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## 305.01 Introduction

The Washington State Department of Transportation (WSDOT) utilizes best practices to develop project management plans to successfully deliver projects on schedule and within budget. WSDOT's project management process provides an organized approach to building collaborative teams. Resources including methods, processes, tools, templates, and examples offer the opportunity to enhance project management.

This chapter serves as a reference and gives a brief overview of project management resources and links for your use. This chapter outlines the steps of project management. Project management includes strategies to manage:

- Teams – identify roles and responsibilities; align team project goal
- Collaboration – engage internal and external stakeholders and participants
- Deliverables – identify what must be produced
- Tasks – plan and organize sequence and levels of effort work to provide the deliverables
- Schedules – determine duration and task linkages
- Costs – plan and control project budget
- Risks – determine project exposure to threats and opportunities
- Integration and coordination of processes – eliminate waste
- Change – describe decision making, approving and reporting change
- Quality – assure, control and verify quality
- Communication – based on project needs, project team and external parties.

Effective project management must include a strong commitment to communication about the project within and external to the design team. Following are descriptions and links to project management resources.

Executive Orders 1032, 1038, and 1053 ensure a consistent process for practical design, project management, and risk management statewide.

## 305.02 Project Management

Project management processes provide the framework for project managers and team members to deliver projects on time and within scope and budget. Project management

resources are consistent with a practical design approach and offer structure for organizing collaborative teams to engage stakeholders and the community.

Exhibit 305-1 shows the project management process used to deliver projects. Each of the five parts shown is briefly described in the sections that follow.

#### Exhibit 305-1 WSDOT Project Management Process



### 305.02(1) *Initiate and Align*

Teams deliver projects; hence one of the first orders of business in project management is to initiate and align the team. Our projects are successful based on the effectiveness of the team delivering them. To that end initiating and aligning the team is an important early accomplishment. Aligning the team establishes communications and responsibilities of the project manager and team. The Initiate and Align worksheet is a tool that can be helpful in this phase.

### 305.02(2) *Planning the Work*

Plan the Work is the portion of the project management process that produces the Project Management Plan.

The Project Management Plan defines the project performance baseline – including deliverables, schedule and budget plans – and the management methods used to deliver the project. As we plan the work for our projects we integrate and coordinate processes in a manner that optimizes resources and reduces waste. For example if your project requires an interchange justification report (IJR), national environmental policy act (NEPA) documentation, or a value engineering study (VE) coordinate and align these efforts in a manner that makes use of common information and subject matter experts and in a way that ensures the need statements and function work together for the project.

The performance baseline documents the team goals for project performance. Performance baseline includes:

- Scope – the deliverables to be produced by the project team.
- Schedule – the logical sequence of work and related milestones.
- Budget – the allocation for the project.
- Risk – uncertainty that affects project objectives.

The Project Management Plan includes management plans for Risk, Change, Communication, Quality, Transition and Closure. These plans align the team toward uniform goals. A complete project management plan considers how the project will start, how it will be executed, monitored, and controlled, and how the project will close.

### **305.02(3) Executing the Work**

The executing process is where we actually perform the planned work. During execution, we coordinate our team, subject matter experts and others as necessary to produce the deliverables. During execution, we ensure the integration of various project development and design processes that are optimal for completing the required work and meeting the performance objectives.

### **305.02(4) Monitoring and Controlling**

As the work is being executed we track and report progress. If changes or course corrections are required, we want to identify those and take appropriate action in a timely manner. As we monitor progress and control variance we may need to take actions that include: developing and implementing recovery strategies, updating the project management plan, implementing risk response strategies and updating the risk assessment. Obtain change request approvals as necessary and ensure the quality plan is being implemented. Report on the performance of the team and provide early and meaningful communication to management, staff and team.

### **305.02(5) Closing the Project**

As a project comes to an end it will either close or transition to a new phase. We want to perform the closure and transition in an orderly and appropriate manner. This involves demobilizing and reassigning staff and transferring resources or facilities.

Address the closure and transition phase of the project management process during creation of the project management plan and the work plan.

At the end of the project it is helpful to review lessons learned and to reward and recognize the team for successes. Capturing lessons learned and recognize people occurs throughout the project however, the closure phase provides an opportunity to finalize this and bring it to conclusion.

Project transitions can be aided by using the Deliverable Expectation Matrix which provides a range of project development deliverables and the general order in which they will occur.

A project is complete after transition and closure is accomplished and the project manager is released from responsibility for the project.

## **305.03 Project Management Tools**

For an overview of project management, with links to the WSDOT project management process and tools for delivering the WSDOT Capital Construction Program, see the following website:

 [www.wsdot.wa.gov/projects/projectmgmt](http://www.wsdot.wa.gov/projects/projectmgmt)

The three more common tools are described below.

### 305.03(1) *WSDOT's Master Deliverables List (MDL)*

The Master Deliverables List (MDL) is a comprehensive listing of project elements. This list serves as a starting point for creating the project Work Breakdown Structure (WBS) and ensures:

- Appropriate project deliverables are included in the project management plan and schedule.
- A common vocabulary across project teams, region and Headquarters (HQ), and specialty/support groups.

For additional information, see the MDL:

🔗 [www.wsdot.wa.gov/projects/projectmgmt/masterdeliverables.htm](http://www.wsdot.wa.gov/projects/projectmgmt/masterdeliverables.htm)

### 305.03(2) *Deliverables Expectation Matrix*

The Deliverables Expectation Matrix (DEM) is another tool used to identify design project deliverables. The DEM is a simpler presentation than the MDL and shows recommended deliverables at project phases like 30% design. The DEM is here:

🔗 [www.wsdot.wa.gov/publications/fulltext/design/demintro.pdf](http://www.wsdot.wa.gov/publications/fulltext/design/demintro.pdf)

### 305.03(3) *Project Management and Reporting System (PMRS)*

The PMRS is a tool for effective and efficient management of design project schedules, resources, and costs. The following website provides tools for project planning, work breakdown structure (WBS) development, scheduling, and resource and cost management:

🔗 <http://wwwi.wsdot.wa.gov/planning/cpdmo/pmrs.htm>

## 305.04 **Cost and Risk Management**

There are several WSDOT sources for cost estimating guidance, including:

- Strategic Analysis and Estimating:  
🔗 <http://www.wsdot.wa.gov/Design/SAEO/>
- Estimating Information  
🔗 <http://www.wsdot.wa.gov/Projects/ProjectMgmt/RiskAssessment/Information.htm>
- Cost Estimating Manual  
🔗 <http://www.wsdot.wa.gov/publications/manuals/m3034.htm>

Risk management, as an integral part of project management, occurs regularly.

With proactive risk management, projects are monitored to assess and document risks and uncertainty. For more information on risk planning and risk management, see:

🔗 [www.wsdot.wa.gov/publications/fulltext/cevp/projectriskmanagement.pdf](http://www.wsdot.wa.gov/publications/fulltext/cevp/projectriskmanagement.pdf)

For more information on risk assessment, see:

🔗 [www.wsdot.wa.gov/projects/projectmgmt/riskassessment/](http://www.wsdot.wa.gov/projects/projectmgmt/riskassessment/)

Document each estimate review in the Project File, and clearly show any changes made to the estimate as a result of the review.

## 305.05 References

### 305.05(1) Federal/State Laws and Codes

23 United States Code (USC) 106, Project approval and oversight

### 305.05(2) WSDOT Policies

Directives, Executive Orders, Instructional Letters, Manuals, and Policy Statements

🔗 <http://wwwi.wsdot.wa.gov/publications/policies/default.htm>

Executive Order E 1032, Project Management

🔗 <http://wwwi.wsdot.wa.gov/publications/policies/fulltext/1032.pdf>

Executive Order E 1038, Enterprise Risk Management

🔗 <http://wwwi.wsdot.wa.gov/publications/policies/fulltext/1038.pdf>

Executive Order E 1053, Project Risk Management and Risk Based Estimating

🔗 [www.wsdot.wa.gov/publications/fulltext/cevp/1053policy.pdf](http://www.wsdot.wa.gov/publications/fulltext/cevp/1053policy.pdf)

Executive Order E 1090, Moving Washington Forward: Practical Solutions

🔗 <http://wwwi.wsdot.wa.gov/publications/policies/fulltext/1090.pdf>

Executive Order E 1096, WSDOT 2015–17: Agency Emphasis and Expectations

🔗 <http://wwwi.wsdot.wa.gov/publications/policies/fulltext/1096.pdf>

Executive Order E 1082, Business Practices for Moving Washington

🔗 <http://wwwi.wsdot.wa.gov/publications/policies/fulltext/1082.pdf>

Policy Statement P 2047.00 "Estimating Project Budget and Uncertainty"

🔗 <http://wwwi.wsdot.wa.gov/publications/policies/fulltext/2047.pdf>

Project Delivery Memos

🔗 [www.wsdot.wa.gov/design/projectdev/memos.htm](http://www.wsdot.wa.gov/design/projectdev/memos.htm)

### 305.05(3) WSDOT Project Management References

Project Management Guide:

🔗 <http://www.wsdot.wa.gov/Projects/ProjectMgmt/OnlineGuide/ProjectManagementOnlineGuide.htm>

*Project Management Glossary:*

🔗 [www.wsdot.wa.gov/publications/fulltext/projectmgmt/pmog/pm\\_glossary.pdf](http://www.wsdot.wa.gov/publications/fulltext/projectmgmt/pmog/pm_glossary.pdf)

*Glossary for Cost Risk Estimating Management:*

<http://www.wsdot.wa.gov/publications/fulltext/CEVP/Glossary.pdf>

*Cost Estimating Manual for Projects:*

🔗 <http://www.wsdot.wa.gov/publications/manuals/fulltext/M3034/EstimatingGuidelines.pdf>

*Project Risk Management Guide:*

🔗 [www.wsdot.wa.gov/projects/projectmgmt/riskassessment/default.htm](http://www.wsdot.wa.gov/projects/projectmgmt/riskassessment/default.htm)

