

Project Management Process

Fall 2005



Washington State
Department of Transportation
Project Control & Reporting
Project Management and Training

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT TRAINING

Project Management Process

Acknowledgements:

Patty Mutton, HQ Project Management & Training

Pat Forza, HQ Project Management & Training

Mark Gabel, HQ Cost Risk Estimating Management

Blane Long, HQ Design

Bill Elliott, Olympic Region

Contents

Contents.....	iii
Course Objectives.....	v
Teamwork Exercise	vi

INTRODUCTION

WSDOT Management Principals	7
Project Management	10
Scope, Schedule, Budget Triangle.....	20
Project Management Online Guide	20

MODULE 1 INITIATE AND ALIGN

Project Description	24
Team Mission/Assignment	28
Major Milestones	32
Boundaries.....	36
Team Identification.....	40
Roles and Responsibilities	42
Measures of Success.....	46
Operating Guidelines	48
Summary.....	50
SR 101 Purpose and Mission Exercise.....	52
A Flock of Geese	53
Teams.....	55

MODULE 2 PLAN THE WORK

Work Breakdown Structure (WBS).....	58
Task Planning and Scheduling.....	66
Budget	70
Risk Planning	72
Communication Plan	78
Change Management	86
Quality (QA/QC) Plan.....	90
Transition & Closure Plan	94

MODULE 3 ENDORSE THE PLAN

What is Endorsement?	103
Project Team Commitment	104
Management Endorsement.....	108

MODULE 4 WORK THE PLAN

Project Performance Baseline.....	112
Manage Scope, Schedule, & Budget	118
Manage Risks	124
Change Management.....	128
Communication and Team Building	134
Communicate: Progress, Issues, and Lessons Learned.....	136

MODULE 5 TRANSITION AND CLOSURE

Review Lessons Learned	144
Reward and Recognize.....	146
Archive	148

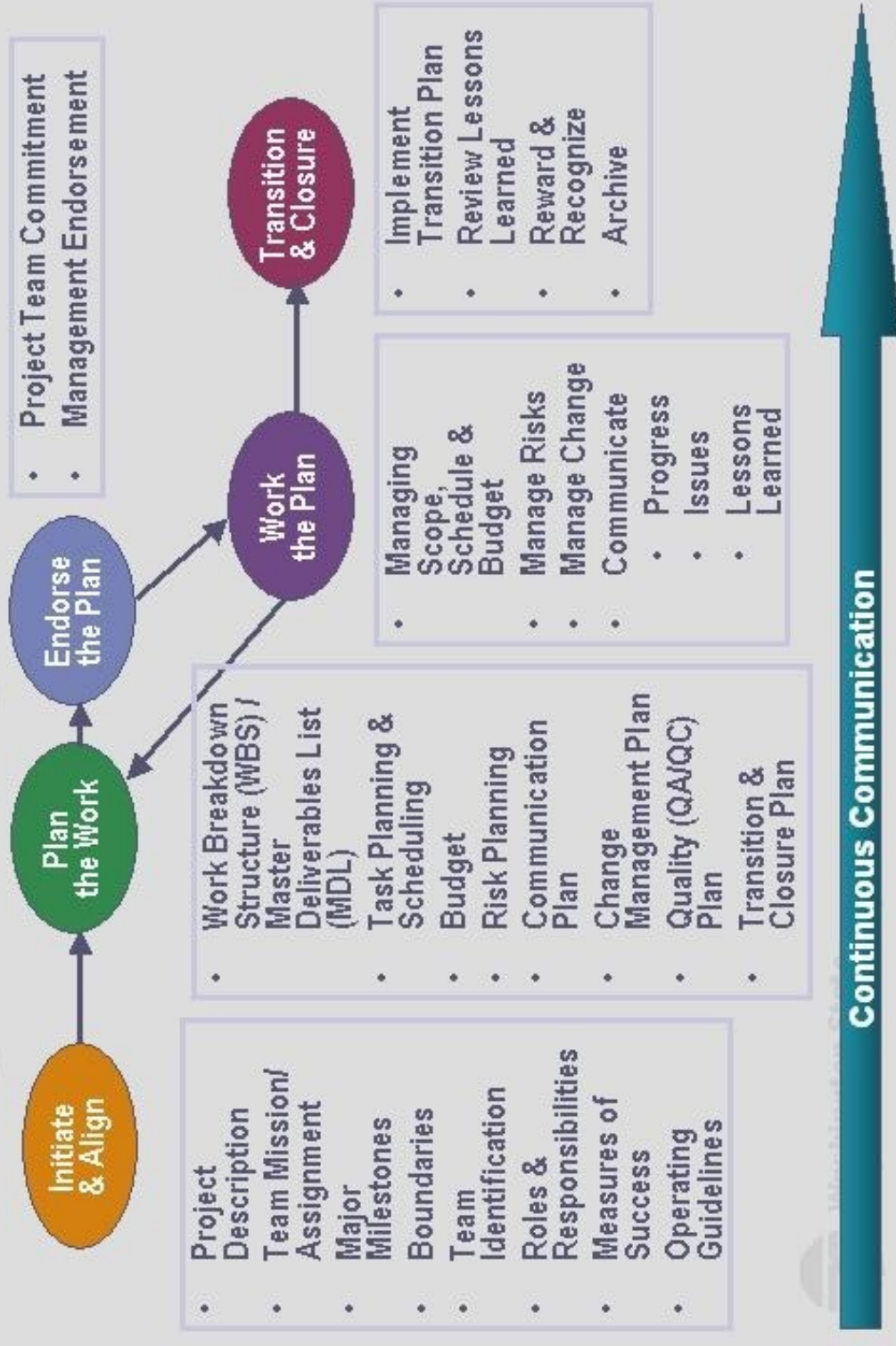
APPENDIX A EXECUTIVE ORDER E 1032.00

APPENDIX B MASTER DELIVERABLES LIST

APPENDIX C US 101, PROJECT MANAGEMENT PLAN

APPENDIX D HANDOUTS

Project Management Process



Course Objectives

Course Title: Project Management Process

Course Code: B71

Date: _____

Location: _____

Instructor(s): _____

AFTER SUCCESSFUL COMPLETION OF THIS COURSE,
STUDENTS WILL BE ABLE TO:

- Initiate and align a project team;
- Use the Master Deliverables List (MDL) to develop a project specific WBS;
- Develop a Project Management Plan (PMP);
- Assess project risk;
- Obtain endorsement for a Project Management Plan;
- Manage scope, schedule, and budget;
- Manage change;
- Conduct an effective project closure.

This course provides WSDOT staff with foundational knowledge and skills in project management principles and methodologies as described in www.wsdot.wa.gov/Projects/ProjectMgmt/ . WSDOT's project management processes provide the tools for interdisciplinary teams to efficiently and effectively deliver projects within scope, schedule and budget.

References:

- WSDOT Project Management website;
<http://www.wsdot.wa.gov/Projects/ProjectMgmt/>
- WSDOT Executive Order 1032.00
- WSDOT Management Principles,
www.wsdot.wa.gov/accountability/mgmtprinciples.htm
- A Guide to Project Management body of Knowledge, Third Edition (PMBOK), Project Management Institute (PMI)
- The Project Management Professional Exam textbook, 2005 Edition, Velociteach
- Project Management, Harold Kerzner, PhD

Teamwork Exercise

Goal: Each team is responsible for building a bridge that meets the following criteria.

Schedule: 8 minutes and 47 seconds

Work as a team/everyone must contribute

What is your budget?

Building materials may be purchased at the local bridge store.

Meet the following requirements:

Finish on time and on budget

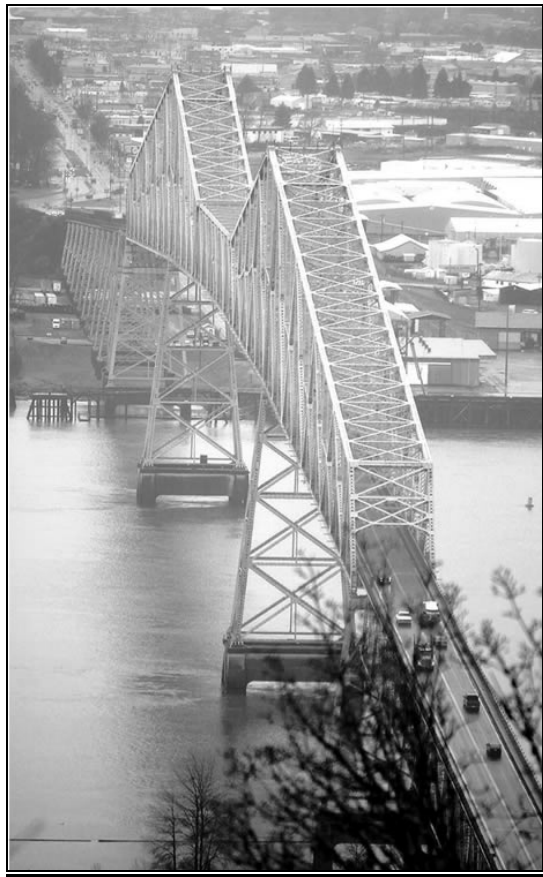
Impress the public with your work

The bridge opening will be aired on the evening news

- What do they need to know?

The bridge must carry 2400 vph

Span = 237.25 feet



SR 433, Lewis & Clark Bridge

Introduction

This course identifies the principles and methodologies adopted by the Washington State Department of Transportation (WSDOT) for successful project management and delivery. Project management requires the application of skills, knowledge, tools, and techniques to deliver the project on time, within budget, and according to specifications. WSDOT's project management process is based on proven industry standards for project management, such as the Project Management Body of Knowledge (PMBOK) prepared by the Project Management Institute (PMI).

WSDOT Management Principals

Our mission is to keep people and business moving by operating and improving the state's transportation systems vital to our taxpayers and communities. These are our management principles:

Leadership

We are committed that WSDOT provide strategic vision and leadership for our state's transportation needs.

Delivery and Accountability

We shall manage the resources taxpayers and the legislature entrusted to us for the highest possible return on value. We shall be disciplined in our use of both time and money. We shall account for our achievements, our shortcomings and our challenges to citizens, to elected officials, and to other public agencies.

Business Practices

We shall encourage progressive business management practices in delivering cost effective and efficient transportation services. Our quest for short-term cost savings and business process improvement shall be balanced by the long term need to preserve and improve the state's transportation systems through sound fiscal planning and asset management.

Safety

Concern for the health and safety of the people who use and work on our transportation facilities shall be a paramount value in every area of our business.

Environmental Responsibility

Our work shall incorporate the principles of environmental protection and stewardship into the day-to-day operations of the department as well as the on-going development of the state's transportation facilities.

Excellence and Integrity

Our employees shall work in a culture of workplace excellence and diversity that encourages creativity and personal responsibility, values teamwork, and always respects the contributions of one another and of those with whom we do business. We shall adhere to the highest standards of courtesy, integrity and ethical conduct. We shall encourage and recognize our employees' professionalism and their career growth.

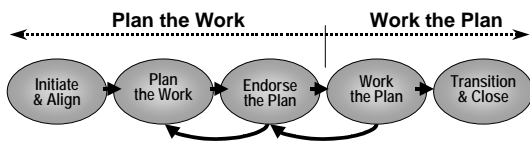
Communications

We shall stress the importance of sharing clear, concise, and timely information with WSDOT employees, elected officials, community leaders, businesses, citizens and taxpayers, others in the transportation community, with the press and other media. We shall strive for the effectiveness of all our employees in meeting WSDOT's communications standards.

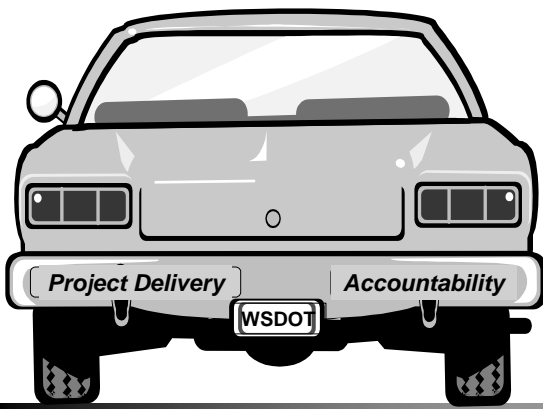
WSDOT's Project Management principals can be found at:
www.wsdot.wa.gov/accountability/mgmtprinciples.htm)

Industry Standards

A set of proven tools available to help project managers and teams define, execute, and deliver projects more effectively.







Project Management

While terminology may vary, the principles of project management are consistent. A project manager needs more than tools to succeed in delivering quality projects on time and within budget. Project managers with the knowledge and skill to lead a team toward a common goal will optimize team member talents to the best benefit of the team.

The Project Management Body of Knowledge (PMBOK) describes the work planning process as defining and refining objectives and selecting the best alternative courses of action. There are many tools and techniques unique to project management; such as work breakdown structures, critical path, or earned value. These tools and techniques alone are not sufficient without effective project management knowledge and skills. The project team must recognize and use knowledge and skills from at least five areas of expertise:

The Project Management Body of Knowledge - knowledge unique to the project management field and overlaps other management disciplines.

Application area knowledge, standards, and regulations - Project categories with common elements but not necessary in all projects

- Functional and supporting disciplines - legal, inventory management, personnel, traffic, right-of-way, environmental, etc.
- Technical elements – software development or ENGINEERING
- Management specializations – government contracting, new product development
- Industry groups – automotive, chemical, agriculture.

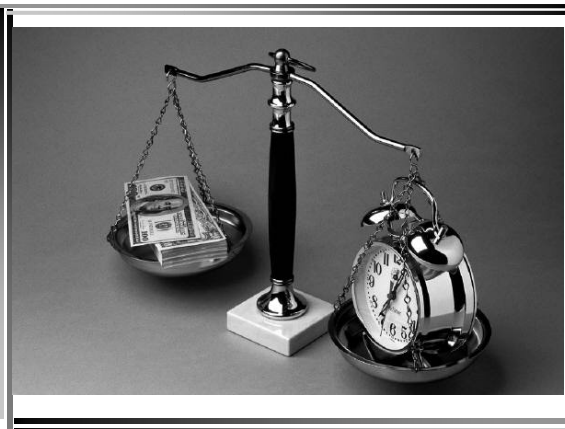
Each of these areas typically have their own set of accepted standards and practices.

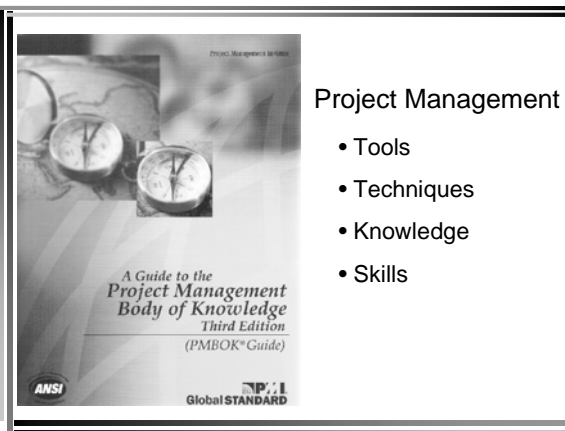
Understanding the project environment – the team needs to understand the positive and/or negative cultural, political, social and environmental impacts the project may have and how people (customers, stakeholders, etc.) may affect the project.

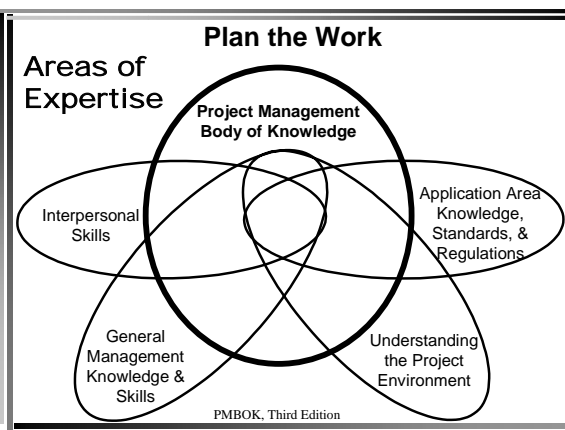
General management knowledge and skills – planning, organizing, staffing, controlling ongoing operations; including strategic planning, accounting, procurement, human resources, information technology, etc.

Interpersonal skills – effective communication, getting things done, leadership, motivation, conflict management, and problem solving.

Each of these areas may appear to be discrete elements, but they generally overlap. It is not required that every team member be an expert in all five areas, the combined knowledge of the team leads to an effectively managed project.







History of Project Management at WSDOT

In late 1998, a focus team was formed to begin looking at how WSDOT could more effectively and efficiently deliver projects. The team developed guidance and tools for project management as it applies to WSDOT. An Instructional Letter (IL) recommending the use of these principles was signed in the summer of 2000, followed by Design Manual Chapter 140. The first Managing Project Delivery (MPD) class was delivered in December 2000. Many other tools for delivery, accountability, and communicating have followed:

- Cost Estimating & Validation Process (CEVP)
- Project Delivery Information System
- Cost Risk Assessment
- Project Control & Reporting (change management)

JLARC Review

The Joint Legislative Audit and Review Committee (JLARC) review focused on the agencies critical path management, risk management, project reporting, and organizational structures used to execute capital projects. Since the study was intended to be a pre-audit review, only eight example projects were selected to represent the diversity of issues and characteristics in WSDOT's capital program. JLARC chose projects well into the construction phase; many of these projects were designed prior to some of the tools and processes we have in place today.

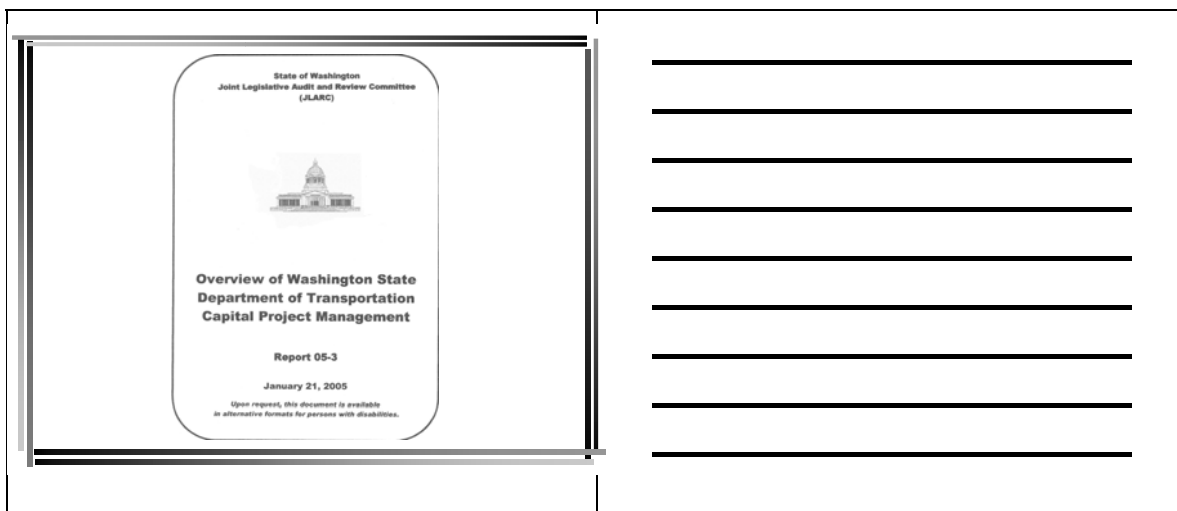
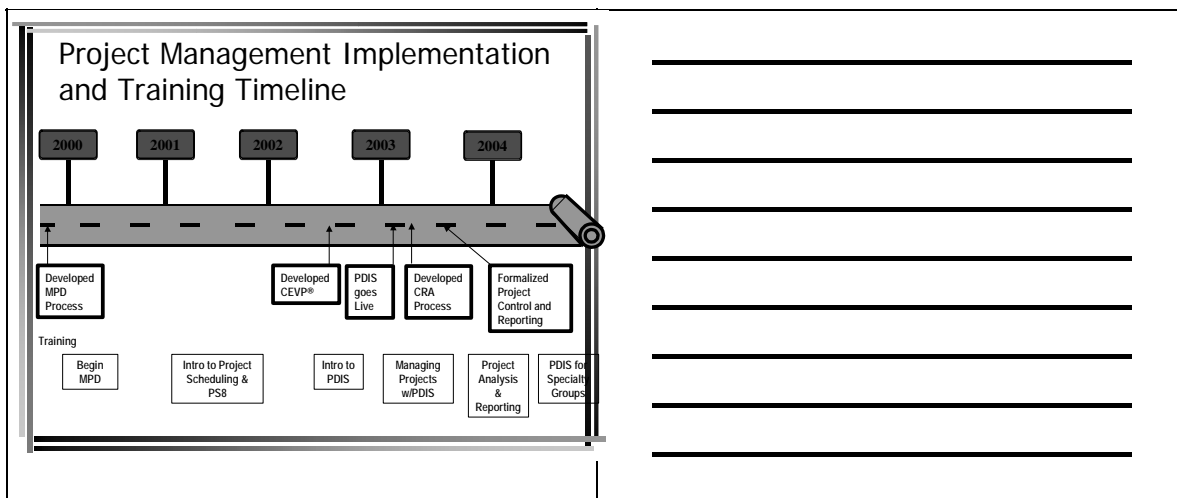
The *Overview of Washington State Department of Transportation Capital Project Management Report*, January 21, 2005, made four summary management recommendations:

Recommendation 1 – WSDOT should extend the application of the Managing Project Delivery, Project Delivery Information System, and Primavera Project Planner for the Enterprise tools and put management steps in place to confirm their adoption.

Recommendation 2 - WSDOT should develop a plan and timeline for implementing recommendations issued by Gannett Fleming, which center primarily on a) using existing exemplary practices in place at some projects to develop minimum standards and/or templates; b) improving the clarity of project communication by documenting terms and definitions; and c) confirming the consistency and currency of reporting information.

Recommendation 3 - WSDOT should conduct an assessment of the effectiveness of current information systems and options for addressing any deficiencies.

Recommendation 4 - WSDOT should develop criteria for extending Cost Risk Estimating and Management (CREM) analyses to a wider universe of projects.



JLARC Review

(Joint Legislative Audit & Review Committee)

Management Recommendations

1. Extend the application of MPD, PDIS, & P3e
2. Develop a work plan & schedule for implementing Gannett Fleming recommendations.
3. Assess current information systems
4. Cost Risk Estimating & Management (CREM)

www.wsdot.wa.gov/Projects/ProjectMgmt/

This is followed by twenty-three key recommendations by Gannett Fleming. The report also includes options for future WSDOT Audit/Study topics.

Audit/Study Topic 1 – Audit the effectiveness of MPD and PDIS in improving project delivery. Objective: To determine how new standardized schedule tools are enabling project teams to manage schedules and the critical path. Timeline: Nine audit months (recommend delaying start date to allow full implementation of management efforts)

The full report can be found on the WSDOT project management website:

www.wsdot.wa.gov/Projects/ProjectMgmt/

WSDOT's Response

WSDOT is proactively identifying ways to address these recommendations. One step was the formation of a Project Management Task Force. The Project Management Task Force is made up of representatives from across the state; representing multiple disciplines (design, construction, etc.) They were tasked with identifying ways to implement the JLARC recommendations, but more importantly to improve our project management process. Make the process more scalable; identify and develop easy to use tools, templates, and techniques to encourage and simplify the use of the process. The result of this effort is the Project Management Online Guide and Executive Order 1032.00. Copies of the Executive Order are in Appendix A of this course workbook and available on the project management website (www.wsdot.wa.gov/Projects/ProjectMgmt/)

Project Management Process Overview

A few changes have occurred over the years but the philosophy remains the same. WSDOT's project management process features a 5-step process very similar to other project management approaches being used around the world by project managers in the private and public sectors. The five project management steps are:

- Initiate & Align
- Plan the Work
- Endorse the Plan
- Work the Plan
- Transition and Closure

Project Management Task Force

- Region & HQ Representation
- Improve our Project Management Process
- Make it more scalable
- Provide tools & templates



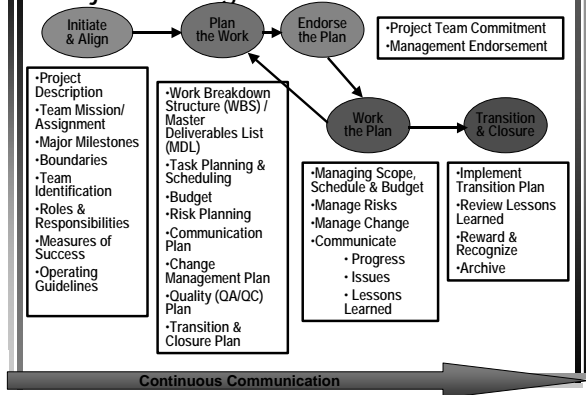
Result:

Project Management Online Guide
Executive Order

What's it say?

By this executive order all phases of Washington State Department of Transportation capital transportation projects are to be delivered consistent with the principles and practices of our project management process as defined <http://www.wsdot.wa.gov/Projects/ProjectMgmt> (Available July 1, 2005)

Project Management Process



WSDOT Project Management Process Matrix

WSDOT's project management process provides the tools to actively manage and deliver projects. How the tools are used is up to the project manager and team. A responsibility matrix was developed to help you understand the process and what it might mean to you. It identifies:

- Who is responsible for each step
- Who is involved in the process
- What is it
- What are the project management steps
- What it looks like to team members
- Outcome or work product

The project manager is responsible for assuring total team participation, including specialty groups.

A project team consists of the project manager, team members from their project office, team members from specialty groups such as Real Estate Services, Environmental, Hydraulics, Traffic, Operations, Geotech, Bridge, Utilities, and any others that are needed to deliver the project.

The _____ is

Large and in Charge!

The project manager is ultimately responsible for the outcome of the project. The project manager is:

- Formally empowered to use organizational resources
- In control of the project
- Authorized to spend the projects budget
- Authorized to make decisions for the project

Insert full page PM matrix

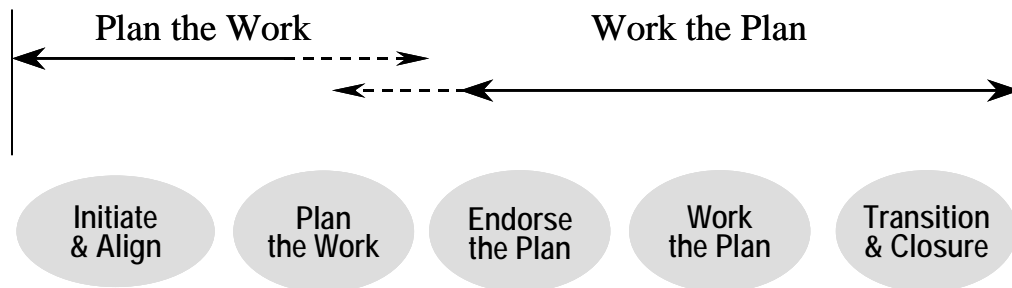
Additional project management terms:

Project - A temporary endeavor undertaken to create a unique product, service, or result.

Project Management Plan – A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and decision, facilitate communication among stakeholders, and document approved scope, cost, and schedule baselines. A project plan may be summary or detailed.

Level vs. Effort

The five project management process steps can be further simplified into two basic phases; Plan the Work and Work the Plan.



In a typical project application planning the work (the first two steps) will constitute approximately 10% of the total project effort and time. The remaining three steps constitute approximately 90% of the project effort and time.

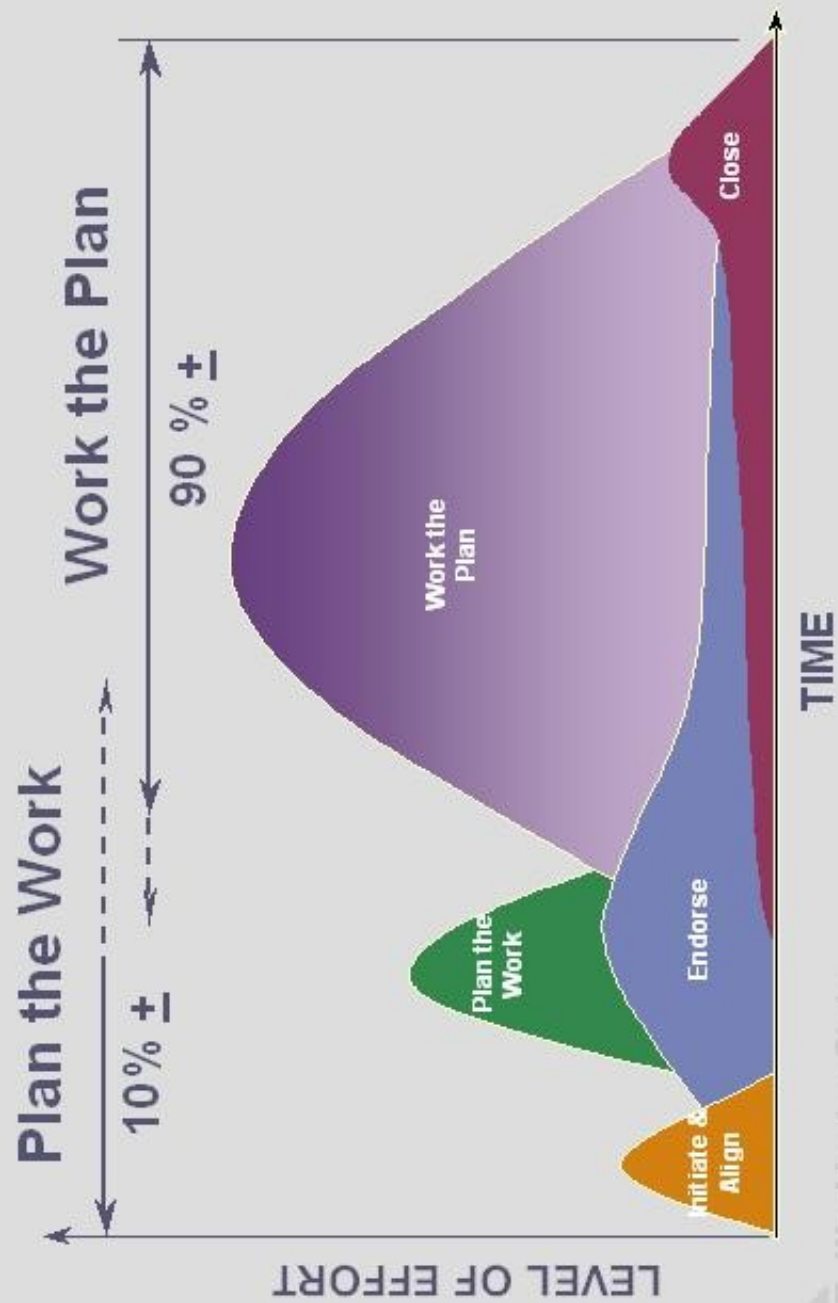
The graphic “Level of Effort vs. Time” provides a general sense of the relative effort and time required for each phase during project delivery. You can see the majority of time and effort is spent doing the work (Work the Plan).

How much time, money, and effort should I spend on this project management stuff? The amount of time spent on each of the steps should be commensurate with the following elements:

- Project Size & Complexity
- Team Size
- Stakeholder Involvement
- Potential resistance to the project

Scalability is the level of work planning required based on those elements. The Project Manager determines the appropriate level of detail.

Level of Effort vs. Time

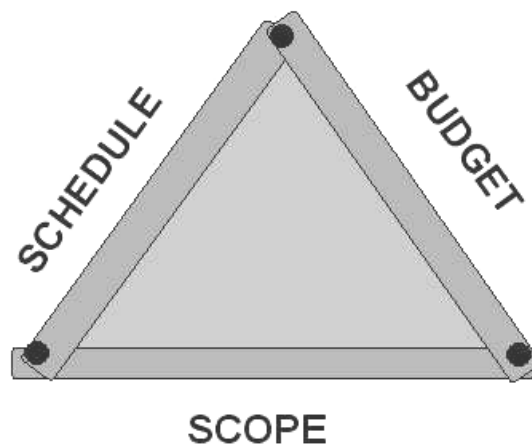


Washington State
Department of Transportation

Scope, Schedule, Budget Triangle

Another fundamental topic in project management is commonly referred to as “Trade-Off Triangle” or Scope, Schedule, Budget Triangle. While changes occur on a project they do not occur in a vacuum. When the scope of a project is changed, time and cost are affected. Of course, the same is true when changes are made to cost or time.

Scope, Schedule, and Budget are each project constraints and must be actively monitored and managed throughout the project delivery process. As change occurs it is essential in project management to be mindful of these constraints and help keep others aware of it. Changes should not always be accepted as valid; rather they should be evaluated on how the change affects other aspects of the project.



Project Management Online Guide

Think of the Project Management Online Guide as many instructional manuals in one easy to find location. These “manuals” are based on project phase, Pre-Construction and Construction. The five process steps remain the same regardless of phase. Within each step, the process elements or activity guides will vary by phase. Much as the work is substantially different between Design and Construction.

Each Activity Guide provides a description of the element, inputs, tools, steps, and products. There are many tools and templates available that are easily downloaded. A glossary of project management terminology is also available.

Check out the PM Online guide at: www.wsdot.wa.gov/Projects/ProjectMgmt/

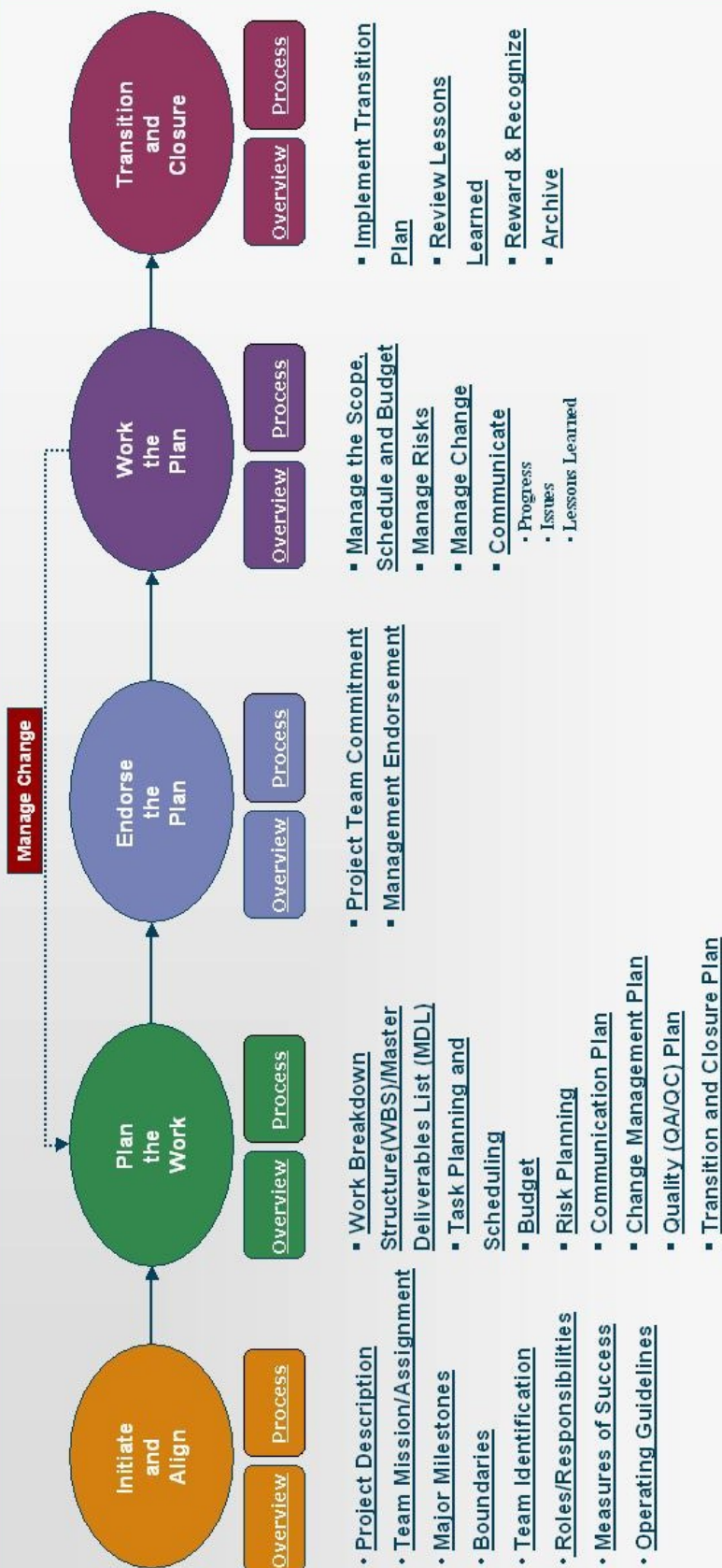
But first! Before diving into “doing the work” the team needs to get ready and establish its direction by **Initiating and Aligning** the team.



Project Management On-Line Guide

Pre-Construction

[Construction](#)



Initiate and Align

Ladies and Gentlemen... Start your engines!

Initiate and Align is the first step of the project management process. It provides for team building early in the process and sets the direction of the project. Effective teams develop a project purpose, team mission, operating guidelines, project boundaries, roles & responsibilities, and measures of success. These elements establish a firm foundation with a common goal in sight.

_____ : The process of formally recognizing that a new project exists (this includes transition of projects from one phase to another (i.e. Scoping to Design).

“Defining Successful Performance”

Region/Organization Management initiates the project by providing:

- Project Description;
- Team Mission/Assignments;
- Major Milestones;
- Boundaries.

The project team reviews and commits to meeting these initial elements.

_____ : The basis for establishing a common understanding of the team’s roles and responsibilities; the requirements of and limits on their performance; and their commitment to act as a cohesive and cooperative team for the effective delivery of the Pre-Construction Phase of the project.

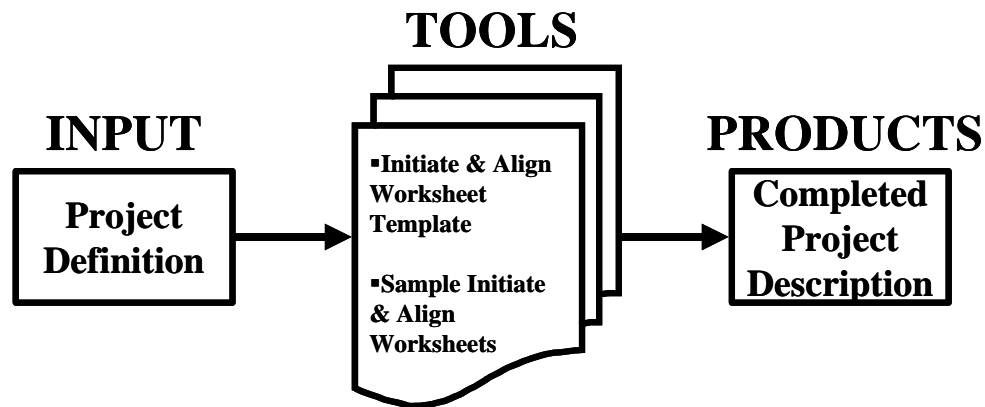
“Establishing team understanding and commitment to successful performance”

The project manager aligns the project team by developing:

- Team Member Identification;
- Team Roles and Responsibilities;
- Measures of Success;
- Operating Guidelines.

Project Description

The **Project Description** is a formal statement that defines the purpose and need for the “product” or “outcome” that the project is intended to produce. Region/Organization Management provides the Project Description (for example, as defined on the WSDOT Project Definition form) to the Project Manager. It is used to establish a common purpose and need of both the project and the project phase among the members of the project team.



Steps for development/review of the Project Description:

1. The Project Manager receives the Project Description from Region/Organization Management and:
 - Reviews the needs the project is intended to fill;
 - Reviews the goals, products, and outcomes of the project.
2. The Project Manager uses his/her understanding of the Project Description to begin to identify team members.
3. The Project Manager reviews the Project Description and preliminary team membership with Region/Organizational Management.
4. The Project Manager or designee enters the Project Description of the Initiate and Align Worksheet.

The Project Description is a statement of the reasons why the project or phase is being undertaken, and acts as the foundation for all further project planning and actions.

A Project Description generally includes the following characteristics:

- It is a statement of the desired condition at the end of the project; hence, it describes an “end result” and should be capable of being seen.
- It is a “project” objective, not the duty of an individual.
- It establishes a common goal toward which all project activities and efforts strive.
- It is expressed in positive terms; it is a positive end result.

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Project Description Steps</p> <ol style="list-style-type: none"> 1. <i>Review needs, goals, products & outcomes</i> 2. <i>Identify team members</i> 3. <i>Review with Region/Organizational Management</i> 4. <i>Begin Initiate & Align Worksheet</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Initiate the Project</p> <p><i>Region or Organizational Management</i></p> <ul style="list-style-type: none"> •Project Description •Team Mission/Assignment •Major Milestones •Boundaries 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Project Description Characteristics</p> <p><i>End result, capable of being seen</i></p> <p><i>"Project" objective</i></p> <p><i>Common Goal</i></p> <p><i>Positive terms</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Pragmatic Benefits of a Project Description

Recall the adage “go slow to go fast”. Take time to establish a firm foundation for the team. The initiation and alignment phase provides a structured way to do this - the no-nonsense benefits of a clear purpose are undeniable. A few of these are listed below.

Work planning

Provides an integrated theme for developing a written plan (i.e. writing a scope of work, preparing a schedule, identifying resources, developing a budget, etc.).

Organizing

Arranging activities into a coherent whole, making day-to-day decisions for the long-term goal of the project.

Employee Development

Helps answer questions like: What skills do we need? When do we need the people with those skills?

Leadership

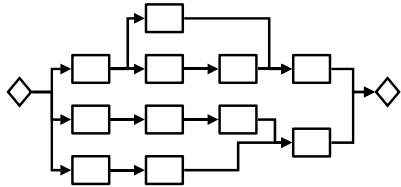
Employees want to know:

- “where are we going?”
- “how do we plan to get there?”
- “what role am I expected to play?”
- “how will my job change?”

Project teams throughout history had focus or a “purpose”. Whether exploring new continents, building pyramids, the great wall, Panama Canal or challenging the elements there was a mental picture of what was to be achieved. Maybe they used a formal process, maybe not, but the teams knew exactly what their objectives were.

INITIATE & ALIGN

Work Planning and Organization



INITIATE & ALIGN

Project Description Benefits

Employee Development



INITIATE & ALIGN

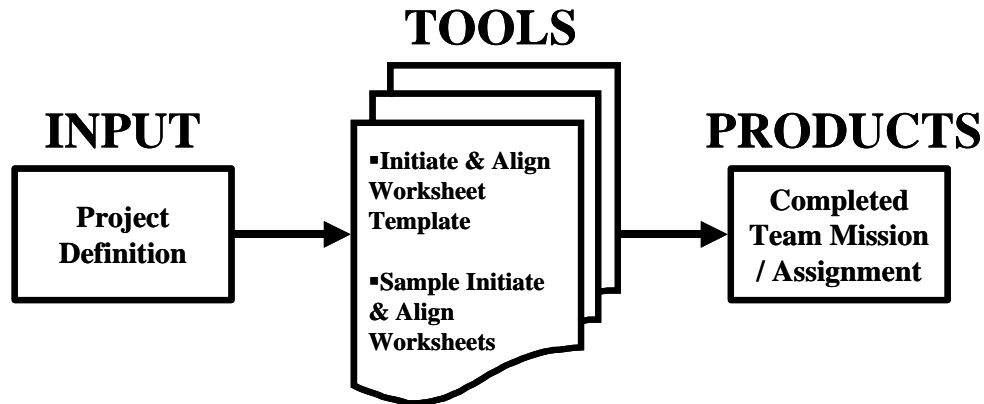
Project Description Benefits

Leadership



Team Mission/Assignment

The **Team Mission Statement/Assignment** is an expansion of the Project Description and describes the overall actions the project team will take to accomplish its portion of the project. It is usually a short paragraph developed with input from Region/Organization Management.






Steps for development/review of the Team Mission/Assignment:

1. The Project Manager reviews the Project Description to determine the major elements of the work needed to produce the end product or outcome of the Pre-Construction Phase of the project.
2. The Project Manager and the project team collaboratively develop simple descriptions of the major activities the team will perform to produce the end product or outcome (e.g., develop the plans, specifications, and contract documents needed to advertise for bids; identify and obtain all required environmental permits).
3. Review the Team Mission/Assignment Statement with the key members of the project team in order to obtain their agreement.
4. Review the Team Mission/Assignment Statement with the Region/Organization Management.

While the Project Description identifies the end product or outcome, the Mission Statement addresses the specific work the team is assigned to perform and relates only to specific work deliverables and tasks needed to accomplish the assigned scope of work. The team mission is of particular importance during project work planning as it clearly defines the scope of the Work Breakdown Structure (WBS).

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Mission / Assignment</p> <p>An expansion of the Project Description and describes the overall actions the project team will take to accomplish its portion of the project</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Mission / Assignment Steps</p> <ol style="list-style-type: none"> 1. <i>Review Project Description</i> 2. <i>Define Major Activities</i> 3. <i>Review with key team members</i> 4. <i>Review with Region/Organizational Management</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Mission Assignment</p> <p><i>Specific work the Project Team will perform for the approved work order</i></p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

A Highway Construction Program project is developed in phases; scoping, design/PS&E (including right of way) and construction. A specific team mission may be limited to a specific phase or phases of a Highway Construction Program project. The team mission of any given project team may not attain the ultimate end product of the Highway Construction Program project as described by the project purpose. For example; the team assigned to the design/PS&E phase of the project develop a work plan that includes deliverables such as a contract plans, specifications, and estimate for advertisement.

Consider the U.S. Space program beginning in the early sixties and culminating in man's landing on the moon in 1969. JFK established a purpose for the nation. The scientists and engineers developed a series of progressive rocket programs (established a mission) that in progressive and ever advancing iterative steps lead to a successful landing on the moon. You may recall the Mercury program, the Gemini program and finally the Apollo program that accomplished the purpose and fulfilled the mission.

PROJECT DESCRIPTION

“To put a man on the moon and bring him safely home. And to accomplish this by the end of the decade.” John F. Kennedy

TEAM MISSION/ASSIGNMENT

“Develop and execute a space program that progressively advances the USA technologically to accomplish a lunar landing.” NASA

What is a “good” purpose statement? What is a “good” mission statement? Purpose and mission statements are good if they help the team deliver the project.

INITIATE & ALIGN



INITIATE & ALIGN



INITIATE & ALIGN



Major Milestones

_____ : A significant event in the project schedule, such as an event restraining future work or marking the completion of a major deliverable. A schedule milestone has zero duration.

Major Milestones identify specific elements or phases of the project phase and the dates by which they must be accomplished in order to consider the project or phase “successful.”

WSDOT identifies eleven Major Milestones for all projects. Five of which occur during the Pre-Construction Phase:

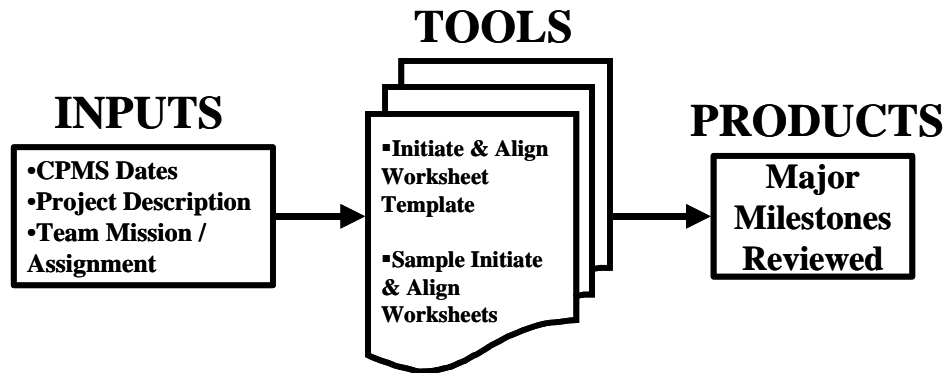
- **Project Definition Complete** – Date of concurrence of the Project Summary (Project Definition, ERS, DDS)
- **Begin Preliminary Engineering** – Beginning the preliminary engineering marks the start of the project design.
- **Environmental Documentation Complete** – All environmental documentation complete prior to Design Approval and Right of Way Approval.
- **Right of Way Certification** – Date the Region RES Manager assures all right of way necessary for construction, operation, and maintenance has been obtained and that no displacement remains in the project limits.
- **Advertisement (Ad date)** – Date the project is first advertised for bid.
- **Bid Opening** – Public opening and reading of sealed bids.
- **Award** – Official notice of award of the contract to the successful bidder.
- **Contract Execution** – This is the date when the Department signs the actual contract with the contractor.
- **Construction Start** – The first day that can be charged against the contract.
- **Operationally Complete** – This is the date when the intended end user has free and unobstructed use of the facility.
- **Final Contract Completion** – This is the date when the contract is finalized. All contractual work will have been completed and all payments to contractors will have been completed.

Along with these Major Milestones, and as planning progresses, Region/Organization Management may identify additional milestones for the project. Also, the project team will identify other project and phase-specific milestones that are critical to the success of the Pre-Construction Phase of the project.

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Major Milestones</p> <p><i>MILESTONE:</i></p> <p><i>A significant event in the project schedule, such as an event restraining future work or marking the completion of a major deliverable.</i></p> <p><i>A schedule milestone has zero duration.</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Major Milestones</p> <p><i>Preconstruction</i></p> <ul style="list-style-type: none"> • <i>Project Definition Complete</i> • <i>Begin Preliminary Engineering</i> • <i>Environmental Documentation Complete</i> • <i>Right of Way Certification</i> • <i>Advertisement (Ad Date)</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Major Milestones</p> <p><i>Construction</i></p> <ul style="list-style-type: none"> • <i>Bid Opening</i> • <i>Award</i> • <i>Execution</i> • <i>Construction Start</i> • <i>Operationally Complete</i> • <i>Final Contract Completion</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---



Steps for reviewing the major milestones for a project:

1. The Project Manager reviews the CPMS file for specific milestones and dates for accomplishment.
2. The Project Manager reviews the WSDOT Major Milestones with the project team.
3. The project team reviews the work and the performance conditions of the project and determines those activities that are critical to the success of the project or phase. A “Major” Milestone is one that absolutely must be achieved in order to make the Construction Phase successful, and may be linked to the Measures of Success.
4. The Project Manager and the project team identify the risks, impacts, and implications of failure to meet each Major Milestone.
5. The Project Manager reviews the Major Milestones identified with the Region / Organization Management: Discuss the implications of failure to meet Major Milestones and Measures of Success.
6. The Project Manager (or designee) enters the Major Milestones in the Initiate and Align Worksheet.

The “Major Milestones” previously listed are linked to critical path activities on the project schedule. The critical path describes the continuous sequence of project activities that determine the completion date of the project or project phase. Other milestones may be associated with events that must occur by a certain date, but may not, logically, be on the critical path that determines the end date of the project.

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Major Milestones</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 1. <i>Project Manager reviews CPMS for specific milestones</i> 2. <i>Project Manager reviews Major Milestones with project team</i> 3. <i>Project team determines activities critical to success</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

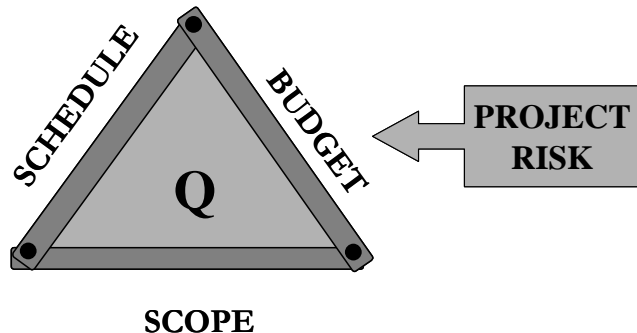
<p style="text-align: center;">INITIATE & ALIGN</p> <p>Major Milestones</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 4. <i>Project team identifies risks and impacts of failure to meet milestone dates</i> 5. <i>Project Manager reviews Major Milestones with Region/Organizational Management</i> 6. <i>Project Manager documents Major Milestones on Initiate and Align Worksheet</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">INITIATE & ALIGN</p> <div style="text-align: center; margin-top: 20px;"> <div style="background-color: #333; color: white; padding: 2px 5px; display: inline-block;">Critical Activity / Task</div> <div style="display: inline-block; vertical-align: middle;"> <div style="border-left: 1px solid black; border-top: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin: 0 5px;"></div> </div> </div> <td style="width: 50%; vertical-align: top;"> <hr/><hr/><hr/><hr/><hr/><hr/><hr/><hr/><hr/><hr/> </td>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Boundaries

Boundaries describe the limits of the project with regard to the project team's responsibilities and decision-making authority. They are the physical boundaries; e.g., design improvements from MP to MP, as well as other operational parameters (such as funding, legal, and regulatory) delineating the project and its performance envelope.

Trade Off Triangle (Triple Constraints Theory)



Project Managers often talk of a “triple constraint” or “trade off triangle” – project requirements (scope), project time (schedule), and project costs (budget). Replacing the project parameters with the tools to manage those parameters gives the “trade off” triangle of scope, schedule, and budget.

Project quality is affected by balancing these project parameters. High quality projects deliver the required product, service, or result within scope, on time, and within budget.

The relationship between these parameters is such that if any one of the three parameters is changed, at least one of the other project parameters is likely to be affected.

So which parameter is most important? This is what the Project Manager and the project team need to decide and document for project boundaries. A project team will need to

_____, _____, and _____

these parameters. This will also help identify what the appropriate responses to change should be for the project.

Project managers also manage projects in response to uncertainty. Project risk is an uncertain event or condition that, if the risk event occurs, has a positive or negative effect on at least one project parameter.

INITIATE & ALIGN

Boundaries

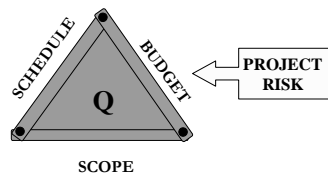
The limits of the project with regard to Project Team responsibility and authority

- Physical boundaries (SR#, MP to MP, etc)
- Operation limitations (funding, regulatory, legal, etc)

INITIATE & ALIGN

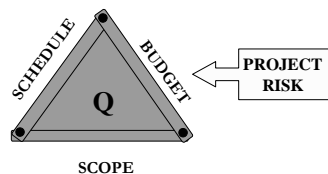
Boundaries

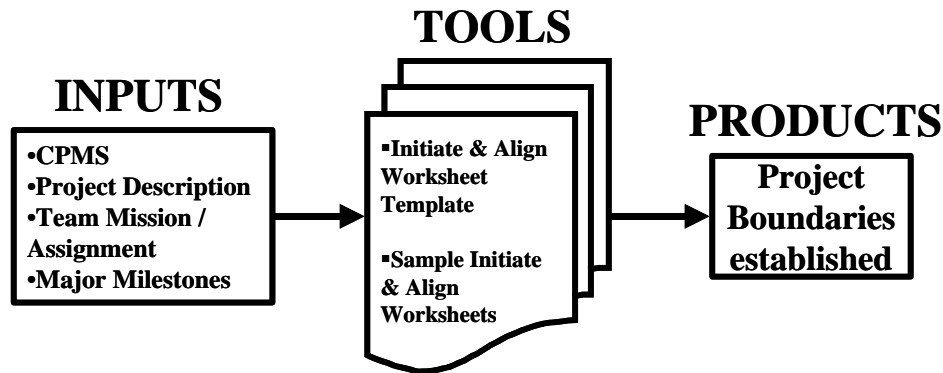
"Triple Constraints Theory" or "Trade Off Triangle"



INITIATE & ALIGN

"Prioritize, Optimize, Accept"





Steps for establishing and reviewing project boundaries:

1. The Project Manager reviews the CPMS file for specific limitations on the project and its performance.
2. The Project Manager and project team establish a set of “draft” boundaries for review and planning.
3. Review the draft boundaries with the Region/Organization Management:
 - Validate each “boundary” parameter
 - Identify which parameters are “fixed” and which are “flexible”
 - Determine the acceptable range of variation for those parameters deemed flexible
 - Plan for change:
 - a. Identify notification requirements and thresholds for early or advance warning when the possibility of exceeding or the need for changing Project Boundaries is imminent.
 - b. Identify the approvals needed to exceed or change the Project Boundaries
 - c. Define the process to follow in obtaining those approvals
4. The Project Manager (or designee) enters the boundaries on the Initiate and Align Worksheet.
5. The Project Manager and project team review the boundaries with the Region/Organization Management and incorporate them into the development of all project planning.

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Boundaries</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 1. Review CPMS data 2. Set "draft" boundaries for project team to review and plan. 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

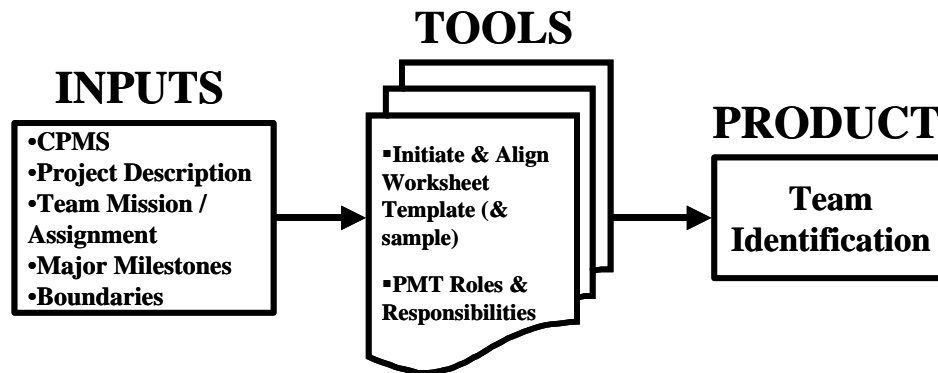
<p style="text-align: center;">INITIATE & ALIGN</p> <p>Boundaries</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 3. Review Draft Boundaries with Region / Organization Management <ul style="list-style-type: none"> • Validate boundaries • "Fixed" vs. "flexible" (prioritize, optimize, accept) • Acceptable variation ranges • Plan for change 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Boundaries</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 4. Enter boundaries and documentation to Initiate & Align Worksheet 5. Incorporate boundaries into all subsequent planning activities 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Team Identification

Once the Project description, Project Mission/Assignments, Major Milestones, and Boundaries have been received from Region/Organization Management, the Project Manager identifies the team needed to accomplish the project.

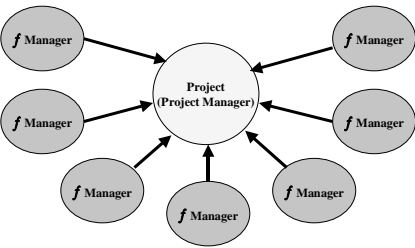
The project team is a designated group of people, including specialty groups, consultants, contractors, and others, who will collaborate and work together under the direction of the Project Manager to perform and complete the work of the project.



Steps for Project Team Identification

1. Review the Scope of Work to be performed and managed; and identify the technical, administrative, and management skills needed to accomplish the work.
2. Work with specialty groups to identify, schedule, and commit appropriate staff for the planning and performance stages of the project.
3. Identify the work that will require the services of consultants, and identify the appropriate consultants to utilize.
4. Based on the staff resources identified for the project, establish, and define the Project Organization.

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Member Identification</p> <p><i>Identifying the Project Delivery Team needed to accomplish the work assigned.</i></p> <ul style="list-style-type: none"> •Specialty Groups •Consultants •Contractors •Others (vendors, etc.) 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Member Identification</p> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

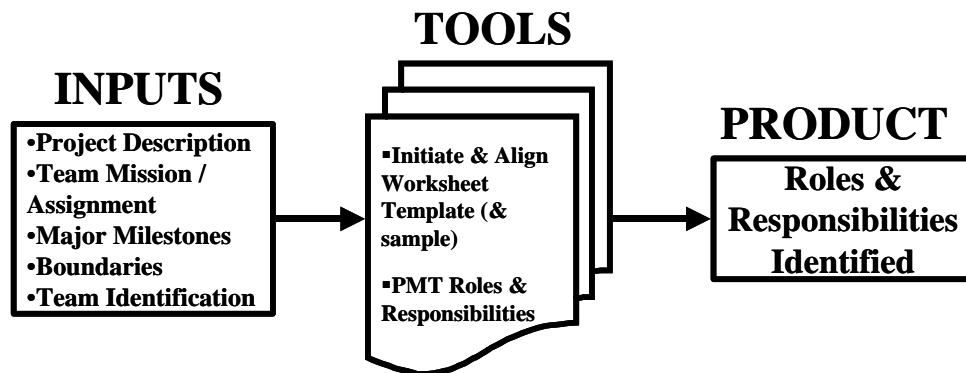
<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Member Identification</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 1. Review project description, identify skills required 2. Work with functional managers to identify, schedule, and commit appropriate staff 3. Identify consultant/contractor services required 4. Define the Project Organization (Project TOs) 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Roles and Responsibilities

The definition, and mutual acceptance, of organizational and individual Roles and Responsibilities delineates “who will do what.” Roles and Responsibilities are defined at the organizational level, down to the level of each individual on the project team.

_____ : A defined function to be performed by a project team member. The team members’ roles are the specific titles or positions occupied; e.g., team leader, designer, permit coordinator.

_____ : The duties, assignments, or accountability of results associated with a designated role in the project organization. The deliverable or product expected of the team or individual; e.g., hydraulic analyses, schedules.



Steps for Identifying Roles and Responsibilities

1. The Project Manager collaborates with the project team to identify individual roles to deliver the Team Mission/Assignments.
2. Review each role; determine individual and team responsibilities and the corresponding authority with each team member

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Roles and Responsibilities</p> <p><i>"Who will do <u>what</u>?"</i></p> <p>•<u>Roles</u> – specific titles or positions</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Roles and Responsibilities</p> <p><i>"Who will do <u>what</u>?"</i></p> <p>•<u>Responsibilities</u> – deliverables or products expected of Team members</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>Team Roles and Responsibilities</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 1. <i>The Project Manager collaborates with the project team to identify individual roles.</i> 2. <i>Review and determine individual and team responsibilities and the corresponding authority.</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

Project Management Executive Order E 1032.00

Project Management Executive Order E 1032.00 defines the basic project responsibilities for the following roles:

Executives/Senior Managers (Region/Organization Management):

- Ensure that the project managers they appoint possess the project management knowledge, skills and abilities required to deliver capital transportation projects.
- Know the status of all of the projects assigned to them.
- Plan for and provide appropriate resources to implement project management.
- Review and endorse project management plans for each project.

Project Manager:

- Plan for and provide appropriate resources to implement the project management process.
- Lead the project management process consistent with the principles and practices defined on the web site and on-line project management guide.
- Develop and document a project management plan for each project assigned to them.

Project Team Members:

- Perform the roles and responsibilities as defined in the Project Management Plan.
- Endorse the Project Management Plan.
- Provide the project manager with a schedule and estimate for the tasks assigned. (Functional Managers / Specialty Groups)
- Review the project management plan as part of the normal process reviews for pre-construction and construction documents.

<p style="text-align: center;">INITIATE & ALIGN</p> <p>WSDOT Basic Project Responsibilities</p> <p><u>Region / Organizational Management</u></p> <p>Ensure Project Management Knowledge</p> <p>Know project status</p> <p>Plan and provide appropriate resources</p> <p>Review and Endorse Project Management Plan</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">INITIATE & ALIGN</p> <p>WSDOT Basic Project Responsibilities</p> <p><u>Project Managers</u></p> <p>Plan and provide resources</p> <p>Lead Project Management Process</p> <p>Develop Project Management Plan</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

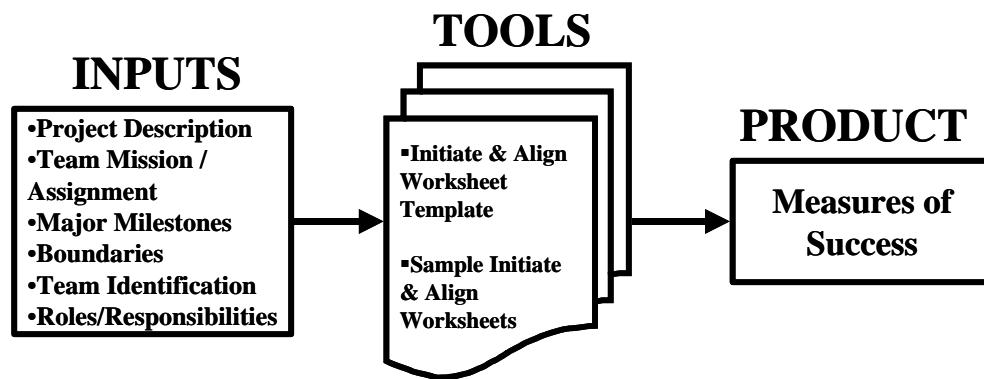
<p style="text-align: center;">INITIATE & ALIGN</p> <p>WSDOT Basic Project Responsibilities</p> <p><u>Project Team Members</u></p> <p>Endorse & implement Project Management Plan</p> <p>Perform roles and responsibilities</p> <p>Provide estimates to Project Manager (SG)</p> <p>Review Project Management Plan (HQ)</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Measures of Success

Measures of Success will define the most important things the team should accomplish to fulfill its mission and achieve success. The measures of success are tied to the project purpose and team mission. Measures of success are measured incrementally “along the way” not just at project completion. This allows the project to get “back on track” if needed.


_____ describe what the project team must accomplish to fulfill its mission and to achieve project success.

_____ are the “indicators” or “metrics” used to assess progress toward the accomplishment of Critical Success Factors and are reviewed at regular intervals throughout the project.



Steps for developing Measures of Success

1. Identify the Critical Success Factors of the project phase. (e.g., Environmental Documentation Complete, Budgetary Limitations met, etc.)
2. Review the list of Critical Success Factors with Region/ Organization Management.
3. The Project Manager and project team identify corresponding Measures of Success.
4. Define the specific indicators, signals, threshold values, etc., that will be monitored and reported.
5. The Project Manager or designee documents Measures of Success on the Initiate and Align Worksheet.
6. Develop and specific methods and assignments for monitoring and reporting the Measures of Success.
7. Review the Measures of Success with Region/Organization Management and the project team.

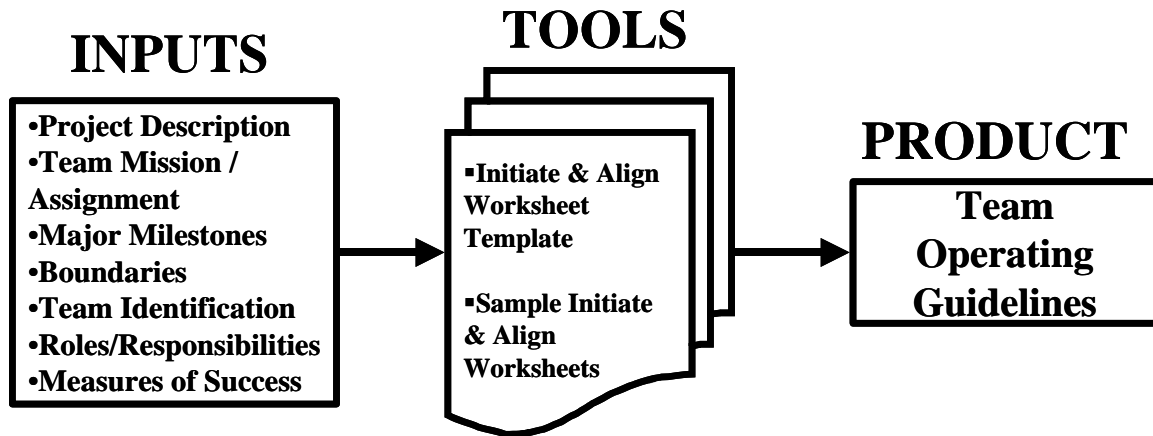
<h2 style="text-align: center;">INITIATE & ALIGN</h2> <p>Measures of Success</p> <p><i>Indicators or metrics used to assess progress – reviewed at regular intervals during the project</i></p> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<h2 style="text-align: center;">INITIATE & ALIGN</h2> <p>Measures of Success</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 1. <i>Identify Critical Success Factors</i> 2. <i>Review Critical Success Factors with Region / Organizational Management</i> 3. <i>Identify corresponding Measures of Success</i> 4. <i>Define values that will be monitored and reported</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<h2 style="text-align: center;">INITIATE & ALIGN</h2> <p>Measures of Success</p> <p><i>Steps:</i></p> <ol style="list-style-type: none"> 5. <i>Document Measures of Success on Initiate and Align Worksheet</i> 6. <i>Develop methods and assignments for monitoring and reporting Measures of Success.</i> 7. <i>Review with project team</i> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Operating Guidelines

Team Operating Guidelines describe how the project team will govern itself. They identify the functions most commonly performed by the team and guidelines to steer it within those functions.



The project team may develop some or all of the following guidelines:

- Team Decision-Making Process
- Team Meetings (structure, frequency, etc.)
- Communication (methods, uses, frequency, protocols, etc.)
- Team Performance Measures
- Team Issues and Conflicts Management

<div><div>INITIATE & ALIGN</div><div>Operating Guidelines</div><div><i>Specific processes and rules the Team will use to maintain cohesiveness and effectiveness.</i></div><div><ul style="list-style-type: none">•Team Decision-Making Process•Team Meetings•Communication•Team Performance Measures•Team Issues and Conflict Resolution</div></div>	<div><hr/><hr/><hr/><hr/><hr/><hr/><hr/><hr/><hr/><hr/></div>
--	---

Summary

Aligning to common goals helps the Team form a cohesive, effective unit. It builds a foundation of cooperation where team members are comfortable communicating with one another and working together. The Team Mission/Assignments statements align the team... and help maintain alignment as the work progresses.

An effective tool to begin building the Project Management Plan is the “Initiate and Align Worksheet template”, available from the Project Management On-Line Guide:

<http://www.wsdot.wa.gov/Projects/ProjectMgmt/Process.htm#PMOG>

It allows the Project Manager and the project team to identify and document project parameters and other information needed during the initiate and align phase of the project.

Teams must not only be built but also sustained. Each team member brings different skills, knowledge, abilities, attitudes and interests. Throughout the project it will take energy to maintain focus and team alignment. For successful project delivery, the participants must conduct their efforts in a coordinated and complementary manner. The most important function of this first step is to establish communication with the people who will develop and deliver the project.

What is the most important skill set of a Project Manager?

_____ : It is integral to everything the Project Manager does.

Remember, the project management process is scalable, and should be tailored to fit the project by the project manager and team. A Project Management Plan is as simple or as complex as the team makes it. The work plan and work planning effort should be commensurate with the needs of the team and the project.

The project team is more than just the assigned designer and CADD operator –it is the deliberate establishment of a multi-disciplinary team – an “extended” or “hybrid” team – including appropriate representation from all key specialty groups as well as the project sponsor(s) and/or customer(s). All parties need to be represented and involved in order to obtain their endorsement and commitment to accomplish the work plan and deliver the project. This does not mean that all team members must participate in every team meeting or project work session.

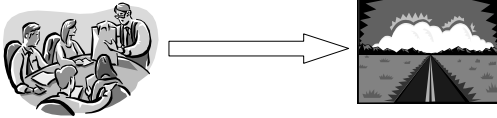
Do not be trapped by current ways of thinking or limited by the way we’ve always done it before... for example at the very same time the pony express was trying to deliver mail faster by getting speedier horses and moving stations closer together, someone else was inventing the telegraph.

INITIATE & ALIGN

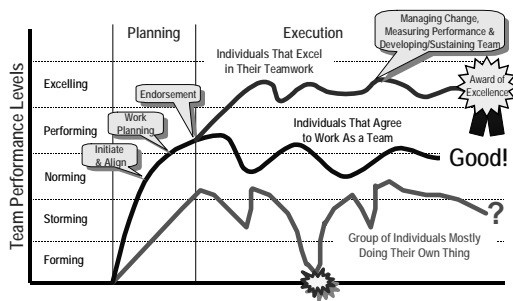
Team Alignment

Building the foundation of cooperation

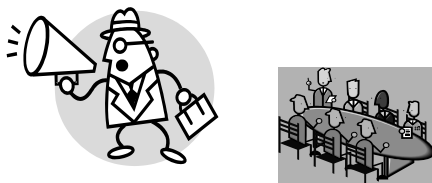
Forming a cohesive, effective unit



INITIATE & ALIGN



INITIATE & ALIGN



SR 101 Purpose and Mission Exercise

Each team is accountable to develop an Initiate and Align Worksheet for the SR 101, Cooper Point Road Interchange Improvements project. The “Initiate the Project information” located in Appendix D.

Goal: Based on the assigned roles, develop an Initiate and Align Worksheet that documents the following:

- Project Description
- Team Mission/Assignment
- Major Milestones
- Boundaries
- Team Identification
- Roles and Responsibilities
- Measures of Success
- Operating Guidelines

Schedule: 20 minutes



What do Geese instinctively know?

A Flock of Geese

Each of us is strong, talented and capable. However a group of strong, talented individuals become capable in the extreme if they function as a unified team.

Geese in flight are like teams in formation united by a purpose, aligned toward a common goal and working together -achieve the mission. Each has individuality yet they put the team before themselves. Geese in flight support their team the way the team and each member needs support. Completing the mission and realizing the purpose requires it.

When are geese at their best? When working as a team on their great migrations. The term for a flock of geese in flight is “skein”. This is an interesting word, there are several definitions for the word skein but two are very applicable to us. A skein is a flock of geese flying in the “V” (victory) formation, they never let each other down, they never give up until they reach their goal. Skein also means a series of similar or interrelated things: such as a skein of completed projects delivered on time, on budget and of superb quality.

Team **success depends on each member committing to the purpose**: are you going to be the “silly” goose that doesn’t know what to do because of lack of communication, refusing to contribute to the discussion or not actively listening? Are you going to be the goose that let’s down the rest of the team?



Geese working together

Have you ever noticed how geese fly in a “V” formation? Did you notice there are no geese drafting lazily in the middle? That’s because the others won’t allow it. Those who give their best to the team get the whole team behind them and achieve success. Did you know that if a goose in flight becomes wounded or ill and has to land one of the others goes with him to care for and comfort him until he can rejoin his team. That’s what having team behind you can do. That is something you can never do on your own.

Do you know why geese fly in a “V” formation? It is very effective; geese in formation can fly 70% farther than a lone goose. Migrating geese fly at extremely high altitudes for sustained periods at speeds ranging from 40-60 mph. A lone goose, not working with a team, tires and stops to rest, it may be eaten by a fox, or fly too low and wind up in a goose hunter’s cook pot in Kennewick. When the geese are at their optimum altitude even the hunters can’t get them. A team flies higher, farther, and faster than an individual.

The “V” Formation provides the ability to cooperate and communicate; it is also the epitome of a team in alignment. The toughest place to fly is up front, the lead goose in the team, so they take turns leading, each leader bringing special skills to share with the team.

Consider how this works in project delivery with a project team. At different times, during the project, various elements assume prominent roles “leading” the effort. Sometimes we need the environmental to play a more prominent role, other times it may be design, utilities, real estate services, traffic, or others to take the lead, blazing the trail at the front. As these changes occur during the project, the team continues forward.

Initiating and aligning the team establishes an atmosphere conducive to cooperation and an environment that promotes a positive attitude. It is the attitude of the team members that holds the team together and the purpose helps maintain team alignment and focus throughout the project.

Ask yourselves at the beginning of each project your level of commitment to the team. When tempted to whine or complain, or speak or act in a way that brings down the attitude (and altitude) of the team recall these things: “the team needs my help”, “I’m here”, “I’m ready”, “you can count on me”, then cheer your team on, honking encouragement just like the geese do when they fly over 5,000 miles twice a year.

Be aligned and united in purpose as a team, with a clear purpose and mission. Depend on one another; Support one another. Communicate and encourage one another (honking encouragement in flight). Share leadership as appropriate and use the unique strengths of each other. Deal with and adjust to changing conditions (just as geese adjust to wind, darkness, etc.). Establish milestones along the route (geese use lakes and fields where they rest and refresh)

Establish a work plan that includes scope, schedule and budget

- Scope = migration start and finish points.
- Schedule = time to begin and time to complete
- Budget = we use money geese use food and water along the way, their energy reserves
- Work plan = the migration route and scope, schedule, and budget elements of their journey: resources have been assigned; roles and responsibilities are known; each team member is committed and contributes and offers encouragement along the way; completion of the project brings rewards and recognition.

Teams

As stated earlier, the project management process is a scalable process that can be tailored by the team to suit the needs of their project. But what about the team is it scalable? Can the size of the team be scaled to best suit the project? Yes, according to Glenn M. Parker, author of “Cross-Functional Teams” the following are worth consideration:

↑ = Increase ↓ = Decrease

Think about the following as the size of a team increases:

1. ↑ Team size = ↓ Productivity
2. ↑ Team size = ↓ Accountability
3. ↑ Team size = ↓ Participation/Trust

But there is an allure of larger teams. Some potential benefits (perceived or actual) of larger teams include:

4. ↑ Team size = ↑ Ideas
5. ↑ Team size = ↑ Importance of Project
6. ↑ Team size = ↑ On the job training opportunities

Limit Team Size

Do the right thing – “right-size” the team for your project. Teams are always free to invite subject-matter experts to assist as the need arises.

Use the Core Team Approach

Core teams typically include 5 to 8 members. The core team provides leadership and key decision-making, but meets regularly with their respective functional groups to ensure work conforms to quality standards, and meets schedule and budget.

Dividing into Subgroups

When teams are large, skillful use of subcommittees achieve the advantages of small groups. In this model the full team may meet monthly (or every other month, or quarterly as the team deems appropriate) and the subcommittees provide status reports at these full team meetings. The small groups meet weekly and continue to do the work between the large full team meetings.

Ultimately it is up to your team and the nature of your project as to how to best size your team and strategize involvement of all appropriate parties so as not to offend either allies or enemies. The only limitation is the imagination of the team.

Plan the Work

Failing to plan is planning to fail.

Proper work planning is art and science. It requires a blend of engineering and imagination. Predicting time, resources, risk and possible change. Building a quality work plan requires skill in both the “soft” skills and “hard” skills of our business. COMMUNICATION makes this happen.

_____ is the portion of the project management process that produces the Project Management Plan. The Project Management Plan (PMP) describes both the Project Performance Baseline – the project deliverables and the schedule and budget plans for delivering them – and the Project Management methods that will be used by the project team during their delivery.

The detailed planning needed to establish a Project Management Plan begins during the Initiate and Align process and continues throughout the remainder of the project. Not all project management plans are the same; the size and complexity of the PMP depends on the project and the project team.

Project Performance Baseline

The Project Performance Baseline documents the project team’s detailed planning for the performance of the project within the scope, schedule, and budget parameters established by region management. The baseline identifies all of the deliverables to be produced, the sequences and schedule for their production, and the budgets allocated for their performance.

The baseline is simply the original plan plus any approved changes. As the plan changes the baseline must be reviewed, updated, and endorsed. It is essential to document how the plan has progressed and changed over time.

Establish Project Management Plans

The development of performance plans for critical project management processes provides the project team with procedures and tools to direct their performance and confirm the project team’s commitment to performance within department and region management methods and requirements.

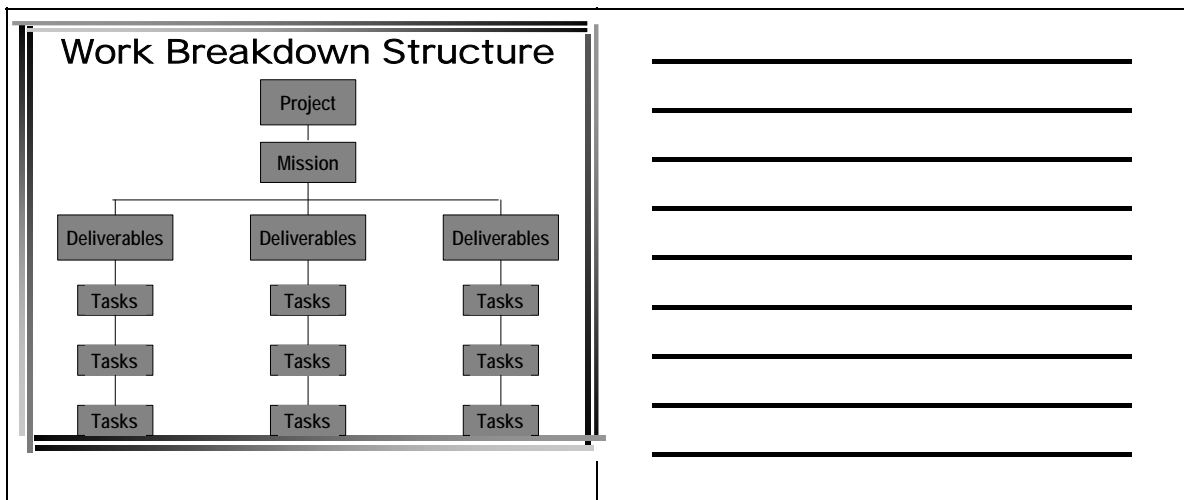
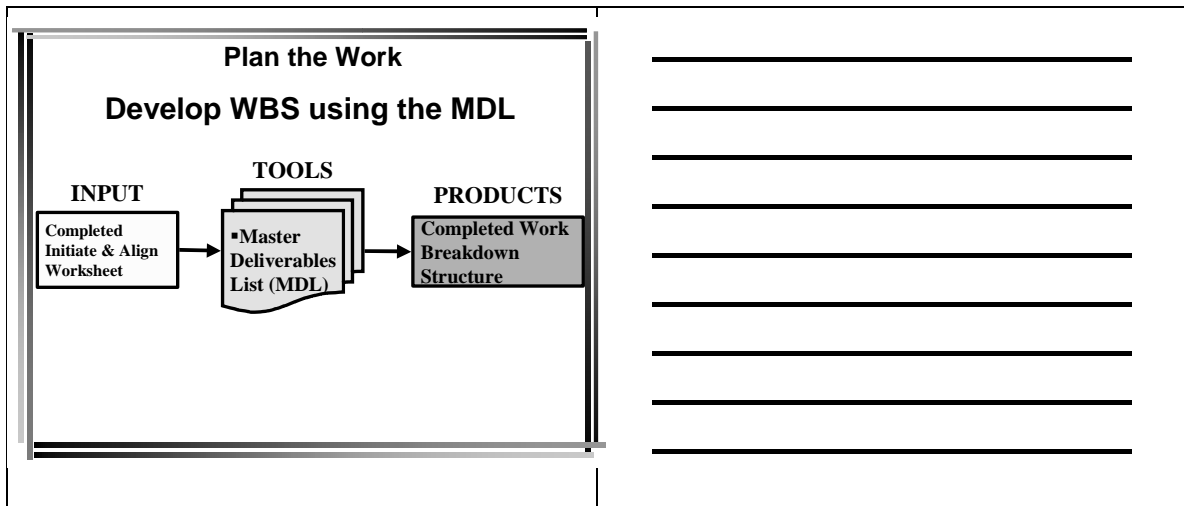
Work Breakdown Structure (WBS)

“Project scope management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully.” (*PMBOK, Third Edition*). The first step in Plan the Work is to develop the _____, which identifies and describes all of the project deliverables.

Development of the WBS is collaboration by the entire project team; the team includes the design team, specialty groups (Traffic, Environmental, Right of Way, etc.), and any others who have a role in the projects development and delivery. Typically the WBS is in chart format and includes progressively detailed levels of information, beginning with the top level deliverable of the project as the first and highest level. The WBS is used as an input to create the schedule, verify the budget, to create activity lists, and to define all of the work that will be done on the project. If an item is not in the WBS, it is not part of the project scope of work.



WSDOT’s standardized Master Deliverables List (MDL), implemented as part of the Project Delivery Information System (PDIS), is a starting point for developing a project specific WBS. The MDL is a comprehensive list that identifies project phases, work processes, and deliverables.



Task #	WBS Code	Task Name	MDL Code
1PC		PreConstruction (Put Project Name Here)	
2PC-01		Preliminary Estimates & Schedules	0167
3PC-01.01		PE Estimate	0167
4PC-01.02		Regional cost and schedule to complete the right of way phase of a project. Includes all resource costs, developed for programming the project.	0167
5PC-01.03		The estimated cost and schedule to complete the construction phase of a project. Developed for programming the project.	0167
		A document which comprises the Project Definition, Design Decisions and the Environmental Review Summary for a project	
		The official document that states the purpose and need for the project and the solution of the deficiency. This is a formal document that must have Region and HQ concurrence.	0168

Project Delivery Information System (PDIS)

Olympic Region, as part of their quest to continuously improve, asked questions like: How can we more effectively deliver programs and manage resources? And better coordinate multiple projects?

ANSWER: people need information -to track progress of projects along the way. The result was a collaborative effort by all regions to improve management of schedules and limited resources.

A statewide Steering Team was formed in 2001. The need for enterprise scheduling required a more robust scheduling software package. WSDOT selected Project Scheduler software, more commonly referred to as PS8. It was customized for our use and is known as PDIS (Project Delivery Information System). The PDIS allows us to gather and manage project information useful to planning and delivering multiple projects across the state.

PDIS is a tool for effective and efficient management of project schedules, assigned resources, and the resulting cost to complete projects. Based on the WSDOT project management principles, PDIS enhances communication and coordination between staff engaged in project delivery. It does this by providing information in an easily accessed uniform manner.

Communication in project delivery is more than transmitting random words, thoughts and pictures but involves sending, receiving and disseminating useful information. The Master Deliverables List (MDL) is one of many PDIS products available for statewide use. It provides a common identifier for deliverables and the opportunity to identify the required time and resources to produce a work product. The MDL provides a common language and consistent terminology for project communication.

PDIS

Project Delivery Information System

(using Project Scheduler 8 (PS8))

In part, this came from a simple question:

"How can we improve the communication, coordination, & management of multiple projects?"

Project Delivery Information System (PDIS)

PDIS

Master Deliverables List (MDL)

The _____ provides a list of phases, processes, and deliverables that are typical of WSDOT projects. Obviously not every project will produce every deliverable, in fact most projects will provide just a portion of the deliverables that are on the list. The MDL is only the starting point for defining the deliverables and building a project specific WBS.

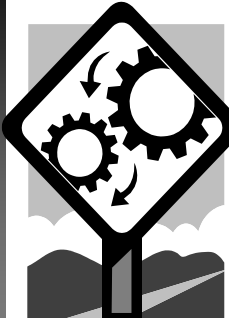
The MDL, shared by all the regions, provides consistent terminology for project communication. In the past one project team might use the term “Storm Water Plan”, and another team “Storm Water Design”, even though they meant the same thing to the project teams. A common language is crucial for PDIS to be effective.

In addition, the MDL simplifies development of the Work Breakdown Structure for a project. In the planning process the project team looks at the MDL and determines which deliverables their project requires and simply eliminates the rest. Note that each deliverable already has a specific name and WBS Code. It is important to use the WBS Code and name as provided on the MDL.

Once the deliverables are determined there is great flexibility on creating the rest of the WBS. Each deliverable will require some activities, (tasks) needed in order to produce it. The MDL provides the freedom to do this as preferred by the team.

Reminder – We are building the project management plan to take us from our existing state to the realization of the project description. Keep the project description and team mission/assignment in mind throughout the development of the project.

Plan the Work



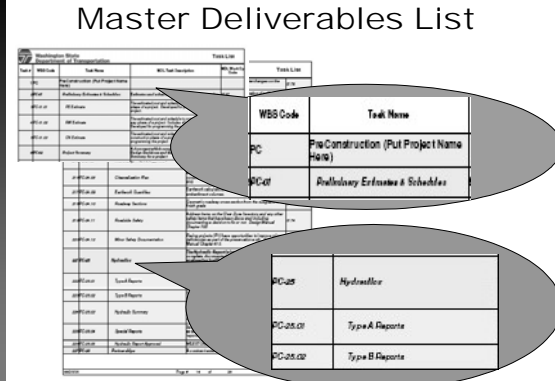
Master Deliverables List

Provides consistent terminology or a list of parts for your project.

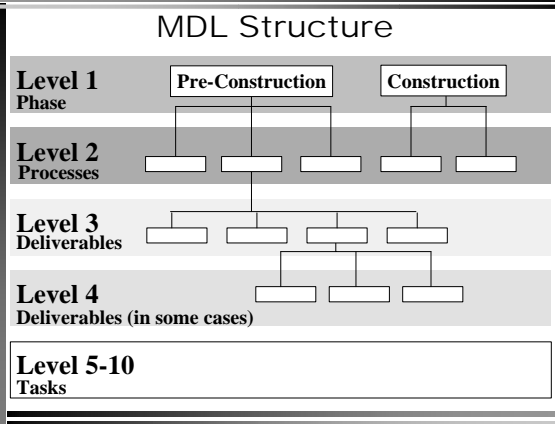
The project team determines which parts and how to assemble them.

Then build a project WBS - like a fine running machine.

Master Deliverables List



MDL Structure



Using the MDL

Using the MDL is simply a process of contraction and expansion. Eliminate the processes and deliverables that you do not need for your project. Then build upon this by identifying the tasks required to accomplish the deliverable. The MDL can be reorganized as the team desires, within the constraints of PDIS and the PS 8 software.

1. **Identify the Project Phase, eliminate the rest (Levels 1)** Pre-Construction or Construction.
2. **Identify the processes that will be a part of your project, eliminate the rest (Levels 2)** The processes in the MDL, includes things like: Project Management, Hydraulics, Right of Way, Traffic, Utilities, Environmental Documentation, etc.
3. **Identify deliverables to be produced for each process, eliminate the rest (Typically Level 3, but in some cases Level 4)** The deliverables in the MDL, includes things like: Type A Reports, Right of Entry, Traffic Analysis Report, ESA Compliance, etc.
4. **Teams may reorder the WBS if they wish.** The project management process provides a set of tools, how the tools are used is up to each team. Flexibility is built into the process, this includes the MDL, if a team wishes to reorganize the list they may do so within the constraints of the PDIS and software. Users are constrained to moving by “work families” in other words hydraulics tasks cannot be moved into traffic tasks and so forth. If the team wants traffic listed before hydraulics it can be moved but all sub-levels (or child tasks) must be moved with it.

Customize the MDL to your project

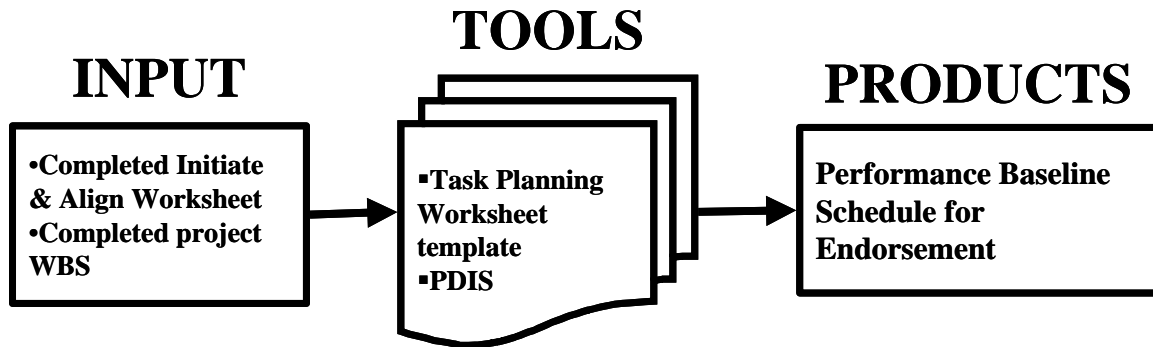
Process of elimination...

1. Identify Project Phase
2. Identify the Processes
3. Identify the Deliverables
4. Reorder if needed, "child/parent relationships"



Task Planning and Scheduling

Using the project specific Work Breakdown Structure (WBS) to develop “manageable” tasks and put them into a time phase format.

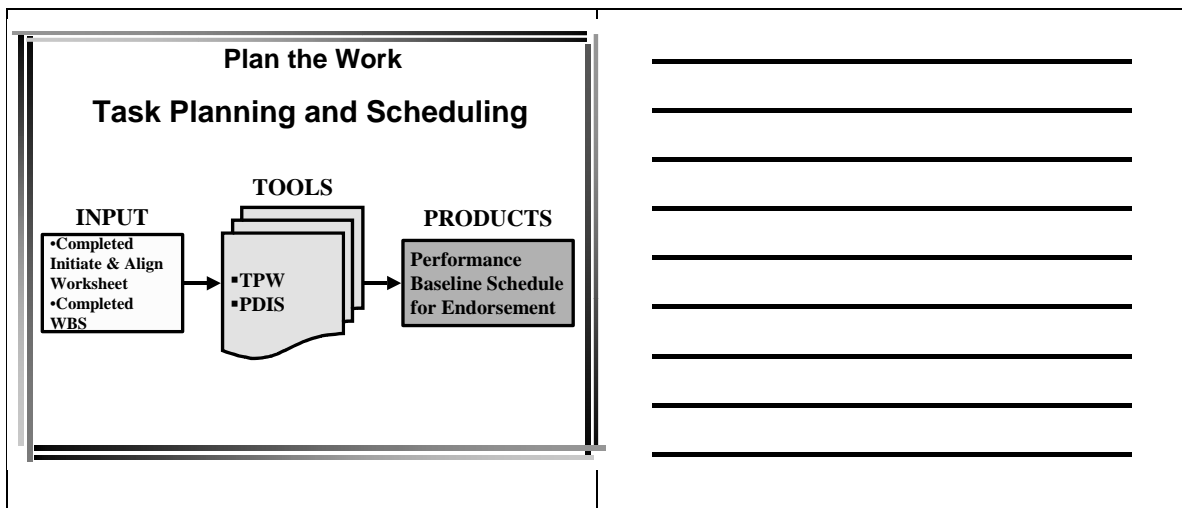


Steps for Task Planning and Scheduling

1. Review the deliverables identified in the project specific WBS and establish the logical sequence within their work categories or processes (Level 2).
2. Define the task(s) for each deliverable*, what activities will take place? The Task Planning Worksheet (TPW) is an excellent tool to help with identifying and defining detailed tasks that support the production of the deliverables (Level 3, in some cases Level 4).

* Include dollar-loaded deliverables prepared by specialty groups.

3. Establish durations and task dependencies:
 - Estimate durations for each task.
 - Identify all precedence relationships between dependent tasks by type of dependency (Start-Finish, Start-Start, etc.).
 - Review each task dependency and determine if lead/lag times are required, and enter them.
 - Review the schedule, dates, and Major Milestones for appropriateness.
4. Assign resources and/or estimated costs to the tasks. (generic resources are a minimum)
 - Identify the estimated effort needed for the assigned resource.
 - Identify any constraints associated with the assigned resource. Resource constraints may include things like: availability of staff, experience of staff and complexity of the task.



Task Planning Terminology

Task	Milestone	Deliverables
Activity	Event	Measurable
Finite duration	Identifiable point	Tangible
Defined start & finish	Completion of a major deliverable or set of tasks	Work Product
Assignable		
A deliverable upon completion		

- ### Plan the Work

Task Planning

 - Define the task
 - Estimate durations
 - Identify Dependencies
 - Assign Resources
 - Resource constraints
 - Estimate cost

More on Scheduling

The Task Planning Worksheet is a tool to identify task scope, constraints, estimated duration, and resource assignments. Using this information you can begin to build the project schedule. The next step is to look at the logic or the order the work must be performed, this is known as a Network Logic Diagram or activity on node. This is generally the preferred method for representing the tasks, their dependencies, and the sequence.

Using the completed network diagram and task durations you can build the project schedule. Gantt charts are a graphic display of schedule related information, typically having a calendar along the horizontal axis. Gantt charts can show percentage complete and are considered to be a good tool to communicate with management.

The network path is a sequence of events that affect each other on the project from start to finish. These paths are used to identify areas of high risk on a project. Generally, the longest path through the schedule is the critical path.

It is essential to include the entire project team in schedule development, organizations that consist of multiple divisions and functional work areas need to have a clear understanding of what is required for tasks and what each group is responsible for. Task relationships linking functional work groups are often not emphasized strongly enough.

Remember! Review the “balanced _____
_____ with team members prior
to seeking endorsement.

Want to know more about project scheduling?

Attend the Introduction to Project Scheduling course, course code CB5

Plan the Work

Network Logic Diagrams

```

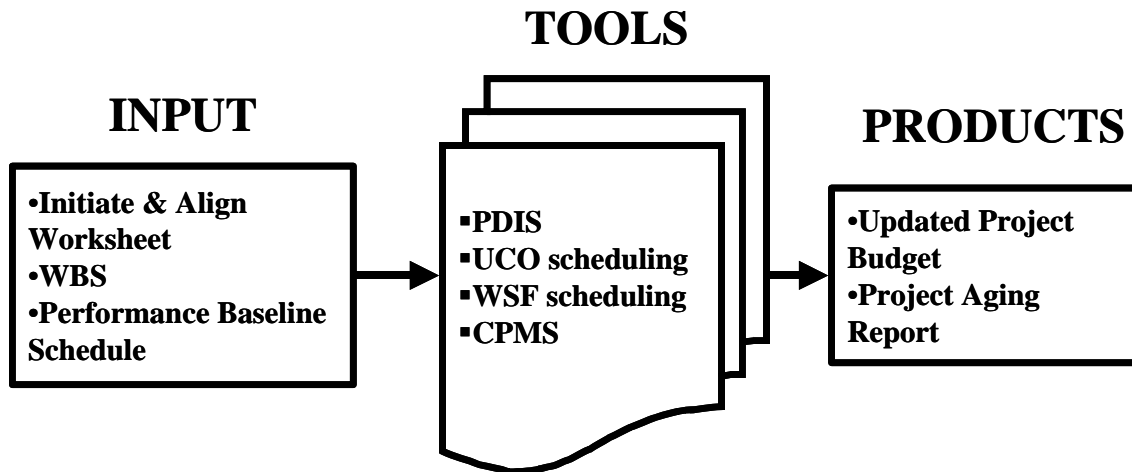
graph LR
    Start --> A
    Start --> D
    Start --> F
    A --> B
    B --> C
    C --> E
    D --> E
    E --> Finish
    F --> G
    G --> H
    H --> Finish
    
```

Task	Start	End
1 START	0	1
2 FRPLAN	1	4
3 INFOREP	1	3
4 TRANPLN	1	2
5 FRGAME	2	10
6 FRMENU	2	6
7 INFOSITE	3	4
8 TRNVEH	3	4
9 FRFOOD	4	10
10 INFOCMU	4	8
11 TRFCON	4	8
12 INFOPKT	6	10
13 TRNTRSH	8	10
14 FIN	10	11

Plan the Work

Budget

Validate the programmed project budget in the Capital Project Management System (CPMS) through comparison with specific project planning.



Steps for Validating the Project Budget

1. Compare the estimated project costs from the resource-loaded schedule to the programmed project budget provided in the CPMS.
2. Identify any variances between project estimated costs and programmed budget, including their sources (scope elements, resource costs, etc.).
3. Review and reconcile all budget differences with Region/Organization Management.
4. Based on reconciled project budgets and the performance baseline schedule, develop the project aging report.

[illegible][illegible][illegible]

The graph illustrates the cumulative spending over time, following an S-curve pattern. The vertical axis represents the amount spent, ranging from \$0 to \$50,000. The horizontal axis represents time, with 10 discrete intervals marked. The curve begins at the origin (0,0) and shows an initial slow increase, followed by a period of rapid growth between time units 4 and 6, and finally a slow approach to a total spending of approximately \$45,000 by the end of the 10th time unit.

Time	Spending (\$)
0	0
1	2,000
2	4,000
3	6,000
4	12,000
5	22,000
6	30,000
7	36,000
8	39,000
9	42,000
10	45,000

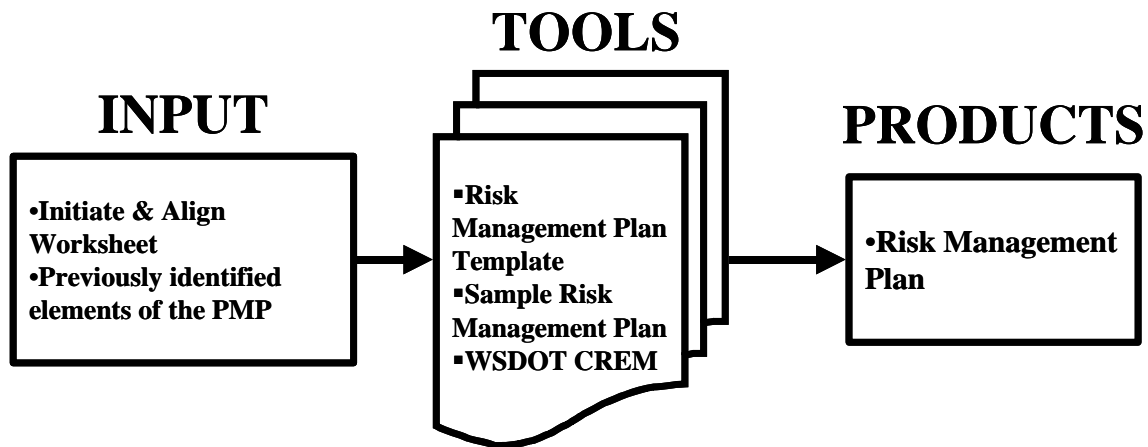
[illegible]

Risk Planning

Risk as defined by the Project Management Institute (PMI) is “*An uncertain event or condition that, if it occurs, has a positive or negative effect on a project’s objectives*”.

Risk Management Planning is the systematic process of deciding how to approach, plan, and execute risk management activities throughout the life of a project. It is intended to maximize the beneficial outcome of the opportunities and minimize or eliminate the consequences of adverse risk events.

The _____ is a component of the Project Management Plan. Its development involves the entire project team, begins early in the project planning process, and is an iterative process that takes place along with WBS development, task planning and scheduling, and validation of the project budget.



Plan the Work

Risk Planning Terminology

- **Risk** is an uncertain event, if it occurs, has a positive or negative effect.
- **Risk Response Strategy** is a pre-planned approach to address risk events should they occur; designed to enhance opportunities and reduce threats to a projects objectives.

PMBOK, 2000 edition

Plan the Work

Risk Planning Terminology

- **Triggers**, or warning signs, indicate a risk has occurred or is about to occur.
- **Risk Mitigation** seeks to reduce the probability and/or impact of a risk.

PMBOK, 2000 edition

Steps for Risk Management Planning

1. Determine the required level of risk analysis and management.
 - Review the project; location, size, participants, type of work involved, general “risks” involved and their consequences, previous experience, etc.
 - Review *A Policy for Cost Risk Assessment* to determine the appropriate level of detailed risk analysis to be performed. Work with Region/Organization Management to determine the risk factors to be considered; the risk tolerance levels/thresholds to be used, and risk reporting and visibility requirements.
 - Communicate the level of risk analysis and management to the project team.
2. Identify risk events that might affect the project and document their characteristics. It may be a simple risk assessment organized by the project team, or an outcome of the CEVP®/CRA process.
3. Qualitative risk analysis assesses the impact and likelihood of the identified risks and develops prioritized lists of these risks for further analysis or direct mitigation.
4. Quantitative risk analysis is a way of numerically estimating the probability that a project will meet its cost and time objectives. Quantitative analysis is based on a simultaneous evaluation of the impacts of all identified and quantified risks.

Quantitative risk analysis is only performed on projects meeting the criteria identified in *A Policy for Cost Risk Assessment*. The policy can be found on the CREM website at:
<http://www.wsdot.wa.gov/Projects/ProjectMgmt/RiskAssessment/>
5. Risk Response Strategy is the process of developing options and determining actions to enhance opportunities and reduce threats to the projects objectives. It identifies and assigns parties to take responsibility for each risk response. This process ensures that each risk requiring a response has an “owner”.
6. Risk Monitoring and Control tracks identified risks, monitors residual risks, and identifies new risks - ensuring the execution of risk plans, and evaluating their effectiveness in reducing risk. Risk Monitoring and Control is an ongoing process for the life of the project.

Risk Response Strategies

The Project Manager and the project team identify which strategy is best for each risk, and then design specific actions to implement that strategy. Risk strategies include:

- _____. The team adjusts the project plan to eliminate the risk or to protect the project objectives from its impact. The team might achieve this by changing scope, adding time, or adding resources, while maintaining the balance of scope-schedule-budget.
- _____. The team transfers the consequence of a risk to a third party together with ownership of the response. Transferring the risk gives another party responsibility for the management of the risk; it does not eliminate it.
- _____. The team seeks to reduce the probability and/or consequences of a risk event to an acceptable threshold. Taking early action to reduce the probability of a risk's occurring or its impact on the project is more effective than trying to repair the consequences after it has occurred. Mitigation costs should be appropriate, given the probability of the risk and its consequences.
- _____. The project manager and the project team decide not to change the project plan to deal with a risk, or cannot identify a suitable response action. A contingency plan may be developed or no action may be taken, leaving the project team to deal with the risk as it occurs.

Risk Assessment Tools

A variety of tools exist for assessing risk, most involve some consideration of the impact of the risk and the probability that it will occur. Some, of the many, assessment tools include:

Risk Interview

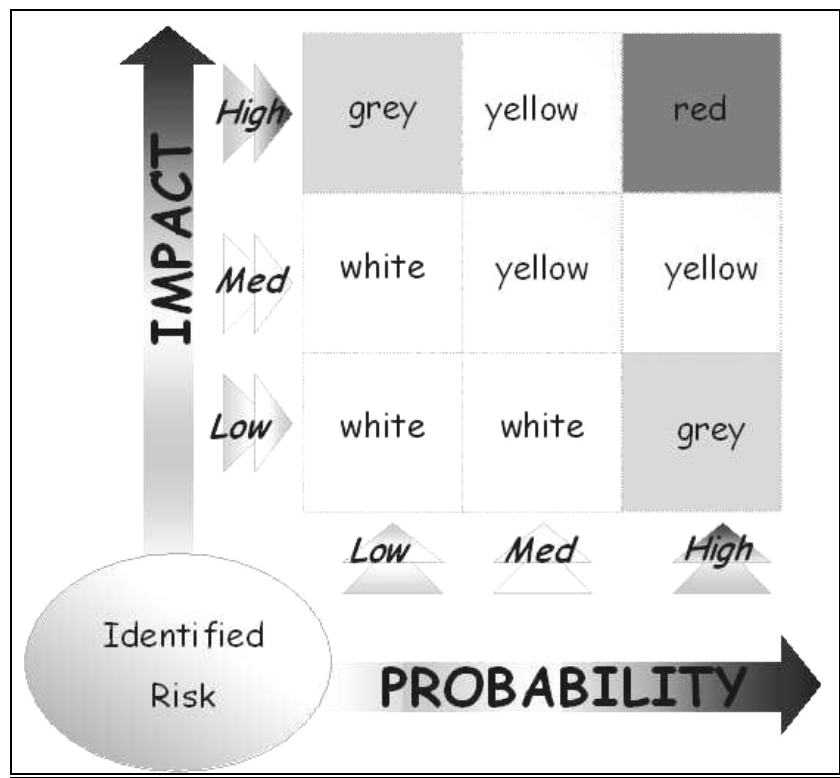
Interviews are used to determine the probability and consequences of risks on project objectives. A risk interview with project stakeholders and subject-matter experts may be the first step in quantifying risks.

Decision Tree Analysis

The decision tree is a diagram that describes a decision under consideration and the implications of choosing one or another of the available alternatives. It incorporates probabilities of risks and the costs or rewards of each logical path of events and future decisions.

Probability – Impact Matrix

A common way to determine whether a risk is considered low, moderate, or high is by combining the two dimensions of risk, its probability of occurrence, and its impact on objectives if it occurs.



EXAMPLE #1

IDENTIFIED RISK: Budget is exceeded by 10%.

Probability Impact Project Risk Profile

LOW MEDIUM WHITE ZONE

EXAMPLE #2

IDENTIFIED RISK: Survey data incomplete or inaccurate

Probability Impact Project Risk Profile

Medium High YELLOW ZONE

EXAMPLE #3

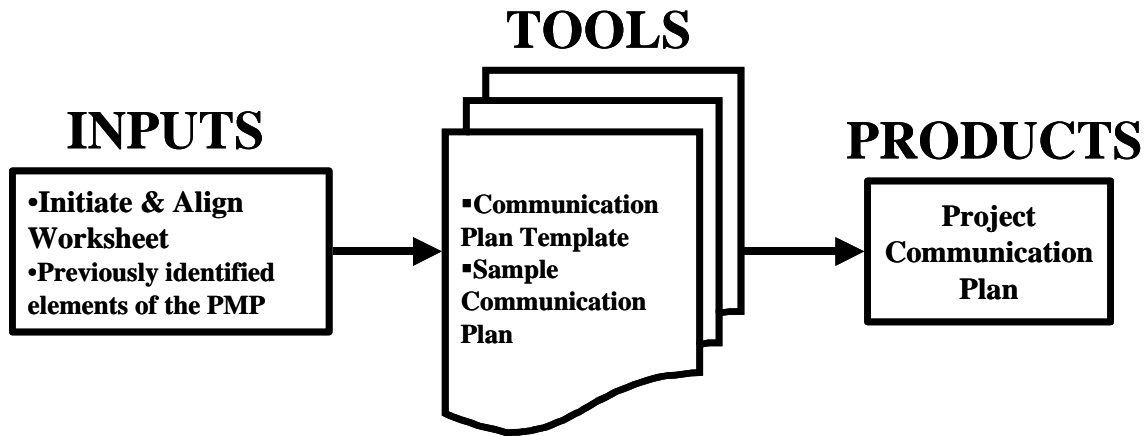
IDENTIFIED RISK: Quality problems due to inexperienced staff, employee turnover and/or lack of quality management plan.

Probability Impact Project Risk Profile

High High RED ZONE

Communication Plan

Change Management, Risk Management, Quality Management, and Transition & Closure Plans all address communication requirements. For example, one step in the change management process is to “communicate the change”. This does not mean an individual Communication Plan is not needed; there are still elements of communication that have not been addressed and should be documented separately. The project communication plan should compliment the plans previously mentioned.



Take an imaginary ride in a hot air balloon, as we rise we see specialty offices, and we see other people we will interact with in order to deliver the project. People representing customers, other agencies, and specialty groups in Regions and at HQ. We see the “big picture”. This is helpful during work planning. We recognize relationships that need to be established and maintained in order to work effectively.

Steps for Communication Planning

1. Identify project participants and stakeholders, including their functions and interests associated with the project and its performance.
2. Identify the project specific information needs of each participant and stakeholder. Using the project WBS, identify the information produced from each deliverable and develop the “draft” communication matrix. This includes identifying the distribution, recipients, medium, frequency, and timing, etc., for the information from each deliverable.
3. Review and adjust the draft communications matrix with the project team and the region or organization Public Information Officer, and identify constraints on communication with any participant or stakeholder, (organizational, contractual, and legal, etc.).

Plan the Work

Communication Plan

Plan the Work

Develop Communication Plan

INPUT

- Completed Initiate & Align Worksheet
- Previously identified PMP elements

TOOLS

- Communication Plan Template
- Sample Communication Plan

PRODUCTS

Completed Project Communication Plan

Communication

The exchange of information to the relevant parties (including ideas, expectations, goals, commitments, requirements, recommendations, and status) is vital to project success.

- Who needs the information?
- What information do they need?
- When do they need the information?
- How will the information be provided to them?

Steps for Communication Planning (cont'd.)

4. Review the draft communication matrix with the appropriate participants and stakeholders, including the information they will be receiving, its frequency, medium, etc. Verify its suitability and usefulness for their purposes and gain their endorsement.
5. Using the communication matrix as a basis and the communication plan template as the outline, develop the “draft” Communication Plan for the project.
6. Review the Draft Communication Plan with the Region or Organization Public Information Officer and management.

Communication

<p>_____ is the exchange of information to the relevant parties (including ideas, expectations, goals, commitments, requirements, recommendations, and status) is vital to project success.</p>

Increasingly, organizations use project teams to work across space, time, and organizational boundaries, linked by webs of communication technologies. Such teams, often widely dispersed, do not have the benefit of informal communication that occurs daily when teams are in the same office.

The project team and manager must pro-actively and effectively use the communication plan and available technologies to ensure project information is getting to the right people at the appropriate time and manner.

Effective communication is vital to the success of a project. When a breakdown in communication occurs, disaster may follow. Typical communication patterns or channels are shown on the slide to the right. Most project managers communicate laterally, where line managers communicate vertically downward to subordinates.

Plan the Work

Communication

The exchange of information to the relevant parties (including ideas, expectations, goals, commitments, requirements, recommendations, and status) is vital to project success.

The diagram shows a pyramid with the title 'Plan the Work' at the top. Inside the pyramid, the text 'Operational Islands' is centered. To the left of the pyramid, the text 'Managerial Gaps' is written. To the right, the text 'Functional Gaps' is written. A diagonal line on the right side of the pyramid is labeled 'Bridge'.

Plan the Work

Communication Channels

```

graph TD
    subgraph Left
        PSE1[Project Sponsor or Executive] <--> PM1[Project Manager]
        PM1 <--> E1[Employees]
    end
    subgraph Right
        PSE2[Project Sponsor or Executive] <--> PM2[Project Manager]
        PM2 <--> E2[Employees]
    end
    PSE1 <-- Informal --> PSE2
    PM1 <-- Formal --> PM2
    E1 <-- Informal --> E2
        
```

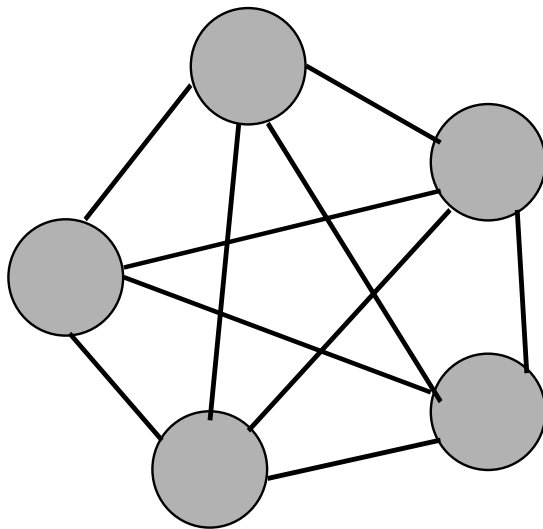
Perception barriers can occur because individuals can view the same message in different ways. Factors influencing perception include the individual's knowledge, experience, and abilities. Clearly defining terms or using words that have precise meaning can minimize perception problems. For example, what does the acronym PMP mean to you?

Personal likes and dislikes can affect communication; people tend to turn a deaf ear to boring topics. How often have you been in a meeting that has gone off on another subject and "tuned out"? Attitudes, emotions, and prejudices also warp our sense of interpretation.

Communication channels refer to how many paths of communication can exist on a project. Because the project manager needs to manage and be in control of project communications, it is important to understand that adding a single person on a project can have a significant impact on the number of paths or channels of communication that exist between people.

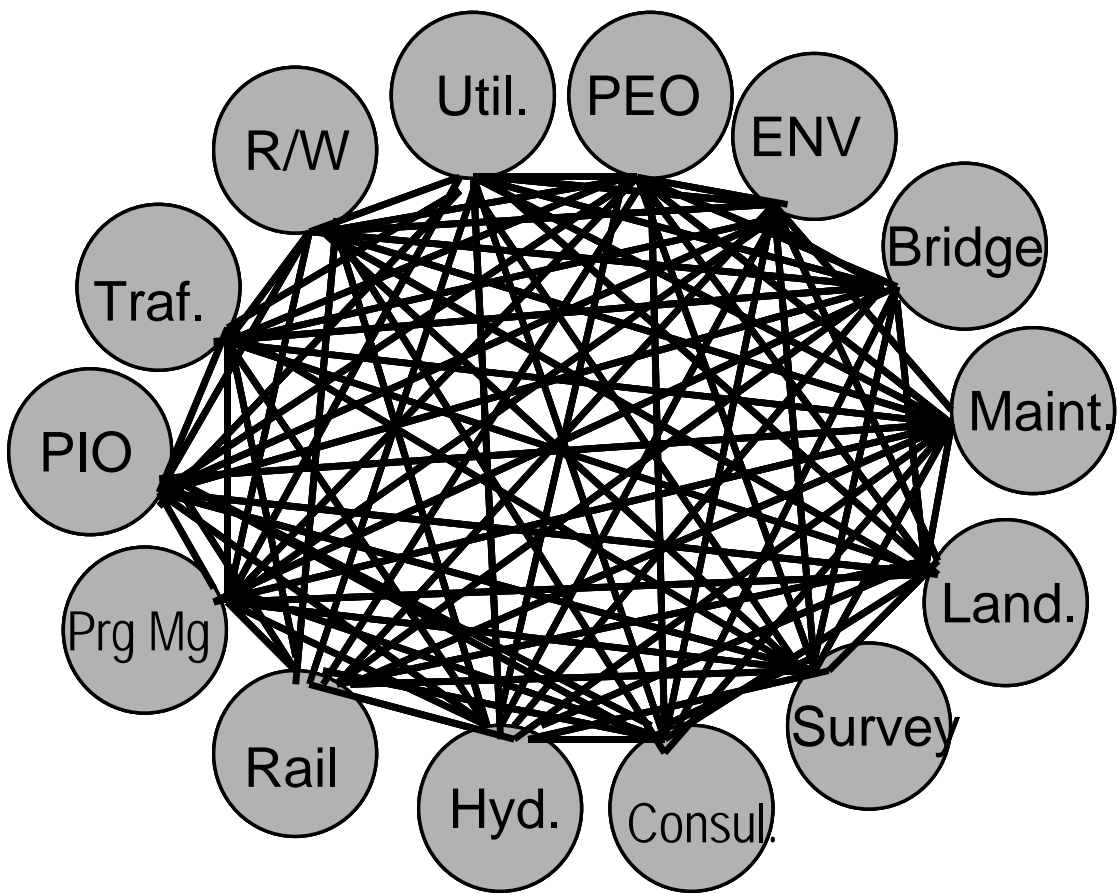
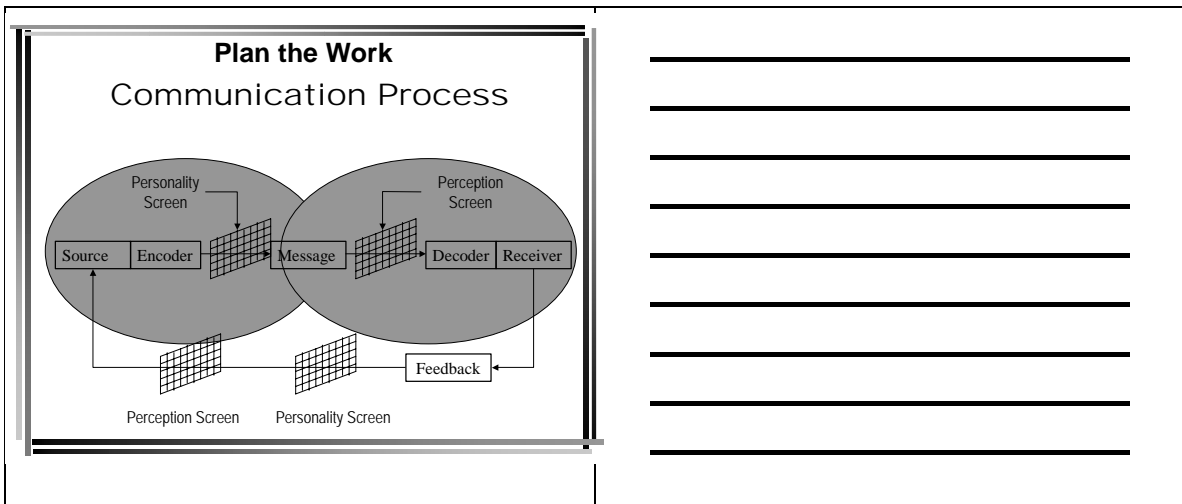
$$\text{Channels} = n(n-1)/2$$

How many lines of Communication?



$$n(n-1)/2$$

n = the number of
people on the project



How many lines of Communication?

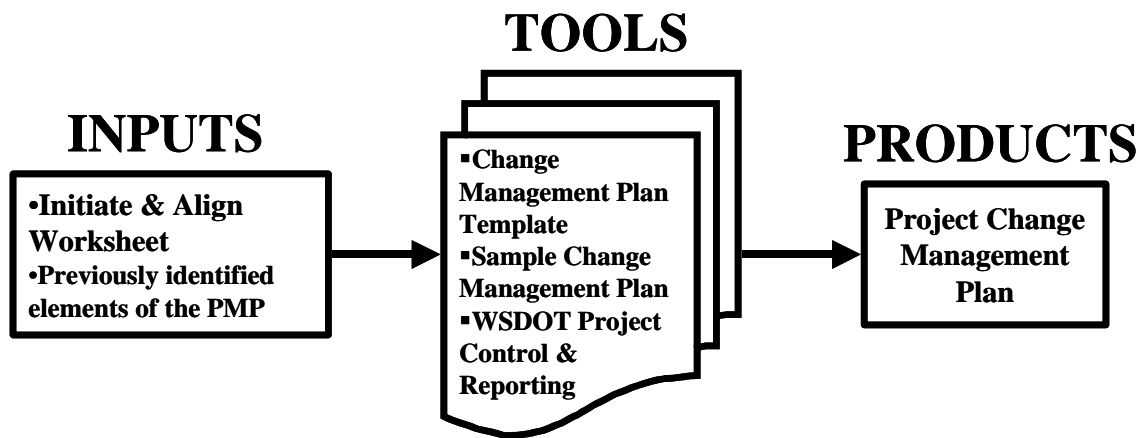
Keep all elements of the Project Management Plan in mind during development and implementation of the Communication Plan. During Work the Plan, it is essential to communicate change or risk events that impact the quality of the scope, schedule, and/or budget.

Using each of the individual plans within the Project Management Plan as standing agenda items will ensure open communication and action(s) taken at the appropriate time.

<p>Plan the Work</p> <p>Communication Plan</p> <p>Other Considerations:</p> <ul style="list-style-type: none">• Project Performance Baseline• Risk Management Plan• Change Management Plan• Quality Plan• Transition & Closure Plan	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

Change Management

Successful project delivery requires we be prepared for potential change. A common tendency is to deny that change is occurring until it becomes overwhelming. A _____ (CMP) provides the roadmap for decision making when change occurs. Since it is not possible to foresee all potential changes, a project manager plans how change will be addressed when encountered.



Steps for Change Management Planning

Develop a plan for identifying, quantifying, approving, and reporting changes to the Project Performance Baseline – scope, schedule, and budget.

1. Establish, define, and document the Project Performance Baseline components representing scope, schedule, and budget:
 - Project WBS
 - Project baseline schedule
 - Project Budget
 - Prior adjustments to the baseline
 - Depending on the project, define certain elements that document site and performance conditions, limits of work, geotechnical or other physical characteristics, periods of work, or other performance constraints, etc.

For each component of the baseline, identify the specific project thresholds that trigger the formal change management process.

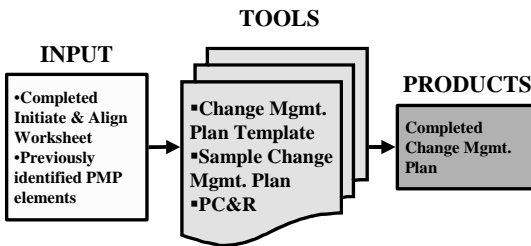
Change Management Plan

The roadmap for decision making when change occurs.



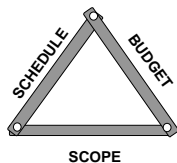
Plan the Work

Develop Change Management Plan



Change Management Plan

The roadmap for decision making when change occurs.



Project Performance
Baseline components



Change Management
Thresholds & Triggers

2. Develop and document project specific processes and instructions for the change management process.
 - Identify, report, and track potential change issues.
 - Team and individual responsibilities for identifying and reporting all potential change issues.
 - Establish & use a single change issue tracking and management log.
 - Work with Region/Organization Management, Region Program Management, and the Project Control and Reporting Office to establish change reporting thresholds and levels of authority.
 - Review the Risk Management Plan and risk response strategies and recovery plans.
 - Identify endorsement requirements for changes to the Project Performance Baseline.
 - Update the Project Performance Baseline.
 - Develop guidance for documentation and incorporation of change in design or other product records.
3. Gain Endorsement for the project specific Change Management Plan from Region or Organization Management.
4. Review the plan with the project team and provide instructions on the specific responsibilities of each team member.

Note: WSDOT has formal processes and procedures in place for managing the change process, and compliance is mandatory.

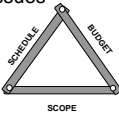
- Review the appropriate procedures and thresholds.
- Consult with Region Management, Program Management, and Project Control & Reporting before establishing specific project procedures.
- Use the standardized Project Control Form when required.

Information on the change management process, including the Project Control Form, is available on the Intranet at: wwwi.wsdot.wa.gov/ProjectReporting/

Change Management Plan

The roadmap for decision making when change occurs.

- ✦ Document processes for change management
- ✦ Identify, report, & track potential change issues
- ✦ Establish change tracking log
- ✦ Identify Endorsement requirements



Update the Project Performance Baseline

Gain Endorsement

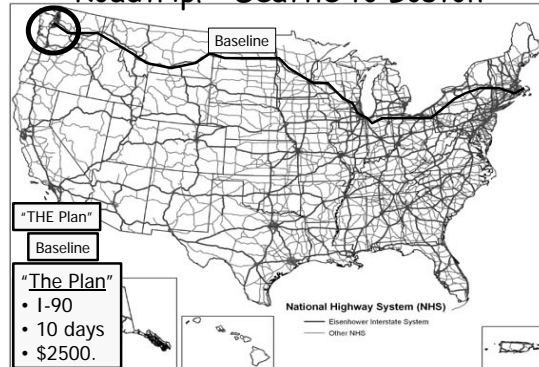
Plan the Work

Formal Processes & Procedures

- Review procedures & thresholds
- Consult with:
 - Region Management
 - Program Management
 - Project Control & Reporting
- Use the Project Control Form (as required)

www.wsdot.wa.gov/ppsc/pgmmgt/dpsb

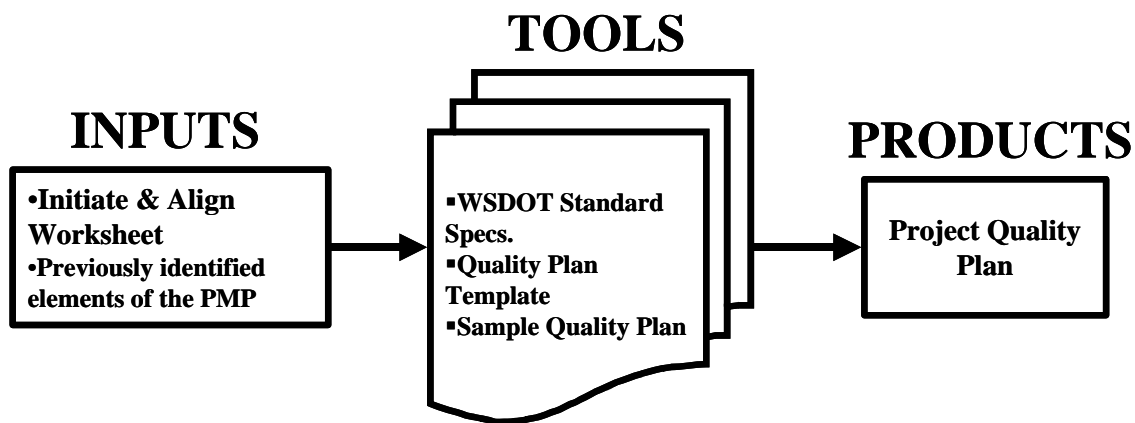
Roadtrip! - Seattle to Boston



Quality (QA/QC) Plan

Quality Management includes all activities of project management that determine the project quality objectives and applicable standards, the responsibilities of project participants, and the requirements for _____
_____ and _____
_____.

Quality Planning involves identifying which quality standards are relevant to the project and determining how to satisfy them. The activities of the quality planning process basically translate existing quality policy and standards into a project Quality Plan, and the project Quality Plan into a project quality compliance matrix for documenting performance and results.



Steps for Quality (QA/QC) Planning

1. Review each work element of the project WBS and determine the applicable standards for each process, product, and deliverable.
2. List each of the applicable standards with the appropriate work element in the “draft” Quality Plan.
3. Using the draft Quality Plan, review each work element and applicable standards with:
 - Performing Staff – Verify understanding of assignment, specific quality standards and requirements, and qualifications for performance. Develop specific plans and documentation procedures for performance and achievement of the quality standards.
4. Complete the Quality Plan and review updating and reporting procedures with appropriate team members.

Plan the Work

The purpose of the Quality Plan is to document the project's quality standards and goals and to provide a baseline against which the Quality Assurance / Quality Control efforts of the Project Team may be compared.

INPUT

- Completed Initiate & Align Worksheet
- Previously identified PMP elements

TOOLS

- WSDOT Std. Specs.
- Quality Plan Template
- Sample Quality Plan

PRODUCTS

Completed Quality Plan

Plan the Work

Quality (QA/QC) Plan

- Review the Project Performance Baseline
- Identify applicable Quality standards
 - Design Documentation Checklist
 - Design Matrices
- List the work elements & standards
- Review with performing staff

*The purpose of the **Project Quality Plan** is to document the project's quality standards; to provide a baseline against which the QA/QC efforts of the project team may be compared.*

Plan the Work

WSDOT Quality Assurance & Control

- **Quality Assurance** – the process of evaluating overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards.
- **Quality Control** – the process of monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance.

The Quality Plan provides a baseline against which the QA/QC efforts of the project team can be compared. A project Quality Compliance Matrix is a tool for documenting the planned efforts, their accomplishments, and their outcomes. Quality management:

- Is a consistent approach to meeting appropriate quality standards, objectives, and requirements on all WSDOT projects.
- Is performed only on those quality activities that add value to WSDOT projects.
- Shifts the focus from review and correction of work performed to those activities that enhance the production of quality during the planning and performance of the work in order to minimize costly rework.
- Establishes responsibilities for meeting appropriate quality standards on all WSDOT projects.

Plan the Work

Why do we need a Quality Plan?

- Consistency
- Value
- Avoidance of Rework
- Responsibilities



Transition & Closure Plan

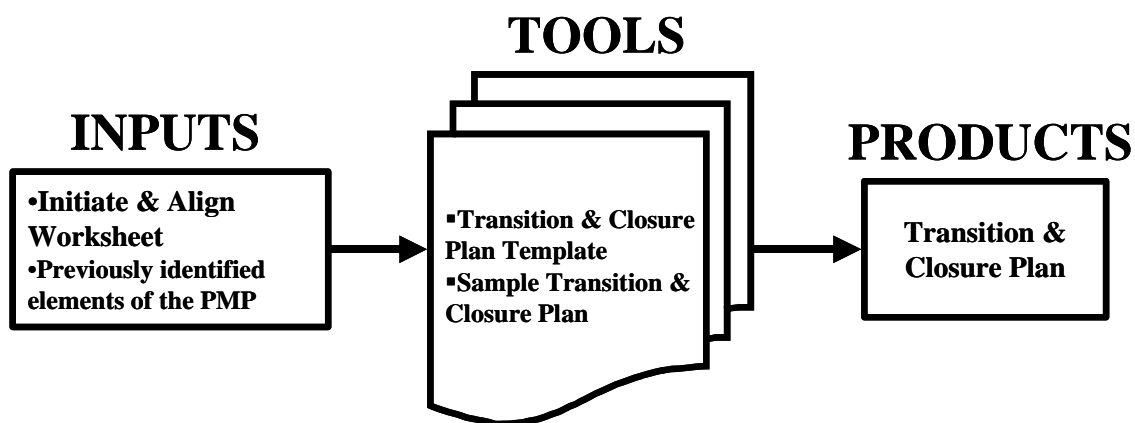
Transition and Closure is the process of completing a major activity, phase, or the project itself. This includes transferring the completed work and remaining project responsibilities to others, demobilizing the appropriate team members and facilities, completing document archiving, and closing out the administrative and financial processes associated with the activity, phase, or the project.

The _____ outlines the points in the project at which formal transition and closure activities will take place, the requirements of the transition, the responsible organization, and the process steps that will be taken to accomplish an efficient and effective transition.

The resulting Transition and Closure Plan is an integral part of the Project Management Plan and is implemented at appropriate points throughout the project and at project completion.

Certain elements of the Transition and Closure Plan are implemented continuously, e.g. Lessons Learned, Reward and Recognition, etc. Other elements can be implemented at appropriate intervals prior to the full completion of the work of the activity or phase (preparing no longer needed files for archiving, demobilizing staff, facilities or equipment no longer needed for the work, etc.). All Transition and Closure activities are completed before the activity, phase or project is deemed “complete” and the Project Manager is released from responsibility for the project.

Begin with the End in mind



Transition & Closure Plan

The Transition and Closure Plan outlines points in the project at which formal transition and closure activities will take place, the requirements of the transition and the responsible organization, and the process steps that will be taken to accomplish an efficient and effective transition.



Begin with the End in Mind!

Transition & Closure

➤ **Transition** – the process of changing from one phase to another.

➤ **Closure** – the act or process of closing, a finish or end.



Steps for Transition and Closure Planning

1. _____

Identify major activities and milestones of the project that will require a formal transition process. In general, there are clear transition points between Pre-Construction and Construction. Other transition points may be more obscure and associated with the project type, or specific to the project itself. Consider the following criteria:

- Delivery & acceptance of major elements of work.
- Transfer of responsibility for all or a major portion of the project.
- Major changeover of project staff, resources, or location of performance.

2. _____

- Identify all of the work included in each transition and develop acceptance criteria for all deliverables.
- Identify the responsible parties for each element of the work to be accepted – the performers and those accepting the work
- Work with the appropriate staff to establish a common understanding of the requirements and acceptance criteria.
- Identify the activities and responsibilities involved in the completion and acceptance process, and develop a discrete transition and closure schedule for the specific transition event or incorporate them into the Project Performance Schedule.

3. _____

- Staff - Planning for the transition of staff is one of the most critical Transition and Closure planning activities. The absence of a sound approach to staff transition often creates a “non-productive” environment in which the staff is focused on identifying their next assignment.
- Facilities, Equipment and Services - Identify all of the activities, steps and requirements for demobilizing and returning (or terminating) facilities, equipment and services as they are acquired. For each transition event; establish roles, responsibilities, budgets and schedules for all demobilization activities.

Plan the Work

Transition & Closure Plan

- Establish Transition/Closure Points
 - Scoping to Pre-Construction
 - Pre-Construction to Construction
 - Construction Complete
- Develop Acceptance Criteria
- Demobilization Strategies
 - Staff reassignment
 - Facilities, equipment, services
 - Roles & responsibilities

4. _____
 - WSDOT has established a formal Lesson Learned System, which includes the collection of lessons learned from WSDOT projects.
 - Based on the requirements of the WSDOT Lessons Learned System, establish specific project team activities and responsibilities for identifying, documenting, reporting and compiling lessons learned. During the course of the project, and as each transition point is reached, compile and report the complete lessons learned file for the appropriate area or phase of the work.
 - Information for the Lessons Learned process is found at:
<http://wwwi.wsdot.wa.gov/IPD/WSDOT+Lessons+Learned.htm>
5. _____
 - Review archiving requirements with Region/Organization Management.
 - Develop specific instructions on record keeping, document management and preparation for archiving during the course of the project.
6. _____
 - Review the requirements and specific procedures for financial closure of the activity, phase or project with Region/Organization Management and the Program Management Office.
7. _____
 - Review requirements and policies regarding reward and recognition with Region/Organization Management.
 - Identify “target” performance measures in “key” areas that are critical to project success. The measures should indicate performance beyond expectations and should be “stretch” targets that are achievable, but require significant “extra” effort to accomplish.
 - Based on these “key” areas and target performance measures, identify appropriate project rewards and recognition for exemplary performance. Consider non-monetary recognition and rewards as well as those requiring budget allocations.
 - Develop a budget around the appropriate awards and targets and include in the Project Management Plan.

<p style="text-align: center;">Plan the Work</p> <p>Lessons Learned</p> <ul style="list-style-type: none"> • Identify processes to document, report, & compile • Establish Team activities & responsibilities • Report lessons learned <p>Lessons Learned System: www.wsdot.wa.gov/IPD/WSDOT+Lessons+Learned.htm</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">Plan the Work</p> <p>Archive</p> <ul style="list-style-type: none"> • Review WSDOT requirements <ul style="list-style-type: none"> – Design Manual – Design Documentation Checklist – Others? • Develop archiving instructions <ul style="list-style-type: none"> – Identify documents to be retained – Where should they be stored? – For how long? – Who is responsible? 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">Plan the Work</p> <p>Financial Closure</p> <ul style="list-style-type: none"> • Review requirements & procedures <p>Reward & Recognize</p> <ul style="list-style-type: none"> • Review WSDOT policy • Identify "target" performance metrics <ul style="list-style-type: none"> – Individual – Team • Rewards and recognition for exemplary performance • Develop a budget 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

8. Transition and Closure Schedules and Budgets

- The activities to be performed must be included into the Project Baseline Schedule. The required budgets for their performance must be established so they can be tracked and their status monitored.
- All transition activities should be linked to the appropriate project milestones and activities for tracking and status monitoring. This provides as an effective method to ensure that they are not overlooked.

Remember that the Transition and Closure process starts during planning. Many projects are “put on the shelf” for a number of years before they are actually completed. Good records – starting with the Project Management Plan and a sound Transition and Closure Plan can expedite the start-up and completion process.

Even if all of the requirements, roles and responsibilities are not understood when beginning the planning for the Transition and Closure process, include your best estimates and “guesses” in the Transition and Closure Plan and upgrade it regularly throughout the project.

Plan the Work

Transition & Closure Plan

- Schedule Closure
 - Track activities performed
 - Ensures activities are not overlooked
- Shelf Projects
 - Expedites start-up and completion process.
- Update throughout the process

Transition & Closure Plan

```

graph LR
    A([Initiate & Align]) --> B([Plan the Work])
    B --> C([Endorse the Plan])
    C --> D([Work the Plan])
    D --> E([Transition & Closure])
    E -- Lessons Learned --> B
    C --- F[Project Team Commitment  
Management Endorsement]
    E --- G[Implement Transition Plan  
Review Lessons Learned  
Reward & Recognize  
Archive]
    
```

Endorse the Plan

Can I have your John Hancock please?

Endorsement is the final step in the preparation or planning phase of the project management process. It can be simple if the team is prepared and ready with a quality work plan. A good plan instills confidence within the team and with the sponsors and customers. Once the work plan is endorsed the project moves into the “Work the Plan” phase of development.

Communication must be clear, coherent and complete... people are asked to commit to something.... they need to know what that something is. It is natural for them to be curious about how something will get done, how much will it cost, how long will it take, and why?

What is Endorsement?

Endorsement unifies a group of individuals and transforms them into a team. Effective endorsement involves communication and collaboration during the Initiate and Align phase and Work Planning. By endorsing the work plan, key participants take ownership of the team mission and agree upon the method by which it will be accomplished.

Approval

Favorable regard; to confirm or agree to officially.

Commitment

An agreement or pledge to do something.

Endorse

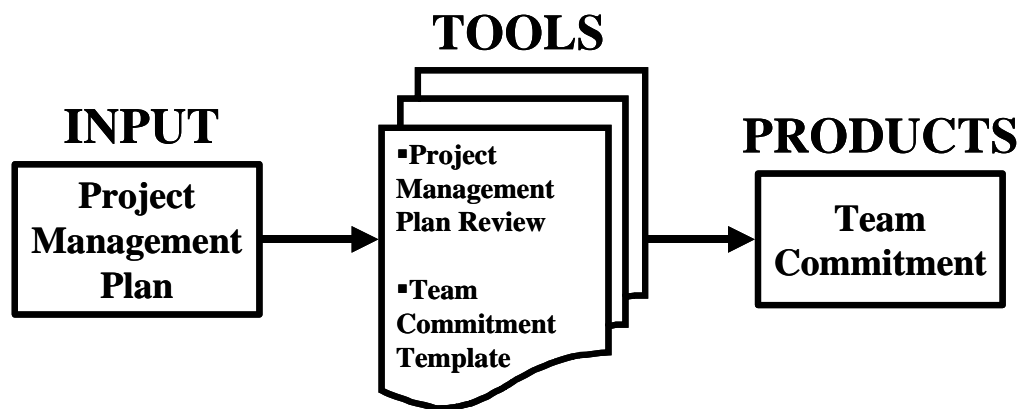
To approve openly, to express support or approval publicly and definitively.

Project Team Commitment

The process of gaining the commitment of project team members to the Project Management Plan can be as simple as a discussion of their assignment and their commitment to perform that assignment, or as formal as a workshop session with all team members, culminating in a formal, signed document committing to the Plan.

In all cases, the result is an understanding of the Plan, the team members' role in its execution, and their specific commitment to perform their responsibilities according to the Plan.

The Endorsement process can unify a group of individuals and transform them into a team.



Steps for obtaining Project Team commitment:

1. Identify the Participants

The project team is comprised of all project participants required to deliver the project. This includes those directly engaged by the project, as well as specialty groups, consultants, contractors, and other organizations or agencies.

Review the Project Management Plan, particularly the work breakdown structure and responsibilities, to identify all resources needed to complete the project.

Identify those project team members whose specific commitment to the Project Management Plan is appropriate.

Endorsement is easy when the participants have been included in the development of the Project Management Plan.

ENDORSE THE PLAN



Project Team Commitment

- Mutual understanding, agreement, & commitment to support the Project Work Plan
- “Grudging Compliance” is not Endorsement.

ENDORSE THE PLAN

Project Team Commitment

Steps:

1. Identify the participants and review the plan



2. Establish Endorsement Methods

Identify the appropriate methods for gaining commitment from each participant—individual discussions, group meetings, etc.

Formal Meeting: Participants review and sign-off on the Project Management Plan. The use of a formal endorsement meeting provides a team-building opportunity where participants can discuss their assignments; discuss the inter-relationships of their assignments with other assignments; develop their working relationships; and open the channels of communication.

Prior to the meeting, the Project Manager should:

- Coordinate with specialty groups.
- Coordinate with local agencies, cities, counties, police, emergency services, etc.
- Distribute the Project Management Plan for review.

The endorsement meeting should be held as soon as possible after completion of the Project Management Plan.

- Use the Project Management Plan as the structure for the meeting agenda.
- Discuss the team mission; roles and responsibilities; schedule; and resources to complete major deliverables.
- Discuss any outstanding issues.
- Review Change Management, Risk Management, Communication, Quality, and Transition/Closure Plans.
- Have a method for signifying commitment: signature on the Project Management Plan or a suitable substitute for documenting commitment.

Individual Discussions: A second approach is to conduct individual discussions and sign-offs with each predetermined project participant. The same principles used to conduct an organized session with a group apply here, except that it is less formal.

Distribute and Return: A third – and less desirable – approach is to distribute portions of the Plan, either electronically or by hard copy, to selected project participants and ask for their endorsement. It is important, if using this technique, to attach a cover letter that clearly states what is being requested, with directions for providing comments.

Often Project Management Plans are all-inclusive documents that overwhelm rather than inform the reader. They can be much more informative if they are transmitted with instructions that clearly focus readers on the portions of most

<p>ENDORSE THE PLAN</p> <p>Project Team Commitment</p> <p>Steps:</p> <p>2. Establish Endorsement Methods</p> <ul style="list-style-type: none">• Formal Meeting• Individual Discussions• Distribute & return	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

relevance to them. In some cases, only part of the project work plan needs to be transmitted, reviewed, and endorsed by project participants.

3. Establish a Schedule for the Endorsement Process

Endorsement is needed at any time the commitment of two or more parties is needed; but most importantly, as the Plan the Work process is concluding and the Project Management Plan is being completed for management endorsement.

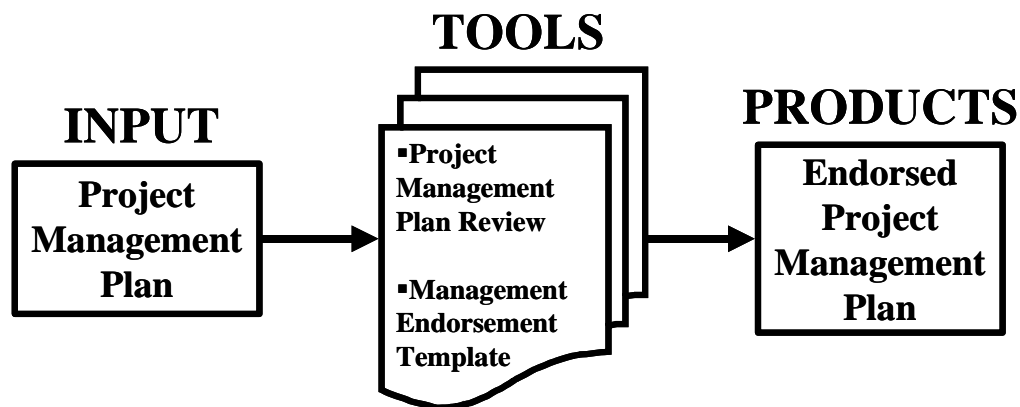
“The commitment of the project team is required before the endorsement of management is sought.”

Endorsement is ***not*** a one-time occurrence for most projects. The Project Management Plan should gain new endorsement any time there are major changes to the scope, schedule, budget, sponsor, or team members. Establishing team commitment as soon as possible will help expedite management endorsement.


Management Endorsement

Management includes those individuals who have responsibility and authority for resources defined in the Project Management Plan. Gaining management’s understanding of the Project Management Plan, particularly resource requirements, assumptions, schedule, and issues, leads to gaining their commitment to the project. It also provides the baseline of understanding needed to balance their total resource requirements to avoid “over commitment.”

The commitment of the management of all planned resources is essential to ensure that the right resources will be available when they are needed to support execution of the Project Management Plan.



<p style="text-align: center;">ENDORSE THE PLAN</p> <p>Project Team Commitment</p> <p>Steps:</p> <p>3. Establish the schedule for the Endorsement Process</p> <p style="text-align: center;"><i>"The commitment of the project team is required before the endorsement of management is sought."</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">ENDORSE THE PLAN</p> <div style="display: flex; align-items: center;">  <div> <p style="text-align: center;">Management Endorsement</p> <ul style="list-style-type: none"> •Understanding & acceptance •Mutual understanding, agreement, & commitment •Commitment of staff, tools, & resources </div> </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

Steps for obtaining Management endorsement:

1. Identify the Required Endorsements

Endorsement by management results in a specific commitment of support for the Project Management Plan and the resources necessary to successfully deliver it. This may include managers from specialty groups and/or other organizations. Endorsement is ***not*** a one-time occurrence for most projects. The project team should gain new endorsement any time there are major changes to the Project Management Plan—scope, schedule, budget, sponsor, or team members.

- Review Region/Organization requirements for management approval and endorsement requirements.
- Review the Project Management Plan and identify all organizational resources needed to complete the project.
- Review the Baseline Performance Schedule and identify the timing and levels of involvement for resources.
- Identify the appropriate management entities controlling all needed resources.

2. Establish a Schedule for the Endorsement Process

The commitment of the project team is required before the endorsement of management is sought. Obtaining management's commitment as soon as possible will allow a smoother start to project delivery.

The first choice is to obtain management endorsement in a meeting when all the necessary management staff can attend, discuss the required commitments, and share their observations on the Plan and its execution.

If a meeting is not possible, management commitment is gained individually or in groups and the resulting endorsements are sent to all participating managers by memo.

3. Obtain Management Endorsement

The purpose of formal endorsement is to acquaint and inform the manager with the requirements, quantity, and timing for the resources being committed, and to document that commitment.

It is highly recommended that documentation of the agreement be made and shared among managers and the team. The main consideration should be the level of commitment required and the need to document that commitment. The most direct method is to have the manager sign the Project Management Plan or the cover letter.

ENDORSE THE PLAN

Management Endorsement

Steps:

1. Identify the required endorsements



ENDORSE THE PLAN

Management Endorsement

Steps:

2. Establish a schedule for the Endorsement Process



ENDORSE THE PLAN

Management Endorsement

Steps:

3. Obtain Management Endorsement



Prior to the meeting, the Project Manager should have the following complete:

- Coordination with support offices/organizations
- Coordination with local agencies, cities, counties, police, emergency services, etc.
- Team-endorsed Project Management Plan

The endorsement meeting should be held as soon as possible after Team Endorsement.

- Use the Project Management Plan as the structure for the meeting agenda.
- Discuss team mission; roles and responsibilities; schedule; and resources to complete major deliverables.
- Discuss any outstanding issues.
- Review Change Management, Risk Management, Communication, Quality, and Transition/Closure Plans.

A rule-of-thumb is that those responsible for the resources should endorse the Project Management Plan. If higher levels of management commitment are needed, those committing the resources should identify them.

Having managers visibly endorse the Project Management Plan is a team motivator – use it!

“Don’t let the endorsement process get stale. Make it part of the work planning process, not a separate task.”

Project Performance Baseline

Once the Project Management Plan has been endorsed, a Project Manager saves the baseline of the project plan. This baselined plan is called the Project Performance Baseline.

The project Performance Baseline is a tool to evaluate the progress of the project. To compare what was planned to what has actually taken place. It allows the project manager to identify potential problems and use proactive measures to manage project issues. Use of this progress evaluation tool is discussed further in “Work the Plan”.

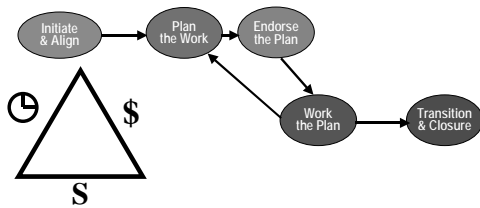
ENDORSE THE PLAN



Project Performance Baseline

- A baseline plan to evaluate project progress against what was planned and committed to.

ENDORSE THE PLAN



Changes to scope, schedule, or budget require evaluation for re-endorsement.

Work the Plan

Roll up your sleeves; it is time to get to work!

The team successfully moved through the “Initiate & Align”, “Plan the Work”, and “Endorse the Plan” elements and processes. In other words, we have readied, taken aim, verified the target, now it’s time to FIRE or “Work the Plan”. Failing to plan is planning to fail, we’ve taken time to plan our work, now let’s work the plan to ensure project success (delivery on time, within budget, to customer’s expectations)

The Project Management Body of Knowledge (PMBOK) Guide defines Project Management as the application of knowledge, skills, tools and techniques to project activities to meet project requirements. Project Management is accomplished through the use of the processes such as; initiating, planning, executing, controlling, and closing.

The project team manages the work of the projects, and the work typically involves:

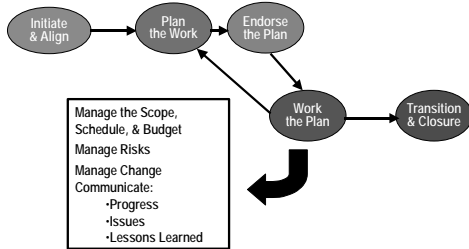
- Competing demands for: scope, time, cost, risk, and quality.
- Stakeholders with differing needs and expectations.
- Identified requirements.

The more you know about your project, the better you are able to manage it. By developing a work plan, the team, project manager, & sponsors comprehensively define project requirements. Endorsement of the work plan represents commitment by key participants and ensures it is consistent with sponsor and customer expectations.

Working the plan is:

- Actively managing those planned elements, including the scope, schedule, & budget.
- Effectively communicating & building on relationships with the team, customers and sponsors.
- Actively monitoring and managing identified risks and change.
- Communicating changes before they occur.

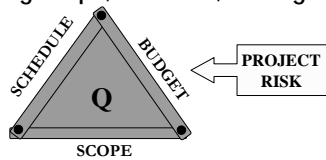
WORK THE PLAN



WORK THE PLAN

Working the Plan is...

Actively managing those planned elements, including scope, schedule, & budget



WORK THE PLAN

Working the Plan is...

Actively monitoring and managing identified risks and change...



WORK THE PLAN

Working the Plan is...

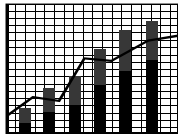
...and responding proactively instead of
reactively to potential
changes and risk



WORK THE PLAN

Working the Plan is...

Communicating project progress, project
issues, and lessons learned



WORK THE PLAN

Working the Plan is...

Effectively communicating & building on
relationships within the team, customers, &
sponsors



Manage Scope, Schedule, & Budget

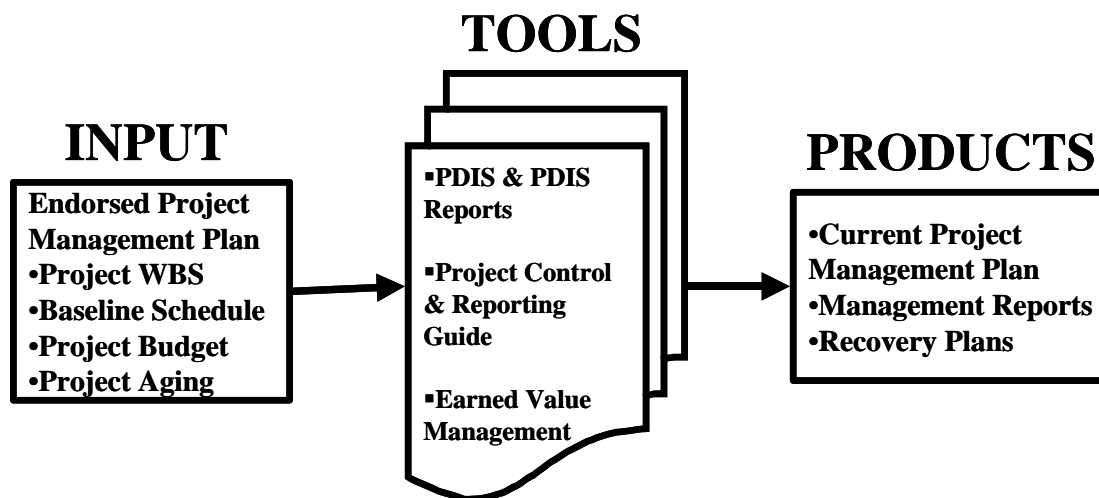
So what does managing the Scope, Schedule & Budget mean?

Managing the Project Scope is ensuring that the projects includes all the work necessary and is performed according to expectations (specifications).

Managing the Project Schedule is ensuring that the project is completed in a timely manner and by the accepted or approved dates.

Managing the Project Budget is ensuring that the project is completed within the allotted or approved budget.

A project manager should be “large and in charge” and have an influence on all project parameters (requirements, time, cost).



Steps for managing scope, schedule, and budget:

1. Project Performance Baseline

The “Project Performance Baseline”—the Project WBS, Project Baseline Schedule, and Project Budgets—serves three critical functions in managing the project:

- _____: Provides the target metrics and measures that we use to gauge actual performance against plan.
- _____: Provides a basis for identifying and understanding the potential impact of performance problems.
- _____: Provides the background and basis for “testing” solutions to performance problems.

<p style="text-align: center;">WORK THE PLAN</p> <p>Managing Scope, Schedule, & Budget</p> <ul style="list-style-type: none"> •Project includes all work required and quality is consistent with the expectations (Scope) •Timely completion of the project (Schedule) •The project is completed within the approved budget (Budget) 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Project Performance Baseline</p> <ul style="list-style-type: none"> •Project Work Breakdown Structure (WBS) •Project Baseline Schedule •Project Budget <p>Serves three critical functions in managing the project</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

2. Maintain the Baseline (Scope, Schedule, and Budget)

The effectiveness of the Baseline to the project team is only as good as its accuracy. The project team should “freeze” the original Baseline data and maintain a “current” Baseline by updating it on a regular basis to incorporate changes and current information.

Whenever scope, schedule, or assigned resources change, a corresponding budget change is required.

3. Monitor Performance:

Scope Verification:

- Configuration – The project team must verify that the products being produced in the Pre-Construction Phase meet all of the requirements established for them and that they conform to WSDOT standards and specifications and comply with WSDOT policies.
- Quality – The project Quality Plan should be frequently reviewed to verify that quality management actions are being performed as planned and with the results expected.

Performance Measurement: As a part of assessing project performance against the Baseline, verify the following:

- Actual Work Completed
- Actual Schedule Consumed
- Actual Costs/Budget Consumed

Regions and Organizations may have specific methods and programs for measuring performance, including Earned Value Measurement Systems. Discuss plans for measuring project performance with Region/Organization Management.

4. Identify Variances and their Sources

Review each component of the Baseline and identify any significant differences between planned and actual performance. For each variance, determine the severity of impact and its source; i.e., the reasons why there was a variance and the conditions that led to it.

5. Forecast Performance

Before determining a course of action to correct a variance, evaluate the Baseline for the remainder of the project and determine the probable outcome at

<p style="text-align: center;">WORK THE PLAN</p> <p>Project Scope Management</p> <p>Scope Change Control</p> <ul style="list-style-type: none"> •Identifies when a change has occurred •Manages change when and if it occurs •Influence those factors that create change •Ensure they are beneficial and endorsed 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Project Schedule Management</p> <p>Schedule Change Control</p> <ul style="list-style-type: none"> •Identifies schedule changes •Analyze planned vs. actual and manage the required schedule adjustments •Influence those factors that create change •Ensure they are beneficial and endorsed 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Project Budget Management</p> <p>Budget Change Control</p> <ul style="list-style-type: none"> •Identify cost baseline changes •Analyze planned vs. actual and manage the required budget adjustments •Influence the factors that create budget changes 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

completion for each component. The re-evaluation of the work to be completed provides the understanding needed to develop and integrate recovery plans.

6. Manage Variances

Understanding the severity of the variance and its impact on the remainder of the work, the project team must decide how to adjust performance and conditions to avoid further impact and to recover from the variance.

Recovery Plans should be developed in the context of the remaining work. For example, directing resources to complete work that has fallen behind schedule should not create resource problem with work yet to be completed; adding resources will impact the budget for completing the work (hence, budgets must be adjusted).

Use the Performance Baseline to “test” the impact of Recovery Plans.

7. Obtain Endorsement:

- Project Team
- Region or Organization Management

Only adjust the Project Performance Baseline after the recovery plan has been endorsed.

Earned Value Management

An effective tool for measuring project performance, evaluating project costs, and reporting project information is Earned Value Management (EVM).

What is EVM? It’s a way to integrate the project scope, schedule, and resources to measure project progress.

EVM allows the project manager to compare the amount of work that was actually performed to what was planned and what was actually spent to determine if the project’s scope, schedule, and budget are progressing, or performing, as described in the endorsed Project Management Plan.

For more information, please sign up for the “Managing Scope, Schedule, and Budget” class, course code CPH, in ATMS.

<p style="text-align: center;">WORK THE PLAN</p> <p>Project Budget Management</p> <p>Budget Change Control (cont.)</p> <ul style="list-style-type: none"> •Prevent incorrect, inappropriate, or unauthorized changes from being included in the cost baseline •Ensure cost baseline changes are agreed upon and endorsed 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Earned Value Management (EVM)</p> <p><i>What is Earned Value Management?</i></p> <p><i>A method of integrating scope, schedule, and resources for measuring project performance</i></p> <p style="text-align: right;"><small>PMBOK Guide 3rd Edition</small></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

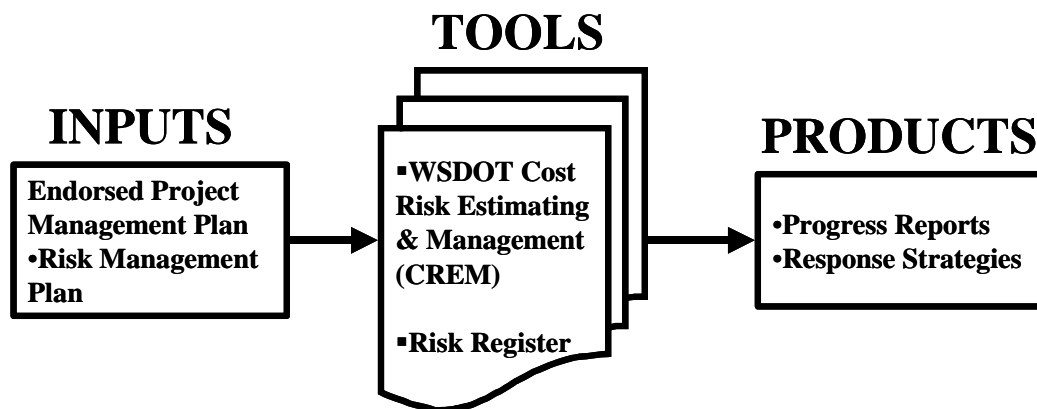
<p style="text-align: center;">WORK THE PLAN</p> <p>Earned Value Management (EVM)</p> <p><i>What is Earned Value Management?</i></p> <p><i>It compares the amount of work that was actually earned with what was planned and what was actually spent to determine if schedule and cost performance are as planned</i></p> <p style="text-align: right;"><small>PMBOK Guide 3rd Edition</small></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Manage Risks

Risk Management is an integral component of day-to-day project management. Project teams implement and continuously upgrade the Risk Management Plan throughout the project.

Primary Risk Management functions include:

- Monitoring risk and opportunity elements
- Identifying new risk and opportunity elements
- Evaluating/upgrading probability of occurrence and potential impacts
- Devising and implementing response strategies
- Evaluating and documenting the effectiveness of response actions
- Reporting to Region/Organization Management and Stakeholders






Steps for Managing Project Risks:

1. Implement and Manage the Risk Management Plan:

- Brief each team member on the Risk Management Plan and the criteria for the execution of their responsibilities.
- Risk reviews should be a standing agenda item at all team meetings.
- Maintain the Risk Management Plan and adjust risk responses as appropriate to provide visibility and understanding of current project conditions, status of Risk events, and the potential overall impact on the Project Performance Baseline.
- Report the status of the Risk Management Plan to Region/Organization Management.

<p style="text-align: center;">WORK THE PLAN</p> <p>Manage Risks</p> <p>Primary Risk Management Functions:</p> <ul style="list-style-type: none"> •Monitoring identified risk events •Identifying new risk events •Evaluating/revising probability & impact estimates 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Manage Risks</p> <p>Primary Risk Management Functions:</p> <ul style="list-style-type: none"> •Devising & implementing response plans •Evaluate/document effectiveness of responses •Reporting 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Manage Risks</p> <p>Implement & Manage the Risk Management Plan</p> <div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 20px;"> <div style="text-align: center;"> <p>Agenda</p>  </div> <div style="text-align: center;"> <p>Maintain</p>  </div> <div style="text-align: center;"> <p>Report</p>  </div> </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

2. Monitor and Control Potential Risk Events:

- Assign a team member to monitor and track each risk event according to the Risk Management Plan.
- Risk ratings and prioritization may change over the life of the project; changes may require additional analysis.
- Identify and report changes in probability of occurrence and potential impact.




3. Identify and Evaluate New Risk Elements:

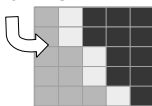

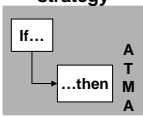
- Charge team members with the responsibility to continuously review project work and conditions and to identify new risk events.
- Add new risk events to the Project Management Plan and evaluate their probability of occurrence, potential impact, and timing.
- Identify appropriate triggers.
- Establish preliminary response strategies and, in keeping with Monitor and Control Risk Events (above), monitor and control each new risk event.


4. Implement the Risk Management Plan when Risk Events Occur

As Risk events reach the “imminent” stage:

- Review the planned response actions for appropriateness given current estimates of impacts and available resources.
- Use the Change Management process to enact and implement response actions and adjust the Project Performance Baseline—scope, schedule, and budgets—accordingly.
- Make appropriate assignments and track performance of the response actions.
- Monitor the effectiveness of each response action and adjust actions accordingly.
- Document each risk event and response action implemented as a basis for future actions and as a reference for reporting Lessons Learned.

<p style="text-align: center;">WORK THE PLAN</p> <p>Manage Risks</p> <p>Track and Monitor Potential Risk Events</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Assign</p>  </div> <div style="text-align: center;"> <p>Additional Analysis</p>  </div> <div style="text-align: center;"> <p>Report</p>  </div> </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Manage Risks</p> <p>Identify and Evaluate New Risk Elements</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>New Risk</p>  </div> <div style="text-align: center;"> <p>Identify triggers</p>  </div> <div style="text-align: center;"> <p>Response strategy</p>  </div> </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Manage Risks</p> <p>Implement Risk Management Plan when risk event occurs</p> <div style="text-align: center; margin-top: 20px;">  </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

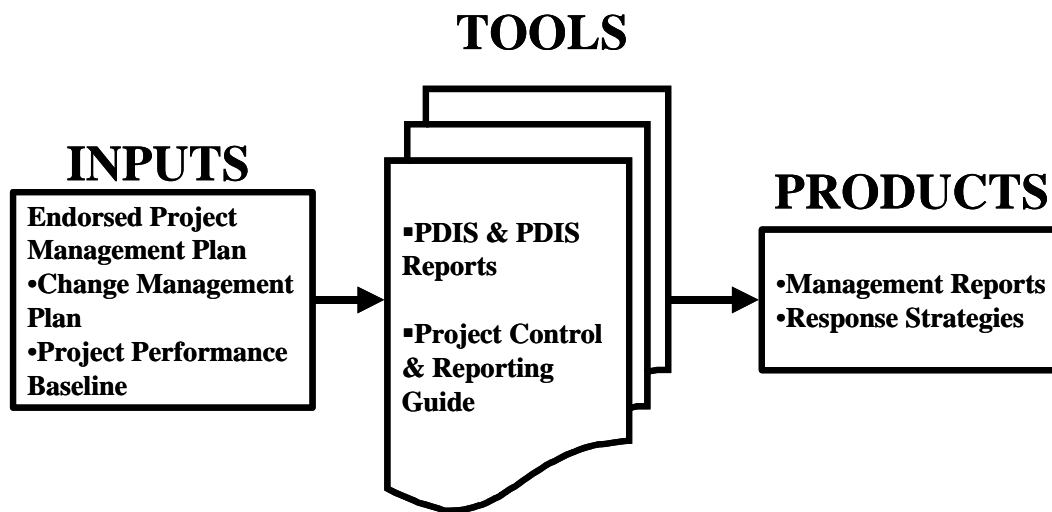
5. Manage Risk Response Resources

Contingency Funds are the “last resort” and are used only after all other means for Abatement, Avoidance, or Mitigation of risks have been exhausted.

Avoid the simple measure of percentage of project completion compared to contingency funds committed. Risk events do not occur evenly throughout the project.

Change Management

Project teams will implement the Change Management Plan developed in the planning process. This is part of the Project Management Plan. Active management of change issues is constant through the life of the project.




Steps for Managing Change:

1. Review the Project Change Management Plan

Brief the project team and other appropriate participants on the processes and procedures to follow in managing change and change issues in the course of their work on the project.

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p><i>Project teams implement the Change Management Plan (CMP) from the Project Management Plan (PMP) and actively identify and manage potential change issues.</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <div style="display: flex; align-items: center;">  <p>A CMP provides the framework for decision making when change occurs</p> </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p>Review Project Change Management Plan</p> <p><i>Brief team members and other participants on process and procedures</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

2. Identify and Manage Potential Change Issues:

- Brief the project team and other appropriate participants on their responsibility to notify the Project Manager (or other appropriate designee) of any significant change that has occurred, or may occur. Include the details—who, what, when, etc.
- Make potential risks and change issues a “standing” agenda item and have an open dialogue about risks and changes at all team meetings; it encourages responsibility for this process.
- Develop and maintain a Change Issue Log identifying and tracking each potential change issue—whether it is a “proven” change or not.
- Assign responsibility for tracking, verifying, and documenting each potential change issue and its ultimate disposition. Each potential change issue should be treated with high priority until its significance to the project is determined. Often—particularly in the design phase—potential change issues turn out to be “evolving design details” that are perceived as changes in scope or conditions. Although not generally considered a change, it is important to track and document these reports in order to avoid duplication of effort or their incorporation into other potential change issues.

3. Administer the Change Management Process:

- For each “real” change issue, analyze the nature and scope of the change and establish a formal change description.
- Evaluate and quantify the impact of the change on the project work and performance conditions, including changes required to completed, current, and future work product(s).
- Evaluate and quantify the impact of the change on the Project Performance Baseline (scope, schedule, and budgets—including contingency budgets) and potential risk.

4. Develop Mitigation/Recovery Strategies:

- Analyze the change for alternative actions to minimize the negative impacts and maximize the benefit of the change—including the “no action” option.
- Formally establish the scope of the change and direction for incorporating the changed work and conditions.
- Formally establish the required adjustments to the Project Performance Baseline—scope, schedule, budgets, and Risk Management Plan
- Solicit input and provide appropriate notifications to all team members—especially those whose performance is directly affected by the change.

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p>Identify and Manage Change Issues</p> <p><i>Identify and quantify the variance from the Project Performance Baseline</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p>Administer the Change Process</p> <p><i>Per the Project CMP, begin the process to address the change issue</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

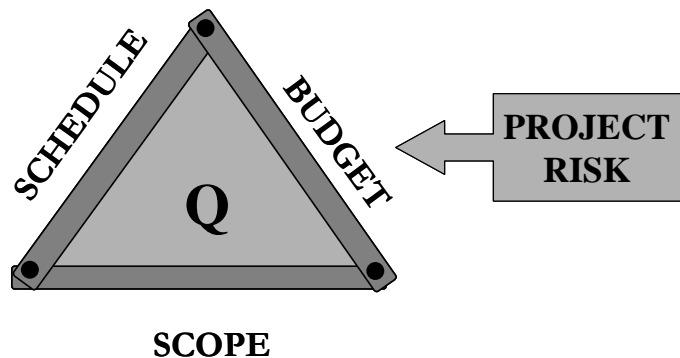
<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p>Develop Mitigation/Recovery Plans</p> <p><i>Per the Project CMP, develop plans to recover or mitigate the impacts of change</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

5. Obtain the appropriate Endorsements/Approvals and Distribute:

- Notify and consult with Region/Organization Management, Region Program Management, and the Project Controls & Reporting Office.
- Process a formal notice of change to the project team and Contract Change Orders as appropriate. Note: Consultants and Contractors may not proceed with—or get paid for—changed work until their Contract Scope of Work, Contract Amounts, and Schedules have been formally changed through the Contract Change Order process.

6. Update the Performance Baseline:

Work with Region Program Management to adjust the Project Performance Baseline



- Work Breakdown Structure – Determine appropriate methods for incorporating the changed work as separate from the original baseline scope of work.
- Schedule – Integrate the appropriate logic, duration, and resource revisions to accommodate the changed scope while maintaining visibility of the original baseline schedule.
- Budgets – Make the appropriate budget adjustments including transfers from contingency budgets to work budgets.
- Impacts to Quality Planning and Project Risks.

7. Communicate changes per the Project Communication Plan:

- Project Team
- Region/Organization Management

Emphasize the importance of prompt attention to evaluating each potential change issue. Identifying the “real” change quickly gives the team more time and options for minimizing negative impacts and maximizing benefit. Establishing the Project Performance Baseline is key, as it allows the Project Manager to identify and quantify the changes to the Project Plan.

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p>Obtain Endorsement</p> <p><i>Project Management iterative process. Obtain endorsement for recovery/mitigation plan</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p>Update Project Performance Baseline</p> <p><i>After endorsement of the recovery/mitigation plan, update the project Performance Baseline to reflect the current endorsed plan.</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Change Management</p> <p>Communicate</p> <p><i>Per the Project Communication Plan, update project team on the changes made.</i></p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Communication and Team Building

Working the plan is about actively managing the planned elements. Continue to foster customer relationships and communicate with the project team and sponsor(s).

Customer Relationships

Know and manage customer expectations. Involve the customers as they wish to be involved. Communicate progress as identified in the Communication Plan and resolve conflict as necessary.

Communication

Appropriate frequency and quality of communication between the project manager, team members and sponsors is essential for project delivery. Facilitating the effective exchange of the necessary information between project participants and interested parties. Project managers and team members apply the Communication Plan endorsed for the project.

Team Building

Teams are dynamic; they must be built and sustained. As they move through the spectrum of team development they must be continually managed to attain high performance, produce results, and deliver the project.

A team:

- is a group of individuals who work for a common purpose to produce a specific outcome.
- continuously develops group and individual skills to enhance team performance.
- effectively develops and implements a reward and recognition strategy.
- works together to correct mistakes to minimize negative impacts.
- works together to learn from accomplishments and mistakes.

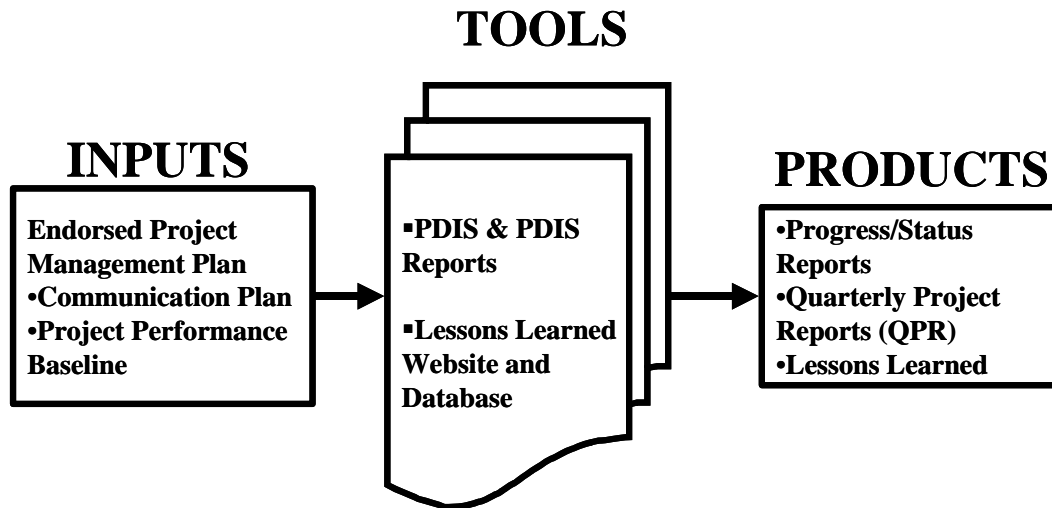
<p style="text-align: center;">WORK THE PLAN</p> <p>Communication & Team Building</p> <p><i>Customer Relationships</i></p> <ul style="list-style-type: none"> •Know and manage customer expectations •Communicate progress •Resolve conflict as necessary 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Communication & Team Building</p> <p><i>Communication</i></p> <ul style="list-style-type: none"> •Appropriate frequency and quality is essential for project delivery 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---	---

<p style="text-align: center;">WORK THE PLAN</p> <p>Communication & Team Building</p> <p><i>Team Building:</i></p> <ul style="list-style-type: none"> •Teams are dynamic •Teams must be built •Teams must be sustained 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
--	---

Communicate: Progress, Issues, and Lessons Learned

Project teams implement the Communication Plan from the Project Management Plan.



Steps for implementing the Project Communication Plan:

1. Implement the Communication Plan

The Communication Plan establishes the types of information to be distributed, both within the project team and to the public. It defines the recipients and the methods and frequency of distribution. The goal of the Communication Plan is to provide all appropriate participants with the information they need to support their roles and execute their responsibilities. The Project Manager and the project team are responsible for implementing the Communication Plan, which includes updating and adjusting the Plan to accommodate the information needs of all participants and the status of the project work.

2. Progress Reporting

Progress Reporting is an integral part of WSDOT project delivery and is a major part of the project team's responsibility. Progress Reports are shared within the project team and are provided to Region/Organization Management and the public, as established in the Communication Plan.

Depending on the nature of the project, the recipients, and a number of other factors, Progress Reports will vary in content and frequency, but will generally include:

WORK THE PLAN

Communication

Project teams implement the Communication Plan from the Project Management Plan (PMP).

WORK THE PLAN

Communication

Implementing the Communication Plan



WORK THE PLAN

Communication

Progress Reporting



- Current activity and significant accomplishments
- Production and schedule status
- Budget status
- Change and risk status
- Status of recovery and corrective action plans
- Planned activities for the next period

3. Issues and Issues Reporting

The project team is responsible for the management and reporting of “issues” encountered during the performance of the work. Issues—potential change or risk events—have a positive or negative impact on the project scope, schedule, or budget. Resolution of these issues and recovery plans from any impacts must be communicated to Region/Organization Management and the public as established in the Communication Plan, Change Management Plan, and/or Risk Management Plan.

4. Reporting Lessons Learned

“Lessons Learned” is defined as “knowledge gained from experience, successful or otherwise, for the purpose of improving future performance.” WSDOT has developed a “Lessons Learned System,” or database, to capture and share these lessons. The System will help eliminate trial and error, reduce the reinvention of the wheel, and ultimately improve our ability to deliver projects on time and within budget.

<http://wwwi.wsdot.wa.gov/IPD/WSDOT+Lessons+Learned.htm>

WORK THE PLAN

Communication

Issues & Issues Reporting



WORK THE PLAN

Communication

Lessons Learned

<http://wwwi.wsdot.wa.gov/IPD/WSDOT+Lessons+Learned.htm>



WORK THE PLAN

Communication – Lessons Learned



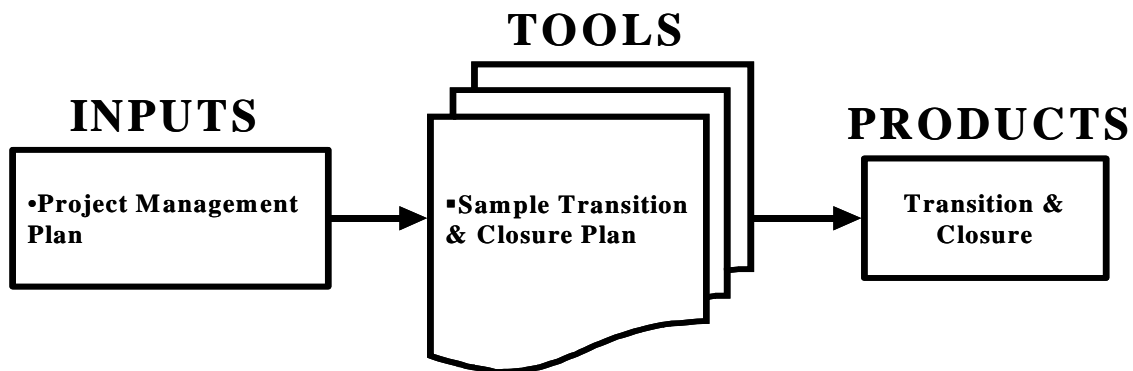
Transition & Closure

Transition and closure is the final project management process step and should be planned for from the beginning and throughout the life of the project. Transition and Closure is the process of completing a major activity, phase, or the project itself. The elements of this process include; implementation of the Transition and Closure Plan, Lessons Learned, Archiving, and Rewards & Recognition.

The Transition and Closure Plan is an integral part of the Project Management Plan and is implemented at appropriate points throughout the project. Although transition and closure is identified as a separate step in the project management process, managing it effectively requires the application of other steps within the process:

- Plan the Work – Development of the Transition and Closure Plan.
- Endorsement – Acceptance and approval of the plan.
- Work the Plan – Tracking and managing transition and closure activities.

Review the Project Performance Baseline to ensure all activities are performed as planned. Tracking and monitoring the schedule and budget are critical as you begin to close out activities. All Transition and Closure activities must be completed before the activity, phase or project is deemed “complete” and the Project Manager is released from responsibility for the project.



Steps for Transition and Closure

1. Continuously review and refine the activities and responsibilities associated with each transition event.
2. Use the Project Delivery Information System (PDIS) baseline and budget tracking tools to maintain performance visibility of all transition and closure activities.
3. As the work leading up to the transition event proceeds, report progress and changes to those involved in the acceptance of work process.
 - Review acceptance criteria and checklist.
 - Establish detailed scheduling of acceptance activities.
 - Establish a date and procedures for formal acknowledgement of the acceptance of work.
 - Acceptance acknowledges the transfer of responsibility and should be formally acknowledged in writing.
4. Refine and complete plans for demobilizing staff, facilities, equipment, and services. Provide clear communication with affected staff. As the completion of work renders facilities, equipment, and services unneeded, expedite their cancellation, return or transfer to other uses in accordance with the Transition and Closure Plan.
5. Review the requirements and specific procedures for the financial closure of the activity, phase, or project with Region/Organization Management and the Program Management Office.

Implement Transition/ Closure Plan

- Acceptance of Work
 - Review criteria & checklists
 - Establish a date for formal acknowledgement
 - Transfer of responsibility
- Demobilization
 - Reassign staff, facilities, services, & equipment
 - Provide clear communication to affected staff
 - Verify completion of work products



Implement Transition/ Closure Plan

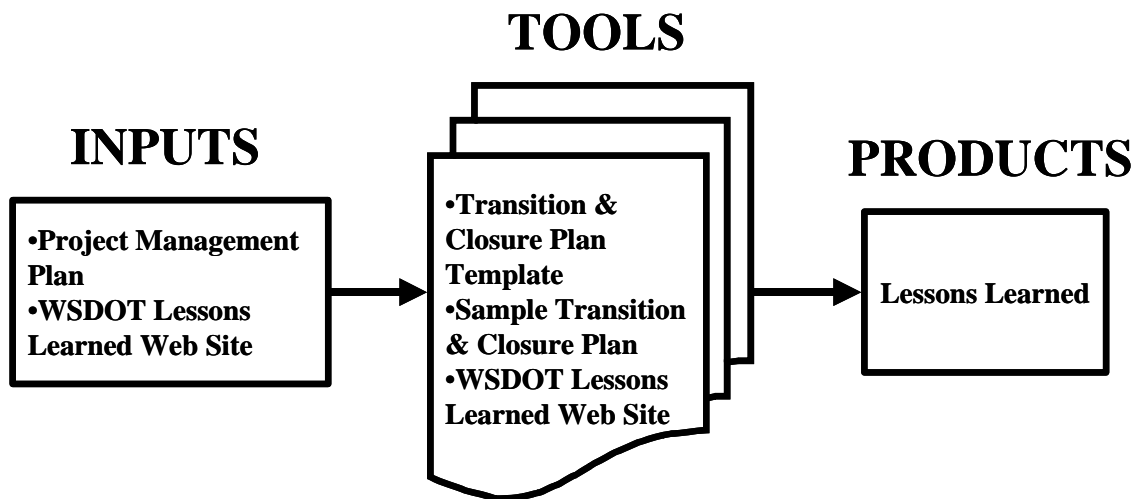
- Financial Closure
 - Review requirements & procedures
 - Contact Region & Program Management



Review Lessons Learned

The WSDOT _____ is focused on gathering, organizing, and using the lessons learned from past and current WSDOT projects to continually improve WSDOT methods and project delivery.

Lessons learned are reported and used continuously throughout the project, culminating in a final submittal of project lessons learned during the transition and closure stage. Documentation to capture and share lessons learned were developed during Plan the Work in the project management plan and were maintained during Work the Plan.

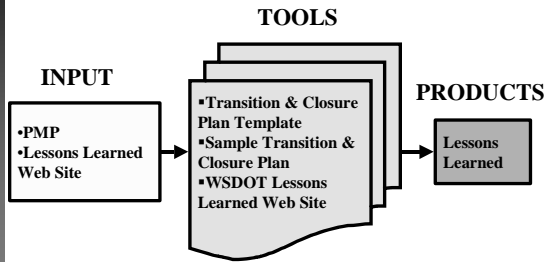


Steps for Lessons Learned

1. Responsibilities for capturing lessons learned are documented in the Project Management Plan.
2. During the project or phase, the reporting of lessons learned should be a continuous sharing process and should be a standing agenda item in team meetings and workshops.
3. At completion of the phase or project, a formal meeting or workshop is held to review the lessons learned and assignments made for improvement and communication of best management practices.

Activities associated with capturing and documenting lessons learned can be placed in the project baseline schedule so they can be tracked and monitored.

Transition & Closure Review Lessons Learned



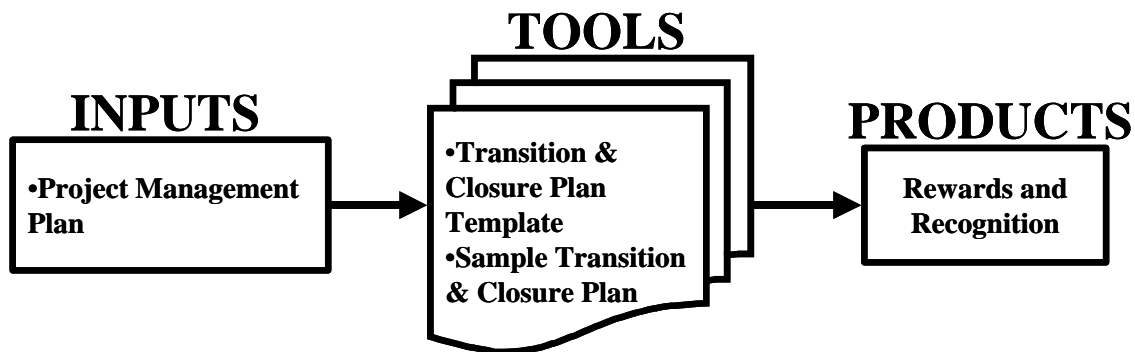
Lessons Learned

- Compare Planned vs. Actuals
- Report & Share Lessons Learned
- Lessons Learned Database
 - www.wsdot.wa.gov/IPD/WSDOT+Lessons+Learned.htm
- Final closure meeting



Reward and Recognize

Maintaining positive energy and focus within the project team is a critical element of successful project delivery. Positive reinforcement through a project specific Rewards and Recognition program is one way to develop and maintain the team's "esprit de corps" during the project. Formal recognition of team and individual contributions to project success at completion enhances the sense of team accomplishment and encourages positive team behavior on other projects.



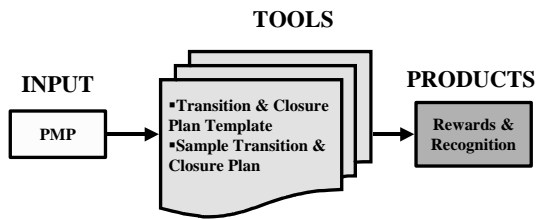
Steps for Reward and Recognize

1. The Transition and Closure Plan includes identification of "target" performance measures in "key" areas critical to project success. They are "stretch" targets that are achievable, but require significant "extra effort to accomplish.
2. Project rewards and recognition for exemplary performance are based on those "key" areas and "target" performance measures. Consider non-monetary recognition and rewards, as well as those requiring budget allocations.
3. During Work the Plan, track both the "target" performance measures and the status of the rewards and recognition program budget. Schedule special team events around "target" milestones as it becomes apparent they will be achieved.
4. Focus on individual and team accomplishments. If the project has strong stakeholder involvement look at ways to reward their contributions.

Senior management should be closely involved in development and endorsement of the rewards and recognition program. They need to establish a leadership role in the program if the desired motivation is to be achieved.

Never underestimate the power of a simple and sincere handwritten note.

Transition & Closure Reward & Recognize



Reward & Recognize

- Positive reinforcement
- Performance metrics
 - Individual & Team
- Senior Management
- Timing is everything

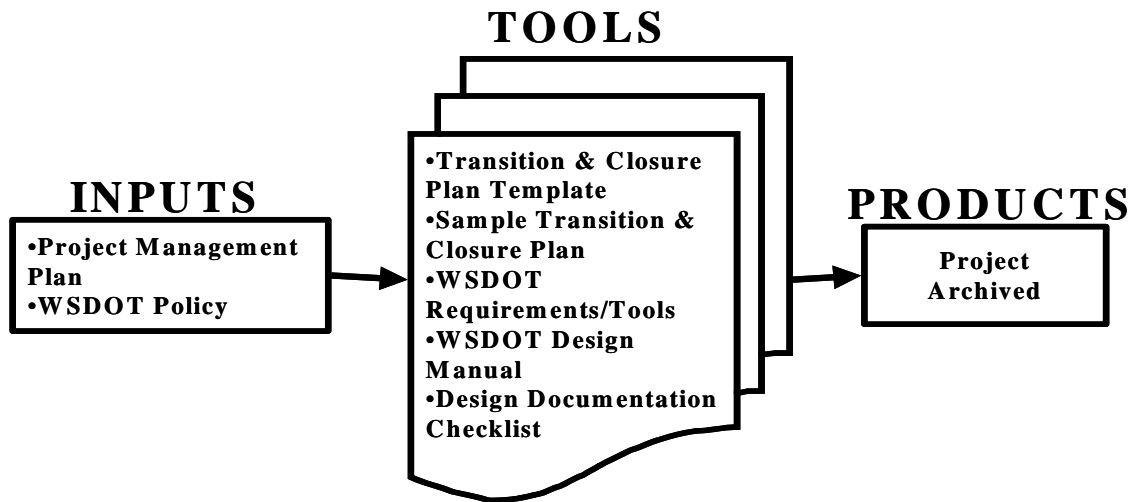


Never overlook the power of a simple, handwritten and sincere note.



Archive

Archiving is the process of collecting, organizing, and storing contract and project files. Preparation of project files for archiving is mandatory and must be completed before the demobilization process is completed. The requirements for the archiving process are established in the Transition and Closure Plan. Budgets and schedules for the performance of archiving activities are tracked and managed like all other project activities.



Steps for Archiving

1. During Plan the Work, the Transition and Closure Plan identified current archiving requirements.
2. Collect all project materials, files, and records (eg., project reports, historical documentation, drawings, contract documents, manuals, electronic data, photographs) from the project team.
3. Remove inappropriate or incomplete material from the file (eg., retain final documents; and remove drafts, internal review comments or handwritten notes, working drafts, and duplicate copies of documents).
4. Consolidate files and sort them into an organized record according to Region/Organization filing requirements.
5. Create an inventory of all files and their contents; perform a quality check of the files; then package and transport them to the appropriate storage area.

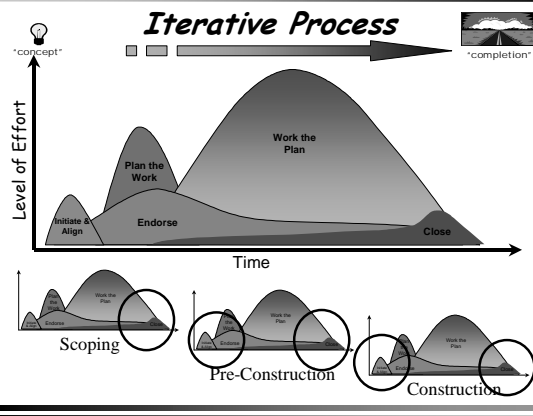
Steps should be taken to organize files and prepare them for archiving during the course of the project. Waiting until the end of the project to start collecting the files will make the task ineffective and much more difficult.

Archive

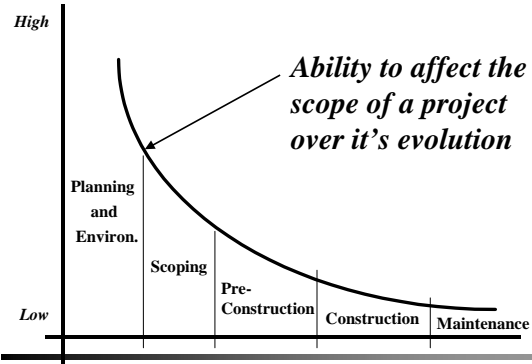
- Review archiving requirements
- Collect files, documents, & drawings
- Remove incomplete material
- Retain final documents & reports
- Consolidate & prepare for storage
- Inventory

Begin the process early!





Early Involvement is Essential!



Executive Order 1032

Number E 1032.00

/s/ Douglas B. MacDonald
Secretary of Transportation

Date: July 1, 2005

Project Management

I. Introduction

The Department of Transportation has refined its project management process for delivering Capital Transportation projects. This process includes “best practices”, tools, templates and examples and will enhance the communication process for both pre-construction and construction project management. The Process, tools and templates can be found at: <http://www.wsdot.wa.gov/Projects/ProjectMgmt>

II. Supersession

This Executive Order supersedes and replaces the following WSDOT documents:

- P 2011.00 *Managing Project Delivery – Using Quality Principles* dated August 25th, 2000
- P 2011.00 *Managing Project Delivery - Providing Resources* dated August 25, 2000
- M 22-10 *Design Manual Chapter 140 Managing Project Delivery* dated January 2005

III. Purpose

WSDOT Management Principle: *Delivery and Accountability*

We shall manage the resources taxpayers and the legislature entrust to us for the highest possible return of value. We shall be disciplined in our use of both time and money. We shall account for our achievements, our shortcomings, and our challenges to citizens, to elected officials, and to other public agencies.

<http://www.wsdot.wa.gov/accountability/mgmtprinciples.htm>

IV. Executive Order

This Executive Order directs all Washington State Department of Transportation capital transportation projects are to be delivered consistent with the principles and practices of the department's project management process. The project management process is defined <http://www.wsdot.wa.gov/Projects/ProjectMgmt/>

A. Direction to Executives and Senior Managers

1. Ensure that the project managers they appoint possess the project management knowledge, skills and abilities required to deliver capital transportation projects.
2. Know the status of all of the projects assigned to them.
3. Plan for and provide appropriate resources to implement project management.
4. Review and endorse project management plans for each project.

B. Direction to Project Managers

1. Plan for and provide appropriate resources to implement the project management process.
2. Lead the project management process consistent with the principles and practices defined on the web site and on-line project management guide.
<http://www.wsdot.wa.gov/Projects/ProjectMgmt/>
3. Develop and document a project management plan for each project assigned to them.
 - a. Perform the roles and responsibilities as defined in the project-specific project management plan.
 - b. Report on Scope, Schedule and Budget as defined in the Project Control & Reporting Guide:
<http://www.wsdot.wa.gov/projectreporting/>

- 1) As they occur, all proposed project changes that break the approval threshold shall be submitted through the project control process using the appropriate Project Control Form (PCF).
- 2) Schedule progress and key milestones shall be kept up-to-date and reported compared to the planned baseline schedule.
- 3) All project status reports shall include at a minimum the status of the “total” project budget, costs, and forecasted cost-to-complete.

C. Direction to Project Team Members

1. Follow the project management process consistent with the principles and practices defined on the web site and on-line project management guide.
<http://www.wsdot.wa.gov/Projects/ProjectMgmt/>
 - a. Perform the roles and responsibilities as defined in the project-specific project management plan
 - b. Endorse the work plan

D. Direction to Specialty Groups

1. Provide the project manager with a schedule and estimate for the tasks assigned.
2. Follow the project management process consistent with the principles and practices defined on the web site and on-line project management guide.
<http://www.wsdot.wa.gov/Projects/ProjectMgmt/>
 - a. Perform the roles and responsibilities as defined in the project-specific project management plan
 - b. Endorse the work plan

E. Direction to Headquarters Design and Construction

Review the project management plan as part of the normal process reviews for pre-construction and construction documents.



Request Alternate Formats

- Deaf or hard of hearing call 7-1-1 and ask for (360) 705-7095
- All others call WSDOT at (360) 705-7097

Master Deliverables List



Task #	WBS Code	Task Name	MDL Task Description	MDL Work Op Code
1	PC	PreConstruction (Put Project Name Here)		
2	PC-01	Preliminary Estimates & Schedules	Estimates and schedules developed for programming.	0167
3	PC-01.01	PE Estimate	The estimated cost and schedule to complete the design phase of a project. Developed for programming the project.	0167
4	PC-01.02	RW Estimate	The estimated cost and schedule to complete the right of way phase of a project. Includes all resource costs. Developed for programming the project.	0167
5	PC-01.03	CN Estimate	The estimated cost and schedule to complete the construction phase of a project. Developed for programming the project.	0167
6	PC-02	Project Summary	A document which comprises the Project Definition, Design Decisions and the Environmental Review Summary for a project	
7	PC-02.01	Project Definition	The official document that states the purpose and need for the project and the solution of the deficiency. This is a formal document that must have Region and HQ concurrence.	0168
8	PC-02.02	Design Decisions Summary	A document which is part of the Project Summary which illustrates design considerations and details about design aspects of the project.	0168
9	PC-02.03	Environmental Review Summary	A document which illustrates environmental permit needs and addresses the level of environmental approval and classification of the project.	0130
10	PC-02.04	Project Summary Region Approval	MILESTONE - Date that the Region Project Development Engineer approves the Project Summary	
11	PC-02.05	Project Definition Complete	MAJOR MILESTONE - Date of concurrence of the Project Summary (Project Definition, ERS, DDS)	
12	PC-03	Design-Build Assessment	A systematic process based on a balance of the anticipated benefits and allocated risks used in the selection of design-build contracting for a project.	0113
13	PC-03.01	Design-Build Decision Document	A document used to make the final decision to proceed with design-build contracting on a project	0113
14	PC-04	Emergency Project Documentation	Required documentation for projects with declared emergency. See Emergency Procedures Manual M3014 for details.	0101
15	PC-04.01	Disaster Damage Inspection Report	An Inspection report completed in the field on a deficiency that can be associated with a natural disaster such as earthquakes, and floods and describes the damage which occurred, details relating to the restoration of the facility (both temporary and permanent activities), and is required in order to receive federal emergency relief funds. See the Emergency Procedures Manual, M3014 for details	0101



16PC-04.02	Declaration of Emergency	A standard WSDOT form completed by the region on a deficiency that is associated with a natural disaster. This form is signed by the Regional Administrator and submitted to HQ Emergency Management Program Manager. See Emergency Procedures Manual, Chapter 4.	0101
17PC-04.03	Change Management Form	A standard WSDOT Change Management form (CMF) completed for a deficiency associated with a declared emergency. The CMF is submitted to HQ Program Management.	0101
18PC-05	FHWA Project Management	Development of FHWA Project Management Plans and FHWA Financial Plans, for projects with an estimated total cost exceeding \$1,000,000,000 (Major projects). Guidance and standards from the FHWA are at this web site: http://www.fhwa.dot.gov/programadmin/mega/	
19PC-05.01	FHWA Finance Plan	A Financial Plan is a comprehensive document that is required for Federally funded projects with an estimated total cost of \$1,000,000,000 or more that reflects the cost (requirement) and revenue structure (capability) of a project and provides a reasonable assurance that there will be sufficient financial resources available to implement and complete the project as planned. Financial Plans are a requirement on Major projects per Section 1305 of the Transportation Equity Act for the 21st Century (TEA-21). The Initial Financial Plan and each Annual Update is submitted to the FHWA Division Administrator for review and acceptance. The FHWA memorandum giving direction on finance plans and other guidance can be found at the following web sites: http://www.fhwa.dot.gov/programadmin/contracts/fpgmemo.htm and http://www.fhwa.dot.gov/programadmin/mega/fplans.htm	0170
20PC-05.02	FHWA Project Management Plan	Project Management Plans currently are strongly recommended from a best practices point of view, in order to effectively and efficiently manage the budget, schedule, and quality of Major projects. They are expected to be required by the new federal reauthorization act when it passes (replacing TEA-21). The FHWA memorandum giving direction on project management plans can be found at the following web site: http://www.fhwa.dot.gov/programadmin/mega/megaiii.htm	0106
21PC-06	Project Funding Approved	MILESTONE - Official funding approval by the Region or HQ's Program Management in order to begin the design phase of a project	
22PC-07	Begin Preliminary Engineering	MAJOR MILESTONE - Beginning the preliminary engineering marks the start of the project design. See Project Control & Reporting Manual for details.	
23PC-08	Consultant Administration	The process concerning the authorization, selection, management, and oversight of consultants for Personal Service and Architect & Engineer (A&E) agreements and/or supplements. See Consultant Services Procedures Manual M27-50.	0107



24	PC-08.01	Consultant RFP	Request for Proposal (RFP): A legal notice for solicitation of consulting services. Please see the Consultant Services Procedures Manual M 27-50, Chapter 1 for procedures.	0107
25	PC-08.02	Consultant Selection	The process of reviewing, scoring and selecting a Consultant. Please see the Consultant Services Procedures Manual M 27-50, Chapters 2, 3, and 4 for procedures.	0107
26	PC-08.03	Consultant Signed Contract	A legally binding contract between WSDOT and a Consultant for services rendered. Please see the Consultant Services Procedures Manual M 27-50, Chapters 5, 6, and 7 for procedures.	0107
27	PC-08.04	Consultant Management	The process for delivering a contracted product within the parameters of a legally binding contract. Please see the Consultant Services Procedures Manual M 27-50, Chapter 8, 9, 10, 11, 12, 13, and 14 for procedures.	0107
28	PC-09	Project Management	See Project Management On-line Guide (PMOG) http://www.wsdot.wa.gov/Projects/ProjectMgmt/	0106
29	PC-09.01	Managing the Project Hammock Task	Hammock task to assign and account for the resource needs and effort required to manage the project.	0106
30	PC-09.02	Project Management Plan	The Project Management Plan describes both the Project Performance Baseline for the project deliverables and the schedule and budget plans for delivering them, and the Project Management Methods that will be used by the Project Team during their delivery. See Project Management On-line Guide (PMOG) for details. http://www.wsdot.wa.gov/Projects/ProjectMgmt/	0106
31	PC-09.03	Endorsement	MILESTONE - Endorsement is the process of gaining the commitment of the Project Team then the endorsement of the Management entities responsible for the resources needed to successfully execute the Project Management Plan. The process is a formal one and culminates in documented commitment of support by the Team members, management and others - customers, team and sponsors as appropriate. See Project Management On-line Guide (PMOG) for details. http://www.wsdot.wa.gov/Projects/ProjectMgmt/	
32	PC-10	Cost Risk Estimate & Management	Cost Risk Assessment, as an integral element of project risk management at WSDOT, quantifies, within a reasonable range, the cost and schedule to complete a project. This information is used by decision-makers to program projects and by project managers to monitor projects as they are being developed. WSDOT has developed CEVP® and CRA to identify, assess and evaluate risk that could impact cost and/or schedule during project delivery. See Cost Risk Estimate & Management website at: http://www.wsdot.wa.gov/Projects/ProjectMgmt/RiskAssessment/	0166



33PC-10.01	CEVP®	Cost Estimate Validation Process (CEVP®), an intense workshop in which a team of top engineers and risk managers from local and/or national private firms and public agencies examine a transportation project and review project details with WSDOT engineers. A Cost Estimate Validation Process (CEVP®) is required for any project with an estimated cost of \$100 million or more. See Cost Risk Estimate & Management website at: http://www.wsdot.wa.gov/Projects/ProjectMgmt/RiskAssessment/	0166
34PC-10.02	CRA Workshop	Cost Risk Assessment (CRA) is a workshop process similar but less intense CEVP®. A Cost Risk Assessment (CRA) is required for all projects with an estimated cost of \$25 million or more. See Cost Risk Estimate & Management website at: http://www.wsdot.wa.gov/Projects/ProjectMgmt/RiskAssessment/	0166
35PC-11	Public and Agency Involvement	Local agencies and the public should be notified of projects in their jurisdiction or area. Contact the Communications office for details.	0110
36PC-11.01	Public Involvement Plan	The level of public involvement plan needed is determined by SEPA or NEPA requirements to be met and the amount of potential impact on people, the environment and the economy. Contact the Communications Office for details.	0110
37PC-12	Project Data	Collection and organization of project information to develop project base plans.	
38PC-12.01	Background Data	Information about the project	0116
39PC-12.02	Aerial Photographs	Aerial photographs of the project site.	0116
40PC-12.03	Clear Zone Inventory	The "Corrective Action" portion of Form 410-026 ensures roadside safety is addressed	0116
41PC-12.04	Photogrammetry Data	A means of collecting topographical information for the project through Geographic Services	0116
42PC-12.05	Surveying Data	All of the surveying required to complete the design of the project	0117
43PC-12.06	As-Built Data Verified	Refer to the as-built data as necessary to compliment the survey data gathered. Research the current plan of record to verify the existing access regulation program.	0116
44PC-12.07	Basemap	Development of the project basemap for Preliminary Engineering	0119
45PC-12.08	Maintenance Review Documentation	An onsite review of the project with maintenance to look at existing situations and any concerns about the proposed design.	0116
46PC-13	Alternative Assessment	Includes identification of conceptual solutions, Transportation Demand Management (TDM), Transportation System Management (TSM), alternative modes, or capacity improvements and endorsement of selected alternatives.	0164
47PC-13.01	Preferred Alternative	Documentation of the preferred alternative selected for Preliminary Engineering.	0164
48PC-14	Design Hearing	Prepare for and deliver a Design Hearing. See Design Manual, Chapter 210.	0120



49PC-14.01	Design Hearing Packet	When it is determined that a hearing is to be held, the region prepares a pre-hearing packet. See Design manual Chapter 210 for details.	0120
50PC-14.02	Design Hearing	A formal or informal hearing that presents the design alternatives to the public for review and comment before a commitment is made to any one alternative. See Design manual Chapter 210	0120
51PC-15	Value Engineering	A systematic process designed to focus on the major issues of a complex project or process.	0165
52PC-15.01	VE Study	A systematic process designed to focus on the major issues of a complex project or process. It uses a multi-disciplined team to develop recommendations for the decisions that must be made. The primary focus of a Value Engineering study is value improvement. See Design Manual Section 315 for details.	0165
53PC-15.02	VE Recommendations Response	The Project Team's responses to the VE Team recommendations, which is provided to the Regional Managers for use in developing the Decision Document.	0165
54PC-15.03	VE Decision Document	A document prepared by Regional managers that includes a specific response for each of the VE team recommendations and a summary statement with a schedule for implementation. It also includes estimated costs or savings associated with the recommendations and estimated costs of implementation.	0165
55PC-16	Access Point Evaluation	New or reconstructed access to Interstate highways. See Design Manual Chapter 1425.	0121
56PC-16.01	Access Point Decision Report	An access point decision report for FHWA approval is required for new/reconstruction of access on Interstate highways. An access point decision report is required to be submitted to the Access and Hearings Unit of the Headquarters Design Office for new/reconstruction of access on divided state highways. See Design Manual Chapter 1425, for completing an Access Point Decision Report.	0121
57PC-17	Access Management & Control	This is to determine if existing connections of abutting properties to the state highway will be eliminated, relocated, or consolidated. See Design Manual Chapters 1430 and 1435.	
58PC-17.01	Access Connection Permit	All new access connections and alterations and improvements to existing access connections to state highways require an access connection permit. See Design Manual Chapter 1435.	0129
59PC-17.02	Access Report	If the project is to acquire additional limited access, an access report is required. The access report notifies the local agency how the limited access will impact their transportation system. The access report is worked with and submitted to the HQ Access and Hearings Unit.	0120
60PC-17.03	Access Report Plans	See Design Manual, Chapter 1430 and the Plans Preparation Manual, Section 150	0120
61PC-17.04	Access Hearing Plans	See Design Manual Chapter 1430 and Chapter 2, section 210.09(4). The Plans Preparation Manual, Section 160 shows how plan sheets should be prepared.	0120



62PC-17.05	Access Hearing	A formal hearing that gives local public officials, owners of abutting property, and other interested citizens an opportunity to be heard concerning any plan that proposed the limitation of access to the highway system. See Design Manual Chapter 210.	0120
63PC-17.06	Findings & Order Package	A document containing the findings and conclusions of a limited access hearing that is approved by the Assistant Secretary for the Environmental and Engineering Service Center. See Design Manual Chapter 210.	0120
64PC-17.07	Findings & Order Adopted	MILESTONE - See Design Manual Chapter 210.	
65PC-18	Environmental Documentation	Federal and State regulations require WSDOT to document the environmental impacts of a transportation project. Where appropriate, other public and governmental agencies are involved in the decision making process. National Environmental Policy Act/State Environmental Policy Act (NEPA/SEPA) If project has a federal nexus, follow NEPA procedures and obtain review of proposed documentation level by FHWA. If state only funding, follow SEPA procedures. See Environmental Procedures Manual.	
66PC-18.01	Endangered Species Act Compliance	The Endangered Species Act requires that the Department of Transportation, on behalf of the Federal Highways Administration, must consult with Wildlife Services to determine the effects of project actions on threatened and endangered species. There are five categories of effect determinations.	0132
67PC-18.01.01	Biological Assessment	A document required for all activities with a federal nexus that analyzes the potential affects of the project on listed species and critical habitat and justifies a particular "effect determination". Federal agencies are responsible for evaluating impacts to listed species from all federal actions, regardless of scope. For actions other than a "major construction activity", the agency must still evaluate the potential for adverse effects and consult with the service, if necessary.	0132
68PC-18.01.02	Environmental Biological Assessment - NOAA Concurrence	Biological Assessment concurrence by the National Oceanic and Atmospheric Administration (NOAA) Fisheries.	0132
69PC-18.01.03	Environmental Biological Assessment - USFW Concurrence	Biological Assessment concurrence by USFW	0132
70PC-18.01.04	Environmental Biological Assessment - No Effect Letter Sent	Biological Assessment determines No Effect.	0132
71PC-18.02	NEPA/SEPA Compliance	National Environmental Policy Act/State Environmental Policy Act (NEPA/SEPA) If project receives federal funding, follow NEPA requirements and obtain review of proposed documentation level by FHWA. If state only funding, follow SEPA requirements. See Environmental Procedures Manual.	0134
72PC-18.02.01	NEPA/ C.E. (ERS)	National Environmental Policy Act Categorical Exclusion and programmatic C.E. (Environmental Review Summary) (NEPA C.E. (ERS))	0134
73PC-18.02.02	NEPA Documented C.E. (ECS)	National Environmental Policy Act Documented Categorical Exclusion (Environmental Classification Summary).	0134



74PC-18.02.03	NEPA Environmental Assessment	National Environmental Policy Act (NEPA) Environmental Assessment. See Environmental Procedures Manual.	0134
75PC-18.02.04	FONSI Issued	MILESTONE - Finding of No Significant Impact (FONSI) issued. A federal lead agency document presenting the reasons why a proposal will not significantly affect the environment and therefore will not require EIS documents.	
76PC-18.02.05	NEPA EIS or Supplement	National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) or Supplement. Required when actions are likely to have significant impact on the environment by altering land use, planned growth development patterns, traffic volumes, travel patterns, transportation services or natural resources, or by creating public controversy. Contact Region Environmental Manager.	0134
77PC-18.02.05.01	NOI	Notice of Intent (NOI) is published in the he Federal Register to begin public NEPA process. Official start date of document production.	0134
78PC-18.02.05.02	DEIS	Draft Environmental Impact Statement (DEIS) and commitment file circulated. The DEIS is the initial WSDOT project report. It identifies the alternative actions and presents an analysis of their impacts on the environment. It also summarizes the early coordination process, including scoping, and identifies the key issues and pertinent information received through these efforts.	0134
79PC-18.02.05.03	Environmental Hearing	A formal or informal hearing that ensures that social, economical, and environmental impacts have been considered. See Design Manual Chapter 210.	0134
80PC-18.02.05.04	FEIS	Final Environmental Impact Statement (FEIS) and Commitment File Circulated. Contains the final recommendation or preferred alternative, discusses substantive comments received on the DEIS, summarizes citizen involvement, and describes procedures required to ensure that mitigation measures are implemented.	0134
81PC-18.02.05.05	ROD	Record of Decision Issued (ROD) - A document prepared by the federal lead agency after an EIS has been completed, outlining the final decisions on a proposal. It identifies the decision alternatives considered, measures to minimize harm, and a monitoring or enforcement program.	0134
82PC-18.02.06	NEPA re-evaluation	Re-evaluation of Environmental Assessments and Environmental Impact Statements if no action is taken on the project for 3 years or substantial change to the scope results in a loss of validity of determinations.	0134
83PC-18.02.07	SEPA C.E.	State Environmental Policy Act Categorical Exemption (SEPA C.E.) A type of action that does not significantly affect the environment.	0134
84PC-18.02.08	SEPA Checklist/DNS	State Environmental Policy Act (SEPA) Checklist/Determination of Non-Significance (DNS) The written decision by the Region Administrator, or designee, that a proposal will not have a significant impact and no EIS is required.	0134



85PC-18.02.09	SEPA EIS or Supplement	State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS) or Supplement. Required when actions are likely to have significant impact on the environment by altering land use, planned growth development patterns, traffic volumes, travel patterns, transportation services or natural resources, or by creating public controversy. Contact Region Environmental Manager.	0134
86PC-18.02.10	SEPA Adoption	State Environmental Policy Act (SEPA) Adoption. NEPA document adopted to meet the requirements of SEPA. See Environmental Procedures Manual.	0134
87PC-18.03	Discipline Reports - Earth (Geology & Soils)	Environmental Procedures Manual Section 420 Earth (Geology & Soils)	0136
88PC-18.03.01	Geology & Soils Discipline Report Checklist	Refer to Environmental Procedures Manual Section 420.05 & Exhibit 420-1.	0136
89PC-18.03.02	Geology & Soils Discipline Report	Refer to Environmental Procedures Manual Section 420.05(1)	0136
90PC-18.03.03	Temporary Erosion & Control Plan	Refer to Environmental Procedures Manual Section 420.05(2) & Exhibit 431-7.	0136
91PC-18.03.04	Soils Survey	Refer to Environmental Procedures Manual Section 420.05(3)	0136
92PC-18.04	Discipline Report - Air	Environmental Procedures Manual Section 425 Air	
93PC-18.04.01	Air Quality Discipline Report Checklist	Refer to Environmental Procedures Manual 425.05(3)(a) & Exhibit 425-4	0136
94PC-18.04.02	Air Quality Discipline Report	Refer to Environmental Procedures Manual 425.05(3)(a)	0136
95PC-18.04.03	Air Quality Analysis (for NEPA/SEPA)	Refer to Environmental Procedures Manual 425.05(5)(b)	0136
96PC-18.05	Discipline Reports - Water Quality/Surface Water, Groundwater, & Coastal Areas /Shorelines	Environmental Procedures Manual Sections 431, 433, & 452 Water Quality/Surface Water, Groundwater, & Coastal Areas /Shorelines	0136
97PC-18.05.01	Water Quality Discipline Report Checklist	Refer to Environmental Procedures Manual 431.05(1) & Exhibit 431-4	0136
98PC-18.05.02	Water Quality Discipline Report	Refer to Environmental Procedures Manual 431.05(1) & Exhibit 431-4	0136
99PC-18.06	Discipline Reports - Floodplain	Environmental Procedures Manual Section 432 Floodplain	0136
100PC-18.06.01	Floodplain Discipline Report Checklist	Refer to Environmental Procedures Manual 432.05 & Exhibit 432-1	0136
101PC-18.06.02	Floodplain Discipline Report	Refer to Environmental Procedures Manual 432.05 & Exhibit 432-1	0136
102PC-18.07	Discipline Reports - Wildlife, Fish, Vegetation, & Wetlands	Environmental Procedures Manual Sections 436 & 437 Wildlife, Fish, and Vegetation & Wetlands	0136
103PC-18.07.01	Biological Evaluation (BE)	Refer to Environmental Procedures Manual 436.05(3)(b)(5)	0136
104PC-18.07.02	Wetland Inventory Discipline Report Checklist	Refer to Environmental Procedures Manual 437.05(2) & Exhibit 437-10	0136
105PC-18.07.03	Wetland Inventory Discipline Report	Refer to Environmental Procedures Manual 437.05(2)	0136
106PC-18.07.04	Wetland/Biology Discipline Report Checklist	Refer to Environmental Procedures Manual 437.05(3) & Exhibit 437-11	0136
107PC-18.07.05	Wetland/Biology Discipline Report	Refer to Environmental Procedures Manual 437.05(3)	0136



108	PC-18.07.06	Botanical Surveys Report	This report is necessary for reporting to the US Forest Service and other Federal Agencies sensitive vascular and non-vascular plant species within the project area.	0136
109	PC-18.07.07	Conceptual Mitigation Report/Plan Checklist	Refer to Environmental Procedures Manual 437.05(4) & Exhibit 437-12	0136
110	PC-18.07.08	Conceptual Mitigation Report/Plan	Refer to Environmental Procedures Manual 437.05(4)	0136
111	PC-18.07.09	Wetland Mitigation Report/Plan Checklist	Refer to Environmental Procedures Manual 437.05(5)(a) & Exhibit 437-13	0136
112	PC-18.07.10	Draft Wetland Mitigation Report/Plan	Refer to Environmental Procedures Manual 437.05(5)(a)	0136
113	PC-18.07.11	Final Wetland Mitigation Report/Plan	Refer to Environmental Procedures Manual 437.05(5)(d)	0136
114	PC-18.08	Discipline Reports - Energy	Environmental Procedures Manual Section 440 Energy	0136
115	PC-18.08.01	Energy Discipline Report Checklist	Refer to Environmental Procedures Manual Exhibit 440-1	0136
116	PC-18.09	Discipline Reports - Noise	Environmental Procedures Manual Section 446 Noise	0136
117	PC-18.09.01	Traffic Noise Discipline Report Checklist	Refer to Environmental Procedures Manual 446.05(1)(a) & Exhibit 446-2	0136
118	PC-18.09.02	Traffic Noise Discipline Report	Refer to Environmental Procedures Manual 446.05(1)(a)	0136
119	PC-18.09.03	Traffic Noise Analysis	Refer to Environmental Procedures Manual 446.05(1)(d)	0136
120	PC-18.10	Discipline Reports - Hazardous Materials	Environmental Procedures Manual Section 447 Hazardous Materials	0136
121	PC-18.10.01	Hazardous Materials Discipline Report Checklist	Refer to Environmental Procedures Manual 447.05(3)	0136
122	PC-18.10.02	Hazardous Materials Discipline Report	Refer to Environmental Procedures Manual 447.05(3)	0136
123	PC-18.10.03	Initial Site Assessment (ISA) Checklist	Refer to Environmental Procedures Manual 447.05(4)	0136
124	PC-18.10.04	Initial Site Assessment (ISA)	Refer to Environmental Procedures Manual 447.05(4)	0136
125	PC-18.10.05	Preliminary Site Investigation (PSI) Checklist	Refer to Environmental Procedures Manual 447.05(5)	0136
126	PC-18.10.06	Preliminary Site Investigation (PSI)	Refer to Environmental Procedures Manual 447.05(5)	0136
127	PC-18.10.07	Detailed Site Investigation (DSI)	Refer to Environmental Procedures Manual 447.05(6)	0136
128	PC-18.11	Discipline Reports - Land Use, Land Use Plans, and Growth Management	Environmental Procedures Manual Section 451 Land Use, Land Use Plans, and Growth Management	0136
129	PC-18.11.01	Land Use Discipline Report Checklist	Refer to Environmental Procedures Manual 451.05(1) & Exhibit 451-1	0136
130	PC-18.11.02	Land Use Discipline Report	Refer to Environmental Procedures Manual 451.05(1)	0136
131	PC-18.12	Discipline Reports - Wild and Scenic Rivers	Environmental Procedures Manual Section 453 Wild and Scenic Rivers	0136
132	PC-18.12.01	Wild and Scenic Rivers Project Report	Refer to Environmental Procedures Manual 453.05(1)	0136
133	PC-18.13	Discipline Reports - Agricultural and Farmland	Environmental Procedures Manual Section 454 Agricultural and Farmland	0136
134	PC-18.13.01	Farmlands Discipline Report Checklist	Refer to Environmental Procedures Manual 454.05(1) & Exhibit 454-2	0136
135	PC-18.13.02	Farmlands Discipline Report	Refer to Environmental Procedures Manual 454.05(1)	0136
136	PC-18.13.03	Farmland Conversion Rating (Form AD-1006 or NRCS-CPA-106)	Refer to Environmental Procedures Manual 454.05(2)(c)	0136



137	PC-18.14	Discipline Reports - Public Lands (Section 4(f), 6(f), and Forests)	Environmental Procedures Manual Section 455 Public Lands (Section 4(f), 6(f), and Forests)	0136
138	PC-18.14.01	Section 4(f) Evaluation Checklist	Refer to Environmental Procedures Manual 455.05(1)(a), Exhibit 455-1, & 456.05(4)	0136
139	PC-18.14.02	Section 4(f) Evaluation	Refer to Environmental Procedures Manual 455.05(1)	0136
140	PC-18.14.03	Outdoor Recreation Property (6(f)) Discipline Report Checklist	Refer to Environmental Procedures Manual 455.05(2)(a) & Exhibit 455-3	0136
141	PC-18.14.04	Outdoor Recreation Property (6(f)) Discipline Report	Refer to Environmental Procedures Manual 455.05(2)(a)	0136
142	PC-18.15	Discipline Reports - Historic, Cultural, and Archeological Resources	Environmental Procedures Manual Section 456 Historic, Cultural, and Archeological Resources	0136
143	PC-18.15.01	Cultural Resources Discipline Report Checklist	Refer to Environmental Procedures Manual 456.05(1) & Exhibit 456-4	0136
144	PC-18.15.02	Cultural Resources Discipline Report	Refer to Environmental Procedures Manual 456.05(1)	0136
145	PC-18.15.03	Section 106	Refer to Environmental Procedures Manual 456.05(2)	0136
146	PC-18.15.03.01	Section 106 Consultation	Refer to Environmental Procedures Manual 456.05(2)	0136
147	PC-18.15.03.02	Section 106 Compliance	Refer to Environmental Procedures Manual 456.05(2)	0136
148	PC-18.15.03.03	Cultural Resource Study	Refer to Environmental Procedures Manual 456.05(2)(c)	0136
149	PC-18.15.03.04	Memorandum of Agreement	Refer to Environmental Procedures Manual 456.05(2)(f)	0136
150	PC-18.16	Discipline Reports - Socio-Economic, Environmental Justice, Transportation, Relocation, and Public Services & Utilities	Environmental Procedures Manual Sections 457, 458, 460, & 470 Socio-Economic, Environmental Justice, Transportation, and Public Services & Utilities	0136
151	PC-18.16.01	Social Discipline Report Checklist	Refer to Environmental Procedures Manual 457.05(1)(a) & Exhibit 457-1	0136
152	PC-18.16.02	Economic Discipline Report Checklist	Refer to Environmental Procedures Manual 457.05(1)(b) & Exhibit 457-2	0136
153	PC-18.16.03	Relocation Discipline Report Checklist	Refer to Environmental Procedures Manual 457.05(1)(c) & Exhibit 457-3	0136
154	PC-18.16.04	Environmental Justice Discipline Report Checklist	Refer to Environmental Procedures Manual 458.05(5) & Exhibit 458-3	0136
155	PC-18.16.05	Environmental Justice Discipline Report	Refer to Environmental Procedures Manual 458.05(5)	0136
156	PC-18.17	Discipline Reports - Visual Impacts, Light and Glare	Environmental Procedures Manual Section 459 Visual Impacts, Light and Glare	0136
157	PC-18.17.01	Visual Quality Discipline Report Checklist	Refer to Environmental Procedures Manual 459.05(1) & Exhibit 459-1	0136
158	PC-18.17.02	Visual Quality Discipline Report	Refer to Environmental Procedures Manual 459.05(1)	0136
159	PC-18.18	Environmental Documentation Complete	MAJOR MILESTONE - All environmental documentation complete prior to Design Approval and Right of Way Approval. See Project Control & Reporting Manual.	
160	PC-19	Environmental Permits	Identify and complete permits required for the project. Permit requirements are scoped as part of the Environmental Review Summary. See Environmental Procedures Manual for procedures.	0138
161	PC-19.01	Corps Section 404 Permit	This permit is needed for discharging, dredging, or placing fill material within waters of the United States or adjacent wetlands. Responsible Agency: Army Corp of Engineers.	0138



162	PC-19.02	Section 10 Permit	This permit is needed for obstructions, alterations, or improvements of any navigable water (e.g., rechanneling, piers, wharves, dolphins, bulkheads, buoys, etc.). Responsible Agency: Army Corp of Engineers.	0138
163	PC-19.03	Coast Guard Section 9	Permission from the Coast Guard on anything that obstructs vessel passage in navigable waters.	0138
164	PC-19.04	Coastal Zone Management Certification	Applicants for federal permits/licenses are required to comply with the states Coastal Zone Management Program (Shoreline Management Act). Corps permits sometimes require WSDOT to receive certification from Ecology that the proposed project will comply with the Coastal Zone Management Program. Responsible Agency: Department of Ecology	0138
165	PC-19.05	HPA	Hydraulic Project Approval (HPA) A permit required for projects that use, divert, obstruct, or change the natural flow or bed of any state waters (e.g. culvert work, realignment, bridge replacement). Responsible Agency: Washington State Dept of Fish and Wildlife.	0138
166	PC-19.06	NPDES	This permit is needed from Ecology for all construction activities (including grading, stump removal, and demolish) on sites one acre or larger and when there is a discharge of stormwater to a surface water (e.g., wetlands, creeks, rivers, marine waters, ditches, estuaries). Ecology will not have to permit for 1 to 5 acres sites until September 2005. Operators of 1 to 5 acre sites may seek coverage under the current permit.	0138
167	PC-19.07	State Waste discharge	This permit is issues by Ecology. Discharges of pollutants to land require a State Wastewater Discharge Permit. Discharges from industrial facilities to municipal wastewater treatment plants require a State Waste Discharge Permit if they haven't been issued a Pretreatment discharge permit by the municipality.	0138
168	PC-19.08	Section 401 Water Quality Certification	A federal permit/license for discharge into navigable waters. Certain Army Corp permits will require a section 401. Responsible Agency: Department of Ecology; and the Environmental Protection Agency (EPA) on federal and tribal land.	0138
169	PC-19.09	Short Term Water Quality Modification	Issued for activities resulting in temporary minor increase in turbidity. Responsible Agency: Department of Ecology.	0138
170	PC-19.10	Forest Practices Permit	Permit required to remove timber or convert timber land. Responsible Agency: Department of Natural Resources.	0138
171	PC-19.11	Aquatic Lands Acquisition & Permit Approval	Projects involving aquatic lands contact Real Estate Services. Responsible Agency: Department of Natural Resources.	0138
172	PC-19.12	Floodplain Development Permit	A permit for any construction activity within the 100 year flood plain as defined by FEMA mapping. Responsible Agency: Department of Ecology, Cities and Counties.	0138



173PC-19.13	Critical Area Ordinance Permit	Local approval or permits may be required for projects impacting areas defined as "critical" by counties and cities under the Growth Management Act (GMA), including wetlands, aquifer recharge areas, wellhead protections areas, frequently flooded areas, geographically hazardous areas, fish and wildlife habitat, and conservation areas. Responsible Agency: Counties and Cities.	0138
174PC-19.14	Noise Variance	Construction and maintenance activities during nighttime hours may require a variance from local noise ordinances. Daytime noise from construction is usually exempt. Responsible Agency: Counties and Cities.	0138
175PC-19.15	Shoreline Permit/Exemption	Required for any contract requiring work within 200 feet of a shoreline of the state as defined by the local agency with jurisdiction. Responsible Agency: Department of Ecology, Cities and Counties.	0138
176PC-19.16	Tribal Approvals & Permits	Anything that tribes have delegated authority for.	0138
177PC-19.17	Miscellaneous Permits & Approvals	Examples include: Federal Aviation Administration (FAA), sole source aquifer, water use permit, etc.	0138
178PC-19.18	Hazardous Material Generation Permit		0138
179PC-19.19	Environmental Permits Received	MILESTONE - All environmental permits acquired for project to go to Ad/Construction.	
180PC-20	Materials (Roadway)	Development of soils, surfacing, and materials reports for project.	0156
181PC-20.01	Pavement Determination	Preliminary recommendations for surfacing materials. See WSDOT pavement interactive guide at http://www.wsdot.wa.gov/MaintOps/mats/pavementguide.htm	0156
182PC-20.02	Surfacing/Resurfacing Report	A report that lists the recommendations for type, size, & depth of surfacing for each roadway and recommendations for rehabilitation of existing roadways	0156
183PC-20.03	Materials Source Report	A report on a specific WSDOT material source that verifies the quality and quantity of the material requested	0156
184PC-21	Geotechnical Evaluations	Development of Geotechnical reports for project.	
185PC-21.01	Preliminary Site Data	Project design office is to provide a project description and location of work to be performed to Region Materials Engineer. See Design Manual Chapter 510.	0140
186PC-21.02	Environmental Permit for Field Exploration	Field exploration may require permits to complete. Permits need to be provided by the Project Office to HQ Geotechnical Office/Region Materials Office to enable required field work to be started.	0138
187PC-21.03	Conceptual Geotechnical Report	RME/HQ Geotechnical will provide recommendations at the conceptual / feasibility level. Some soil borings may be drilled at this time depending upon project scope and available information.	0140
188PC-21.04	Project Site Data	Site information provided to RME by the project design office (specific to the type of project) to initiate geotechnical work on a project during the design and PS&E phases. See Design Manual Chapter 510.	0140



189	PC-21.05	RME Geotech Report(s)	Region Geotechnical Report containing geotechnical recommendations and information applicable to the project. There is a possibility of multiple reports, depending upon the scope and complexity of the project.	0140
190	PC-21.06	HQ Geotechnical Report(s)	HQ Geotechnical Report containing geotechnical recommendations and information applicable to the project. There is a possibility of multiple reports, depending upon the scope and complexity of the project.	0140
191	PC-22	Structural Site Data	Site data to the Bridge and Structures Office, HQ Geotechnical Office, or Region Materials Office. May include base maps, photos, drawing or reports.	0144
192	PC-22.01	Bridge Site Data	Structure Site Data to be sent to HQ Bridge for design and PS&E. See Design Manual Chapter 1110.	0144
193	PC-22.02	Wall Site Data	Structure Site Data to be sent to HQ Bridge, HQ Geotechnical, or Region Materials for design and PS&E. See Design Manual Chapter 1130.	0144
194	PC-22.03	Noise Wall Site Data	Plan and profile along centerline of the wall. Data to be sent to HQ Geotechnical or Region Materials for design. See Design Manual Chapter 1140.	0144
195	PC-22.04	Noise Barrier Height & Verification Analysis	This deliverable uses more detailed design data to optimize barrier height and verify that feasibility and requirements are met.	0144
196	PC-23	Structure Design	Development of structures reports and contract plans, specifications, and estimates (PS&E).	0145
197	PC-23.01	Bridge Condition Report	A Report produced by the Bridge Office which describes the condition of the deck and general information about the structure.	0145
198	PC-23.02	Preliminary Bridge Plan	Preliminary plan showing location, length, type of structure (TS&L) and estimate.	0145
199	PC-23.03	Demolition Plan	Development and/or review of demolition plans .	0145
200	PC-23.04	Sign Structure Design	Cantilever and monotube sign structures and bridges.	0145
201	PC-23.05	Noise Wall Design	Document/design noise walls that are non-standard or are part of a retaining wall.	0145
202	PC-23.06	Retaining Wall Design	Document/design non standard retaining walls & soldier pile walls	0145
203	PC-23.07	Bridge Rails/Expansion Joints Design	Document/design rehabilitation of bridge rails, expansion joints and bridge decks	0145
204	PC-23.08	Other Structure Design	Document/design tunnels, approach slabs, emergency repairs and other structural design.	0145
205	PC-23.09	Consultant Structural Plans Review	60%, 90% or 100% review of all structural plans produced by consultants	0145
206	PC-23.10	90% Bridge & Structures Plan	90% Plans turn-in to the regions 4 weeks prior to 100% turn-in	0145
207	PC-23.11	Bridge & Structures PS&E	100% Plan, Specials and Estimates ready for region 12 week review.	0145
208	PC-24	Roadway Design	Development of earthwork design and channelization design. Also includes minor safety design and documentation.	
209	PC-24.01	Preliminary Intersection Plan	Plans that are required for any increases in capacity, modification of channelization, or change of intersection geometrics, see Design Manual Chapter 910.	0174



210	PC-24.02	Preliminary Interchange Plan	Preliminary geometric elements for interchanges on the project	0174
211	PC-24.03	Preliminary Channelization Plan	Preliminary plans that show the separation of traffic movements into delineated paths of travel, see Design Manual Chapter 910.	0174
212	PC-24.04	Preliminary Earthwork Quantities	Preliminary calculations for embankment, roadway excavation, and other earth moving volumes.	0174
213	PC-24.05	Alignments	Finalization of the horizontal and vertical alignments for each roadway in the project, see Design Manual Chapters 620 & 630.	0174
214	PC-24.06	Intersection Plan for Approval	A plan that address the intersection design considerations in accordance with Design Manual Chapter 910	0174
215	PC-24.07	Interchange Plan for Approval	A plan that address the interchange design considerations in accordance with Design Manual Chapter 940	0174
216	PC-24.08	Channelization Plan	A plan that address the channelization design considerations in accordance with Design Manual Chapter 910.	0174
217	PC-24.09	Earthwork Quantities	Earthwork calculations for roadway excavation and embankment volumes.	0174
218	PC-24.10	Roadway Sections	Geometric roadway cross section from the subgrade to finish grade	0174
219	PC-24.11	Roadside Safety	Address items on the Clear Zone Inventory and any other safety items that have been discovered including documenting a decision to fix or not. Design Manual Chapter 700	0174
220	PC-24.12	Minor Safety Documentation	Paving projects (P1) have opportunities to improve minor deficiencies as part of the preservation work. See Design Manual Chapter 410.	0176
221	PC-25	Hydraulics	The Hydraulic Report is intended to serve as a complete documented record containing the engineering justification for all drainage modifications that occur as a result of the project. See Hydraulics Manual.	0148
222	PC-25.01	Type A Reports	Type A Hydraulic Reports contain documentation of design for major hydraulic work. See the Hydraulics Manual.	0148
223	PC-25.02	Type B Reports	Type B Hydraulics Reports contain documentation of design for hydraulics. See the Hydraulics Manual.	0148
224	PC-25.03	Hydraulic Summary	At the Regions discretion smaller projects may replace a Type B report with a Hydraulic Summary, see the Hydraulics Manual and Region Hydraulics Engineer for more information.	0148
225	PC-25.04	Special Reports	Special reports contain specialized hydraulic analysis such as bridge backwater analysis, scour and other special reports.	0148
226	PC-25.05	Hydraulic Report Approved	MILESTONE - Hydraulics Report Approved for project.	
227	PC-26	Partnerships	A contract entered into by two or more groups.	0109



228	PC-26.01	Local Agencies Agreements/MOU's	A contract between the Washington State Department of Transportation and a local governmental agency that includes an offer and an acceptance. Agreements are necessary to accomplish the transfer of funds into and out of state accounts for goods and services.	0109
229	PC-26.02	Other Agencies Agreements/MOU's	A contract between the Washington State Department of Transportation and other governmental agencies or non-governmental agencies that includes an offer and an acceptance. Agreements are necessary to accomplish the transfer of funds into and out of state accounts for goods and services.	0109
230	PC-26.03	Tribal Agreements/MOU's	A contract between the Washington State Department of Transportation and a tribal government that includes an offer and an acceptance. Agreements are necessary to accomplish the transfer of funds into and out of state accounts for goods and services.	0109
231	PC-26.04	Developer Agreements/MOU's	A contract between the Washington State Department of Transportation and a private developer that includes an offer and an acceptance. Agreements are necessary to accomplish the transfer of funds into and out of state accounts for goods and services.	0109
232	PC-27	Railroad	Communication and tasks related to Railroads. Contact the Region Utilities Office.	0158
233	PC-27.01	Preliminary Relocation Plan	A plan that shows railroad facility relocations/adjustments by WSDOT and needs preliminary design plans.	0158
234	PC-27.02	Existing Railroad Facilities Located	Locate existing railroad facilities in the field.	0158
235	PC-27.03	Existing Railroad Facility Plan	A plan showing the location of known railroad facilities. This plan should include all additional data acquired to insure the accuracy needed for the project.	0158
236	PC-27.04	Updated Railroad Facility Location plan	An update and/or enhancement of the quality of the railroad location information.	0158
237	PC-27.05	Railroad Facilities Relocation Plan	A plan showing railroad relocations/adjustments by DOT.	0158
238	PC-27.06	Railroad Agreements	A contract between the Department and a railroad for work by either party where the department will receive or pay funds.	0158
239	PC-28	Right of Way (R/W) Engineering	Property required for a public facility, includes square footage, access rights, easements, and any property impacts as defined in the Right of Way Manual Division 6.	
240	PC-28.01	Preliminary Right of Way	Determination of approximately how much additional Right of Way will be needed to construct the project. Includes any property impacts as defined in the Right of Way Manual Division 6.	0119
241	PC-28.02	R/W Plans	HQ R/W Plans Section makes the final review and then the Plan is stamped & signed by the responsible Project Engineer. Right of Way acquisition cannot begin without plan approval. See Plans Preparation Manual (PPM) Section 130.09.	0124
242	PC-28.03	Sundry Site Plans	Legal Document/Right of Way Plan showing boundary of property to be acquired by WSDOT that is not adjacent to highway right of way. Typically these would include mitigation sites, stormwater treatment areas, and maintenance sites.	0124



243	PC-28.04	DNR Plat	Legal Document prepared by WSDOT HQ R/W Plans Office showing a survey of property to be acquired from the Department of Natural Resources - Either uplands or aquatic	0124
244	PC-28.05	Monumentation Map	The official state survey document for state highway R/W alignment, see Plans Preparation Manual (PPM) 1010	0119
245	PC-28.06	Record of Survey	Public Record filed with the County Auditor used to preserve the evidence of land surveys. The content and format of Record of Surveys are prescribed by law.	0119
246	PC-28.07	Land Corner Records	Written record of corner information as prescribed by the Department of Natural Resources, used to perpetuate or establish land corners and their accessories.	0119
247	PC-28.08	Permit to Destroy	Application made to Department of Natural Resources requesting permission to remove or destroy monuments or make them inaccessible.	0119
248	PC-28.09	R/W Plan Approved	MILESTONE - R/W Plans are submitted to the Region R/W Plans Office for review and transmittal to HQ for approval in accordance with Plans Preparation Manual (PPM) Section 130.08	
249	PC-29	Right of Way Acquisition	WSDOT Real Estate Services performs and coordinates all real estate transactions for the department, and issues guidelines for all state agencies engaged in real estate activities covered by the Uniform Relocation Assistance and Real Property Acquisition Policies Act.	
250	PC-29.01	Preliminary Right of Way Costs	Initial estimate as to what Right of Way costs will be.	0168
251	PC-29.02	Ownership Interests and Encumbrances (Title Reports)	Legal records that defines property interest and boundaries needed to prepare the R/W Plans.	0220
252	PC-29.03	Right of Entry	Field investigations and field explorations, other than land surveying, that are obtrusive in nature require a Right of Entry from the property owner. RCW 47.01.170	0220
253	PC-29.04	Project Funding Estimate (PFE)	A parcel by parcel estimate of all right of way and condemnation costs.	0222
254	PC-29.05	R/W Funding Approved	MILESTONE - Work Order set up by Program Management and authorizes funding. Notification to RES to proceed with R/W acquisition.	
255	PC-29.06	Parcel (Parcel ID)	The process of securing the property needed for highway improvements that conforms with Federal and State regulations called the Uniform Relocation and Acquisition Act. It includes, but is not limited to square footage, access rights, and easements. This element of the MDL can be repeated in the project work breakdown structure for individual parcels.	
256	PC-29.06.01	Appraisal/Administrative Offer Summary	An analysis of real estate market used to estimate the value of the real property and the damages to the remaining property.	0222
257	PC-29.06.02	Review & Determination of Value	Appraisal Review checks the accuracy of the appraisal data and the soundness of the appraisers reasoning then writes a determination of value (DV) which is the amount of money to be offered to the property owner for the property needed for the highway project.	0224
258	PC-29.06.03	Document Development	Development of legal descriptions for real property or property rights to be acquired.	0220



259	PC-29.06.04	Negotiations	The formal offer to purchase, including payment and recording of documents.	0220
260	PC-29.06.05	Purchase	The formal transaction for real property and damages to remaining property.	0220
261	PC-29.06.06	Property Management	Tenant leases are signed, rents collected, property is secured if vacant to prevent vandalism. Demolition of improvements if needed.	0211
262	PC-29.06.07	Condemnation	A judicial process to acquire property where the state has been unable to reach a settlement through negotiation. This is handled by the office of the Attorney General.	0230
263	PC-29.06.08	Possession & Use	A regional or judicial formal document that grants the State the ability to possess and use the property in its construction project prior to the condemnation trial.	0230
264	PC-29.06.09	Relocation	A program of benefits to assist owners, tenants, businesses, farms and non profit organizations that are being displaced by a highway project to move to replacement facilities.	0240
265	PC-29.07	R/W Certification	MAJOR MILESTONE - Date the Region RES Manager assures all right of way necessary for construction, operation, and maintenance has been obtained and that no displace remains in the project limits. This process is required before construction is advertised for bids.	
266	PC-30	Roadside Restoration	WSDOT projects that disturb operational, environmental, visual and auxiliary functions (see Chapter 110 of the Roadside Manual) must be restored according to the policy set forth in the Roadside Classification Plan.	0162
267	PC-30.01	Roadside Master Plan	A Roadside Master Plan may be prepared for a route or portion of a route where conditions require coordination of planning, design, construction, and maintenance activities with anticipated route development, construction projects, environmental or other commitments, and/or a special route designation. See the Roadside Classification Plan.	0162
268	PC-30.02	Restoration Estimate	Region Landscape Architects or the HQ Roadside and Site Development Unit prepares a restoration estimate which includes all costs to restore and establish a sustainable plant community per the Roadside Classification Plan, 1996, Chapter 810.	0162
269	PC-30.03	Landscape Design	Landscape design and revegetation plans are required when the project disturbs the roadside. See the Roadside Classification Plan and Roadside Manual Chapter 800.	0162
270	PC-31	Traffic Design	Gathering of traffic data and development of Traffic reports, studies, designs, and plans.	
271	PC-31.01	Collision Data	Validate accident data. Update / supplement if necessary	0150
272	PC-31.02	Preliminary Traffic Analysis Report	A report that identifies safety and/or capacity deficiencies and list of recommendations including geometric configurations and appropriate traffic control devices.	0150
273	PC-31.03	Preliminary Illumination Design	Scope illumination system using appropriate design matrix and design level. Identify project specific issues and needs	0152
274	PC-31.04	Preliminary ITS Design	Scope ITS system in accordance with Region ITS Implementation Plan.	0152



275	PC-31.05	Preliminary Signing Design	Scope signing system using appropriate design matrix and design level. Identify project specific issues and needs	0152
276	PC-31.06	Preliminary Signal Design	Scope signal system using appropriate design matrix and design level. Identify project specific issues and needs	0152
277	PC-31.07	Bus Stop Inventory	Design decisions . Approval, denial, or variance per engineering and traffic considerations.	0150
278	PC-31.08	Traffic Volumes & Movements	Validate traffic counts. Update / supplement if necessary	0150
279	PC-31.09	Traffic Model	Validate traffic model. Update/supplement if necessary	0150
280	PC-31.10	Traffic Analysis Report	Finalize traffic analysis report	0150
281	PC-31.11	Traffic Signal Permit	State statutes (RCWs) require Department of Transportation approval for the design and location of all conventional traffic signals and some types of beacons located on city streets forming parts of state highways. Approval by the Department of Transportation for the design, location, installation, and operation of all other traffic control signals installed on state highways is required by department policy. The Traffic Signal Permit (DOT Form 242-014 EF) is the formal record of the department's approval of the installation and type of signal. The permit is completed by the responsible agency and submitted to the Regional Administrator for approval.	0152
282	PC-31.12	Illumination Design	Document project specific design decisions, deviations, justifications, and other approvals. Request soils investigation, foundation design, utility service agreement.	0152
283	PC-31.13	ITS Design	Document project specific design decisions, deviations, justifications, and other approvals. Request soils investigation, foundation design, utility service agreement.	0152
284	PC-31.14	Signing Design	Document project specific design decisions, deviations, justifications, and other approvals. Request soils investigation, foundation design, utility service agreement.	0152
285	PC-31.15	Signal Design	Document project specific design decisions, deviations, justifications, and other approvals. Request soils investigation, foundation design, utility service agreement.	0152
286	PC-32	Utilities	The Utility Accommodation Team evaluates and authorizes the installation of utilities and other facilities or activities within the state highway right of way.	0160
287	PC-32.01	Existing Utilities Located	Locate existing utilities in the field to level of accuracy required. Can vary from quality level D (most basic) to quality level A (Subsurface Utility Engineering (SUE)). See Utilities Manual.	0160
288	PC-32.02	Existing Utility Plan	A plan showing the location of known aerial and underground utility facilities. This plan should include all additional data acquired to insure the accuracy needed for the project.	0160
289	PC-32.03	Utility Relocation Plan	A plan showing utility relocations/adjustments by DOT.	0160



290	PC-32.04	Utility Agreements	A contract between the Department and a utility for work by either party where the department will receive or pay funds.	0160
291	PC-33	Work Zone Traffic Control (WZTC)	The planning, design, and preparation of contract documents for the modification of traffic patterns during construction is known as work zone traffic control. See Design Manual Chapter 810.	0154
292	PC-33.01	Preliminary TC Plans	A conceptual plan to provide safety in a work zone for the traveling public and the workers. See Design Manual Chapter 810.	0154
293	PC-33.02	Work Zone Traffic Control Meeting	A meeting with the Work Zone Traffic Control (WZTC) team to discuss various traffic control strategies for the project. See Design Manual Chapter 810.	0154
294	PC-33.03	Staging Design	A strategy for staging the work and/or developing detour plans that are efficient, cost effective, and safe. See Design Manual Chapter 810.	0154
295	PC-34	Design Documentation	Design documentation is prepared to record the evaluations by the various disciplines that result in design recommendations. See Design Manual Chapter 330.	0172
296	PC-34.01	Design Documentation Package	A compilation of assumptions, decisions, justifications, and approvals that support the ultimate design of the project, to include review of the package. See Design Manual Section 330.06	0172
297	PC-34.02	Deviation	A documented decision granting approval at project specific locations to differ from the design level specified in the Design Manual.	0172
298	PC-34.03	Evaluate Upgrade	Documentation of whether or not to correct an existing design element as designated in the design matrices.	0172
299	PC-34.04	Design Exception	Preauthorization to omit correction of an existing design element for various types of projects, as designated in the design matrices. See Chapter 325. A DE designation indicates that the design element is normally outside the scope of the Project Type.	0172
300	PC-34.05	Design Approved	MILESTONE - An action taken to formally approve the Design (Documentation) File, see Design Manual Section 330.07	
301	PC-35	Design-Build Procurement	(Note: Review Contract Ad & Award and Construction Milestones for additional Design Build Reporting Milestones.)"	
302	PC-35.01	RFQ	The Request for Qualifications is a document asking interested proposing teams to submit a well defined package outlining historical information related to capabilities, experience and past performances on specific issues pertinent to the design-build project.	0190
303	PC-35.02	Draft RFP	The draft Request for Proposals is documentation furnished to interested proposing teams to guide the preparation and submittal of qualifications and proposals.	0190
304	PC-35.03	RFP	The final Request for Proposals document.	0190



305	PC-35.04	Technical & Price Evaluation	A systematic scoring of proposals in two parts. First, the Technical Proposal is scored, according to criteria published in the RFP. Second, the Price Proposals are opened and evaluated for completeness and conformance with the requirements in the RFP. The technical score is then divided by the price of qualified proposals to arrive at the final score.	0191
306	PC-36	Contract Plan Sheets Preparation	Development of the Contract Plansheets. See Plans Preparation Manual (PPM) M22-31.	
307	PC-36.01	Contract Plan Workforce Hammock	This task is a hammock task for uniform resource loading the effort involved with contract plan preparation. This task is used when the plan sheet deliverables are constrained by other activities or dates and are not resource loaded. When used, this task will have no constraints, in order to have the task span the entire duration of plan preparation (parent or summary activity).	0178
308	PC-36.02	Index	Required on all projects with 30 plan sheets or more, see Plans Preparation Manual (PPM) Chapter 460.	0178
309	PC-36.03	Vicinity Map	A plan sheet that is required for all projects to show the approximate location of the project on the state route, see Plans Preparation Manual (PPM) Chapter 460.	0178
310	PC-36.04	Summary of Quantities	These plans are a complete tabulation of all bid items and pay quantities required for the project, see Plans Preparation Manual (PPM) Chapter 460.	0178
311	PC-36.05	Reclamation Plans	Plans that are required on all WSDOT projects that contain a WSDOT furnished material source, including borrow, pit, quarry, stockpile, waste site, and reclamation plans. See Plans Preparation Manual (PPM) Chapter 460.	0178
312	PC-36.06	Roadway Section Plans	Plans that show the geometric roadway cross section from subgrade up to finished grade, see Plans Preparation Manual (PPM) Chapter 460.	0178
313	PC-36.07	Grading Section Plans	Plans that show finished ground contours, see Plans Preparation Manual (PPM) Chapter 460.	0178
314	PC-36.08	Stage Construction Plans	These plans show the different stages required to construct the project. See Plans Preparation Manual (PPM) Chapter 460.	0178
315	PC-36.09	Alignment / Right of Way Plans	Plans that contain horizontal alignment & R/W information, see Plans Preparation Manual (PPM) Chapter 460.	0178
316	PC-36.10	Quantity Tabs	Plans that tabulate quantities and identifies locations and notes pertaining to specific bid items, see Plans Preparation Manual (PPM) Chapter 460.	0178
317	PC-36.11	Site Preparation Plans	These plans show existing topography, removal & demolition work, see Plans Preparation Manual (PPM) Chapter 460.	0178
318	PC-36.12	Existing Utilities Plan	This is an extension of the Site Preparation Plan and is only required if the existing utilities are so extensive that they cannot be clearly shown of the site preparation plans. See Plans Preparation Manual (PPM) Chapter 460.	0160
319	PC-36.13	Environmental and/or Wetland Mitigation Plans	A plan sheet that identifies wetland mitigation. See Plans Preparation Manual (PPM) Chapter 460.	0162



320	PC-36.14	Roadway Profiles	Plans that identify a change in the vertical alignment of the roadway, see Plans Preparation Manual (PPM) Chapter 460.	0178
321	PC-36.15	TESC Plans	These plans are required if the project involves land disturbance, to include Qtabs, Plansheets, and Details. see Plans Preparation Manual (PPM) Chapters 460 and 750.	0162
322	PC-36.16	Drainage Plans	Plans that show how the drainage system relates to the rest of the project, including Drainage Structure Notes, Drainage Profiles, and Drainage Details. See Plans Preparation Manual (PPM) Chapter 460.	0178
323	PC-36.17	Utility Plans	Plans that are required when there is work on existing utilities as part of the contract, to include Utility Structure Notes and utility details. See Plans Preparation Manual (PPM) Chapter 460.	0160
324	PC-36.18	Irrigation Plan	These plans are developed by the Region Landscape Office. Includes Irrigation Structure notes and details. See Plans Preparation Manual (PPM) Chapter 460.	0162
325	PC-36.19	Landscape Plan	Plans that are developed by the Region Landscape Office. Includes Qtabs and details. See Plans Preparation Manual (PPM) Chapters 460 and 750.	0162
326	PC-36.20	Interchange Contours	Plansheets showing the contour grading of interchanges. See Plans Preparation Manual (PPM) Chapter 460.	0178
327	PC-36.21	Paving Plans	Plans that show total roadway widths to be paved, including Qtabs and details. See Plans Preparation Manual (PPM) Chapter 460.	0178
328	PC-36.22	Pavement Marking Plans	Plans that show the type and location of pavement markings for the project, including Qtabs and details. See Plans Preparation Manual (PPM) Chapter 460.	0178
329	PC-36.23	Minor Structures Plans	Plans that show the information required to construct retaining walls, etc. Includes Qtabs, profiles, and details. See Plans Preparation Manual (PPM) Chapters 460 and 750.	0145
330	PC-36.24	Illumination Plan	Plans that show street lighting, including Qtabs and details. See Plans Preparation Manual (PPM) Chapter 460.	0152
331	PC-36.25	Traffic Signal Plans	Plans developed by the Region or HQ Traffic Office, including details. See Plans Preparation Manual (PPM) Chapter 460.	0152
332	PC-36.26	ITS Plan	Plans normally developed by the Region Traffic Office that show how to construct Intelligent Transportation Systems, including details. See Plans Preparation Manual (PPM) Chapter 460.	0152
333	PC-36.27	Signing Plans	Plan sheets developed in accordance with Plans Preparation Manual (PPM) Chapter 460. Includes sign specification sheets and details.	0152
334	PC-36.28	Bridge Plan	Bridge plans are prepared by the Headquarters Bridge & Structures Office, see Plans Preparation Manual (PPM) Chapter 460.	0145
335	PC-36.29	Wall Plans	Plans that show the information required to construct major walls and noise walls. See Plans Preparation Manual (PPM) Chapters 460 and 750.	0145



336PC-36.30	Sign Structure Plans	These plans show the details for overhead sign structures. See Plans Preparation Manual (PPM) Chapter 460.	0145
337PC-36.31	Building Plans	Plans that show building structures, to include Qtabs, and details. See Plans Preparation Manual (PPM) Chapter 460.	0145
338PC-36.32	Traffic Control Plans	These are site specific work zone traffic control plans, see Plans Preparation Manual (PPM) Chapter 460.	0154
339PC-36.33	Detour Plan	Plans that show the route to be used as a detour while the project is being constructed. See Plans Preparation Manual (PPM) Chapters 460 and 750.	0154
340PC-37	Contract Specifications Development	Development of Contract Provisions. See Plans Preparation Manual (PPM).	
341PC-37.01	Contract Specifications	Development of Contract Provisions, Amendments, General Special Provisions, and appendices. See Plans Preparation Manual (PPM) Division 6.	0179
342PC-37.02	Summary of Geotechnical Conditions	HQ Geotechnical and/or Region Materials prepares summary of geotechnical conditions for inclusion into the PS&E as Appendix B.	0140
343PC-38	Construction Estimate Development	Development of Contract Estimates for costs and time. See Plans Preparation Manual (PPM).	0167
344PC-38.01	Engineer's Cost Estimate of Construction	An estimate used to initiate funds for the construction activity and to evaluate the contractor's bids, see Plans Preparation Manual (PPM) Division 8.	0167
345PC-38.02	Lump Sum Breakout	Calculations for determining estimate of Lump Sum items.	0167
346PC-38.03	Working Day Estimate	Contract time determined in accordance with Plans Preparation Manual (PPM) Appendix A6	0167
347PC-39	Construction Permits	Development and documentation of permits from other public agencies for work to be done outside of WSDOT right of way and within other public agency right of way.	0181
348PC-39.01	Construction Permits	Construction Permits accommodate WSDOT activities on public owned right of way. See Design Manual, Section 1410.04.	0181
349PC-39.02	Haul Road and Detour Agreement	When the project provides a materials source, or requires traffic to be detoured from the state highway, the region is required to acquire agreements with the owners of the roads that will be used as the haul route or the detour route. See Plans Preparation Manual (PPM) Section 750.10.	0181
350PC-39.03	Turnback Agreement	Areas for relinquishment are areas that the state acquires for the improvement or construction of roads that will not remain a part of the highway system. See Plans Preparation Manual (PPM) Chapter 130.	0181
351PC-40	Constructability Reviews	To develop a quality project, WSDOT uses a series of reviews at predetermined stages of project development. These reviews, called constructability reviews, attempt to ensure that: project development process is on schedule; project definition and estimates are correct; project is buildable; project is maintainable; and project documents are biddable.	0180



352	PC-40.01	Scoping Phase Review (PDR)	Scoping Phase Review	0180
353	PC-40.02	0% Constructability Review	Transitional / Design Re-Start Review	0180
354	PC-40.03	30% Constructability Review	Geometric Review	0180
355	PC-40.04	60% Constructability Review	General Plans Review	0180
356	PC-40.05	90% Constructability Review	Contract Plans Review	0180
357	PC-41	PS&E Reviews	Plans Specifications & Estimate (PS&E) Reviews. Check for completeness and compatibility between the Plans, Specifications and Estimate.	0181
358	PC-41.01	Local Agency Review	A check of the plans, specification and estimate by a local governmental or non-governmental agency or tribal nation to ensure compliance with established agreements or memorandum of understandings.	0181
359	PC-41.02	Region PS&E Review	Region Project Office submits PS&E package to Region for review.	0181
360	PC-41.03	State Materials Justification/Approval	Justification for use of State Furnished Materials and approval by the ASDE.	0181
361	PC-41.04	Proprietary Item Approval	Item approved with final PS&E to Region and a copy to job file.	0181
362	PC-41.05	HQ PS&E Review	Region forwards PS&E package to Headquarters for review.	0181
363	PC-41.06	FHWA PS&E Review	Headquarters forwards PS&E package to FHWA for review.	0181
364	PC-41.07	FRA PS&E Review	Headquarters forwards PS&E package to Federal Railroad Administration (FRA) for review.	0181
365	PC-41.08	Federal Transit Agency (FTA) PS&E Review	Headquarters forwards PS&E package to FTA for review.	0181
366	PC-41.09	Final Signed PS&E to Region	MILESTONE - Project Manager returns stamped and signed AD ready PS&E package to the Region.	
367	PC-41.10	Ad Package to Headquarters	MILESTONE - Final PS&E to HQ with all appropriate attachments as required on the Final Check Sheet, five(5) days prior to the scheduled Ad date.	
368	PC-42	Project Shelf	Completion milestones and documentation for projects not funded for construction. Re-start milestones for projects coming off the shelf for advertisement.	0187
369	PC-42.01	Incomplete Project to Shelf	MILESTONE - The date that an incomplete project goes to a holding area (called "the shelf"). This project is not ready for advertisement and will need to undergo further design/adjustments and reviews.	
370	PC-42.02	AD Ready Project to Shelf	MILESTONE - The date that a fully designed, reviewed and permitted project goes to a holding area (called "the shelf"). This project is ready for advertisement without any further adjustments or reviews	
371	PC-42.03	Shelf to AD Ready	MILESTONE - Date project is taken off shelf.	
372	PC-42.04	Shelf/Ad Ready Letter	A Memo from the Project Engineer to the Assistant Region Administrator for Project Development to formally suspend work on a project until a later date.	0187
373	PC-42.05	Estimate to Make AD Ready	Estimate of scope, time, and cost to get an incomplete, "shelved", project ready for advertisement	0187



374PC-43	Contract Ad & Award	Advertisement and award of construction contracts. See Ad and Award Manual.	
375PC-43.01	Construction Funding Approval	MILESTONE - Official approval from HQ Program Management and FHWA (if federal funds are used) to move ahead with the advertisement of the construction phase of a project	
376PC-43.02	Printing	Reproduction and distribution of plans, specifications, and bid proposal package. Contact HQ Printing Services for information.	0189
377PC-43.03	Project Geotechnical Documentation Package	Printing of pertinent geotechnical reports for sale to prospective bidders. Prepared by HQ Geotechnical and/or Region Materials and printed by HQ Printing Services.	0140
378PC-43.04	Advertisement (AD Date)	MAJOR MILESTONE - Date the project is first advertised for bid. (Note: For Design-Build, this is reported as the RFP date)"	
379PC-43.05	Addendum Deadline	MILESTONE - Date addenda are due in headquarters. 14 calendar days prior to the scheduled bid opening.	
380PC-43.06	Bid Opening	MAJOR MILESTONE - Public opening and reading of sealed bids (Note: For Design-Build projects, this is reported as the selection date)"	
381PC-43.07	Award	MAJOR MILESTONE - Official notice of award of the contract to the successful bidder. (For Design-Build projects, this is reported as the Contract Award date)"	
382PC-44	Construction Milestones	Project Control and Reporting milestones for Construction phase of the project. Estimates here are for the Preconstruction phase and will be revised/updated when project is in construction phase.	
383PC-44.01	Contract Execution	MAJOR MILESTONE - Project Control & Reporting (PC&R) Milestone. This is the date when the Department signs the actual contract with the contractor. This typically occurs within 21 days following contract award. See 1-03.3 of the Standard Specifications for further detail. (Note: For Design-Build projects, this is reported as the Notice to Proceed date)"	
384PC-44.02	Construction Start	MAJOR MILESTONE - Project Control & Reporting (PC&R) Milestone. This is the date when work actually starts on building the project and activity might be seen on the site. The first day that can be charged against the contract. This day is usually the 10th calendar day following execution but is also sometimes changed by Special Provision. See 1-08.5 and contract special provisions for further details.	



385PC-44.03	Operationally Complete	MAJOR MILESTONE - Project Control & Reporting (PC&R) Milestone. This is the date when the intended end user (the public in the case of facilities such as highways and ferry terminals, WSDOT employees in the case of facilities) 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. See 1-01.3 of the Standard Specifications for further details (Substantial Completion).	
386PC-44.04	Final Contract Completion	MAJOR MILESTONE - Project Control & Reporting (PC&R) Milestone. This is the date when the contract is finalized. All contractual work will have been completed and all payments to contractors will have been completed. After all contractual obligations have been fulfilled, the Department accepts the contract as complete by signature of the Secretary on the Final Contract Voucher Certification. See 1-01.3 and 1-05.12 of the Standard Specifications for further detail.	
387CN	Construction		
388CN-PE	Project Engineer Contract Support Activities	CN-PE-01 through PE-09	
389CN-PE-01	Project Management	See Project Management On-line Guide (PMOG) http://www.wsdot.wa.gov/Projects/ProjectMgmt/	
390CN-PE-01.06	Managing the Project Hammock Task	Hammock task to assign and account for the resource needs and effort required to manage the project.	
391CN-PE-01.07	Project Management Plan	The Project Management Plan describes both the Project Performance Baseline for the project deliverables and the schedule and budget plans for delivering them, and the Project Management Methods that will be used by the Project Team during their delivery. See Project Management On-line Guide (PMOG) for details. http://www.wsdot.wa.gov/Projects/ProjectMgmt/	
392CN-PE-01.08	Endorsement	MILESTONE - Endorsement is the process of gaining the commitment of the Project Team then the endorsement of the Management entities responsible for the resources needed to successfully execute the Project Management Plan. The process is a formal one and culminates in documented commitment of support by the Team members, management and others - customers, team and sponsors as appropriate. See Project Management On-line Guide (PMOG) for details. http://www.wsdot.wa.gov/Projects/ProjectMgmt/	
393CN-PE-02	Bridge Technical Advisor	Bridge engineer assigned to be an advisor to a construction project.	
394CN-PE-02.01	Bridge Technical Advisor Assigned		
395CN-PE-03	Geotechnical Advisor	Provides support to the Region during construction. Much like a Bridge Technical Advisor.	
396CN-PE-03.01	Geotechnical Advisor Assigned		
397CN-PE-04	Consultant Administration		
398CN-PE-04.01	Management of Consultant On-Call Agreement	The process of ensuring the original design consultant is available for services during construction under a legally binding agreement. See Consultant Procedures Manual.	



399	CN-PE-04.02	Management of Disputes Review Board Agreements	The process of ensuring State and Third Party members of Disputes Review Board are available for services during the construction project under legally binding agreements. See Consultants Procedures Manual.	
400	CN-PE-05	Qualified Tester Program	Headquarters Materials Lab program that establishes uniform testing procedures, insures that testing staff is qualified in performing the testing procedures, and provides regular review. See Construction Manual 9-5.5	
401	CN-PE-05.01	Qualify Field Staff		
402	CN-PE-06	Public Outreach	The public should be notified of upcoming construction projects. Contact the Communications office for additional information.	
403	CN-PE-06.01	Communication Plan Developed		
404	CN-PE-06.02	Communication with Public Completed		
405	CN-PE-07	Change Management	Active identification and assessment of encountered change using the change management plan including obtaining proactive endorsement (by the necessary authority) of changes to project scope, schedule, or budget before the change is implemented.	
406	CN-PE-07.01	Changes and Issue Resolutions Documented		
407	CN-PE-08	Mapping	CN-PE-08.01 through 08.02 Mapping necessary for R/W Maintenance	
408	CN-PE-08.01	Surveying	R/W research, layout and maintenance of R/W, R/W markers, and R/W controls.	
409	CN-PE-08.02	Records	Actions necessary to record R/W surveying activities with local county governments and the maintenance of department R/W records	
410	CN-PE-09	Conveyances & Permits	Management of Permits, easements, etc granted to WSDOT for completion of the contract work.	
411	CN-PE-09.01	Permit/Easement Conditions Met		
412	CN-CC	Contract Completion	CN-CC-01 through CC-05 General Term for the various stages of contract completion	
413	CN-CC-01	Substantial Completion	A Stage of completion where the contract work has progressed to the extent that the Contracting Agency has full use and benefit of the facilities. See 1-01.3 of the Standard Specifications for further details	
414	CN-CC-01.01	Substantial Completion Letter Sent to Contractor		
415	CN-CC-02	Physical Completion	A stage of completion where all physical work of the contract has been completed. See 1-01.3 of the Standard Specifications for further details.	
416	CN-CC-02.01	Physical Completion Letter Sent to Contractor		
417	CN-CC-03	Completion	A stage of completion that generally follows Physical completion where all administrative paperwork required by the contract has been submitted. All aspects of the work both physical and administrative are completed and the job is now ready for Acceptance by the Secretary of the Department. See 1-01.3 and 1.08.9 of the Standard Specifications for further details	



418	CN-CC-03.01	Letter of Completion sent to Secretary		
419	CN-CC-04	Contract Acceptance	After all contractual obligations have been fulfilled the Department accepts the contract as complete by signature of the Secretary on the Final Contract Voucher Certification. See 1-01.3 and 1-05.12 of the Standard Specifications for further detail	
420	CN-CC-04.01	Endorsement of Final Contract Voucher		
421	CN-CC-05	FHWA Stewardship Acceptance	An act of acceptance by FHWA for work completed under the contract. This Federal Stewardship action clears the way for completion of Federal funding for the contract. Refer to the FHWA/WSDOT Stewardship Agreement, Construction Monitoring Plan for further details.	
422	CN-CC-05.01	Letter of Stewardship accepted by FHWA		
423	CN-EOT	Estimated Open to Traffic	The date key traffic components are open for public use.	
424	CN-CS	Contractor Specific/Contract Driven Activities	CN-CS-01 through CS-02	
425	CN-CS-01	Contract Administration	CN-CS-01.01 through 01.08.01 The administrative work in managing a contract towards it's completion.	
426	CN-CS-01.01	Contract Execution	This is the date on which the contract between WSDOT and the contractor for completion of the work has been fully executed or signed. See 1-03.3 of the Standard Specifications for further detail.	
427	CN-CS-01.02	First Chargeable Working Day	The first day that can be charged against the contract. This day is usually the 10th calendar day following execution but is also sometimes changed by Special Provision. See 1-08.5 and contract special provisions for further details.	
428	CN-CS-01.03	Contract Records	Construction records that are prepared to document the completion of the contract. Some of these records include contract payments, contract materials, Correspondence, etc. See the Construction Manual for further detail on the various records kept in support of the construction project.	
429	CN-CS-01.04	Contract Surveying	Survey work necessary for the layout and construction of the project.	
430	CN-CS-01.05	Inspection	Inspection activities conducted by the Project Engineer and their staff to ensure the construction effort adheres to the requirements noted in the contract plans, contract provisions as well as the Standard Specifications for Road Bridge and Municipal Construction.	
431	CN-CS-01.06	Environmental Review/Permits	Changes or omissions that result in impacts to the environment not already covered in environmental permits & documentation for the project.	
432	CN-CS-01.07	ESA Compliance/Listing Updates	ESA listings change every 6 months, concurrence with Section 7 should be reviewed every 6 months for the life of the project.	



433	CN-CS-01.08	Materials Testing & Acceptance	Construction Project Engineers actions to approve and accept materials for use in WSDOT Construction projects. See contract Provisions, Contract Plans, Amendments to the Standard Specifications, Standard Specification, and Construction Manual for specific requirements and guidance.	
434	CN-CS-01.08.01	Qualified Tester Modules	A program implemented by the HQ Lab to ensure the use and understanding of national standard test procedures such as AASHTO, ASTM, WAQTC, as well as WSDOT procedures. This program uses elements of the HQ Materials Lab accreditation extending that accreditation to testing completed in field offices and on construction sites.	
435	CN-CS-02	Scheduling/Workforce Leveling	A program implemented by the HQ Lab to ensure the use and understanding of national standard test procedures such as AASHTO, ASTM, WAQTC, as well as WSDOT procedures. This program uses elements of the HQ Materials Lab accreditation extending that accreditation to testing completed in field offices and on construction sites.	
436	CN-DB	Design-Build Contract Administration	The process of ensuring that construction is in conformance with the design-build contract.	
437	CN-DB.01	Environmental Compliance	The monitoring to ensure the design builder's compliance with environmental requirements of the design-build contract.	0335
438	CN-DB.02	Design-Build Design Oversight	The process of ensuring that design is in conformance with the design-build contract.	0325
439	CN-DB.03	Utilities - Design Build	The monitoring to ensure the design builder's compliance with utility requirements of the design-build contract.	0336
440	CN-DB.04	QA - Construction	The monitoring to ensure the design builder's compliance with the construction quality assurance requirements of the design-build contract.	0337

US 101 Project Management Plan

Handouts