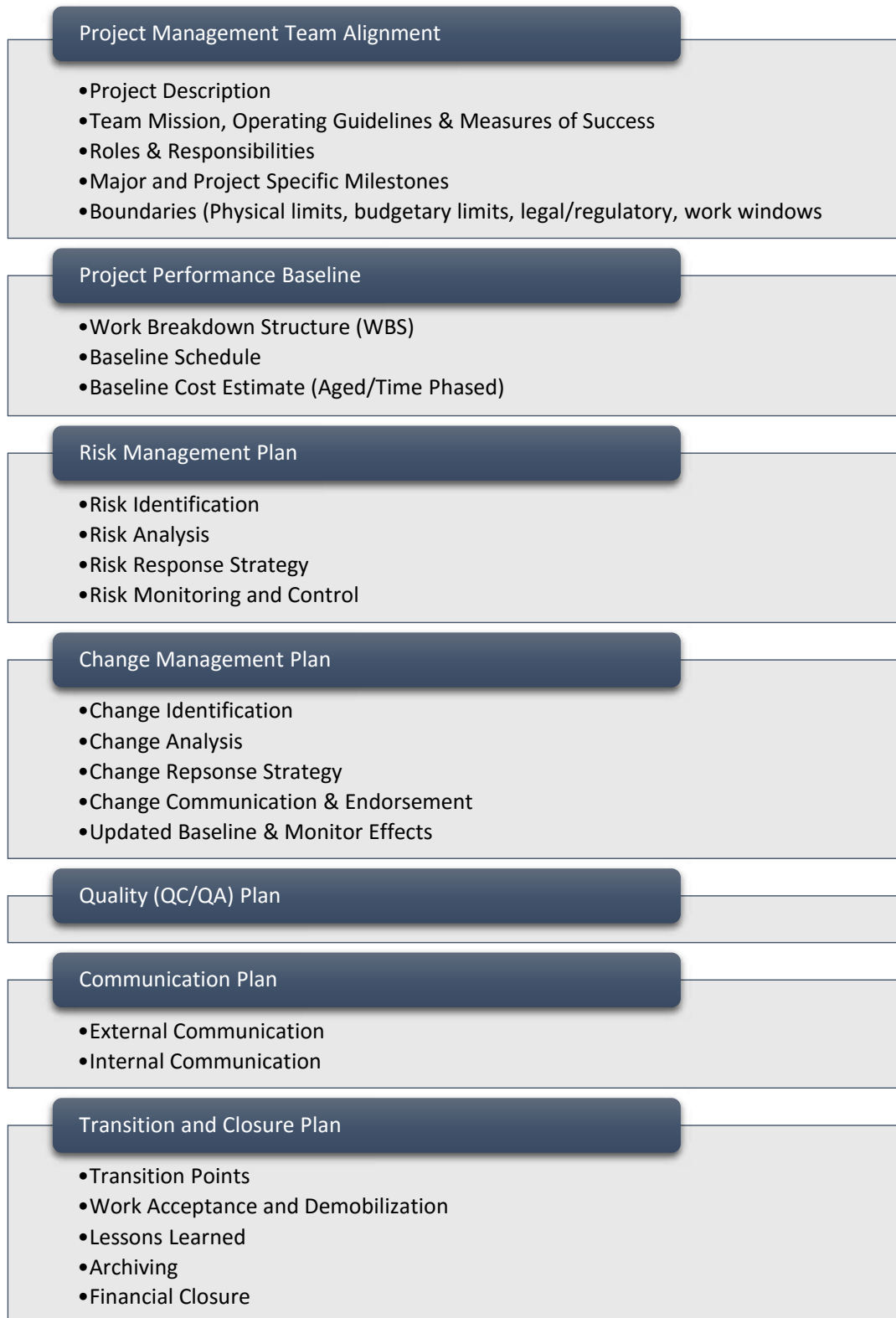
The project manager is expected to use the Project Management and Reporting System (PMRS) (discussed below) to manage and report business decisions related to project scope, schedule, risk, and cost. See the [Project Management Guide](#) for additional project management responsibilities of the project manager and project team members.

Other Modes – The Marine Project Engineers and Marine Project Managers (Senior Marine Engineers) lead the project teams in developing Project Management Plans for the Ferries Terminal Engineering division. The Engineering Manager for Ferries Terminal Engineering Design reviews and approves the Project Management Plans and the pre-design studies. Pre-design studies are approved by the WSDOT Deputy Secretary for submittal to OFM for final approval. The Director of Terminal Engineering ultimately endorses the PMP for all terminal capital projects.

Project Managers in the Rail division currently use agreements and the agreement process to coordinate the roles and responsibilities of the department and the agencies it contracts with—such as Burlington Northern Railway and Sound Transit—to perform work. The Rail Office administers a master agreement with these service providers who lead the project through the design and construction phases.

⁵The Project Manager identifies the project team needed to manage and accomplish the work assigned. The project team is a designated group of people—including specialty groups, consultants, contractors and others—who will collaborate and work together under the direction of the Project Manager to perform and complete the assigned work.

Figure 6-5 Project Management Plan Outline



6-8 Authorize the Work Order

Before work on a project can begin, CPDM must authorize the expenditure of funds by means of a work order. For explanations on work orders and work order authorizations, see [Chapter 8](#) Funds Management and Federal-Aid, or [Exhibit B](#) Common Acronyms and Definitions. A Work Order Authorization (WOA) must be established before the beginning of each project delivery phase: Preliminary Engineering (PE) (also referred to as Design), Right of Way (RW), and Construction (CN). These are called initial (first) work order setups. Subsequently, a WOA is needed to increase or decrease the authorization and/or update funding information.

At the beginning of the PE phase it is common for the entire budgeted amount for the phase to be authorized for expenditure. However, for RW and CN phases, all funding available to the project phase may not be authorized on the initial setup. An example is a Risk Reserve which has been established and placed in the CN phase. Funds in this reserve are not authorized when a contract is awarded. When risks are realized, a separate “increase” Work Order Authorization must be approved by CPDM to expend risk funds and if needed, to move the funds to another phase. The construction contingency is authorized at initial setup of a CN work order, but a separate WOA must be processed when money is spent from the contingency, in order to move money to the correct expenditure group. Contingency funds must be exhausted before authorizing risk funds.

For information on the history of the Alaska Way Viaduct risk pool, established in 2007, see [Appendix 6C](#).

The work order authorization process uses a proprietary electronic document management system. It is the responsibility of the Region or division managing the project to initiate an electronic work order authorization form. CPDM’s role in the WOA process is most involved for the Highways Construction Program and less so for other modes. For the I and P programs, the work order section of CPDM reviews the work order document for accuracy and completeness and is the final approval authority for PE, RW and CN work orders.

For all WSDOT modes, if the project is eligible for Federal funding and WSDOT chooses to apply those funds to the project, CPDM will prepare and submit a Federal Aid agreement as part of the WOA process.⁶ For most highway projects, Federal Aid funding comes through FHWA and they approve the agreements with WSDOT. Once the Federal Aid agreement and the WOA process are completed by CPDM, the WOA is forwarded to Headquarters Accounting for processing in the Transportation Reporting and Accounting Information System (TRAINS).

One of the prerequisites for authorization of a work order is that a Project Summary be submitted to Headquarters and approved by CPDM. If a Region has submitted a Project Summary but Headquarters has not approved it, CPDM may perform a case-by-case analysis that could lead to the work order being approved without an approved Project Summary.

Another prerequisite is that all project changes be approved in accordance with CPDM's change management requirements. More will be said about change management as it relates to managing project delivery below.

Other modes: For non-highway programs including Ferries and Rail, work orders come to CPDM only for Federal Aid processing. Final work order authorization in those programs occurs within their organizations. In the Ferries Vessel Branch, the Vessel Business Supervisor oversees development and execution of work orders by a Work Order Specialist. Depending on funding specifics, other Federal agencies such as the Federal Transit Authority and the Bureau of Indian Affairs may be involved in the Federal Aid agreement.

The next step in the delivery process is developing a project-specific design in the pre-construction phase.

6-9 Pre-Construction Phases

Once specific work orders have been authorized for Design and Right of Way, the project team can begin work on these phases. CPDM's role in these activities is limited primarily to monitoring, measuring and reporting delivery performance, and in overseeing change management.

CPDM staff participate in monthly status meetings with the Regions to monitor project status and track the projects delivery performance against baselines for scope, schedule and cost. CPDM uses information acquired at these monthly status meetings to provide feedback on scope, schedule or cost conflicts, to recommend additional communication needs, reporting requirements or change management implications. It is the responsibility of the project manager to identify variances from the baselines and to forecast the resources needed to complete the project.

CPDM will also perform independent analysis on project data to look for potential problems. Problems or performance concerns will be reported back to the project manager or to the regional program manager.

6-10 Project Management and Reporting System (PMRS)

PMRS is a suite of software tools for managing project delivery. It provides project managers with scheduling, contract managing and document storage tools to manage project scope, schedule, and cost. PMRS is designed to provide current, easily accessible, and accurate information.

[Executive Order E 1032.02](#) directs WSDOT employees "to use the PMRS, as the agency-wide project management and reporting tools supporting Capital Transportation Project Delivery." PMRS supports best management practices. PMRS shares product [support](#) responsibilities with the Regions.

PMRS's suite of software tools reduces project management administrative time and provides consistent and timely reports delivered with less effort and more accuracy. PMRS tools include:

- Primavera Scheduler (P6) is a schedule management tool to build, monitor, and control schedules and resources. A project schedule ensures more effective sharing, and earlier identification and communication of project delivery challenges.

- WSDOT has purchased an Oracle product called “Unifier” and is in the process, in collaboration with IT, of exploring the best way to implement the Unifier software to provide the functionality of Contract Manager.
- Primavera Contract Manager was the contract management tool CPDM had been using for the efficient administration of construction contracts and activities, and better prediction of project performance. As of April 2017, Contract Manager is no longer supported by Oracle. Unifier will take the place of Contract Manager.
- PMRS is integrated with key WSDOT Information Technology (IT) systems to provide automated data transfer of specific data elements. For example, data is imported into PMRS from CPMS nightly and from TRAINS on a monthly basis. Data on payments to contractors is imported from CAPS. CCIS data is imported to manage changes to contracts.

Region requests for system modifications and enhancements are administered by the team in CPDM. Future enhancements are evaluated and prioritized based on user needs and system efficiencies which provide the most value to the department. The PMRS goals and performance measurements are contained in the [PMRS Sustainability Plan](#).

Options for training include in-class training, webinar or net-meeting environments, and online e-learning courses. CPDM will work to offer project management training through many of same options as PMRS.

Links to PMRS web-based tools, policies, processes, procedures, web reporting, training and support are found at the [PMRS webpage](#).

Other Modes. The Ferries Terminal Engineering Program Manager is responsible for managing cost estimates, monitoring delivery, tracking expenditures, and recommending changes to the Ferries program. This manager is responsible for using PMRS within Ferries and for the development of advanced cost estimating tools for Terminal Engineering.

6-11 Construction Phase

An authorized work order is necessary before work can begin on the Construction phase.

In the Highway Construction Program, before the project is advertised there is a unique process to certify that funding is available to advertise a project for construction. CPDM verifies, by means of a draft WOA document called the Construction Contract Funding Authorization (CCFA), that sufficient funding is available to embark on the advertisement and award process. This document is approved like a work order by CPDM but is not set up in TRAINS. Therefore, no expenditures are authorized at this point. Once approved by CPDM, the CCFA goes to the CAPS group in the Headquarters Accounting Office where a contract number is assigned. Immediately following bid opening for the project, CAPS processes the CCFA back to the Region work order initiator who converts it into an actual work order authorization document and updates it to reflect the low bid received on the project. It is then re-processed through CPDM.

As with the pre-construction phases, CPDM’s role during construction continues to be one of monitoring, facilitating and reporting. Facilitation is done by means of the work order process and the change management process. CPDM has oversight over both of these management processes in the Highway Construction Program. The two operate in concert to control cost, schedule and scope changes.

Other Modes. This manual's [Chapter 8](#) Funds Management and Federal Aid, and [Chapter 9](#) Managing Change provide some additional information on the roles and responsibilities of CPDM during the construction phase of project delivery. As with the Highways Construction Program, CPDM's role is one of monitoring, facilitation and reporting. However, project controls for the other modes tend to be more of a review and concurrence process rather than an approval process.

At the 2017 Innovations and Partnership Conference, Governor Inslee and Secretary Millar emphasized the need to size contracts for Connecting Washington projects to enable local transportation companies an opportunity to compete for this work. For information on contract sizing, see [Appendix 6B](#).

6-12 Change Management Process

Changes to a project's scope, schedule or cost may occur at any time during the project delivery process. Each project manager and project team is expected to monitor, control, and report change to CPDM. CPDM functions as a project control and reporting group, independent of the project team.

Every requested change, whether in the PE, RW, or CN phase, must be documented by the regional project manager and either accepted or rejected by some authority. At WSDOT, that authority may reside within the project management team or within the Region or division for minor changes. For more significant changes, the authority resides in CPDM or executive management. To request a change on a project, the project manager and the regional program manager will document the change according to the CPDM Change Management process. For more information see [Chapter 9](#) Managing Change.

CPDM is responsible for monitoring, facilitating, controlling and reporting change. Some approvals occur within CPDM and some are referred to the Secretary's Office (i.e., Assistant Secretary for Engineering and Regional Operations). Some must be approved by the Director of Financial Management at OFM, as determined by the approval level thresholds.

CPDM may engage other specialty group managers or technical experts to consult on proposed changes during the Headquarters' review process. These specialists are responsible for reviewing the change proposal and providing a written response to CPDM in a timely manner. CPDM will consider their input as they build a Headquarters consensus on the approve/disapprove recommendation for the proposal.

During the Construction phase, significant changes are documented and approved by means of a construction change order document. These are initiated by the Project Manager and approved by the Construction Engineer. The regional program manager, the project manager, or the construction engineer will coordinate with CPDM any scope, schedule and cost changes which exceed Region approval levels.

Other Modes. For the non-Highway Construction Program modes, CPDM reviews change management processes, aids in establishing approval thresholds and provides recommendations to ensure projects are delivered within scope, schedule and budget.

For an approval codes table, see [Appendix 6A](#), and for additional information see [Chapter 9](#).

6-13 Reporting Project Delivery

In CPDM, the reporting process is closely aligned with the change management process. Reporting occurs throughout the project delivery process—from the scheduled PE start date through operational completion of the constructed project.

Reporting consists of monitoring and communicating how projects and programs are being delivered. Reporting serves to inform the public and policy-makers of progress—accomplishments and challenges—and it also provides a critical function in the delivery process: it works in concert with the change management process to give early warning to project teams and agency executives when corrective action is needed to keep projects on schedule, within scope and budget.

Reports are generated for use externally and internally to WSDOT. The Gray Notebook, project web pages, and special reports stipulated in legislative budget documents are examples of external reporting. For more information, see [Chapter 10](#) Project and Program Reporting.

CPDM coordinates preparation for external reporting of the Gray Notebook reports through the Office of Strategic Assessment and Performance Analysis Office (OSAPA). Project managers are responsible for maintaining the webpages through their Communication Offices. CPDM staff validate the project webpages for internal reporting on budget, schedule and current cost information.

For external reporting, CPDM works closely with project managers and communications staff to adequately report on project delivery to the public, the Governor, and the Legislature. WSDOT aggressively reports the bad news as well as the good news to maintain the most open and transparent environment possible.

The primary responsibility for initiating communication rests with the project manager and their teams who have knowledge of the project's progress. [The Gray Notebook](#) is the standard accountability document to the public, the Governor, and Legislature. However, there are other external reporting mechanisms as well:

- 1) The project delivery communications process requires the Regions to notify Headquarters of significant delivery problems and to report updates to problems monthly to executives. For internal reporting, there are monthly and quarterly reports and ad-hoc reporting tools to monitor delivery. Project managers and regional program managers are responsible for alerting Headquarters to projects that need to be “watched” due to increasing risks or impending challenges. The project or program manager is responsible for initiating communication on problem issues to ensure they reach the department's Management in Headquarters and for following up with a written communiqué, as often as necessary, on those projects with warning flags. Some of these warnings are selected by the Chief Engineer and the Secretary to be included in alerts to Legislative Staff and OFM. Those projects may then be “watch-listed” and are considered for inclusion in the Gray Notebook by CPDM and the Office of Strategic Assessment and Performance Analysis. When projects are completed, CPDM compiles a section of the Gray Notebook reporting on time, on-budget statistics.

Essential to good communication and the reporting process is the collection, storage and retrieval of project delivery data. Several computer systems are used by CPDM to monitor, analyze and report on project delivery.

At the start of the design phase, it is the responsibility of the managing Region to enter data about their project into these systems. The Capital Program Management System (CPMS) is a primary data entry and storage system. The Transportation Executive Information System (TEIS) is a powerful communication, reporting and analysis tool used by CPDM. CPDM is responsible for maintaining and improving both CPMS and TEIS. For more information on these systems, see [Chapter 11](#) Information Technology Systems.

Reports generated from these systems satisfy the data requirements of both internal and external reporting needs. Explanatory text must be manually added to many reports to provide a complete picture of project delivery.

For additional information on the subject of reporting, see [Chapter 10](#) Project and Program Reporting.

6-14 Performance Monitoring

Successful project delivery needs to measure performance and encourage good communication between the planning offices, program management, design engineers, support functions, and the construction offices at all organizational levels. Every office and every individual involved in the project is responsible for effectively communicating with other team members. Ideally, CPDM staff would like communication to be constant and bi-directional; there are many opportunities throughout the life of a project for communication to take place. Additionally, more options may be available to mitigate issues in project delivery when the issues are communicated earlier in the delivery process.

Performance in project delivery is monitored by comparing and reporting project scope, schedule and cost against corresponding baseline values. These are reported monthly, quarterly, by fiscal year, by biennium, and at project completion. For more information, see [Section 6-13](#) Reporting Project Delivery above, and [Chapter 10](#) Project and Program Reporting.

6-15 Savings WIN Removal Process

In 2018, CPDM made a significant effort to remove the Savings WINs from projects identified to have funds reserved in a Savings WIN. This endeavor took approximately three months of active communication and collaboration with CPDM and the Regions to identify, discuss, and finalize the removal of Savings WINs. Communication was key as sometimes a Savings WIN was removed but had not been updated within the WSDOT system.

Reporting, updating, and removing Savings WINs occurs through the Transportation Executive Information (TEIS) System. To report which Savings WINS were removed in a given month, two final TEIS versions can be compared and assessed: "18SAVE09" and "18SAVE10." This comparison will include all Savings WINs within the previous month end update.

When analyzing the data, comparing these versions is key to ensuring that all the Savings WIN variances are zero. If the variance is not zero, the Savings WIN has not been removed yet. However, there is also a chance it has not been updated in the TEIS system.

The Saving WINs were removed in November 2018, and reflected in the November month end version, reported later in December.

CPDM has confirmed all the Saving WINs have been successfully removed. CPDM no longer uses Savings WINs.

6-16 Appendices

- Appendix 6A CPDM - TEIS Versions
- Appendix 6B Sizing Construction Contracts
- Appendix 6C Risk Pool Funding History

Appendix 6A CPDM - TEIS Versions

External Reports uses three TEIS datasets: PMEXCURR, PMEXINIT, and PMEXORIG, for the data to make several monthly reports. For more details, please see Appendix 10D.

	Time Period	Business Owner: Does your group use this version?	Description	Criteria	Binned (B) Project (P)	Common comparisons	Version Security (groups or people that can read or edit)
	BIENNIAL						
1	CURR - DM	All CPDM	Daily snapshot of CPMS. Used to monitor biennial expenditure plans for programmed projects.	App Codes: A,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Prog: D,I,P,Q,W,Y. Notes: Daily load of projects from CPMS Production. Perm: View - DOT.	P	Project: 3, 5, 9, 10, 11, 12, 13, 14 Binned: 15, 16, 17, 18, and 19	All DOT Users
2	CPMS - DM	Systems	A complete snapshot of all CPMS data, including historical, active, unprogrammed, proposed, and future programmed projects. Excludes phases with no (0) dollars or approval codes	All Approval Codes including nulls and blanks. App Programs except A, B, C, G, H, R, and nulls. All Stage of Funding codes. No zero current dollar PINs are included. Notes: Daily load of projects from CPMS Production that have approval codes. This version can be used to find projects that have been set up in CPMS since 93-95 using the current program structure (Improvement & Preservation). Perm: View - DOT.	P	Search	All DOT Users
3	ACT - DM	Systems	Actual expenditures from current closed month (CPMS Datamart).	App Codes: A,C,L,S,T,V,X,Y. Fund: B,C,J,S. Prog: D,I,P,Q,W,Y. Notes: Daily load of actual expenditures as of the last monthend. This is the same as the amount on the CPMS CD screen in the field ACTLS THRU:. Perm: View - DOT.	P	Project: 1, 5, and 14 Binned: 15, 16, 17, 18, and 19	All DOT Users
4	PROP - DM	Priority	Projects proposed for prioritization and programming. Includes projects with unfunded phases.	App Codes: B,U,P,R,Z. Fund: B,C,J,S. Notes: Daily load of proposed projects from CPMD Production. Perm: View - DOT.	P	PDP	All DOT Users
5	BTDA - DM	Systems	Current Biennium to date - actual expenditures from current closed month including unposted actuals (CPMS Datamart).	App Codes: A,L,S,T,V,X. Prog: I,P,WSF,Traffic Operations. Notes: Daily load from TRAINS of actual expenditures including unposted actuals in the current month. This is the same as the amount on the CPMS CD screen in the field (ACTLS FOR). Perm: View - DOT, PCRO, CPDM, EllisM, HaskellIT, JayTest, StrunaR, WalkerC, AlexanderJ.	P	Project: 1, 3, and 14 Binned: 15, 16, 17, 18, and 19	All DOT Users
6	PRDAY - DM	Systems	Same as Curr-DM - Day before...	App Codes: T,V,A,C,L,S,X,Y,E,I,N. Fund: B,C,J,S. Notes: Daily load of projects from CPMS Production. Perm: View - DOT, EllisM, StrunaR, WalkerC.	P	Project: 1 Binned: None	All DOT Users
7	PLAN - DM	Program Delivery	Currently Programmed Projects plus Delivery Plan update candidates (already prioritized by Priority Group).	App Codes: T,V,A,C,L,S,X,Y,E,I,N,B,M,P. Fund: B,C,J,S. Programs: I,P,Q,W,D,Y. Notes: Daily load of projects from CPMS Production. Same as CURR-DM except M and P approval codes are included. Perm: View - DOT	P	Project: 1 and 9 Binned: 15, 16, 17, 18, and 19	All DOT Users
8	RISK - DM	Project Delivery Group	Risk Reserves on Currently Programmed Projects.	App Codes: A,C,E,I,L,N,S,T,V,X,Y. Fund: J. Perm: View - DOT, WardA, HaskellIT.	P	Search	All DOT Users
9	BOOK - DM	Program and Project Delivery	Snapshot of CPMS Book environment	From CPMS Datamart Volume 425 (2016 Six Year Plan Dev). App Codes: A,B,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Notes: This version is a snapshot of CPMS Mainframe at May 2016 Monthend. Daily load of projects from the Book file. Perm: View - DOT	P	Project: 1, 3, and 5 Binned: 15, 16, 17, 18, and 19	All DOT Users

	Time Period	Business Owner: Does your group use this version?	Description	Criteria	Binned (B) Project (P)	Common comparisons	Version Security (groups or people that can read or edit)
10	LAPR	Project Delivery Group	Projects in Active Delivery (programmatic and legislative). This includes all projects included in a BIN of a legislative project.	Used as the baseline for project approvals A,C,E,I,L,N,S,T,X,Y Approval codes Limited to Active Delivery projects only. (Any phase is authorized to start via approval code) History projects can be found in CLAPRS	P	Project: 1, 3, 5, and 6 Binned: None	All DOT Users
11	xxWEEKxx	All CPDM	Weekly Copy of CURR-DM	Approval Codes: A, C, E, I, L, N, S, T, V, X, Y Fund Stages: Blank, C, J, and S Programs: D, I, P, Q, W, Y	P	Project: 1 Binned: None	All DOT Users
12	xxWKL Rx x	All CPDM	Weekly Copy of LAPR	Used as the baseline for project approvals A,C,E,I,L,N,S,T,X,Y Approval codes Limited to Active Delivery projects only. (Any phase is authorized to start via approval code) History projects can be found in CLAPRS	P	Project: 1 and 10 Binned: None	All DOT Users
13	xxMExx	All CPDM	Snapshot of CPMS after month end closure. Used to monitor biennial expenditure plans for programmed projects.	Prod, 15-17, App: A, C, E, I, L, N, S, T, V, X, Y, Stg: B,C,J,S, Sub: All, Fund: All	P	Project: 1, 3, 5, 9, 10, 11, 12, and 14 Binned: 15, 16, 17, 18, and 19	All DOT Users
14	xxACTLxx	Program Delivery	Snapshot of CPMS after month end closure. Used to monitor actual expenditures to date for current active projects.	Actual construction expenditures from TRAINS, 17ACT03, 17ACTC03, and 17DOT003	P		All DOT Users
15	xxDOTxxx	Program Delivery	Project list created by CPDM during the budget development process.		B	Project: None Binned: 16, 17, 18, 19, and 20	
16	xxGOVxx	Program Delivery	Project list created by the Governors office during the budget development process.		B	Project: None Binned: 15, 17, 18, 19, and 20	
17	xxHTCxx	Program Delivery	Project list created by the House Transportation Committee during the budget development process.		B	Project: None Binned: 15, 16, 18, 19, and 20	
18	xxSTCxx	Program Delivery	Project list created by Senate Transportation Committee during the budget development process.		B	Project: None Binned: 15, 16, 17, 19, and 20	

	Time Period	Business Owner: Does your group use this version?	Description	Criteria	Binned (B) Project (P)	Common comparisons	Version Security (groups or people that can read or edit)
19	xxLEGCOR	Program Delivery	Project list as passed by the Legislature with provisio directed corrections.		B	Project: None Binned: 15, 16, 17, 18, and 20	
20	xxLEGFIN	Program Delivery	Project list as passed by the Legislature.		B	Project: None Binned: 15, 16, 17, 18, and 19	
21	DPSPSAPR	PAMS	Current approved budget for DPS and Program Support.	Subprograms H1, H2, H3, I5, P4, P8, K2, T2, T3, T6 Last approved budget amount with descriptive changes.	P	Project: 22 Binned: None	CPDM, Region Program Management, DOT Traffic Office
22	DPSPSACT	PAMS	DPS and Program Support daily actuals.	I5 and P4 loaded from BTDA-DM. P8 loaded from the Financial Data Mart (IR and MS work orders, excluding group 99). Actual expenditures updated daily. Actual DPS and Program Support expenditures. Data source changed from Accounting Data Mart to Financial Mart starting 4-24-2012.	P	Project: 21 Binned: None	All DOT Users
23	xxSAVExx	Project Delivery Group	Monthly snapshot of Savings portions of a project's PIN used to show unrealized Risk Reserve spending.	Approval Codes: A, C, E, I, L, N, S, T, V, X, Y Fund Stage: S	P	Search	All DOT Users
24	xxRISKxx	Project Delivery Group	Monthly snapshot of Risk Reserve portions of a project's PIN.	Approval Codes: A, C, E, I, L, N, S, T, V, X, Y Fund Stage: J	P	Search	All DOT Users
	ANNUAL						
	PLNFY - DM	Program Delivery		App Codes: T,V,A,C,L,S,X,Y,E,I,N,B,M,P. Fund: B,C,J,S. Prog: I,P,Q,W,D,Y. Notes: Daily load of projects from CPMS Production. Same as CURR-DM, except M and P approval codes are included. Perm: View - DOT	P		
	CPMFY - DM	Systems		All Approval Codes including nulls and blanks. App Programs except A, B, C, G, H, R, and nulls. All Stage of Funding codes. No zero current dollar PINs are included. Perm: View - DOT	P		
	CURFY - DM	Systems		Fiscal Year Version: Same filters as CURR-DM. App Codes: A,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Prog: D,I,P,Q,W,Y. Notes: Daily load of projects from CPMS Production. Perm: View - DOT.	P		
	PROFY - DM	Priority		App Codes: B,U,P,R,Z. Fund: B,C,J,S. Notes: Daily load of proposed projects from CPMS Production. Perm: View - DOT	P		

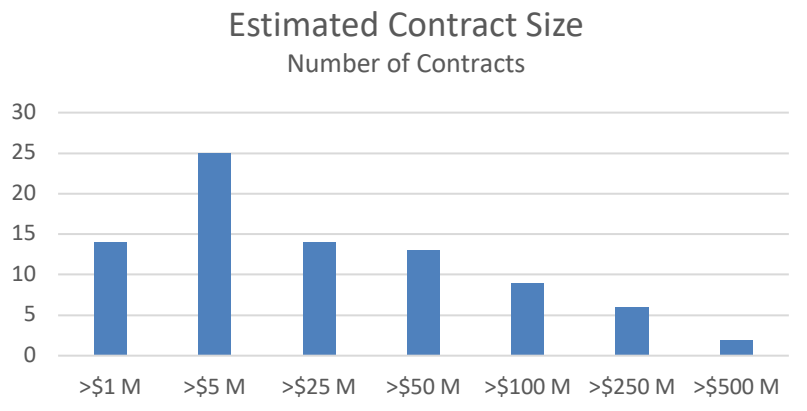
	Time Period	Business Owner: Does your group use this version?	Description	Criteria	Binned (B) Project (P)	Common comparisons	Version Security (groups or people that can read or edit)
	BKFY - DM	Program Delivery		From CPMS Datamart Volume 424 (2016 Six Year Plan Dev). App Codes: A,B,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Notes: This version is a snapshot of CPMS Mainframe at May 2016 Monthend. Daily load of proojects from CPMS Book file. Perm: View - DOT.	P		
	PLNFF - DM	Program Delivery		App Codes: T,V,A,C,L,S,X,Y,E,I,N,B,M,P. Fund: B,C,J,S. Prog: I,P,Q,W,D,Y. Notes: Daily load from CPMS Production. Same as CURR-DM, except M and P approval codes are included. Perm: View - DOT	P		
	CPMFF - DM	Systems		All Approval Codes including nulls and blanks. All Programs except A,B,C,G,H,R, and nulls. All Stage of Funding codes. No zero current dollar PINs ate included. Perm: View - DOT	P		
	CURFF - DM	Systems		Federal Fiscal Year Version: Same filters as CURR-DM. App Codes: A,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Prog: I,P,Q,W,D,Y. Notes: Daily load of projects from CPMS Production. Perm: View - DOT.	P		
	PROFF - DM	Priority		App Codes: B,U,P,R,Z. Fund: B,C,J,S. Notes: Daily load of proposed projects from CPMS Production. Perm: View - DOT.	P		
	BKFF - DM	Program Delivery		From CPMS Datamart Volume 424 (2016 Six Year Plan Dev). App Codes: A,B,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Notes: This version is a snapshot of CPMS Mainframe at May 2016 Monthend. Notes: Daily load of proojects from CPMS Book file. Perm: View - DOT.	P		
	PLNCY - DM	Program Delivery		App Codes: T,V,A,C,L,S,X,Y,E,I,N,B,M,P. Fund: B,C,J,S. Prog: I,P,Q,W,D,Y. Notes: Daily load of projects from CPMS Production. Same as CURR-DM, except M and P approval codes are included. View - DOT.	P		
	CPMCY - DM	Systems		All Approval Codes including nulls and blanks. All Programs except A,B,C,G,H,R, and nulls. All Stage of Funding codes. No zero current dollar PINs ate included. Perm: View - DOT	P		
	CURCY - DM	Systems		Federal Fiscal Year Version: Same filters as CURR-DM. App Codes: A,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Prog: I,P,Q,W,D,Y. Notes: Daily load of projects from CPMS Production. Perm: View - DOT.	P		
	BKCY - DM	Program Delivery		From CPMS Datamart Volume 424 (2016 Six Year Plan Dev). App Codes: A,B,C,E,I,L,N,S,T,V,X,Y. Fund: B,C,J,S. Notes: This version is a snapshot of CPMS Mainframe at May 2016 Monthend. Notes: Daily load of proojects from CPMS Book file. Perm: View - DOT.	P		

Appendix 6B Sizing Construction Contracts

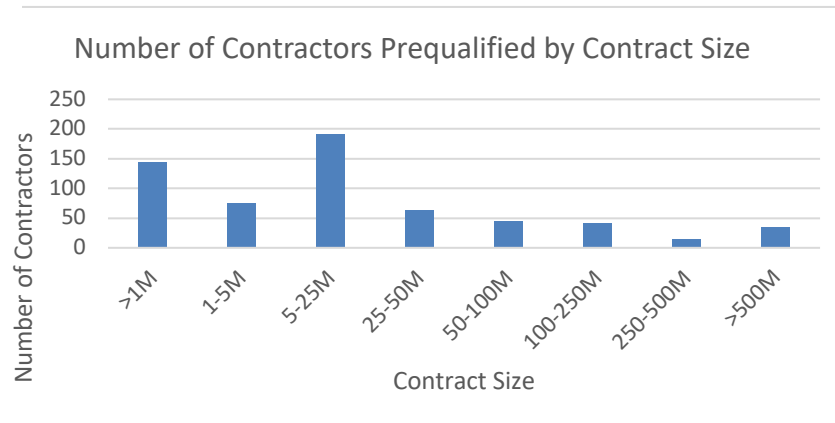
6B-1 Background

In 2015, the Washington State Legislature passed a 16-year, \$16 billion transportation package called “Connecting Washington.” Fundamental to the bi-partisan support for the passage of the transportation package was an understanding of the economic benefit of infrastructure investment to the state’s economy. This investment translates into economic opportunities for the state’s transportation construction industry. At the 2017 Innovations and Partnership Conference, Governor Inslee and Secretary Millar emphasized the need to size contracts for Connecting Washington projects to enable local transportation companies an opportunity to compete for this work.

There are 73 highway construction projects funded by the Connecting Washington Transportation Revenue Package, counting the programmatic projects of additional preservation and fish barrier removal as one project each, totaling \$10.45 billion. Project size ranges from \$1.1 million to \$1.9 billion, with \$6.5 billion for projects with a cost greater than \$400 million. While each project may be delivered using multiple contracts, it is generally expected that projects over \$400 million will be delivered using multiple contracts. Below is a chart showing the currently programmed number of contracts, by the size of the contract. A number of larger projects over \$400 million are still working through the delivery assumptions with regards to the number of contracts that will be used to deliver the project.

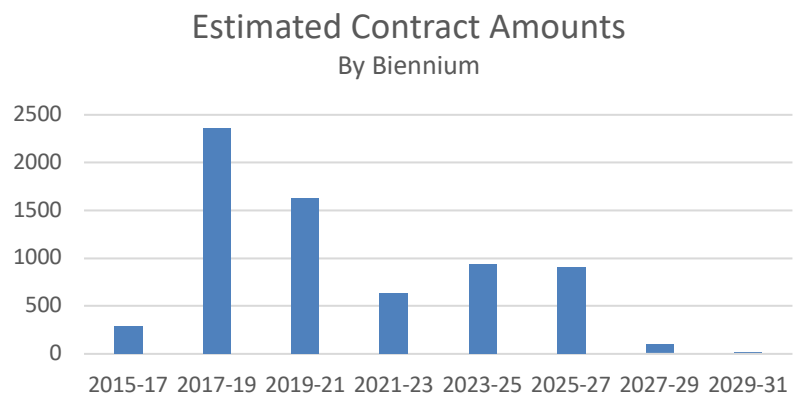


In reviewing the number of contractors that have been pre-qualified, the number of contractors eligible to bid contracts falls dramatically with contracts greater than \$25 million. The number of contractors and contract limits is portrayed in the chart below. Additionally, assuming the current legislative delivery schedule for the Connecting Washington projects, there is a significant amount of construction activity starting in 2017-19 and continuing into the 2019-21 and 2021-23 biennia. With a significant number of contracts planned for advertisement within the next six years, direction will be needed quickly to identify opportunities for smaller contractors.



6B-2 Next Steps

A few of the larger projects have not communicated their current delivery plans. CPDM is working with Region Program Management staff to understand the current delivery assumptions of all of the Connecting Washington projects and evaluate those projects that are currently assuming delivery with contracts greater than \$100 million to evaluate the impacts of breaking construction activities into multiple, smaller contracts. Initially, CPDM will focus on those projects expected to be delivered in the 2017-19 and 2019-21 biennium to evaluate the options for delivery.



Appendix 6C Risk Pool Funding History

6C-1 Background

The 2007 Legislature established a \$1.1 billion risk pool for the AWW and SR 520 Bridge as a separate line item on page 420 in the [07LEGFIN project list \(PIN 099950Z\)](#). This funding was provided to cover anticipated cost increases on these two projects. Funding to capitalize the risk pool came from two sources: (1) an adjustment in the amount of Federal Bridge Replacement funds distributed to the state, and (2) an adjustment to the amount reserved for future highway construction activities.

6C-2 2007 Legislative Session

Legislative intent documented in the 2007 Budget Notes indicated “access to a \$1 billion pool of funds earmarked exclusively for either the Alaskan Way Viaduct or SR 520 Bridge. Since the Viaduct’s total state funding is limited, the range of additional funds available from this pool to SR 520 is from \$600 million to \$1 billion.” Source: [2007-09 Transportation Budget \(Budget Notes, page 400\)](#)

The funds provided were a combination of federal Bridge Replacement (BR) and Surface Transportation Program (STP), aged as follows:

	(dollars in millions)						
	<u>11-13</u>	<u>13-15</u>	<u>15-17</u>	<u>17-19</u>	<u>19-21</u>	<u>21-23</u>	<u>Total</u>
Federal Bridge	15.0	106.3	133.9	129.6	224.9	189.8	799.6
Federal STP	0.0	0.0	62.9	56.5	78.1	74.9	272.4
Total	15.0	106.3	196.8	186.1	303.0	264.7	1,071.9

In addition to the risk pool, the 2007 Legislature increased the federal Bridge Replacement funding on the SR 520 Bridge project by \$109.7 million. This raised the total commitment on the project to \$1,181.6 million. The additional Bridge Replacement funds were aged as follows:

	(dollars in millions)						
	<u>11-13</u>	<u>13-15</u>	<u>15-17</u>	<u>17-19</u>	<u>19-21</u>	<u>21-23</u>	<u>Total</u>
Federal Bridge	0.0	48.2	59.5	2.0	0.0	0.0	109.7

6C-3 2008 Legislative Session

In 2008, the risk pool was exclusively associated with the SR 520 Floating Bridge project (PIN 852000T) through the elimination of the separate Risk Pool project (PIN 099950Z). The funding level and aging provided in the Risk Pool project in 2007 was transferred to the SR 520 Floating Bridge project. In 08LEGFIN, federal funding on the SR 520 Bridge project was shown as follows:

	<i>(dollars in millions)</i>						
	<u>11-13</u>	<u>13-15</u>	<u>15-17</u>	<u>17-19</u>	<u>19-21</u>	<u>21-23</u>	<u>Total</u>
Federal Bridge	15.0	154.5	193.4	131.6	224.9	189.8	909.3
Federal STP	0.0	0.0	62.9	56.5	78.1	74.9	272.4
Total	15.0	154.5	256.3	188.1	303.0	264.7	1,181.6

The following is the assumed breakout of the bridge funds on the project:

	<i>(dollars in millions)</i>						
	<u>11-13</u>	<u>13-15</u>	<u>15-17</u>	<u>17-19</u>	<u>19-21</u>	<u>21-23</u>	<u>Total</u>
Risk Pool	15.0	106.3	133.9	129.6	224.9	189.8	799.6
Direct Project	0.0	48.2	59.5	2.0	0.0	0.0	109.7
Total	15.0	154.5	193.4	131.6	224.9	189.8	909.3

7-1 **Purpose of Transportation System Planning at WSDOT**

The purpose of transportation systems planning at the Washington State Department of Transportation (WSDOT) is to preserve the state's existing assets while providing a safe, efficient, and reliable transportation system. Commuting to work, delivering products, taking a vacation, running errands, and many other aspects of our lives and livelihoods depend on a well-planned and implemented transportation system.

Transportation planning in Washington is a collaborative process among federal, state, regional, and local governments. Collectively, these entities are responsible for identifying transportation system needs, and solutions to address those needs.

Transportation planning is an essential element of the project delivery process to ensure there is general agreement in the performance needs of the transportation network. By conducting a thorough analysis and public outreach during the planning stage, WSDOT can resolve many of the issues that a project might otherwise encounter during scoping, design, or construction.

The Multimodal Planning Division has the lead role and responsibility for updating the WSDOT Highway System Plan (HSP).

The Multimodal Planning Division has the lead role and responsibility for developing and updating the federally compliant phase of the Washington Transportation Plan.

7-2 **Washington State Legislature's Goals for Transportation**

The Washington State Legislature has adopted the following [transportation policy goals](#) defined below:

- **Economic Vitality** – To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.
- **Preservation** – To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services.
- **Safety** – To provide for and improve the safety and security of transportation customers and the transportation system.
- **Mobility** – To improve the predictable movement of goods and people throughout Washington State, including congestion relief and improved freight mobility;
- **Environment** – To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment; and
- **Stewardship** – To continuously improve the quality, effectiveness, and efficiency of the transportation system.

7-3 The Washington State Highway System Plan (HSP)

The state Highway System Plan identifies program and financing needs and recommends specific and financially realistic improvements to preserve the structural integrity of the state highway system, ensure acceptable operating conditions, and provide for enhanced access to scenic, recreational, and cultural resources. The state Highway System Plan contains the following elements:

- (a) A system preservation element;
- (b) A highway maintenance element;
- (c) A capacity and operational improvement element;
- (d) A scenic and recreational highways element; and
- (e) A paths and trails element.¹

Although an update to the HSP is currently in process (2019) by the Multimodal Planning Division, the HSP has not been updated since late 2008, and therefore some needs identified may not fully match what is in the document.

Programmed projects are always the result of an identified need, which may be identified through several agency processes (subject matter experts, Region staff, etc.).

A folio of the [2007 – 2026 Highway System Plan](http://www.wsdot.wa.gov/planning/hsp.htm) is available at the [HSP internet webpage](http://www.wsdot.wa.gov/planning/hsp.htm). www.wsdot.wa.gov/planning/hsp.htm.

(SharePoint permissions required for:) A folio of the [Practical Solutions Lifecycle](http://sharedot/ri/PractSol/Practical%20Solutions%20Library/Business%20Process%20and%20Investment%20Strategies/Business%20Process/1%20WSDOT%20Lifecycle%20FLOW4.pdf), which is an overview of the processes WSDOT uses to carry out the HSP, can be found here: <http://sharedot/ri/PractSol/Practical%20Solutions%20Library/Business%20Process%20and%20Investment%20Strategies/Business%20Process/1%20WSDOT%20Lifecycle%20FLOW4.pdf>

7-4 Relationship of the Highway System Plan to Other Plans

7-4.1 *Regional and Metropolitan Transportation Plans*

Regional and Metropolitan Transportation Plans are prepared by [Regional Transportation Planning Organizations \(RTPOs\)](#) and [Metropolitan Planning Organizations \(MPOs\)](#) respectively. These plans are coordinated with city and county governments to identify current and future land use patterns and growth. Once adopted, these plans become the basis for developing a regional transportation system that is consistent with comprehensive local plans and state transportation policies.

The HSP is in alignment with these plans.

¹ <https://app.leg.wa.gov/rcw/default.aspx?cite=47.06.050>

7-4.2 Modal Plans

The diverse geography and topography in Washington State require several different modes to transport people and goods: car, ferry, bicycle, foot, airplane, and train. The HSP includes elements of all modal plans that rely on or directly connect to the state highway system, such as ferry terminals, ports, railway stations, and bicycle and pedestrian paths and trails.

7-4.3 Corridor Plans and Studies

Corridor [planning studies](#) are conducted on state highway facilities and developed to identify current and future needs, provide a long-range vision for the area studied, and evaluate alternative solutions to incrementally preserve and improve existing assets and operating conditions. These studies are part of WSDOT's long range planning program and are intended to support local jurisdictions in implementing the intent of the Growth Management Act ([RCW 36.70A](#)). These studies can be conducted at the statewide, regional, sub-area, corridor, or route levels.

WSDOT is developing [corridor sketches](#) (please see Subareas 1.4 and 1.5) to aid planning analysis by identifying priority issues. WSDOT has defined 'corridors' for each state highway. The agency then works with partners to establish a vision and gather relevant information resulting in a 'one-stop shop' for WSDOT to store and retrieve background information and improvement ideas.

It is important to recognize that planning studies vary significantly in content and coverage. An effort is underway to bring more consistency to planning studies through a standardization process. This process, when implemented will improve needs identification, solution development, along with traffic, benefit and cost analysis that is consistent with the HSP.

Identified needs and their related solutions must be approved through a multidisciplinary review process to ensure consistency with adopted laws and policies.

It should also be recognized that the local priorities identified in these studies might not be the same as the statewide priorities used to develop biennial budgets or 10-year highway construction programs. Study recommendations for improvements beyond 10 years will be considered concepts that need further analysis before funding consideration will be given.

The HSP database was designed to capture and store all the needs and solutions identified in all studies, including corridor planning studies.

7-4.4 Washington Transportation Plan

The HSP needs to be consistent with all modal plans and the two phases of the WTP as per [RCW 47.06.040](#).

7-4.5 Strategic Highway Safety Plan (*Target Zero*)

Washington's transportation leaders, including engineers, educators, enforcement officials and emergency services providers, developed a strategic plan for Washington State entitled *Target Zero*. Target Zero's goal is to eliminate fatal accidents and serious injuries by the year 2030. This plan is ambitious, but has already achieved significant reductions during the last eight years. *Target Zero* relies on strong collaborative efforts between safety proponents to focus their limited resources on implementing cost effective strategies to reduce the potential for serious and fatal collisions.

Target Zero represents a practical way that WSDOT and other partners can use the information and planning compiled in the HSP to save lives.

7-4.6 Records Retention

For information on how CPDM manages electronic and paper public records for retention, please see the [July 2018 CPDM Newsletter](http://wwwi.wsdot.wa.gov/publications/fulltext/cpdm/Reporting/CPDM%20Newsletter/CPDMNewsletter201807.pdf#page=7) article titled "Records Management."
<http://wwwi.wsdot.wa.gov/publications/fulltext/cpdm/Reporting/CPDM%20Newsletter/CPDMNewsletter201807.pdf#page=7>

8-1 Overview

This chapter outlines the information and methods used to ensure budgetary compliance, through funds management best practices. Consistent use of these best practices will help projects maintain compliance with federal, state, and agency funding requirements.

This chapter is primarily intended for capital improvement and preservation programs. See Chapters [12](#), [13](#), and [14](#) for information applicable to operational programs.

WSDOT program building is an integral part of biennial budget development for the Governor and the State Legislature and is a nearly continuous process. This process is overseen by CPDM and supported by a number of other organizations within the WSDOT planning and programming community, including the various regional and program offices for each of the modes.

Long-term transportation system needs and solutions are identified, prioritized, and programmed within the financial constructs of forecasted revenues over the specified planning period (currently 16 years). The planned investment areas in the long-term plan are used as investment targets to program prioritized projects for a near term detailed delivery plan.

Once the final Transportation Budget has been passed by the state Legislature and signed by the Governor, final allocations for each subprogram within the capital program are made and the final program of projects for the biennium is established in the Capital Improvement and Preservation Program (CIPP). See [Chapter 5](#) Budget Development for more information on the CIPP. WSDOT's objective is to deliver the final program of projects within the established allocations. This requires careful funds management and control of project changes. Specific objectives include the following:

- Controlling project expenditures to stay within the established scope, schedule, and budgets.
- Ensuring all charges to funds are authorized, accurate, and appropriate.
- Optimizing the use and availability of federal funding by adhering to all requirements and taking full advantage of all federal funding opportunities.
- Predicting cash flow supply and demand to time the issuance of debt and retain high bond ratings, which reduces the cost of capital.
- Maintaining sufficient cash reserves to cover emergency needs.

To accomplish this, WSDOT uses two related project controls for managing project expenditures and changes. The first is the Work Order Authorization (WOA) process, and the second is the Change Management process. See [Chapter 9](#) Managing Change for more information on the Change Management process.

The WOA process allows WSDOT to establish specific permission for a project to incur expenditures by funding type, amount, purpose, phase, and timing. This is accomplished through Capital Program Development and Management Office (CPDM) approval of all new spending proposals. It provides control at the project level, as well as a mechanism for rolling expenditures up so that they can be managed at program and subprogram levels. This is important because it allows WSDOT to oversee project-level changes, as well as their individual and cumulative impacts at the program level.

While the WOA process makes it possible administratively for expenditures to be charged against a given fund source, it does not constitute approval of any proposed change to project scope, schedule or budget. A second tool, the Change Management process, must be used in order to gain approval for proposed project changes, including modifications in work order authorization.

Together, the WOA and Change Management processes give WSDOT the ability to set the initial parameters for expenditures and to control changes at the project level once those parameters are in place. This allows the agency to manage the capital program at both the program and project level.

8-2 Managing Funds

8-2.1 *Managing Funds at the Program Level*

Role of the Regional and Modal Program Manager

Regional and modal program managers monitor the funding within their administrative unit to ensure that planned expenditures do not exceed the allocation. Program managers regularly review and update cost and expenditure schedules. They identify cost trends within a program and develop options to accommodate changes. When unexpected needs arise, emergent projects are accommodated in the overall financial plan. Partnerships may be developed with local agencies and other stakeholders to help manage the cost of improvements to the state transportation system.

Role of Capital Program Development and Management Division (CPDM)

CPDM ensures that overall spending within a program for the biennium does not exceed available expenditure authority. This is done by:

- Coordinating obligation authority (OA) and apportionment with other WSDOT Divisions.
- Balancing funds and utilization (e.g. flexing of funds, rescission strategies (see [Appendix 8H](#)), redistributed OA, and federal penalties).
- Comparing Formula Funds versus Allocations (monitoring and adjustment of the plan).
- Monitoring the Monthly Plan by federal code (fiscal constraint).
- Assessing capital projects versus “other.”
- Reviewing proposed state and federal rule making and legislation.
- Creating Finance Codes.

Within CPDM, the Capital Program Delivery Manager looks at Pre-existing Funds (PEF) funding on a statewide basis to balance the planned expenditures with available funds. State and federal funds are limited and need to be managed closely. Funds from local agencies are also appropriated in the budget or approved through the unanticipated receipt process. [Unanticipated receipts](#) are proposed through the CPDM and the Budget Office and approved by the Office of Financial Management (OFM).

The appropriation levels for state and federal funds cannot be adjusted at will. State appropriations may only be increased by the legislature. OFM may reduce spending through the allotment process. Federal funds come from the Federal Highway Administration (FHWA) with spending limitations. Sometimes federal funding limits are raised or lowered by FHWA, apart from the legislature’s action, and revised federal appropriation levels can be processed through OFM or included in the next budget proposal.

The Highway Construction Program is separated into the Improvement and Preservation Programs, each of which is further divided into subprograms and each subprogram into subcategories. CPDM oversight looks at the balances of each subprogram's funds to ensure planned expenditures match the available funding. The subprogram balances are also rolled up at the program level, to check for the combined surpluses and deficits, and to avoid having the biennial expenditures exceed the available program expenditure authority. Legislatively approved project lists are used to compute regional budgets by subprogram and fund type.

The primary controlling mechanism used by CPDM is the Work Order Authorization (WOA) process. The Regions cannot expend funds until authorized by CPDM through the WOA process. This process allows regulation of the rate of expenditures within a biennium.

CPDM also reviews the balance of planned expenditures and available revenue on a monthly basis. This helps indicate where spending could be accelerated or slowed down. Funding balances are summarized at the subprogram level for each by Region. At the statewide level, balances are summarized by program and subprogram for the Improvement and Preservation programs.

Finance codes are used in CPMS to track work order expenditures by fund source, to determine remaining authorization, to establish the monthly aging plan for the remaining authorization, and to redistribute planned expenditures over the remaining months of a project during the monthly aging process.

The CPDM Division creates and maintains finance codes.

8-2.2 *Increasing non-participating funds due to distribution*

There is a statewide and Region distribution. A work order that has a Headquarters' organization code will distribute to all projects statewide that have activity that month. A work order that has a Region organization code will distribute to all projects in that Region that have activity that month. Expenditures charged to distributed work orders will be distributed by the system based on open projects that have current expenditures by phase (preliminary engineering, construction, right of way). These planned current month expenditures will distribute to projects that have an open labor group in the same month.

When there is an increase in the distribution of expenditures an increase to your state fund source on the projects that are anticipated to receive the distribution will need to be increased by phase to accommodate for these additional non-participating expenditures.

See [Section 12-6](#) that provides detailed information on how Direct Project Support distribution works.

8-2.3 Federal-Aid Funding Concepts and Requirements

The [US Department of Transportation](#) provides funding and support for transportation activities, through a number of administrations. There are four main administrations WSDOT receives federal funding from: the [Federal Aviation Administration](#) (FAA), the Federal Railroad Administration (FRA), the [Federal Transit Administration](#) (FTA), and the [Federal Highway Administration](#) (FHWA).

FAA's major roles involve safety and efficiency and include both entitlement and discretionary funding. Federal funding is provided for items such as the Airport Improvement Program, which is a discretionary program that provides grants for construction and safety projects at airports. The WSDOT Aviation Division is the main recipient of FAA funding.

FRA supports passenger and freight rail networks through a variety of competitive grant, dedicated grant, and loan programs to develop safety improvements, relieve congestion, and encourage the expansion and upgrade of passenger and freight rail infrastructure and services. FRA also provides training and technical assistance to grantees and stakeholders, as well as ongoing monitoring of grants throughout the grant lifecycle. The WSDOT Freight and Rail Divisions are the primary recipients of FRA funding for capital programs.

FTA provides funding for the construction, operation and maintenance of public transportation systems. Funding involves many different sources, including federal and non-federal grants, cooperative agreements, loans, and revenue sources. Different types of financing arrangements such as leases and public private partnerships have been used to fund the procurement of materials and activities. The Washington State Ferries Division is the main recipient of FTA funding for capital programs. FHWA coordinates highway transportation programs in cooperation with states and other partners to enhance the country's safety, economic vitality, quality of life, and the environment. Major program areas include the Federal-Aid Highway Program, which provides federal financial assistance to the States to construct and improve the National Highway System, urban and rural roads, and bridges. This program provides funds for general improvements and development of safe highways and roads. The Federal Lands Highway Program provides access to and within national forests, national parks, Indian reservations and other public lands by preparing plans and contracts, supervising construction facilities, and conducting bridge inspections and surveys. The FHWA also manages a comprehensive research, development, and technology program. Federal-Aid Highway Program funds are WSDOT's primary source of federal funding for capital programs. The remainder of this chapter will focus on this funding source.

Federal-Aid Highway Program funds are authorized by Congress to assist the States in providing for construction, reconstruction, and improvement of highways and bridges on eligible Federal-Aid highway routes and for other special purpose programs and projects. The Federal Lands Highway Program provides funding for improving access to and within National Forests, National Parks, Indian Lands and other public lands. The principal statutes establishing the Federal-Aid Highway Program are found in Title 23, United States Code (23 U.S.C.). Regulatory requirements are generally found in Title 23, Highways, of the Code of Federal Regulations ([23 CFR](#)). These regulations dictate that Federal-Aid highway program funds are provided through a reimbursement process. This means WSDOT must first spend state funds on project costs, and then request reimbursement from FHWA for the eligible costs incurred.

8-2.4 **Balancing and Monitoring WSDOT's Federal-Aid Funding**

CPDM processes all funds received by and obligated through the Federal Highway Administration (FHWA). Currently WSDOT receives two main types of funds distribution from FHWA: formula distribution and allocated distribution.

There are two limitations to the federal formula distribution – apportionment and obligation authority. Apportionments set limits on the type of federal funding that is available and obligation authority sets a limit on the annual amount the state may spend from any combination of their available apportionments. These limits are set when Congress develops and enacts a surface transportation authorizing legislation such as the [FAST Act](#).

Federal funds are shared between two divisions of WSDOT: capital programs for improvement and preservation projects, and Local Programs for use by local entities. The distribution is determined based on recommendations received from an advisory group that includes representation from WSDOT leadership, the House of Representatives, the Senate, MPO's, Tribes and various public and private associations.

While some funding is restricted for use strictly by Local Agencies, the remainder is split by a percentage based on the recommendation received. These percentages are set for the life of the current federal act and will remain in place until new directions are received from the Advisory group.

For more information on monitoring federal funds, see [Appendix 8A](#).

Federal-Aid funds are authorized in “core” programs: Congestion Mitigation and Air Quality (CMAQ), Freight, Metropolitan Planning, National Highway Performance Program (NHPP), Surface Transportation Program (STP), Rail Highway and Highway Safety Improvement Program (HSIP), which are then reduced to provide funding for other purposes. For example, the total NHPP authorization is reduced by 2 percent to fund a portion of Statewide Planning and Research.

In addition to the nationwide, standardized reductions, certain penalty reductions may apply. In 1994, 23 USC Section 159 established a law that the Secretary shall withhold five percent of the amount required to be apportioned if a state does not comply with the penalties set for an individual that is convicted of any violation of the Controlled Substances Act or any drug offense. In 1998, 23 USC Section 164 and intoxicated driving laws/regulations were established to build on Section 159. States that do not comply with the requirements of the provisions set are penalized by the reservation of 2.5% of the NHPP and STP apportioned federal-aid funds. States are able to specify if the penalty is to be taken from NHPP, STP or a combination of the two funds. These funds are then distributed to the state as restricted funds that are to be used for driving countermeasures, the enforcement of the laws prohibiting driving while intoxicated by alcohol and related laws, or Highway Safety Improvement Program (HSIP) activities eligible under 23 U.S.C. § 148.

Distributing the penalty funds requires additional coordination between CPDM and Region personnel. Program codes and finance codes must be updated on projects to sufficiently obligate all penalty funds to be received. CPDM will identify projects that meet the criteria and request an update from the Regions, while attempting to limit the number of changes by selecting projects with high dollar values.

Allocated distributions are funds provided for a specific activity or event, outside of the standard distributions WSDOT receives. Emergency Relief Program funds are an example of allocated distributions, as they are provided for a specific type of work and event. These funds typically have a short period of time in which to be obligated and must be used specifically for the purpose listed on the distribution announcement. Allocated distributions normally come with or do not require corresponding obligation authority, in order to use the funds.

Federal ferry vessel funding is different in that it is distributed based on a formula (like apportionments) but is distributed for specific purposes (like allocations).

8-2.5 Processing the Receipt of Federal-Aid Funds

FHWA issues a formal notice to WSDOT when federal funding becomes available. CPDM uses the notice to determine if the funds are in the Federal Management Information System (FMIS). If they are, CPDM calculates the distribution of the funding and coordinates with Local Programs to ensure the accuracy of the distribution.

Funds are taken from the initial distribution and divided between WSDOT programs such as Statewide Planning and Research, Metropolitan Planning, and Recreational Trails. The remaining funds are split between Local Programs and Program Management based on federal requirements and the direction of a Steering Committee. The law that defines the apportionment (FAST Act) also dictates requirements for some of the funds, such as inclusion of a Metropolitan Planning Organization in decision-making.

If the funding received is for a new program, such as the National Highway Freight Program, there may be a need to establish a new finance code. Finance codes are established for reporting and tracking within WSDOT systems. CPDM will evaluate the need and make a determination on whether a new finance code is necessary. Any changes to finance codes are then communicated to all pertinent parties, such as Region staff.

8-2.6 Budgeting Federal Funds at the Agency Level

Federal funds management is an integral part of the annual ten-year plan development. The proposed 10-year plan is analyzed against the forecasted federal funding data provided by the WSDOT Budget Office, to ensure the plan is within estimated funding limits. Any changes needed are communicated and addressed prior to finalization of the ten-year plan.

8-2.7 Obligation of Federal Funds

Funds are obligated on individual capital projects using the WSDOT Federal-Aid Tracking System (FATS). In addition to verifying that each project is contained in the current Statewide Transportation Improvement Plan (STIP), each project must be evaluated to determine the appropriate fund to be used. Some funds are more restrictive (e.g., Highway Safety Improvement Program) and require specific requirements be met while other funds (e.g., Surface Transportation Block Grant Program Flex) can be used on a broader range of projects. Prior to processing any obligation, CPDM staff will evaluate each project to ensure the most restrictive fund type is being used.

Funding for non-capital projects, such as Metropolitan Planning, is managed by offices other than CPDM. CPDM staff notify the appropriate office that funds are available and ask for direction on obligating the funds. Upon receiving direction from the managing office, CPDM staff prepares the obligation request in FATS and CPDM staff notify the managing office once it has been authorized by FHWA.

Obligation of Federal-Aid on Design-Build projects can require special handling. [Federal regulations](#) allow WSDOT to move forward with federally funded Design-Build projects, before NEPA is completed. However, there are Federal-Aid and WSDOT system constraints that must be taken into account when delivering projects by the Design-Build Pre-NEPA (DBpN) method. For more information, see [Appendix 8F](#).

Once the obligation has been authorized by FHWA, the CPDM Project Financial Specialist (PFS) approves the corresponding WOA, which authorizes spending on the project. Expenditures are incurred using State dollars, then billed to FHWA on a weekly basis until the project is complete.

When the project is complete and the Accounting office has received all required paperwork, they will request approval from CPDM to close the project. CPDM staff review the project to ensure that the Accounting records and FATS are in agreement and that there are no actions pending on the project. Once CPDM authorizes the closure, the Accounting office will begin the closure process in FATS, which is then transmitted to FMIS.

8-2.8 Monthly Monitoring and Federal Fiscal Year Close

Each month the data in the FATS is balanced against the data in the FMIS and reports are run from both systems to analyze changes in the data. Some of the items monitored include actual obligations vs. planned obligations, restrictive fund usage, lapsing funds and Emergency Relief projects that are using formula funds.

As each month is closed in CPMS, a list of planned projects is prepared. The data is taken from the last closed month version and includes all planned projects with unobligated federal dollars within a ten-year period. This list also includes any debt service payments such as Grant Anticipation Revenue Vehicles ([GARVEE](#)). The planned project list is compared to the forecast distribution amount to ensure all funds are being utilized. This list is analyzed each month to identify items such as fund changes, milestone changes or cost changes.

In addition to monthly monitoring, CPDM must ensure WSDOT complies with federal fiscal year close requirements. One of the most crucial tasks CPDM must complete each September is to ensure all formula obligation authority is applied to WSDOT projects through the FAPA process, before the close of the federal fiscal year. *Otherwise, any remaining obligation authority will be withdrawn by FHWA, and cannot be used by WSDOT in the future.* This is why Region program managers are asked to ensure all federal funding requests are submitted by the second week of September. This allows CPDM adequate time to balance all federal funding and fully obligate any remaining funds prior to the FHWA system lockout at the end of September.

8-2.9 Federal Share Percentages

With a few exceptions, FHWA does not reimburse WSDOT for the entire cost of construction or improvement of Federal-Aid highways. Instead, Federal funds must be “matched” with funds from other sources at a rate and method agreed upon in the Federal-Aid Project Agreement (FAPA).

Unless otherwise specified in the authorizing legislation, most projects will be reimbursed at 80 percent Federal share. Exceptions are outlined in Sections 8-2.9 to 8.2.11.

8-2.10 Interstate System

The Federal share for projects on the Interstate system is 90 percent (unless the project adds lanes that are not high-occupancy-vehicle or auxiliary lanes, in which case the Federal share will revert to the 80 percent level).

8-2.11 Sliding Scale

States with large amounts of Federal lands have their Federal share of certain programs increased up to 95 percent in relation to the percentage of their total land area that is under Federal control. WSDOT frequently uses the sliding scale, and this is why projects may have federal percentages of 86.50 and 90.66 percent.

8-2.12 100 percent Federal funding

Some types of projects require no matching funds, and FHWA reimburses WSDOT up to 100 percent of the cost of certain projects, such as Federal Lands Highways projects; Emergency Relief projects (for certain emergency repairs made within 180 days of the event causing the need for such repairs); Highways for LIFE projects; Highway Use Tax Evasion projects; and certain safety projects.

8-2.13 Tapered Match

Tapered match is a form of Federal-Aid matching flexibility that allows a project's Federal share to vary, as long as the final contribution of Federal funds does not exceed the project's maximum authorized share. Tapered match allows states to vary the required matching ratio over the life of a project. For example, the Federal share could start out at 100 percent and taper off to zero as the project nears completion.

WSDOT may request use of a tapered match approach for most projects eligible for Federal-Aid assistance under Title 23, as approved by the FHWA Division Administrator. Tapered match cannot be used on advance construction projects, [Surface Transportation Program Block Grant \(STGB\)](#) projects for which the non-Federal match is being provided on a program-wide basis, or projects that are financed with GARVEE bonds, as these activities are considered to be inconsistent with the intent of tapered match.

8-2.14 Sources for Matching Funds

Required matching funds can come from the following sources:

- State and/or local governments' funds.
- Private contributions.
- Credit for donated private property or land lawfully obtained by the State or local government without the use of Federal funds.
- Other Federal agencies, if specifically authorized in law.
- Federal Lands Highway Program funds, for Federal-Aid projects that provide access to or within Federal or Indian lands.
- Toll Credits (Soft Match).

8-2.15 Toll Credits Overview

Descriptions in this section are taken from [FHWA's Innovative Finance Support](#) site.

Section 120(j) of Title 23 permits the Washington State Department of Transportation (WSDOT) [to substitute certain previous toll-financed investments](#) for state matching funds on current Federal-Aid projects. It permits the non-Federal share of a project's cost to be met through a "soft match" of toll credits. The use of toll credits, increases WSDOT's flexibility to finance projects. Toll credits encourage states to increase capital investment in infrastructure and enable them to more effectively utilize existing resources. By using toll credits to substitute for the required nonfederal share on a new Federal-Aid project, the Federal share can effectively be increased to 100 percent.

Toll credits are earned when WSDOT funds a capital transportation investment with toll revenues earned on existing toll facilities (excluding revenues needed for debt service, returns to investors, or the operation and maintenance of toll facilities). The amount of credit earned equals the amount of excess toll revenues spent on Title 23 highway capital improvement projects (except emergency relief program projects) and Title 49, Chapter 53 transit projects. If Federal funds were used for the project, the credit is reduced by the percentage of the total project cost derived from Federal funds.

For additional information on toll credits, see [Appendix 8C](#).

The 2015 Connecting Washington transportation revenue package contained a handful of projects that assumed additional types of funding beyond Connecting Washington, toll funds and/or local contributions. For more information, see [Appendix 8E](#).

8-2.16 Process

To utilize toll credits, WSDOT must pass an annual Maintenance of Effort (MOE) test. The MOE determination covers WSDOT's nonfederal transportation capital expenditures over a four-year period, and must certify that its toll facilities are being properly maintained before excess revenues can be credited. The expenditures in the last year of the four-year period generally must meet or exceed the annual average of the expenditures in the preceding three years of the four-year period.

To apply earned toll credits toward the non-Federal matching share of an eligible project, WSDOT must make a request to FHWA at the time the project is put under the Federal-Aid Project Agreement (FAPA) for obligation of Federal funds.

Below are steps for the approval and use of toll credits:

Phase I: Toll Credit Approval

1. WSDOT spends toll funds on capital roadway improvements serving interstate travel.
2. WSDOT submits certifications and request for use of toll credits to FHWA with maintenance of effort (MOE) documentation.
3. FHWA determines whether WSDOT meets requirements.
4. FHWA approves MOE and toll credits for later use.
5. Credit remains available until used.

Phase II: Toll Credit Use

1. WSDOT identifies candidate projects for application of toll credits.
2. WSDOT determines the amount of credit applied to projects.
3. WSDOT submits billings for progress payments and toll credits applied as non-Federal share.
4. FHWA reimburses Federal share according to FAPA agreement.

8-2.17 State Transportation Improvement Program (STIP)

The [Statewide Transportation Improvement Program \(STIP\)](#) is a four-year, fiscally constrained prioritized program of transportation projects, compiled from local transportation programs, metropolitan and regional transportation improvement programs and is consistent with metropolitan and regional long range plans, and the Washington Transportation Plan (WTP). Projects included in the STIP are identified through state, metropolitan, regional and local planning processes, and are the highest priority for the available funding to preserve and improve the state's transportation network.

Local agencies and WSDOT work through metropolitan planning or regional transportation planning organizations as appropriate, to include projects into their Transportation Improvement Programs (TIP) and the STIP. Included in the STIP are state and local roadway, bridge, safety, bicycle, pedestrian and public transportation (transit) projects, funded with revenues from federal, state and local sources. The projects are organized in alphabetical order by Metropolitan Planning Organizations (MPO) and lead agency and are shown in a standardized format.

Also included is project information such as project phases, including design or preliminary engineering (PE) and which includes environmental; right of way (RW); and construction (CN) on surface transportation projects, as well as on public transportation capital and operating projects.

Washington has a unique approach to splitting federal funds between state and local government. For more information, see [Appendix 8G](#).

A. STIP Administration

The STIP is amended every month except November and December by either amendment or administrative modification. For more information on STIP, amendments and administrative modifications refer to Section VII STIP Management and Appendix C of the current STIP document at www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/STIP.htm.

Region staff work with the MPOs and Regional Transportation Planning Organizations (RTPO) to accurately enter the projects into the web-based STIP database through Secure Access Washington (SAW). Projects are submitted to the MPOs/RTPOs through SAW for inclusion in the regional TIPs.

CPDM staff are responsible for the financial feasibility of WSDOT projects programmed in the current Statewide Transportation Improvement Program (STIP). Local Programs forwards WSDOT projects to CPDM for review to ensure they align with the coding in the Transportation Executive Information System (TEIS) and the Capital Program Management System (CPMS) and that the plan is financially feasible. Financial feasibility is determined by confirming the total planned obligations for each year of the STIP do not exceed the forecast distribution by FHWA for the same year. If any changes are required,

the CPDM staff work with Region program management staff to ensure the changes are integrated in the next amendment cycle. For detailed information and examples, please see [Appendix C](#) of the current STIP document.

In addition to the standard STIP entries, WSDOT also prepares programmatic STIP entries for the majority of the Roadway Preservation (P1) projects. Any federally funded, non-regionally significant project that does not have a RW phase can be included in the programmatic STIP.

The programmatic STIP entries are determined by a series of calculations. The total for all subprogram P1 projects by year is calculated as a percentage of the total planned projects by year. This percentage is then applied to the forecasted federal distribution amount. The calculated amount is distributed to each MPO and RTPO based on the amount of P1 projects in each entity as a percentage of the entire amount.

Programmatic entries are then made for each MPO/RTPO. The amount that is distributed to each MPO/RTPO is then split proportionately between white and black pavement with a separate programmatic entry made for each type of pavement.

These entries are entered into the ten-year plan in TEIS. As the final step, a STIP control version is prepared in TEIS that contains all of the P1 projects included in the programmatic entries. The CPDM Systems group is notified when the version is available and instructed to update the Programmatic STIP website.

In general, federal requirements must be fully met to ensure projects maintain Federal-Aid eligibility. In *rare* situations, it may be determined to be in the public interest to deviate from such requirements. Deviations from federal requirements are allowed in only limited circumstances provided certain conditions are met.

A Public Interest Finding (PIF) is a determination that acknowledges the needs of the public will be better served by *not* following Federal requirements.

For more information on PIFs, see [Appendix 8B](#).

Figure 8-1 STIP Administration, Appendix C

STIP Administration

Appendix C

Amendment¹ See Section VII STIP Management - STIP Amendments & Administrative Modifications of the STIP document for definition.	Administrative Modifications² See Section VII STIP Management - STIP Amendments & Administrative Modifications of the STIP document for definition. The following do not require the STIP to be modified prior to federal authorization of the project. However, the STIP must be updated to align with MPO requirements and reflect the changes as soon as possible.	Updates Not Requiring STIP Change The following do not require the STIP to be changed, as they will be reflected in the annual obligation report or subsequent STIP as applicable.
Adding a New Project	Revisions to lead agency	Moving a project within the four years of the TIP or STIP.
Deleting a Project	Adding a prior phase of a project not previously authorized	Changes in a project's federal fund source(s) (any change from IM to NHS or STP etc.; is an update only as this is a funds management action)
Changes to a project's total programmed amount* greater than 30% (or any amount greater than \$3 million). This includes adding or subtracting funds from currently programmed phases. * Total programmed amount = A project's current 4-year STIP total of programmed funds	Changes to a project's total programmed amount* less than 30% (or any amount less than \$3 million). This includes adding or subtracting funds from currently programmed phases. NOTE: In order to reprogram funds decreased from a project or phase (i.e. adjust to award), the STIP will need to be updated prior to or at the same time funds are being reprogrammed. * Total programmed amount = A project's current 4-year STIP total of programmed funds	Any and/or all federal funds currently programmed in the STIP for a particular project without consideration of the phase split. For example: Programmed amounts are: PE – 1,000,000 CN – 4,000,000 Authorization for PE of 1,750,000 is allowed without a change to the STIP since the funds are programmed. OR Authorization for CN of 5,000,000 if the funds were not utilized for PE.
Major Scope Changes		
Changes to a project that affects Air Quality Conformity	Minor changes or errors in project information such as: environmental type, right of way required, improvement type, project limits, functional classification, typographical errors, transposed numbers, etc.	All adjustments in a project's funding authorization for award of a contract.
Adding a future phase of a project		
Adding Federal dollars to a project currently in the TIP/STIP that does not have federal funds (federalizing a project).		

¹ Amendments will continue monthly January through October² Administrative modifications will be updated monthly and available via the on-line STIP. FHWA/FTA will be provided listing twice a year with the January and October amendment submittals. Additionally, financial feasibility will be shown in the original STIP and updated twice a year in the January and October amendment submittals to FHWA/FTA.

B. Advanced Construction

Advance construction (AC) allows WSDOT to begin a project even in the absence of sufficient Federal-aid obligation authority to cover the Federal share of project costs. Advance construction eliminates the need to set aside full obligational authority before starting projects. This allows WSDOT to undertake a greater number of concurrent projects than would otherwise be possible. In addition, advance construction helps facilitate construction of large projects, while maintaining obligational authority for smaller ones. At some future date when WSDOT does have sufficient obligation authority, it may convert an advance-constructed project to a Federal-Aid project by obligating the permissible share of its Federal-Aid funds. Advance construction allows WSDOT to conserve obligation authority and maintain flexibility in its transportation-funding program.

There is no obligation or guarantee on either side. If Federal funds are not available, WSDOT will not be able to convert the project to a Federal-Aid project. In some cases, WSDOT may choose not to convert the project, if state funds are sufficient.

Partial conversion of advance construction (PCAC) is a somewhat different approach in which WSDOT converts, obligates, and receives reimbursement for only a portion of the Federal share of project costs. This removes any requirement to wait until the full amount of obligational authority is available. WSDOT can therefore convert an advance-constructed project to a Federal-Aid project in stages, based on cash flow requirements and availability of obligational authority, rather than all at once on a single future date. This flexibility enables WSDOT to begin some projects earlier, delivering the benefits to the public sooner. PCAC is used in conjunction with GARVEE bonds when Federal funds are obligated for debt service payments over a period of time.

C. Process

An Advanced Construction (AC) project application may only be approved if it is included in a WSDOT's transportation improvement program ([23 U.S.C. 115\(c\)](#)). The AC approval process includes the following steps:

1. WSDOT identifies project(s) and requests AC designation.
2. FHWA ensures WSDOT meets financial preconditions for AC.
3. FHWA reviews and approves AC designation for project. Federal-Aid Project Agreement (FAPA) is executed.
4. WSDOT begins project following Federal-Aid requirements.
5. WSDOT requests conversion to Federal-Aid project full or partial and project agreement is modified.
6. FHWA obligates Federal-Aid funds per modified FAPA.
7. WSDOT requests reimbursement for costs incurred full or partial as needed.
8. FHWA reimburses Federal-Aid share of WSDOT's project costs.

8-3 Federal-Aid Project Funding Authorization Process

If a project will use federal funding, a Federal-Aid Project Agreement (FAPA) is required in addition to a WOA (see [Figure 8-3](#)). The FAPA obligates funds and is a contractual agreement between WSDOT and FHWA defining the scope of work and other project-related commitments. The FAPA assures FHWA that the project will be constructed by the State in accordance with federal requirements. In addition, the FAPA is the document which constitutes FHWA's obligation to reimburse WSDOT for the federal share of eligible project costs.

Region program management provides the required information, and CPDM prepares and submits the FAPA to FHWA for approval. Usually, Regions submit the WOA for funding authorization at the same time they submit information for the FAPA. The FAPA must be approved **before** work starts on a project phase that will use federal funds. The one exception is that a PE phase may be 100 percent state funded and underway before the FAPA is approved. Upon approval of the FAPA, federal funds may then be used for PE phase expenditures from the date of FAPA approval forward. **Any expenditure incurred prior to FHWA approval is not eligible for reimbursement.**

A FAPA, initiated by completing FHWA Form 120 (see [Figure 8-2](#)), defines the scope and cost of a project that will utilize federal funding. When approved by FHWA, the form will document FHWA's commitment to participate in the project cost. All FAPA's are prepared and submitted by CPDM.

An additional authorization may be required if there is a change in project scope, new work is added to the project, or contract conditions are renegotiated. This is particularly important during construction when new work or payment incentives may be added to the project by a change order.

Figure 8-2 Form 120 (page 1 of 2)

Figure B-3, Form 120 (page 1 of 2)

Washington State Department of Transportation
Modification of Federal Aid Project Agreement

Project Number: 0401(000) Prefiles: (A/C) NH, ER, Mod Number: 5
Title: SF101-NON RIVER - EMERGENCY REPAIRS - DMC071, MS001,SF4066 & 006271.

Purpose: ☒ Authorizing Work ☒ Obligating Funds Mod Justification: ADDING ADDITIONAL FUNDS
Description: MODIFICATION NO. 5: THIS REQUEST (SF4066) PROVIDES FOR ROADSIDE RESTORATION / PLANT ESTABLISHMENT BY STATE FORCES \$25,950.00.

The Project Agreement for the above referenced project entered into between the undersigned Parties and executed by the Division Administrator on Nov 14, 2003 is hereby modified as follows:

Description/Location: NON RIVER - EMERGENCY REPAIRS
SRI 01-18.62 TO 18.72 MILES SOUTH OF JUNCTION SRI 10.

County	Urbanized Area	WIN	W-O #	Sub-Pam	FIN No	Structure	Fin Code
JEFFERSON	NOT IN AN URBANIZED AREA	C10141C	006017	PS	000NM		JL
		C10141F	DMC071		00PC		
		C10141G	MS001		310141C		
			SF4066				

SR: 101 Beginning MP: 174.100 Ending MP: 174.000 Place Code: NOT APPLICABLE
Design Apprvl: 04/15/2004 Envrntl Ctrnc Date: 04/15/2004 Envrntl Ctrnc: CATEGORICAL EXCLUSION (CCE) FMMA DOC
ROW Carve: 00/00/0000 STP Apprvl: 00/00/0000 STP Rel: EXEMPT

FEDERAL FUNDS:	Class of Funds	Approp	Fin Ctl	Pro-Rate	Phase	Current Amount	Previous Amount	Increase/Decrease
EMERGENCY RELIEF - FED AID - OTHER	00/0	JL	100%	CN		\$04,070.00	\$04,070.00	.00
NATIONAL HIGHWAY SYSTEM	1050	JL	90.5%	CN		\$,905,954.00	\$,943,904.00	\$0,950.00
					Total Federal Funds:	\$7,474,104.00	\$7,449,174.00	\$25,930.00
					Total Non-Federal Funds:	\$2,250,213.00	\$2,246,163.00	\$4,050.00
					Total Project Funds:	\$9,724,317.00	\$9,695,337.00	\$30,000.00

Incl Soft Marsh - TOLL: No
Incl Soft Marsh - IDC: No

NON-FEDERAL FUNDS:	Fund Type	Amount	Fin Ctl	Phase	Amount	Previous Amount	Increase/Decrease
STATE FUNDS				CN	2,250,213.00	2,246,163.00	4,050.00
				Total Non-Federal Funds:	\$2,250,213.00	\$2,246,163.00	\$4,050.00

8/3/2004
Page 1 of 2

Federal Aid Tracking System (FATS)
DIST, W/O, CPMS, FMIS, D/B, FATS

Created By: JENKIN

Figure 8-2 Form 120 (page 2 of 2)

Figure B-3, Form 120 (page 2 of 2)

Washington State Department of Transportation Modification of Federal Aid Project Agreement										
Project Number: 0401(003)	Prefixes: (AQ) NH L/L	Mod Number: 5								
Title: SR101 HOH RIVER - EMERGENCY REPAIRS - DMC071, M55031, SF4066 & 506271.										
Purpose Of Request: MODIFICATION NO. 5: THIS REQUEST (SF4066) PROVIDES FOR ROADSIDE RESTORATION / PLANT ESTABLISHMENT BY STATE FORCES \$25,950.00. MODIFICATION NO. 4: CONVERT ADVANCED CONSTRUCTION FUNDS \$5,943,934.00 TO H&B. MODIFICATION NO. 2: INCREASE (W/C) NH H&B CNL \$1,538,556.00 TO ADJUST TO AWARD. MODIFICATION NO. 2: THIS MESSAGE SERVES AS MY AUTHORIZATION TO REMOVE ALL FHWA CONDITIONS (PLACED AT THE TIME OF CONSTRUCTION AUTHORIZATION) RELATED TO AD. BID OPENING, AND AWARD OF THE SUBJECT PROJECT. CONCERNING ESA CONSULTATION (COMPLETION OF THE BOI) WITH THE USF&WS, FHWA HAS FORMALLY NOTIFIED THE USF&WS THAT THIS PROJECT WILL BE DESIGNATED AN EMERGENCY PROJECT UNDER ESA AND CONSULTATION WILL BE COMPLETED DURING OR AFTER CONSTRUCTION PER ESA REGULATORY PROCEDURES. FROM: HUGHES, GARY (FHWA) 6/14/2004 MODIFICATION NO. 1: THIS ADVANCE CONSTRUCTION REQUEST PROVIDES A PERMANENT REPAIR TO PREVENT FUTURE EROSION BY INSTALLING PILING AND CREATING IN RIVER LOG JAMS FOR BANK PROTECTION. RECONSTRUCTION AND RESURFACING THE SHOULDER ON THE RIVER SIDE OF SR101 DAMAGED BY HEAVY REPAIR EQUIPMENT AND TRAFFIC CONTROL DURING THE REPAIR WORK. ORIGINAL CN REQUEST: THIS REQUEST PROVIDES TEMPORARY / INCIDENTAL PERMANENT REPAIR OF BANK EROSION ALONG THE HOH RIVER ADJACENT TO SR101 BY PLACING HEAVY LOOSE RIPRAP TO PREVENT FURTHER EROSION AND TO REPAIR DAMAGED BARBS IN THE RIVER. PRELIMINARY ENGINEERING ACCOMPLISHED ON FEDERAL PROJECT ER-0401(001), XL1557, SCHEDULED TO BE ADVERTISED ON 8/10/2004. NEPA DCE APPROVED BY FHWA ON 4/13/2004. NOAA/EPH APPROVED 5/14/04 AND USF&WS WILL BE DETERMINED PRIOR TO BID OPENING. RIGHT-OF-WAY WILL BE CERTIFIED PRIOR TO BID OPENING. THIS PROJECT WILL BE A REGION AD AND AWARD (RAA). THIS PROJECT WILL BE CONVERTED TO EMERGENCY RELIEF FUNDS WHEN THOSE FUNDS ARE AVAILABLE. AUTHORIZATION TO PROCEED IS NOT A COMMITMENT OR OBLIGATION TO PROVIDE FEDERAL FUNDS FOR THAT PORTION OF THE UNDERTAKING NOT FULLY FUNDED HEREIN.										
Remarks: MODIFICATION NO. 5: THIS REQUEST (SF4066) PROVIDES FOR ROADSIDE RESTORATION / PLANT ESTABLISHMENT BY STATE FORCES \$25,950.00. THIS MESSAGE SERVES AS MY AUTHORIZATION TO REMOVE ALL FHWA CONDITIONS (PLACED AT THE TIME OF CONSTRUCTION AUTHORIZATION) RELATED TO AD. BID OPENING/AWARD OF THE SUBJECT PROJECT. CONCERNING ESA CONSULTATION (COMPLETION OF THE BOI) WITH THE USF&WS, FHWA HAS FORMALLY NOTIFIED THE USF&WS THAT THIS PROJECT WILL BE DESIGNATED AN EMERGENCY PROJECT UNDER ESA AND CONSULTATION WILL BE COMPLETED DURING OR AFTER CONSTRUCTION PER ESA REGULATORY PROCEDURES. HUGHES, GARY (FHWA) 6/14/2004										
All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of <u>Aug 30, 2004</u>										
This form requires that as a condition of payment of the federal funds obligated, it complies with the provisions set forth in 23 CFR 630.307 and 40 CFR 26.115(b) which is incorporated directly herein. The State further requires that its signature on this project agreement constitutes the making of the certifications set forth in 23 CFR 630.307 and 40 CFR 26.115(b).										
WSDOT APPROVAL: By: JOHN R. JEFFREYS Date: 06/30/2004		FUNDS AVAILABLE: Initials: Date:								
FHWA RECOMMENDED SIGNATURE: By: Date:		FHWA AUTHORIZED SIGNATURE: By: TONYA D. PRICE Date: 06/30/2004								
Distribution: <table style="width: 100%; border: none;"> <tr> <td>☐ Region: OLYMPIC</td> <td>☐ Federal Aid Files</td> <td>☐ Contract Ad and Award</td> <td>☐ _____</td> </tr> <tr> <td>☐ Program Manager</td> <td>☐ Project Support Services</td> <td>☐ Records Control</td> <td>☐ _____</td> </tr> </table>			☐ Region: OLYMPIC	☐ Federal Aid Files	☐ Contract Ad and Award	☐ _____	☐ Program Manager	☐ Project Support Services	☐ Records Control	☐ _____
☐ Region: OLYMPIC	☐ Federal Aid Files	☐ Contract Ad and Award	☐ _____							
☐ Program Manager	☐ Project Support Services	☐ Records Control	☐ _____							
9/2/2004 Federal Aid Tracking System (FATS) Created By: JENKIN Page 2 of 2 DEST, WIC, CPMS, FMS, DRI, FATS										

8-3.1 How the Approval Process Works

The CPDM Federal-Aid Section, using information provided by a status report and/or a completed WOA form, prepares FHWA Form 120 (see [Figure 8-2](#) above). It is reviewed and approved in CPDM, then submitted to FHWA for review and approval. FHWA review considers such questions as:

- Are the requested funds available?
- Is the project, as described, eligible for the type of funds requested?
- Has the state met FHWA requirements for developing the project?
- Is the project in the current approved STIP?
- What type of matching funds or finance strategy will be used for the project?

Once the review is completed, FHWA returns the approved form to the CPDM Federal-Aid Section. A WOA can then be processed, reviewed, and if there are no other issues to be resolved, approved by CPDM. It is then forwarded to Headquarters' Accounting & Financial Services (AFS) Project Support and Receivables section for setup in TRAINS. A copy of the approved form can be accessed in the Federal-Aid Tracking System (FATS).

Occasionally, WSDOT receives project funding from another Washington State agency budget (Other State Agency). For more details on this process, see [Appendix 8D](#).

8-3.2 What is Verified on a FAPA?

Many questions need to be answered before setting up a FAPA. The three most important are:

1. Is the project in the approved STIP?
 - If the project is not included in the current STIP, FHWA will not approve the project authorization. CPDM and the Region will need to work together and agree on how to proceed with the project until the STIP issues are resolved.
2. Are all the required supporting documents available?
 - Before the RW or CN phase can be submitted to FHWA, the design and environmental requirements for the project must be approved. This includes approved RW plans, a Relocation Assurance Letter (if applicable), and a Project Funding Estimate (PFE) for RW Authorization. Right of Way Certification Letter is also usually submitted with the Project Funding Estimate (PFE) for construction projects. An exception is railroad crossing construction performed by the railroad within the railroad right of way. If the state or a contractor performs this same work, a Right of Way Certification Letter is required. Submitting an incomplete Form 120 to FHWA increases the review time since FHWA staff will withhold approval until they have received all the required information. CPDM cannot process a WOA with federal costs until FHWA has authorized an increase in federal funds.
3. What is the federal share and non-federal match requirement (Tapered Match, Soft Match/Toll Credits, etc.)?

8-3.3 How to Modify a FAPA

The FAPA must be modified to increase or decrease the amount FHWA has authorized for each phase. The modification should be requested as soon as it is known that project costs will differ from the FHWA authorized amount. TRAINS, CPMS, Financial Information Retrieval System (FIRS), Cognos, [Federal Funding Limit Report](#), and other project data should be reviewed to determine whether the FAPA should be modified. If the amount of difference is relatively small, it may be best to wait until the project is nearly completed to process a modification or to allow the final voucher process to satisfy the modification requirements.

8-3.4 Understanding FAPA Numbers

Each federally funded project phase and some third party agreements that are considered reimbursable are identified by a FAPA number. The type of project funding and appropriation must be determined before this number can be assigned. The CPDM Federal-Aid Section assigns the FAPA number when the project phase is submitted to FHWA for approval and authorization. This number usually remains the same for all phases. Occasionally PE is programmed under one FAPA and CN is programmed under another.

The FAPA number is a series of alpha-numeric characters followed by a number enclosed in parentheses. The state route and state route section are usually identified. Exceptions occur for emergency relief projects, for statewide projects, and for projects on multiple state routes. The number in parentheses is a sequential number. [Table 8-1](#) shows examples of FAPA numbers.

Table 8-1 Federal Aid Project Agreement Number Examples

Interstate: IM-0901 (302)	
IM	Funding Type (Interstate Maintenance)
090	State Route
1	State Route Section (per status of development of the National System of Interstate and Defense Highways)
(302)	Sequential Number assigned in order of setup
National Highway System: NH-0012 (040)	
NH	Funding Type (National Highway System)
0012	State Route
(040)	Sequential Number
Emergency Relief: ER-90-02 (038)	
ER	Funding Type (Emergency Relief)
90	Year of Disaster (1990)
02	Number of Disaster Within FFY (second disaster)
(038)	Sequential Number

8-3.5 Overrun (Unbilled) Federal-Aid Project Agreements

WSDOT does not receive federal funding in advance, even after a FAPA is approved. All Federal-Aid funding is provided through a reimbursement process. WSDOT must first use state funds to pay for project costs. WSDOT must then request reimbursement from FHWA for actual expenditures incurred, within the constraints outlined in the FAPA. WSDOT requests reimbursement from FHWA through a weekly billing process.

WSDOT cannot bill FHWA for expenditures in excess of the FAPA funding limits. This is why expenditures in excess of the FAPA are commonly referred to as “Unbilled.” Expenditures in excess of the FAPA can put an unanticipated burden on WSDOT’s cash flow, because state funding sources will not be reimbursed in a timely manner.

Each week, Region program management staff are expected to run the [Federal Funding Limit Report](#), and resolve actual or potential federal overruns. This report provides detailed information and instructions on how to effectively use the Federal Funding Limit Report. See [Exhibit A](#) Executive Orders.

Preventing or quickly resolving overruns is crucial to maintaining compliance with the terms of WSDOT’s funding agreements with FHWA.

8-4 Managing Funds at the Project Level

Projects are managed to ensure they are delivered on time, on budget, and within the appropriate scope as approved by the legislature in the most current budget. Program managers monitor the cost, schedule and scope of each project to ensure that they follow legislative intent.

8-4.1 Role of the Regional and Modal Program Managers

The regional and modal program managers are updated on the progress of their projects by project managers and project engineers. If project changes are required, the project manager or engineer coordinates with their program manager for direction on how best to proceed.

When cost change thresholds are exceeded, the program manager for the Region or other mode works with the project engineer or project manager to provide information to report and process the change. For changes within the regional approval level, a recommendation is prepared for approval within the administrative unit. On larger changes, a request for approval is prepared (usually through the Change Management process) and submitted for review by upper management or at the organization-wide level. For more information, see [Chapter 9](#) Managing Change.

The program manager coordinates with local, state, and federal offices to obtain funding for individual projects. Work orders are submitted for cost changes, unprogrammed projects, and deleted work only after a change request has been approved at the appropriate level. Work orders are also submitted to initiate new phases of work: Preliminary Engineering (PE), Right of Way (RW), and Construction (CN).

8-4.2 Role of Capital Program Development and Management Office (CPDM)

CPDM manages the WOA and Change Management processes, and routinely looks at costs on a project level each time a WOA is processed for approval. Increases or decreases from the legislatively-approved costs are approved at different levels, based on the magnitude of the change. Low-level changes are within the Regions' jurisdictions and do not require CPDM approval. For more information, see [Chapter 9](#) Managing Change.

Beyond a fixed minimal level, the program delivery manager must review and approve cost changes. At the next highest level, the Director of CPDM reviews and approves changes. Changes beyond the Director of CPDM level require approval by the Chief Engineer, Assistant Secretary for Engineering and Regional Operations. Changes to Nickel- and TPA-funded projects are submitted to OFM for approval per the current budget language.

8-5 Managing Project Funds through the Work Order Authorization Process

8-5.1 Work Order Authorization (WOA) Process

Expenditures can begin on individual projects within the Highway Construction Program once a work order is established and project funds are authorized. The authorization of funding is documented through the WOA process.

A separate work order is required for each project phase: preliminary engineering (PE), right of way (RW), and construction (CN). Work may also be authorized for separate stages within a phase. A standard WOA form (see [Figure 8-3](#)) is used to submit the initial request for authorization, to make modifications, and to close the work order. The WOA process is an important tool for managing project funds. Special care needs to be taken to ensure WOAs are submitted in a timely manner, completed accurately, and provide clear information.

If a project is proposed for federal funding, a Federal-Aid Project Agreement (FAPA) is required in addition to a WOA. The FAPA documents the Federal Highway Administration's (FHWA) commitment to participate in the project costs. Regions provide the information required to submit a FAPA to CPDM.

CPDM reviews, prepares, and submits the final FAPA to FHWA for approval. Usually, Regions submit the WOA for funding authorization at the same time they submit information for the FAPA. *The FAPA must be approved before work starts on a project phase that will use federal funds.* The one exception is that a PE phase may be 100-percent state funded and underway before the FAPA is approved. Upon approval of the FAPA, federal funds may then be used for PE phase expenditures from the date of FAPA approval forward.

Once project funds are authorized and the new work order is established, work begins and charges come in against the work order. A nightly process transmits expenditures from Transportation Reporting and Accounting Information System (TRAINS) by finance code into the Capital Program Management System (CPMS). The finance code is used in CPMS to track work order expenditures by fund source, to determine remaining authorization, to establish the monthly aging plan for the remaining authorization, and to redistribute planned expenditures over the remaining months of the project during the monthly aging process.

Regions track project expenditures, adjust monthly aging plans, and submit work order modifications, as necessary. This monitoring of project expenditures is very important—it is much like balancing a checkbook. By law, the agency cannot spend more than its biennial appropriation for each program. CPDM continually monitors and summarizes project level expenditures to make sure expenditures at the subprogram level remain balanced.

8-5.2 Preparing and Modifying Work Orders

The WOA form is used to submit a request to establish new work orders, modify existing work orders, and close work orders. Submitting an incomplete or inaccurate WOA form can delay a project phase start, funds authorization, or closing of a project phase. Such delays can ultimately affect a Region's ability to deliver its portion of the Highway Construction Program.

8-5.3 Background Information

The WOA process allows expenditures for preliminary engineering, right of way acquisition, and construction of all projects within the Highway Construction Program.

8-5.4 When to Submit a WOA

A WOA should be submitted:

- To set up initial funding for a project phase. (Be sure to submit the WOA form early enough to allow adequate time for processing before the phase start date.)
For PE and RW phases that require CPDM approval, submit the WOA request:
 - At least two weeks in advance for 100-percent state funded projects.
 - At least three weeks in advance for projects with other fund sources.
 - For CN phase, at least four weeks in advance, regardless of fund source.
- To increase or decrease funding on an existing work order (be sure to submit WOA prior to expending unauthorized funds).
- To set up funding for payable or reimbursable agreements on project phases (be sure the agreements have already been approved and set up in TRAINS).
- To transfer funds within a work order from one “group category” or finance code or fund source to another (see the [Chart of Accounts](#) M 13-02 for an explanation of group categories).
- To correct discrepancies between data systems (indicate what data needs correcting in CPMS or in TRAINS).
- Adding or reducing funds from other programs or other sources to highway construction projects (i.e., funds from Program M, etc., local or developer funds).

Figure 8-3 Work Order Authorization Form

Washington State Department of Transportation		Work Order Authorization New Setup	
Work Order : XL5395	Work Order Title : SR 7/SR 507 to S of S 38th St - Paving and ADA Compliance	WOA Date : 2/14/2017	
WIN : C00702D	Work Description : HMA inlay and upgrade curb ramps		
Phase : PE	WOA Type : Perpetual	Org Code : 434301	Org Mgr : KEETH, J.
Reimbursable From: Reimbursable Agmt # % or \$ Limit Date Executed Receivable Desc.			
FA Number	Fed Fin Code	FA %	Prog Code
NEW	FH	86.50	
NEW	GE	80.00	
RW Cert Required ☐ Yes ☒ N/A		NEPA Approval Date: NEPA Type: Proj Dev Appr Date	
PIN	STIP Ref	STIP Appr Date	State Route
300702D			007
300702F	2017-2020	1/10/2017	007
ESA		Determination Date	
USPWS			
NMF5			
FA Notes 300702D: Included in the Programmatic STIP.			
Previous Authorization		0.00	
Group Category		GC02 Payable Agreements	
01. Work Done Contractor		Agmt. #	Agmt. \$
02. Work Done Others		0.00	
03. Engineering		493,000.00	
04. State Force Work			
05. Material Furnished			
06. Contingencies			
07. R/W Acquisition			
08. R/W Other			
99. Vendor Supplied Materials & Services			
NET CHANGE		493,000.00	
NEW TOTAL AUTHORIZATION		493,000.00	
CCFA Only:	AD Date:	PIN	Control Sec.
PS&E Numbers		300702D	272605
Locked PS&E Version:		300702F	272605
PS&E Version Date:		Total 100.00%	
Bids Rejected or Pulled from Ad? ☐			
PIN	Sub Pgm	Fund Acct	Legis Approp
300702D	P1	108	A10
		108	N10
300702F	12	108	N30
		108	A10
Amount Change		493,000.00	
Project Summary Data			
HQ Approved?		Project Summary Comment	
No		Project Summary submitted to HQ for review and approval on 2/8/2017	
No			
Amount Change 493,000.00			
WORK ORDER JUSTIFICATION			
To fund the new setup for the Preliminary Engineering phase of this project.			
Pavement condition rating is projected to drop below the adopted standard. By inlaying the existing roadway with hot mix asphalt, the existing pavement condition rating will be increased to be within adopted standards. In addition, ADA curb ramps do not meet current ADA standards. Upgrading curb ramps to current standards will improve pedestrian access and has the potential to improve safety.			
NOTES TO ACCOUNTING			
*** Accounting - Setup appropriate group categories & groups.			
INSTRUCTIONS FOR CPMS			
Y-line the P-lines.			

8-5.5 When NOT to Submit a WOA

Do not submit a WOA form before all project funding requirements are met (i.e. Change Management, RW Certifications, Project Action Forms). Do not submit a WOA more than 60 days in advance of the planned phase start date. WOAs submitted too far in advance, or missing required information, could delay other more timely requests or could fail to include last-minute estimate revisions.

When closing a work order, a WOA is not required, if final expenditures are within \$10,000 (positive or negative) of the authorized amount and all work order groups are closed. A large number of projects have excess funds or are slightly overrun when the work is complete. In most cases, expenditures within \$10,000 can be administratively reduced or increased without formal authorization. This is a grace amount in order to substantially reduce the number of work orders processed.

8-5.6 Setting Up a New Work Order through the WOA process

Project funding is established with the setup of the initial work order in TRAINS. Each project phase has slightly different elements to consider before submitting the first request through the WOA process.

8-5.7 Preliminary Engineering (PE) Work Orders

This is the first work order for most projects. This work order is used for all activities prior to contract award with the exception of right of way acquisition. In some cases, this may be the only work order set up for a project, such as in the case of planning studies, traffic assessments, or contributions to other agencies. The following items must be addressed before submitting the initial PE phase WOA:

- The project is programmed and in CPMS.
- CPDM Priority Programming has approved the Project Summary or provided interim approval to proceed. For more information, see [Chapter 4](#) Prioritization.
- The project PE phase is in Statewide Transportation Improvement Program (STIP) for federally funded or regionally significant projects.
- The total project cost estimate is within the budget amount in LAPR (Last Approved by CPDM in TEIS).
- All agreements needed to start the project design are approved.
- The Project Design Office is ready to begin design work on the project.

If these issues are all addressed, a PE WOA should process through the system smoothly, and the PE work order will be established in TRAINS. If not, the WOA will most likely be returned to the initiator until all outstanding issues have been resolved.

8-5.8 Right of Way (RW) Work Orders

This is usually the second work order set up on a project if there are RW activities involved. This can also be the only phase on a project as in the case of contributions to other agencies. In addition to compliance with *Right of Way Manual* [M 26-01.19](#), the following must be addressed before submitting the initial RW phase WOA:

- The project is programmed and in CPMS.
- CPDM Priority Programming has approved the Project Summary or provided interim approval to proceed.

- The project RW phase is in the approved STIP (for federally funded or regionally significant projects only).
- The RW plans are approved.
- The design and environmental documentation is approved (i.e., SEPA or NEPA for federally funded projects).
- All known agreements are approved for on-call appraisal and negotiation services and/or reimbursable agreements from local agencies or developers in order to start the RW acquisition process.
- The total project cost estimate are within the budget amount.
- A Project Funding Estimate (PFE) is submitted to Headquarters Real Estate Services.
- The Region Real Estate Services Office is ready to begin appraisal and negotiation services on the project.

If these issues are all addressed, a RW WOA should process through the system smoothly, and the RW work order will be established in TRAINS. If not, the WOA will most likely be returned to the initiator until all outstanding issues have been resolved.

8-5.9 Early Right of Way Acquisitions

The Department has the option of using early RW acquisition. The steps to access it are in the RW Manual [M 26-01.19](#).

Early acquisition means acquisition of real property interests by an acquiring agency prior to completion of the environmental review process for a proposed transportation project, as provided under [23 CFR 710.501](#) and 23 U.S.C. 108.

If a project requires early acquisition of RW, the process outlined in the Right of Way Manual [M 26-01.19](#) must be followed prior to submitting a WOA. Following this process ensures the appropriate federal and state requirements are met. Early acquisition must be approved by WSDOT's Acquisition Program Manager, and FHWA if the project is federally funded.

8-5.10 Construction (CN) Work Orders

This is often the final and most important work order for the project. This may be the only phase of a project, such as small maintenance projects or contributions to other agencies. The following items must be addressed before submitting the initial CN phase WOA:

- The project is programmed and in CPMS.
- CPDM Priority Programming has approved the Project Summary (unless justified otherwise).
- The project CN phase is in the STIP (for federally funded or regionally significant projects only).
- The RW is secured and certified by Headquarters Real Estate Services.
- The design and environmental documentation is approved.
- All agreements (as shown in EBASE) needed to start the construction process are approved. These include, but are not limited to, service agreements, Washington State Patrol agreements, and local agency contribution agreements.
- The total project cost estimate is within the budget amount.
- The project is ready and scheduled for advertisement.

- State force work is approved.
- Please see [Appendix 8F](#) for specific guidance on federally funded projects to be delivered through the Design-Build Pre-NEPA process.

If these issues are all addressed, a CN WOA should process through the system smoothly and the CN work order will be established. If not, the WOA will most likely be returned to the initiator until all outstanding issues have been resolved.

8-5.11 Biennial Work Orders

A biennial work order is funded for only one biennium at a time. Biennial work orders are typically administrative in nature. The work order number may be reused each biennium. However, in CPMS, the WOA must be balanced to expenditure levels at the end of each biennium and reauthorized at the new biennial budget amount.

In TRAINS, biennial work orders are reset to zero at the end of each biennium through an automated process. A WOA must be processed to establish new funding level for the new biennium if the work order number will be reused. CPMS does not reset to zero for biennial work orders; expenditure and authorization history is preserved in CPMS. In cases where a biennial work order spans more than one biennium, TRAINS and CPMS authorization/expenditure amounts will not match.

8-5.12 Modifying an Existing Work Order

All projects are unique and dynamic. As a result, it is often necessary to adjust work orders that have already been set up in TRAINS and CPMS. Changes can occur to the project phase due to a variety of factors. Some of the more common reasons a work order may need to be modified are:

- Insufficient design data at the time of project scoping.
- New or revised policies or regulations by other agencies.
- Changes in state or federal laws.
- Changes in design standards.
- Community or local agency input to the project design.
- Contractor claims resulting from unanticipated obstacles or project delays.
- Changes in project scope.
- Changes in project costs or financial needs.
- Transfers for unanticipated agreements.

All work order modifications must provide clear and concise documentation of the change on the WOA form. Explain whether the original scope, intent, or schedule will change and provide justification for changes in project costs or financial needs. Where change orders are involved, include number, description/justification, subprogram and cost estimates for each change.

N Lines are used to capture unauthorized dollars in CPMS. N-lines are commonly used for initial project set-up when the project has a Z approval code, to capture risk/need prior to receiving documentation or approval for an increase, and Risk Reserve and Savings WINS on revenue package projects. At CCFA any potential surplus in the PE or RW phase is N-lined and released. If the Construction bid is lower than the programmed dollars, the variance is N-lined and released at Adjust to Award (A2A).

N-lines will not be permitted to display the difference between lower bids and a higher CCFA authorization level without prior coordination with Headquarters' CPDM. The A2A WOA and the final EBASE estimate are routed to Headquarters' Accounting Project Support and Receivables Division (PSSR) to be established in TRAINS.

8-5.13 Processing a Work Order Authorization

Clearly outline in the WOA "Notes to Accounting" tab any special processing being requested of Headquarters Accounting and Financial Services Office (AFS).

The TRAINS queue is accessed by AFS Project Support and Receivables (PS&R). PS&R will print WOAs and any attachments needed to make updates in TRAINS. WOAs are then distributed to the responsible PS&R support person for processing into TRAINS.

PS&R staff verify the following requirements for processing the WOA:

- New contracts require the awarded EBASE. This is used to determine how many contractor payment groups are needed, what funding is on each group, control section for group, etc. These amounts are also used to calculate the engineering split percentages used for group 60.
- New contract payment groups on contracts require a change order.
- Payable and reimbursable agreements must be set up in TRAINS before a group can be set up for the agreement.
- Federal projects must be approved by FHWA and set up before a work order can be set up with federal funds.

[Tapered match](#) or specific spending plans need to be clearly outlined so that the proper funds are spent in the proper order. (**Note**—this requires manual monitoring and manual modification to switch funds in a timely manner to avoid O-lines whenever possible.)

The TRAINS system produces a Work Order Accounting Plan during the nightly processing cycle. The PS&R manager will log the WOA as approved by TRAINS (generally the morning after it has been processed in TRAINS—or sometimes during the day depending on the volume, such as during biennium conversion).

The PS&R will attach the hardcopy WOA to the Work Order Accounting Plan during the daily batching process, and file it in the Accounting vault as part of original agency file to be archived according to the agency retention schedule.

Note: If there is a problem with how a WOA was processed in TRAINS, contact the [assigned PS&R team member](#), not the person who logged the WOA. The responsible PS&R staff can also be found by looking at the WCHG screen in TRAINS. The name of the PS&R team member who processed the WOA will be shown next to the work order and change number.

8-5.14 Closing a Work Order

When work on a project phase has been completed, the final step is to close the work order. The responsibility for closing a work order lies with the Region project manager/engineer. The closure process involves all offices that participated in the particular project and phase. It is important to maintain good communication between all parties throughout the closure process. Don't submit a closure WOA if agreements are still active and final payments or billings are not complete, or if the work order groups are still open in TRAINS. If additional expenditures occur before the work order groups are closed,

the work order will overrun. Before closing a work order, the Region should verify the following:

1. For the Preliminary Engineering phase:
 - a. The PE work is complete.
 - b. If there is a CN phase involved, the contract is executed and all advertisement expenditures are complete.
 - c. If there will not be a CN phase and federal funds were expended, contact the CPDM Federal-Aid & Work Order Authorization Manager to determine if federal funds will need to be returned.
 - d. All final payments or reimbursements are complete for the associated design agreements (e.g., consultant or local agency agreements).
 - e. All TRAINS groups are closed.
2. For the Right of Way phase:
 - a. All RW activities are complete.
 - b. The RW is certified through Headquarters.
 - c. All final payments or reimbursements are complete for the associated RW agreements (consultant or local agency agreements).
 - d. All TRAINS groups are closed.
3. For the Construction phase:
 - a. All CN activities are complete.
 - b. All final payments or reimbursements are complete for all associated construction agreements (State Patrol, consultant, utility, or railroad agreements).
 - c. All claims are finalized.
 - d. All TRAINS groups are closed.
 - e. Department of Revenue, Labor and Industries (L&I) and Employment Security clearances and retainers are released.
 - f. Stewardship packet (federally funded projects) is complete and submitted.
 - g. Inspection of Federal-Aid projects in Maintenance Program Report (DOT form 422-100A).

Once these items have been addressed, Headquarters Accounting and CPDM can complete the work order and FAPA closure process. Each Region may have a different procedure for addressing these requirements.

To initiate the work order closure process, Region program management sends a closure request to the Region Financial Services Office. Region program management may want to send a 30-day notification to project managers that the work order is being closed. Sometimes project managers may initiate a request to Region program management to close the work order. For work orders in Headquarters, the Financial Support Office will complete the work closure request form.

For I and P program work orders, if the work order is overrun or underrun by \$10,000 or more, a WOA is required to increase or decrease the authorization on the work order to match actual expenditures. The Region Financial Services Office or Headquarters Financial Support Office will then complete the work order closure form (see [Figure 8-4](#), DOT Form 120-025). The following items are included on the form and are the responsibility of the Region Financial Services Office or the Headquarters Financial Support Office:

- Verification that all necessary accounting adjustments have been made to the work order.
- For contracts—reviewing retainage release, contractor payment balances, and amortization.
- For payable agreements—verification of expenditures to GC02 balance, and identifying whether agreements can be closed or need to remain open.
- Comments—any additional information that may be useful to AFS to close the work order.

After the work order closure request form is received, PSR will take the following actions:

- Close payable agreements requested for closure and send notice to the Internal Audit Office of agreements requiring audit.
- If closure was requested, schedule reimbursable agreements for final billing.
- Close open groups in TRAINS.
- Balance any remaining authorization in TRAINS (unless WOA is required).

It is important to remember that most biennial work orders must be re-authorized or closed each biennium. Region Program Management offices may have to remind project managers to initiate this process; in some cases, CPDM may be the project manager.

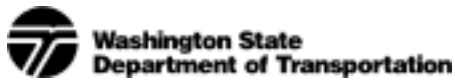
Construction work orders should not be kept open to complete long-term activities such as plant establishment or environmental monitoring. The work order should be closed after the contractor has met the contract one-year warranty period for these activities. Ongoing work items should be set up on a new work order, i.e., a MS or MU work order.

8-5.15 Sources for Work Order Data

When setting up, modifying, or closing a work order, it is often necessary to input data or review data in several computer systems and databases. The primary systems used when working with a work order are listed below:

- WOA (Work Order Authorization System)
- CAPS (Contract Administration and Payment System)
- CPMS (Capital Program Management System)
- EBASE (Estimate and Bid Analysis System)
- FIRS (Financial Information Retrieval System)
- Cognos Reporting Tool
- Project Summary Database
- TRAINS (Transportation Reporting and Accounting Information System)
- TEIS (Transportation Executive Information System)
- STIP (Statewide Transportation Improvement Program)
- [Programmatic Projects in STIP Web Search](#)

Figure 8-4 Work Order Closure Request Form 120-025



Work Order Closure Request

Work Order No.	Title	
Federal Aid No.(s)	Responsible Org.	Org. Manager

Work Order Closure Check List (To be completed by Requestor)

- ☐ Yes ☐ No Have all the necessary adjustments (Journal Vouchers) been made to the appropriate Group and Group Category?

Work By Contractor (Grp Cat 01)

- ☐ Yes ☐ No Has retainage been released?
- ☐ Yes ☐ No Are the expenditures for Prime Contractor in balance with the dollar amount as shown on the Headquarters Final Estimate Payment?
- ☐ Yes ☐ No Has amortization been balanced (Contracts with Subprogram M5)?

Payable Agreements (Grp Cat 02)

Payable Agreement	Task No.	Authorized \$	Expenditures	Close	
				Yes	No
Totals					

Reimbursable Agreements

Reimbursable Agreement	Close			Reimbursable Agreement	Close	
	Yes	No			Yes	No
1				4		
2				5		
3				6		

Requested By	Date	☐ Balance and Close Work Order
Closed By	5/21/2014	

Comments

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DOT Form 120-025
01/2007

Verification Check List (To be completed by PSS)

- ☐ **(Grp Cat 01)** - Verify if work order has federal funds

Agreements Closed?

Yes No

- ☐ **Send Notice to Audit Office**

Agreements Scheduled for Final Billing

8-5.16 Reviewing and Authorizing Work Orders

The WOA form should be reviewed for accuracy and completeness before it is submitted for processing. An incomplete WOA form will only delay the process and/or result in an improper work order setup in TRAINS. A small mistake in work order setup can cause larger problems later on, requiring extensive and time-consuming correction efforts by both Region and Headquarters staff.

8-5.17 Elements of Headquarters Reviews

Each WOA that requires CPDM processing, (through CPDM, Headquarters Traffic, Headquarters Budget Services Office, or Headquarters Accounting and Financial Services) must go through a formal review process. There is a slightly different review process for different WOA types. When the WOA form is submitted to Headquarters, the WOA system determines what approval process should be followed by evaluating information on the WOA form. The evaluation elements are:

- Work order phase (PE, RW, or CN)
- Fund source (state, federal, Transportation Improvement Board, or local)
- Type of work order (new setup, increase, decrease, or transfer)
- Subprograms (I1, I2, I3, I4, P1, P2, P3, Q2, Q3, etc.)

After this initial evaluation, the WOA is routed to the appropriate CPDM staff for review. During this review, these elements are considered:

- For federally funded projects, whether the project phase is in the STIP.
- Whether the Project Summary is approved.
- Whether the documentation is complete.
- Whether CPMS thresholds have been broken. Adjustments that break certain thresholds require different approval levels and may require the submittal of a new change management request.
- Whether documentation adequately justifies any change in project cost or scope. This information is needed to document causes of changes to the approved budget estimate.
- For RW WOAs, whether parcels are included in approved RW plans. Headquarters Real Estate Services Office requires that parcels are in an approved plan prior to acquisition.
- Whether project scope is consistent with the approved Project Summary.
- Whether construction engineering (CE) on construction work orders is consistent with agency guidelines for projects of this type and size. If the CE is not consistent with agency guidelines, justification must be provided in the WOA.
- Whether CPMS has been updated. CPMS data must accurately represent the individual project costs and aggregated project costs must accurately portray the biennial expenditure plan for the program.
- Whether the WOA is complete and accurate, to help reduce the number of errors occurring in TRAINS and CPMS data.
- Whether all FHWA requirements have been met (if applicable).

8-5.18 Steps in the Review Process

The review process is different for each type of work order that is requested and for each Region or office that submits a WOA form. The workflows in the WOA system have been designed to support the policies applicable to each type of work order requested through the WOA process.

8-5.19 How to Check the Status of a Work Order Authorization

The WOA system keeps track of the location of each WOA and links to the current document. Anyone who can access the WOA system can search the database to obtain the latest information about a WOA.

8-5.20 Managing Work Order Expenditures

WSDOT uses work orders as the central collection point (or cost center) for recording all expenditures associated with a particular project or activity.

Work orders are identified by a six-digit alphanumeric designation (i.e., 0L1240). Groups are established within work orders to provide a further breakdown of projects or type of work. Every work order must have at least one group.

Work orders are valuable tools used to monitor and manage costs associated with projects in the Highway Construction Program and to track expenditures for a given appropriation and subprogram allocation.

Appropriations made by the Washington State Legislature are separated into program allocations and, depending upon the program, these may be broken down to subprogram allocations. A unique program item number (PIN) identifies specific work (a project) within each subprogram allocation. The project to be accomplished by each program item is defined by one or more work item number (WIN), each of which may have a PE, RW and/or CN phase. A separate work order is defined for each work item phase. Each work item phase has one and only one work order defined for it. However, funding for a given work order can come from more than one subprogram allocation.

8-5.21 Work Order Groups

Work order groups and group categories are established in TRAINS to provide further detail of work order expenditures. The Group Category segregates expenditures by type of work such as state force work, work done by others under a payable agreement, or work done by a contractor. Multiple groups may be set up for each Group Category.

A change to the authorized amounts of federal dollars, the addition of a new fund source, or a change to the state force amount on a CN phase work order requires CPDM approval. Group Categories may not be reduced below actual expenditures to date, because this would result in an overrun Group Category.

The WOA system recognizes regional authority and by selectively routing the WOA, eliminates unnecessary processing of work orders by CPDM. On active work orders, expenditures should be controlled in the Region. If a project is not going to collect direct charges for a while, or if the project is pending completion, then the Region or Headquarters can close one or more of the TRAINS groups.

Expenditures cannot be charged against closed groups.

8-5.22 Responsibilities of the Project Manager

The assigned project manager has primary responsibility for monitoring the specific activities of a work order and to ensure expenditures stay within authorized funding. The project manager should establish a work plan, including a monthly expenditure plan. The expenditure plan should show how much has already been spent each month and the planned expenditures by month for the remaining life of the work order.

A clear understanding of the expenditure plan for a project is critical. Adjustments to funding levels should be made as soon as the need becomes apparent. It is especially important to anticipate the need for additional funding well in advance of overrunning the authorization. The Region program managers monitor their subprogram allocations and expenditures. They perform a general review of work orders in the Highway Construction Program. However, it is the project manager/engineer who has primary responsibility for monitoring and managing the individual project expenditures.

8-6 Grant Tracking and Coordination

Specialty grants that WSDOT applies for such as TIGER, FASTLANE, AID, and FLAP grants are monitored through the Grant Tracking Module. The Grant Tracking Module is accessed through the Transportation Executive Information System (TEIS) and enables tracking of all grant applications, and the associated non-federal matching funds or toll credits. The module is administered by the Grant Tracking Unit in the CPDM Division.

The Grant Tracking Module allows CPDM to check if a particular grant is an agency priority, and also to provide the following services:

- Validation of grant assumptions, such as match source and availability of funds, prior to submission of grant applications. This helps to identify the funding needs and ensure the matching funds are available for each grant when approved by the federal agency/grantee.
- Coordinate grant assumptions among all affected groups. Communication between CPDM and the affected offices allows for accurate planning for current and future grants.
- Accurately monitoring grant submittals, allowing for quick and effective coordination of funding on approved awards.

8-6.1 How the Grant Tracking Process Works

Prior to submitting a grant to an external agency, the applicant will submit their grant information directly in the Grant Tracking Module of TEIS. CPDM will then review and provide validation of the grant assumptions and ensure matching funds or toll credits are available.

Upon concurrence, CPDM will notify applicant to proceed with the grant application via the current WSDOT grant application process.

The Applicant will maintain grant request entry noting when the grant has been submitted to the external agency, and when the agency returns with a decision.

CPDM monitors the Grant Tracking Module monthly, to verify the status is accurate for each grant at its stage of the process. The Applicants are encouraged to use this statewide module to maintain the data of any grants in their office.

8-7 Federal Financial Plans

8-7.1 Purpose of Annual Federal Financial Plans

Major projects are large, complex projects designed to address major highway needs and requiring the investment of significant financial resources. The preparation of the annual financial plan ensures that the necessary financial resources are identified, available, and managed throughout the life of the project.

An annual financial plan is a comprehensive document that reflects the project's scope, schedule, cost estimate and funding structure to provide reasonable assurance that there will be sufficient funding available to implement and complete the entire project, or a fundable phase of the project, as planned.

Annual financial plans for major projects and other projects as defined in [23 U.S.C. 106\(h\) and 106\(i\)](#) consist of an Initial Financial Plan and Annual Updates. Initial Financial Plans provide the major project's baseline information. Through the submission of Annual Updates, the Initial Financial Plan is updated with current project status to provide a comparison of baseline information to actual performance and to provide updated forecasts of future project performance. Annual Updates track the progress of the project over time by highlighting significant deviations from the Initial Financial Plan and subsequent Annual Updates and explaining the mitigating actions or response strategies taken to address the deviations. Each Annual Update, therefore, provides a comprehensive view of the project's background and status without requiring the reader to refer to previous submissions.

8-7.2 Projects That Require a Federal Financial Plan

A. Major Projects

As described in [23 U.S.C. 106\(h\)](#), the recipient of Federal financial assistance for a title 23 project with a minimum estimated total cost of \$500 million or a project that has been otherwise identified by FHWA as a major project, must submit an Initial Financial Plan and Annual Updates. Major project financial plans and updates are submitted to the FHWA division office for approval.

For the purposes of determining whether a project's estimated cost exceeds \$500 million, FHWA will use the total cost estimate within the project scope set forth in NEPA decision document approving the project. The total cost of the project is the value of all resources necessary to perform the planning, engineering, and construction activities regardless of funding source or administering agency.

B. Projects Between \$100 Million and \$500 Million

Projects with an estimated total cost exceeding \$100 million but not designated by FHWA as a major project pursuant to section 106(h)(1) also must have an Initial Financial Plan and Annual Updates. WSDOT must make these plans available to the FHWA for review upon request.

With prior approval from the FHWA division office, WSDOT may submit a single financial plan that covers multiple projects exceeding \$100 million, which are not designated as major projects.

C. *Transportation Infrastructure Finance and Innovation Act (TIFIA) Projects*

The TIFIA program provides Federal credit assistance (direct loans, loan guarantees, and lines of credit) to support critical improvements to the Nation's surface transportation system. For the purpose of implementing [23 U.S.C. 106\(h\)](#) and [\(i\)](#), TIFIA loan proceeds are considered Federal financial assistance, and a TIFIA borrower must comply with all FHWA requirements even if the project receives no Federal-Aid grant assistance ([23 U.S.C. 602\(c\)](#); [49 CFR 80.9](#)).

All TIFIA loan agreements require the borrower, regardless of total project cost, to submit annual financial plans in accordance with this guidance. One financial plan may be submitted to meet the TIFIA and major project requirements. The TIFIA agreements further require the submission of Annual Updates throughout the life of the loan, which can extend beyond substantial completion of construction for the project.

8-7.3 *Additional Federal Financial Plan Considerations*

A. *Phasing*

Project Sponsors often build major projects over a long period of time, funding and building phases of the overall project incrementally. In the event the Project Sponsor determines that there are insufficient financial resources immediately available to complete the entire project as defined in the NEPA decision document, financial plans may identify fundable incremental improvements or phases ("phasing plan") that will address the purpose and need of the overall project in the short term.

For projects with financial plans that include phasing plans, the total cost of the overall project, not the cost of any fundable incremental improvement or phase, is used to determine whether the project meets the \$500 million threshold.

In general, the inclusion of a phasing plan does not alter the contents of the financial plan, but does have an impact on how the overall project can meet fiscal constraint requirements. If a phasing plan is included in an approved major project financial plan, and fiscal constraint requirements are met for the funded phase, then pursuant to [23 U.S.C. 106\(h\)\(3\)\(C\)](#), the overall project is deemed to meet fiscal constraint requirements under [23 U.S.C. 134 and 135](#).

8-7.4 *Federal Financial Plan Submittal Process*

A. *The Initial Financial Plan*

For all major projects, the Initial Financial Plan should be submitted and approved prior to the first authorization of Federal funds for construction. FHWA will not approve a major project's financial plan until the selected alternative for the project has been identified in the NEPA decision document for the project. For Design-Bid-Build projects, the Initial Financial Plan should be approved prior to FHWA project authorization for construction. For projects other than design/bid/build, the Project Sponsor should consult with the FHWA division office concerning the timing of the submittal of the Initial Financial Plan prior to issuing initial procurement requests for the project.

In the case of major projects funded jointly by FHWA and other Federal agencies, WSDOT may submit to FHWA, a single financial plan meeting the requirements of all the Federal agencies.

B. Annual Updates

Annual Financial Plan submission dates and reporting periods should be proposed in the Initial Financial Plan. The Annual Update should be submitted to FHWA no later than 90 days after the end of each reporting period.

C. Financial Plans Including TIFIA Assistance

For TIFIA projects, additional information from WSDOT (TIFIA borrower) and other funding partners may be needed. In some cases, this may entail the submission of supplemental financial plans from the appropriate parties. In such instances, the financial plan and all supplemental financial plans should cover the same reporting period, be updated annually, and be submitted together. The TIFIA credit agreement will establish the financial plan requirements, including the submittal dates and reporting periods.

D. WSDOT Certification

The content of the Initial Financial Plan and each Annual Update should be certified as “accurate and reasonable to the best of my knowledge and belief” by WSDOT’s Chief Executive Officer. The signature authority for major project financial plans may be specifically delegated in writing by the Chief Executive Officer. The certification should be submitted to the FHWA division office with the financial plan.

E. FHWA Review and Approval

The Initial Financial Plan and each Annual Update will be submitted to the FHWA division office by WSDOT for review and approval. Acceptance and approval will be based upon a compliance review. This review will evaluate, among other items, the reasonableness of the cost estimates, the viability of the identified funding sources (including whether they are contained in the fiscally constrained State Transportation Improvement Program (STIP), Transportation Improvement Program (TIP), and Long Range Plan, and the likelihood that the funding commitments will prove sufficient to complete the project as planned. Major project financial plans that include a phasing plan are subject to the modified fiscal constraint provisions discussed in this guidance.

The FHWA will determine a financial plan’s acceptability within 30 to 60 days after the document is received.

For major projects with phasing plans, Annual Updates should be submitted each year until the entire project is complete. If construction is complete on the funded phase when an Annual Update is due and there are no changes to the information in the most recently approved financial plan, WSDOT may notify FHWA in writing that the most recently approved financial plan is to be used as the current Annual Update.

8-8 Emergency Relief (ER) funds

Congress authorized in Title 23, United States Code, Section 125, a special program from the Highway Trust Fund for the repair or reconstruction of Federal-Aid highways and roads on Federal lands which have suffered serious damage as a result of (1) natural disasters or (2) catastrophic failures from an external cause.

This program, commonly referred to as the emergency relief or ER program, supplements the commitment of resources by States, their political subdivisions, or other Federal agencies to help pay for unusually heavy expenses resulting from extraordinary conditions.

The applicability of the ER program to a natural disaster is based on the extent and intensity of the disaster. Damage to highways must be severe, occur over a wide area, and result in unusually high expenses to the highway agency. Applicability of ER to a catastrophic failure due to an external cause is based on the criteria that the failure was not the result of an inherent flaw in the facility but was sudden, caused a disastrous impact on transportation services, and resulted in unusually high expenses to the highway agency.

One hundred million dollars are authorized annually for the ER Program under 23 U.S.C. 125. Congress has periodically provided additional funds for the ER program through supplemental appropriations.

Emergency repair work to restore essential travel, minimize the extent of damage, or protect the remaining facilities, accomplished in the first 180 days after the disaster occurs, may be reimbursed at 100 percent Federal share. The 180 day period for 100 percent eligibility of emergency repairs may be extended if a State cannot access a site to evaluate damages and the cost of repair.

8-8.1 Funding an Emergency Repair Project

The WSDOT [Emergency Operations Plan](#) Appendix E and [Emergency Relief Procedures Manual](#) M 3014, outline the steps WSDOT staff should take when a disaster event occurs. Refer to this guidance to prepare for an emergency event.

When an emergency occurs, Regions need to determine if the emergency requires an “Declaration of Emergency,” which is required whenever it is necessary to utilize emergency contracting procedures for work related to transportation facilities, and to increase the limit for State Force repair work from \$60,000 to \$100,000.

If the event is large enough (defined as “Widespread Area of Catastrophic Failure” with a minimum repair cost of \$700,000), federal “Emergency Relief” funding will be pursued. The Region must complete a Detailed Damage Inspection Report (DDIR) and submit it to FHWA and CPDM.

8-8.2 Emergency Repair Funding Considerations

Normal maintenance work is not eligible for federal reimbursement because it is routinely scheduled or budgeted to historical levels. This work is funded out of the state-funded M2 maintenance budget. Normal work orders, charge numbers, and coding are used to track accomplishments and costs.

Emergency maintenance work may be eligible for federal reimbursement when properly approved by FHWA, if the work exceeds the threshold amount of \$700,000 minimum for an event and \$5,000 per site. This work is initially funded out of the maintenance budget and later reimbursed with federal funds. Disaster Maintenance (DM) work orders are established to ensure the agency properly accounts for and documents expenditures.

There are three types of repair work to consider when requesting federal ER funding:

Temporary/Emergency Repair – Work necessary to restore essential traffic, minimize the extent of damage, or protect the remaining facilities. This work typically requires minimal preliminary engineering, geotechnical studies, structural analysis, or environmental review. These repairs are usually within the capabilities of the State and local maintenance forces and most will be performed on a force account or an emergency contract basis.

Temporary/Emergency Repair Work is categorically excluded from NEPA requirements under [23 CFR 771.117\(c\)\(9\)](#). This work must meet the emergency provisions of all other environmental regulations, such as ESA, Section 106, 4f. Most of these emergency provisions require that the regulatory agency be notified before beginning work.

Incidental Repair Work – Work completed incidental to the Temporary/Emergency Repair Work. This work was not necessary to restore essential traffic, minimize the extent of damage, or protect the remaining facilities; this work may be eligible for federal participation at the normal pro rata share for the facility type. Work in this box typically requires minimal preliminary engineering, geotechnical studies, structural analysis, or environmental review. These repairs are usually within the capabilities of the State and local maintenance forces and most will be performed on a force account or an emergency contract basis.

Incidental Repair Work is generally categorically excluded from NEPA requirements under [23 CFR 771.117\(c\)\(9\)](#). This work must meet the emergency provisions of all other environmental regulations, such as ESA, Section 106, 4f. Most of these emergency provisions require that the regulatory agency be notified prior to beginning work.

Permanent Restoration Work – Work performed as part of the Permanent Restoration. Permanent restoration shall be administered using normal Federal-Aid procedures that include written authorization, NEPA clearance, design approval, permits, right of way certification, PS&E, advertisement period, etc. The federal participation on eligible work will be at the normal pro rata share for the facility type (Interstate 90.6 percent Non-Interstate 86.5 percent) regardless of when the work is done.

Betterments typically fall into this category of work; proper justification documentation for the betterments must be approved by FHWA. Funding for this work may not be needed immediately (especially construction funding).

8-8.3 **Outline of the ER Funding Process**

The goal is to ensure Emergency Repair (ER) costs are accurately accounted for between the Maintenance (M) and Preservation (P) funding programs, while ensuring that staff have charge codes in a timely manner. This guidance is in no way intended to stop required emergency work, or supersede applicable federal or state regulations. The following is a brief summary of the standard procedures followed to coordinate with the appropriate parties and fund an ER site.

1. Disaster Maintenance (DM) work order request form is submitted to [AFS \(HQAacctAgmts@WSDOT.WA.GOV\)](#) and CPDM ([CPDMProjectFinancialSpecialistPFS@WSDOT.WA.GOV](#)) as instructed on the DM form.

2. HQ Accounting sets up the DM work order in TRAINS, as specified in the DM request form.
 - a. DM work orders are funded by the M program and intended for costs incurred to stabilize, close, or minimize damage. All costs charged to a DM work order will remain in M, regardless if they are reimbursed by federal funds or not.
 - i. If immediate action is required from specialty offices (Bridge, PE, Geotech, etc.) a DM can be used, but these charges will remain in the DM as part of the immediate emergency response.
 - ii. DM work orders should not be used to collect charges for project scoping or permanent repairs, unless M has agreed to fund this work.
 - iii. In cases of minor errors or extenuating circumstances, a transfer of costs can be requested, but all transfers **between M and P must be pre-approved by both HQ Maintenance and CPDM.**
3. Region and HQ Maintenance, CPDM, and the Emergency Operations Manager participate in an ER funding phone call to:
 - a. Begin to assess federal eligibility.
 - b. Estimate funding needs (Maintenance vs. Preservation funds).
 - c. Come to an agreement on method and source of funding.
 - i. If CPDM approves Preservation funds, all costs must be charged to a project specific PIN and work order (see step 4).
 - ii. If federal ER funding is requested, the distribution of federal funds between the M and P programs will be documented on the DDIR.
4. CPDM Federal-Aid staff will coordinate with the Region to initiate a Project Action Form (PAF) and setup a project WIN, PIN, and work order within 2 working days of the approval of preservation funds.
 - a. In urgent situations where charge codes are required immediately or evaluation is needed from technical staff to determine the appropriate next step, CPDM can provide a group on the CPDM ER work order during the ER funding phone call.
 - b. The CPDM ER work order is a temporary collection point until a project- specific work order is established. Once the project work order is established, CPDM will transfer all charges from the CPDM ER work order to the project work order.
5. CPDM Federal-Aid staff will coordinate with the FHWA, WSDOT Program Management, and Maintenance to obtain, monitor, and report on federal ER funds. CPDM Federal-Aid staff will:
 - a. Report to FHWA on WSDOT's total ER funding needs.
 - b. Monitor WSDOT's ER appropriation levels against actual expenditures.
 - c. Ensure ER Federal-Aid agreements are converted from Fed Formula funding to ER Fed funding and close in a timely manner.

8-8.4 General guidance for how Emergency Repair (ER) project costs are split between Maintenance and Preservation

The following outlines how ER costs are split between the Maintenance (M) and Preservation (P) funding programs. These splits can differ depending upon the agreement reached during the ER funding phone call between HQ Maintenance, Office of Emergency Management (OEM), the CPDM, and the Region. Agreements that deviate from this guidance should be outlined in writing (email, DDIR, WOAs, etc.) to ensure all parties are clear on their budget limits, rolls, and responsibilities in upholding the agreement.

For project charges directly related to federally eligible emergency relief events, third party damage, and emergency repairs NOT eligible for federal reimbursement.

- **Temporary/Emergency Repair** work is funded by the M program (usually on a DM work order, or K work order for third party damage) unless:
 - CPDM approves the use of Preservation funds and a CPDM work order is provided to collect the appropriate charges.
 - Charges collected on a DM or K work order will not be transferred to work orders funded by the Preservation program without pre-approval from HQ Maintenance and CPDM.
- **Incidental Repair** work is funded by the M program if the contract is administered in the Maintenance Program, unless:
 - Incidental Repairs are administered by the Construction Office and a work order is authorized by CPDM in the P program before the contract is awarded and/or any work has started.
- **Permanent Restoration** work is funded by the P program, if pre-authorized by CPDM and a work order funded by the P program is approved before work is started.
- Specialty or Unusual work is funded by the M program unless:
 - CPDM approves the use of Preservation funds and a CPDM work order is provided to collect the appropriate charges.
 - Charges collected on a DM or K work order will not be transferred to work orders funded by the Preservation program (unless specifically approved by HQ Maintenance & CPDM).
 - Any and all funding agreements should be documented on required forms, correspondence and emails.

8-9 Appendices

Appendix 8A	Funds Monitoring Reports
Appendix 8B	Public Interest Finding (PIF)
Appendix 8C	Toll Credit Fact Sheet
Appendix 8D	How to Setup another State Agency's Funding On a WSDOT Capital Highway Project
Appendix 8E	Guidance on Connecting Washington Project Savings
Appendix 8F	Design-Build pre-NEPA Projects Funded with Federal-Aid
Appendix 8G	Distributing Funds by Apportionment or Obligation Limitation
Appendix 8H	Implementing a Rescission

Appendix 8A Funds Monitoring Reports

8A-1 Federal Funding Limit Report

8A-1.1 Description

The Federal Funding Limit Report displays open Federal Aid Project Agreements (FAPA) when 85 percent or more of the authorized federal funds have been expended. This report is populated with data from the Transportation Reporting and Accounting Information System (TRAINS), and is updated nightly.

8A-1.2 Goal

The Federal Funding Limit Report provides a tool for regions to identify potential or existing federal funding issues, before the department exceeds the level of federal funding authorized in the FAPA.

WSDOT does **not** receive federal funding in advance, even after a FAPA is approved. WSDOT must first use state funds to pay for project costs. WSDOT can request reimbursement from the Federal Highway Administration (FHWA) for actual expenditures incurred, within the constraints outlined in the FAPA. WSDOT requests reimbursement from FHWA through a weekly billing process.

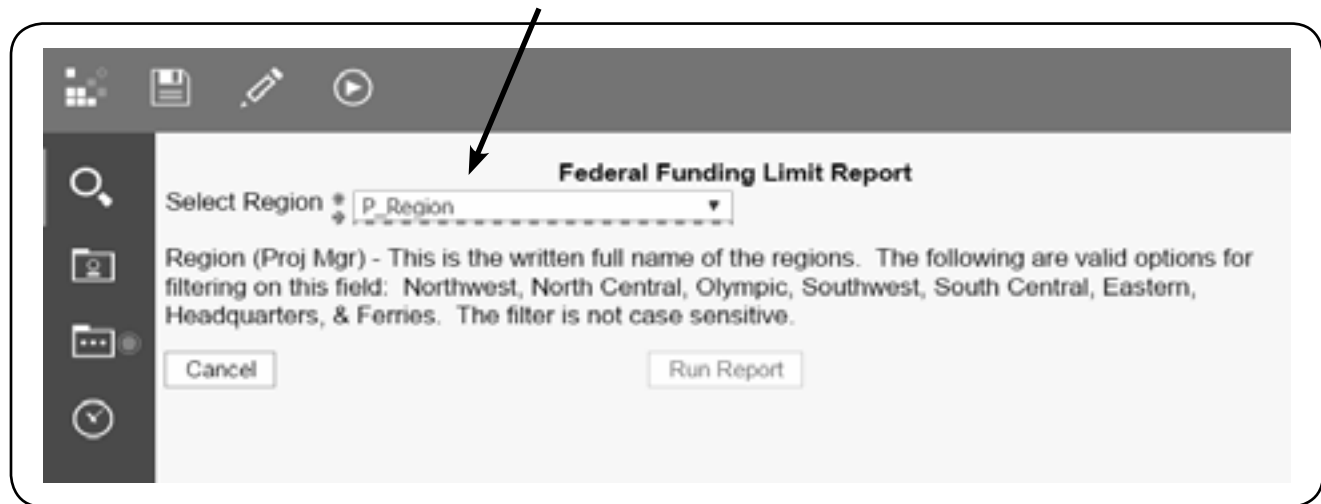
WSDOT cannot bill FHWA for expenditures in excess of the FAPA funding limits. This is why expenditures in excess of the FAPA are commonly referred to as “Unbilled”. Expenditures in excess of the FAPA can put an unanticipated burden on WSDOT’s cash flow, because state funding sources will not be reimbursed in a timely manner.

8A-1.3 Instructions

The Report is located in COGNOS: [Team Content/Reports/Finance/Program Management/HQ-CPDM/Federal Aid/Federal Funding Limit Report](#) (hold down the “Ctrl” key and click on the link).

Figure 8A-1

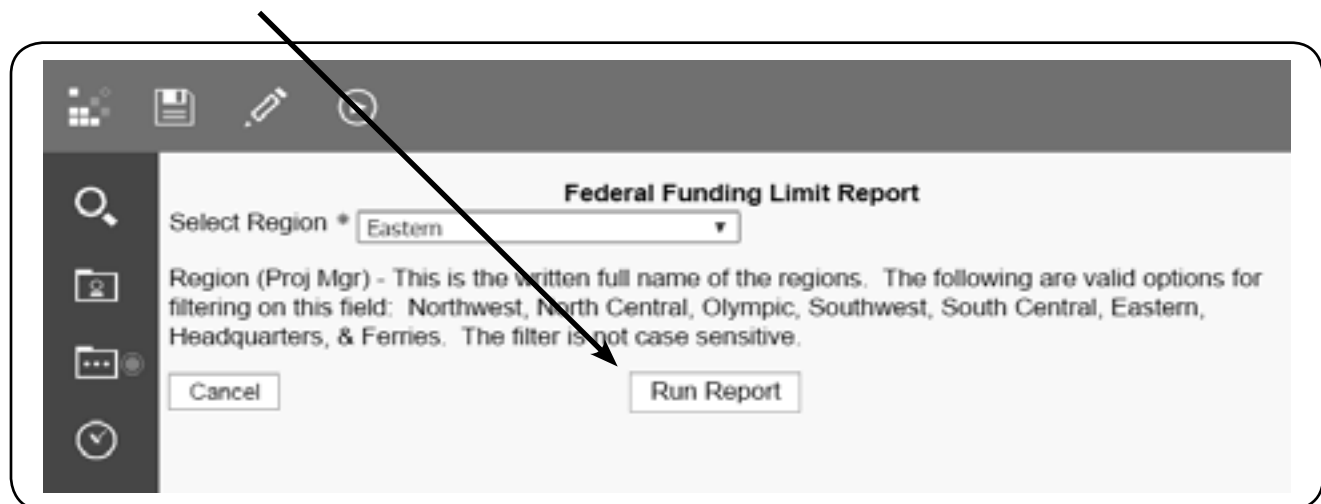
Choose Region from drop down menu.



The screenshot shows the 'Federal Funding Limit Report' interface. At the top, there is a toolbar with icons for a grid, a document, a pencil, and a play button. Below the toolbar is a sidebar with icons for a magnifying glass, a folder, a list, and a checkmark. The main content area has a title 'Federal Funding Limit Report'. Below the title is a 'Select Region *' dropdown menu with 'P_Region' selected. Below the dropdown menu is a text box with the following text: 'Region (Proj Mgr) - This is the written full name of the regions. The following are valid options for filtering on this field: Northwest, North Central, Olympic, Southwest, South Central, Eastern, Headquarters, & Ferries. The filter is not case sensitive.' At the bottom of the main content area are two buttons: 'Cancel' and 'Run Report'. An arrow points from the top of the page to the 'Select Region *' dropdown menu.

Figure 8A-2

Click Run Report



The screenshot shows the 'Federal Funding Limit Report' interface. At the top, there is a toolbar with icons for a grid, a document, a pencil, and a play button. Below the toolbar is a sidebar with icons for a magnifying glass, a folder, a list, and a checkmark. The main content area has a title 'Federal Funding Limit Report'. Below the title is a 'Select Region *' dropdown menu with 'Eastern' selected. Below the dropdown menu is a text box with the following text: 'Region (Proj Mgr) - This is the written full name of the regions. The following are valid options for filtering on this field: Northwest, North Central, Olympic, Southwest, South Central, Eastern, Headquarters, & Ferries. The filter is not case sensitive.' At the bottom of the main content area are two buttons: 'Cancel' and 'Run Report'. An arrow points from the top of the page to the 'Run Report' button.

Figure 8A-3

Sample excerpt of a result for Eastern Region:

Reporting

STACZY WASH-TO YouTube Project Design App: WSDOF fiscal.us go/fiscalities

Reporting

Shepard, Stacey J.

Page 1 of 2

This Status Report shows Federal Projects that have spent 85% or more of the budgeted amount.

Federal Funding Limit Report.

Region	WIN	Organization Code	FY/NA Number	Agreement Number	Agreement Description	Phase Description	Phase Code	Work Type	Current Budget Amount	Expended Amount	Billed Overhead Amount	Available Amount	% Spent	Status Code	Status Description
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	N SPOKANE CORRIDOR R&D	1	RW	6,081,000.00	6,081,000.00	0.00	0.00	100.0%	0	Open
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	ELIMINATE SPOKANE CORRIDOR	2	RW	948,418.60	948,418.60	0.00	0.00	100.0%	0	Open
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	SPOKANE CORRIDOR R&D	3	RW	4,175,536.00	4,175,536.00	0.00	0.00	100.0%	0	Open
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	ELIMINATE SPOKANE CORRIDOR	4	RW	20,616,000.00	20,616,000.00	0.00	0.00	100.0%	0	Open
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	ELIMINATE SPOKANE CORRIDOR	5	RW	20,550,000.00	20,550,000.00	0.00	0.00	100.0%	0	Open
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	ELIMINATE SPOKANE CORRIDOR	6	PE	200,000.00	200,000.00	0.00	0.00	100.0%	0	Open
Eastern	F00114A	371900	NAEP-8395(198)	0356108	Un-205-Nor Washington	5M-V 85.58% FIC-FH	8	PE	1,856,510.00	1,856,510.00	0.00	0.00	100.0%	0	Open
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	ELIMINATE SPOKANE CORRIDOR	9	PE	200,000.00	200,000.00	0.00	0.00	100.0%	0	Open
Eastern	F00090C	371900	NCPCP-8395(198)	0356009	North Spokane Corridor	ELIMINATE SPOKANE CORRIDOR	10	PE	200,000.00	200,000.00	0.00	0.00	100.0%	0	Open

Page 1 of 2

Top of Page up Page down

There may be more than one page. Use Page scroll links to view the entire report.

Figure 8A-4

The report can be exported to Excel or PDF

Federal Funding Limit Report.
This Status Report shows Federal Projects that have spent 85% or more of the budgeted amount.

Agreement Number	Project Description	Phase Code	Work Type	Current Budget Amount	Expended Amount	Budget Overhead Amount	Available Amount	% Spent	Status Description
NCPP01-0396(20)	North Spine Area Corridor	1	WV	5,681,500.00	5,681,500.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	2	PE	940,498.00	940,498.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	3	WV	4,175,526.00	4,175,526.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	4	WV	20,000,000.00	20,484,712.95	0.00	20,000,000.00	95.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	5	WV	20,000,000.00	20,484,712.95	0.00	20,000,000.00	95.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	6	PE	200,000.00	200,000.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	7	PE	1,000,000.00	1,000,000.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	8	PE	1,738,000.00	1,627,190.72	0.00	81,000.00	96.2%	Open
NCPP01-0396(20)	North Spine Area Corridor	9	PE	60,000.00	58,512.81	0.00	4,487.19	90.5%	Open
NCPP01-0396(20)	North Spine Area Corridor	10	PE	821,700.00	798,000.00	0.00	23,700.00	90.5%	Open
NCPP01-0396(20)	North Spine Area Corridor	11	PE	200,000.00	201,144.72	0.00	1,144.72	96.2%	Open
NCPP01-0396(20)	North Spine Area Corridor	12	PE	1,000,000.00	1,002,500.81	0.00	2,500.81	96.2%	Open
NCPP01-0396(20)	North Spine Area Corridor	13	PE	100,000.00	102,000.00	0.00	2,000.00	96.2%	Open
NCPP01-0396(20)	North Spine Area Corridor	14	PE	144,000.00	141,000.00	0.00	3,000.00	96.2%	Open
NCPP01-0396(20)	North Spine Area Corridor	15	PE	80,000.00	80,000.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	16	PE	80,000.00	80,000.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	17	PE	400,000.00	400,000.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	18	PE	3,104.25	3,104.25	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	19	PE	300,000.00	300,000.00	0.00	0.00	100.0%	Open
NCPP01-0396(20)	North Spine Area Corridor	20	PE	250,000.00	247,000.00	0.00	3,000.00	96.8%	Open

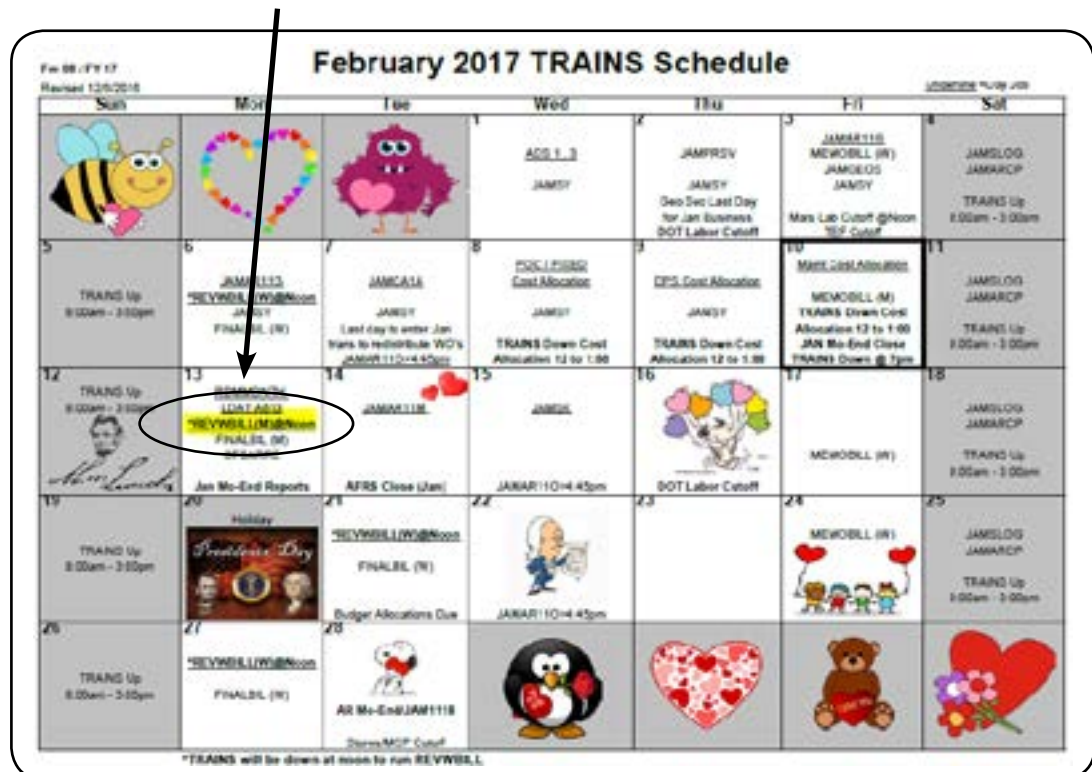
8A-1.4 Expectation

The Federal Funding Limit Report can be run at any time, and as many times as needed. As a best practice, Region Program Managers (RPM) should run the report weekly to determine whether budget limits are/will be exceeded before the next billing to FHWA. Using this information, RPM can take action to prevent FAPAs from becoming overrun (unbilled).

Points to note on WSDOT's weekly federal billing cycle:

- WSDOT bills FHWA on Wednesdays.
- Each weekly billing is for federally eligible expenditures, within FAPA limits, recorded in the prior week.
 - That is, the bill sent on 02/15/2017 is for the week of 02/06/2017
 - 02/10/2017.
- If an overrun, it will be addressed by:
 - A transfer of expenditures, the transfer must be approved by close of business on Friday (in the above case that would be 02/10/2017).
 - Modifying the amount authorized in the FAPA, the modification must be approved by FHWA and entered into TRAINS before “Review Bill” report is run (in the above case that would be noon on 02/13/2017, highlighted in the calendar below).

TRAINS Calendar for February 2017



TRAINS Calendars are available online at
<http://www.wsdot.wa.gov/Accounting/TRAINS/>

8A-1.5 Reasons For Overrun

The most common reasons FAPAs appear on the Federal Funding Limit Report are:

- Actual expenditures exceeded the FAPA.
 - The entire FAPA might be overrun or just a phase (PE, RW, CN).
- Work order groups are not set up correctly in TRAINS due to:
 - Incorrect FAPA.
 - Correct FAPA but incorrect phase.
 - Incorrect reimbursement rate.
 - Incorrect Finance Code.
- Payments or labor charged to the wrong work order/FAPA.
- Incorrect JV transfers.

8A-1.6 Addressing Items On The Report

Common examples of analysis performed to address Federal Aid Project Agreements (FAPA) displayed on the report:

- Are work order groups set up correctly in TRAINS?
- Are CPMS and TRAINS setup in alignment?
- Use the WIN Lookup Report to verify alignment.
- Are expenditures on track?
- Is the project work complete?
 - If so, are work order and/or groups closed or scheduled for closure?
- If the project is not ready for closure:
 - How much more work remains?
 - How much additional federal funding will be needed and why?
 - If no more federal funds are needed, should FAPA funded groups be closed or the FAPA removed from groups?
- Does the FAPA or a phase of the agreement need to be closed or changed?
- Action is taken to address the issue as necessary, with priority placed on overrun issues.
- For group set up issues, contact Project Support in Headquarters Accounting.

8A-2 Work Order LookUp Report

8A-2.1 Description

The Work Order Lookup Report provides a comparison of budget and expenditure data from CPMS and TRAINS, by individual work order.

8A-2.2 Goal

This report provides a quick way for users to identify differences between the data in CPMS and the data in TRAINS. With this data, the user can determine if action needs to be taken to update one or both systems.

8A-2.3 Instructions

The Work Order Lookup Report is located in Cognos at

[Team Content/Reports/Finance/Program Management/_Regions-All/Work Order Lookup](#)

Figure 8A-6

Once the report is open, a work order can be entered into the prompt.

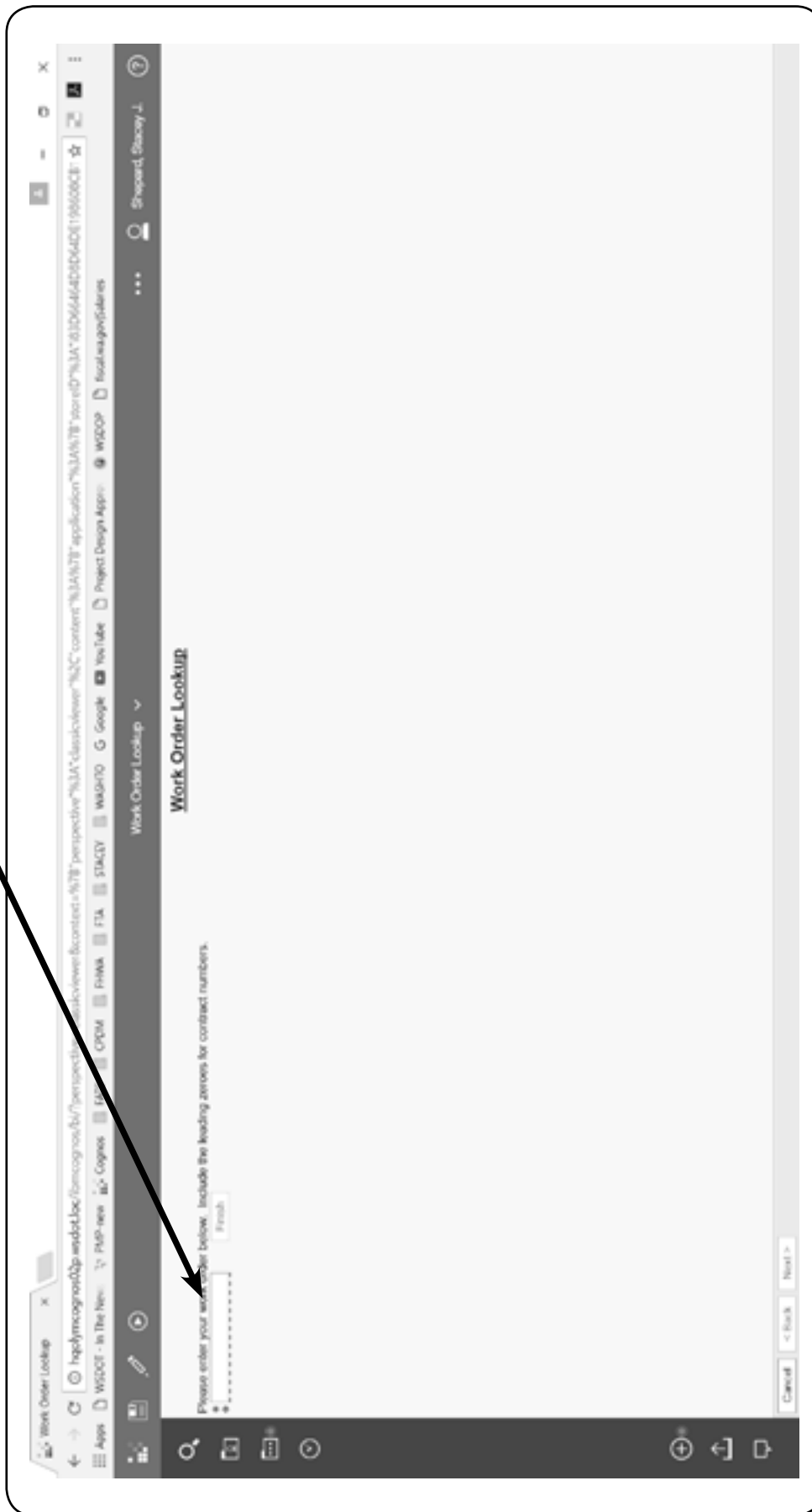


Figure 8A-7

After the work order has been entered, select “Finish” to run the report.

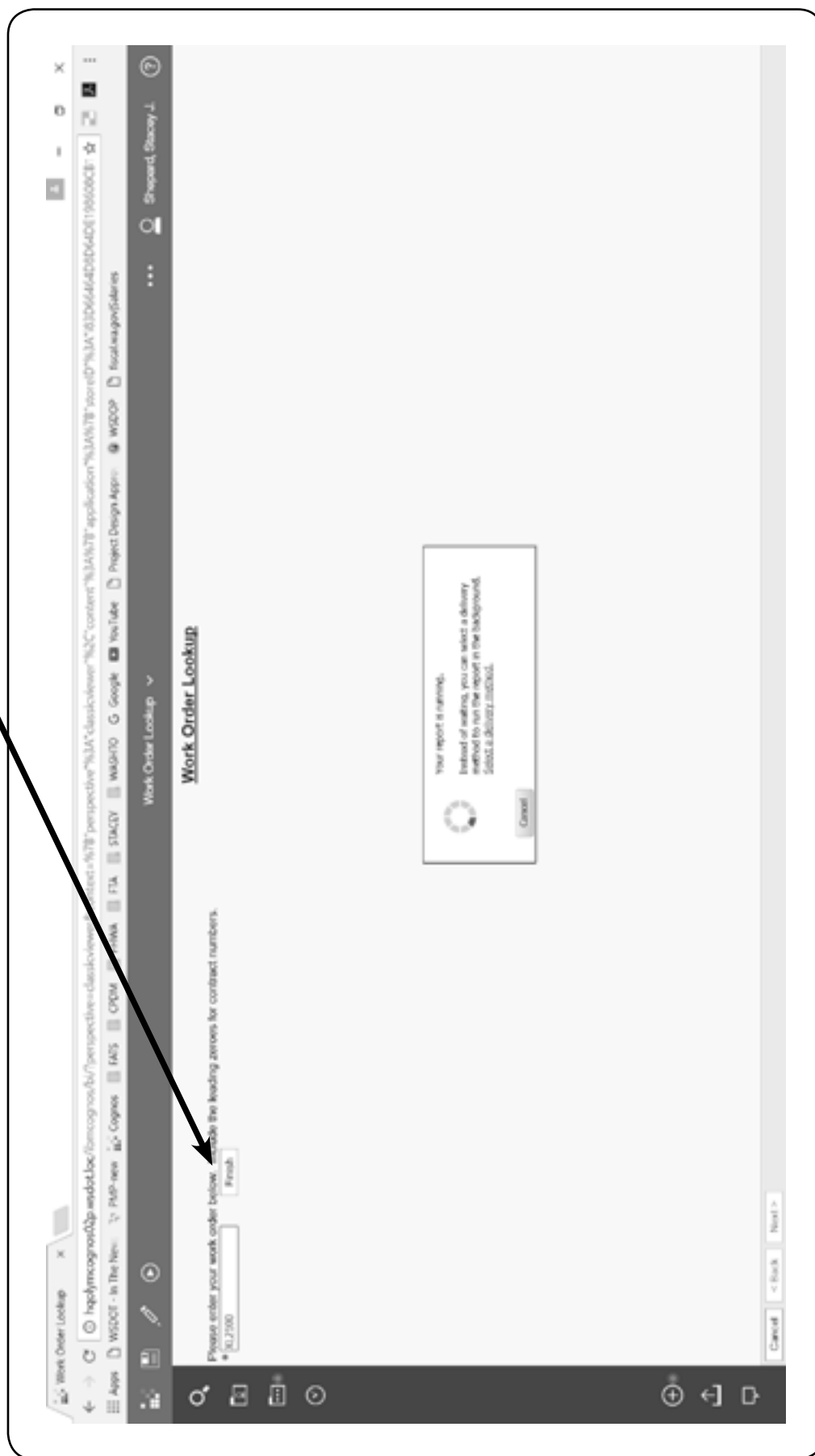


Figure 8A-8

Use the “page down” button to view all pages of the report.

Work Order Lookup

XL2100 - SR 241 South Wablike Slope - Guardrail

Work Item	Phone Code	Responsible Person Name	Responsible Org	Total Plan	Approved Actuals
0024000	PC	ROBERT R. T.	00000	36,564.40	0.00

TRANS Authorized CPMS Authorized Actuals Overrun CPMS Remaining Auth Transmitted

36,564.00	36,564.00	0.00	0.00	0.00
-----------	-----------	------	------	------

Plan by color of money (similar to GPOROCUP-HRHC screens in CPMS.)

SP	FIN	Est. Code	Authorized	Actual Dollars	Overrun Dollars	CPMS Remaining Auth	Transmitted Dollars
02	2024000	AA	36,564.00	36,564.40	0.40	0.00	0.00

TRANS Set-Up (similar to WACT screen)

Group Category Code	Group Category Name	Authorized Amount	Expended Amount	Balance
00	Authorization	0.00	0.00	0.00
01	Contractor Payments	0.00	0.00	0.00
02	Task Cost Agreement	5,865.63	5,865.63	0.00
03	Engineering	36,698.46	36,698.46	0.00
04	State Force Work	0.00	0.00	0.00
05	Materials	0.00	0.00	0.00
06	Contingencies	0.00	0.00	0.00
07	Bar Acquisition	0.00	0.00	0.00
08	Bar - Other Costs	0.00	0.00	0.00
09	Vendor Supplied Supp And Mats	0.00	0.00	0.00
		36,564.40	36,564.40	0.00

As Of Date : 1

radioTime run : Mar 27, 2017, 5:56:23 PM
 Top Page Up Page Down

Figure 8A-9

Select "Reset prompts and run" to run the report for another work order

Work Order Lookup

XL2100 - SR 24 South Wabuke Slope - Guardrail

Work Item	Phase Code	Responsible Person Name	Responsible Org	Total Plan	Unreported Actuals
0121020	PC	RODRIGUEZ, R. T.	012105	36,564.49	0.00

TRAINS Authorized	CPMS Authorized	Actuals	Overrun	CPMS Remaining Auth	Unreported Actuals
36,564.49	36,564.49	0.00	0.00	0.00	0.00

Plan by color of money (similar to CPMS/CPMS/CPMS screens in CPMS)

SP	FIN	FIN Code	Source	Actual Dollars	Overrun Dollars	CPMS Remaining Auth	Unreported Actuals
01	2024100	AA	State	36,564.49	36,564.49	0.00	0.00

TRAINS Set-Up (similar to WACT screen)

Group Category Code	Group Category Name	Authorized Amount	Expended Amount	Balance
01	Construction	0.00	0.00	0.00
02	Contractor Payments	0.00	0.00	0.00
03	Work Order Agreement	0.00	0.00	0.00
04	Engineering	36,564.49	36,564.49	0.00
05	State Force Work	0.00	0.00	0.00
06	Materials	0.00	0.00	0.00
07	Contingencies	0.00	0.00	0.00
08	Buy - Acquisition	0.00	0.00	0.00
09	Buy - Other Goods	0.00	0.00	0.00
10	Vendor Supplied Services and Materials	0.00	0.00	0.00

Buttons: Run HTML, Run PDF, Run Excel, Run Excel data, Run CSV, Reset prompts and run

Footer: Date/Time run: Mar 27, 2017, 5:50:23 PM
Top | Page up | Page down | Bottom

8A-3 WIN Lookup Report

8A-3.1 Description

The WIN Lookup Report displays a comparison of authorized amounts in the Capital Program Management System (CPMS) to expended amounts in the Transportation Reporting and Accounting Information System (TRAINS) for all Program Item Numbers (PIN) of a selected Work Item Number (WIN).

8A-3.2 Goal

The WIN Lookup Report is a tool to verify that expenditures are being recorded as authorized. It should assist with addressing funding discrepancies or overruns. An overrun of funds indicates WSDOT has incurred more expenditures than were authorized. A discrepancy indicates funds being expended but not authorized.

8A-3.3 Instructions

The Report is located in COGNOS: Team Content/Reports/Finance/Program Management/HQ-CPDM/Federal Aid/WIN Lookup Report.

Link to Report (hold down the “Ctrl” key and click on the link):

<http://hqolymcognos02p.wsdot.loc/ibmcognos/bi/?perspective=authoring&id=i36FB548D4D394C5381D9F91F7F3AAC1D&isViewer=true&isNewFromModule=false&isNewFromPackage=false&isNewDataSetFromModule=false&isNewDataSetFromPackage=false&isTemplate=false&isDataset=false&UIProfile=Titan&cmProperties%5Bid%5D=i36FB548D4D394C5381D9F91F7F3AAC1D&rsFinalRunOptions%5Bformat%5D=HTML&rsFinalRunOptions%5Ba11y%5D=false&rsFinalRunOptions%5Bbidi%5D=false&rsFinalRunOptions%5BrunInAdvancedViewer%5D=true&rsFinalRunOptions%5BDownload%5D=false&rsFinalRunOptions%5Bprompt%5D=true&rsFinalRunOptions%5BisApplication%5D=false>

Click in the ‘Value’ box and type in WIN(s). Click on arrow to load WIN(s) into ‘Selections’ box.

This should activate the 'Finish' button – click on 'Finish' button to generate the report.

The intent of the WIN Lookup report is to compare the CPMS setup for all PINS under the selected WIN, to how the corresponding expenditure data was actually recorded in TRAINS. This will allow users to easily determine if TRAINS is capturing data in alignment with how the project is actually funded in CPMS. This report should show the user if there are any errors, misalignments, or overruns between the systems. This data will allow the user to quickly pinpoint and address alignment issues.

WIN Lookup (CPMS vs. TRAINS)

WINS: Value:

Selections:

[Select all](#) [Deselect all](#)

Sample excerpt for WIN A09601B:

Columns to the left of the neon blue heading columns are CPMS data columns; to the right are TRAINS data columns. The neon blue heading columns provide differences of amounts between CPMS and TRAINS by fund source, similar to the Work Order Lookup Report.

WIN Lookup (CPMS vs. TRAINS)

The intent of the WIN Lookup report is to compare the CPMS setup for all PINs under the selected WIN to how the corresponding expenditure data was actually recorded in TRAINS. This will also assist users to easily determine if TRAINS is capturing data in alignment with how the project is actually funded in CPMS. This report should assist the user if there are any errors, misalignments, or omissions between the systems. This data will allow the user to quickly pinpoint and address alignment issues.

WIN Lookup (CPMS vs. TRAINS)

Work Item: A09601B WIN Title: SR 968.5 Interchange Vic to SR 9 Vic -Paving & ADA Compliance

CPMS PIN	CPMS Resp	CPMS Order	CPMS Phase	CPMS Sub	CPMS Fund	CPMS Source	CPMS Code	CPMS Job	Dollars	CPMS vs. TRAINS	CPMS vs. TRAINS	TRAINS Expenditure	TRAINS PIN	TRAINS Order	TRAINS Code	TRAINS Program	TRAINS Project	TRAINS Phase	TRAINS Type	TRAINS Expenditure
109641C	412348	36,506	FE	02	Local	DA		82,911.00	0.00	0.00	82,911.00	109641C	X,5096	DA	02	MCR	LM6192	R		400.40
109641C	412348		FE	02	Federal	SM		16,537.14	0.00	0.00	16,537.14	109641C	X,5096	SM	02	N38	009605	1	FE	16,537.14
815096 - Total									99,448.14	0.00	0.00	99,448.14								
109601C	413801	895,138	FW	02	State	AA		2,321.34	0.00	0.00	2,321.34	109601C	895,138	AA	02	A25				2,321.34
109601C	413801		FW	02	Federal	SM		38,531.32	0.00	0.00	38,531.32	109601C	895,138	SM	02	N38	009605	1	FE	38,531.32
895,138 - Total									40,852.66	0.00	0.00	40,852.66								
109601B	412130	001188	ON	P1	State	AA		106,229.00	0.00	86,716.83	19,512.17	109601B	009190	AA	P1	A31				19,512.17
109601B	412130		ON	P1	Federal	PM		1,302,534.00	0.00	1,850,650.05	3,344,279.45	109601B	009190	PM	P1	N15	009605	6	**	3,344,279.45
109601C	412130		ON	02	State	AA		22,572.94	0.00	22,529.67	43.27	109601C	009190	AA	02	A25				43.27
109601C	412130		ON	02	Local	DA		61.34	0.00	0.00	61.34	109601C	009190	DA	02	MCR	LM6194	R		61.34
109601C	412130		ON	02	Federal	PM		1,186,064.00	0.00	279,879.26	906,184.74	109601C	009190	PM	02	N38	009605	6	**	906,184.74
109641B	412130		ON	P1	State	AA		28,831.00	0.00	27,977.47	853.53	109641B	009190	AA	P1	A31				853.53
109641B	412130		ON	P1	Federal	Q2		25,988.00	0.00	0.00	0.00									
109641B	412130		ON	P1	Federal	Q2		741.00	0.00	0.00	0.00									

No Data Available

No Data Available

There may be more than one page. Use Page scroll links and scroll bars to view the entire report.

“No Data Available” indicates expenditures have not been recorded for the funding source in CPMS.

Clicking on the down arrow brings up export options.

The intent of the V in alignment with I

Work Item: F00

CPMS PIN	CP Re O
600228R	464
600228R	464
600228R	464
XL5191 - Total	
600225H	464307

WIN Lookup (CPMS vs. TRAINS)

WIN Lookup (CPMS vs. TRAINS)

ct L30 to Euclid Ave - Paving

BS	CPMS Fund Source	CPMS Finance Code	CPMS Auth Dollars	CPMS vs. TRAINS Overrun	CPMS vs. TRAINS Remaining	TRAINS Expenditures	TRAINS PIN
	Federal	FH	35,286.00	0.00	0.00	35,286.00	600228R
	State	AA	15,179.32	0.00	0.00	15,179.32	600228R
	Federal	FH	293,543.42	0.00	0.00	293,543.42	600228R
XL5191 - Total			444,008.74	0.00	0.00	444,008.74	
	State	AA	5,180.00	0.00	5,173.24	6.76	600225H

Clicking on the triangle within a circle allows new input of WIN(s).

The intent of the WIN Lookup report is to compare the CPMS setup for all PINS under the selected WIN, to how the corresponding expenditure data was actual in alignment with how the project is actually funded in CPMS. This report should show the user if there are any errors, misalignments, or overruns between the

WIN Lookup (CPMS vs. TRAINS)

Work Item: F00228R WIN Title: US 2621190 to Euclid Ave - Paving

CPMS PIN	CPMS Resp Org	CPMS Work Order	CPMS Phase	CPMS Sub Program	CPMS Fund Source	CPMS Finance Code	CPMS Auth Dollars	CPMS vs. TRAINS Overrun	CPMS vs. TRAINS Remaining	TRAINS Expenditures	TRAINS PIN
606228R	454397	XLS191	PE	P2	Federal	FH	35,286.00	0.00	0.00	35,286.00	606228R

8A-3.4 Expectation

As a best practice, Region Program Managers (RPM) should run the WIN Lookup Report as needed to determine whether expenditures are in alignment with authorization. Using this information, RPM can take specific action to address discrepancies or overruns.

The report can be run at any time, and as many times as needed.

8A-3.5 Contacts

Please contact CPDM if you need assistance with the WIN Lookup Report.

Stacey Shepard	Federal Aid & Work Order Authorization Manager	360-705-7138	SheparS@wsdot.wa.gov
Katya Braun	Project Financial Specialist	360-705-7146	BraunK@wsdot.wa.gov
Sam Thomas	Project Financial Specialist	360-705-7455	ThomasS@wsdot.wa.gov
Terie Wright	Project Financial Specialist	509-324-6028	WrightT@wsdot.wa.gov
Julie Younglove	Project Financial Specialist	360-705-7145	YounglJ@wsdot.wa.gov

Appendix 8B Public Interest Finding (PIF)

8B-1 Public Interest Finding (PIF) Overview and Intended Uses

In general, federal requirements must be fully met to ensure projects maintain Federal Aid eligibility. In rare situations, it may be determined to be in the public interest to deviate from such requirements. Deviations from federal requirements are allowed in limited circumstances, provided certain conditions are met. A Public Interest Finding (PIF) is a document that outlines how the needs of the public will be better served by deviating from a federal requirement. A PIF must clearly demonstrate the proposed deviation is more beneficial to the public than meeting the existing requirement.

In a PIF document, the Federal Highway Administration (FHWA) agrees with the Washington State Department of Transportation (WSDOT) that a deviation from regulatory requirements is in the public interest. A PIF requires WSDOT to clearly demonstrate the proposed deviation is more beneficial to the public than meeting the requirement. For projects using Federal-Aid funds, a PIF (WSDOT [Form 140-050](#)) is required to request the following deviations:

1. Two-Week Advertisement
2. Agency Supplied Materials
3. Mandatory Use of Borrow or Disposal Site
4. Agency Supplied Equipment
5. Tied Bids
6. Agency Force Work
7. Patented/Proprietary Items are identified by FHWA as a deviation requiring additional approval, but these approvals are obtained through the [Design Office](#), not through a PIF.
 - For all construction projects, a Memorandum of Justification, per [Plans Prep Manual](#) Section 700.01(5)c, is required from the Project Office for use of any proprietary material, work, manufacturer or product. Region Project Development and HQ Design provide concurrence and approval respectively. Sufficient time must be allowed for review, comment and approval.

Some requirements *cannot* be waived by a public interest finding (PIF) such as:

- Prohibition on convict labor
- Requirement to pay Davis-Bacon wage rates
- Buy America
- Requirement for competitive bidding

8B-2 The PIF Request Process

FHWA has delegated to WSDOT, the authority to approve accurate and compliant PIF requests. This delegation is documented in a [Stewardship Agreement](#), between FHWA and WSDOT. This agreement allows CPDM to review and approve appropriate PIF requests, in a timely manner. The Stewardship Agreement also documents that WSDOT must compile and submit all public interest findings to FHWA each year. This provides FHWA the ability to ensure WSDOT is honoring the Stewardship Agreement when approving PIF requests. The CPDM Division retains copies of approved PIFs and provides FHWA with this data as required.

The following are the basic steps in the PIF request process:

1. The Project Office determines if a deviation from standard federal requirements is needed and/or appropriate.
2. If a deviation is necessary, the Project Office completes a PIF form and submits it to the Region Program Management (PM) Office.
 - a. If estimates or other types of analysis are required, these must be submitted with the PIF.
 - i. Please see the matrix, starting on page 160, for a list of required information for each type of PIF.
3. The Region PM approves the PIF once they have determined it is accurate, complete, and provides all required justification for an acceptable deviation from standard requirements.
4. Once approved, the Region PM will submit the signed PIF and applicable supporting documents, to the CPDM Capital Program Delivery Manager at CPDMProjectFinancialSpecialistPFS@WSDOT.WA.GOV for final review, approval, and records retention.
 - a. The CPDM Capital Program Delivery Manager provides final approval of all PIFs for projects on the interstate.
 - b. A PIF must be approved and logged by CPDM before any actions related to the deviation can begin.
5. CPDM provides FHWA with copies of all PIFs on a yearly basis, and/or as requested for auditing purposes.

8B-3 Information Required on a PIF Document

Project Number

The project's Work Order number or WIN the deviation is requested for.

Project Name

The title of the project as it is listed in the State Transportation Improvement Program (STIP).

Federal-Aid Project Number

This number is assigned by CPDM. To obtain this number, please contact a Project Financial Specialist at CPDMProjectFinancialSpecialistPFS@WSDOT.WA.GOV

National Environmental Policy Act (NEPA) Category – Check the appropriate type:

- Environmental Impact Statement (EIS)
- Categorical Exclusion (CE), Documented Categorical Exclusion (DCE), and Programmatic Categorical Exclusion (Programmatic CE)
- Environmental Assessment (EA)

Region – The WSDOT Region requesting PIF approval.

Amount – The total amount of the request.

Full FHWA Oversight – Answer Yes or No

Is FHWA providing full project oversight? Projects with full FHWA oversight are sometimes referred to as a Project of Division Interest (PODI).

Buy America Compliance

Steel and iron that is permanently incorporated into the project shall consist of American-made materials, as outlined in the required General Special Provision (GSP). The agency must include a provision containing the “Buy-America” requirements in each contract. Purchase of foreign steel and iron products by agencies for installation on a federally funded project is not allowed except to the limit allowed by the “Buy America” GSP. The agency must document the sources of steel and iron by having a “Certification of Materials Origin” on file.

Justification

This is a summary of the overall benefits supporting why an exception to normal federal regulations should be granted.

Description of Work

Provide a summary description of the project.

Cost Effectiveness Determination

- Attach detailed estimates and/or cost saving analysis (i.e. cost of state forces vs. cost to contract work).
- Provide an explanation of cost effectiveness.

Schedule Issues

Explain how the agency will deliver the project and describe if there is a benefit to the public for early completion.

Required Approvals

FHWA has delegated PIF approval to WSDOT. WSDOT can only grant approval for deviations that meet specified PIF justification and documentation requirements.

At a minimum, the following WSDOT staff must approve a PIF:

- Region Program Manager
- CPDM, Capital Program Delivery Manager
- A project on an Interstate requires Full Oversight (indicated on PIF); both Region and CPDM Capital Program Delivery Managers' approval is required.
- A project that is non-Interstate – i.e., there is No Full Oversight – requires only regional approval.
- Other approvals may be required, depending upon the deviation requested.

The following matrix provides guidance and examples on when deviations from FHWA construction requirements might be acceptable, and which WSDOT offices should be consulted.

Type of PIF	Federal Regulatory Reference	State Regulatory Reference	Justification Examples	Required Information
Two-Week Advertisement Two-week advertisement periods require approval from FHWA and must document justification of why a shorter advertisement period is necessary. Projects must be advertised a minimum of two weeks.	23 CFR 635.112 (a) No work shall be undertaken on any Federal-Aid project, nor shall any project be advertised for bids, prior to authorization by the FHWA. (b) The advertisement and approved plans and specifications shall be available to bidders a minimum of 3 weeks prior to opening of bids except that shorter periods may be approved by the FHWA in special cases when justified.	RCW 47.28.050 <i>Advertisement and Award Manual M 27-02.04</i>	Examples • Emergency correction of roadways or bridges • To meet the conditions of an environmental permit (fish windows) • To meet the conditions of a Bureau of Reclamation Permit (Irrigation Canal) • To complete project prior to a school district opening in the fall	Coordination Contract Ad and Award Office Required PIF Approvals FHWA Field Engineer Region Program Manager Thanh Nguyen, CPDM Capital Program Delivery Manager Justification Why is a two-week advertisement necessary? Provide a summary of the overall benefits to the public. Schedule Issues Explain how the agency will deliver the project and describe if there is a benefit to the public for early completion.
Patented/Proprietary Items FHWA may participate in the costs of a proprietary product under the following circumstances: (a) Such patented or proprietary item is purchased or obtained through competitive bidding with equally suitable unpatented items; or (b) The State transportation department certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists; or (c) Such patented or proprietary item is used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. (d) If there are other equally acceptable materials or products available, the contracting agency may require a specific material or product when the Division Administrator approves of its use as being in the public interest	23 CFR 635.411 Federal Funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material. The primary purpose of the policy is to have competition in selection of materials and allow for development of new materials and products. If only patented or proprietary products are acceptable, they shall be bid as alternatives with all, or at least a reasonable number of acceptable materials or products listed. A single source may be approved if it can be found that its utilization is in the public interest.	Plans Preparation Manual M 22-31.06		Contact the HQ Design Office and review the <i>Plans Preparation Manual M 22-31.05</i> for instructions on how to request an exception for Patented or proprietary items.

Type of PIF	Federal Regulatory Reference	State Regulatory Reference	Justification Examples	Required Information
Agency Supplied Materials Exceptions to this requirement may be made when there is a definite finding that it is in the public interest to require the contractor to use materials furnished by the agency or from sources designated by the agency.	23 CFR 635.407 FHWA policy requires that the contractor must furnish all materials to be incorporated in the work, and the contractor shall be permitted to select the sources from which the materials are to be obtained. This requirement applies even if the material in question is non-participating. If WSDOT owns or controls a local natural materials source such as a borrow pit or stockpile of salvaged pavement material, the materials may be designated for either optional or mandatory use. Mandatory use will trigger the need for a PIF, optional use does not require a PIF. If the use of WSDOT furnished manufactured materials is approved the use must be made mandatory. <i>Note:</i> If WSDOT proposal to designate a material source for mandatory use would result in higher project costs, Federal-aid funds shall not participate in the increase even if the designation would conserve other public funds.		Examples (General) Long lead time on procurement Consistency with existing materials and systems The designation of a mandatory material source may be permitted based on environmental considerations, provided the environment would be substantially enhanced without excessive cost. Examples (from WSDOT PIFs) Procurement of ATIS equipment through DES contract Procurement of precast culvert Agency procured steel piles then supplies to contractor Agency supplied logs to the contractor State procurement of signal equipment Contractor installing vehicle actuated signs State to provide Five 3R Nema Controller Cabinet w/dual circuit relays, Three Nema Controller Cabinet w/8 channel slot, Six Reno C-1100-R detectors	Coordination Construction Office Required PIF Approvals Region Program Manager Thanh Nguyen, CPDM Capital Program Delivery Manager Justification A brief summary of the overall benefits and provide a detailed description of why agency supplied materials are needed. Description of Work What is being accomplished/what is the outcome for using agency supplied materials. Schedule Issues Explain how the agency will deliver the project and describe if there is a benefit to the public for early completion. Cost Effectiveness Determination • Attach a detailed estimate for the material supplied. • Provide an explanation of cost effectiveness.

Type of PIF	Federal Regulatory Reference	State Regulatory Reference	Justification Examples	Required Information
Mandatory Use of Borrow or Disposal Site It is expected that in most instances a disposal site for surplus material will be at the contractor's option. This does not preclude the State from showing a possible disposal site in the contract provisions. Where mandatory borrow or waste sites will be permitted based on environmental considerations and which were discussed in the Environmental Impact Statements, such considerations may be used as the basis for subsequent PS&E public interest findings.	23 CFR 635.407 The contract provisions for one or a combination of Federal- aid projects shall not specify a mandatory site for the disposal of surplus excavated materials. If the agency owns or controls a local natural materials source such as a borrow pit the materials may be designated for either optional or mandatory use. Mandatory use will trigger the requirement for PIF. Normally, the disposal site for surplus excavated materials is to be of the contractors choosing; although an optional site(s) may be shown in the contract provisions. The mandatory use of a site will trigger a PIF. Discussion of the mandatory use of a disposal site in the environmental document, or as an environmental commitment may serve as the basis for the PIF.		Examples Placement is the most economical Designation of a mandatory site may be permitted based on environmental considerations, provided the environment would be substantially enhanced without excessive cost Note: Mandatory use of borrow or disposal sites, is such a rare occurrence that it will be handled on a project-by-project basis. Approvals should only be provided after careful coordination with appropriate staff in the Environmental and Construction Offices.	Coordination Environmental Services Office or Region Environmental Coordinator Construction Office Required PIF Approvals Region Environmental Coordinator Region Program Manager Thanh Nguyen, CPDM Capital Program Delivery Manager Justification A brief summary of the overall benefits to the public. Description of Work What is being accomplished/what is the outcome for using Mandatory Borrow or Disposal Site. Cost Effectiveness Determination Provide an explanation of cost effectiveness. Schedule Issues Explain how the agency will deliver the project and describe if there is a benefit to the public for early completion.
Agency Supplied Equipment In exceptional cases a showing that it would be clearly cost effective to use publicly owned equipment may be justified. Federal funds may participate in the costs associated with the use of publicly owned equipment provided that: (1) The PS&E submittal clearly sets for the proposed use (2) The specifications indicate the items of equipment that are available, the rates to be charged, and the point(s) of availability or delivery, and (3) the specification includes the express condition that the contractor has the option to rent all or part of the available equipment, or to provide the equipment.	23 CFR 635.106 Publicly owned equipment should not normally compete with privately owned equipment on a project to be let to contract.		Note: Agency supplied equipment, is a rare occurrence and will be handled on a project-by-project basis. Approvals should only be made after careful coordination with appropriate staff in the Design and Construction Offices.	Coordination Design Office Construction Office Required PIF Approvals Region Program Manager Thanh Nguyen, CPDM Capital Program Delivery Manager Justification What is being accomplished/what is the outcome for using agency supplied equipment. A brief summary of the overall benefits. Description of Work Provide a detailed description of equipment being used. Cost Effectiveness Determination Provide an explanation of cost effectiveness. Schedule Issues Explain how the agency will deliver the project and describe if there is a benefit to the public for early completion.

Type of PIF	Federal Regulatory Reference	State Regulatory Reference	Justification Examples	Required Information
Tied Bids	23 CFR 635.111 WSDOT may tie or permit the tying of Federal-aid highway projects or Federal-aid and State financed highway projects for bidding purposes where it appears that by so doing more favorable bids may be received. To avoid discrimination against contractors desiring to bid upon a lesser amount of work than that included in the tied combinations, provisions should be made to permit bidding separately on the individual projects whenever they are of such character as to be suitable for bidding independently.		Note: Tie Bids are a rare occurrence and will be handled on a project-by-project basis. Approvals should only be made after careful coordination with appropriate staff in the Construction Office.	Coordination Contract Ad and Award Office Required PIF Approvals Region Program Manager Thanh Nguyen, CPDM Capital Program Delivery Manager Justification What is being accomplished by a tied bid. A brief summary of the overall benefits. Description of Work Provide a detailed description of work being performed under both contracts. This description should also include a purpose and need statement that explains why the project is being proposed. Cost Effectiveness Determination Provide an explanation of cost effectiveness. Environmental Provide documentation to show that the environmental process is complete for each project. NEPA/SEPA Logical Termini & Independent Utility Attach a Vicinity Map and/or other plan sheets to show that each project has Logical Termini and Independent Utility. Logical termini for project development are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. Independent Utility – A project must be able to function on its own, without further construction of an adjoining segment.

Type of PIF	Federal Regulatory Reference	State Regulatory Reference	Justification Examples	Required Information
State Force Work Deviations from competitive bidding are only permitted if FHWA finds it is cost effective to do so, an emergency exists, or FHWA approves an alternate bidding process. Noncompetitive construction contracting or other unusual methods of construction may be approved in one of three conditions: - the option is proven to be more cost effective, - an emergency exists and time is a critical factor, or - the project will use the Youth Conservation Corps per MAP-21 - Section 1524. Circumstances that justify a negotiated construction contract should be even more of an exception, making approvals of this basis for contract award extremely rare.	23 USC 112(a) In all cases where the construction is to be performed by the State transportation department or under its supervision, a request for submission of bids shall be made by advertisement unless some other method is approved by the Secretary. & 23 CFR 635 Subpart B (outlines exceptions to contracting out work) Also refer to FHWA Order 5060.1 FHWA Policy on Agency Force Account Use	RCW 47.28.030 (1)(a) A state highway shall be constructed, altered, repaired, or improved, and improvements located on property acquired for right-of-way purposes may be repaired or renovated pending the use of such right- of-way for highway purposes, by contract or state forces. The work or portions thereof may be done by state forces when the estimated costs thereof are less than sixty thousand dollars. (b) When delay of performance of such work would jeopardize a state highway or constitute a danger to the traveling public, the work may be done by state forces when the estimated cost thereof is less than one hundred thousand dollars. RCW 47.28.035 The cost of any project for the purposes of RCW 47.28.030 shall be the aggregate of all amounts to be paid for labor, material, and equipment on one continuous or interrelated project where work is to be performed simultaneously. The department shall not permit the construction of any project by state forces by dividing a project into units of work or classes of work to give the appearance of compliance with RCW 47.28.030.	Examples (from WSDOT PIFs) Governor declared emergency causing road damage. Sole Source Contract Electronic Radio communications Purchase and install Permanent Traffic Recorder (PRT) loops. Electronic Signals type work ER signal shop forces installing Wavetronix system after contractor paving is complete ER signal shop forces lowering a junction box to reconstruct an ADA ramp Installation of wireless advance notification systems OR Signal Shop forces to relocate a junction box (justification: work needs to take place before contract) State force used to replace navigation light on SR 25 Bridge over the Spokane River Installation of Signs Install low cost countermeasures to improve intersection visibility at 60 intersections in NWR. Maintenance staff installing curve warning signs State forces fabricating, installing signs and posts. State forces used to replace signs; fabrication & installation Plant Establishment State forces perform plant establishment Scoping Work Maintenance staff conducting pavement condition assessments Strategic Pavement Repair Maintenance forces performing pavement marking WSDOT Maintenance staff will identify critical locations on region-wide roads that need crack sealing, BST patching, and HMA patching to extend pavement life. Striping Maintenance perform striping work. TDO Type Work Purchase and install Permanent Traffic Recorder (PRT) loops. TDO providing materials, labor and traffic control to reinstall new sensors and loops Weigh in Motion sensor installation WSDOT TDGO forces perform PTR road sensor reinstallation	Coordination Maintenance Office Required PIF Approvals Region Program Manager Thanh Nguyen, CPDM Capital Program Delivery Manager Description of Work Provide a detailed description of work to be done by agency forces. Justification What is being accomplished/what is the outcome for the work being completed by state forces. A brief summary of the overall benefits. Per FHWA Order 5060.1 - FHWA Policy on Agency Force Account Use, WSDOT must meet the following: Demonstrated ability of WSDOT to perform the work. FHWA must be able to determine WSDOT has the experience, resources, and demonstrated ability to complete the work with the same level of quality as that expected on a competitively let construction contract. Availability of equipment. WSDOT must own (or currently lease) most of the equipment that is needed to perform the work. If the agency must acquire or lease substantially more equipment than required for its normal operation, it would be difficult to justify an affirmative finding of cost-effectiveness. Document use of minor agreements. It is anticipated WSDOT will perform all work with its own forces. However, in some instances, it may be appropriate for the agency to enter into agreements for specific minor services associated with the scope of work (e.g., guardrail installation). Such instances should be documented and pre-approved. Ability to comply with design, construction and material, quality standards. Ability to document compliance with quality assurance requirements. WSDOT must be able to obtain and document the same level of quality that is required for competitively let contracts under 23 CFR 637. Schedule. The project/contract completion time is to be equal for both WSDOT and contract work estimates in order to provide a fair comparison of prices. Cost comparison. WSDOT must obtain sufficient cost information so that a cost-effectiveness determination can be made by comparing the total cost for WSDOT to perform the work versus the total cost using competitively bid prices. Assurances the performance of the project by force account will not hinder the WSDOT's attainment of its approved Disadvantaged Business Enterprise (DBE) goal. Whenever WSDOT performs work by force account, contracting opportunities are not available. Thus, the agency must assure that the performance of the project by force account will not negatively affect the ability of the State to achieve its approved DBE goal. Assurances that the project will comply with all Federal-aid requirements. WSDOT must assure it will comply with all applicable Title 23 requirements during construction such as the applicable sections of Form FHWA-1273 (Required Contract Provisions for Federal-aid Construction Projects), job site poster requirements, environmental commitments, etc.

Appendix 8C Toll Credit Fact Sheet

Toll credits are not money. They do not bring any funds to a project. Toll credits provide a way to eliminate the need for state or local matching funds on a project. Typically, projects funded with federal money require matching dollars from other non-federal sources. By using toll credits to substitute for the required nonfederal share on a new federal-aid project, the federal share can effectively be increased to 100 percent. For example, a project funded with 80 percent federal funds and requiring 20 percent matching funds can be 100 percent federally funded. With few exceptions, toll credits are eligible for most projects.

8C-1 Determination of Maintenance of Effort (MOE)

To be able to earn a toll credit, a State must satisfy the MOE determination required by 23 U.S.C. § 120(j)(2). The MOE determination is an assessment of a Washington's non-Federal transportation capital expenditures over a four-year period. The expenditures in the last year of the four-year period must exceed the annual average of the expenditures in the preceding three years of the four-year period.

The calculation of the non-Federal transportation capital expenditures must include expenditures to build, improve, or maintain (other than routine maintenance) public highways. As a minimum, the calculation must include expenditures for public highways and ferry capital.

- The MOE determination only needs to be satisfied for the federal fiscal year for which a State earns the credit amount. Once a credit amount is appropriately established, it can be applied whether or not the State satisfies the MOE determination in later years. Additionally, any established credit does not lapse after a period of time but remains available until used by the State.

8C-2 Determination of Amount of Credit

The amount of credit earned is based on:

- Revenues generated by the toll authority (i.e., toll receipts, concession sales, right-of-way leases or interest), including borrowed funds (i.e., bonds or loans) supported by this revenue stream, that are used by the toll authority to build, improve or maintain highways, bridges or tunnels that serve interstate commerce.
- Expenditures (actual cash outlays) by a toll authority for capital improvements to build, improve, or maintain public highway facilities that carry vehicles involved in interstate commerce (the degree does not matter). It cannot include expenditures for items such as routine maintenance work (i.e., snow removal or mowing), debt service, or costs of collecting tolls.
- Credits earned may be applied toward the non-Federal matching share of programs authorized by title 23, U.S.C, except the credit may not be applied to projects funded with FHWA's emergency relief funds. Additionally, the credit may be applied to transit programs authorized by chapter 53 of title 49, U.S.C.

8C-3 Additional Information

https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_aid/matching_strategies/toll_credits.aspx

Appendix 8D How to Setup another State Agency's Funding On a WSDOT Capital Highway Project

8D-1 Issue and Challenge

Occasionally, WSDOT receives project funding from another Washington State agency budget (Other State Agency). The Governor's Office of Financial Management (OFM) assigns the appropriation for the funding to the "Other State Agency" and holds them accountable for tracking the expenditure of those funds against their state appropriation. OFM does not want to double-count the expenditure of these funds and has determined that the expenditure **can only be recorded** in the Other State Agency's Accounting and Budgeting System.

OFM's business process has resulted in the reduction of project expenditures on WSDOT capital projects when the Other State Agency reimburses WSDOT and our Accounting Office posts a credit to the project work order. This results in an overstatement of the **Current Plan** for the project in CPMS and skews project characteristics such as Preliminary Engineering and Construction Engineering percentages, parametric cost profiles, and FTE-loaded cost factors.

This process also has resulted in the removal of expenditures from WSDOT's Asset Management Tracking System which is fed by CPMS and records the amount of capital spending to build or replace capital features.

8D-2 Instructions on How to Setup Funds from Other State Agencies on Projects in the Capital Highway Construction Program

CPDM has worked with WSDOT Accounting to align each office's business processes to ensure that OFM's and WSDOT's reporting requirements are met while still:

- Providing strong project controls for expenditure control and cost recovery.
- Reporting to HQ Accounting of completed capital highway assets for annual Government Accounting Standards Board (GASB) Initiative 34 reporting to OFM.

The following steps will ensure that these objectives are met:

1. The Regions will include the Other Agency's funding on the project as they define it in the Capital Program Management System (CPMS). They will use a **unique finance code (IZ)** so the "Other State Agencies" funding can be easily identified and excluded by CPDM in determining the amount of appropriation authority needed to deliver a budget proposal. (See section below for more details.)
2. Region will follow standard work order authorization and agreement processes in setting up and providing project cost controls.
3. HQ Accounting will setup the Reimbursable Object Table in TRAINS. This table will convert the object code from the **"Expenditure Object"** to the **"Reimbursable Object"** with the use of the **Sx** codes.
4. Accounting will send an invoice to the Other State Agency for reimbursement of funds expended against the "Reimbursable Agreement."

5. When Accounting invoices the Other State Agency, they will post the reimbursement to the project work order in TRAINS and the Reimbursable Object Table will assign the Object Code of "Sx – Interagency Reimbursement."
6. CPDM has modified the nightly "TRAINS to CPMS" expenditure transaction upload process to exclude the posting of expenditures with these "Sx" Object Codes. Capital Program Management System (CPMS) will retain the actual expenditures as part of the project's final cost and report them to HQ Accounting and OFM as part of WSDOT's annual reporting for asset management. CPDM transmits a monthly report between CPMS and HQ Accounting that identifies the amount of funding spent on each project by Subprogram and Improvement type, which identifies the type of asset to be constructed and whether it is new or replacement of an existing feature (referred to as "Expensed").

8D-3 Business Case for a Separate Finance Code for Other State Agency Funds

The Management Region needs to set up the funding, from the Other State Agency, on the project in CPMS with a unique finance code that identifies this "Other State Agency" funding. CPDM has designated the following CPMS Finance Code for this purpose: Finance Code "IZ" – State Funding from another State Agency.

The use of this finance code will allow the capital program managers to identify the number of projects that include funding from another state agency and the amount of those funds. This information is needed by them in order to prepare their budget request to the Legislature.

8D-4 Things to Watch Out For

Setting up state funds from another state agency in this manner will allow the Project Manager to run reports out of TRAINS and see the remaining authorization left on the work order. However, Program Managers and Project Engineers need to be aware that if they compare the TRAINS reports to the ones from the Capital Program Management System (CPMS) or the Transportation Executive Information System (TEIS), the authorized amount and the expenditure amount will not agree for those projects with funding from another state agency following reimbursement by the other state agency. This is because HQ Accounting reduces the authorized amount in TRAINS once reimbursement has been received and CPMS will not be reduced because the Nightly Expenditure Upload process between TRAINS and CPMS prevented the credit from removing the expenditures paid by the Other State Agency.

One more thing to watch out for: when the Program Manager closes out a project phase that includes funding from Another State Agency, they will need to provide a note to Accounting on their work order request that instructs them to reduce the final authorized amount on the Closing Work Order to match the amount in TRAINS.

8D-5 Questions

If you have questions, contact [Mike Ellis](#), 360-705-7144, CPDM Budget Development Group.

Appendix 8E Guidance on Connecting Washington Project Savings

8E-1 Background

The 2015 Connecting Washington transportation revenue package contained a handful of projects that assumed additional types of funding beyond Connection Washington, toll funds and/or local contributions. Two projects are partially funded by contributions from tolling, SR 167/SR 509 Puget Sound Gateway and I-405 Renton to Lynnwood - Corridor Widening. Additionally, the package includes expected local contributions on a number of projects, examples of which are:) Seattle Terminal, and US 395/ Ridgeline Intersection.

8E-2 Tolling Examples

Some current tolling projects are:

- The SR 167/SR 509 Puget Sound Gateway, which consists of two projects:
 - A new four lane alignment on SR 167 between SR 509 in Tacoma and SR 161 in Puyallup
 - SR 509 south from SeaTac to I-5. Toll funding on SR 167 is assumed to be \$95 million and on SR 509 it is assumed to be \$85 million.
- The I-405 Renton to Lynnwood - Corridor Widening project widening of the I-405 corridor between Renton and Bellevue, including the implementation of Express Toll Lanes (ETL) and rebuilding impacted interchanges.
- Also-builds on the first segment of the I-405/SR 167 interchange master plan will construct 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. Toll funding is assumed to be \$215 million.

8E-3 Local Fund Examples

- The Seattle Terminal Preservation project will replace the main terminal building, and north timber trestle.
- Replacement of Slip 3 OHL and transfer span.
 - Preservation of the bulkhead and retained fill area.
 - Preservation of security video monitoring systems. The local contribution to the project is \$19.4 million, with \$15.5 million expected in 2017-19.
- The US 395/Ridgeline Intersection project will construct a new intersection in Kennewick. The \$6 million local contribution funding design of the project is expected in 2017-19 and 2019-21.

8E-4 Area of Concern

As these Connecting Washington projects begin development, there is a question regarding how savings might be treated on these projects. If savings occur, should the savings be credited to the Connecting Washington Account or be used to reduce the local or tolling contribution to the project?

In RCW 47.01.480, the Department is encouraged to apply Practical Design. The Legislature expects Practical Design to result in project cost reductions and subsequent savings to be used to fund additional projects. The statute requires the Department to report Practical Design savings at the completion of the project design phase. Retired risk and unused contingency funding is to be reported at the completion of the project.

These savings are to be reported to the State Treasurer for transfer from the Connecting Washington Account to the Transportation Future Funding Program Account. As stated in RCW 47.01.480, it is the Legislature's intent that savings on Connecting Washington projects be deposited into the Transportation Future Funding Program Account to be made available for appropriation in 2024 for "...highway improvement projects or preservation investments...."

8E-5 Direction received from Executive Leadership Team (at the Bi-weekly meeting on December 5, 2016)

Savings on Connecting Washington projects must follow the intent of the statute and not be used to reduce the local or tolling contribution of a legislatively-identified Connecting Washington project.

Appendix 8F Design-Build pre-NEPA Projects Funded with Federal-Aid

8F-1 Intent

Design-Build pre-NEPA (DBpN) refers to a Design-Build project where National Environmental Protection Act (NEPA) requirements are not complete prior to Request for Proposals (RFP). This guidance applies to DBpN projects funded with Federal-Aid, and outlines the federal funding process. This document is intended to clarify how WSDOT can maintain compliance with federal funding requirements without sacrificing the innovations the Design-Build delivery method can produce.

For information on other Design-Build and DBpN requirements, such as advertisement and contract requirements, please contact the Headquarters Construction Office [Design-Build team](#) or visit their website.

8F-2 Background

[Federal regulations](#) provide a process to advertise and award DBpN projects prior to completing NEPA requirements, but federal funding for the construction (CN) phase cannot be authorized until NEPA is complete. In addition, there are Federal-Aid and WSDOT system constraints that must be taken into account when delivering projects by the DBpN method.

“§ 636.109 (d) The FHWA's authorization and obligation of preliminary engineering and other preconstruction funds prior to the completion of the NEPA process is limited to preliminary design and such additional activities as may be necessary to complete the NEPA process. After the completion of the NEPA process, the FHWA may issue an authorization to proceed with final design and construction and obligate Federal funds for such purposes.”

This funding constraint becomes a significant issue at RFP, when WSDOT seeks to obtain federal funding for the DBpN contract. WSDOT's process for obtaining federal funding and billing FHWA for reimbursement must be aligned with the DBpN delivery method. In addition, WSDOT budget and financial records must reflect alignment between the actual work performed by the DBpN contractor, and compliance with federal and state regulations. In other words, funding authorizations and agency records must clearly separate preliminary design and NEPA support from construction activities, even when the contractor will perform both under one DBpN contract.

In compliance with Federal regulations, the Headquarters Construction Office Design-Build team has developed DBpN contracts that outline two types of Notice to Proceed:

1. Notice to Proceed 1 (NTP 1) is provided upon contract execution authorizing the contractor to begin preliminary design activities. NTP 1 can be provided before NEPA is completed.
2. After NEPA is completed, Notice to Proceed 2 (NTP 2) can be provided authorizing the contractor to begin construction activities.

Each DBpN contract clearly communicates to the contractor that construction activities are not authorized to take place prior to NTP 2. In addition, Capital Program Development and Management (CPDM) staff create Federal-Aid authorizations in alignment with each NTP.

8F-3 Summary of Guidance

For purposes of this guidance, it is assumed all other applicable federal, state, and agency requirements are met, and therefore are not referenced in this document.

8F-4 Preliminary Engineering (PE) Phase

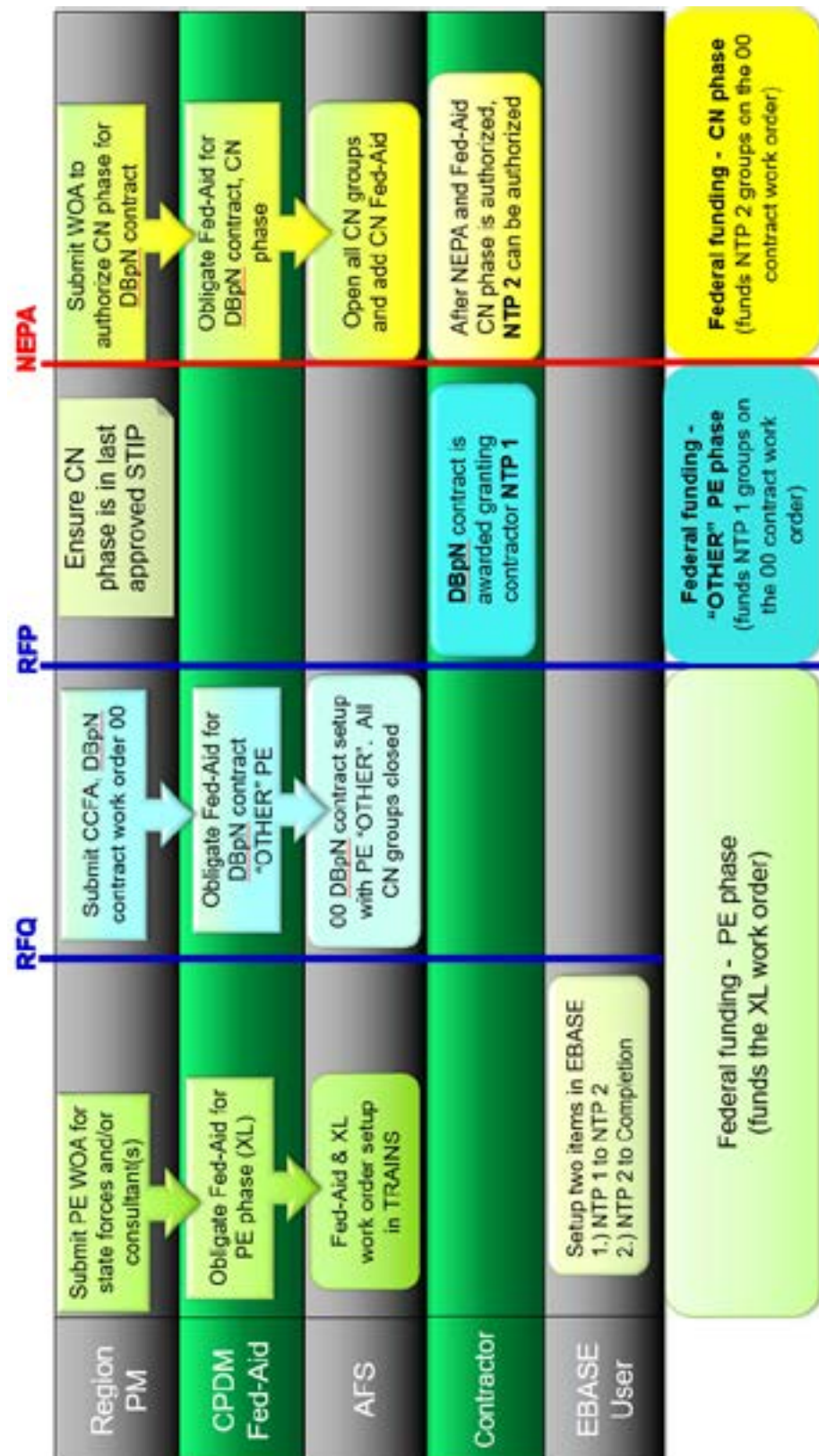
In the appropriate systems (EBASE, CPMS, FATS, FMIS, TRAINS), WSDOT staff must identify and separate contractor work performed between NTP 1 and NTP 2, from all work performed after NEPA is completed and NTP 2 is granted. This allows WSDOT to obtain, track, and report on federal funding for preliminary design and NEPA support activities, separately from all construction activities performed after NTP 2.

CPDM creates a Federal Aid Project Agreement (FAPA), to obligate funds for the period of time between NTP 1 and NTP2. Within the FAPA, this funding is identified as part of the PE phase, but separated into improvement type “other”. The improvement type is listed as “other”, in order to provide a clear separation from the initial PE phase.

Until NTP 2 is provided, all non-contractor costs should be charged to the PE work order. This includes WSDOT staff time and stipends paid for proposals. Stipends should not be paid under the contract work order (00 prefix), because these costs are incurred prior to and outside of the Design-Build contract. In addition, if for any reason the RFP is not successful and a contract is not issued, stipends are paid from the PE work order.

8F-5 Construction (CN) phase

After NEPA requirements are complete (NTP 2), Region Program Management submits a request to fund the remaining portion of the DBpN contract. CPDM modifies the FAPA, to obligate funds for the construction phase of the DBpN contract.



8F-6 Federally Funded Contract Work Order Establishment Process

Obtaining federal funding for the Design-Build pre-NEPA (DBpN) delivery method requires a different process than those established for the Design Bid Build (DBB) and Design-Build (DB).

In order to receive federal funding, activities prior to National Environmental Policy Act (NEPA) approval and those following NEPA approval must be clearly separated. The separation enables transactions to be accurately recorded and billed to FHWA for reimbursement. DBB and DB processes achieve this separation through the use of different work orders; a Preliminary Engineering work order (XL) prior to NEPA and construction work order (00) after NEPA is complete. In contrast, the DBpN process enables the use of a contractor before and after NEPA requirements are met, and all contractor payments are recorded in the construction work order (00).

It can be challenging within current WSDOT systems to record non-construction and construction (CN) work in the same work order for contractor work where contractors are paid through the Contractor Payment and Administration System (CAPS).

8F-7 DBpN Funding Process

1. **Region Program Management (RPM) establishes a Preliminary Engineering (PE) work order, usually XL prefix.**
 - a. Record all WSDOT staff and consultant costs for PE activities in the PE work order.
 - b. Record contractor stipends associated with the RFQ/RFP process in the PE work order.
 - i. Ensures consistent treatment of stipends regardless of which funding process is used, and whether RFP is successful or not.
 - c. This work order will overlap the DBpN contract, until NTP 2 is authorized.
2. **Project Office and RPM determine if NEPA will be complete before RFP.**
 - a. Federally funded Design-Build projects where NEPA is **not** complete prior to RFP must follow the DBpN process:
 - i. Special language must be included in the advertisement and contract, noting NEPA is not complete and Notice to Proceed (NTP) 1 and 2 apply.
 - ii. Federal funding for the DBpN contract must be obtained from FHWA in phases.
 1. NTP 1 (pre-NEPA) = PE phase "other."
 2. NTP 2 (NEPA complete) = CN phase.

3. **Project Office and RPM ensure Estimates and Bids Analysis System (EBASE) Report reflects all costs associated with NTP 1 and NTP 2.** (*Detailed instructions for PDES and Engineering Offset outlined in 'Design-Build pre-NEPA EBASE Below Subtotal Items Quick Reference'.*)
- a. Within the EBASE report groups are designated as NTP 1 or NTP 2 and noted in the 'Group Description' field:
 - i. NTP 1 groups to use "PDES" in the 'Federal Work Type Code' field.
 1. "PDES" denotes "Preliminary Design" which is consistent with the term used in the [§ 636.109](#).
 2. NTP 1 groups to be assigned a "below the line" item labeled "Engineering Offset" to remove Engineering Costs (this is to work around system limitations of not being able to assign engineering costs by group).
 - ii. NTP 2 groups to use codes as necessary (no change from Design Bid Build process).

EBASE Input example:

The screenshot shows the EBASE input form with the following values:

- County: SNOHOMISH (Select First)
- Control Section Number: 314430
- Fund Number: 2
- Group Description: TRAFTON CREEK NTP1
- Program: I4
- Program Item Number: 153026A
- State Route Number: 530
- Tax Rate: 8.90%
- Federal Work Type Code: PDES (PRELIMINARY DESIGN)

EBASE Example Result Excerpt:

The screenshot shows the EBASE example result excerpt with the following information:

PS&E JOB NO: 17A847
 CONTRACT NO: 000000
 WORK ORDER#: XL4562

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY GROUP ***
 GROUP NO : 1
 TRAFTON CREEK NTP1

PROGRAM ITEM NUMBER : 153026A
 CONSTR. TYPE CODE : PDES
 PROGRAM CODE : I4
 STATE ROUTE(S) : 530
 COUNTY : SNOHOMISH
 CONTROL SECTION/SALES TAX : 314430 / 8.90%
 SAFETY CLASS CODE :
 FUND NO: 2 PARTICIPANT: STATE CON WASH PARTICIPATION PERCENT:

EBASE Input example:

General Info		Text Data	Funding	Groups	Columns	Bid Items	Non-Bid Items
Number	Column	Item Description				Unit Price	
800	1	NTP1 ENGINEERING OFFSET				-107,700.0000	
Total:						(\$107,700.00)	

EBASE Example Result Excerpt:

GROUP 1 BASE SUBTOTAL :		1,000,000.00 *
WASHINGTON STATE SALES TAX 7.70% OF \$ 1,000,000.00		77,000.00
GROUP 1 SUBTOTAL		1,077,000.00 **
ENGINEERING 10.00%		107,700.00
NTP1 ENGINEERING OFFSET		Offset -107,700.00
GROUP 1 TOTAL		1,077,000.00 ***

4. Prior to RFP, Region Program Management (RPM) submits a Work Order Authorization (WOA) form to establish a Construction Contract Financial Authorization (CCFA) work order.
 - a. Funds contractor payments [Group Category (GC) 01] limited to NTP 1 activity.
 - b. Does **not** fund engineering (GC03):
 - i. Activities prior to NEPA are limited to preliminary design activities and must be recorded in the related PE work order.
 - c. The WOA CCFA 'FA Notes' Section:
 - i. Specify the contract is a DBpN contract.
 - ii. Elaborate the Notice To Proceed (NTP) 1 and NTP 2 Steps:
 1. NTP 1: designation to record non-construction activities.
 2. NTP 2: designation to record construction activities.

Excerpt of FA Notes Section example:

"This is a Design-Build Contract. NEPA documentation and environmental permits for the project will not be completed prior to the Award of the contract. Consequently, WSDOT will issue a two-step notice to proceed for the project. Upon execution of the contract and NTP 1, Groups 1 & 2 will begin preliminary design to the extent needed to support the NEPA process and environmental regulatory compliance, including early permit coordination, right of way plan development and procurement. Groups 3 & 4 will consist of final design, environmental permitting, right of way acquisition and construction. Opportunities for innovation lie in stream alignment, structure design and construction staging; therefore, issuing the request for proposals prior to environmental documentation & permitting, and right of way acquisitions provides the most innovation potential."

5. WOA CCFA submitted to CPDM

- a. Capital Program Development and Management (CPDM) Office prepares a Federal Aid Project Agreement (FAPA) in the Federal Aid Tracking System (FATS) requesting funds for “other” phase and submits FAPA for Federal Highway Administration (FHWA) approval.
 - i. **Note:** funding specified as “other” in FATS will be designated as “PE” in TRAINS due to system limitations.
- b. Upon receipt of FHWA approval:
 - i. CPDM notifies the Contract Ad and Award Office that funds are approved for RFP.
 - ii. CPDM approves the WOA CCFA, and it is transmitted to Accounting and Financial Services to establish the contract work order.

6) Establishing the Contract Work Order

- a. If a contract number was not assigned at RFQ, Accounting and Financial Services – Payments and Receipts (AFS-PR) Section assigns contract number initiating conversion of WOA CCFA to WOA Adjust to Award (A2A).
 - i. In most cases, this number is assigned at Request for Qualifications.
- b. Accounting and Financial Services – Project Support (AFS-PS) Section.
 - i. Receives WOA A2A with ‘other’ funds only.
 - ii. Receives EBASE Report after contract execution.
 1. Establishes ‘00’ work order with only payment to contractor (CAPS) groups from EBASE report.
 - a. NTP 1 groups with open status: PE codes with federal funding source.
 - b. NTP 2 groups with closed status: CN codes - no federal funding source.
 - c. Adds ‘other’ funds to work order.
- c. AFS-PR establishes groups in CAPS:
 - i. NTP 1 groups exception coded with PE work-op: **0195**.

Excerpt from the Chart of Accounts:

Excerpt from the Chart of Accounts:

WSDOT Chart of Accounts Manual M 13-02.28 2017–2019 Biennium
October 2018 Page 7-49

0195	Non-Construction – Design Build Contracts (CAPS Payments to Prime Contractors)
------	--

- ii. NTP 2 groups are setup with default codes.

7. NEPA is complete and NTP 2 is authorized.

8. Modify the DBpN contract work order to request construction funding.

- a. RPM initiates process upon completion of NEPA:
 - i. Prepares WOA with CN funds (work after NEPA approval).
 - ii. Adds contingencies.
- b. CPDM
 - i. Prepares FAPA in FATS requesting funds for CN phase and submits FAPA for FHWA approval.
 - ii. Authorizes WOA, upon receipt of FHWA approval.
- c. AFS-PS
 - i. Receives WOA with CN funding.
 - ii. Changes NTP 2 groups to open status and adds federal funding source.
 - iii. Adds Engineering Group feature to work order ("60" on WORD table)
 - iv. Establishes (with CN codes and open status).
 - 1. Non CAPS group(s) specified on EBASE report and/or WOA form.
 - 2. GC03 group(s) for engineering as applicable.
 - 3. CAPS group 90.
 - 4. Adds CN funds to work order.

8F-8 Contacts and Resources

Contacts	Title	Email	Office Phone
Tomi Hume-Pontius	EBASE	HUMEPOT@wsdot.wa.gov	360-705-7456
Jolena Missildine	Design-Build Engineer	MISSILDJ@wsdot.wa.gov	360-705-7548
Stacey Shepard	Federal Aid & WOA Manager	SHEPARS@wsdot.wa.gov	360-705-7138

**8F-9 Code of Federal Regulations
Title 23 – Highways**

Volume: 1 Date: 2013-04-01 Original Date: 2013-04-01 Title: PART 636 - DESIGN-BUILD CONTRACTING

Context: Title 23 - Highways. CHAPTER I - FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION. SUBCHAPTER G - ENGINEERING AND TRAFFIC OPERATIONS.

<https://www.gpo.gov/fdsys/pkg/CFR-2013-title23-vol1/xml/CFR-2013-title23-vol1-part636.xml>

Appendix 8G *Distributing Funds by Apportionment or Obligation Limitation*

Annual funding received from the Federal Highway Administration (FHWA) is split between Capital Programs and Local Programs. The separation of funding relates to both apportionment and obligation limitation.

8G-1 Governor's Advisory Group's agreement on distributing funds

The final determination of the distribution of funding is made by an advisory group of legislators, local government entities and various users of the transportation system. The participants include representatives from WSDOT, as well as other individuals identified by the current Governor.

Two guiding principles have been adopted to support statutory goals of the state transportation system (economic vitality, preservation, safety, mobility, environment and stewardship).

- Protect Washington's share of overall federal funding.
- Leverage federal funds with state, local and private funding sources to maximize the safety, preservation and improvement of the transportation system, including maintaining current levels of investment.

8G-2 Process

At the end of each federal fiscal year FHWA issues an advance notice for the upcoming year's apportionment. In early October, after the Federal Fiscal Management Information System (FMIS) becomes available for use, states are able to see the actual funding received. There are two pieces to this funding, apportionment and obligation limitation.

Apportionment and Limitation are split between three divisions; Program Management (programs I, P and W), Local Programs (program Z) and Planning (programs S and T). The funds are further split within each division for programs such as Recreational Trails, Section 164 (Repeat Offender Penalty) and the High Risk Rural Roads Penalty.

The percentages determined by the advisory committee are applied to the amounts shown on the FHWA notices.

8G-3 Apportionment Distribution (Formula Funds Only)

The states receive the apportionment distribution notice which shows only the core program distribution, it does not reflect the set-asides or programs that are not core programs. This detail is provided months later when the computational tables are received.

To calculate the original distribution the W10A is printed in FMIS. The W10A is the FHWA **Status of Funds** report and indicates the current year apportionment amounts.

The amounts listed on the W10 are transferred to a Divisional Split document. The spreadsheet identifies two classifications for each amount, the amount to be distributed to each division and how the funds will be posted in FATS. This is an important distinction because some program codes are used to calculate a divisional split percentage but are not technically part of the division. As an example Statewide Planning and Research is included as part of the Program Management split percentage but it is posted in FATS

under the Planning division. Likewise, the Metropolitan Planning funds affect the Local Programs split percentage but are posted in FATS to the Planning division.

Currently there are several fund types that require unique calculations.

- In the years that WSDOT is subject to the Section 164 penalty, the amount of NHPP distributed to Program Management is reduced by the amount of the Section 164 penalty. Program Management works with the Washington Traffic Safety Commission to determine an amount of the penalty that will be distributed to their organization. The remaining funds are distributed to Program Management for obligation.
- Surface Transportation Block Grant Program (STP Flex) funds for any area of the state are limited to \$42.2M per year for Program Management with the remaining amount being distributed to Local Programs.
- National Highway Performance Program (NHPP) is limited to \$358.1M for Program Management with the remaining amount being distributed to Local Programs.
- The High Risk Rural Roads (HRRR) penalty is distributed to Local Programs.
- Rail Crossing Hazards and Rail Protective Devices are distributed 100% to Local Programs
- Recreation Trails and the associated 1% admin fee are distributed 100% to Program Management.
- All CMAQ funds are distributed 100% to Local Programs
- Statewide Planning is distributed to Planning division
- Research and Development is distributed to Planning division
- Metropolitan Planning is distributed to Planning division
- STP by population (any funds other than flex or general fund distributions) are distributed 100% to Local Programs
- All TAP funds are distributed 100% to Local Programs
- National Highway Freight funds are distributed based on recommendations from the Freight committee

An example of a completed form follows:

Changes to FFY 2018 Distribution of Apportionment for the month of July 2018		FY2018	No Funds State/Local Split				Split to New Apportionment is Proposed		
			Amount	%	Amount	%	Date	LP	Planning
National Highway Performance Program (NHPP)									
National Highway Performance Program (NHPP)	2000	342,742,263	347,800,725	93.2%	34,941,541	6.7%	347,800,725	30,941,541	
NHPP Withdrawal for Section 164 Penalty	2001	(11,082,868)	(11,082,868)	100%			(11,082,868)		
National Highway Performance Program (NHPP) Grants	2002	11,017,014	10,718,740	93.3%	737,273	7%	10,718,740	737,273	
Surface Transportation Block Grant Program (STBPG)									
STP - Urbanized Areas with Population Over 200K	2200	58,426,200	-	-	58,426,200	100%	-	58,426,200	
STP - Areas with Population Over 5K to 200K	2201	22,117,878	-	-	22,117,878	100%	-	22,117,878	
STP - Areas with Population 5K and Under	2202	(7,221,860)	-	-	(7,221,860)	100%	-	(7,221,860)	
STP - DP-Scenic Bridges	2203	21,830,103	-	-	21,830,103	100%	-	21,830,103	
Surface Transportation Program (STP) Fee	2240	42,200,000	42,200,000	100%	-	-	42,200,000	-	
STP Withdrawal for Section 164 Penalty	2240	-	-	-	-	-	-	-	
Highway Safety Improvement Program (HSIP)									
Highway Safety Improvement Program (HSIP)	2500	24,108,275	24,108,275	100%	-	-	24,108,275	-	
Section 164 Penalty	2501	(11,082,725)	(11,082,725)	100%	-	-	(11,082,725)	-	
Railway-Highway - Hazard Elimination	2540	3,144,572	-	-	3,144,572	100%	-	3,144,572	
Railway - Highway - Protective Devices	2541	3,144,572	-	-	3,144,572	100%	-	3,144,572	
High Risk Rural Roads	2580	3,144,572	-	-	3,144,572	100%	-	3,144,572	
Congestion Mitigation and Air Quality Program (CMAQ)									
Projects to Reduce PM 2.5 Emissions	2000	4,406,100	-	-	4,406,100	100%	-	4,406,100	
Congestion Mitigation & Air Quality Improvement (CMAQ)	2400	32,848,204	-	-	32,848,204	100%	-	32,848,204	
National Freight Program (NFP)									
National Highway Freight Program (NHFP)	2400	14,708,932	14,708,932	100%	-	-	14,708,932	-	
CONC Formula Programs under FDOT Act									
Non Core Formula Programs									
SPR - Planning & Research									
Metropolitan Planning Program	2000	7,138,885	-	-	7,138,885	100%	-	7,138,885	
State Planning and Research (SPR)	2001	10,524,750	10,524,750	100%	-	-	10,524,750	-	
Research, Development and Technology Transfer (RD&T)	2040	3,538,210	3,538,210	100%	-	-	3,538,210	-	
Recreational Trails									
Recreational Trails Program (RTP)	2040	1,847,407	1,847,407	100%	-	-	1,847,407	-	
Return of 2% for STP Administration	2041	18,803	18,803	100%	-	-	18,803	-	
STBPG									
STBPG (Transportation Alternatives Program (TAP) Fee)	2300	5,136,071	-	-	5,136,071	100%	-	5,136,071	
STBPG (TAP - Urbanized Areas With Population Over 200K)	2301	3,308,065	-	-	3,308,065	100%	-	3,308,065	
STBPG (TAP - Areas with Population Over 5K to 200K)	2302	1,713,809	-	-	1,713,809	100%	-	1,713,809	
STBPG (TAP - Areas with Population 5K and Under)	2303	975,897	-	-	975,897	100%	-	975,897	
Total Distribution									
		702,171,779	692,269,790	93%	279,901,980	98%	638,236,790	272,266,487	21,540,493

8G-4 Limitation Distribution

In general, an entire year of obligation limitation is released on October 1. However, if the federal government is working under a Continuing Resolution (CR) there will be multiple distributions of limitation throughout the year. Each distribution will contain funding for a specified number of days and is a pro-rated portion of the anticipated annual amount. The split of formula limitation is decided by the steering committee mentioned above.

Formula limitation is currently distributed as follows:

An amount of limitation equal to the apportionment received for State Planning & Research, Research Development and Metropolitan Planning is distributed to the Planning Division. An amount of limitation equal to the apportionment received for Recreational Trails and the associated 1% penalty is distributed to Program Management. Additionally, Program Management and Local Programs receive limitation equal to the amount of National Highway Freight Funds received. All of these funds are considered “off the top”. Once these are reduced from the total limitation received, the remaining funds are distributed based on the percentages determined by the aforementioned steering team.

The remainder of the limitation is distributed to Program Management and Local Programs at the percentage identified by the steering team. As additional distributions are made the funds are split to provide limitation for the Freight funds with any remainder being between Program Management and Local Programs.

Section 164 limitation is distributed entirely to Program Management and High Risk Rural Roads limitation is distributed entirely to Local Programs. These amounts are included in the overall percentage for each division and are not in addition to the percentage split.

Distribution of FAST Act Formula OA for period of 10/1/17 - 9/30/18				
As Posted in FATS				
				Current Distribution
OA for All Entities				115,726,464
	Planning & SPR			(21,592,494)
	Rec Trails			(1,886,270)
	NHPP OA			(1,411,594)
	Redistributed OA			-
Amnt Subject to Divisional Split				88,835,106
PM				55,966,285
	NHPP OA			982,198
	Rec Trails	Rec Trails		1,886,270
Total PM				58,815,215
Local Programs				22,869,350
	NHPP OA			2,429,396
	Redistributed OA			
Total LP				35,298,755
Planning				21,592,494
Grand Total				115,726,464

\$115,132,140 was received for Formula OA & 5594,324 was received for High Risk Rural Roads - a total of \$115,726,464

We have received approximately 15% of the OA - 69/365

PM received approximately 28.70% of NHPP apportionment 5,709,979/20,039,911

63.0%

27.0%

Appendix 8H *Implementing a Rescission*

A “rescission” is legislation enacted by Congress that cancels the availability of contract authority before that authority would otherwise expire. A rescission of funds does not affect obligation limitation.

There are two components to federal funding, budget (or contract) authority and obligation limitation.

“Contract Authority” is governmental budget authority that authorizes a government agency to incur obligation before the associated appropriation has been passed or to exceed an already passed appropriation amount. For the Federal Highway Administration (FHWA) this means that all funds that are authorized from the Highway Trust Fund (HTF) are available for obligation on the date of their apportionment or allocation or on October 1 of the fiscal year for which they are authorized, whichever comes first.

Contract Authority is not cash; it is funding that the Federal government, on behalf of a State, obligates to a given project. Once this obligation is made the Federal government is legally bound to pay the obligation when a bill is received. Contract Authority may not be used without Obligation Limitation.

“Obligation Limitation” is a limit, or ceiling, on the total obligations that can be incurred during a year. This limitation does not affect the scheduled apportionment or allocation of Federal-aid highway funds after they are authorized. However, by limiting the obligations Congress may prevent FHWA from making a promise to pay, eliminating the need for subsequent payment.

Historically, the amount of Contract Authority has exceeded the amount of Obligation Limitation. The result is a carry-forward of Contract Authority that will continue until the funds are either used, lapse or expire. The implementation of a rescission cancels the availability of these funds prior to when they would normally lapse or expire. A rescission does not directly affect spending because states are able to continue to obligate funds as long as Obligation Limitation is available.

Another issue that impacts the available Obligation Authority, and by default the Contract Authority, is the August Redistribution process. August Redistribution is a statutory process that allows FHWA to redistribute any obligation limitation that a state cannot obligate by the end of a given fiscal year to other states that can, by the year-end deadline, obligate more than their initial share of limitation. States that receive Redistributed Obligation Limitation reduce their carry-forward balances of Contract Authority. Generally, the funds that are carried forward are the more restricted funds, which can be more difficult to obligate.

In general, the amount of a rescission will be split proportionately among the states based on their share of the nationwide total of unobligated balances of funds. In some cases, Congress may protect certain federal programs from the rescission. Once notice of a pending rescission is received, the state will attempt to minimize balances in the federal programs that are subject to the rescission.

Within a short period of time following the rescission, FHWA issues a notice to all of the states that identifies the amounts rescinded by program code. These rescinded amounts are distributed between the three WSDOT divisions in the same way that the initial apportionments were made.

9-1 Introduction

The Capital Program Development and Management Division (CPDM) is responsible for overseeing the transparent delivery of the capital program and projects. To deliver programs effectively, CPDM staff need to be able to react and communicate in a timely manner on project changes and trends as they unfold.

In addition to providing project expenditure variance explanations through legislatively-directed reports, other WSDOT offices work closely with, and benefit from, the change management functions. The Headquarters' Budget and Financial Analysis Office produces the Quarterly Financial Report, which tracks commitments made to the Governor and the State Legislature. The report compares actual expenditures made by the agency to expenditure authority provided in the legislative budget. Variances between planned and actual dollar expenditures must be explained by program. CPDM provides those explanations from Transportation Executive Information System (TEIS) Change Management (CM) notes. Depending on the explanation, the agency may be required by the Office of Financial Management (OFM) to place funds into an "unallotted" or "reserve" status.

Managing project level changes for scope, schedule and budget begins once the projects are programmed in the Project Delivery Plan. Project managers or project engineers are responsible for delivering their projects according to the scope, schedule and budget as committed by the Legislature or defined in the project delivery plan. Adjustments to project scope, schedule or budget are sometimes required for reasons including, but not limited to:

- Emergent/Emergency needs.
- Changes in federal or state revenue levels.
- Changes in permitting or regulatory requirements.
- Previously unknown site conditions.
- Unpredictable fluctuations in cost of materials.
- Opportunities or risks materialize on a project.

For more information on the method for adding a programmed project for project delivery, see [Appendix 9A](#).

The Change Management process documents the change, the reasons behind the change, and memorializes the decisions. In order to deliver the program and projects, staff in the Region, modes and CPDM work together to manage, ensure compliance, and transparency of project changes.

Another important aspect of managing project change is to accurately and concisely document the history of a project, specific to scope, schedule and budget. CPDM is responsible for collecting and documenting this history, and for enabling quick and easy access to the story. While documenting a project's history is considered an industry best practice, it is also required by proviso in the legislative Transportation Budget.

This chapter explains the principles and practices used by the agency to monitor change, document and review change, and control change at the program and project level. A working knowledge of the content of this chapter will be valuable to project managers, Region and Headquarters' program managers, and CPDM managers and their staff.

CPDM oversees CM to provide department-wide consistency and to coordinate approval by the appropriate authority. CPDM also coordinates the exchange of information with the Office of Financial Management (OFM), the Governor's office, and legislators and legislative staff on project and program issues related to change.

The Change Management Threshold, Workflow, and Communication documents are in the appendices at the end of this chapter.

9-2 Managing Change

A reality of project management is that change is expected and projects will need to be modified. Change management is necessary because projects seldom develop exactly according to plan. CPDM's role in the CM process deals largely with the review, approval and documentation of changes.

CPDM seeks to control and manage change responsibly using a structured change approval process. The process is hierarchical. Larger and more significant changes—in terms of cost, schedule and scope changes—require a higher approval level.

For WSDOT projects, smaller changes may be approved by the project team or Region management. More significant changes must be approved by Headquarters' management or the Director of OFM, or the Legislature, depending on the change and approval authority.

For examples of change control scenarios, see [Appendix 9F](#).

9-3 Role of the Legislature

The Legislature provides project funding in the Transportation Budget and accompanying project lists. Projects are funded as groups of projects—called 'programmatic investments'—or as individual line-item projects. Projects designated as Transportation Partnership Account ([TPA](#)) and Connecting Washington ([CW](#)) projects are budgeted as line-items. The remaining projects, designated as Pre-Existing Funds (PEF) projects, usually receive programmatic appropriations in the transportation budget. A few PEF projects may be named in the budget bill (in a provision or proviso). The proviso may dictate that a certain portion of the programmatic appropriation is provided solely for a designated project.

When projects receive funding through a proviso, that level of funding by fund source is reserved in the program's appropriation for that purpose. OFM will establish an Expenditure Authority code for the proviso by fund type. This authority serves as a minimum level of funding. There may be occasions where the agency decides to supplement the amount specified by proviso. Projects budgeted as line-items are subject to special change management requirements stipulated in the budget document requiring approval of the change from OFM or the Legislature.

9-4 Role of the Project Manager

A primary responsibility of the project team, the project manager, and the division or Region program manager is to identify and communicate anticipated and actual project changes. Communication forums, management systems, analytical tools, reports and processes should be used regularly to provide timely and accurate change notification.

Several types of changes may affect a project. Among them are changes in scope, technology and tools, and timing and schedule. The primary changes which are monitored and controlled by CPDM are categorized as scope, schedule or budget changes. All three are interconnected. A change to any one component of this three-sided triangle impacts at least one other side. The analysis of a change must explore the impact to all three aspects of this “trade-off” triangle.

Threshold levels are used to manage the flow of information and to ensure that meaningful project changes have been documented. If a change threshold is exceeded, the action taken in response to a change must be documented and presented to CPDM.

Change thresholds are defined in terms of the magnitude of a scope, schedule or budget change. The proposed action is documented in the Capital Program Management System (CPMS) on the WX and PX screens. If the change exceeds the regional threshold level, the Region will notify CPDM, and CPDM will approve and document the change in accordance with the change management process.

Program managers at the Regions, Modes, and Headquarters conduct monthly and quarterly reviews to analyze current project delivery and expenditure plans relative to budgetary appropriations and financial plans.

Project managers are encouraged to be prepared for change by forecasting potential change, identifying contingency plans, and establishing a resolution and implementation process. Project managers are responsible for developing a project management plan in accordance with the Secretary’s Executive Order [E 1032](#).

Two main elements of the project management plan are the risk management plan and the change management plan. Good planning requires consideration of those risks, which cause change and change response strategies.

- Risk management plans identify in advance the steps to take to avoid or minimize adverse risks and capitalize on acceptable opportunities.
- The change management plan documents how project teams will identify, quantify, approve, and report changes to the baseline (scope, schedule and budget). CPDM is an advocate of a well-defined change management plan consistent with the policies and procedures put forth in this chapter and elsewhere in WSDOT project management guidance. For more information on baseline changes, see [Appendix 9E](#).

When change occurs, project-specific alternative strategies should be evaluated in accordance with the project’s risk management plan and documented for review and approval, keeping Practical Design solutions in mind. If alternative strategies are available, the best solution would be one which optimizes the cost, schedule and scope equation within the limits of the commitments described above.

A project change must also be evaluated in terms of scope, schedule and budget commitments to the public and the Legislature. In evaluating change, it is important to understand the specific nature of the commitment made when the Legislature approved the transportation budget.

Communication between Regions and CPDM is crucial in understanding the commitment. Because of its direct involvement in the budget development process, CPDM may have insight into the particular legislative expectation. For some projects, the commitment is a fixed investment amount, which is used by the agency to achieve maximum benefit. For example, a fixed dollar amount may be provided to install cable median barrier on the interstate system, or to widen as much of a section of roadway as possible.

In most cases however, the commitment is to accomplish a specific scope of work. The dollar amount and approved schedule are what the agency estimates is needed to accomplish that approved scope. Within the limits of the approved scope, individual design elements of a project may be modified by the project team, subject to review by CPDM staff. The basic project functionality as described in budget support documents must be preserved. Neither more nor less scope than is included in budget documents is expected.

For descriptions of roles and responsibilities in determining programmatic changes, see [Appendix 9B](#).

9-5 Role of the Regional and Modal Program Management

9-5.1 *Communicating Change*

An early step in identifying and communicating change is to show how the cost, schedule and scope are impacted by updating the Capital Program Management System (CPMS).

If the change requires a higher level of approval, in addition to updating CPMS and documenting the reason the change was necessary, the following is to be done:

- Discuss the change with those responsible for giving approval.
- Decide on the appropriate course of action.
- Document the approval of the decision from the responsible parties.
- Distribute the documented decision by attaching it to a CM note in TEIS and submitting it.

9-5.2 *Documentation of Changes*

Change history in CPMS does much of the hard work in documenting what changed. The change management notes in TEIS serve a similar function by showing what has changed since the Last Approved project information, which includes all changes and approvals up to that point.

A comprehensive note should allow department staff to reconstruct the project history. Change management notes should answer four questions:

- What has changed?
- Why did the change occur?
- What is the result of the change?
- How does the change affect other aspects of the work?

For more information about preparing notes, see [Appendix 9D](#).

9-5.3 Role of CPDM Division

CPDM receives notification of a project change from the regional project manager, or a Region's or division's program manager. CPDM coordinates with the Region to review and approve project changes that ensure program and project delivery. Updated project information is stored and changes are tracked to compare trends that may help to recognize future changes.

Our guiding principles are early notification and transparency in reporting and managing change. CPDM will contact Region program managers if CPDM staff notice variances from the baseline plans for cost, schedule and rate of expenditure. Standardized change approval policies and processes create uniform expectations, encourage consistent documentation, and expedite the review and approval of change.

The approved TEIS change management note provides positive and formalized feedback. It is formal documentation of change approval and notification to proceed with implementation or to modify the change management plan.

If a project change is rejected or modified, it is done so to maintain the integrity of the budget, scope or schedule, as WSDOT has committed to the Legislature. In these cases, the decision-maker determines that the negative impacts to scope, schedule or budget outweigh the benefits of the change. These measures foster confidence and respect from our external customers—most notably the Legislature and the state's taxpayers.

The change management process provides Headquarters' executive management with oversight (through CPDM) of project development. The process ensures that WSDOT complies with budget requirements (appropriations, provisos, etc.) imposed by the Legislature. The Director of OFM approves cash flow changes to [TPA](#) and [CW](#) projects per proviso (historically, section 601 or 603) of the Transportation Budget bill. OFM keeps the Legislature informed of cash flow transfers by coordinating with legislative staff members. These decisions are documented in TEIS by change management notes.

9-6 Measuring Change

9-6.1 Key Terms

Active Delivery – A project is in Active Delivery when any of the PIN's phases have the approval code A, C, L, S, X or Y. These are the approval codes that allow a work order to be authorized in CPMS. Once any phase of the project has any of these approval codes, the whole project is considered to be in Active Delivery. This applies to PINs as well as project BINs.

Last Approved – The TEIS version LAPR is used to store WSDOT's Last Approved scope, schedule and budget so we can measure project changes. A project is added into LAPR when it has been programmed in the Project Delivery Plan. LAPR is updated only when a change is documented and finalized within the CM process.

Current Plan – CPMS production is used to show the current project plan. A summarized copy is made nightly and placed into TEIS as the version "CURR-DM."

9-6.2 Optimal Timing

To maintain transparency and accountability, it is best that change be identified before it happens—in the case of discretionary changes—or immediately after happening, in the case of non-discretionary changes. This assures that no time is lost when responding to change, and available recovery options are maximized.

Optimally, a change is identified and analyzed by the project manager. Region or division management is informed and, upon concurrence, agrees to enter the change into CPMS. Management at Headquarters is informed of significant changes through a variety of reporting processes including verbal or email notifications; printed reports generated daily, monthly, and quarterly; project status meetings held monthly or quarterly; and by means of the TEIS CM process.

Change requests will be on hold until approval is obtained. Regional change requests should be processed quickly so as to function as the approval mechanism and to facilitate decision-making by management. Change requests are structured to ask and answer questions critical to a well-informed decision.

For more information, please see the Change Management Threshold Table in [Appendix 9C](#).

9-7 Line-Item Budgeted Projects versus Program Budgeted Projects

Differences exist in change management between projects funded with line-item budgets and projects that are funded at the program level. The key difference between line-item budgeted and programmatic funded projects in terms of CM process approvals is the level of approval required. An increase to line-item budgeted [TPA](#) and [CW](#) projects of more than 10% or \$250,000 (whichever is less) must follow the process directed in the transportation budget in addition to the regular CM process.

Not only must the proviso process be followed for changes to a line-item budgeted project, but the reallocation of any resources resulting from a cost under-run on a line-item budgeted project must also be approved by OFM or the Legislature. In contrast, WSDOT may reallocate resources among projects funded at the program level.

9-8 Impact of Project Level Changes at the Program Level

The Legislature appropriates funds to the department either at the program-level or project-by-project. For non-line-item projects¹, CPDM is responsible for managing change at the program level as well as at the project level. CPDM may need to make changes to project schedules or budgets to manage the program to the available budget.

Scope, schedule and cost changes at the project level can change the expenditure plan at the program level. Program-level impacts result from project-level changes when:

- Program expenditure plans exceed the appropriation (over programmed).
- Program expenditure plans fall below the appropriation (under programmed).
- Program expenditure plans use less than 100 percent of the federal allocation.
- Program expenditure plans do not balance to appropriated fund sources.

¹ Line item projects are usually [TPA](#) or [CW](#) projects. Some [TPA](#) and [CW](#) projects are grouped and budgeted as a single item—a project BIN. Non-line-item projects are grouped in programmatic BINs and are managed as a program by WSDOT.

- Total Preconstruction Engineering or Right of Way phase actual expenditures are below planned expenditures for the program.
- Actual program expenditure rates compared with historical rates indicate problems.
- Actual projects advertised in a quarter do not match planned advertisements for the program.

Sometimes, modifications are implemented at the project level to manage change at the program level. Adjustments to scope, schedule and cost may be required.

Program-level expenditures are monitored through reports generated by CPMS, TEIS, and other program management systems. These reports track expenditure plans by fund type and compare them to total fund type appropriations in the program to alert CPDM to variances requiring attention.

9-9 Appendices

Appendix 9A	Implementing Programmatic Change Management
Appendix 9B	Line-by-Line Explanation of Category Uses
Appendix 9C	Business Reason for a Last Approved (LAPR) project list
Appendix 9D	Change Control Scenarios

Appendix 9A *Implementing Programmatic Change Management*

9A-1 Context

The capital program at WSDOT is very large. The 2017-19 Biennial Appropriation for WSDOT totals \$6.3 billion¹. Nearly 70 percent of those funds are for capital projects. The ten-year Project Delivery Plan (PDP)², upon which the 2017-19 Biennial Budget is based, includes about 2,900 individual capital projects. Eighty-one percent of these projects are highway projects³. The ten-year cost for the 2017 Project Delivery Plan is approximately \$17.8 billion. Individual projects range in size from hundreds of thousands of dollars for simple repaving projects to billions of dollars for large projects, such as the Gateway Project. The nature of the capital projects in the Project Delivery Plan are similarly diverse, spanning everything from preserving the condition of existing roadways and ferry terminals, to constructing new urban interchanges, bridges, and ferries.

With a program of this magnitude in size and diversity, project management methods and challenges are likely to be similarly diverse. Generally, when programming a project the department sets an initial scope, schedule, and budget estimate. The project schedule and budget usually span multiple biennia. WSDOT assigns staff project management responsibility for completing projects within the scope, schedule, and budget levels. WSDOT establishes a project budget consistent with the external funding decision, but the estimate for the cost of delivering the budget is refined with greater precision during the course of the project. When the department determines an adjustment to a project's scope, schedule or budget exceeds established thresholds, a "Documenting Project Change Process" is used to request adjustments. These adjustments must be evaluated in the context of delivering the entire highway construction program. Individual project changes must be reviewed and approved or they may lead to the loss of federal funding, create possible construction fatigue, require funding that is not available, result in the delay of higher priority work, prevent the department from meeting legislative expectations, misalignment between investments made and desired performance outcomes, etc.

9A-2 Business Need

The department uses its program management systems to communicate project status with regard to scope, schedule and budget. This reporting relies on the latest approved project information. The detailed information used and reported by project engineers to control resources, status of activities and deliverables, and to produce forecasts of schedule and cost performance serves as the foundation of higher level reporting. Details of the changes developed by the project engineers and program management staff and rolled-up into summary level reports is provided to executive management, the Office of Financial Management, Legislative Transportation Committees, and to the public. These reports should:

- Provide a current perspective of project status;
- Provide accurate budget and schedule information;

¹ ESSB 6106, 2018 Transportation Budget

² Transportation Executive Information System (TEIS) version 17PLAN01

³ Programs I and P

- Provide information on the root cause of project delivery issues;
- Be informative for a variety of internal and external audiences;
- Standardized to ensure that information is timely, transparent, accurate, and consistent;
- Use clearly defined and easily understood metrics that reflect WSDOT project delivery values;

9A-3 Business Process

Currently, WSDOT's change documentation process relies on a table that identifies the approving authority based on fiscal or schedule thresholds. These are typically set at levels necessary to satisfy external reporting requirements and requirements in provisos, such as ESB 5096, Section 601 that permits cash flow transfers under limited circumstances. WSDOT has relied on the threshold table to ensure that the program satisfies external reporting requirements and to deliver the entire program within legal spending limits. The change documentation process allows the department to satisfy its fiduciary and reporting responsibilities without creating an unnecessary burden on either region program management or CPDM.

Documenting a project change consist of two components: (1) Projects that are not in Active Delivery (Planning/Programming) and (2) Projects that are in Active Delivery (Project Delivery). The following threshold table describes the level of approval and documentation required for changes on projects.

Approval Required	Last Approved (LAPR)	Programmed Project not in Active Delivery ¹
PEF Projects		
Scope ²	Project Delivery Note Approval if the proposed scope addresses a different "need."	Planning/Programming Note if the proposed scope addresses a different "need."
Schedule	Project Delivery Note Approval if the change delays the project by a construction season.	Planning/Programming Note if the change delays the project by a construction season.
Budget	Project Delivery Note Approval if cumulative change is greater than \$500,000. ^{3, 4}	Planning/Programming Note ⁵ if cumulative change is greater than \$500,000. ⁴
Revenue Package Projects (Nickel, TPA, CW)		
Legislative Scope	Project Delivery Note Approval ⁶	
Schedule	Project Delivery Note Approval	

¹ Programmed projects that have not yet been approved for Active Delivery (S Approval Code)

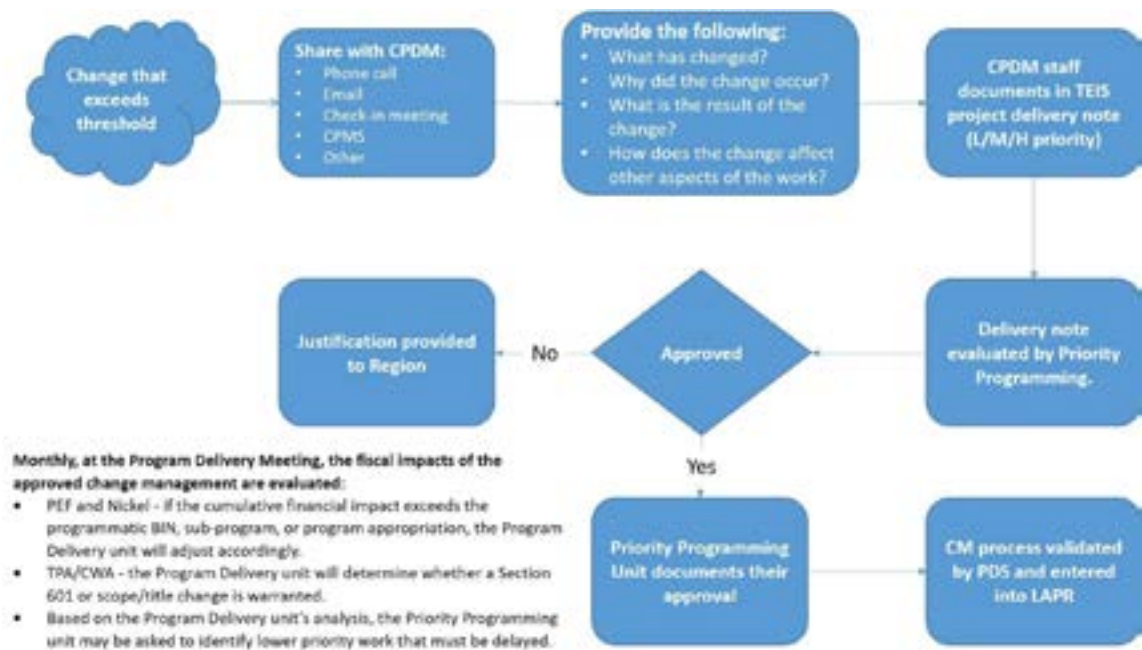
² As defined by the approved Project Summary

³ Increases on projects that are considered a fixed investment requires approval

⁴ Change in current biennium cash flow or in total project cost

⁵ May effect prioritization

⁶ CW scope changes are pursuant to RCW 47.01.480 (1)(a). Scope changes require Legislative action



9A-4 Change Management Documentation

Change management documentation consists of sufficient information to approve the change. These notes are identified as Project Delivery Notes if the change occurs on a programmed project that is being delivered (S approval code) and Planning Programming Notes that document changes on projects that are programmed, but not approved for design, right-of-way, or construction funding.

1. Project Delivery Notes are reviewed by program management staff and if approved are reflected in LAPR. These changes are reflected in the Project Delivery Plan, budget proposals, and external reporting.
2. Planning/Programming Notes are not included in LAPR. However, if approved these changes will be included in the department's Project Delivery Plan and budget proposals.

Change management notes will be copied into TEIS by CPDM staff and documented in the appropriate TEIS Project Note Category. The category of note selected depends on whether the change being documented breaks a threshold.

Description of the two types of Change Management Notes:

- **Planning/Programming Note:** This note is placed in the TEIS Project Note Category: Planning/Programming, Sub-Category: Planning. *Submitting a Planning/Programming Note does not constitute approval.* This note should be one paragraph in length and follow the PX Note Guidance. If the change is the result of actions taken by CPDM or the Legislature (e.g. annual update to Project Delivery Plan, budget adoption, re-prioritization, etc.), CPDM staff will enter the Planning/Programming note in TEIS. Regions will be notified to update CPMS to align with the change.

- **Project Delivery Note:** This type of note is placed in the TEIS Project Note Category: Project Delivery, Sub-Category: Change Management. This note should be no more than one paragraph with supporting documentation, if necessary. If the change is the result of actions taken by CPDM or the Legislature (e.g. annual update to Project Delivery Plan, budget adoption, re-prioritization, etc.), CPDM staff will enter the Project Delivery note. Project Delivery notes are primarily used with Active Delivery projects in the current biennium with the following thresholds:
 - Nickel, TPA, and CW projects
 - Scope, schedule, and budget changes are pursuant to RCW 47.01.480 (1)(a) and ESSB 6106, Section 601
 - Pre-Existing Funded (PEF) projects
 - Scope – Change in “need” being addressed.
 - Schedule – Delay by more than a construction season.
 - Budget – Current biennium cash flow or total project cost changes more than \$500,000.

9A-5 Change Management Documentation

The note should allow department staff to reconstruct the project history (or if you were relatively new to the project and needed to know some background). Please use the following guidelines/examples in documenting cost/schedule/scope changes in CPMS (PX or WX screen), via an email, phone call, or monthly check-in meeting. The guideline will help provide sufficient detail to describe what has changed and the reason for the change. Change management notes should answer four questions:

- What has changed?
- Why did the change occur?
- What is the result of the change?
- How does the change affect other aspects of the work?

Please use upper and lower case for the comments and enter the comments sequentially by date with the name (not initials) of the individual entering the comments.

Example Change Management Documentation:

Cost Changes: In documenting cost changes, note both the change to the uninflated estimate (\$x) and the inflated estimate (\$y).

Cost change and design element change. Total project uninflated cost increase of \$3.8M. Preliminary engineering increased by \$200,000 (actual) to add the roundabout and new traffic signal to the design, additional utility coordination costs with PSE and higher permitting costs for the new mitigation site. Right-of-way (actual) increased by \$600,000 as the last parcel went to condemnation to acquire. The uninflated construction estimate increased by \$3,000,000 due to the addition of the roundabout, new traffic signal and widened sidewalks. Finally, inflation increased the construction estimate by \$700,000 for a total project cost increase of \$4,500,000.

Schedule Changes

Schedule change. The operationally complete date was delayed five months, from 5/1/2010 to 10/1/2010, due to toll facility constructability issues and unexpected ground water issues, which delayed the contractor's schedule. This delay does not affect the estimated cost at completion.

Scope Changes: If a scope change results in cost changes, the change would normally be documented as cost change as noted in the above cost change example. However, if a scope change results in no net cost impact, it should be documented as follows:

Scope change. Adding a new two way left turn lane with sidewalks and a new sidewalk from SR 306 to NE Barklay Street to accommodate revised traffic estimates in design year. The milepost limits were extended to include the new sidewalk work. This additional scope can be constructed within available CN funding.

9A-6 Change Management Note in TEIS (Responsibility of CPDM Staff):

The project story should be a concise and fact-filled narrative, providing a summary of each project from inception in the Project Delivery Plan through project closeout. The project story is intended to be CPDM-centric – that is, not intended to capture specific design or construction information such as cubic yards of fill, roadway widths, permit conditions, etc. However, it can be linked to sources that can provide this information. If it is necessary to document the story. It should capture relevant information regarding need, scoping, budget process, legislative intent, funding, milestones, progress, delivery issues (“root cause”), change management, and schedule, scope and cost performance. This information should be written so that it is understandable by internal and external audiences, and free from jargon and acronyms. It should be written using commonly accepted terminology, so that searching and reporting will be productive and comprehensive. When relevant, the project story should include attachments such as maps and other documents, and utilize links to other systems such as the Project Summary database.

From the project story, we should be able to capture the information needed for proviso reports and explanations, Watch List highlights, variance explanations for PMRS external reports, project benefits, etc. Eventually we would like to utilize the information in the project story to document and approve changes before they are incorporated in the Project Delivery Plan or the department's budget submittal.

The TEIS notes module allows categorization of notes using categories, tags, and priorities. In addition to selecting a category and sub-category, the user can check one or more of the check boxes to further “tag” the notes for later sorting or reporting, as well as select high, medium, or low priorities. To use the notes function. The process to document project information:

1. Select a TEIS version (notes are “associated” with a version, but are visible from all versions when appropriate permissions are set)
2. Select a project
3. Select the Notes icon on the tool bar (yellow notepad)
4. Once you are in the new Notes Console screen, select “Add Note”

5. Type in a note title that indicates the nature of the note in 72 characters or less and that will allow a quick browse to see if the reader wants to look further. This field is also searched using the search functionality found on the Notes Console screen. Examples of a notes effectiveness:
 - Good: “Reduced total project cost at award by \$550,000.”
 - Not so good:” Project cost adjustment”.
 - Worse: “Dec. \$45,312 per Thanh’s e mail”
 - Not useful: “\$45,312 reduction”
6. Select a category from the pull down menu.
7. Select a sub-category from the pull down menu. Remember that the sub category and the check boxes will be used to sort, search, and report, if reportable. The sub-category is used to determine the default group of individuals if an e-mail is being sent from the Notes Console screen.
8. Select a note priority (High, Medium, or Low). This priority is used within CPDM to determine who within CPDM will be responsible for reviewing the notes. High priority notes will be provided to the Director, while medium priority notes will be reviewed regularly by managers. Low priority notes are not regularly reviewed. The table in this document shows the default priority for each sub-category. On occasion, a priority higher than what is shown in the table may be used. This is left to the discretion of the individual entering the note.
9. Write your note in complete sentences. Abbreviations are discouraged. Always consider the audience, including those not familiar with the WSDOT acronyms, shorthand, etc. Does the note contribute to the readers understanding of the project? In the case of a note that is marked “reportable” – would this note be appropriate if reproduced verbatim on a public web page or report?
10. Close and choose save. You do not need to add your name, date, or version to the note as all of these are automatically recorded when you save the note.
11. Before you close the “Project Note” box, select the appropriate permissions. If you do not do this, the default is “Private” and the note is only available to its author.

These features will greatly increase the utility of TEIS notes, both for selection of particular types of information, and for assembling the project story. The example table below is filled in to show one possible scenario of notes at a particular point in the life of a project. The example is not intended to cover every possibility – additional training will be provided to cover further needs.

TEIS Project Note Structure:

1. External Reporting

a. Anticipated Project Benefits	f. Gray Notebook
b. Change Orders over \$500K	g. Inclusion Explanation
c. Contractor	h. Project News
d. Exclusion Explanation	i. Project Update
e. Explanation of Variance	j. Watch List

- 2. General
 - a. General
- 3. Planning/Programming
 - a. Basis of Estimate
 - b. PAF
 - c. Planning
 - d. Project Summary
 - e. Scoping
- 4. Program Delivery
 - a. Bike-Ped-Transit Benefit
 - b. Budget Development
 - c. Budget Impact
 - d. Funds Management
 - e. Work Order Authorization
- 5. Project Delivery
 - a. Change Management (Project Change Request)
 - b. Delivery Information (Scope, Schedule, Budget)

Appendix 9B Line-by-Line Explanation of Category Uses

Line-by-line explanation of category uses, who in CPDM enters notes, and examples of notes

CATEGORY SUB-CATEGORY	Scope	Schedule	Budget	Reportable	Priority	Version	Author	BIN/PIN	Summary	Example
General										
General							C	B/P	To be used only if other sub-categories do not fit.	
Program Delivery										
Bike-Ped-Transit Benefit				X	L	C	PrD	P	This note indicates the amount expended on a project that benefit from Bike-Ped-Transit. This is a proviso requirement from Sec 606.	Local Programs provides information to paste in.
Budget Development	X	X	X		M	C	PrD	B	Used for any note that is relevant to budget development, but not necessarily for changes to project budget.	“This project was proposed in the 2017 budget request, but denied because of legislative interest in other safety projects. Recommend proposal in 2018 submittal.”
Budget Impact	X	X	X		M	C	PrD	B	Documents where a budget related decision was made. This may include changing project finance lines due to budget constraints.	“Converted to 100% State funds. Project cannot make it into the STIP in time for project advertisement. Approved for conversion to 100% state funds to keep project delivery on track. There are currently state funds available in the Intersection and Spot Improvements BIN to accommodate this request.”
Funds Management			X		M	C	FM	P	Used for any note that involves funds management.	“This project is funded from the TPA for construction in 2023, but would qualify for federal funds. If funding were available, the project could be ready to advertise in 2019, for construction in 2020.”
Work Order Authorization			X		L	L	FM	P	Would be checked if the note involved any aspect of WOA request or approval.	“WOA approved with revisions to indicate proper award amount.”
External Reporting										
Anticipated Project Benefits				X	L	L	PP	P	Category checked and note entered by Priority Manager, explaining the anticipated project benefits for use in external reporting.	“This project will a fish barrier through the replacement of the culvert.”
Change Orders over \$500K			X	X	H	C	PD	P	Indicates a change order over \$500K has issued for the project. This is a proviso requirement from Sec 612.	“12/7/2016 - Change Order No. 003 “Additional Concrete Panels PTI” http://www.wsdot.wa.gov/publications/fulltext/construction/changeorders/8918_CO_3_Redacted.pdf ”
Contractor				X	L	L	FM	P	Category checked and note entered by WOA staff, naming the contractor at award	“Low bidder: Tri State Construction 2nd low bidder: Tucci and Sons 3rd low bidder: PNW Contractors”
Exclusion Explanation				X	M	L	PD	P	Indicates a project’s manual exclusion in the External Reports Systems. The project note is documented to explain when, through the project filtering assumptions, it would normally be included.	“Project is excluded from external reporting while details of the issue affecting delivery is confirmed.”
Explanation of Variance				X	L	L	PD	B/P	Checked if there is a variance, explaining the variance for use on 306/307 report. If reportable checked, this note would populate the 306/307 report.	“Construction cost increased since last report due to heavy winter rainfall, delaying installation of culvert.”
Gray Notebook				X	M	L	PD	B	Indicates the Watch List that was published in the Gray Notebook.	Cut and paste actual watch list text verbatim from Gray Notebook.
Inclusion Explanation				X	M	L	PD	B	Indicates a project’s manual inclusion in the External Reports Systems. The project note is documented to explain when, through the project filtering assumptions, it would normally be excluded.	“This project is included at the request of the SCR Communicators because the project was not in active delivery (outside of the normal process) and a web page was created by Communications for the Public Open House on 10/1/2017”
Project News				X	M	L	PD	P	Capture specific project related press news releases sent out by WSDOT Communications for display on the External Reports System online.	“Southern mile of AWV demolished six months early – 6/3/2011”
Project Update	X	X	X	X	H	L	PD	P	Concept is that PDS’ or others would write project update e mail to Director, CPDM. If approved as project update, PDS would paste the note here, checking appropriate subject matter check boxes. Upon approval of the Director, CPDM, the reportable box would be checked, and the update will be automatically posted to PMRS External Reports.	Example: After talking to region program management staff...”This project is in design. There is a potential schedule delay and cost increase because WSDOT has determined the existing paint coating has deteriorated to the point that it has to be completely removed before the bridge is repainted.” When is it is not a delivery issue related to a specific scope/schedule/cost change: “WSDOT was contacted by a property owner in the SW corner of the SR40, Rio Bravo/Layla Boulevard Intersection about the encroachment of some of the newly constructed roadway elements on their property. Upon an examination, WSDOT determined that the SR 40, Pearson to I-5 project installed CCTV cabinets on this private property. Additionally WSDOT found that the curb, gutter, sidewalk, and a portion of the right turn lane may also be on the private property. WSDOT is currently evaluating how to address this issue.”
Watch List	X	X	X	X	L	L	C	B	Watch List items are cut and pasted here only after approval for monthly publication	Cut and paste actual watch list text verbatim.

CATEGORY SUB-CATEGORY	Scope	Schedule	Budget	Reportable	Priority	Version	Author	BIN/PIN	Summary	Example
Project Delivery										
Change Management (project change request)	X	X	X		M	L	PD	P	This would be checked if the note provided information concerning project progress or problems necessitating change management. Likely used in conjunction with other check boxes such as scope, schedule, budget, or design element change.	Copy PX Note: A good example of a PX Note is...”This project is in design. After further traffic analysis and public involvement, the design has been revised to construct a roundabout instead of a signalized intersection to allow more efficient traffic movement at the intersection of 8th Street and Marysville Road. Right of way costs have increased as the last parcel had to be acquired through condemnation. To accommodate these changes, the advertisement date has been delayed 4 months and the estimated cost to complete has increased by \$2.5 million. The advertisement delay should not impact the planned operationally complete date.”
Delivery Information (scope, schedule, budget)	X	X	X		M	L	All	P	This would be checked if the note provided information concerning project progress or problems, but does not cross a change management threshold.	After conversation with region program management staff...”WSDOT was contacted by a property owner in the SW corner of the SR 40, Rio Bravo/Layla Boulevard Intersection about the encroachment of some of the newly constructed roadway elements on their property. Upon an examination, WSDOT determined that the SR 40, Pearson to I-5 project installed CCTV cabinets on private property. Additionally WSDOT found that the curb, gutter, sidewalk, and a portion of the right turn lane may also be on the private property. WSDOT is currently evaluating how to address this issue.”
Planning/Programming										
Basis of Estimate			X		L	C	PP	P	Used for any note that applies to the project estimate, or to estimating.	”Planning Level Estimate prepared 1/2/2018 by John Doe indicates \$2 million cost increase due to discovery of poor soils. Revised Basis of Estimate attached.”
PAF	X	X	X		L	C	PP	P	Used for a note that applies to a request for a new project to be programmed. Scope, Schedule, and Budget boxes would likely by checked, since the PAF and the note reference all three.	Project Proposed: ”Add one lane each direction between mileposts 14.2 and 17. Programming this project cannot wait until the annual update to the Project Delivery Plan.”
Planning	X	X	X		L	C	C	P	Used for any note that applies to planning. Could be used in conjunction with other check boxes, e.g. PAF, Project Summary, Change Management, etc.	”2017 Corridor Sketch noted need for safety improvement to substandard radius curve. Not addressed in 2017-19 budget, substantial public concern.”
Project Summary	X	X	X		L	C	PP	P	Used for a note that applies to a project summary. Scope, Schedule, and Budget boxes checked, since the project summary would likely affect all three.	”This project summary has been revised to show new project limits after identification of wetlands near site.”
Scoping	X				L	C	PP	P	Used for a note that applies to project scope.	”Scope changed to extend project limits from MP 9 to MP 18, after analysis of pavement condition.”
Estimating			X		L	C	PD	P	Used for any note that applies to the project estimate, or to estimating, including CEVP.	”Planning Level Estimate prepared 1/2/2010 by John Doe indicates \$2M cost increase due to discovery of poor soils. Revised estimate and Basis of Estimate attached.”

- Table Key:**
- TEIS versions
- C – “CURR-DM”
 - L – “LAPR”
 - B – agency, legislative, or Governor proposed or enacted (l.e. 18GOV001, 18DOT001).
- Staff Author
- C – “Any CPDM staff member”
 - PP – “Priority Programming”
 - PrD – “Program Delivery”
 - FM – “Funds Management”
 - PD – “Project Delivery”
 - Cm – “Communication”

Appendix 9C *Business Reason for a Last Approved (LAPR)¹ project list*

Creating a baseline detailed project list is necessary to manage project change. The LAPR to CPMS comparison is the basis of the Change Management Thresholds, which determine the level of documentation and approval required for changes on WSDOT projects statewide. It can also be used, for example, avoid authorizing funds on a work order that was not supported by the Project Delivery Plan, change management or approved by CPDM.

Having LAPR allows CPDM and region staff to compare information and proposals entered into CPMS Production² against approved project budgets using the Transportation Executive Information System (TEIS)³. *LAPR exists to manage project change using a baseline that aligns with our budget structure.*

Prior to LAPR being used in TEIS, we used the following baselines in CPMS:

- Initial: A single number per PIN Phase set when the approval code changed to A,C,L,S,X or Y.
- Baseline: A single number per PIN set when the nightly news is approved.
- Original: A battery of numbers per PIN, phase, finance code and month showing the entire financial plan of the project set from the BOOK environment when the operating book had been adjusted to match the approved budget.

As TEIS gained popularity and budgets began to reference versions, it became necessary to move the project baseline into TEIS. As we moved away from CPMS for our project change baselines, we began using the Project Change Request Form. CPDM staff reviewed and approved change management within established thresholds. It became clear that we needed a place to store such approvals, since they were no longer in CPMS and we created LAPR for this use. When the approval of work orders was separated from the delivery section in CPDM, a need arose to check for project change during Work Order Processing, the already existing LAPR version was chosen as that communication tool.

Approximately a decade ago, the responsibilities of the Work Order Specialists changed to include creating and modifying federal-aid agreements. Work Order Specialist were moved from the Project Delivery Unit to the Program Delivery Unit, reporting to the WMS position responsible for federal-aid and work order authorizations. Followed a transactional model and were no longer responsible for regions. Subsequently, the Assistant Project Delivery Managers were renamed Project Delivery Specialists and Work Order Specialists were renamed Project Financial Specialist.

¹ The TEIS version LAPR is used to store WSDOT's Last Approved scope, schedule and budget so we can measure project changes. When a project enters active delivery, the project is copied from the CURR-DM version in TEIS to the LAPR version. The LAPR version is updated only when the change is documented in a TEIS Change Management Note and is approved.

² CPMS production is used to show the current project delivery plan. A summarized copy is made nightly and placed into TEIS as the version "CURR-DM".

³ This is a proprietary, WSDOT-developed application used by program management to facilitate transportation budget planning and oversight.

Context

Project funding is established with the setup of the initial work order in TRAINS. Each project phase has slightly different elements to consider before submitting the first request through the WOA process. One of the items that must be addressed before submitting the initial PE phase WOA is confirmation that the total project cost estimate is within the budget amount in the budget.¹ Subsequently, right-of-way and construction work order authorizations are validated against the information found in LAPR, which is based on the budget and updated for WSDOT approvals

The WOA process allows WSDOT to establish specific permission for a project to incur expenditures by funding type, amount, purpose, phase, and timing. This is accomplished through Headquarters approval of all new spending proposals. It provides control at the project level, as well as a mechanism for rolling expenditures up so that they can be managed at program, subprogram, and programmatic investment levels. This is important because it allows WSDOT to not only oversee project-level changes, but their individual and cumulative impacts at the program level.

While the WOA makes it possible administratively for expenditures to be charged against a given fund source, it does not constitute approval of any proposed change to project scope, schedule, or budget. The second tool, change management, must be used in order to gain approval for proposed project changes, including modifications in work order authorization. While the thresholds requiring change management to be processed may vary by fund type, this process constitutes WSDOT's sole project change approval mechanism. Changes to Nickel/TPA/CW funded projects require different approval criteria than changes to other fund types.

Together, the WOA and change management processes give CPDM the ability to set the initial expectations for expenditures and to control changes at the project level once those expectations are in place. This allows CPDM to manage the capital program at both the program and project level given the constraints of the existing program management systems.

¹ *Program Management Manual* Section 8-5.7 Preliminary Engineering (PE) Work Orders accessed on July 10, 2018.

Appendix 9D Change Control Scenarios

9D-1 Scenario one:

The Program Delivery Manager is contacted by Olympic Region regarding advancing a seismic retrofit project by six months. If approved quickly, the Bridge Office would be able to include the work in their summer work plan. The region says the advanced schedule would increase cash flow in the 2017-19 biennium by an estimated \$600,000.

Process:

1. Program Delivery Manager enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Change Management (request exceeds LAPR financial threshold)
 - c. Note priority: Medium (manager threshold for approval)
 - d. Select appropriate check boxes
 - e. Program Delivery Manager emails note to Priority Programming Manager and cc's Project Delivery Manager, and Project Delivery Specialists.
 - f. Priority Programming Manager reviews note
 - i. Determines whether to consult other offices or the CPDM Director
 - ii. Add note providing concurrence and identifies priority
 - iii. Emails concurrence note to Project Delivery Specialists
 - g. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices be consulted
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Should this be elevated to the Watch List?
 2. Are there project delivery issues that should be noted?
 - viii. Once final review is complete, copy change into LAPR

Note: Determining whether the program has the capacity to accommodate the change occurs during the monthly program delivery review process. If it has been determined that there is no financial capacity, the Program Delivery Manager will ask the Priority Programming Manager to identify a lower priority project to be delayed.

9D-2 Scenario two:

The Program Delivery Manager is contacted by Olympic Region regarding advancing a seismic retrofit project by six months. If approved quickly, the Bridge Office would be able to include the work in their summer work plan. The region says the advanced schedule would increase cash flow in the 2017-19 biennium by an estimated \$200,000.

Process:

1. Program Delivery Manager enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Delivery Information (assumed because request, by itself, doesn't exceed LAPR threshold)
 - c. Note priority: Low (within region approval authority)
 - d. Select appropriate check boxes
 - e. Saves and sets permissions to editable for Project Delivery Specialists
 - f. Program Delivery Manager emails note to Project Delivery Specialists and cc's Priority Programming Manager and Project Delivery Manager.
 - g. Project Delivery Specialists review request to determine if cumulatively, Change Management have been broken:

Yes, Exceeds thresholds	No, Does not exceed thresholds
• Project Delivery Specialist revise note to reflect Change Management and emails a request to the Priority Programming Manager to review note • Priority Programming Manager: 1. Determines whether to consult other offices or the CPDM Director 2. Add note providing concurrence and identifies priority 3. Emails concurrence note to Project Delivery Specialists	1. No further action or documentation required

- h. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices be consulted
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Should this be elevated to the Watch List?
 2. Are there project delivery issues that should be noted?
 - viii. Once final review is complete, copy change into LAPR

9D-3 Scenario three:

The Project Delivery Manager is contacted by North Central Region regarding an increase in the project at bid opening. The Construction Office has reviewed the bid and has determined that re-advertising the project will not lead to lower bids. The increase exceeds the region threshold.

Process:

1. Project Delivery Manager enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Change Management (request exceeds LAPR financial threshold)
 - c. Note priority: Medium
 - d. Select appropriate check boxes
 - e. Project Delivery Manager emails note to the Project Delivery Specialists and cc's the Program Delivery Manager and Priority Programming Manager.
 - f. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices or CPDM Director be consulted or informed?
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Should this be elevated to the Watch List?
 2. Are there project delivery issues that should be noted?
 - viii. Add note providing concurrence
 - ix. Once final review is complete, copy change into LAPR

Note: Determining whether the program has the capacity to accommodate the change occurs during the monthly program delivery review process. If it has been determined that there is no financial capacity, the Program Delivery Manager will ask the Priority Programming Manager to identify a lower priority project to be delayed.

9D-4 Scenario four:

The Priority Programming Manager is contacted by South Central Region regarding bundling a paver project and a bridge project. This request would advance the bridge project by 24 months. There is no approved CPDM guidance on bundling these types of projects. The region says the advanced schedule would increase cash flow above the region threshold level.

Process:

1. Priority Programming Manager enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Change Management (request exceeds LAPR financial threshold)
 - c. Note priority: High (authority to approve bundling these types of projects has not been delegated to the manager-level)
 - d. Select appropriate check boxes
 - e. Priority Programming emails note to CPDM Director and cc's the Program Delivery Manager, Project Delivery Manager, and Project Delivery Specialists.
 - f. Priority Programming Manager reviews note
 - i. Determines whether to consult other offices
 - ii. Formulates recommendation and emails to the CPDM Director
 - g. CPDM Director concurs with recommendation
 - h. Priority Programming Manager
 - i. Adds note documenting concurrence
 - ii. Emails concurrence note to Project Delivery Specialists
 - i. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices be consulted
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Should this be elevated to the Watch List?
 2. Are there project delivery issues that should be noted?
 - viii. Once final review is complete, copy change into LAPR

9D-5 Scenario five:

A Project Delivery Specialist is contacted by Eastern Region informing headquarters that a project will be delayed because of workforce issues. This request would delay the project by one construction season. The region says the delayed schedule would decrease the project's cash flow requirements by \$300,000.

Process:

1. Project Delivery Specialist enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Change Management (request exceeds LAPR schedule threshold)
 - c. Note priority: Medium (request exceeds LAPR financial threshold)
 - d. Select appropriate check boxes
 - e. Project Delivery Specialist emails note to Priority Programming Manager and cc's Project Delivery Manager and Program Delivery Manager.
 - f. Priority Programming Manager reviews note
 - i. Determines whether to consult other offices or the CPDM Director
 - ii. Add note providing concurrence
 - iii. Emails concurrence note to Project Delivery Specialists
 - g. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices be consulted
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Should this be elevated to the Watch List?
 2. Are there project delivery issues that should be noted?
 - viii. Once final review is complete, copy change into LAPR

Note: If it has been determined that the approved change management creates financial capacity, the Program Delivery Manager will ask the Priority Programming Manager to identify priority projects that can be advanced. The approval to advance this work will be discussed at the monthly program delivery meeting.

9D-6 Scenario six:

The Priority Programming Manager is contacted by North Central Region regarding advancing a programmed bridge project scheduled for construction in year six of the ten-year plan (pre-active delivery). This request would advance the bridge project by 24 months. The region says the advanced schedule would allow the project to avoid construction at the same time as a major local project.

Process:

1. Priority Programming Manager enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Change Management (request exceeds schedule threshold)
 - c. Note priority: Medium (within authority delegated to the manager-level)
 - d. Select appropriate check boxes
 - e. Priority Programming emails note to Project Delivery Manager and Project Delivery Specialists.
 - f. Priority Programming Manager
 - i. Determines whether to consult other offices
 - ii. Adds note documenting decision
 - iii. Emails note to Project Delivery Specialists
 - g. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices be consulted
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Are there project delivery issues that should be noted?
 - viii. Once final review is complete, copy change into 18WEBP02

9D-7 Scenario seven:

The Priority Programming Manager is contacted by Eastern Region regarding advancing a programmed paving project scheduled for construction in year three of the ten-year plan (pre-active delivery). This request would advance the project into active-delivery. The region says the advanced schedule is the result of damage from a harsh winter.

Process:

1. Priority Programming Manager enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Change Management (request exceeds schedule and financial threshold)
 - c. Note priority: Medium (within authority delegated to the manager-level)
 - d. Select appropriate check boxes
 - e. Priority Programming emails note to Project Delivery Manager, Project Delivery Specialists and Program Delivery Manager.
 - f. Priority Programming Manager
 - i. Determines whether to consult other offices
 - ii. Adds note documenting decision
 - iii. Emails note to Project Delivery Specialists
 - g. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices be consulted
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Are there project delivery issues that should be noted?
 - viii. Once final review is complete, copy change into LAPR, remove project from 18WEBP02.

9D-8 Scenario eight:

The Program Delivery Manager is contacted by South Central Region regarding an updated cost estimate for a project. The region says the updated cost estimate decrease the overall cost of the \$400,000 project by 50% or \$200,000.

Process:

1. Program Delivery Manager enters note into TEIS
 - a. Category: Project Delivery
 - b. Sub-category: Delivery Information (assumed because request, by itself, doesn't exceed LAPR threshold)
 - c. Note priority: Low (within region approval authority)
 - d. Select appropriate check boxes
 - e. Saves and sets permissions to editable for Project Delivery Specialists
 - f. Program Delivery Manager emails note to Project Delivery Specialists and cc's Priority Programming Manager and Project Delivery Manager.
 - g. Project Delivery Specialists review request to determine if cumulatively, Change Management have been broken:

Yes, Exceeds thresholds	No, Does not exceed thresholds
• Project Delivery Specialist revise note to reflect Change Management and emails a request to the Priority Programming Manager to review note • Priority Programming Manager: 1. Determines whether to consult other offices or the CPDM Director 2. Add note providing concurrence and identifies priority 3. Emails concurrence note to Project Delivery Specialists	1. No further action or documentation required

- h. Project Delivery Specialists review the change management request:
 - i. Did the Change Management note answer the four questions?
 - ii. Was the note written appropriately for external audiences?
 - iii. Was note categorization correct?
 - iv. Was Change Management threshold correct?
 - v. Should other offices be consulted
 - vi. Was process adhered to?
 - vii. Secondary review:
 1. Should this be elevated to the Watch List?
 2. Are there project delivery issues that should be noted?
 - viii. Once final review is complete, copy change into LAPR

CPDM or system-generated change management – Prior to the system-generated change, the Project Delivery Unit will coordinate with the Prioritization and Programming Delivery units to ensure the appropriate process is followed capturing change management information. Examples of system-generated changes are:

1. Changes made during the annual update to the Project Delivery Plan (June – August)
2. Changes made for fund balancing (July to September)
3. Changes necessary for programming scenarios (varies)
4. Changes made during the annual inflation process (May – June)

10-1 Introduction

The Washington State Department of Transportation (WSDOT) reports on its activities and project delivery performance to the State Legislature, the Office of Financial Management (OFM), the Governor's Office, the public and other stakeholders through its system of quarterly reviews and reporting described in this chapter.

WSDOT program delivery is managed at the individual project level. Each project is managed to maintain cost, scope, and schedule as defined in the budget. The delivery process is designed to identify problems and changed conditions early, with senior management involved in solutions and open disclosure of any changes that could result.

A critical aspect of project control is continuous monitoring, tracking, and reporting of both project performance and program status, which facilitates the early identification of baseline variances. Project and program monitoring, tracking, and reporting occur at multiple levels within the department.

Individual project engineers and their consultants use a range of project management programs to track their project and budget performance relative to work accomplished, usually in conjunction with WSDOT's information resources. Both the Capital Program Development and Management Division (CPDM) and regional and modal program management offices use the Capital Program Management System (CPMS) to monitor each program and project. WSDOT regional offices also maintain detailed project tracking and program monitoring databases and reports for internal performance monitoring. CPDM maintains its own independent check on the status of all WSDOT projects and programs—both individually and at the statewide level—through a series of tracking and reporting activities conducted on monthly and quarterly cycles.

CPDM works with the Regions and the Modes to compile, refine, prepare and present project and program delivery reports. These reports are at levels of detail and aggregation useful to the Office of Financial Management, the Legislature, and the public. They are produced monthly, quarterly and on an ad hoc basis.

CPDM is responsible for analyzing and communicating the statewide progress of delivering the state's transportation projects.

Accurate reports and analyses are directly attributable to the combined efforts of the Regions' and Modes' staff and the project and program delivery groups in CPDM, who ensure the project information is continually and accurately updated in the agency's program management systems.

Statewide capital project delivery performance is available monthly and quarterly to the public through various means, as described later in this section. Additionally, more detailed analyses are produced for executive management to aid in their decision-making on each of the capital programs.

This chapter identifies the biennial, annual, quarterly and monthly reports that are produced.

10-2 Reporting Principles

Policies, procedures, and tools are developed and applied at every level and in every unit of the department to ensure that the projects are constructed and open to the public on time, within budget, and within the intended scope as committed to the Legislature. As part of WSDOT's accountability efforts, the public and elected officials are kept accurately informed of progress of the delivery of programs and selected projects.

In cases where the department may have difficulty meeting the project objectives, as intended by the Legislature, it is the responsibility of CPDM to report the issue(s) and its causes and effects promptly so that: (1) policy makers and the public have an understanding of the issues, (2) corrective action can be applied early, and (3) the department can analyze the issues and concerns in order to avoid them in the future.

The fundamental concepts and policies that drive WSDOT project delivery monitoring and reporting processes include the following:

- Delivery is reported timely, clearly and transparently: Reports are to be written in common lay terms with a “plain talk” approach.
- Maintenance of the most current and accurate data: Those responsible for inputting and maintaining project data will make sure it is accurate in order to support decision making, accurate performance analyses and delivery of the capital construction programs.
- CPMS is the tool used for inputting and maintaining project data in the capital programs: CPMS data is used at the phase, project, subprogram, Region and statewide level and accessed by many different users and computer systems for a wide variety of purposes. Project information is included in reports distributed to WSDOT executive management, the legislature, or the public.
- A “no surprises,” early warning approach: Communicating project delivery issues early is critical to the department's ability to proactively prevent or minimize changes in project scope, schedule, or budget. Internally, the Management Quarterly Project Reviews (MQPRs) generated by the Regions are an example of this type of report. The CPDM Watch List functions in the same way for external reporting.
- Each project represents a commitment to the Legislature to solve an identified need: All legislative commitments are to be regularly evaluated to determine WSDOT delivery performance.
- Performance reporting is to be frequent, consistent, data-driven, and on a regular schedule, as opposed to discretionary, ad hoc self-reporting.
- Reporting provides an easy access to information on WSDOT program and project management performance.

Reporting is an output of the overall program and project management effort to deliver the capital construction programs. While many aspects of reporting are driven by statute or budgetary requirements, a significant part is based on providing project data and informational materials upon request to staff in offices that are internal and external to WSDOT.

10-3 Reportable Projects

In each biennium budget, the Legislature identifies specific projects to include in WSDOT's performance reporting. These projects are identified in the Legislative Evaluation and Accountability Program Committee (LEAP)¹ List and include all line-item projects—Transportation Partnership Account (TPA) and Connecting Washington (CW)—and several Preexisting Funds (PEF) projects.

WSDOT is required to report the delivery progress of each of those identified individual projects.

Programmatic investments are identified in the LEAP List to provide funds for a specific type of transportation project such as guardrail, or asphalt roadways preservation. These are reported at the programmatic level. Delivery of PEF projects generally are reported at a programmatic level, with the exception of those PEF projects of high interest to the Legislature and specifically identified as line-item projects rather than as part of a programmatic investment.

For a complete and thorough understanding of a project's delivery status, individual line-item projects will be reported in their entirety without regard to fund source, rather than reporting only on the budget and schedule information of projects funded by the Nickel, TPA or CW transportation packages.

- The projects categorized below consist of TPA, Nickel, CW, and legislatively selected PEF projects that have expenditures in the current biennium and subsequent biennia. They are identified by a Program Item Number (PIN) or Budget Item Number (BIN):¹
- LEAP List projects with construction phase identified. This list represents the quarterly project counts. In accordance with legislative requirements, quarterly reports will include a project's scope, schedule (including milestone achievement), and budget performance.
- These projects are included in project counts related to on-time and on-budget performance.
- LEAP List projects without construction phase: This list includes projects reported by appropriate and applicable milestone only and will not be included in the project count above (e.g., environmental impact statements and planning studies). These projects are included in milestone reporting in the Gray Notebook.
- Other projects or phase work: These include studies, environmental analyses and programmatic investments identified on the LEAP List.

These programmatic investments (buckets) are set up by area, or statewide such as cable, bridge, guardrail, paving, or fish passage projects. Generally, the individual projects within the programmatic investment line-item are smaller. These projects will be identified and reported in the GNB's Beige Pages "as completed" in the appropriate section.

¹ The legislature typically prepares two LEAP project lists. One list references projects funded through transportation revenue packages. The second list includes all projects, regardless of funding source or transportation package.

10-4 Corridor Budgeting: Reporting

Over the last few biennia, there has been a transition to corridor and grouped project-level budgeting by BIN where several program items constitute a logical solution to address a highway deficiency. For example, improving a corridor in lieu of budgeting by individual PINs and pooling projects of a particular improvement type.

Budgeting at the BIN level allows funding flexibility between program items within the corridor or project group. The budget level for the BIN is established as the sum of all the PINs within the Budget Item and is reported to the Legislature through the Transportation Executive Information System (TEIS) by the summary amount.

To date, this concept has been mostly accepted by the Legislature with a large number of projects changing from stand-alone PINs to BINs. Accountability for delivery of the budget is at the BIN level but accountability for project delivery (project counts and milestone delivery) is at the individual PIN level within the BIN.

WSDOT will report budget delivery of a BIN to the Legislature by summarizing the PIN expenditure information to the BIN level through TEIS. Cash flow transfer approvals through OFM (as per Section 601) will also be requested at the BIN level. However, for Gray Notebook reporting, WSDOT will maintain individual PIN information to provide a clear explanation of the Budget Item delivery. Funding levels and milestone commitments will be established by WSDOT in order to have a baseline to measure performance.

10-5 Measuring and Reporting Project Delivery

WSDOT's project delivery assessment process is comprised of three phases: measures, reviews, and reports.

10-5.1 Measures

The department continuously measures each project's progress and ability to stay within approved scope, schedule and budget.

10-5.2 Scope

The project scope is a description of how the department plans to correct a deficiency or group of deficiencies on the highway system. This is described in the project description in CPMS. It establishes the legislative expectation on what will be accomplished with the approved budget.

It is important to provide a project description that clearly explains WSDOT's intent with the approved expenditure authority. The description should be narrow enough to explain the intent but not so tight it removes the flexibility necessary to select alternate solution strategies.

It is very important to remember that changes to a project's title must be carefully reviewed and documented to avoid confusion, since the title is used to help define the scope with respect to legislative intent. *For CW projects, titles and work descriptions may only be changed with legislative approval.*

10-5.3 Schedule

Six major project milestones were selected for reporting performance on delivering Nickel, TPA and CW project schedules. As indicated below, three of these milestones are also reported for all PEF projects. These milestones measure significant events in the delivery of a project. The legislature sets milestones as commitments during biennial or supplemental budgets for those milestones yet to be achieved. Whether a milestone is accomplished is measured against the milestone commitment date in the legislative budget that is active at the time the milestone occurs.

The six reportable milestones for line-item projects and three milestones for PEF projects are:

1. **Project Definition Complete.** The official document that states the purpose and need for the project and the solution of the deficiency is a formal document called the *Project Summary*. For reporting purposes, the Project Definition Milestone is considered complete on the date the Regional Administrator (RA) or the RA designee signs the Project Summary document. The Project Definition is formally approved when Project Summary has received Headquarters' signature.
2. **Begin Preliminary Engineering (PE).** This milestone marks the start of the project design process. It is usually the first capital spending activity in the project delivery process and is considered accomplished, or complete, on the date the PE Work Order is authorized.
3. **Environmental Documentation Complete.** For reporting purposes, the environmental documentation is considered complete on the date that all necessary National and State Environmental Policy Act (NEPA/SEPA) documentation has been submitted by WSDOT to the appropriate regulatory agencies for approval.
4. **Right of Way Certification.** This milestone marks the point in time that the right of way acquisition requirements are met and the project can be approved for advertisement. The milestone has been met on the date the Right of Way Certification is signed by the Region Real Estate Services Manager.
5. **Advertisement Date.** This milestone is the date that WSDOT publicly solicits bids from contractors to construct the project. When a project is advertised, it has a completed set of plans and specifications, along with a construction cost estimate. The milestone is met on the date of the advertisement.
6. **Operationally Complete Date.** This is the date when the public has free and unobstructed use of the facility. In some cases, the facility will be open, but minor work items may remain to be completed. This is equivalent to Estimated Open to Traffic.

10-5.4 Budget

Based on current financial information, the project's Total Cost at Completion is compared to legislatively approved project budgets. Three phases and the total budget status will be reported for projects that are completed or underway:

- Preliminary engineering (Design)
- Right of way
- Construction (Contract)

The legislative expectation for a project's budget, when measured in the Gray Notebook, is the last recorded legislative budget (either biennial or supplemental) in effect at the time the project becomes Operationally Complete.

10-6 Reviews

WSDOT conducts monthly and quarterly meetings to review the status of projects and to discuss potential project changes.

The Project Delivery Specialists (PDSs) on the Project Delivery Team provide detailed reports and lists on individual projects as well as other project delivery information for these meetings. Regions and Modes staff provide the project-specific data, entering it into CPMS and TEIS. The PDSs pull that information from these systems and compile it into lists and reports that are referenced at the meetings.

10-6.1 Monthly

Project Delivery Check-in Meetings

This is a joint phone meeting with representatives from CPDM and the Regions/Modes to review project delivery, identify issues, and Watch List items. Reports for reference at these meetings are supplied by the PDSs.

Project Status Review Meetings

These meetings are held within most WSDOT Regions/Modes to review the status of projects in the design phase; some Regions also include projects under construction. Some Regions conduct these as single Region-wide meetings and others have meetings with individual project offices conducted by the regional project development staff. Information from these meetings provides items for discussion at the monthly check-in meetings.

CPDM/Region/Mode Phone calls

These meetings are held monthly with CPDM and the Regions/Modes to discuss issues important to Program Management.

10-6.2 Quarterly

Quarterly Region Visits (QRVs) (previously known as Management Quarterly Project Reviews (MQPRs))

The QRV meetings provide a regular forum for discussion between Headquarters, Region/ Mode executive management, and the project teams on project delivery issues. The PDSs provide the reports that are reviewed at these meetings. The Regions and Modes staff strategize jointly with executive management to mitigate potential challenges or project changes.

The QRV is designed to provide the following:

- Continuous, systematic monitoring and control of all Nickel, TPA and CW projects as well as other projects of regional and statewide significance.
- Early identification of potential and actual risks to project scopes, schedules, and budgets.
- An early warning system that notifies WSDOT executives for managing concerns of statewide significance.
- A forum for identifying the individual projects to be reported in the *Gray Notebook's* Beige Pages.

10-7 Practical Solutions Roundtable

The Practical Solutions Roundtable meetings consist of the executive leadership team, regional administrators, assistant secretaries, and office directors. It provides a forum to review projects for practical solution efforts.

10-8 Program Managers Statewide Conference

This annual meeting is for program managers and planners from the Regions, Non-highway programs, Divisions, and CPDM. The meeting provides an opportunity for speakers from these groups to present their most recent findings and efforts in program management.

10-8.1 Reports

In addition to producing reports for reviews, CPDM staff also develop and publish two primary types of reports: internal and external reports.

10-8.2 Internal

The reports listed here are generated by CPDM staff and distributed to audiences internal to CPDM and WSDOT.

WSDOT uses a variety of standard reports for the management of its projects, programs, and operations on a day-to-day basis. These reports track project expenditures and schedules in detail and provide program managers and senior managers with the information necessary to keep informed of the status of all programs, subprograms and subcategories. Subsets of these reports are aggregated for oversight purposes and external reporting.

10-8.3 Regional Confidence Report

This report is generated in the Regions and used during regional monthly project status review meetings. The report allows the project engineer's offices and specialty groups to report on confidence levels (high, medium or low) of their portion of work for all active projects, and on whether the Region can deliver and meet the Advertisement dates and stay within budget.

10-8.4 Construction Status Report

This report is created in the Regions and presented at the Management Quarterly Project Reviews. It shows basic construction information as well as estimated and actual cost-to-complete information for projects under construction. Comments from construction offices regarding whether projects are on schedule are displayed as to the project being on schedule. User specific tasks are also displayed within this report.

10-8.5 Webpages (Internal)

Each CPDM team has designated a Web Coordinator for uploading various report files on internal WSDOT webpages.

CPDM internal webpages are structured according to team function. Each team's major product or report is listed under their team name. For example, the Scoping and Prioritization Team lists web links to Planning, Prioritization and Scoping documents, which are provided and updated by that team.

The Intranet (WSDOT's internal webpages) are in the process of migrating to a Drupal format. CPDM produces various reports and papers. The internal webpages are where CPDM reports, etc., are made available to other WSDOT offices. Users can find out whom to contact, as well as current and back issues of reports.

For WSDOT Communications' guidelines on how to add information to internal webpages, please see the Web Toolkit at www.wsdot.wa.gov/Communications/WebToolkit/Default.htm

10-8.6 CPDM Newsletter

The monthly CPDM Newsletter keeps the Regions and other WSDOT offices apprised of what the CPDM Division wants to communicate. The articles can be relevant ideas, policies, timely information needing to be carried out, or other activities of the CPDM Division.

Most of the news articles are written by the CPDM Managers or their team members and sent to the newsletter Editor to compile, edit and publish. Most newsletter articles are written by the CPDM Managers or their team members of the various groups (Budget, Prioritization & Programming, Asset Management, Project Delivery, and Program Analysis & Management Services).

The audience for the newsletter is other WSDOT employees in the Regions, and other WSDOT office staff such as Planning, Regional Program Management, and CPDM employees.

The webpage version of the newsletter can be found on the [CPDM Newsletter](#) webpage.

10-8.7 Program Management Manual

The [Program Management Manual M 3005](#), is a guiding policy manual on how CPDM conducts business with other offices and the Regions. This living document records the changes in CPDM's working business processes, and it serves as a reference manual for interested program management staff in CPDM and the Regions.

The various groups or teams within CPDM are responsible for assigning one of their own to write and update their chapters. The manual Editor then coordinates the authors' work so that the manual reads smoothly. The Editor compiles, edits, organizes chapter structure, coordinates formatting, and publishes the manual.

Besides program management staff, the audience for the manual is new employees, WSDOT employees transferring from other agency offices, and other state government workers.

The manual is published online and is scheduled to be updated biennially in January. Crucial or urgent changes can be made to the online chapters at any time, as necessary.

10-8.8 External Reports

CPDM compiles, edits, and publishes external reports for an audience comprised of the Governor's Office, the Legislature, and the public. The reports are at a level of detail useful to the above audiences. The reports are easily accessed online by the respective audiences. Here is the list of external reports that CPDM generates or compiles.

Note: "External Reports" refers to three different meanings, as used by CPDM staff:

1. Reports that are destined for an external audience, such as the public, or Legislature.
2. Reports that are proviso reports. These monthly and quarterly reports are conduits for WSDOT to report to the Legislature as to budget changes in line-item projects.
3. The third meaning of "External Reports" is as a system. It is a public-facing web-based application that contains three modules within it: a project web page search, programmatic projects' STIP map, and project delivery status. This application allows customers to search for project web pages, provides the mapping of projects within the Statewide Transportation Improvement Program (STIP), and provides the current status of active construction projects.

For a detailed discussion of the External Reporting System background and criteria, see [Appendix 10D](#).

- Initial Legislative Budget – Records the project's initial budget as approved by the Legislature.
- Original Budget and Schedule - Current Legislative or Project Delivery Plan Budget and Dates.
- Current Budget and Dates – A project's last approved budget that incorporates budgetary changes from the current delivery plan.

Current project information is vetted and updated monthly, which data is fed into already designed formats on the individual project webpages. The audience for the information displayed on the webpages is the public, OFM, and the Legislature.

For the IT systems that Region staff use to enter their scope, schedule, and budget information and that provides the data to CPDM staff for the reports, please see [Chapter 11](#).

The following reports are provided by CPDM to external customers. In addition to the reports listed here, CPDM also provides information on project delivery for *The Gray Notebook*. For a detailed table of the External Reports' Requirements for the reports that CPDM produces, see [Appendix 10B](#).

10-8.9 Advertisement/Operationally Complete Report (Ad/OC) Report

This report provides specific project information for communicating with the public. The monthly report includes how many Nickel, TPA and CW projects' advertised or completed dates were actually met through the end of the previous month. Project Advertisement and Operationally Complete dates are included, and statewide progress is summarized within a cumulative, consecutive 12-month rolling year.

These reports can be found on the [Project Delivery Reports](#) webpage.

This report is developed by the CPDM Budget group.

10-8.10 Advance Schedule of Projects Planned for Advertisement (ASOP)

This report is a summary of all scheduled Advertisement dates for contracts within twelve months. This report is updated and published monthly on WSDOT's external website by the Construction Office. This report is provided as a service to an audience of contractors interested in bidding on WSDOT projects. The report includes the contract title, project location, planned Advertisement Date, and a range for the budget.

This report is developed by the CPDM Budget group.

10-8.11 Watch List

As a part of transportation reporting, CPDM communicates information to the public on Capital Highway Program projects, which have, or may have significant changes in scope, schedule, or budget. The CPDM Project Delivery Team reports on these projects in a monthly publication called the "Watch List," which is available by the 5th working day. Projects included in the Watch List are updated in subsequent months until the issue is resolved.

These reports can be found on the [Project Delivery Reports webpage](#). Past years' reports can be found on the [Project Delivery Reports Archive](#) webpage.

For a detailed discussion of the Watch List background and criteria, please see [Appendix 10C](#).

This report is developed by the CPDM Delivery group.

10-8.12 Geographic Information Systems (GIS)

CPDM uses GIS applications and tools for a variety of ways in CPDM to plan, prioritize, analyze, and even obtain or distribute funding for WSDOT projects.

GIS allows the customer to map, model, query, and analyze large quantities of data within a single database or from multiple databases according to their relative location to Washington roads and features.

CPDM's Systems Support Team uses GIS to locate assets and elements within project limits, verify county and legislative boundaries, analyze intersecting highway locations for collision clusters, and identify needs near fish passage projects and other assets. Analysis is performed in GIS and often presented in web applications, internet pages, and publications. Data is also extracted for further analysis in Excel and other programs.

10-8.13 Project Delivery Plan

A 10-year, project detail plan for all modes that communicates WSDOT's intentions for specific capital investments in all transportation infrastructure administered by the department. The plan supports the FHWA's requirement that the state will program four years of projects in the State Transportation Improvement Program (STIP). An updated plan is published annually and CPDM is responsible for coordinating the development of the plan in accordance with legislative and executive direction in the context of defined asset management investment strategies.

In CPDM, this plan is used to currently transitioning from a 6-year to an 8-year to a 10-year plan. The Prioritization and Budget teams generate this report.

This report is developed by the CPDM Budget group.

10-8.14 Legislative/OFM Reports also known as Proviso Reports

The CPDM Budget team is responsible for generating proviso reports. These reports are required by the Legislature which directs the line-item level reporting. The publishing frequency can be quarterly, annual or biennial, depending on direction from the Legislature's budget. These reports can be found on the [Project Delivery Reports](#) webpage. Past years' reports can be found on the [Project Delivery Reports Archive](#) webpage.

These reports are developed by the CPDM Budget group.

The following project information and analysis is provided by CPDM to the Legislature and OFM via TEIS:

1. Milestone achievement records, current expenditure plan for the biennium, and total expenditure plan.
2. Biennium-to-date actual expenditures incurred through the end of the month.

10-8.15 Capital Improvement and Preservation Program (CIPP)

This document is prepared by the Budget Team biennially and submitted with the agency biennial budget request to OFM and the Legislature. The CIPP details the budget request and what is to be accomplished in the biennium. The CIPP also includes the following information required either by statute, the budget instructions, or legislative provisions:

1. Summary of re-appropriations.
2. Project variance explanations.
3. Summary of cash flow transfers.
4. Project advancements.
5. Mega project status (Folios)
6. Consultant usage.
7. Jobs impact estimate.
8. Risk reserves and contingencies.
9. Facilities Maintenance Backlog Reduction Plan.
10. Toll Credit Report.

11. Practical Design Report.
12. Bike Ped Tiered Project Report.
13. Nickel/TPA History.
14. These reports can be reviewed in the CIPP on CPDMs website.

This report is developed by the CPDM Budget group.

10-8.16 Quarterly Variance Report

This report compares current delivery plans for projects against the latest approved legislative budget and provides explanations for variances above thresholds.

This report is developed by the CPDM Budget group.

10-8.17 TPA/Connecting Washington Cash flow

This report consists of two parts; a request to move funds from one TPA or CW project to another for amounts greater than \$250 thousand. The second part is a report [detailing](#) administrative transfers that are less than \$250 thousand. The report is submitted quarterly.

This report is developed by the CPDM Budget group.

10-8.18 Practical Design Savings

Engrossed Substitute House Bill (ESHB) 2012 passed in 2015 requires the department to submit two reports; a semi-annual report to the State Treasurer identifying CW project practical design savings and how much in project savings can be transferred to the transportation future funding program account and an annual report identifying savings similar to the semi-annual report.

This report is developed by the CPDM Budget group.

10-8.19 Project Web Pages

Project pages are updated by the Regions regularly and posted on the WSDOT website to keep the public informed throughout the life of a project. The web page provides relevant updates, milestones status, map, links to related projects, project manager and team, and upcoming activities or events. The WSDOT Communications Office provides detailed information on the top ten project page tips, including how to keep your project schedule current, keep it simple and use clear and consistent navigation. See at: www.wsdot.wa.gov/Communications/WebToolKit/ProjectPages/ProjectTips.htm

For roles and responsibilities in developing and maintaining project Web pages, go to: "Roles & Responsibilities" in the Communications Manual, Web Content Strategy, at: <https://www.wsdot.wa.gov/communications/web-toolkit/standards/content-strategy#Governance>

The CPDM Delivery group is responsible for coordination on webpage set-ups and maintaining the scope, schedule and budget information that is used to automatically populate them.

For a list of the External Reporting Requirements that WSDOT complies with, see Appendices 10A and 10B.

10-9 Appendices

- Appendix 10A External Reporting for Capital Programs
- Appendix 10B External Reporting Requirements
- Appendix 10C Project Watch List Background and Criteria
- Appendix 10D How to Develop the External Reporting System Information
- Appendix 10E Monthly Full Time Equivalent Report

Appendix 10A External Reporting for Capital Programs

Capital Improvement and Preservation Program (CIPP)

Every 2 years with the biennial budget request
Combination of proviso and OFM budget instruction requirements
Executive summary
Program highlights
Program descriptions
Contact: CPDM Budget group

Proviso Reporting

Section 312 Nickel/TPA History

- Documents the history of Nickel/TPA projects from 2003 to present
- Crosswalks how projects have appeared in budget lists
- Scope, schedule, and budget
- Annually with budget submittal
- Contact: CPDM Budget group

Section 313 Quarterly Variance Report

- Documents current scope, schedule, and budget versus most recent budget list
- Uses budget list structure
- Variances based on thresholds
- Number of bidders, award amounts
- D,I,P,Q,W,Y
- Actual expenditures - TEIS list
- Contact: CPDM Budget group

Section 601 Nickel/TPA Transfers

- Documents Nickel/TPA and CWA current biennium cash flow transfers
- Identifies donors
- Administrative transfers
- Quarterly to OFM and STC/HTC chairs
- Annual summary report with budget request
- Contact: CPDM Budget group

Section 606 Bicycle/Pedestrian/Transit Benefits

- Document Connecting Washington project benefits to bike, pedestrians, and transit
- Special provision
- Annual report in November
- Contact: CPDM Budget group

Section 607 Scope and title changes

- List all approved practical design related scope changes to Connecting Washington projects
- Annual report with budget submittal
- Contact: CPDM Budget group

ESSB 5024 Section 612 Change orders over \$500K**ESSB 5024 Section 612 Legislative Reports Page****Section 604 Project Reappropriations, Savings, and Increases**

- With 2018 budget submittal
- Reappropriations of State funds
- Contact: CPDM Budget group

ESHB 2012 Section 2(b) Practical Design Savings

- Connecting Washington Projects
- Report to state treasurer and transportation committees
- Every 6 months
- Identifying the amount of savings attributable to the application of practical design, retired risk, and unused contingency funding, and report when the savings become available.
- Contact: CPDM Delivery group

10A-1 Transparency Reports

External Reporting System

- External Website – Project Search
- Project, Milestone/Budget Variances
- Contact: CPDM Project Delivery group
- Updated monthly

Watch List

External website – [Project Delivery Reports](#)

Summary list of projects with Phase/Issue

Narrative description of issues

Summaries are linked in [The Gray Notebook](#)

Updated monthly

- Contact: CPDM Delivery group

6/8/10 Year – [Project Delivery Plan](#)

All capital modes

By sub-program/Region/County

Biennial aging

Updated every year

Published on external website

- Contact: CPDM Budget group

Advance Schedule of Projects ([ASOP](#))

Monthly update

1-year pipeline of advertisements

Type of project, estimate range

Other flags

[Construction Office](#) ad and award page

- Contact: CPDM Budget group

[STIP](#) list online

Local Programs [website](#)

- Contact: CPDM Budget group

421 Nickel/TPA projects

Dashboard metrics

On time, On budget

Pipeline, Advertisements, Under CN, Completed

- Contact: CPDM Budget group

CW projects

Pipeline, Advertisements, Under CN, Completed

- Contact: CPDM Budget group

PEF program delivery

Ad delivery

Cash flow

- Contact: CPDM Budget group

Appendix 10B External Reporting Requirements

Reports	Requirement			Mode		
	Budget Instructions	Proviso	Statutory	Transparency	Highway	Non-Highway
Capital Improvement and Preservation Program (CIPP) • Every 2 years with the biennial budget request • Combination of proviso and OFM budget instruction requirements • Executive summary • Program highlights • Program descriptions	X	X		X	X	X
Section 312 Nickel/TPA History • Documents the history of Nickel/TPA projects from 2003 to present • Crosswalks how projects have appeared in budget lists • Scope, schedule, and budget • Annually with budget submittal	X				X	
Section 313 Quarterly Variance Report • Documents current scope, schedule, and budget versus most recent budget list • Uses budget list structure • Variances based on thresholds • Number of bidders, award amounts • Program D, I, P, Q, W, and Y • Actual expenditures - ??ACTL?? TEIS list		X			X	X
Section 601 TPA/CW Fund Transfers • Documents TPA and CWA current biennium cash flow transfers • Identifies donors • Administrative transfers • Quarterly to OFM and STC/HTC chairs • Annual summary report with budget request		X			X	
Section 604 Project Reappropriations, Savings, and Increases • With 2018 budget submittal • Reappropriations of state funds • Amount of cost savings or increases in funding that have been identified as compared to the 2015 enacted omnibus transportation appropriations act.		X			X	X
Section 605 Website Reporting • Post on website, every planned and completed report due to the legislature • Web link for change orders greater than \$500,000 on project web page						
Section 606 Bicycle/Pedestrian/Transit Benefits • Document Connecting Washington project benefits to bike, ped, and transit • Special provision • Annual report in November		X				X

Reports	Requirement			Mode		
	Budget Instructions	Proviso	Statutory	Transparency	Highway	Non-Highway
Section 607 Project Scope Changes - List all approved practical design related scope changes to Connecting Washington projects - Annual report with budget submittal		X			X	
ESHB 2012 Section 2(b) Practical Design Savings - Connecting Washington Projects - Report to State Treasurer and transportation committees - Every 6 months - Identifying the amount of savings attributable to the application of practical design, retired risk, and unused contingency funding, and report when the savings become available.			X		X	
Watch list - External web site – Project delivery reports - Summary list of projects with Phase/Issue - Narrative description of issues - Updated monthly				X	X	
Detailed Project Delivery Plan - All capital modes - By sub-program/Region/County - Biennial aging - Updated every year - Published on external website				X	X	X
Advance Schedule of Projects (ASOP) - Update monthly 1-year pipeline of advertisements - Type of project, estimate range - Other flags - Construction Office's Ad and Award webpage				X	X	
STIP list online Local Programs web site				X	X	X
421 Nickel/TPA projects - Dashboard metrics - On-time, On budget - Pipeline, Advertisements, Under CN, Completed				X	X	
CW projects Pipeline, Advertisements, Under CN, Completed				X	X	
PEF program delivery - Ad delivery - Cash flow				X	X	

Appendix 10C Project Watch List Background and Criteria

10C-1 Background

The Washington State Department of Transportation (WSDOT) identifies projects deemed “at risk” for budget or schedule on a watch list. Projects are continuously monitored to ensure issues affecting the budget or schedule are brought to the attention of the Executive Leadership Team, senior managers, and transportation partners to resolve or minimize issues.

The project watch list will change from one month to another (projects dropped or added) as change management is approved or legislative action is taken to address budget and schedule risk. Since the report is prepared monthly, in order to keep projects on schedule, there may be cash flow requests approved either as needed administratively by the department or through approval by the Director of Financial Management¹ each quarter.

In managing the Project Delivery Plan, WSDOT balances risk in project budgeting with the need to ensure that an appropriate mix of projects are brought forward in sufficient quantities to use our annual federal obligation authority and the state appropriation. Complete and reasonable estimates are necessary to avoid undesired consequences, including loss of federal or local funds or the inefficient use of state funds.

10C-2 Criteria for Inclusion on the Watch List (“at risk”)

The highest budget risk is assigned to transportation package projects (Nickel, TPA, and CW) that are projected to exceed the funding provided by the legislature. PEF projects that need additional funds or have significant schedule changes are also considered at risk.

Schedule issues listed typically identify projects that will miss their advertisement date by a quarter or more. Previous budget or schedule issues may have contributed to the overall delivery risk for the project. Projects with schedule risk will be included even if there is a possibility of recovering a portion or all of the schedule.

10C-3 Threshold for Inclusion on the external Watch List

1. Projects funded by a transportation revenue package (Nickel, TPA, and CW):
 - Basis for comparison is the last legislatively adopted project list
 - Increase in total project cost
 - Advertisement date delayed by more than a quarter
2. PEF projects
 - Basis for comparison is Last Approved (LAPR)
 - Increase in total project cost greater than \$500,000
 - Construction season delayed and the Ad Date is delayed by more than 90 days (example: Ad date 9/05/2018 is delayed to 11/25/2018, would not be reported)

¹ Authorized in ESSB 5096, Section 601.

10C-4 Process for Inclusion or Removal

Monthly, the Project Delivery Specialist (PDS) will identify projects that: (1) meet the aforementioned criteria and (2) other projects that have been identified as potentially “at risk” through monthly coordination meetings or conversations with Region program management. The Program Manager will be notified when a project meets the Watch List criteria and will not be added to the Watch List (example: increased estimated costs due to annual inflation process).

Projects on the Watch List will be removed once the PDS has concluded that the issue has been resolved and an explanation of how the issue was resolved is documented on the Watch List.

Appendix 10D How to Develop the External Reporting System Information

10D-1 Process for developing the External Reporting Systems Initial Budget (PMEXINIT)

PMEXINIT – Initial Legislative Budget

This is a TEIS version that captures a project's initial legislative budget (xxLEGFIN).

Definition

This TEIS version captures the updated copy of the initial data from 2003 Nickel, 2005 Nickel and TPA, and the 2015 Connecting Washington funded projects. The intent is to create a historic version of the Legislative Initial Budget cost only. Legislative projects may be broken down into smaller projects for delivery. In order to not conflict with PINs in CPMS a 'B' is added to the beginning of the PIN to distinguish this relationship. In addition, milestone dates are seldom provided by the Legislature and are not shown in this version.

Maintenance Refresh Cycle

Annually, following the approval of the Legislative Budget, CPDM will evaluate and update the version to include any new legislative projects.

QA/QC Process

Compare the new list to the previous list, for document variances.

10D-2 Assumptions / Analysis Summary

- Includes only Nickel, TPA, and CWA project BINs and Stand-alone PINs that are in the current legislative budget (18LEGFIN).
- Nickel revenue package projects introduced in the 2003 Legislative Budget use 03LEGFIN as initial baseline.
- TPA and Nickel/TPA revenue package projects introduced in the 2005 Legislative Budget use 05LEGFIN as initial baseline.
- Connecting Washington revenue package projects introduced in 2015 Legislative Budget use 15LEGCOM or 15NLRBAR as initial baseline.
- Any projects funded through the three revenue packages that were introduced in subsequent legislative sessions use the corresponding legislative project list.
- Milestone dates for the initial project lists are not reported externally.
- For consistency across the project titles, descriptions, location and other header information is from the current (18LEGFIN) BIN list information.
- Initial project totals are verified against the most recent Section 312 report (3/21/18).

10D-3 Process for developing the External Reporting Systems Original Budget (PMEXORIG)

PMEXORIG - *Current Legislative or Project Delivery Plan Budget, Original Date*

This is a TEIS version that captures a project's budget and milestone dates from the current enacted legislative budget (XXLEGFIN) or current Project Delivery Plan (XXPLANXX).

Definition

This TEIS version captures Legislative projects from the most current enacted legislative budget and legislative projects broken down into smaller projects for delivery and project detail that supports the programmatic investments from the most current Project Delivery Plan.

Legislative projects may be broken down into smaller projects for delivery. In order to not conflict with PINs in CPMS, a 'B' is added to the beginning of the PIN to distinguish this relationship.

Maintenance Refresh Cycle

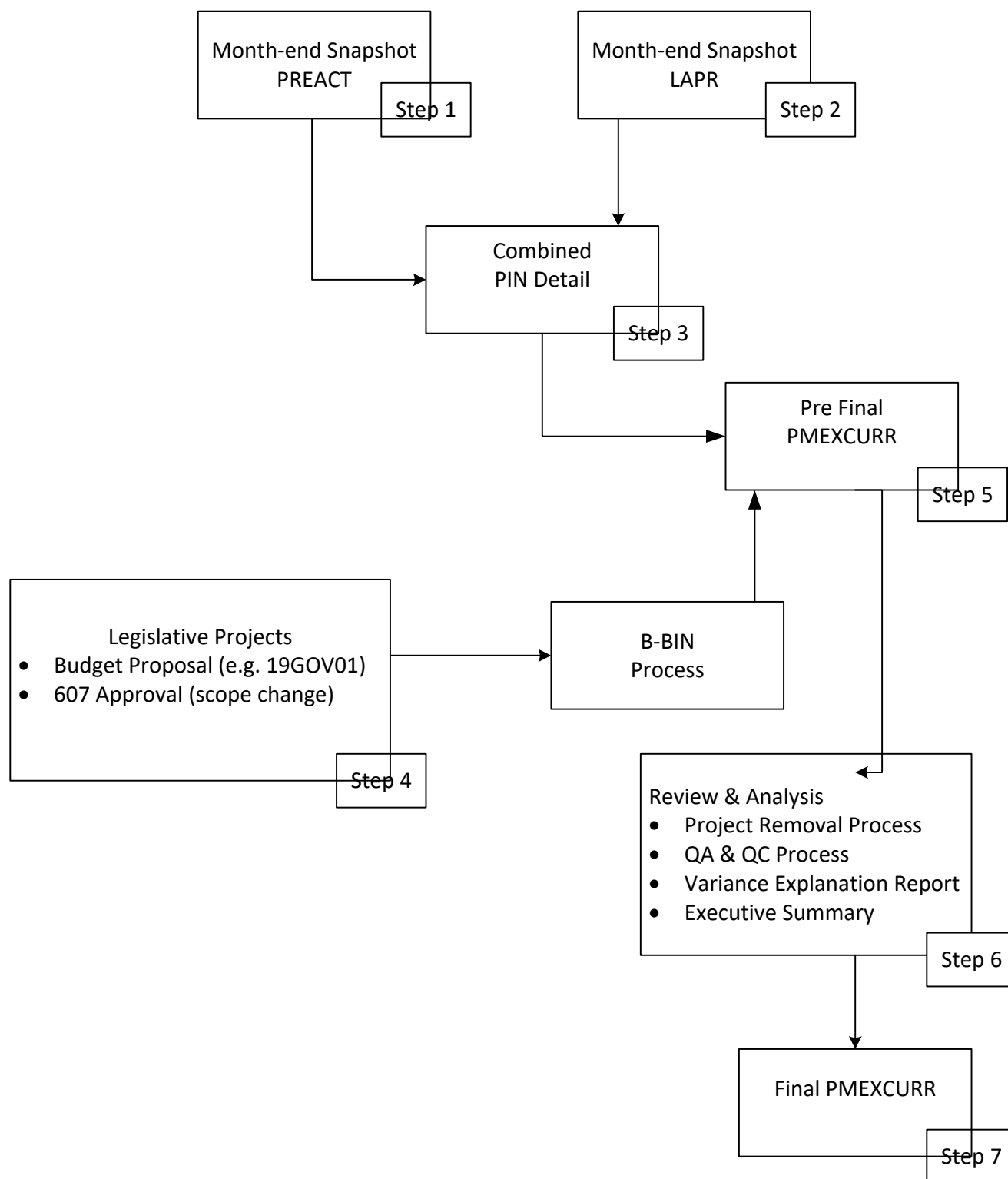
Annually, following the approval of the Legislative Budget and Project Delivery Plan, CPDM will evaluate and update the version to include any new legislative projects.

Compiling Process for PMEXCURR

External Reporting System

Monthly PMEXCURR Compiling Process

Flow Chart



Appendix 10E Monthly Full Time Equivalent Report

The FTE* Report is produced monthly from historical data utilizing the Financial Information Retrieval System (FIRS) and data received from the Human Resources (HR) Office. The purpose of the report is to provide an easy to read and comprehensive source of FTE and Headcount Data. The report is comprised of an Executive Summary, two statistics sections (FTE and Headcount), an [Appendix A](#), and an [Appendix B](#). The most recent, and historical, reports can be found at this location (permissions required): <http://sharedot/pd/cpdm/copbd/cbd/SitePages/Budget%20Delivery%20Reporting.aspx>

The Executive Summary provides statistics for month over month, and year over year changes for both the FTE and the Headcount Statistics sections. Hires and Separations are summarized for 'Engineering' and 'Non-Engineering' job classifications.

Section One, WSDOT FTE Statistics, reports on FTE's and expenditures.

The information is assembled using multiple perspectives:

- By program and sub-program
- By period: current month and biennial average-to-date
- By work status: fulltime, temporary, overtime
- By Region
- By organization

FTE data comes from FIRS. The I&P program includes the I Program, P Program and sub-programs OM and OR.

Section Two, WSDOT Headcount Statistics, contains headcount and variance statistics for 'Engineering' and 'Non-Engineering' job classifications.

The term "headcount" is an actual measurement of employees. "Engineering" classifications are determined by HR and outlined in [Appendix A](#). The headcount data in Section 2 comes from the HR Office, except for the organization names, which come from the Financial DataMart. Hires and Separations by 'engineering' and 'non-engineering' classifications are shown at the end of Section Two.

[Appendix A](#), as mentioned above, is 'Job Class Codes' as determined by HR.

[Appendix B](#) is an 'FTE Definition and Calculation' sheet.

*An FTE is defined as the number of hours available for one full time staff over a given period of time. Typically, an FTE equals the number of hours equivalent to a full time employee, over the period of a year.

11-1 Overview and purpose of Information Technology Systems in CPDM

Information technology systems and applications provide companies and government agencies the benefit of allowing them to input and process their data. It is this data that supports the business' ability to effectively make good decisions and minimize litigation risks.

The systems crucial to Program Management here at WSDOT, are standard computer applications, and address the needs for capital project scoping, prioritization and delivery, capital program delivery and management, and finally, financial and budget management. In this chapter, only those systems will be mentioned which directly support the Program Management processes and procedures used for developing and delivering the Capital Programs of the WSDOT Highway Construction Program.

11-2 Roles and Responsibilities of CPDM Systems Support and Project Management and Reporting Systems (PMRS) Teams

Two teams in the Capital Program Development and Management (CPDM) office directly support the systems and applications for Program/Project Management and Delivery. The CPDM Systems Support Team is responsible for Capital Program Management System (CPMS), Transportation Executive Information System (TEIS), Work Order Authorization (WOA), CPMS-related Datamarts, and Federal-Aid Tracking System (FATS). The Project Management and Reporting System (PMRS) team is responsible for Primavera (P6) Scheduler, Primavera Contract Manager, Enterprise Content Management (ECM), and Project Reporting & Information (PRI). See individual descriptions below for all systems.

Each team is supported by Office of Information Technology (OIT) technicians that help to keep the systems current and functioning. In addition to regular system updates and issue resolutions, there is also a system change request process which, when required, is evaluated respectively by their established Steering Committee.

The Steering Committee is generally made up of regional/modal customers, Information Technology (IT), and CPDM staff. The committee's purpose is to provide oversight and guidance regarding major system enhancements and changes from various different perspectives. They are also key in ensuring any changes to the system are vetted, approved and communicated prior to implementation.

11-3 Relationships with Other Offices

The CPDM Division interfaces with many different offices/divisions and specialty groups internally as well as externally. Because of this, the systems owned and supported by CPDM have to be robust and inclusive of these groups and should consider their business processes.

In addition to these business processes, the CPDM systems also transact or retrieve information from other IT systems. This occurs with but is not limited to:

WSDOT's Accounting Office's Transportation Reporting and Accounting Information System (TRAINS) and the Transportation Data Office's Transportation Information Planning and Support (TIPS) database, FHWA's Financial Management Information System (FMIS), and the Legislature's and OFM's Capital Projects System, to name a few.

11-4 Summary Descriptions of the IT Systems that the CPDM Systems Support Teams Maintains

The following systems and applications support Program Management functions. More detailed descriptions can be found in the next section below.

1. **Capital Program Management System (CPMS)***
This is a mainframe application that is accessed through the Attachmate Reflections Workspace software. It is the primary data input system and access point for all capital program management project information used in developing, monitoring, managing, and delivering WSDOT's capital construction program.
2. **Transportation Executive Information System (TEIS)***
This a proprietary, WSDOT-developed application used by program management to facilitate transportation budget planning and oversight. It provides budget preparation and executive summary information about a variety of activities to the Legislative Transportation Committees (HTC, STC), the Office of Financial Management (OFM), transportation agency managers, and other state agencies.
3. **Project Management and Reporting System (PMRS)***
This suite of software applications consists of an enterprise project scheduling, construction contract management, and content management system for the capital highway construction projects.
4. **Work Order Authorization System (WOA)***
This web-based application provides customers with the ability to create, submit, modify and close work orders for preliminary engineering, right of way, and construction expenditures on all projects in the highway construction program.
5. **Cognos**
This web-based tool provides customers with the ability to retrieve data from the various datamarts. Program Management customers can use Cognos to datamine against the CPDM datamart, TEIS reporting database, and WOA database, to name a few.
6. **SharePoint**
This web-based application is used by WSDOT teams to collaborate, communicate, and share information in an intuitive, structured way. The CPDM Division uses SharePoint to collaborate with its customers and provides information using this application.
7. **Geographic Information Systems (GIS)**
WSDOT's standard tool for GIS is ESRI's ArcGIS. The CPDM Division uses this tool to create web-based, interactive, and paper-based maps for many different purposes and audiences.
8. **Federal Aid Tracking System (FATS)***
This web-based system provides customers with the ability to create, submit, modify, and track Federal-Aid agreements between WSDOT and FHWA (FMIS).

*System or application directly supported by CPDM Division.

9. External Reports System*

This public-facing, web-based application contains three modules within it: a project delivery status, programmatic projects' STIP map, and project webpage search. This application allows customers to search for project webpages, provides the mapping of projects within the Statewide Transportation Improvement Program (STIP), and provides the current status of active construction projects.

10. Transportation Reporting and Accounting Information System (TRAINS)

This is the Accounting and Finance Services mainframe application that is accessed through the Attachmate Reflections Workspace software. It is the official accounting system for all WSDOT revenues, expenditures, receipts, disbursements, resources, and obligations.

11. Contract Administration and Payment System (CAPS)

This is the Accounting and Finance Services application for maintaining administrative and payment information about highway and ferry construction contracts. It also features an automated tracking and payments capability for project bid items.

12. Estimate and Bid Analysis System (EBASE)

This is the Design Office's application used to develop estimates for projects. It contains the engineer's estimates and contract bid history for highway construction projects which are uploaded into the CAPS application.

13. Transportation Information Planning and Support System (TRIPS)

This is the Transportation Data, GIS and Management Office's application that maintains and processes data about the WSDOT roadway network, traffic volumes and classifications, and collisions and collision severity.

14. Construction Contracts Information System (CCIS)

This is the Construction Office's application that tracks construction contract details, e.g. start dates, end dates, percent complete, fair hiring practices, fair wage rates, percent of work sublet, etc.

11-5 Detailed Descriptions of the IT Systems that the Systems Support Team Maintains

11-5.1 Capital Program Management System (CPMS)*

Contact: CPDM Systems Support Manager, 360-705-6889

Website: wwwi.wsdot.wa.gov/ppsc/pgmmgt/cpms

Used by: CPDM, Region Program Management, and Project Offices

CPMS is the primary tool WSDOT uses to establish, monitor, and deliver the statewide Highway Capital Construction Program. The system provides timely and reliable data to program managers, program management staff, Region administrators, project engineers, state Legislators, and transportation Commissioners. CPMS is a mainframe application accessed by Program Management Staff to plan, maintain, and deliver projects in the Improvement, Preservation, and Traffic programs, along with the Ferries, Rails, and Capital Facilities programs.

**System or application directly supported by CPDM Division.*

The information in CPMS is published in many formats for many different customers. Two publications based on CPMS data are the Capital Improvement and Preservation Program (CIPP) Book, which is published at least twice a biennium, and the Advance Schedule of Projects, which is published every month. Quarterly snapshots are taken for the agency's Gray Notebook reporting. Our TEIS extract is used daily during legislative sessions for scenario building and other reports for the Legislature and Commission. Data is captured in a datamart for access via Cognos and other querying software.

11-5.2 Transportation Executive Information System (TEIS)*

Contact: CPDM Systems Support Manager, 360-705-6889

Website: <http://transinfo.state.wa.us>

Used by: CPDM, Region Program Management, and Project Offices

TEIS is a set of applications designed to facilitate transportation budget planning and oversight. It provides budget preparation and executive summary information about a variety of activities to the Legislative Transportation Committees (HTC, STC), the Office of Financial Management (OFM), transportation agency managers, and other state agencies.

The overall system objectives for TEIS are to:

- Provide a central source for financial, project, and performance data for the Legislative Transportation Committees (LTCs), OFM, and transportation agencies.
- Ensure access to information needed for budget planning, oversight, and accountability.
- Serve as the main tool for reporting agency commitments for dollars and performance.
- Provide consistent data for the Legislature, OFM, and agency managers to track expenditures and monitor performance.
- Provide reliable, easy-to-use, access and uninterrupted service.
- Serve as the main tool for establishing consistent project location data.
- Provide a simple project-mapping interface.

Some of the most commonly used modules of TEIS include:

- **Change Management Module:** This module in TEIS supports the documenting of changes to scope, schedule and/or costs related to capital construction projects.
- **Grant Tracking Module (GTM):** This module in TEIS supports the tracking of grant applications and the verification of the availability of the associated funding matches and rates.
- **Project Summary Suite:** This module in TEIS supports the collection of capital project information during initial project scoping. It also allows for documenting the agency's commitment for scope of work, design, programming, and environmental decisions.
- **Project GIS Maintenance Module:** This module in TEIS supports using major location fields in CPMS to calculate location placement of projects in GIS applications and mapping products. This module is for validation and creation of geometry for accurate project placement spatially. Each project is verified for location accuracy. Additionally, this module allows for the production of the TEIS mapping component within TEIS.

*System or application directly supported by CPDM Division.

11-5.3 Project Management and Reporting System (PMRS)*

Contact: PMRS Helpdesk, 360-705-7300

Website: wwwi.wsdot.wa.gov/planning/cpdm/pmars.htm

Used by: CPDM, Region Program Management, and Project Offices

Referenced by Policy: E 1032.02, IL 4071.02

The Project Management and Reporting System (PMRS) is a suite of applications, both web-based and client based, including Primavera Scheduler (P6), Primavera Contract Manager (CM), Project Reporting and Information (PRI) and OpenText (Livelink), all somewhat customized for WSDOT use. PMRS employs industry-standard best practices and tools and integrates them with TRAINS, CCIS, CAPS, TEIS and CPMS.

PMRS was developed for project managers, program managers, specialty groups, and other agency staff to manage and report on project-specific information for Highways, Rail, and Ferry capital projects. PMRS facilitates schedule management, contract management, cost management, earned value management and electronic document storage and retrieval.

Primavera (P6) Scheduler is used for schedule development and management, cost management and earned value management. Scheduler interfaces with CPMS and TRAINS providing:

- WIN-based data such as milestones and budget.
- Authorized amount by phase.
- Actual costs and hours.
- Full Time Equivalent (FTE) planning and forecasting from a project level to a Region level.

Primavera Contract Manager (CM) is primarily used to administer construction contracts and manage project costs. Contract Manager interfaces with TRAINS, CAPS and CCIS. This application will be replaced by Primavera Unifier in 2017 and provides:

- Authorized and actual costs by group categories.
- Contract number and award amount.
- Change orders and pay estimates.

Electronic Content Management includes two applications: OpenText (Livelink) and SharePoint. These applications provide document collaboration, storage, retrieval and archiving capabilities. This application is used only by the Alaska Way Viaduct program and will be removed from service when the program is completed. All documents will be transferred to the WSDOT ECM system.

Project Reporting Information is the system designed for use with WSDOT Capital Projects. It is a project-reporting tool for program management, project offices, their designees, and specialty groups. This system is intended to be used in both the Regions and Headquarters. PRI interfaces with CPMS, TRAINS, TEIS, P6 and CM.

For additional information about PMRS, visit the webpage at: wwwi.wsdot.wa.gov/planning/cpdm/pmars.htm

*System or application directly supported by CPDM Division.

11-5.4 Work Order Authorization System (WOA)*

Contact: CPDM Systems Support Manager, 360-705-6889
Website: <http://wsdotecm/ibpmweb/client/framework.asp>
Used by: CPDM, Region Program Management, and Project Offices

Oracle Image and Process Management (IPM), formerly Stellent, is a commercially-off-the-shelf (COTS) platform providing core document management and workflow services. The application consists of a set of core windows services, a web client, and a windows client. In addition to the two clients, the Oracle IPM platform also provides both web services and a windows interface for use across the enterprise to access the core services required for implementing the document management and workflow solutions.

WSDOT first employed the Stellent solution in 2002 to provide document management services for the agency's As-built drawings, and workflow services for the Work Order Authorization system (WOA). Since then, the use of the core document management services has been expanded to include solutions for Administrative Contract Services, Real Estate Services, and the TDO as well as for many other offices. Additionally, the workflow services have been expanded to include Collision Location and Analysis System (CLAS), Real Estate Electronic Review, Out of State Travel, and most recently Human Resources, Payroll, and Ferries Timesheets.

11-5.5 Cognos

Contact: CPDM Systems Support Manager, 360-705-6889
Website: wwwi.wsdot.wa.gov/it/data/warehouse
Used by: CPDM, Region Program Management, and Project Offices

IBM's Cognos, the agency's standard reporting tool, is a web-based data query portal and tool that provides customers with the ability to retrieve data from the various datamarts. Program Management customers can use Cognos to datamine from the CPDM Division datamarts (CPMS, TEIS reporting database, and WOA database, to name a few). CPDM has created a number of standard reports that other offices can use to validate and gauge project performance and delivery. In the portal, you can:

- View public reports.
- Create and run reports.
- Perform administrative tasks, such as scheduling and distributing reports.
- Organize data by creating entries and storing the entries in folders.
- Personalize the portal to meet your needs.

*System or application directly supported by CPDM Division.

11-5.6 SharePoint

Contact: CPDM Systems Support Manager, 360-705-6889
Website: (Permissions required) <http://sharedot/pd/cpdm/default.aspx>
Used by: CPDM
Referenced by Policy: CPDM Initiative Policy 2B1

WSDOT uses SharePoint, a web-based application, for teams within the agency to collaborate, coordinate, and share information. CPDM uses SharePoint in the same way, providing the ability for their customers to provide input and guidance on topics that relate to capital project and program delivery.

CPDM's implementation of SharePoint consists of, but is not limited to, business unit team sites, forms hosting, task lists, online calendars, and bulletin board/announcements.

11-5.7 Geographic Information Systems (GIS)

Contact: CPDM Systems Support Manager, 360-705-6889
Website: <http://wsdot.maps.arcgis.com/home/index.html>
Used by: CPDM, WSDOT Communications

CPDM uses GIS applications and tools for a variety of ways in CPDM to plan, prioritize, analyze, and even obtain or distribute funding for WSDOT projects.

GIS allows the customer to map, model, query, and analyze large quantities of data within a single database or from multiple databases according to their relative location to Washington roads and features.

CPDM uses GIS to locate assets and elements within project limits, verify county and legislative boundaries, analyze intersecting highway locations for collision clusters, and identify needs near fish passage projects and other assets. Analysis is performed in GIS and often presented in web applications, internet pages, and publications. Data is also extracted for further analysis in Excel and other programs.

Layers are available in the GIS workbench (internal GIS ARCMAP data warehouse). Those layers are:

- Current Plan (snapshot as approved by Legislature)
- Current Programmed Projects
- Region Defined Projects
- Historical Projects
- Proposed Projects

The Current Plan is available to the public for download and access via web application: [Project Delivery Plan by Year](#)

The web application is broken out by year as follows:

-  WSDOT - Construction Planned 2019-2021
-  WSDOT - Construction Planned 2021-2025
-  WSDOT - Construction Planned 2025-2029

11-5.8 Federal Aid Tracking System (FATS)*

Contact: CPDM Systems Support Manager, 360-705-6889
Website:
Used by: CPDM

FATS is a web-based system used to create, submit, modify, and track Federal Aid agreements between WSDOT and FHWA. FATS provides a central point of reference to document compliance with federal funding requirements. FATS shares data with the WSDOT Accounting office to capture Federal Aid agreement information in WSDOT's TRAINS system.

11-5.9 External Reports System**

Contact: CPDM Systems Support Manager, 360-705-6889
Website: www.wsdot.wa.gov/projects/search
Used by: Various internal and external customers

The External Reports Systems is an online application created by WSDOT for the public consumption of basic information about projects in and around the customer's community.

There are three components of the External Reports System:

- The 'Project Delivery Status' tab provides a listing of projects that are currently being delivered by WSDOT. Also, it provides other information about the project such as the project's description, legislative initial and current budget dollar amounts, project milestone dates, and project funding summary. This section is updated monthly.
- The 'Programmatic Projects in STIP' tab provides a listing of projects and their locations, based on WSDOT's Project Delivery Plan. This section of the system is updated annually.
- The 'Project Web Page' tab provides an easy search mechanism for locating project webpages.

*System or application directly supported by CPDM Division.

**System or application directly supported by CPDM Division.

11-5.10 Transportation Reporting and Accounting Information System (TRAINS)

Contact: TRAINS Helpdesk, 360-705-7514
Website: wwwi.wsdot.wa.gov/publications/manuals/m13-03.htm
Used by: All WSDOT

TRAINS is a modified version of the Government Financial System (GFS), an integrated and relational automated financial management system. The system was designed to work with other WSDOT systems that depend on the agency's automated accounting system for financial information. It is the official accounting system for all WSDOT revenues, expenditures, receipts, disbursements, resources, and obligations.

The CPDM Systems Support group reconciles the CPMS system with TRAINS on a daily basis and follows the scheduled month end processing for ensuring data accuracy.

11-5.11 Contract Administration and Payment System (CAPS)

Contact: Accounting & Financial Services, 360-705-7337
Website: wwwi.wsdot.wa.gov/accounting/manuals/capsmanual.htm
Used by: WSDOT Program/Project Delivery

CAPS is a mainframe application that maintains administrative and payment information about Highway and Ferry construction contracts. The work order manager uses CAPS to initiate payments to be made to prime contractors and escrow agents. The system creates payment vouchers to pay contractors by feeding data to TRAINS. Specific CAPS functions can track construction costs by bid item, calculate sales tax owed at the rate appropriate for the project location, provide the ability to monitor for required insurance and retainage, and create payment vouchers.

11-5.12 Estimate and Bid Analysis System (EBASE)

Contact: Strategic Analysis & Estimating Office, 360-705-7456
Website: wwwi.wsdot.wa.gov/publications/manuals/ebase.htm
Used by: WSDOT Program/Project Delivery

EBASE is a PC desktop application, which is used to develop detailed estimates based on quantities and unit prices. In a project's life cycle, EBASE is populated during the transition between the preliminary engineering and construction phases. The final engineer's estimate compares differences in contractor bids. The apparent low bid is entered into EBASE to facilitate this comparison and to award the project to the successful bidder.

The system provides WSDOT with contract bid history information.

11-5.13 Transportation Information Planning and Support System (TRIPS)

Contact: Traffic Data & Analysis Branch, 360-570-2430
Website: wwwi.wsdot.wa.gov/fasc/it/mainframe/Services/EntireXRPC/TRIPS.htm
Used by: WSDOT Program/Project Delivery

TRIPS is a mainframe system which houses roadway geometrics, traffic data, and state highway collision data. In addition, it is the repository for all state highway realignment records. It is co-managed by the Statewide Traffic & Collision Data Office (STCDO) and the GIS-Roadway Data Office (GIS-RDO). TRIPS feeds other mainframe systems such as:

- CPMS.
- Client-server applications such as the Collision Location and Analysis System (CLAS).
- Roadway, Traffic and Collision Data Marts.
- Unstable Slopes application.
- Washington State Pavement Management System (WSPMS).
- Accumulated Route Mileage (ArmCalc) application that enables other applications to correctly align their data along the state highway system.

The roadway data is used to produce WSDOT's [State Highway Log](http://www.wsdot.wa.gov/mapsdata/roadway/statehighwaylog.htm):
www.wsdot.wa.gov/mapsdata/roadway/statehighwaylog.htm

The collision and traffic data are used to prioritize highway safety projects for programming.

TRIPS roadway data is available through the [State Highway Log](http://www.wsdot.wa.gov/mapsdata/roadway/statehighwaylog.htm), CPMS (the PI screen) and other mainframe synchronization programs, the GIS workbench and various Accumulated Route Mileage (ARM) calculation modules for translating state route mileposts (SRMP) into ARM values.

11-5.14 Construction Contracts Information System (CCIS)

Contact: State Construction Office, 360-705-6970
Website:
Used by: WSDOT Program/Project Delivery

CCIS automates the tracking of construction contract data and provides an accessible reporting system. CCIS contains information on contracts, significant project milestones, change orders, subcontractor tracking, number of working days, and compliance figures. The system is comprised of two subsystems—a mainframe component and a personal computer component. The mainframe collection component of the system combines contract setup data from other mainframe systems with data entered from the project, region, and State Construction offices. The collection system provides a centralized collection of statewide contract data. The personal computer component uses a server-based Structured Query Language (SQL) to provide easy data retrieval.

The Program Analysis and Management Services (PAMS) Budget Analyst staff serve other WSDOT offices by managing and tracking funding and expenditures for Direct Project Support (DPS) and Program Support (PS) activities.

DPS is the funding mechanism that supports the development and delivery of activities performed on *individual highway construction projects*. PS is the funding mechanism that supports the development and delivery of the highway construction program at the *program level*.

These funds are available statewide for support activities to offices and projects in the following sub programs:

- P4 – Program Support and Direct Project Support Budgeted Preservation
- P8 – Direct Project Support Distributed
- I5 – Program Support and Direct Project Support Budgeted Improvements

WSDOT Offices overseeing activities funded by the Capital Program Development and Management Office (CPDM) are given initial budgets prior to the beginning of a new biennium and any subsequent budget increase requests are submitted to the assigned PAMS budget analyst. Parties who seek funding from these programs submit requests by activity to the assigned PAMS analyst who will review the request for accuracy and detail. They will contact the inquiring party with any questions or concerns in need of addressing before the request proceeds to the relevant Program Manager for approval.

Planned expenditures and actual expenditures are tracked and reported to external stakeholders through the Transportation Executive Information System (TEIS).

Responses to questions or concerns originating from these external stakeholders are coordinated through CPDM for programs I and P (Improvement and Preservation).

12-1 Roles and Responsibilities

PAMS Budget Analysts are responsible for managing appropriated funds within their respective sub programs. Analysts will establish Project Identification Numbers (PINs)/ Work Item Numbers (WINs)/Work Orders for activities managed by Headquarters organizations and will review and approve PINs/WINs/Work Orders established by the Regions. In addition, analysts will coordinate to meet the needs of WSDOT offices in regard to Full Time Equivalents (FTEs) and dollars within the defined fund source that is available. The factors that go into this coordination include budget development, detail planning, and the creation of aging plans for each activity as directed by the relevant Program Manager. Customers are informed of their budget status, perceived challenges, and potential solutions.

Analysts reconcile Capital Program Management System (CPMS), Transportation Reporting and Accounting Information System (TRAINS), and Transportation Executive Information System (TEIS) to ensure transparent information sharing between WSDOT, Office of Financial Management (OFM), and the Legislature.

12-2 Direct Project Support - Budgeted

Direct Project Support represents work or services that contribute to the delivery of the Highway Construction Program but are not assigned to any one project. These activities can be further extrapolated as labor and associated costs incurred by an office that benefit the Highway Construction program, or for incidental labor performed by an office on a specific project that would not justify capturing the time in the labor distribution system, such as work lasting less than two hours.

DPS Work Orders and Work Item Numbers (WINs) are set up on a biennial basis, but the Project Identification Numbers (PINs) to which they are tied are 'perpetual' or unchanging over one or more biennia. Project Identification Numbers, Work Orders, and Work Item Numbers are established in the Capital Program Management System (CPMS), but the data can be queried through TEIS or any one of the CPMS packages in the WSDOT Data Warehouse.

DPS budgeted activities are assigned Work Order prefixes based on the Management Region for that work order. The current assignments of DPS Budgeted work order prefixes are as follows:

- IH – Headquarters' managed work order
- IA – Northwest Region managed work order
- IB – North Central Region managed work order
- IC – Olympic Region managed work order
- ID – Southwest Region managed work order
- IE – South Central Region managed work order
- IG – Eastern Region managed work order

12-3 Program Support - Budgeted

In contrast to DPS, Program Support (PS) activities are those that assist in delivering the overall Highway Construction program itself. Examples of PS activities might include conducting bridge inspections, or creating applications that assist in design and analysis functionalities.

Program Support activities are performed as functions of the I5 and P4 sub programs. The work orders set up for these activities use the MT prefix unless they are tied to an Emergent Needs PIN, in which case the work order uses the MU prefix. The titles for both Program Support Work Items and Work Orders begin with the biennium in which the activity is being performed followed by a description, e.g., "17-19 Reach Analysis."

Program Support activities generally have one or many WINS/Work Orders tied to one PIN, whereas DPS Budgeted activities generally have only one WIN/Work Order tied to one PIN.

12-4 Direct Project Support – Distributed

DPS Distributed work orders are established when the necessary funding for DPS and PS activities exceeds the amount appropriated by the legislature. Distributed work orders do not have a state appropriation of a certain amount of funding, but an authorized amount is set up that can be distributed to Highway Construction projects.

DPS Distributed work orders are assigned the IR work order prefix. The titles of these work orders depict the authorized distribution level in dollars, the biennium for which the work order was set up, and the activity costs being distributed.

These DPS Distributed work orders are known as pools because they capture (or 'pool') expenditures which are then distributed to projects monthly. The work orders that are on the receiving end of these distributions are known as "bases." A work order must meet all of the criteria listed below in order to serve as a base for distribution:

1. The Fund used by the work order must utilize one of the following Fund Codes: 09H, 097, 108, 215, 218, 550, or 20H.
2. The work order must be set up in one of the following subprograms: I1, I2, I3, I4, P1, P2, or P3.
3. The work order must have an open labor group (Labor Indicator = Y, Group Category 03, 04, or 08).
4. The work order must have had expenditure activity in the previous month.

The base of a DPS Distributed work order is determined by both the Management Region and activity of the DPS Distributed work order itself. A work order assigned to Headquarters for management will distribute expenditures statewide, whereas a work order assigned to a Region for management will only distribute within that Region.

Furthermore, a DPS Distributed work order will only distribute to bases with the same phase, e.g. a DPS Distributed work order in the Preliminary Engineering phase will only distribute to other Preliminary Engineering work orders.

Table 12-1 How DPS Is Distributed

DPS Distributed Phase	DPS Distributed Mgmt Region	Redistribute only within Region	Redistribute Statewide	Required Base Work Order Phase
Preliminary Eng.	Region	X		Preliminary Eng.
Preliminary Eng.	Headquarters		X	Preliminary Eng.
Right of Way	Region	X		Right of Way
Right of Way	Headquarters		X	Right of Way
Construction	Region	X		Construction
Construction	Headquarters		X	Construction

Consult the GRUP table in the Transportation Reporting and Accounting Information System (TRAINS) to identify a work order's assigned activity. The activity codes and the accompanying description detailed below are those activities that may be supported by a DPS Distributed work order:

- Activity P810 – Preliminary Engineering (PE)
- Activity P820 – Right of Way (RW)
- Activity P830 – Construction Engineering (CN)/State Force Work

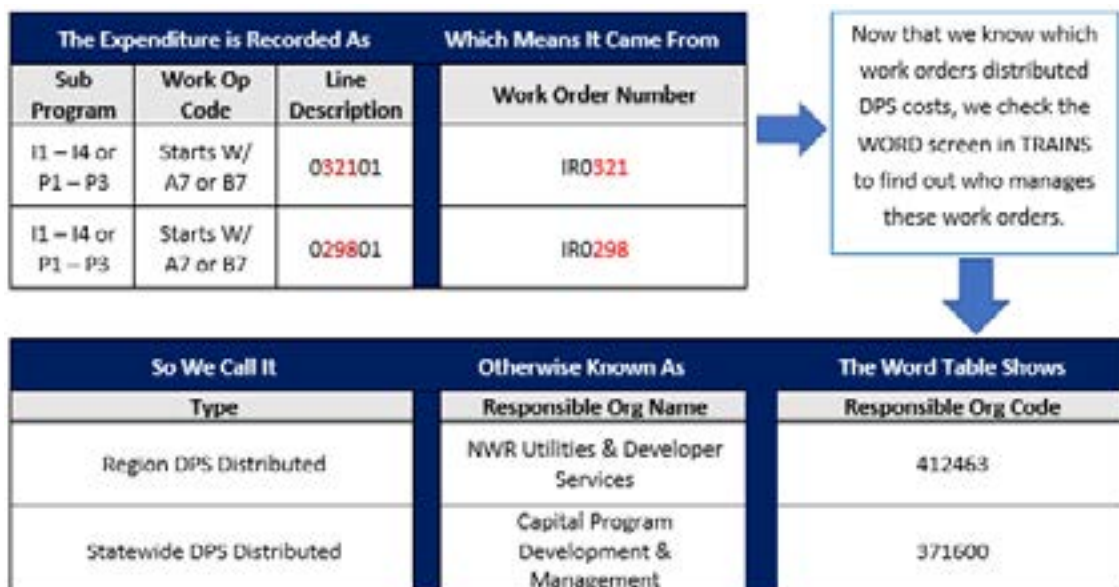
During the distribution process, the work operation code within the pool to which an expenditure was charged is converted to a work operation code utilized by bases specifically to capture distributed expenditures. For instance, the work operation code 0716 is converted to work operation code A716 during the distribution process. This allows for transparent and more simplified reporting on project expenditures that originate from a DPS Distributed work order.

For DPS Distributed work orders, expenditures are captured in those groups numbered between 01-98. Group 99 is used by the system to redistribute expenditures and thus acts as an offsetting credit within the work order, bringing the work order balance to \$0. Sub Program P8 is non-appropriated as expenditures are re-distributed to work orders residing in Sub Programs P1-P3 and I1-I4.

Once these costs have been distributed to work orders in Sub Programs P1-P3 and I1-I4 (the bases), we can still identify the source of the distribution (the pool). While estimating and analyzing Direct Project Support costs as a percentage of the Highway Construction program is important to understanding delivery statewide, it is often necessary to also break out the source of DPS costs at a Region and phase level for deeper analysis. By breaking out these factors, we can be sure that support activities are properly categorized in the phase of work they align with, and that costs are being distributed equitably. We can also ensure that the necessary state match for federal projects is being estimated to capture distributed support costs, and identify where there might be opportunities for improvement in our delivery methods.

Unlike DPS distributed work orders managed by the Regions, Headquarters DPS distributed work orders disburse costs Statewide. For this reason, it is important to differentiate between HQ distributed costs and Region-only distributed costs. The tables below provide an example in order to help you better understand how we identify the source of and then categorize Direct Project Support expenditures.

Exhibit 12-1 This table provides an example of how to identify the source of DPS distributed expenditures, and how those expenditures are categorized.



12-5 Work Order Groups, PINs, and DPS Distributed Outcomes

Clusters of projects that are in the process of being delivered together will commonly share a work order number for any given phase of work. In financial systems, because there is no Work Item Number, each individual PIN will be tied to a different group number on the work order. A single PIN may also be tied to multiple work order groups.

This one-work-order-to-many-PINs relationship can result in unfavorable or inequitable DPS distributed outcomes. While the allocation of support costs are determined at the work order level, the costs are actually captured in a single group on the work order, and thus a single PIN. Assuming all other criteria are met for a project to incur distributed support costs, the costs will be captured as follows:

- DPS Distributed charges will hit the first open engineering group with an engineering split on the CSPA table, OR
- If there is no engineering split, DPS Distributed charges will be directed toward the first open group with Labor Indicator = "Y" in Group Category order of GC03, GC08, and then GC04.

This relationship between the distribution methodology and the manner in which projects being delivered together are structured in financial systems leads to outcomes where a single PIN will capture the support costs necessary to deliver a bundle of projects being delivered together. This scenario is depicted below using real data.

Exhibit 12-2 This work order is related to multiple PINs through work order groups. However, the methodology to determine distributed support costs will only assign those costs to a single PIN related to the work order.

Work Order	Sub Program	Group	PIN	Expenditure Type	
				DPS Desc.	Other
088952	Q	01	108512T - I-5/Nb Martin Luther King Jr Way - Barrier Extension	-	173,197
		06	108516E - I-5/Nb Ave S - Ada Compliance	-	70,648
		07	108515C - I-5/Nb Ravenna Blvd Ramp - Ada Compliance	-	42,073
		01	108512T - I-5/Nb Martin Luther King Jr Way - Barrier Extension	100,001	11,945
		06	108516E - I-5/Nb Ave S - Ada Compliance	-	3,726
		07	108515C - I-5/Nb Ravenna Blvd Ramp - Ada Compliance	-	2,301
		02	108515B - I-5/Northbound Boeing Access Rd To Ne Ravenna Bridge - Pavement Repair	-	4,899,389
		03	108516G - I-5/Nb S Spokane St Vic - Concrete Pavement Replacement	-	2,608,276
	P1	04	108519B - I-5/Nb I-90 Vic To James St Vic - Concrete Pavement Replacement	-	2,751,276
		02	108515B - I-5/Northbound Boeing Access Rd To Ne Ravenna Bridge - Pavement Repair	-	270,679
		03	108516G - I-5/Nb S Spokane St Vic - Concrete Pavement Replacement	-	139,271
		04	108519B - I-5/Nb I-90 Vic To James St Vic - Concrete Pavement Replacement	-	146,885
		08	108515B - I-5/Northbound Boeing Access Rd To Ne Ravenna Bridge - Pavement Repair	-	0
		09	108516G - I-5/Nb S Spokane St Vic - Concrete Pavement Replacement	-	0
		05	108522C - I-5/Nb Spokane St To Lake Wa Shup Canal Bridge - Special Bridge Repair	-	1,570,066
		05	108522C - I-5/Nb Spokane St To Lake Wa Shup Canal Bridge - Special Bridge Repair	-	84,202
	P2	05	108522C - I-5/Nb Spokane St To Lake Wa Shup Canal Bridge - Special Bridge Repair	-	1,570,066
		05	108522C - I-5/Nb Spokane St To Lake Wa Shup Canal Bridge - Special Bridge Repair	-	84,202
	Summary			150,001	12,762,891

Furthermore, because total distributed support costs are determined at the work order level but the costs will only hit a single group and PIN, there exists the possibility that these costs will immediately overrun a project's State funds, or even a project's total budget. In the example image above, PIN 100512T incurred all distributed support costs allocated to the work order, resulting in a \$150,000 O-line in CPMS. Customers who are setting up new work orders to deliver multiple PINs together should be aware of the DPS distributed methodology and how that may impact the budget for each PIN being delivered.

12-6 PAMS Office Relationships with Other Offices

PAMS Budget Analysts primarily work with customers within WSDOT and coordinate responses to external stakeholders with other CPDM offices.

PAMS Budget Analysts establish and modify PINS, WINS, and Work Orders as necessary for Headquarters customers to charge against and provide guidance on the use of any funding provided, whereas Regional customers establish and modify their own PINS, WINS, and Work Orders but approval and guidance still originates from Headquarters.

Both Regional and Headquarters' customers partake in semi-annual budget review meetings to identify and address budget concerns.

12-7 The Budget Request Process

The budgeting process utilized by the PAMS Office stretches the course of the biennium, from initial budget targets to continuous monitoring and eventual work order closures. Budget targets are set many biennia in advance and then refined based on customer input and any ongoing costs identified on a Budget Change Request Form. While customers are given a biennial budget target, funding is only authorized on a fiscal year basis; at the conclusion of the first fiscal year, authorized funding will first be reduced to actual expenditures before second fiscal year funding is authorized for spending. However, as the end of the first fiscal year draws near, customers have the opportunity to communicate through a Budget Change Request Form about what was not delivered as planned, and why they may need to retain their remaining first fiscal year funding into the second fiscal year to complete delivery.

Customers first use the Budget Request form to communicate their needs for both new and already-established activities, whereas the Budget Change Request form is used when circumstances change from the time when a budget was approved. Depending on which form is being submitted, the approval process differs. For a detailed look at the Budget Request process flowchart, see [Appendix 12A](#).

The approval process for DPS funding requests begins when a Budget Analyst from the PAMS office sends the customer their budget targets, a completed labor pricing document, an employee list, and a blank aging plan. Alternatively, customers are welcome to independently submit a Budget Request Form with the same supporting documentation at any time during the biennium to request funding for a new activity. Customers may also find their budget targets for already-established activities in TEIS versions DPSPSAPR.

Office budget targets are sent out to customers and the targets for each activity are entered into TEIS Versions DPSPSAPR at the PIN level, or the work order level for operating programs. The former displays targets for each activity for the full biennium, the latter shows targets for each fiscal year.

Exhibit 12-3 TEIS Version DPSPSAPR

Version Controls: 2017 Version
 ModelID: All
 Scenario: All
 Limit Versions To: All
 Sort Versions By: Date Created
 Version Period: Biennial

Current Biennium Source: version1
Current Biennium: 2015 - 2017

Version 1: DPSPSAPR: Current approved budget for DPS and Program Support - Daily
 Created: 12/7/2013 Updated: 12/21/2016 Total Projects: 648 Selected Projects: 448

Version 2: (None)

Filter By: Program, Funding, Location, Project Grouping, Photo/Schedule

Projects Listed: 448

PIN	Project Title	SR	SubPgm	Total	Price	13 - 15	15 - 17	17 - 19
000001	CPDM Substantive Settlement Litigation	000	PA	\$44,300	0	0	\$44,300	0
000006	15-17 CPDM Office Staff DPS	000	PA	125,000	0	0	125,000	0
000040	15-17 Project Development PDR	000	PA	20,000	0	0	20,000	0
000768	RESEARCH GRANT - NOKS TEST RULES	000	TS	108,375	0	0	108,375	0
091901A	State Survey Support	000	IS	305,961	305,961	0	0	0
091901C	HQ Moving Consultation Costs	999	IS	2,312,969	2,079,635	233,334	0	0
091901D	Commute Trip Reduction	999	IS	1,098,237	396,297	0	0	701,940
091901F	ARC GIS Software License	999	IS	\$2,000	\$2,000	0	0	0

In both instances, it is the responsibility of the customer to verify that the labor pricing and employee lists submitted with their requests are accurate prior to moving onto completing the Budget Request Form.

Along with a Budget Request Form and blank Aging sheet, customers will receive an initial labor pricing and current employee list for each activity funded in DPS. Customers will then review and update these documents as necessary.

Exhibit 12-4 Labor Pricing Tool

For All FTEs - Fill in ONLY the Highlighted Columns
 (Column A through Column G)

This version includes changes to benefit rates and general wage increases that were included in the Enacted 2016 Supplemental Operating Budget.

Annual Step to use: **L**

Annual Salary for WMS or Override Positions

Position Number	Position Class Code	Org Code	Employee Name	Percent Time	Step	Position Job Class	Range	Annual step L	Elig Total
Totals for All FTEs & Dollars									
00001	536P		John Doe	100%	L	TRANSPORTATION TECHNICAL ENGINEER	69	89,104	244,383
00002	536D		Jane Doe	100%	L	TRANSPORTATION ENGINEER S	69	89,104	244,383
00003	147C		Jim Doe	100%	L	BUDGET ANALYST 3	54	61,558	177,684
00004	108T		Rebecca Doe	100%	L	SECRETARY SENIOR	33	36,746	117,834

Information Needed for Budget Request Form:

FTEs	Salaries	Benefits	Tl Sal & Ben
4.000	\$275,452	\$115,620	\$390,142

Totals for All FTEs & Dollars

FTEs	Salaries	Benefits	Tl Sal & Ben
4.000	\$275,452	\$115,620	\$390,142

Totals for All FTEs & Dollars

FTEs	Salaries	Benefits	Tl Sal & Ben
4.000	\$275,452	\$115,620	\$390,142

After the labor pricing for a given activity has been finalized, the customer should then move on to the Budget Request Form. On the initial Budget Request form, customers will identify the scope of the activity performed and the budget needed to provide deliverables at the work order level. If there is more than one work order for a PIN, the budget request for every work order under that PIN must roll up to the PIN budget target shown in TEIS.

The customer requests funding and lays out a budget by object. The amount budgeted for Salaries and Benefits must match the finalized labor pricing completed for the activity.

Customers return this budget request form to the PAMS Office. This information must match their initial target.

After the customer has completed their Budget Request Form, they will use the supplied blank aging sheet to age their requested funding by object over the course of the biennium. The total amount aged for each object must match the total amount requested on the Budget Request Form. For a detailed look at the Budget Request Form, see [Appendix 12B](#).

After a budget has been approved for a given activity, a WIN and Work Order will be established and tied to that activity's PIN. If it is a new activity, a new PIN must be established as well. These WINs, Work Orders, and PINS are all established in the Capital Program Management System (CPMS), followed by a submittal through the Work Order Authorization system in order to set up the Work Order in TRAINS. For work orders managed by a Headquarters organization, the PAMS Office will perform the set up in CPMS and the WOA system. For work orders managed by a Regional organization, a member of that Region will perform the set up. In both cases, the assigned Headquarters Budget Analyst is responsible for reviewing and approving the submitted Work Order Authorization.

The PAMS Budget Analyst will populate the Transportation Allocation and Allotment Control System (TRACS) screens in TRAINS for Budget Planning and Control with the aging plan provided by the customer. The monthly aging reports are generated from these screens:

- The Budget Change Table (BCHG) is used to create a tracking number and description of the changes that you intend to make.
- The District Target Table (DTAR) tracks the budget by Biennium, Sub Program, two Digit Org Code, FY plan amount and FTE.
- The Period Planning Table (PRPL) is the biennium budget plan that tracks by Biennium, Sub Program, three Digit Org Code, Appropriation, Job Number, four Digit Object Code and FTE by month.

Once a work order has been established in both CPMS and TRAINS, customers will receive monthly reports detailing their planned and actual expenditures by object. If the expenditures captured in a work order do not align with the planned expenditures, the customer responsible for managing the work order may be asked to re-age their work order.

When re-aging a work order, customers may only adjust planned dollars for months in which expenditures have not yet posted; for instance, a customer may not adjust their planned expenditures in August if the current month is September. After the customer has finished revising their aging plan, they must send the revised plan to the assigned Headquarters budget analyst. After reviewing the plan, the assigned Headquarters budget analyst will either concur and approve the plan, or they will contact the customer with questions or concerns about the plan. From that point forward, the monthly aging report received by the customer will match the approved plan.

12-8 The Budget Change Request Process

When the situation arises wherein a customer may require additional funding for an already-funded activity, they will communicate that need to a PAMS budget analyst through the Budget Change Request Form. This document allows customers the opportunity to explain what has changed since a budget was originally approved, why those changes impact the resources needed to deliver a given activity, and the amount of additional resources needed to deliver that activity.

The approval process for a Budget Change Request differs slightly from that of a Budget Request Form. For a detailed look at the Budget Change Request process flowchart, see [Appendix 12C](#).

Because the Budget Change Request Form is used in this context to communicate the additional resources needed to deliver an activity, the form itself and all supporting documentation should be completed to reflect only the additional resources being requested. For instance, if the original approved budget for a given activity is \$100,000 and the customer needs an additional \$20,000 to deliver that activity, they will explain and document only the additional \$20,000 on the Budget Change Request Form they submit. For a detailed look at the Budget Change Request Form, see [Appendix 12D](#).

12-9 The Fiscal Year End Process

As DPS work and services are delivered during the first fiscal year of the biennium, it is inevitable that some delays or setbacks occur that may result in actual spending falling behind the original plan. After the third quarter of the first fiscal year closes, customers are required to submit a request in order to push first fiscal year funding into the second fiscal year. Using the Budget Change Request Form, customers will explain what occurred, or what didn't occur, that has led to a need to retain first fiscal year funding in the second year to deliver their work or services. This documentation must be submitted prior to July 1 of the second fiscal year, otherwise all underrun funds will be forfeit and reprioritized within the program. This process follows the same flow as the standard Budget Change Request process.

12-10 Work Order Closures

Work orders are closed when any of these conditions are reached:

- Work activities are completed.
- An organizational budget is expended.
- A reorganization of offices may occur that requires the change of work order.
- The biennium in which the activity was performed has ended.

When a work order is ready to be closed, the process for closure depends on Management Region assigned to the activity.

For offices considered a Headquarter Organization, work orders will be closed by the PAMS Office for Subprograms I5, P4, and P8. Region work orders will be closed by Region Program Management unless assistance is requested of the PAMS Office. The party responsible for managing the work order may notify the PAMS Office with an email request to close the work order and/or groups of work orders at any time during the biennium.

Depending on whether or not the work order is managed by a Region or by Headquarters, either Region Program Management or the PAMS Office will prepare the work order authorization using the Work Order Authorization System and update CPMS.

The work order authorization will:

1. Balance the authorized funds to the amount expended for the work order.
2. Balance the group categories to the amount expended for the group category.
3. Request closure of any associated open payable and/or reimbursable agreement(s) where the agreement time has expired and/or all authorized agreement dollars have been expended. The party responsible for managing the work order may request closure if work activities have been completed for the payable and/or reimbursable agreement.

4. Request closure of associated federal project. This may only occur when the last open work order set up with the federal project is being requested to close.
5. Request closure of the open work order.
6. If closing a non-Headquarters work order, Region Program Management will communicate to PAMS staff to update the Region approval codes in CPMS.

The party responsible for managing the work order will update the following CPMS screens:

1. HM screen to decrease any remaining dollars and balance to expenditures.
2. HP/HR/HC screens to close the WIN. (HP is for the PE phase, HR is for the RW phase, and HC is for the CN phase.)
3. WX screen to enter a comment on closure.
4. MU screen to change the end date of WIN.

Once the work order authorization is approved by the Region or completed by the assigned Headquarters budget analyst, the work order authorization will be routed to the PAMS “CPDM DPS Approve” queue for approval. A member of the PAMS staff will review the work order authorization closure request and update the approval code(s) in CPMS. PAMS staff will also update TEIS with the same information.

Once the work order authorization has been prepared with closing instructions, the work order authorization will be routed to the Accounting and Financial Services Office to be processed into TRAINS. Once closure has occurred in the TRAINS system, the completed work order authorization will be emailed to the customer detailing the completion of the work order closure process.

Software Support Systems and their functions as utilized by PAMS staff include the following. For more information, see [Chapter 11](#).

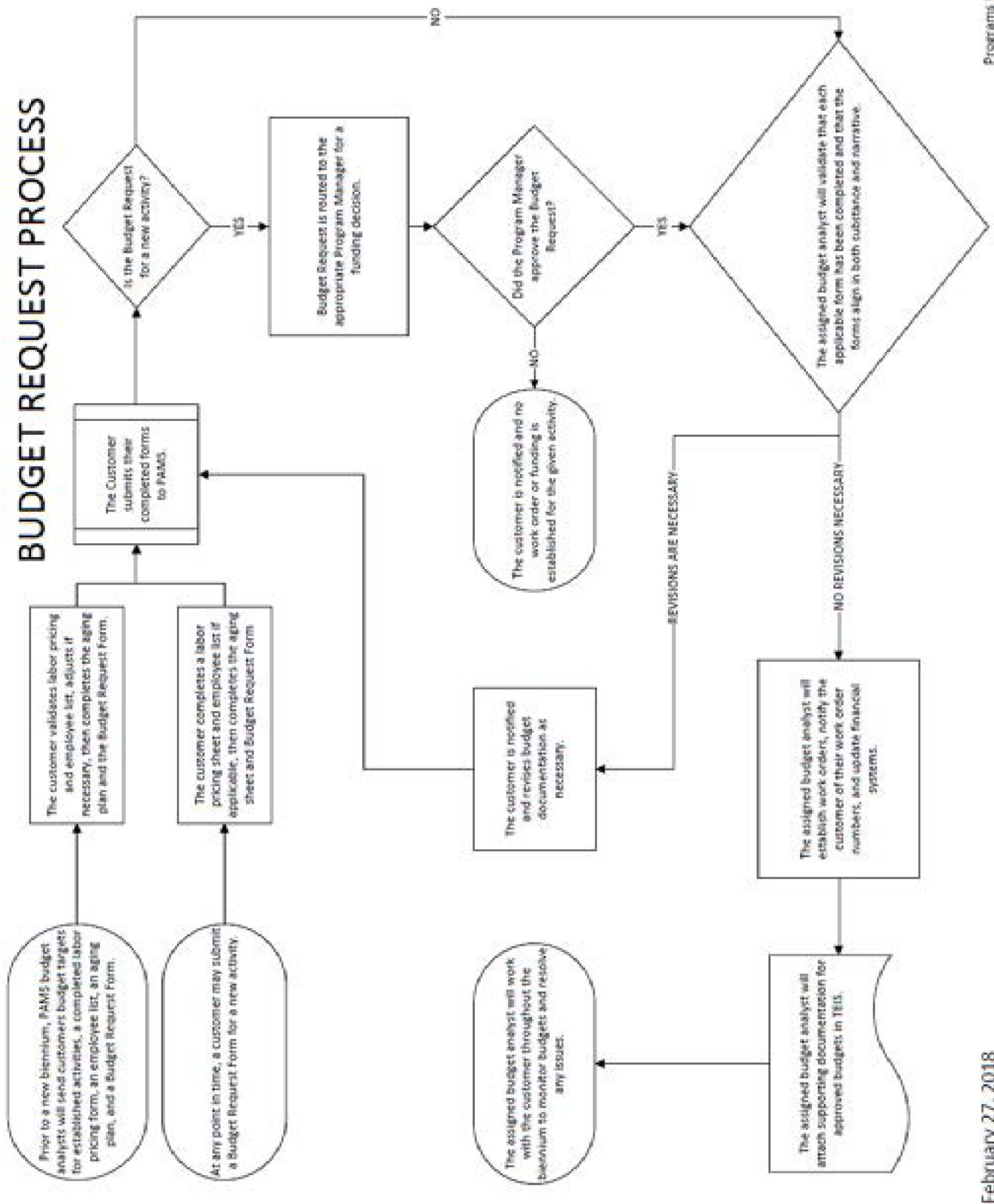
- Electronic Content Management Portal – Work Order Authorizations
- TRAINS – Monitoring
- Transportation Allotment/Allocation Control System (TRACS) – Detail Planning and Allotment
- TEIS – Reporting to internal and external stakeholders
- CPMS – Establishing PINs, WINs, Work Orders and funding
- WSDOT Data Warehouse – Reporting

For more information, see [Chapter 11](#) Information Technology Systems.

12-11 Appendices

- Appendix 12A Budget Request Process
- Appendix 12B Budget Request Form
- Appendix 12C Budget Change Request Process
- Appendix 12D Budget Change Request Form

Appendix 12A Budget Request Process



Appendix 12B Budget Request Form

Capital Program Development and Management Division (CPDM)

BUDGET REQUEST

19-21 Biennium

WSDOT's program structure includes funding for the delivery of the Highway Construction Program. This structure consists of an appropriated operating program, Program H – Program Delivery and an indirect distribution to projects P8 or sub-program I-5 and P-4, commonly referred to as Direct Project Support/Program Support (DPS). A Budget Request form is necessary to communicate needs, intent and deliverables as a result of receiving this funding. This form allows CPDM to determine whether the funding request supports the delivery of the Highway Construction Program and is consistent with legislative expectations for the funding.

Before submitting your documents, please be sure of the following:

- ✓ Requested funds match the "Planned Expenditures by Object" table on this form.
- ✓ Labor expenditures and FTEs match your completed Labor Pricing template if applicable.
- ✓ Expenditures are rounded to the nearest hundred.

If you have questions, please contact your assigned [CPDM budget analyst](#).

Contact Name:	Phone No.	Program: H ☐ DPS ☐
Proposed/Current Work Order Title:		Date:
Name of Requesting Organization:		Org Code:
Approved Budget:	Approved FTEs:	

1. Describe the type of work that is going to be performed with these funds. Define the scope of activity and the deliverables that would result from receiving this funding.

2. Describe any one-time costs that will not carry forward into future biennia.

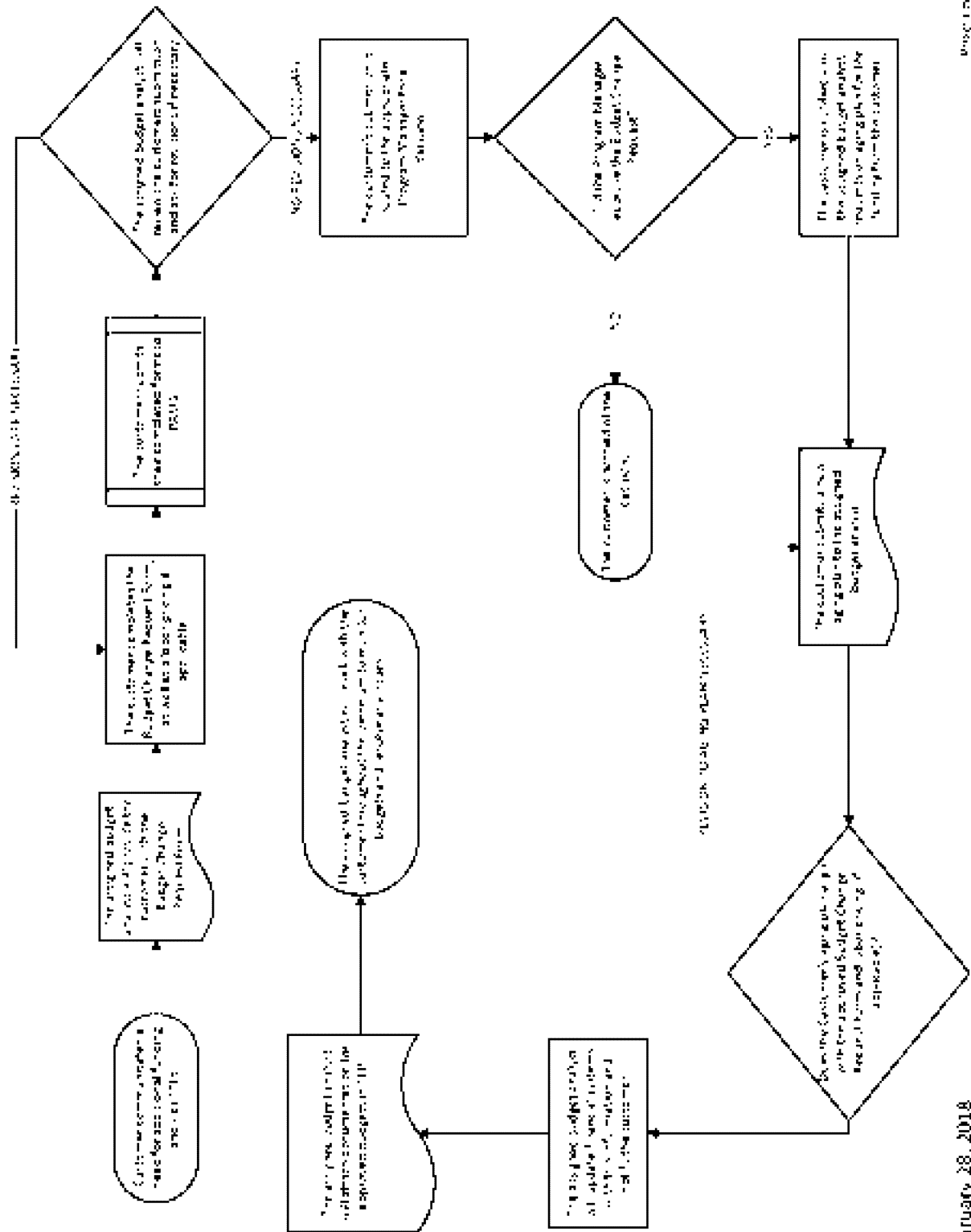
Capital Program Development and Management Division (CPDM)

Please provide the planned expenditure amounts by object code. The total expenditures planned in the table below MUST match your assigned budget target, for the activity. **Double click on grid below to enter in the FTEs and dollar amounts.**

Planned Expenditures by Object	Obj Code	FY20	FY21	Total
FTEs	→			0
Salary & Benefits	A/B			0
Personal Service Contracts	C			0
Goods & Services	E			0
TEF Rental/Pur. Equip Under \$5K	E			0
Purchased Services	ER			0
Travel	G			0
Equip Over \$5k/A&E Consultants	J			0
Total		0	0	0

Appendix 12C Budget Change Request Process

BUDGET CHANGE REQUEST PROCESS



Budget Change Request

February 28, 2018

Appendix 12D Budget Change Request Form

Capital Program Development and Management Division (CPDM)

BUDGET CHANGE REQUEST

2019-21 Biennium

A Budget Change Request form is necessary to request an increase for those activities funded in Program H – Program Delivery, Program T – Multimodal Planning and Programs I and P - Direct Project Support/Program Support. This form allows Capital Programs Development & Management (CPDM) Division and/or the Multimodal Planning Division to determine whether the funding request supports the delivery of the Highway Construction Program and/or the Multimodal Planning Program and is consistent with legislative expectations for the funding.

Before submitting your documents, please be sure of the following:

- ✓ Requested funds match the "Planned Expenditures by Object" table on this form.
- ✓ Labor expenditures and FTEs match your completed Labor Pricing template if applicable.
- ✓ Expenditures are rounded to the nearest hundred.

If you have questions, please contact your assigned [CPDM budget analyst](#).

Contact Name:	Phone No.	Program: H ☐ DP5 ☐ T ☐
Work Order Title & Number:	Date:	
Requesting Organization:	Org Code:	
Approved Budget:	Additional Requested Funds:	Additional Requested FTEs:

1. Describe the work that will be performed with the additional funds:

--

2. Why is this additional work required? How would this need be addressed if funding is not available?

--

3. Describe any one-time costs that will not carry forward into future biennia?

--

Please provide the planned expenditure amounts by object code. The total expenditures planned in the table below **MUST** match your additional requested funds. **Double click on grid below to enter in the FTEs and dollar amounts.**

Capital Program Development and Management Division (CPDM)

Show Additional Funds Requested Only				
Planned Expenditures by Object	Obj Code	FY20	FY21	Total
FTEs →				0
Salary & Benefits	A/B			0
Personal Service Contracts	C			0
Goods & Services	E			0
TEF Rental / Pur. Equip Under \$5k	E			0
Purchased Services	ER			0
Travel	G			0
Equip Over \$5k / A& E Consultants	J			0
Total		0	0	0

Chapter 13 Program H – Program Delivery

The Program Analysis and Management Services (PAMS) Budget Analyst staff serve other WSDOT offices by managing, tracking funding, and expenditures for Program Delivery Management and Support activities in the following sub programs

- H1 – Program delivery management and support for Headquarters.
- H2 – Program delivery management and support to the six Regions.
- H3 – Program delivery management and support for Environmental Services Office.

The Legislature determines funding allocation for Program H. After the Legislature passes the final transportation budget, the Program H Program Manager will determine the office level budgets. Work orders are established to provide the allocation for each office that supports the function and activities in Program H. Parties who seek funding from these programs submit requests by activity to the assigned PAMS analyst who will review the request for accuracy and detail. They will contact the inquiring party with any questions or concerns in need of addressing before the request proceeds to the relevant Program Manager for approval.

Planned funding is tracked and reported to internal and external stakeholders through the Transportation Executive Information System (TEIS). Responses to questions or concerns originating from these external stakeholders are coordinated through the Capital Program Development and Management Office (CPDM) for Program H.

13-1 Program H

13-1.1 Roles and Responsibilities

The Program H PAMS Budget Analyst is responsible for managing appropriated funds within the legislative budget. The analyst will establish Work Orders for activities managed by Headquarters organizations and Regions. In addition, analysts will coordinate to meet the needs of WSDOT offices in regards to Full Time Equivalents (FTEs) and dollars within the defined fund source that is available. The factors that go into this coordination include budget development, detail planning, and the creation of aging plans for each activity.

The Program H Budget Analyst reconciles Transportation Reporting and Accounting Information System (TRAINS), and TEIS to ensure transparent information sharing between WSDOT, Office of Financial Management (OFM), and the Legislature.

13-2 Program H

Program H represents functions and activities associated with management and support for program delivery at Headquarters and in the six Regions. This program is divided into three subprograms:

- Subprogram H1, which provides delivery and support for Headquarters.
- Subprogram H2, which provides program delivery management and support to the six Regions.
- Subprogram H3, which provides program delivery management and support for the Environmental Services Office.

13-2.1 PAMS Office Relationships with Other Offices

The Program H analyst primarily works with customers within WSDOT and coordinate responses to external stakeholders with other CPDM offices.

The Program H analyst establishes and modifies Work Orders as necessary for Headquarters' and Region customers to charge against and provide guidance on the use of any funding provided. Both Headquarters' and Regional customers attend semi-annual budget review meetings to identify and address budget concerns.

13-3 The Budget Request Process

The budgeting process utilized by the PAMS Office stretches the course of the biennium, from initial budget targets to continuous monitoring and eventual work order closures. Budget targets are set many biennia in advance and then refined, based on customer input and any ongoing costs identified on a Budget Change Request Form. While customers are given a biennial budget target, funding is only authorized on a fiscal year basis. At the conclusion of the first fiscal year, authorized funding will first be reduced to actual expenditures before second fiscal year funding is authorized for spending. However, as the end of the first fiscal year draws near, customers have the opportunity to communicate through a Budget Change Request Form about what was not delivered as planned and why they may need to retain their remaining first fiscal year funding into the second fiscal year to complete delivery.

Customers first use the Budget Request form to communicate their needs for both new and already-established activities, whereas the Budget Change Request form is used when circumstances change from the time when a budget was approved. Depending on which form is being submitted, the approval process differs. For a detailed look at the Budget Request process flowchart, see [Appendix 12A](#).

The approval process for Program H funding requests begins when a Budget Analyst from the PAMS Office sends the customer their budget targets, a completed labor pricing document, an employee list, and a blank aging plan. Alternatively, customers are welcome to independently submit a Budget Request Form with the same supporting documentation at any time during the biennium to request funding for a new activity. Customers may also find their budget targets for already-established activities in TEIS versions DPSPSAPR.

Office budget targets are sent out to customers and the targets for each activity are entered into TEIS Versions DPSPSAPR at the PIN level, or the work order level for operating programs. The former displays targets for each activity for the full biennium, the latter shows targets for each fiscal year.

Exhibit 13-1 TEIS Version DPSPSAPR

The screenshot displays the TEIS Version DPSPSAPR interface. It includes a 'Version Criteria' section with dropdowns for 'Model', 'Scenario', 'Limit Versions To', 'Sort Versions By', and 'Version Period'. The 'Current Biennium Source' is set to 'version1' and 'Current Biennium' is '2015 - 2017'. The 'Version 1' is 'DPSPSAPR: Current approved budget for DPS and Program Support - Daily', created on 12/7/2013 and updated on 12/21/2016, with 648 total projects and 448 selected projects. The 'Version 2' is '(None)'. Below this, there is a 'Filter By' section with buttons for 'Program', 'Funding', 'Location', 'Project Grouping', and 'Phase/Schedule'. The main table lists projects with columns: PPN, Project Title, SR, SubPgm, Total, Price, and various codes (13-15, 15-17, 17-19). The table shows several projects, including 'CDOM Subsidized Settlement Litigation', 'CDOM Office Staff OPS', 'Project Development FDR', 'RESEARCH GRANT - NCHS 757 RULES', 'State Survey Support', 'HQ Moving Consultation Costs', 'Commute Trip Reduction', and '2017-2018 Supplemental Operating Budget'.

In both instances, it is the responsibility of the customer to verify that the labor pricing and employee lists submitted with their requests are accurate prior to moving onto completing the Budget Request Form.

Along with a Budget Request Form and blank Aging sheet, customers will receive an initial labor pricing and current employee list for each activity funded in Program H. Customers will then review and update these documents as necessary.

Exhibit 13-2 Bien 17-19 Labor Pricing Tool

The screenshot shows the 'Bien 17-19 Labor Pricing Tool' form. It includes instructions: 'For All FTEs - Fill in ONLY the Highlighted Columns (Column A through Column G)'. It also states: 'This version includes changes to benefit rates and general wage increases that were included in the Enacted 2016 Supplemental Operating Budget.' The form has sections for 'Annual Step to use' (set to 'L') and 'Annual Salary for WMS or Override Positions'. A table at the bottom lists 'Totals for All FTEs & Dollars' with columns for Position Number, Position Class Code, Org Code, Employee Name, Percent Time, Step, Annual Salary, Position Job Class, Range, Annual step L, and Bien Total. The table shows three rows of data for positions 00001, 00002, and 00003.

Position Number	Position Class Code	Org Code	Employee Name	Percent Time	Step	Annual Salary	Position Job Class	Range	Annual step L	Bien Total
00001	530P		John Doe	100%	L		TRANSPORTATION TECHNICAL ENGINEER	69	89,104	244.38
00002	530O		Jane Doe	100%	L		TRANSPORTATION ENGINEER 5	69	89,104	244.38
00003	147C		Jim Doe	100%	L		BUDGET ANALYST 3	54	61,508	177.68

After the labor pricing for a given activity has been finalized, the customer should then move on to the Budget Request Form. On the initial Budget Request form, customers will identify the scope of the activity performed and the budget needed to provide deliverables at the work order level.

The customer requests funding and lays out a budget by object. The amount budgeted for Salaries and Benefits must match the finalized labor pricing completed for the activity.

Customers return this budget request form to the PAMS Office. This information must match their initial target.

After the customer has completed their Budget Request Form, they will use the supplied blank aging sheet to age their requested funding by object over the course of the biennium. The total amount aged for each object must match the total amount requested on the Budget Request Form. For a detailed look at the Budget Request Form, see [Appendix 12B](#).

After a budget has been approved for a given activity, a Work Order will be established by the Program H Budget Analyst.

The PAMS budget analyst will populate the Transportation Allocation and Allotment Control System (TRACS) screens in TRAINS for Budget Planning and Control with the aging plan provided by the customer. The monthly aging reports are generated from these screens:

- The Budget Change Table (BCHG) is used to create a tracking number and description of the changes that you intend to make.
- The District Target Table (DTAR) tracks the budget by Biennium, Sub Program, two Digit Org Code, FY plan amount and FTE.
- The Period Planning Table (PRPL) is the biennium budget plan that tracks by Biennium, Sub Program, three Digit Org Code, Appropriation, Job Number, four Digit Object Code and FTE by month.

Once a work order has been established in TRAINS, customers will receive monthly reports detailing their planned and actual expenditures by object. If the expenditures captured in a work order do not align with the planned expenditures, the customer responsible for managing the work order may be asked to re-age their work order.

When re-aging a work order, customers may only adjust planned dollars for months in which expenditures have not yet posted; for instance, a customer may not adjust their planned expenditures in August if the current month is September. After the customer has finished revising their aging plan, they will send the revised plan to the assigned PAMS budget analyst. After reviewing the plan, the assigned PAMS budget analyst will either concur and approve the plan, or they will contact the customer with questions or concerns about the plan. From that point forward, the monthly aging report received by the customer will match the approved plan and will be reported on monthly.

13-4 The Budget Change Request Process

When the situation arises wherein a customer may require additional funding for an already-funded activity, they will communicate that need to a PAMS budget analyst through the Budget Change Request Form. This document allows customers the opportunity to explain what has changed since a budget was originally approved, why those changes impact the resources needed to deliver a given activity, and the amount of additional resources needed to deliver that activity.

The approval process for a Budget Change Request differs slightly from that of a Budget Request Form. For a detailed look at the Budget Change Request process, see [Appendix 12C](#).

Because the Budget Change Request Form is used in this context to communicate the additional resources needed to deliver an activity, the form itself and all supporting documentation should be completed to reflect only the additional resources being requested. For instance, if the original approved budget for a given activity is \$100,000 and the customer needs an additional \$20,000 to deliver that activity, they will explain and document only the additional \$20,000 on the Budget Change Request Form they submit. For a detailed look at the Budget Change Request Form, see [Appendix 12D](#).

13-5 The Fiscal Year End Process

As Program H work and services are delivered during the first fiscal year of the biennium, it is inevitable that some delays or setbacks occur that may result in actual spending falling behind the original plan. After the third quarter of the first fiscal year closes, customers are required to submit a request in order to push first fiscal year funding into the second fiscal year. Using the Budget Change Request Form, customers will explain what occurred, or what didn't occur, that has led to a need to retain first fiscal year funding in the second year to deliver their work or services. This documentation must be submitted prior to July 1 of the second fiscal year, otherwise all underrun funds will be forfeit and reprioritized within the program. This process follows the same flow as the standard Budget Change Request process.

13-5.1 Work Order Closures

Work orders are closed when any of these conditions are reached:

- Work activities are completed.
- An organizational budget is expended.
- A reorganization of offices may occur that requires the change of work order.
- The biennium in which the activity was performed has ended.

Headquarter and Regional work orders will be closed by the PAMS Office for Program H. The party responsible for managing the work order may notify the PAMS Office with an email request to close the work order and/or groups of work orders at any time during the biennium.

The work order authorization will:

1. Balance the authorized funds to the amount expended for the work order.
2. Balance the group categories to the amount expended for the group category.
3. Request closure of any associated open payable and/or reimbursable agreement(s) where the agreement time has expired and/or all authorized agreement dollars have been expended. The party responsible for managing the work order may request closure if work activities have been completed for the payable and/or reimbursable agreement.
4. Request closure of associated federal project. This may only occur when the last open work order set up with the federal project is being requested to close.
5. Request closure of the open work order.

Once the work order authorization has been prepared with closing instructions, the work order authorization will be routed to the Accounting and Financial Services Office to be processed into TRAINS. Once closure has occurred in the TRAINS system, the completed work order authorization will be emailed to the customer detailing the completion of the work order closure process.

Software Support Systems and their functions used by PAMS staff include the following:

- Electronic Content Management portal – Work Order Authorizations
- TRAINS – Monitoring
- TRACS – Detail Planning and Allotment
- TEIS – Reporting to internal and external stakeholders
- WSDOT Data Warehouse – Reporting

For more information, see [Chapter 11](#).

Chapter 14 Program T – Transportation Planning, Data and Research

The Program Analysis and Management Services (PAMS) Budget Analyst staff serve other WSDOT offices by managing, tracking funding, and expenditures for Transportation Planning, Data and Research activities in the following sub programs

- T2 – Planning
- T3 – Research and Library Services
- T6 – Pass Through Funds

The Legislature determines funding allocation for Program T. After the Legislature passes the final transportation budget, the Program T multimodal director will determine the office level budgets. Work orders are established to provide the allocation for each office that supports the function and activities in Program T. Parties who seek funding from these programs submit requests by activity to the assigned PAMS analyst who will review the request for accuracy, detail and contact the inquiring party with any questions or concerns in need of addressing before the request proceeds to the relevant Program multimodal director for approval.

Planned funding is tracked and reported to internal and external stakeholders through the Transportation Executive Information System (TEIS). Responses to questions or concerns originating from these external stakeholders are coordinated through the Capital Program Development and Management Office (CPDM) for Program T.

14-1 Program T

14-1.1 Roles and Responsibilities

The Program T PAMS Budget Analyst is responsible for managing appropriated funds within the legislative budget. The analyst will establish Work Orders for activities managed by Headquarters' organizations and Regions. In addition, analysts will coordinate to meet the needs of WSDOT offices in regards to Full Time Equivalents (FTEs) and dollars within the defined fund source that is available. The factors that go into this coordination include budget development, detail planning, and the monitoring of aging plans for each activity.

The Program T Budget Analyst reconciles Transportation Reporting and Accounting Information System (TRAINS), and TEIS to ensure transparent information sharing between WSDOT, Office of Financial Management (OFM), and the Legislature.

14-2 Program T

Program T represents functions and activities associated with management and support for Transportation Planning, Data and Research at Headquarters and in the six Regions. This program is divided into three subprograms. Subprogram T2 - provides planning and support for Headquarters and six Regions; subprogram T3 provides development and support to the research program to the Office of Research and Library Services Office; subprogram T6 provides the pass through funds to the Metropolitan Planning Organization and Regional Transportation Planning Organizations (RTPO) and support.

14-3 PAMS Office Relationships with Other Offices

The Program T budget analyst primarily works with customers within WSDOT and coordinates responses to external stakeholders with other CPDM offices.

The Program T budget analyst establishes and modifies Work Orders as necessary for Headquarters and Region customers and provides guidance on the use of any funding provided. Both Headquarters and Regional customers attend semi- annual budget review meetings to identify and address budget concerns.

14-4 The Budget Request Process

The budgeting process utilized by the PAMS Office stretches the course of the biennium, from initial budget targets to continuous monitoring and eventual work order closures. Budget targets are set many biennia in advance and then refined based on customer input and any ongoing costs identified on a Budget Change Request Form. While customers are given a biennial budget target, funding is only authorized on a fiscal year basis; at the conclusion of the first fiscal year, authorized funding will first be reduced to actual expenditures before second fiscal year funding is authorized for spending. However, as the end of the first fiscal year draws near, customers have the opportunity to communicate through a Budget Change Request Form about what was not delivered as planned and why they may need to retain their remaining first fiscal year funding into the second fiscal year to complete delivery.

Customers first use the Budget Request form to communicate their needs for both new and already-established activities, whereas the Budget Change Request form is used when circumstances change from the time when a budget was approved. Depending on which form is being submitted, the approval process differs. For a detailed look at the Budget Request Process flowchart, see [Appendix 12A](#).

As shown in the flowchart, the approval process for Program T funding requests begins when a Budget Analyst from the PAMS office sends the customer their budget targets, a completed labor pricing document, an employee list, and a blank aging plan. Alternatively, customers are welcome to independently submit a Budget Request Form with the same supporting documentation at any time during the biennium to request funding for a new activity. Customers may also find their budget targets for already-established activities in TEIS version DPSPSAPR.

Office budget targets are sent out to customers and the targets for each activity are entered into TEIS version DPSPSAPR at the PIN level, or the work order level for operating programs. The former displays targets for each activity for the full biennium, the latter shows targets for each fiscal year.

Exhibit 14-1 TEIS Version DPSPSAPR

The screenshot displays the TEIS Version DPSPSAPR interface. It includes a sidebar with filters for Program, Funding, and Location. The main area shows a table of projects with columns for PIN, Project Title, SR, SubProgram, Total, Prior, and fiscal years 15-16, 16-17, and 17-18. The table lists several projects, including 'CPDM Extraordinary Settlement Litigation', '15-17 CPDM Office Staff OPS', '15-17 Project Development PDR', 'RESEARCH GRANT - NOISE TEST RULES', and 'State Survey Support'.

PIN	Project Title	SR	SubProgram	Total	Prior	15 - 16	16 - 17	17 - 18
000005	CPDM Extraordinary Settlement Litigation	000	04	\$44,000	0	0	\$44,000	0
000005	15-17 CPDM Office Staff OPS	000	04	125,000	0	0	125,000	0
000040	15-17 Project Development PDR	000	04	20,000	0	0	20,000	0
000740	RESEARCH GRANT - NOISE TEST RULES	000	13	100,375	0	0	100,375	0
000801A	State Survey Support	000	15	305,981	305,981	0	0	0

In both instances, it is the responsibility of the customer to verify that the labor pricing and employee lists submitted with their requests are accurate prior to moving onto completing the Budget Request Form.

Along with a Budget Request Form and blank Aging sheet, customers will receive an initial labor pricing and current employee list for each activity funded in Program T. Customers will then review and update these documents as necessary.

Exhibit 14-2 Bien 17-19 Labor Pricing Tool

This version includes changes to benefit rates and general wage increases that were included in the Enacted 2016 Supplemental Operating Budget.										71 Sal & Ben	\$392,742
Annual Step to use: 1											
							Annual Salary for WMS or Override Positions				
Position Number	Position Class Code	Org Code	Employee Name	Percent Time	Step		Position Job Class	Range	Annual step 1	Elig Total	
Totals for All FTEs & Dollars											\$784,284

After the labor pricing for a given activity has been finalized, the customer should then move on to the Budget Request Form. On the initial Budget Request form, customers will identify the scope of the activity performed and the budget needed to provide deliverables at the work order level.

The customer requests funding and lays out a budget by object. The amount budgeted for Salaries and Benefits must match the finalized labor pricing completed for the activity.

Customers return this budget request form to the PAMS office, which must match their initial target.

After the customer has completed their Budget Request Form and/or Budget Change Request Form, they will use the supplied blank aging sheet to age their requested funding by object over the course of the biennium. The total amount aged for each object must match the total amount requested on the Budget Request Form and/or Budget Change Request Form. For a detailed look at the Budget Request Form, see [Appendix 12B](#).

After a budget has been approved for a given activity, a Work Order will be established by the Program T Budget Analyst.

The PAMS Budget Analyst will populate the Transportation Allocation and Allotment Control System (TRACS) screens in TRAINS for Budget Planning and Control with the aging plan provided by the customer. The monthly aging reports are generated from these screens.

- The Budget Change Table (BCHG) is used to create a tracking number and description of the changes that you intend to make.
- The District Target Table (DTAR) tracks the budget by Biennium, Sub Program, two Digit Org Code, FY plan amount and FTE.
- The Period Planning Table (PRPL) is the biennium budget plan that tracks by Biennium, Sub Program, three Digit Org Code, Appropriation, Job Number, four Digit Object Code and Full Time Equivalent (FTE) by month.

Once a work order has been established in TRAINS, customers will receive monthly reports detailing their planned and actual expenditures by object. If the expenditures captured in a work order do not align with the planned expenditures, the customer responsible for managing the work order may be asked to re-age their work order.

When re-aging a work order, customers may only adjust planned dollars for months in which expenditures have not yet posted; for instance, a customer may not adjust their planned expenditures in August if the current month is September. After the customer has finished revising their aging plan, they will send the revised plan to the assigned PAMS budget analyst. After reviewing the plan, the assigned PAMS budget analyst will either concur and approve the plan, or they will contact the customer with questions or concerns about the plan. From that point forward, the monthly aging report received by the customer will match the approved plan and will be reported on monthly.

14-5 The Budget Change Request Process

When the situation arises wherein a customer may require additional funding for an already-funded activity, they will communicate that need to a PAMS Budget Analyst through the Budget Change Request Form. This document allows customers the opportunity to explain what has changed since a budget was originally approved, why those changes impact the resources needed to deliver a given activity, and the amount of additional resources needed to deliver that activity.

The approval process for a Budget Change Request differs slightly from that of a Budget Request Form. For a detailed look at the Budget Change Request flowchart, see [Appendix 12C](#).

Because the Budget Change Request Form is used in this context to communicate the additional resources needed to deliver an activity, the form itself and all supporting documentation should be completed to reflect only the additional resources being requested. For instance, if the original approved budget for a given activity is \$100,000 and the customer needs an additional \$20,000 to deliver that activity, they will explain and document only the additional \$20,000 on the Budget Change Request Form they submit. For a detailed look at the Budget Change Request Form, see [Appendix 12D](#).

14-6 The Fiscal Year End Process

As Program T work and services are delivered during the first fiscal year of the biennium, it is inevitable that some delays or setbacks occur that may result in actual spending falling behind the original plan. After the third quarter of the first fiscal year closes, customers are required to submit a request in order to push first fiscal year funding into the second fiscal year. Using the Budget Change Request Form, customers will explain what occurred, or what didn't occur, that has led to a need to retain first fiscal year funding in the second year to deliver their work or services. This documentation must be submitted prior to July 1 of the second fiscal year, otherwise all underrun funds will be forfeit and reprioritized within the program. This process follows the same flow as the standard Budget Change Request process.

14-7 Work Order Closures

Work orders are closed when any of these conditions are reached:

- Work activities are completed.
- An organizational budget is expended.
- A reorganization of offices may occur that requires the change of work order.
- The biennium in which the activity was performed has ended.

Headquarters and Regional work orders will be closed by the PAMS Office for Program T. The party responsible for managing the work order may notify the PAMS Office with an email request to close the work order and/or groups of work orders at any time during the biennium.

The work order authorization will:

1. Balance the authorized funds to the amount expended for the work order.
2. Balance the group categories to the amount expended for the group category.
3. Request closure of any associated open payable and/or reimbursable agreement(s) where the agreement time has expired and/or all authorized agreement dollars have been expended. The party responsible for managing the work order may request closure if work activities have been completed for the payable and/or reimbursable agreement.
4. Request closure of associated federal project. This may only occur when the last open work order set up with the federal project is being requested to close.
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Software Support Systems and their functions as used by PAMS staff include the following. For more information, see [Chapter 11](#).

- Electronic Content Management Portal – Work Order Authorizations
- TRAINS – Monitoring
- TRACS – Detail Planning and Allotment
- TEIS – Reporting to internal and external stakeholders
- WSDOT Data Warehouse – Reporting

Chapter 15 Capital Program Development & Management Office (CPDM) Communications

The CPDM Communications position serves on the Program Analysis & Management Services (PAMS) team.

15-1 Purpose of CPDM Communications

The goal of CPDM Communications is to publish reports and documents that inform internal and external audiences in a timely manner on topics CPDM Division staff are obliged to or wish to communicate. Communications offers editing services as well as a coordinating role when CPDM authors or teams wish to publish a particular document.

15-2 Directives for CPDM Business

The business of CPDM, including Communications, is informed by Legislative directives, Governor's Executive Orders, WSDOT policies, Secretary's Executive Orders, and Instructional Letters.

The most specific guidance for CPDM Communications is the Governor's Executive Order "Plain Talk," which states that Washington State communication documents must be written and designed so that they can be easily understood by citizens.

15-2.1 05-03 Plain Talk

For a complete list of the active guidance documents CPDM follows, refer to [Exhibit A](#).

15-3 Roles and Responsibilities

CPDM Communications provides a way that the CPDM Division can communicate in a timely manner with the Regions. The Communications team is responsible for updating webpages, uploading reports for other CPDM teams, and organizing, compiling, writing and editing the CPDM newsletter, manual, and Watch List.

This team is responsible for keeping external audiences, such as the public, the Governor's Office, and the Legislature informed of proviso reports, and information on scope, schedule, and budget issues that occur on the projects. Written material is published monthly for these audiences.

Internally, CPDM Communications sends monthly newsletters to Regions' program management teams and other Modes. APDMs on the Project Delivery team within CPDM also engage in monthly phone calls and annual meetings to keep the Regions, Modes, and other offices informed.

The CPDM Reporting group is a customer of Communications. The Reporting group is responsible for the monthly Watch List report production. Communications works on this document and coordinates publication of it.

Customers from other WSDOT offices frequently request that CPDM staff create Geographic Information Systems (GIS) maps to include in reports and for publication on external and internal websites.

15-4 Formatting

Formatting for the various publications follows the WSDOT recommendations in the WSDOT [Style Guide](#). The guidance includes definitions, direction, and [dictionary](#), [comparison dictionaries](#) and [thesaurus](#) sources.

15-5 List of Publications produced, coordinated or published by CPDM Communications

The CPDM Communications Team works with various CPDM staff to coordinate and publish their work. Following is the list of internal and external reports the team works on.

15-5.1 Internal Reports

A. Webpages (Internal)

Other CPDM teams occasionally send various report files to the CPDM Communications Team for publishing on internal WSDOT webpages.

[CPDM internal](#) webpages are structured according to team function. Each team's major product or report is listed under their team name. For example, the Planning & Programming team lists web links to Planning, Prioritization and Scoping documents, which are provided and updated by that team.

B. [CPDM Newsletter](#)

The Communications Team compiles, edits, and publishes this internal newsletter.

The monthly CPDM Newsletter keeps the Regions and other WSDOT offices apprised of what the CPDM Division wants to communicate. The articles can be relevant ideas, policies, timely information needing to be carried out, or other activities of the CPDM Division.

The Newsletter Editor compiles, organizes, edits, writes some articles, does interviews with transportation professionals, and publishes the newsletter. Most of the news articles are written by the CPDM Managers or their team members. For the profile articles, the Editor meets with transportation professionals, interviews them, and writes an article about their career experiences.

For most newsletter articles, it is the CPDM Managers of the various groups (Budget, Prioritization & Programming, Asset Management, Project Delivery, and Program Analysis & Management Services) who write and send in the drafted articles to the Editor. Either the manager or a member of their team writes the articles.

The audience for the newsletter is other WSDOT employees in the Regions, and in other WSDOT offices such as Planning, Regional Program Management, and CPDM.

For more information on processes for how topics are chosen for the newsletter and how they are formatted and published, please see [Appendix 15A](#).

C. **Program Management Manual M 3005**

The Communications Team compiles, edits, and publishes this manual. It is updated annually and appears in electronic and printed format.

The *Program Management Manual M 3005*, is a guiding policy manual on how the CPDM Division conducts business with other offices, modes and the Regions. This living document records the changes in CPDM's working business processes, and it serves as a reference manual for interested program management staff in CPDM and the Regions.

The various groups or teams within CPDM are responsible for assigning one of their own to write and update their chapters. The manual editor then coordinates the authors' work so that the manual reads smoothly. The editor compiles, edits, organizes chapter structure, coordinates formatting, and publishes the manual.

Besides program management staff, the audience for the manual is new employees, WSDOT employees transferring from other agency offices, and other state government workers.

The manual is published [online](#) and is scheduled to be updated annually in January. Crucial or urgent changes can be made to the online chapters at any time, as necessary.

15-5.2 External Reports

The CPDM Communications Team compiles, edits, and publishes external reports for an audience comprised of the Governor's Office, the Legislature, and the public. The reports are at a level of detail useful to the above audiences. The reports are easily accessed online by the respective audiences.

15-6 Watch List

The Project Delivery Specialists group (PDSs) from the Project Delivery Unit provide the Watch List write-ups on the projects identified as having issues.

The purpose of the online Watch List is to provide the public with clear explanations about issues that arise on projects. This report focuses on Capital Highway Program projects in Active Delivery which have, or may have significant changes in scope, schedule, or budget. The PDS team follows the identified projects to report on when and how the delivery issues are resolved.

The report is published monthly on the [Project Delivery Reports](#) webpage and the past reports are stored on the [Project Delivery Reports Archive](#) webpage.

A summary of the Watch List is published quarterly in the [Gray Notebook](#).

For more detailed information on Watch List background and criteria, see [Appendix 10C](#).

15-7 Ad and OC Reports

The Communications Team compiles, prepares, and publishes this report online.

This monthly two-part report is published online. The data is summarized and presented in chart format. Projects that are in the Nickel, TPA, and Connecting Washington revenue packages are reviewed. Those that were advertised and operationally complete in the previous month are listed.

The main source for the data in these reports is TEIS, with the data pulled from TEIS then validated by the Budget team.

15-8 Geographic Information Systems (GIS)

The CPDM Division's GIS Team creates and publishes a variety of maps for a variety of customers, mostly internal.

CPDM uses GIS applications and tools for a variety of ways in CPDM to plan, prioritize, analyze, and even obtain or distribute funding for WSDOT projects.

GIS allows the customer to map, model, query, and analyze large quantities of data within a single database or from multiple databases according to their relative location to Washington roads and features.

CPDM uses GIS to locate assets and elements within project limits, verify county and legislative boundaries, analyze intersecting highway locations for collision clusters, and identify needs near fish passage projects and other assets. Analysis is performed in GIS and often presented in web applications, internet pages, and publications. Data is also extracted for further analysis in Excel and other programs.

For External Reporting requirements, see [Appendix 10B](#).

15-9 Webpages (External)

15-9.1 Proviso Reports

The Communications Team publishes these reports online.

The CPDM Budget Team is responsible for generating proviso reports. These reports are required by the Legislature which directs the line-item level reporting. The publishing frequency can be quarterly, annual or biennial, depending on direction from the Legislature.

The sources for the proviso reports are the members of the CPDM Budget team. They also compile the report and deliver it to the Office of Financial Management (OFM), WSDOT's Intergovernmental and Tribal Relations Office, and the Legislature.

The CPDM Communications role is to publish the proviso reports online on the [CPDM](#) website. The same reports are also published online by the Intergovernmental and Tribal Relations Office on their [Legislative Reports](#) website.

The audience for the provisos is the public, the Legislature, OFM, and the Governor's Office.

For External Reporting requirements, see [Appendix 10B](#).

15-10 Relationships with Other Offices (Internal to WSDOT)

The Communications group maintains working relationships with a number of other WSDOT offices.

- Office of Strategic Assessment & Performance Analysis (OSAPA). CPDM Communications coordinates with this office, which is responsible for publishing the Gray Notebook. The CPDM Watch List is summarized in the Gray Notebook, and we do reviews of the OSAPA Watch List summaries before they are published.

15-11 Other Internal Communication Processes

Phone or in-person meetings are another well-established method CPDM uses to communicate relevant information among the offices of CPDM, the Regions, and Program Management Offices.

Within the CPDM Division, the Federal-Aid section communicates with the Federal Highway Administration (FHWA) when they need authorization on federal funding. This communication is carried out through a federal software program called Financial Management Information System (FMIS) that is installed on CPDM computers.

15-12 Program Management Monthly Phone Calls

These are monthly phone calls that CPDM staff holds regularly with the Regions. The purpose of the monthly meeting is to give the CPDM staff and Regions the opportunity to discuss potential and actual over-arching issues such as federal aid, legislature changes, and assignments that are in process in several offices, such as changing approval codes.

15-13 Management Quarterly Project Reporting Meetings (MQPRs)

These are quarterly, in-person meetings that CPDM executives and APDM staff hold with the Regions. CPDM staff travel to the regional locations for the meetings.

The purpose of these regular forums is to give the Regions the opportunity to discuss potential and actual scope, schedule, and budget issues with CPDM executives. The APDMs monitor the information at the MQPR meetings for potential change management items.

At the meetings, Region staff and CPDM staff discuss strategies and forthcoming changes that will influence how program management and project business is carried out. The meetings can also serve as an early warning system for scope, schedule, and budget concerns that the APDMs may want reported on the Watch List.

15-14 Annual Program Managers' Conference

This invitation-only conference provides a venue for the CPDM staff and the Regions' program management staff to get together in person every May. Staff from the Regions and CPDM Division offer paper and PowerPoint presentations to communicate topical issues currently being worked on or discussed among the professional groups.

15-15 Editing for CPDM Customers

Other CPDM teams occasionally request editing from the CPDM Communications team. These requests are to do content or line edits on various papers, emails, or other written documents. Examples can be fish barrier removals, the TAMP document, seismic information or folios, etc.

The team also makes workflow charts for other CPDM teams.

15-16 Storage of Final Reports

Most of the regularly produced reports are stored electronically on the main CPDM internal drive where CPDM staff saves folders in common (currently the G-drive), in a file marked as “Finals.” Final retention files for the CPDM Manual and the CPDM Newsletter are stored on the internal drive CPDM uses for archiving files (currently the A-drive). The latter are on a rolling retention schedule which is currently under discussion.

Most of the reports CPDM releases are published on the intranet (available only to WSDOT staff). Exceptions are Proviso reports and Project Delivery Reports. Those are published on the internet (available to the public).

CPDM has both internal and external webpage “archives” where readers can go to access previously published copies. These archives differ from the Finals on the CPDM internal drives. Webpage archives are only for readers to retrieve copies; they are not archival as record retention.

15-17 Software Resources used by Communications Team

For more details about the following software systems, refer to [Chapter 11 Information Technology Systems](#).

General software programs Communications uses to produce reports are:

- Transportation Executive Information System (TEIS) – a database for retrieving data for the Watch List.
- CMS/Drupal – webpage software for uploading and publishing reports or documents on internal and external webpages.
- Transportation Reporting and Accounting System (TRAINS) – a system for tracking and retrieving data on the Work Orders.
- Oracle – a tracking database for the Work Order finalization process.
- Visio – a software program for creating work flow charts for various teams when they are recording their processes or for their desk manuals.
- SharePoint – software storage location for storing files, and for collaboration with other authors on various documents.

15-18 Appendices

Appendix 15A CPDM Newsletter Processes

Appendix 15A CPDM Newsletter Processes

Exhibit 15A-1 CPDM newsletter process for authors

Editorial process for producing the monthly newsletter	
1	Deputy Director gives the List of Topics to Editor.
2	Editor sends Managers and Authors the List of Topics. Gives them a deadline.
3	Author writes a Draft Article and sends to Editor.
4	Editor makes light edits to the Draft Article.
5	Author or their Manager approve the edits to Editor.
6	Editor compiles First Newsletter Draft of all articles and sends to PAMS Manager.
7	PAMS Manager reviews First Newsletter Draft. Sends to Deputy Director for approval.
8	Deputy Director reviews. Sends edits to PAMS Manager and Editor.
9	Editor makes any final edits on all articles. This becomes the Second Newsletter Draft.
10	Editor uses the Second Newsletter Draft to create the webpage version.
11	Editor sends the Second Newsletter Draft to the Graphics Office to format and make into a Draft PDF for publication.
12	Graphics Office makes Draft PDF and sends to Editor.
13	Editor reviews Graphics' Draft PDF for accuracy.
14	Editor sends reviewed Draft PDF to PAMS Manager for final review.
15	PAMS Manager approves Draft PDF.
16	Editor publishes FINAL PDF Newsletter online. Makes the webpage, monthly pdf, and archive pdf versions live.
17	Editor sends distribution email with attached pdf and links to audience. CPDM Systems provides back up for distributing this email.

Exhibit 15A-2 CPDM newsletter production process workflow chart

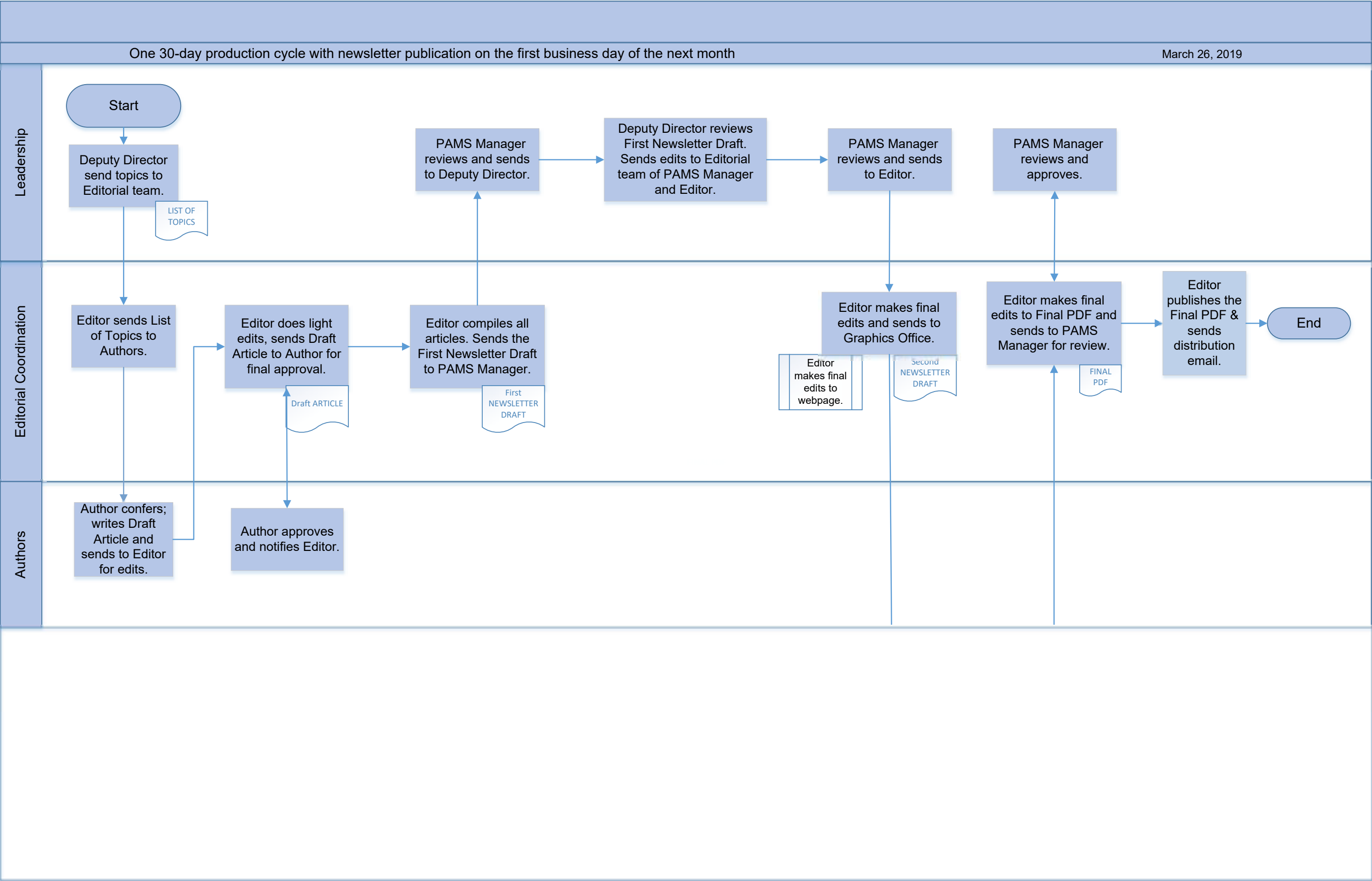


Exhibit A

Executive Orders

Program management executive orders issued at the state and department level can address a variety of policy matters, and they remain active until rescinded. The following are some active executive orders on program management matters that may affect transportation projects:

A-1 Presidential Executive Orders

12898	Environmental Justice
13274	Environmental Stewardship and Transportation Infrastructure Project Reviews
13423	Strengthening Federal Environmental, Energy, and Transportation Management

A-2 Governor Executive Orders

16-06	State Agency Enterprise Risk Management
13-04	“Results Washington,” an innovative, data-driven, performance management initiative, will drive the operations of state government through Lean thinking.
05-03	Plain Talk

A-3 Revised Code of Washington (RCW)

RCW 36.70A	Growth Management Act
RCW 42.52	The Ethics Law
RCW 43.19.760	Risk management – Principles
RCW 43.19.763	Risk management – Definitions
RCW 43.19.781	Risk management – Safety and loss control program
RCW 47.01	Department of Transportation
RCW 47.04	Public Highways and Transportation - General Provisions (Transportation Goals)
RCW 47.04.280	Transportation System Policy Goals
RCW 47.04.220	Miscellaneous Transportation Programs Account
RCW 47.05	Priority Programming for Highway Development (Life Cycle Cost and Priority Programming)
RCW 47.06	Statewide Transportation Planning
RCW 47.06.140	Transportation facilities and services of statewide significance— Level of service standards
RCW 47.60	Puget Sound Ferry and Toll Bridge System (See sections 47.60.005 , 47.60.286 , 47.60.300 , 47.60.327 , 47.60.335 , 47.60.340 , 47.60.345 , 47.60.355 , 47.60.365 , 47.60.375 , 47.60.377 , 47.60.385 , and 47.60.386 .)

A-4 WSDOT Secretary Executive Orders

E 1032	<i>Project Management</i>
E 1095	<i>Enterprise Information Governance Group</i>
E 1004	<i>Ethics in Public Service</i>
E 1018	<i>Environmental Policy Statement</i>
E 1041.02	<i>E-Discovery and Preserving Evidence -- revised</i>
E 1042	<i>Project Management and Reporting System (PMRS)</i>
E 1090	<i>Practical Solutions</i>
E 1001.02	<i>Work Zone Safety and Mobility -- revised</i>
E 1026.02	<i>Loss of Public Funds or Property Notification Requirements -- revised</i>
E 1038.04	<i>Enterprise Risk Management – revised.</i>
E 1031.02	<i>Protections and Connections for High Quality Natural Habitats -- revised</i>
E 1102.00	<i>Wetlands Protection and Preservation - new</i>
E 1103.00	<i>Accommodation of Stormwater Runoff Onto Right of Way -- new</i>
<i>Project Delivery Memo 07-01</i>	
	<i>Project Cost Estimate Creation, Update, Review and Approval Procedures</i>
P 2012.02	<i>Department Role in Actions Against Agency Officers and Employees -- revised</i>

A-5 Policies and Guidelines

A-5.1 Asset Management

Public Law 114-94	<i>Fixing America's Surface Transportation (FAST) Act</i>
Public Law 112-141	<i>Moving Ahead for Progress in the 21st Century Act (MAP-21)</i>
23 CFR 450.200	<i>Performance-based Statewide Multimodal Planning Process</i>
23 CFR Part 490	<i>National Performance Management Measures</i>
23 CFR Part 515	<i>Asset Management Plans</i>
23 CFR 515.5	<i>Definitions</i>
23 CFR 515.7	<i>Process for establishing the asset management plan</i>
23 CFR 515.9	<i>Asset management plan requirements</i>
23 CFR 515.13(b)	<i>Process certification and recertification, and annual plan consistency review</i>
23 CFR 667	<i>Periodic evaluation of facilities repeatedly requiring repair and reconstruction due to emergency events</i>
49 CFR Part 625	<i>Transit Asset Management</i>
49 CFR Part 630	<i>National Transit Database</i>
23 U.S. Code § 119	<i>National Highway Performance Program</i>

[49 U.S. Code § 5326](#) *Transit Asset Management*
Other documents or websites related to asset management:
[AASHTO Transportation Asset Management Guide](#), American Association of State Highway and Transportation Officials (AASHTO), January 2011
[FHWA: Asset Management](#)

A-5.2 Federal Aid

The principal statutes establishing the Federal-Aid Highway Program are found in [Title 23, United States Code \(23 U.S.C.\)](#). Regulatory requirements are generally found in Title 23, Highways, of the Code of Federal Regulations ([23 CFR](#)).

[23 U.S.C. 106\(h\) and 106\(i\)](#) consist of an Initial Financial Plan and Annual Updates.

A-5.3 Project Management

[WSDOT Project Management Principles](#)

A-5.4 Risk Management

For the Secretary's Executive Order E 1098 *Statewide Transportation Asset Management*.

Rules, procedures, and other information on how to carry out the Secretary's Executive Order E 1098 *Statewide Transportation Asset Management* are available from WSDOT's Risk Management and Legal Services Division and Quality Assurance and Transportation System Safety Division, and include:

- WSDOT [Enterprise Risk Management Manual](#) M 72-01
- Department of Enterprise Services [Risk Management](#) web page

A-5.5 Scoping

The [Design Manual](#) Section 300.06 defines the Project Summary project documentation and required approvals.

[JLARC 10-3](#) January 5, 2010 WSDOT's Scoping and Cost Estimating for Highway Construction Projects

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**Transportation Acronym Guide – WSDOT****Numbers****25th Month**

The accounting period following the last month of a biennium, which is used to record expenditures posted after the biennium close but which should be charged in the biennium.

A**AASHTO – American Association of State Highway and Transportation Officials**

Represents the state departments of transportation in Washington, D.C.

AC or ACWP – Actual Cost

Total costs actually incurred and recorded in accomplishing work performed during a given time period for a schedule activity or work breakdown structure component. Actual cost can sometimes be direct labor hours alone, direct costs alone, or all costs, including indirect costs. Also referred to as the actual cost of work performed (ACWP).

Ad or Ad date – Contract Advertisement

The date the Construction phase of a project is to be advertised publicly for bids. This milestone, referred to as Contract Ad as well as Ad Date, marks the date the project will be released for Advertisement.

ADA – Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (42 U.S.C. § 12101) is a US labor law that prohibits unjustified discrimination based on disability. It affords similar protections against discrimination to Americans with disabilities as the Civil Rights Act of 1964, which made discrimination based on race, religion, sex, national origin, and other characteristics illegal. In addition, unlike the Civil Rights Act, the ADA also requires covered employers to provide reasonable accommodations to employees with disabilities, and imposes accessibility requirements on public accommodations.

AFS – [Accounting and Financial Service](#)**APDM – Assistant Program Delivery Managers are now called Program Delivery Specialists (PDS)**

A senior technical specialist within the Capital Program Development and Management division that facilitates project delivery of Highway Construction, Ferry, Facilities, Traffic, Local Programs and Rail capital projects by performing critical monitoring, analysis, communication and reporting, and assisting in the administration of statewide policy for program management. Previously referred to as “APDMs” (Assistant Project Delivery Managers).

ASOP – Advance Schedule of Projects Report

A monthly report detailing projects that will likely be going to advertisement within the next twelve months. Used to inform contractors if they wish to bid on the projects.

AWV – Alaska Way Viaduct Replacement Project

Tunnel Boring project in Seattle that is replacing the Alaska Way Viaduct. Bertha is the name of the tunnel borer. Due to be completed in November 2019.

Active Delivery

A project is in Active Delivery when any of the PIN's phases have the approval code A, C, L, S, X or Y. These are the approval codes that allow a work order to be authorized in CPMS. Once any phase of the project has any of these approval codes, the whole project is considered to be in Active Delivery. This applies to PINs as well as BINs.

Actuals

1) Expenditures of dollars and workforce on a project. Actual expenditures are tracked by Work Item phase. 2) Project milestones that have occurred. 3) The checkmarks in TEIS that are used to show the actual date a milestone was completed.

Adjust to Award

The process of establishing the contract work order by modifying the construction amount approved in the CCFA to the amount awarded to the low bidder. Also called A to A.

Advance Construction

A process which allows work to be performed on approved federal aid projects without having to obligate federal funds.

Advance Engineering

Projects programmed in the first biennium of the Legislative Book that can be advanced to the construction phase if other projects are delayed. Advance engineering assists ensures full delivery of the Highway Construction Program without additional programming action.

Aging

1) The distribution of planned project expenditures over the time duration of the planned work. 2) A monthly plan of how dollars and workforce will be spent for a Work Item phase.

Allocation – Federal

An administrative distribution of funds among the states for funds that do not have statutory distribution formulas. For example, Congress may appropriate funds and direct a federal agency to establish rules for distributing the funds. The rules would not be statutory and therefore the distributed funds would be designated as allocations.

Allocation – State

The amount of money distributed by the Olympia Service Center to each Region for the purpose of constructing and maintaining the state transportation network. There is one allocation per Region per biennium. Everything else is a target amount.

Allocations

These are usually only for state and federal funds. Special allocations are set up for local reimbursable funds. Allocations rarely change once they are established.

Allotment

The amount set aside within an appropriation for a specific purpose. The highway construction program is managed by the allotted amounts within each appropriation. A request must be submitted to OFM prior to spending any unallotted appropriations to allot these funds for use by WSDOT. An allotment plan is developed for each appropriation by month and is provided to OFM. These allotment plans are developed from the expenditure plan in either the Legislative or Operating Book, or may be based upon historical rates of expenditure.

Apportionment

The amount distributed to the state for each federal appropriation for the federal fiscal year. An apportionment is based on formulas established by federal law for dividing appropriations among the states.

Appropriation – Federal

The amount of funds made available by Congress for expenditure with specific limitations as to amount, purpose, and duration. The Federal-Aid highway program operates mostly under contract authority rules which allow obligations to be made immediately after apportionment or allocation. Federal programs (STP, BR, etc.) are funded by appropriations similar to state appropriations.

Appropriation – State

The legislative authorization to make expenditures and incur obligations for a specific purpose from designated resources available or estimated to be available during a specified time period. Expenditures are for both dollar and workforce (FTE). Expenditures may not legally exceed an appropriation. Appropriations have a funding source - state, federal, or local - and are made on a statewide basis.

Generally, appropriation figures match the roll-up of the original statewide program, but the Legislature can appropriate a higher or lower figure.

Appropriations Act

Action of a legislative body that makes funds available for expenditure with specific limitations as to amount, purpose, and duration. In most cases, it permits money previously authorized to be obligated and payments made, but for the highway program operating under contract authority, the appropriations act specifies amounts of funds that Congress will make available for the fiscal year to liquidate obligations.

Asset Management

Asset management is a strategic, risk-based approach to cost effectively and efficiently manage the physical assets of Washington's transportation system. WSDOT uses transportation investment strategies to maintain and preserve our transportation system on an ongoing, systematic basis. Preserving the state's transportation assets saves money while maximizing performance across the transportation network. For further discussion, see [Chapter 1](#).

Assumptions

Assumptions are factors that, for planning purposes, are considered to be true, real, or certain without proof or demonstration. Assumptions affect all aspects of project planning, and are part of the progressive elaboration of the project. Project teams frequently identify, document, and validate assumptions as part of their planning process. Assumptions generally involve a degree of risk.

Authority

1) The right to apply project resources, expend funds, make decisions. 2) Authority provided by law to enter into financial obligations that will result in immediate or future outlays of federal government funds.

Authorization

Approval of the Work Order by internal WSDOT processes.

Authorization Act

Basic substantive legislation that establishes or continues Federal programs or agencies and establishes an upper limit on the amount of funds for the program(s). The current authorization act for surface transportation programs is the Fixing America's Surface Transportation Act.

Authorization – Federal

In reference to Congress, a legislative act or empowerment for an agency to implement a particular program. An authorization establishes the upper limit to which funds can be appropriated. In reference to FHWA, an agreement to provide funding to allow the Department to proceed on a project phase. The vehicle for this authorization is a Federal Aid Project Authorization (FHWA Form 120). Any expenditures that occur prior to an authorization are ineligible for federal funding.

Authorization – State

An agreement that allows Department resources to be spent for a given project phase. A work order authorization is the vehicle currently used by the Department for these authorizations.

B**B/C – Benefit/Cost Ratio**

An analysis in which consequences of the investment are measured in or converted to economic terms and qualitative benefits. In the context of WSDOT's prioritization process: 1) A method for prioritizing highway improvement projects. The B/C ratio is determined by dividing measurable benefits by measurable costs for a specific time period, typically 20 years. It is a comparison, usually in dollars, of the benefits and costs of a project to establish whether it is worthwhile to build the project.

B&FA – Budget and Financial Analysis Division**BIN – Budget Item Number**

The department has been provided authority for two types of BIN structures: programmatic and project-specific. For programmatic BINs, the State Legislature provides an investment level associated with a type of work and allows the department to manage projects within that level. The Legislature allows a number of project-specific BINs. These BINs represent investments within a defined corridor or section of roadway and also have a specific defined scope associated with the funding provided.

Baseline

The approved time phased plan (for a project, a work breakdown structure component, a work package, or a schedule activity), plus or minus approved project scope, cost, schedule, and technical changes. Generally refers to the current baseline, but may refer to the original or some other baseline. Usually used with a modifier.

Beige Pages

Section of *The Gray Notebook* that reports on project delivery performance for capital programs. CPDM staff provide programmatic and project specific scope, schedule, and budget information for the 2003 Nickel, 2005 TPA, and 2015 Connecting Washington revenue packages. The Beige Pages track project delivery from the six-month pre-construction pipeline, through advertisement performance, construction, and finally completion. Dashboard-style performance metrics are used to demonstrate overall delivery at the program level.

Benchmark

A criteria timeline or baseline used for comparative purposes on a project.

Biennium

A two-year fiscal period. The Washington state biennium runs from July 1 of an odd numbered year to June 30 of the next odd-numbered year.

Biological Assessment

A document evaluating impacts and determining the effect that a particular project will have on biological species or their habitat in the vicinity. Construction timings are sometimes restricted due to its effect on the Species.

Bond

A debt instrument issued through a formal legal procedure and secured either by the pledge of specific properties or revenues or by the general credit of the state.

Book Building

The process of developing the Capital Improvement and Preservation Program.

Bow wave

Any additional cost (or savings) that occurs in the future because a budget item in the current biennium is not fully implemented. Example: A program started in the last six months of this biennium might cost \$100,000. If that program operates for a full 24 months next biennium, costing \$400,000, then the current biennium budget decision is said to have a bow wave of \$300,000.

Buckets

Program items budgeted as a lump sum level to be used to develop specific projects to address specified highway deficiencies. More usually, refers to a Region-wide project which has funding but no specific work location. In CPMS, a bucket project is identified by the Program Item Number (PIN). The first character of the PIN indicates the Region and the next six characters uniquely identify the type of work to be done.

Budget

The approved estimate for the project or any work breakdown structure component or any schedule activity.

Budget Authority

Authority provided by law to enter into financial obligations that will result in immediate or future outlays of federal government funds. Budget authority includes the credit subsidy costs for direct loan and loan guarantee programs. Basic forms of budget authority include appropriations, borrowing authority, contract authority, and authority to obligate and expend offsetting receipts and collections.

Budget Notes

A legislative fiscal staff publication that summarizes the budget passed by the state Legislature. This publication is usually distributed a few months after the end of the legislative session. Budget notes provide guidance but are not legally binding.

C**CAL/CAC – Collision Analysis Locations (CALs) and Collision Analysis Corridor (CACs)**

Are potential locations or corridors for safety improvements which focused on low-cost spot modifications.

CAPS – Contract Administration and Payment System

A mainframe computer system that allows WSDOT to manage the data used to track and report on construction contract progress. The work order manager uses the system to initiate payments to be generated to prime contractors and escrow agents. Program managers might check CAPS to see how individual pay items have been set up on a contract. For more details, refer to the [CAPS Manual](#) M 13-01.

CCFA – Construction Contract Funding Authorization

CCFA is used to describe the 1) Construction Contract Funding Authorization process, as well as the 2) Work Order Authorization (WOA) document used to document the process to authorize contract funding.

CCIS – Construction Contract Information System

This is the Construction Office's application that tracks construction contract details, e.g. start dates, end dates, percent complete, fair hiring practices, fair wage rates, percent of work sublet, etc.

CIPP – [Capital Improvement and Preservation Program](#)

The funded list of projects for a ten-year period constitutes the Ten-Year Capital Program, also referred to as the Capital Improvement and Preservation Program (CIPP).

CLB – Current Law Budget

A plan of financial operation embodying legislatively authorized expenditures for a given period of time or purpose, and the proposed means of financing them.

CM – Change Management

A reality of project management is that change will happen and projects will need to be modified. Change control is necessary because projects seldom develop exactly according to plan. CPDM's role in the CM process deals largely with the review, approval and documentation of changes. The Change Management process in CPDM documents the change, the reasons behind the change and memorializes the decisions. In order to deliver the program and projects, staff in the Region, modes, and CPDM work together to manage, ensure compliance, and transparency of project changes. See [Chapter 9 Managing Change](#), for more information on CPDM's change management process.

CN – Construction

The construction phase of a project.

CPDM – Capital Program Development & Management Office

CPDM is responsible in varying degrees for development and management of the capital construction programs for Highways, Ferries, and Rail, as well as for traffic operations and capital facilities. CPDM develops the highway construction program working with Region program management and project development, and oversees development of the construction programs for all other modes and functional areas, working with staff from those modes and areas. CPDM is also responsible to ensure that all modes and offices deliver their respective construction programs to meet the cost, scope and schedule of legislative intent.

CPDM seeks the most efficient means of utilizing the available funding and workforce resources provided by the Legislature and others to construct the projects that preserve and improve the state transportation system. As projects are scheduled for construction, CPDM allocates funding, monitors progress, and reports results to the Legislature, Governor's Office, WSDOT executives and the public.

When necessary, CPDM adjusts the construction program to maintain expenditures within appropriated amounts, and approves, or seeks approval, for changes to cost, scope and schedule. CPDM works with many others both within and outside the department to ensure the successful delivery of the Capital Program.

CPMS – Capital Program Management System

A mainframe computer database used to develop and manage the highway and marine construction programs. It allows users to establish and maintain project data and is used to manage and deliver the statewide construction programs. System screens allow the user to input and maintain project data, manage changes to approved projects, and generate reports to monitor program delivery. CPMS interfaces with TRIPS, PATS, and TRAINS. CPMS data is also downloaded to TEIS.

CW Projects – [Connecting Washington](#) Revenue Package

The \$16 billion Legislative funding package established in 2015 that funds the 16-year Connecting Washington project list. This plan covers highway improvements, highway preservation, state ferry system, fish barrier removal, and other multimodal investments. It will be paid for with bond proceeds, increased vehicle related fees, and an increase in the State's motor fuel excise tax of 11.9 cents that was phased in over two years: 7 cents on August 1, 2015 and 4.9 cents on July 1, 2016. For further discussion, see [Chapter 1](#).

Capital Program

The WSDOT program of projects for which the Legislature has authorized funding. The capital program of projects includes the Highway Construction Program (Improvements (I) and Preservation(P)), Facilities Capital Program (D), Traffic Operations Capital Program (Q), Rail Capital Program (Y), Washington State Ferries (WSF) Capital Program (W), and Local Program Capital Program (Z). Capital Program may also apply to groups of projects which, together, address a particular need. Examples are the Alaskan Way Viaduct Replacement Program, and the SR 520 Bridge Replacement and HOV Program.

Capital Project

An activity that requires long-term financing and an expenditure plan for acquisition, construction, or improvement of capital assets such as roadway, vessels, or bridges for which the Legislature has authorized funding.

Carryforward – Federal

The apportionment balance, in each federal program, that will be available for the next federal fiscal year. Carryforward consists of the apportionment balance that accumulated and was not used in the three previous federal fiscal years. Unused apportionment is forfeited if it is older than three previous federal fiscal years.

Carryforward – State

For capital projects it is the amount of funds necessary to complete project phases authorized in a previous biennium that will not be available to begin new projects or project phases in a subsequent biennium. Sometimes referred to as work-in-progress (WIP). For operating programs the carryforward level is a projected expenditure level created by calculating the biennialized cost of decisions already recognized in appropriations by the Legislature. These adjustments include workload and service changes directed by the Legislature and deletion of costs considered nonrecurring.

Change

A systematic way of reaching an intended outcome. Philosophically, change is what project management is all about.

Change Control

1) Identifying, documenting, approving, or rejecting, and controlling changes to the project baselines. 2) The process of accepting or rejecting changes to the project's baselines. Lack of change control is a common cause of scope creep.

Change Order

A written authorization provided to a contractor approving a change from the original plans, specifications, or other contract documents, as well as a change in the cost. With the proper signatures, a change order is considered a legal document.

Chart of Accounts M 13-02

A WSDOT manual that contains the valid codes and explains the coding structure used in recording and reporting financial and/or related information at WSDOT. It covers: agreement prefixes, job number prefixes, group category codes, authorization codes, WSDOT table of organization, object codes for expenditures, subprogram and work operation codes, agency financial codes, revenue source codes, balance sheet and general ledger codes, appropriation codes, and organization codes.

Cognos

A software product that makes it easy to develop queries and reports from the Data Warehouse databases. Cognos has a simplified front-end that one can use to run pre-defined reports, to customize reports for specific needs, to write new queries of the data warehouse, to present data in charts and graphs, and to compose custom-designed reports. Program Management customers can use Cognos to datamine against the CPDM datamart, TEIS reporting database, and WOA database, to name a few. Cognos is a product of IBM.

Commitment

Official consignment or pledge to do something.

Construction Manual M 41-01

A WSDOT manual providing procedures and methods that are acceptable for the construction of state highway projects under engineering supervision of the Department. It includes detailed guidelines for the documentation of work received and the keeping of records that are essential to proper accounting for the adequacy of work and the payments made. The *Construction Manual M 41-01* is a reference book of instructions consistent with the Standard Specifications. Program Management uses information in this manual relating to contract administration and change order processing.

Consultant

An independent individual or entity contracting with an agency to perform a professional service or render an opinion or recommendation according to the consultant's methods and without being subject to the control of the agency except as to the result of the work. The agency monitors progress under the contract and authorizes payment.

Construction Season

The year that the construction starts. Typically, the year is between the selected Award Date and the Construction Phase end date.

Contingency or Reserve

A provision in the project management plan to mitigate cost and/or schedule risk. Often used with a modifier (e.g., management reserve, contingency reserve) to provide further detail on what types of risk are meant to be mitigated. The specific meaning of the modified term varies by application area.

Contingency Allowance

As a result of risk analysis, money or time may be set aside as contingency, which may be used in the event of risks occurring. Contingency allowance provides for variations, which may occur in the expected values of elements of cost or schedule, but not scope or quality. (Note: contingency should not be shown in the plan as separate items and not hidden in activities as 'an extra 10 percent on duration or cost.)

Contract Authority

A form of Budget Authority that permits obligations to be made in advance of appropriations. Most of the programs under the Federal-Aid Highway Program operate under Contract Authority.

Contractor

A person, firm or corporation who or which, in the pursuit of an independent business under-takes to, or offers to undertake, or submits a bid to construct a project.

Corridor Sketches (see Subareas 1.4 and 1.5)

WSDOT is developing this new initiative to designate “corridors” for each state highway. WSDOT will work with partners to establish a vision and gather relevant information for a “one-stop shop” for WSDOT to store and retrieve background information and improvement ideas. In developing corridor sketches, WSDOT will work with communities to:

- Implement Least Cost Planning at the corridor level.
- Conduct performance based planning.
- Identify short-, mid-, and long-term multimodal performance gaps within corridors.

Cost/Benefit

An analysis in which consequences of the investment are measured in or converted to economic terms and qualitative benefits. In the context of WSDOT’s prioritization process: 1) A method for prioritizing highway improvement projects. The B/C ratio is determined by dividing measurable benefits by measurable costs for a specific time period, typically 20 years. It is a comparison, usually in dollars, of the benefits and costs of a project to establish whether it is worthwhile to build the project.

Cost at Completion

The total estimated construction cost anticipated at the time of the final payment of the construction contract.

Cost to Complete

The estimated total expenditures needed to finish the remaining work on the contract.

Criteria

Standards, rules, or tests on which a judgment or decision can be based, or by which a product, service, result, or process can be evaluated.

Critical Path

Generally, but not always, the sequence of schedule activities that determines the duration of the project. Generally, it is the longest path through the project. However, a critical path can end, for example, on a schedule milestone that is in the middle of the project schedule and that has a finish-no-later-than imposed date schedule constraint. See also [critical path method](#).

Critical Path Method

A schedule network analysis technique used to determine the amount of scheduling flexibility (the least amount of float) on various logical network paths in the project schedule network, and to determine the minimum total project duration. Early start and finish date are calculated by means of a forward pass using a specified start date. Late start and finish dates are calculated by means of a backward pass, starting from a specified completion date, which sometimes is the project early finish date determined during the forward pass calculation.

Current Plan

- 1) The amount currently planned to be spent in dollars and workforce for a project phase.
- 2) CPMS production is used to show the current project plan. A summarized copy is made nightly and placed into TEIS as the version “CURR-DM”.

Customer, or User

The person or organization that will use the project's product or service or result.

Cut-off – also called “month end cut-off”

Time during the month when a system is shut down so that actuals for the preceding month can be applied and re-aging can be accomplished.

D**DB – Design-Build**

1) A procurement or project delivery arrangement whereby a single entity (a contractor with sub-consultants, or team of contractors and engineers, often with sub-consultants) is entrusted with both design and construction of a project. This contrasts with traditional procurement, where one contract is bid for the design phase and then a second contract is bid for the construction phase of the project. 2) A project delivery method where a design-build contractor (contractor-led D-B), A/E design professional (design-led D-B), or CM (CM-led D-B) is directly responsible for both the total project design and construction of the project. Design-Build liability can be explicitly conveyed through the contract documents, or implicitly conveyed through the assumption of project-specific design liability, via performance specifications. 3) A written agreement between and contractor and owner wherein the contractor agrees to provide both design and construction services.

DBB – Design-Bid-Build

A project delivery method in which the department engages or contracts with separate entities for the design and construction of a project.

DPS – Direct Project Support

Work or services that contribute to the delivery of the highway construction program but are not assigned to any one project. DPS is the funding mechanism that supports the development and delivery of activities performed on individual highway construction projects. Often paired with Program Support (PS), which is the funding mechanism that supports the development and delivery of the highway construction program at the program level. These funds are available statewide for support activities to offices and projects.

Decision Package

A request to the Legislature for an increase or decrease in dollars and/or FTEs from the current authorized budget level. These requests are submitted to the program managers for review by the organizational managers.

Deliverable

Any unique and verifiable product, result, or capability to perform a service that must be produced to complete a process, phase, or project. Often used more narrowly in reference to an external deliverable, which is a deliverable subject to approval by the project sponsor or customer.

Dependency

A relation between activities, such that one requires input from the other.

Design Manual M 22-01

A WSDOT publication providing policies, methods and procedures recommended for developing projects. The manual provides specific design elements, such as horizontal curve design and formulas for signal design, and also general guidance about hearings, permits, structures, etc. Program managers use the manual during the development of project summaries to ensure consistency with applicable standards of practice.

Direct Labor

Work which contributes to the completion of a product and which can be charged against a particular project/Work Order.

E**EBASE - Estimates and Bid Analysis System**

A WSDOT Design Office SQL server application that manages estimates and contractor bids for construction projects. It produces project estimates, breaks out contract agreement amounts, construction engineering estimates and sales taxes, and provides a summary by fund source (federal, state, etc.). Region program managers use EBASE to prepare work order authorization forms. OSC program managers use the PE Summary produced by the system for reviews prior to work order authorization or submittal of federal-aid agreements.

ER – Emergency Relief

A federal funding program. The intent of the ER program is for repair and restoration of eligible highway facilities to pre-disaster conditions. In very limited situations, the ER program may fund additional protective features or modifications commonly referred to as betterments. For those situations more stringent eligibility criteria are applied, which significantly reduces the likelihood of receiving federal approval for the betterment. See [FHWA's Emergency Relief Manual](#) for more information.

ER – Emergency Repair

Temporary emergency work that is necessary to restore essential traffic, minimize the extent of damage, or protect the remaining facilities. Keeps facility operating until permanent restoration can be done. This work typically requires minimal preliminary engineering, geotechnical studies, structural analysis, or environmental review. These repairs are usually within the capabilities of the State and local maintenance forces and most will be performed on a force account or an emergency contract basis. For more information, see [Chapter 8](#) Funds Management and Federal-Aid.

ER

WSDOT Eastern Region

EV – Earned Value

The value of completed work expressed in terms of the approved budget assigned to that work for a schedule activity or work breakdown structure component. Also referred to as the budgeted cost of work performed.

Earmark

used in CPDM as meaning a provision in state legislation that allocates a specified amount of money for a specific project, program, or organization. Factcheck.org defines it as “allocations of revenue in a bill that are directed to a specific project or recipient typically in a legislator’s home state or district.”

Estimate

A quantitative assessment of the likely amount or outcome. Usually applied to project costs, resources, effort, and durations and is usually preceded by a modifier (i.e., preliminary, conceptual, feasibility, order-of-magnitude, definitive). It should always include some indication of accuracy (e.g., $\pm x$ percent).

Estimate at Completion

The expected total cost of a schedule activity, a work breakdown structure component, or project when the defined scope of work will be completed. EAC is equal to the actual cost (AC) plus the estimate to complete (ETC) for all of the remaining work. $EAC = AC + ETC$. The EAC may be calculated based on performance to date or estimated by the project team based on other factors, in which case it is often referred to as the latest revised estimate.

Exception Report

Document that includes only major variations from plan (rather than all variations).

Executive Management

WSDOT Regional and Headquarters management.

Expenditure Authority

Permission for agencies to disburse moneys or accrue liabilities during specific fiscal periods, up to specified amounts, from specific accounts. Authority is provided by the Legislature, through appropriations or inclusion of non-appropriated account money in the legislative budget, and by the executive through allocations, approval of unanticipated receipts, or across-the-board spending reductions.

Expenditure Authority Code

The three-character code assigned by OFM to identify each legislative or executive authorization to incur expenditures. Agencies are to use only those expenditure authority codes that have been authorized in writing by OFM. The assigned codes are valid only for the biennium for which they are established.

Expenditure Authority Schedule

A listing prepared by OFM of all dollar appropriations (by agency and account) contained in legislation, along with an assigned code for use in allotment preparation and other accounting requirements.

Expenditure Authority Type

The designator that identifies the nature of the spending authority, such as state, federal, private/local.

Expenditures

Expended funds.

External Reports

- 1) Reports that are destined for an external audience, such as the public, or Legislature.
- 2) Reports that are proviso reports. These monthly and quarterly reports are conduits for WSDOT to report to the Legislature as to budget changes in line-item projects.
- 3) A system with a public-facing web-based application that contains three modules within it: project delivery status, programmatic projects' STIP map, and a project webpage search. This application allows customers to search for project webpages, provides the mapping of projects within the Statewide Transportation Improvement Program (STIP), and provides the current status of active construction projects.

F**FAPA**

Federal Aid Project Authorization form. The FAPA documents the Federal Highway Administration (FHWA) commitment to participate in the project costs. The Regions provide the information for submitting the agreement and Headquarters (HQ) prepares and submits the final form to FHWA for approval. Usually, Regions submit the WOA for funding authorization at the same time they submit information for the FAPA. The FAPA must be approved before work starts on a project phase that will use federal funds. The one exception is that a PE phase may be 100 percent state funded and underway before the FAPA is approved. Upon approval of the FAPA, federal funds may then be used for PE phase expenditures from the date of FAPA approval forward.

FAST Act – Fixing America's Surface Transportation Act

On December 4, 2015, President Obama signed the [Fixing America's Surface Transportation \(FAST\) Act](#) (Pub. L. No. 114-94) into law—the first federal law in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act authorizes \$305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.

FATS – Federal Aid Tracking System

This web-based system provides customers with the ability to create, submit, modify, and track Federal-Aid agreements between WSDOT and FHWA ([FMIS](#)).

FFY – Federal Fiscal Year (October 1 through September 30).

The 12-month period from October 1st through September 30th by which Congress makes appropriations and in which obligation authority can be used by the State.

FHWA – Federal Highway Administration

The section of the United States Department of Transportation with jurisdiction over the use of federal funds for state highway and local street and road improvements. It is the branch of the US Department of Transportation that administers the Federal-Aid Highway Program, providing financial assistance to states to construct and improve highways, urban and rural roads, and bridges. The FHWA also administers the Federal Lands Highway Program, including survey, design, and construction of forest highway system roads, parkways and park roads, Indian reservation roads, defense access roads, and other Federal lands roads. It became a component of the Department of Transportation in 1967 pursuant to the Department of Transportation Act (49 U.S.C. app.

1651 note). It administers the highway transportation programs of the U.S. Department of Transportation under pertinent legislation.

Since 2003, approximately 25 to 30 percent of the funding WSDOT receives for projects comes from the federal government.

FIRS – Financial Information and Reporting System

A client-server computer application which allows the retrieval of accounting, budgeting, and work order information from TRAINS. The user selects criteria for querying the database and information is placed in an Excel spreadsheet for a quick and easy look at expenditures.

FMIS – Financial Management Information System

A nationwide accounting system containing data related to federally funded highway projects. The data is summarized in a variety of ways and used by FHWA for planning and executing agency programs, evaluating program performance, and depicting financial trends and requirements related to current and future funding.

The information is maintained on a central mainframe computer and updated via microcomputers. Fiscal information is input into FMIS by staff in OSC Program Management, Highways and Local Programs, and Finance and Administration. FMIS is used to obtain funding approval from FHWA and to track and manage federally-funded projects.

FRA – Federal Railroad Administration

The Federal Railroad Administration's mission is to enable the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. FRA supports passenger and freight railroading through a variety of competitive grant, dedicated grant, and loan programs to develop safety improvements, relieve congestion, and encourage the expansion and upgrade of passenger and freight rail infrastructure and services. FRA also provides training and technical assistance to grantees and stakeholders. Offers [grant programs](#) to state governments.

FTA – Federal Transit Administration

The Federal Transit Administration (FTA) provides financial and technical assistance to local public transit systems, including buses, subways, light rail, commuter rail, trolleys and ferries. FTA also oversees safety measures and helps develop next-generation technology research. Offers [grant programs](#) to local public transit systems, and state governments.

FTE – Full Time Equivalent

A unit of measurement for workforce (employees). For planning purposes, one FTE is equal to approximately 1800 hours of work in a fiscal year regardless of whether that work is performed by an employee in a full-time, part-time, or temporary position.

FY – Fiscal Year – State

The 12-month period from July 1st to June 30th for which WSDOT plans the use of its funds. (Fiscal year 1999 begins July 1, 1998 and ends on June 30, 1999).

Fast Tracking

A specific project schedule compression technique that changes network logic to overlap phases that would normally be done in sequence, such as the design phase and construction phase, or to perform schedule activities in parallel.

Federal Highway Administration (FHWA)

The section of the United States Department of Transportation with jurisdiction over the use of federal funds for state highway and local street and road improvements. It is the branch of the US Department of Transportation that administers the Federal-aid Highway Program, providing financial assistance to states to construct and improve highways, urban and rural roads, and bridges. The FHWA also administers the Federal Lands Highway Program, including survey, design, and construction of forest highway system roads, parkways and park roads, Indian reservation roads, defense access roads, and other Federal lands roads. It became a component of the Department of Transportation in 1967 pursuant to the Department of Transportation Act (49 U.S.C. app. 1651 note). It administers the highway transportation programs of the U.S. Department of Transportation under pertinent legislation.

Since 2003, approximately 25 - 30 percent of the funding WSDOT receives for projects comes from the federal government.

Fiscal Note

A statement of the estimated fiscal impact of proposed legislation. This cost estimate is usually developed by the state agencies affected by the bill, and then approved and communicated to the Legislature by the Office of Financial Management.

Fiscal Year

A 12-month fiscal period used for budget and accounting purposes. The Washington State fiscal year extends from July 1 through the next June 30 and is named for the calendar year in which it ends (e.g., July 1, 2014 - June 30, 2015 is state Fiscal Year 2015). The federal fiscal year runs October 1 through September 30. The city/county fiscal year runs January 1 through December 31.

Flowcharting

The depiction in a diagram format of the inputs, process actions, and outputs of one or more processes within a system.

Full-Time Equivalent (FTE)

As a unit of measure of state employees: refers to the equivalent of one person working full-time for one year (approximately 2,088 hours of paid staff time). Two persons working half-time also count as one FTE.

G**GCCM – General Contractor Construction Management** (See section 1.1.4 on page 6)

General Contractor/Construction Manager is a project delivery method (PDM) in which WSDOT contracts separately with a contractor as a Construction Manager and either performs the design or contracts with an engineering firm to provide a design. The Construction Manager is selected early in the project development phase (10% to 30% Design) to provide design and constructability input. WSDOT retains control of the design of the project and is typically responsible for design errors and omissions during construction on GCCM projects. Historically, Design-Bid-Build (DBB) has been the default project delivery method for all WSDOT projects unless an Alternative PDM, such as Design-Build (DB) or General Contractor/Construction Manager (GCCM) was pursued. In those cases, internal approval was required from the WSDOT Chief Engineer.

GIS – Geographic Information System

A computerized geographic information system used to store data. Data may be used with GIS if the data includes the Accumulated Route Mile (ARM) or State Route Mile Post (SRMP). Global Positioning System (GPS) technology provides a means of collecting data and is an alternative to location by ARM or SRMP. The primary desktop tool to view and analyze GIS data is ESRI's ArcView software. Program managers may use GIS information when preparing or reviewing a Project Summary and when entering deficiency data in CPMS.

GMAP

The Governor's **Government Management Accountability and Performance** program.

GNB – [The Gray Notebook](#)

A quarterly WSDOT publication to meet transparency and accountability in reporting on transportation programs and department management. This publication is WSDOT's primary transportation system performance report. It is available to the public, the Governor's office and the State Legislature. Previously known as "Measures, Markers and Mileposts."

Gantt Chart, or Bar Chart

A chart using timelines and other symbols that illustrate multiple time-based activities or projects on a horizontal time scale. Activities are listed, with other tabular information, on the left side. Activity durations are shown in the form of horizontal bars. Invented by Henry Gantt.

General Contractor/Construction Manager (GC/CM)

A GC/CM is a firm with which an agency or institution has selected and negotiated a guaranteed maximum allowable construction cost for a project. A competitive selection process is used through a formal advertisement and competitive bids to provide services during the design phase that may include life-cycle cost design considerations, value engineering, scheduling, cost estimating, constructability, alternative construction options for cost savings, and sequencing of work. The GC/CM acts as the construction manager and general contractor during the construction phase. The GC/CM process is considered an alternative contracting method and is subject to provisions in RCW 39.10.

General Obligation Bonds

These are statewide bond issues whose repayment is guaranteed by the full faith, credit, and taxing power of the state and that are subject to the state's debt limit. General obligations bonds are the traditional form of government debt financing for major construction projects.

H**HCP – Highway Construction Program**

The comprehensive two-year program and six-year financial plan of highway improvement and preservation projects selected by priority for each Region.

HQ – WSDOT Headquarters

1) The main transportation offices [building](#). 2) Office managers and staff of various offices in the building in relationship to other modes and Regions.

HSP – Highway System Plan

The Highway System Plan (HSP), developed by the department's Multimodal Planning Division, describes how the department will maintain, operate, preserve and improve one component of the state-owned system—the state highway system—over the next 20 years. In general, the Highway System Plan identifies a proposed strategy and estimated cost for solving some of the mobility needs. For other needs, the HSP discusses general approaches for addressing the need and includes approximate investment levels as defined in the Washington Transportation Plan.

I**I Program**

Improvement Program.

I1 – Improvement Subprogram – Mobility

I2 – Improvement Subprogram – Safety

I3 – Improvement Subprogram – Economic Initiatives

I4 – Improvement Subprogram – Environmental Retrofit

I5 – Improvement Subprogram – Direct Project Support/Program Management

I6 – Improvement Subprogram – Sound Transit

I7 – Improvement Subprogram – Tacoma Narrows Bridge

IT

WSDOT Information Technology Office

Improvement Type

A general definition of the type of work that will be accomplished by a Program Item.

Incidental Repair

Work completed incidental to the Temporary/Emergency Repair Work. This work was not necessary to restore essential traffic, minimize the extent of damage, or protect the remaining facilities; this work may be eligible for federal participation at the normal pro rata share for the facility type. Work in this box typically requires minimal preliminary engineering, geotechnical studies, structural analysis, or environmental review. These repairs are usually within the capabilities of the State and local maintenance forces and most will be performed on a force account or an emergency contract basis. For more information see [Chapter 8 Funds Management and Federal-Aid](#).

Incidental Repair Work is generally categorically excluded from NEPA requirements under [23 CFR 771.117\(c\)\(9\)](#). This work must meet the emergency provisions of all other environmental regulations, such as ESA, Section 106, 4f. Most of these emergency provisions require that the regulatory agency be notified prior to beginning work.

Indirect Costs

Activities which support direct labor costs but cannot be charged against a particular project or activity.

Inflated Dollars

Value of the estimated dollars inflated from the estimate date to the mid-point between the phase start and phase completion dates (for RW and CN phases only).

L

LEAP – Legislative Evaluation and Accountability Program

[Transportation LEAP Documents](#) include legislatively-approved funding for transportation improvement and preservation projects. This includes highway, ferry, rail, and local road projects. These lists are referenced in Transportation budget bills and are created by the transportation fiscal committees.

LEGFIN

A TEIS file nomenclature for the file that represents the final legislative budget.

LP – Local Programs Office

Under the Federal Highway Administration's (FHWA) Federal-Aid Stewardship Agreement with WSDOT, Local Programs serves as the steward of the FHWA funding that goes to public agencies throughout the state.

Last Approved

The TEIS version LAPR is used to store WSDOT's Last Approved scope, schedule and budget so we can measure project changes. When a project enters active delivery, the project is copied from the CURR-DM version in TEIS to the LAPR version. The LAPR version is updated only when the change is documented in a TEIS Change Management Note and is approved.

Lean

Lean is a systematic approach to improving value to customers by eliminating waste. The focus is on the customer and the work steps (or "value stream") that create products or services for customers. Lean thinking, tools, and techniques offer an opportunity to streamline business processes to save time, effort and money that can be better used on what customers value most. For more information, see WSDOT's [Lean](#) Office webpage.

Legislature

- 1) A body of persons having the power to legislate; specifically: an organized body having the authority to make laws for a political unit (as a nation or state) ([Merriam-Webster](#)).
- 2) In Washington State, the voted-in governing body which makes funding decisions on transportation and all other government responsibilities. Funding to pay for the responsibilities comes from revenues raised by taxation, as well as some funding from the federal government.

Legislative Book

List of projects by subprogram developed by Program Management, approved by the Transportation Commission, and submitted to the Legislature during the odd- year session when biennial budgets are set.

Lessons Learned

The learning gained from the process of performing the project. Lessons learned may be identified at any point. Also considered a project record, to be included in the lessons learned knowledge base.

Line-item budgeting

Legislatively mandated, project-specific financial appropriations on certain projects. The 2003, 2005, and 2015 transportation revenue packages greatly expanded the use of project-specific appropriations. For further discussion, see [Chapter 1](#).

Local Agency Guidelines M 36-63

WSDOT publication that provides local agencies with statewide policies and standards to follow when using Federal Highway Administration funds for transportation projects. The manual provides information to help Washington's public agencies plan, design, construct, and maintain transportation facilities. It describes funding procedures and the use of federal Emergency Relief funds.

Lowest Life Cycle

In terms of highway pavement preservation, the point in a pavement's life cycle where optimum pavement life has been achieved and the least cost to resurface has been reached. Pavements that have gone beyond this optimum point typically incur more costs to rehabilitate.

M**MATS Lab**

The WSDOT Materials Testing Laboratory where chemical and other tests are performed on pavement and other materials used in transportation projects.

MDL – Master Deliverable List

WSDOT's standardized Master Deliverables List is the starting point for a project-specific work breakdown structure (WBS). The MDL is a comprehensive list that identifies project phases, sub-phases, work processes, and deliverables. In a few cases, the MDL goes to the task level, for example in the environmental area.

Rather than build a work breakdown structure from scratch, project teams eliminate items from the MDL, and add the appropriate tasks.

The project team identifies project specific tasks with input from project customers, sponsors, and stakeholders. The tasks developed at the project level must roll up into the deliverables in the standardized MDL. It is to be used by all projects in the Highway Construction Program.

MPO – Metropolitan Planning Organization

The agency designated by the Governor to administer the federally required transportation planning process in metropolitan areas with populations over 50,000. The MPO is responsible for the 20-year long-range plan and the Transportation Improvement Program (TIP).

MQPR – Management Quarterly Project Review (meeting)

Each Region and Mode hosts a quarterly half-day meeting to discuss projects impacted by scope, schedule and budget issues. The purpose of the quarterly reviews is to analyze current expenditure plans relative to budgetary appropriations and financial plans. CPDM staff travel to the Regions for these meetings.

Program M

The Maintenance Program oversees the day-to-day needs of the maintaining the state's highway system.

Management Region

The region that has ultimate responsibility for delivering a project. It is usually the region the project is located geographically but can be transferred to another region.

Measure, Markers, and Milestones

Previous title for The Gray Notebook or GNB, a quarterly publication.

Mega projects

WSDOT's major construction programs over \$500 million. They are:

- I-405 Corridor Improvements program
- SR 520 Bridge Replacement program
- US 395 North Spokane Corridor
- I-5 Tacoma HOV Improvements program
- Gateway Program
 - SR 509 Corridor
 - SR 167 Completion
- I-5 Improvements through JBLM
- I-90 Snoqualmie Pass East Corridor Improvement
- SR 99 Alaska Way Viaduct Replacement project

Milestone

1) The date which marks a significant activity to be accomplished on the project, such as PE funds authorized, design report approved, or project advertised. 2) For CPDM reporting purposes, advertisement and operationally complete milestone dates and dollars are measured to determine if a project is on schedule or late, and on or over budget. 2) A significant point or event in the project.

Mission (Mission Statement)

Derived from the project vision, an action statement that is feasible in time and place and compatible with the pursuit of the vision. A brief summary, approximately one or two sentences, that sums up the background, purposes, and benefits of the project. A statement that answers three questions: (1) What do we do? (2) For whom do we do it? (3) How do we go about it?

Mode

The generic term for the modes and offices with capital construction program other than highways such as Ferries, Rail, Highways, and Local Programs, etc.

Monitor

Collect project performance data with respect to a plan, produce performance measures, and report and disseminate performance information.

Monte Carlo Analysis

A technique that computes, or iterates, the project cost or project schedule many times using input values selected at random from probability distributions of possible costs or durations, to calculate a distribution of possible total project cost or completion dates.

Monthend Process

A monthly process in CPMS during which the system is not available for update and actual expenditures are posted, planned dollars are re-aged, and reports and generated.

N

NCR

WSDOT North Central Region

NHS – National Highway System

A network of roadways designated by Congress that consists of all Interstate routes, a large percentage of urban and rural principal arterials, and strategic highways and highway connectors. Over 3,000 miles of WSDOT highways are designated as NHS routes.

NEPA – National Environmental Policy Act

The U.S. Environmental Protection Agency oversees the National Environmental Policy Act (NEPA), which was signed into law on January 1, 1970. NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. The range of actions covered by NEPA is broad and includes:

- Making decisions on permit applications.
- Adopting federal land management actions.
- Constructing highways and other publicly-owned facilities.

Using the NEPA process, agencies evaluate the environmental and related social and economic effects of their proposed actions.

NLB – New Law Budget

Budget proposal that relies on new revenue. Only the Governor and the Legislature can propose new law budgets.

NWR

WSDOT Northwest Region

Nickel Program – 2003 Nickel Funding Package

The \$3.9 billion Legislative funding package established in 2003 that funded the Nickel project list. For further discussion, see [Chapter 1](#).

O

OC Date – Operationally Complete Date

This milestone marks the date a project is 1) operationally complete and ready for its intended use. The agency has free and unrestricted use of the facility, although the contractor may remain on site for minor work. For example, the roadway is operationally complete, a building is ready for occupancy, etc. 2) A formal ribbon-cutting is also considered as the operational complete date.

OFM – Office of Financial Management

The Office of Financial Management provides vital information, fiscal services and policy support that the Governor, Legislature and state agencies need to serve the people of Washington State. This office plays a central role in budget planning, policy development, and fiscal administration for the executive branch of state government.

O-Line

Overrun Work Order or an overstatement in CPMS.

OR

WSDOT Olympic Region

Obligation Limitation

A restriction, or “ceiling” on the amount of Federal assistance that may be promised (obligated) during a specified time period. This is a statutory budgetary control that does not affect the apportionment or allocation of funds. Rather, it controls the rate at which these funds may be used.

Obligational Authority (OA)

The total amount of funds that may be obligated in a year. For the Federal-Aid Highway Program this is comprised of the obligation limitation amount plus amounts for programs exempt from the limitation.

Operations

An organizational function performing the ongoing execution of activities that produce the same product or provide a repetitive service. In CPDM, this can be 1) associated with the Work Order functions, or 2) the work required to repair the software and hardware systems when they go down.

Oracle

The Oracle Image and Process Management (IPM) corporation provides WSDOT with an off-the-shelf software platform that provides core document management and workflow services to WSDOT. The application consists of a set of core windows services, a web client, and a windows client. Used in the Work Order process in the PAMS office.

Org chart, or organization chart

A method for depicting interrelationships among a group of persons working together toward a common objective.

P**P Program**

Preservation Program

- **P1 – Preservation Subprogram – Roadways**
- **P2 – Preservation Subprogram – Structure**
- **P3 – Preservation Subprogram – Other Facilities**
- **P4 – Preservation Subprogram – Direct Project Support/Program Management**

PAF – Project Action Form (previously called Project Approval Form)

A standard WSDOT form used to request the programming of a project to address a need associated with a declared emergency or another emergent problem. More details are provided in the appendices of [Chapter 9](#) Managing Change. For additional information on the PAF process, please see [TEIS Program Project Action Form \(PAF\) Process](#) (7/18/13).

PDM – Program Delivery Manager

The Program Delivery Manager manage the Program Delivery, budget, and WOA processes and routinely look at costs on a project level each time a new work order is processed for approval. Increases or decreases from the legislatively approved costs are approved at different levels in CPDM based on the magnitude of the change. Low-level changes are within the regions' jurisdictions and do not require Headquarters approval. Beyond a fixed minimal level, the program delivery manager must review and approve cost changes.

PDP – Project Delivery Plan

A 10-year, project detail plan for all modes that communicates WSDOT's intentions for specific capital investments in all transportation infrastructure administered by the department. The plan supports the FHWA's requirement that the state will program four years of projects in the State Transportation Improvement Program (STIP). An updated plan is published annually and CPDM is responsible for coordinating the development of the plan in accordance with legislative and executive direction in the context of defined asset management investment strategies.

PDS - Project Delivery Specialist

A senior technical specialist within the Capital Program Development and Management Division that facilitates project delivery of Highway Construction, Ferry, Facilities, Traffic, Local Programs and Rail capital projects by performing critical monitoring, analysis, communication and reporting, and assisting in the administration of statewide policy for program management. Previously referred to as "APDMs" (Assistant Project Delivery Managers).

PE

1) Preliminary Engineering phase of a project. 2) Project Engineer.

PEF – Pre-existing funds

All project funding where the source of funds does not come from one or more of the main three revenue packages: Nickel, TPA, or CW funds.

PIF – Public Interest Finding

All construction projects require this form to be filled out and the work described to be approved and completed. WSDOT reports to FHWA using this form which allows for rare exceptions on projects, when it is in the best interest of the public. For more detailed information on PIFs, please see the appendix at the end of [Chapter 8](#) Funds Management and Federal-Aid.

PIN – Program Item Number

Used to refer to projects identified in CPMS, TEIS and other program management legacy systems. Per CPMS Users Guide Fields: Program Item Number (PIN) Definition from the [CPMS Users Guide](#): A unique seven character number which identifies a Program Item. The Program Item carries the project funding and contains the information used to present the project to the Legislature. For bucket projects, the region number is entered in the first position of the field and an appropriate code from the Bucket Project Table is entered in the 2nd-7th positions.

PM – Project Manager

(1) The person assigned by the performing organization to achieve the project objectives. (2) Any person assigned to lead a team toward completion of a project. A project manager applies specialized knowledge, skills, tools, and techniques in order to meet customer expectations of a project. (3) The person who heads up the project team and has the authority and responsibility for conducting the project and meeting project objectives through project management. (4) A qualified individual or firm authorized by the owner to be directly responsible for the day-to-day management and administration, and for coordinating time, equipment, money, tasks, and people for all or specified portions of a specific project.

PMBOK® – Project Management Body of Knowledge

An inclusive term that describes the sum of knowledge within the profession of project management. As with other professions, such as law, medicine, and accounting, the body of knowledge rests with the practitioners and academics that apply and advance it. The complete project management body of knowledge includes proven traditional practices that are widely applied and innovative practices that are emerging in the profession. The body of knowledge includes both published and unpublished material. The PMBOK is constantly evolving.

PMIS – Project Management Information System

An information system consisting of the tools and techniques used to gather, integrate, and disseminate the outputs of project management processes. It is used to support all aspects of the project from initiating through closing, and can include both manual and automated systems.

PMP – Project Management Plan

The Project Management Plan is the guiding document that sets forth the project scope, schedule, cost, resource needs, and potential risks. The WSDOT Project Management Process documents the elements of a typical project management plan.

PMP – Project Management Professional

A person certified as a PMP® by the Project Management Institute (PMI®).

PMP – Performance Management Program

In 2016 the agency began phasing out the Performance Management Program it had been using since 2007. The program was used to evaluate employees' performance.

PMRS – Project Management and Reporting System

This suite of software applications consists of an enterprise project scheduling, construction contract management, and content management system for the capital highway construction projects.

PS - Program Support

Program Support (PS) is the funding mechanism that supports the development and delivery of the highway construction program at the program level. Often paired with Direct Project Support (DPS) which is the funding mechanism that supports the development and delivery of activities performed on individual highway construction projects. These funds are available statewide for support activities to offices and projects.

Program M

The Maintenance Program oversees the day-to-day needs of the maintaining the state's highway system.

Percent Complete

An estimate, expressed as a percent, of the amount of work that has been completed on an activity or a work breakdown structure component.

Performance Measure

A quantitative indicator that can be used to determine whether an agency's programs or services are directly contributing to the achievement or progress toward some objective. Activity performance measures reported in the budget should tell the story about whether the activity is achieving its purpose and contributes to statewide goals. These measures are most likely to be intermediate or immediate outcomes or output measures.

Performance Reporting

The process of collecting and distributing performance information. This includes status reporting, progress measurement, and forecasting.

Permanent Restoration – Work performed as part of the Permanent Restoration. Permanent restoration shall be administered using normal Federal Aid procedures that include written authorization, NEPA clearance, design approval, permits, right of way certification, PS&E, advertisement period, etc. The federal participation on eligible work will be at the normal pro rata share for the facility type (Interstate 90.6 percent Non-Interstate 86.5 percent) regardless of when the work is done. For more information, see [Chapter 8](#) Funds Management and Federal-Aid.

Phase

One of three parts in the development and delivery of a project, preliminary engineering (PE), right of way (R/W), or construction (CN).

Pool Funded Projects

Projects listed in the Transportation Budget and funded as a group under a Budget Item Number (BIN).

Practical Solutions

A performance-based approach to transportation decision-making. This data-driven approach uses the latest tools and performance measures to support lower cost efficiencies in operating highways, ferries, transit and rail; reduce travel demand to save money; and reduce the need for building costly new infrastructure expansion. For further discussion, see [Chapter 1](#).

Practical Solutions Roundtable

A Practical Solutions Roundtable reviews each project, guides the implementation of Practical Solutions, and is a forum for sharing best practices. Community engagement is a key in developing transportation solutions, leading to collaborative decision making.

Pre-Design phase

The phase prior to the start of design where feasibility studies are done and conceptual project cost estimates are prepared.

Predesign Study

A report and process completed at the beginning of a project that clearly and accurately defines the need/problem to be addressed. The predesign study provides an analysis of alternatives and describes the selected alternative in detail with cost estimates. This study is the basis for large stand-alone capital projects.

Preventive Maintenance

A maintenance strategy where inspections are made or actions are taken on a scheduled basis to reduce service interruptions, reduce the premature failure of facilities, systems, and equipment, and continue efficient operations. Actual inspection and maintenance is performed on pre-specified schedules established by the asset steward or asset manager.

Program

A group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programs may include elements of related work outside the scope of the discrete projects in the program.

Programming

CPDM is responsible to implement the legal requirements of [RCW 47.05](#). Under that law, state transportation funds must be invested based on a policy of priority programming. Priority programming is the rational selection of projects and services according to factual need and an evaluation of life cycle costs and benefits. Projects are to be systematically scheduled to carry out defined objectives within available revenue. Therefore, project scoping is one of the crucial steps taken to insure statewide consistency in conformance with the RCW. For more information on programming, see [Chapter 3](#) Scoping and [Chapter 4](#) Prioritization.

Program Management

The centralized, coordinated management of a specific program to achieve its strategic goals, objectives, and benefits. Often it is a series of related projects designed to accomplish broad goals, to which the individual projects contribute, which are typically executed over an extended period of time (i.e., a biennium).

Programmed

The work is funded in the Project Delivery Plan.

Programming Structure

In 1992, a task force of the Legislative Transportation Committee (LTC) directed the Department to develop a programming structure for the highway system which would allow the Legislature to make investment decisions based on specific action strategies in the Highway System Plan (HSP). As a result, a structure was developed with a budget category for most of the action strategies in the HSP. That structure, slightly modified, is still in use today. For further discussion, see [Chapter 1](#).

Project Management Team

The members of the project team who are directly involved in project management activities. On some smaller projects, the project management team may include virtually all of the project team members.

Project Phase

A collection of logically related project activities, usually culminating in the completion of a major deliverable. Project phases (also called phases) are mainly completed sequentially, but can overlap in some project situations. Phases can be subdivided into sub-phases and then components; this hierarchy, if the project or portions of the project are divided into phases, is contained in the work breakdown structure. A project phase is a component of a project life cycle. A project phase is not a project management process group.

Project Life Cycle

A collection of generally sequential project phases whose names and numbers are determined by the control needs of the organization or organizations involved in the project. A life cycle can be documented with a methodology.

Project Management

The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.

Proviso

These have language in budget bills that places conditions and limitations on the use of appropriations. Example: "Up to \$500,000 of the Motor Vehicle Account-State appropriation is provided solely to evaluate the need to replace the department's land mobile radio system."

Q**QPR**

[Quarterly Project Report interactive map](#)

QRV - Quarterly Regional Visit

A quarterly project delivery visit with Region and Headquarters Staff participating.

R**R/W or RW – Right of Way**

1) A general term denoting land or interest therein, acquired for or designated for transportation purposes. More specifically, lands that have been dedicated for public transportation purposes or land in which WSDOT, a county, or a municipality owns the fee simple title, has an easement devoted to or required for use as a public road/street and appurtenant facilities, or has established ownership by prescriptive right ([Design Manual](#) M 22-01, July 2016). 2) A phase of project delivery, as the term is used in CPDM.

R/W Cert.

Right of Way Certification

RA – Regional Administrator

The Modal or Regional Administrator bears the ultimate responsibility for project delivery at the regional or modal level. Regional Administrators report through the Deputy Chief Engineer, Chief Engineer, and Deputy Secretary.

RCW – Revised Code of Washington

The Revised Code of Washington is the compilation of all permanent state laws now in effect. It is a collection of session laws (enacted by the Washington State Legislature and signed by the Governor or enacted via the initiative process), arranged by topic, with amendments added and repealed laws removed. It does not include temporary laws, such as appropriation acts. [Title 47](#) pertains to Public Highways and Transportation. [Chapter 47.01](#) pertains to the Department of Transportation.

RFP – Request for Proposal

The document package issued by WSDOT requesting submittal of proposals for the project and providing information relevant to the preparation and submittal of proposals, including the instructions to proposers, contract documents, bidding procedures, and reference documents. ([Design Manual](#) M 22-01, July 2016)

Regions

Six identified WSDOT management Regions within Washington State: NWR, NCR, OR, SWR, SCR, ER, and the [mega projects](#) (for projects greater than \$500 million).

Results Washington

Results Washington combines the best aspects of previous performance management and performance budgeting efforts such as Government Management Accountability and Performance (GMAP) and Priorities of Government (POG) with a significantly expanded Lean initiative that will involve all state agencies.

Retainage

Those portions of cash amounts due to be paid to a contractor for work completed that are held back (retained) by the agency/institution and not paid until some later date; often at substantial completion or at final completion of the work, according to the terms and conditions of the contract and any relevant legal statute; as a security for proper performance of work and fulfillment of contractor's requirements.

Revenue Packages

- **CW Projects – [Connecting Washington Revenue Package](#)**
The \$16 billion Legislative funding package established in 2015 that funds the Connecting Washington project list from 2016 to 2032.
- **Nickel Projects – [Nickel Funding Package](#)**
The \$3.9 billion Legislative funding package established in 2003 that funded the Nickel project list.
- **TPA Projects – [2005 Transportation Partnership Program](#)**
The \$7.1 billion Legislative funding package established in 2005 that funded the Transportation Partnership Account (TPA) project list for 16 years.

Risk Reserves

Project risk reserves are defined as funds on a project PIN set aside by the Region Program Manager to address identified phase risks not addressed in project contingencies.

Project savings are defined as potentially unneeded funds on a project PIN set aside by the Region Program Manager. An example is RW phase or Bid savings (from [Project Aging and Risk Reserves – Savings Guidelines](#)).

S

SCR

WSDOT South Central Region

SEPA – State Environmental Policy Act

The State Environmental Policy Act (SEPA) process identifies and analyzes environmental impacts from governmental decisions. These decisions may be related to issuing permits for private projects, constructing public facilities, or adopting regulations, policies, or plans. SEPA review helps agency decision-makers, applicants, and the public understand how a proposal will affect the environment.

SFY

State Fiscal Year (July 1 through June 30)

STIP – Statewide Transportation Improvement Program

1) A planning document that includes all federally funded projects and other regionally significant projects for a three-year period. The STIP is a compilation of all projects that are in the Transportation Improvement Programs (TIPs) developed by the regional planning organizations (MPOs and RTPOs). A new STIP must be developed every two years or less and is approved jointly by FHWA and FTA for compliance with statutory requirements and financial feasibility. 2) A staged, multi-year, statewide, intermodal program of transportation projects, consistent with the statewide transportation plan and planning processes as well as metropolitan plans, TIPs, and processes.

STP – Surface Transportation Program

A federal program established by Congress in 1991 which provides a source of federal funding for highway and bridge projects, including projects in other transportation modes.

SWR

WSDOT Southwest Region

SafetyAnalyst

A program developed to implement the *Highway Safety Manual* methodology ([Design Manual](#) M 22-01, July 2016)

Scope

CPDM uses three types of scope. See [Chapter 3](#) Scoping for further details.

- **Proposed scope** – A solution proposed to solve a transportation need. The proposed solution must meet a need identified in the Highway System Plan.
- **Legislative budget scope** – A statement specifying the legislative intent for a project as written in a legislative budget document or legislatively approved project list, such as the LEGFIN TEIS version dated at the end of the legislative session. A Legislative Budget scope outlines the basic parameters of the project, but is normally not as specific as the details found in a completed Project Definition or Project Summary.
- **Approved Project Summary scope** – This document is WSDOT's intent for the project, as defined in the CPDM-approved Project Summary and all required attachments, including the Basis of Estimate. The scoping process, and the WSDOT-approved scope, are not complete until the Project Summary is approved by CPDM.

Scoping

Scoping is the process of defining the desired outcome—a new or improved system or system component—with specified features and functions to be provided by the project. This project definition is based on information from planning and asset needs assessments, and includes estimates of the work to be done to address the need, the schedule to deliver the work, and the preliminary cost of the work. In short, these are referred to as the scope, schedule and budget, respectively. Defining this information occurs in a series of documents referred to as the Project Summary. For more information, see [Chapter 3](#) Scoping.

SharePoint

This web-based application is used by WSDOT teams to collaborate, communicate, and share information in an intuitive, structured way. The CPDM Division uses SharePoint to collaborate with its customers and provides information using this application.

Subcontractor

A party to a subcontract who does trade work for a contractor (the other party), which work is included under the prime contract between the same contractor and an owner; one who is defined as a subcontractor by the prime contract.

Surface Transportation Block Grant Program (STBG)

The FAST Act converted the long-standing Surface Transportation Program into the Surface Transportation Block Grant Program. This funding program has the most flexible eligibilities among all Federal-aid highway programs [FAST Act § 1109(a)]. The STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs.

T**TEIS – Transportation Executive Information System**

This a proprietary, WSDOT-developed application used by program management to facilitate transportation budget planning and oversight. It provides budget preparation and executive summary information about a variety of activities to the Legislative Transportation Committees, (House Transportation Committee, Senate Transportation Committee), the Office of Financial Management (OFM), transportation agency managers, and other state agencies.

TIP - Transportation Improvement Program

A three-year transportation investment strategy required from Metropolitan Planning Organizations by Congress. It includes all projects in the three-year period expected to be financed by federal funds. All federally funded or regionally significant projects must be included in the TIP.

TNB

Tacoma Narrows Bridge.

TPA Projects – 2005 Transportation Partnership Program

The \$7.1 billion Legislative funding package established in 2005 that funded the Transportation Partnership Account (TPA) project list for 16 years. In 2005, the Washington State Legislature approved the second state gas tax increase since 1991. The centerpiece of the package was a 9.5-cent tax increase per gallon of gasoline implemented over four years. As with the Nickel funding package, the legislature identified specific projects and activities on which the new revenues must be spent. For further discussion, see [Chapter 1](#).

TRAINS – Transportation Accounting and Reporting System. This is the Accounting and Finance Services mainframe application that is accessed through the Attachmate Reflections Workspace software. It is the official accounting system for all WSDOT revenues, expenditures, receipts, disbursements, resources, and obligations.

TRIPS – Transportation Information and Planning Support

A mainframe computer system designed to provide engineering, maintenance, planning, and accounting personnel with highway inventory, traffic and accident data. The system includes both current and historical information about the state highway system. A TRIPS user can view data through on-line screens, generate screen prints for hard copies, print standardized batch reports or use a specialized computer language to develop customized reports. TRIPS is used to obtain geometric data, accident data from the Collision Analysis Report System (CARS), and traffic volumes for preparing project definitions. For more information, see the TRIPS User Guide.

Target

The dollar amount which is expected to be available for program funding within the biennium.

Temporary/Emergency Repair

Temporary emergency work that is necessary to restore essential traffic, minimize the extent of damage, or protect the remaining facilities. Keeps facility operating until permanent restoration can be done. This work typically requires minimal preliminary engineering, geotechnical studies, structural analysis, or environmental review. These repairs are usually within the capabilities of the State and local maintenance forces and most will be performed on a force account or an emergency contract basis. For more information, see [Chapter 8](#) Funds Management and Federal-Aid.

Threshold Break

The point at which an approved Program Item varies from an established range for changes. A single change or the cumulative effect of smaller changes can break a threshold and necessitate a change approval.

Title 23, United States Code

Federal legislative, also referred to as Public Law 104-205, which describes what Congress considers to be permanent substantive laws governing the Federal-Aid Highway Program. It need not be reenacted in each new highway act. (See TEA- 21). Each highway act specifies which sections of Title 23 are amended, repealed, or added. Title 23 does not contain requests for studies or special projects and most authorizations are not codified. Thus, the code effectively contains only those continuing provisions of the highway law.

Toll Credits

Section 120(j) of Title 23 permits the Washington State Department of Transportation (WSDOT) to [substitute certain previous toll-financed investments](#) for state matching funds on current Federal-Aid projects. It permits the non-Federal share of a project's cost to be met through a "soft match" of toll credits. The use of toll credits, increases WSDOT's flexibility to finance projects. Toll credits encourage states to increase capital investment in infrastructure and enable them to more effectively utilize existing resources. By using toll credits to substitute for the required nonfederal share on a new Federal-Aid project, the Federal share can effectively be increased to 100 percent. For more information on toll credits, see [Appendix 8A](#).

U**USC**

United States Code

USDOT

United States Department of Transportation

Unallotted Allotment Status

Expenditure authority not specifically scheduled for expenditure, but expected to be allotted at a later time.

Unallotment

That part of an appropriation which is available for allotment but which the Department does not plan to spend. It is equal to that part of each appropriation for which the Department has expenditure authority but which exceeds the approved plan.

Unanticipated Receipts

Funds that are received from any source that were not anticipated in the transportation budget. Approval to expend these funds is made by means of a Request for Unanticipated Receipts. The Governor has the authority to approve the allotment of such funds within the guidelines specified in [RCW 43.79.270](#).

Under-programmed

A subprogram is under-programmed if its current biennial expenditure plan is less than its allocation.

Underrun

Negative expenditures in CPMS which occur when expenditures are backed out and the reduction exceeds the actual expenditures. The term is also used in monitoring the program. In this case, underrun refers to the condition when actual expenditures made in a month or in the total months-to-date are less than the anticipated expenditures.

Useful Life

An estimate of the total time that an asset is usable and in service.

W

WBS – Work Breakdown Structure

A deliverable -oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverables. It organizes and defines the total scope of the project. Each descending level represents an increasingly detailed definition of the project work. The WBS is organized into work packages. The deliverable orientation of the hierarchy includes both internal and external deliverables.

WSDOT – Washington State Department of Transportation

Also referred to as the ‘department’ or ‘agency’ in this manual.

WSF – Washington State Ferries

WSDOT’s Washington State Ferries division plays an important role in the state transportation system. It is a vital link in east-west highways, carrying people and freight from one side of Puget Sound to the other. For further discussion, see [Chapter 1](#).

WIN – Work Item Number

A unique seven-character identifier for the work within each project phase (PE, RW, and CN). The first character is a letter and indicates the Region. The next three characters are numbers and designate the State Route. The last three characters — two numbers and one letter — are unique identifiers assigned by the Region. For example, WIN F09086A is in the Eastern Region on SR 090 uniquely identified as 86A.

WIP – Work in Progress

- 1) The amount of funds necessary to complete project phases authorized in a previous biennium that will not be available to begin new projects or project phases in a subsequent biennium. Sometimes referred to as “Carryforward – State.” Can also mean
- 2) Work in Process, meaning work that is in a state of currently being done.

WO – Work Order

Work Order Definition. [Accounting Manual](#) M 13-82 Expenditure Accounting Chapter 4.

The electronic form of the document that is used to monitor the work order activities.

WSDOT uses work orders as the central collection point (or cost center) for recording all expenditures associated with a particular project or activity, commonly referred to as a job.

Work orders are identified by a six-digit alphanumeric designation (i.e., 0L1240). Groups are established within work orders to provide a further breakdown of projects or type of work. Every work order must have at least one group. Under the WSDOT accounting system, combination of the six-character work order number and two- character group number is termed the job number (i.e., 0L124001).

Dollars are authorized in a work order by group category to enhance the responsible manager’s expenditure tracking ability. The group category segregates expenditures by type of work such as construction engineering (03), right of way acquisition (07), work done contract (01), work done agreement (02), state force work (04), etc. The agency has established ten standard group categories, which are listed and defined in the [Chart of Accounts Manual](#) M 13-02.

Work orders may be set up so that they will carry balances from one biennium to the next (perpetual) or so that they start over with zero balances at the start of each new biennium (biennial). The requirement for expenditure tracking is the prime driver when considering whether a work order should be set up as biennial or perpetual. For example, a work order that will start in one biennium, continue through the next and finish in the third should be set up as perpetual. On the other hand, an administrative work order that has authorized dollars for a biennium should be set up as biennial.

4-8.2 Work Order Set Up

To establish a work order for a specific project, the responsible manager (called the work order manager) must prepare a Work Order Authorization (WOA), WSDOT Form 120-020, and get an authorized signature to expend funds. The WOA form identifies work order number, title, and nature of work. It also contains the name of the responsible work order manager, the program from which it is funded, the funding sources and the dollar amount authorized. It is signed by the program manager or designee for the program funding the work order and must reflect commitments made during the budget process. Once this is done, the work order is entered into TRAINS and charges may be processed against it.

Every new work order setup or modification will produce a Work Order Accounting Plan (WOAP). The WOAP is to be used by those who need to charge costs to a work order and/or are responsible for monitoring the work order. It lists the available groups, what each is set up for and shows the account coding (fund, appropriation, control section, etc.). The WOAP also shows authorized dollars for each Group Category and for the work order in total. It is essential that the data on the WOAP reflect the intent of the work order manager. Therefore, the work order manager or his/her designee should review it on initial setup and each time an update is processed.

WOA – Work Order Authorization System

1) A web-based application that provides customers with the ability to create, submit, modify and close work orders for preliminary engineering, right of way, and construction expenditures on all projects in the highway construction program. 2) The work order process. How work orders are processed to monitor funding throughout CPDM functions. See [WOA Users Guide – Chapter 1 – DRAFT](#). Also, see [Section 8-5.1](#) for more information.

WSBIS – Washington State Bridge Information System

A client/server based system which replaced the State of Washington Inventory of Bridges and Structures (SWIBS). This database includes National Bridge Inventory data that WSDOT is required to submit to FHWA quarterly. It includes inspection data used to implement WSDOT's Bridge Management System and is the official repository of city and county bridge data. WSBIS is the source for the "Bridge List" published by the Bridge and Structures Office every biennium which shows the name, SR, milepost, length, vertical clearance, structural type and identification number of all bridges on Washington highways. The Bridge Preservation Office maintains the WSBIS data file.

WSPMS – Washington State Pavement Management System

A computer system which stores data about the condition of all the highways in the state and uses calculations to forecast when pavement is due for repaving.

Information available includes the latest field review, past contracts and the result of calculations for every tenth of a mile. Calculations are used to determine whether a given section of pavement is a "past due," "due," or "future due" preservation need.

WSTC – Washington State Transportation Commission

The Washington State Transportation Commission (WSTC) provides a public forum for transportation policy development. It reviews and assesses how the entire transportation system works across the state and issues the state's 20-year Transportation Plan. As the State Tolling Authority, the WSTC sets tolls for state highways and bridges and fares for Washington State Ferries.

WTP – Washington's Transportation Plan

The Washington Transportation Plan is developed in two phases. Phase 1 is developed by the Washington State Transportation Commission as the statewide policy document as required by state law. Phase 2 implements Phase 1. It is developed by WSDOT as the long-range statewide multimodal transportation plan as required by federal and state law.

Watch List

1) The Monthly Delivery Progress Report Watch List replaces the quarterly delivery progress report previously known as The Gray Notebook Watch List. A monthly report allows for timely reporting and improves transparency on delivery progress. This is a report that focuses on Capital Highway Program projects, which have, or may have significant changes in scope, schedule, or budget. These projects are reported monthly by CPDM to identify when and how these delivery issues are resolved. 2) The section for the Gray Notebook Beige Pages where the department reports developing issues on Nickel, TPA, and CW projects that have potential of impacting delivery of the project.

Workforce

Resources available in terms of labor to deliver the highway construction program.

Work Item

An element used in CPMS to describe how the planned work is to be carried out on a project. It carries details about the project schedule, cost, and workforce for each phase.

Work Item Type

A general definition of the type of work to be performed by a Work Item. It is derived from the Improvement Type code entered for the Program Item. The valid Work Item Type codes are: 1-Major, 2-Overlay, 3-Bridge, 4-Safety, 5-Landscape, 6-Unique. (Work Item Type 5 is no longer used.)

Work Order Manager

The individual responsible for managing the project funds and scope changes.

White Pages

The section of [The Gray Notebook](#) where WSDOT reports project delivery at the program level.

Y**Y-Line**

Placing a "Y" in CPMS to indicate a Work Order is approved and funds are authorized.