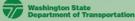


Project Delivery Method
Selection Guidance

Selection Matrix:
Final PDM

January 15, 2016
WSDOT Construction Division



Determining Final PDM

Sequential tasks in the Matrix needed to determine Final PDM:

- Pre-Work
- Selection Process Requirements
- Selection Process Timing
- Selection Matrix
- Final PDM Approval Process



Pre-Work Prior to Determining the Final PDM

- Be thoroughly familiar with the Project Delivery Method Selection Guidance (PDMSG);
- PDM Attribute Comparison Spreadsheet in Appendix A – review the pros and cons of the three project delivery methods as they relate to different project attributes.
- Review Appendix B - Pre-Work
- Review Appendix D - How to use the Selection Matrix
- Review the Project Summary Package, PMP and current project information



Pre-Work

- Review the current Project information including the following:
 1. Project Description and attributes such as scope, schedule and budget.
 2. Project Commitments, Decisions and Assumptions.
 3. Project Goals and Constraints.
 4. Risks and/or Risk Assessment.
 5. Revise/Update or create a new Project Delivery Description Worksheet or similar form with the current project information.



Updated Project Delivery Description Worksheet

Appendix D – How to Complete the Selection Matrix

Project Attributes	
Project Name: Project X - Bridge Replacement Project and HOV Connector	
Location: IA-SR-8 in	
Project Goals: Minimize Schedule (10 and highest priority) Minimize Impacts to the traveling public and local municipality (businesses) (14) (17) Minimize Environmental Impacts (8) Minimize Operations and Maintenance costs (6) Minimize Project Area Footprint (8) (10) There are no Project Constraints that affect the selection of the PDM	<p>Comment (ET56): Changes in the project scope and development of the project information has reduced this goal's relative importance.</p> <p>Comment (ET57): Changes in the project scope and development of the project information has reduced this goal from Primary to Secondary and it is dropped from the Matrix.</p> <p>Comment (ET58): As part of the pre-work, the priority of this goal was adjusted to reflect the increase of its relative importance to project success.</p> <p>Comment (ET59): This Milestone no longer exists.</p>
Estimated Budget: \$25,000,000	
Estimated Project Schedule: Completion Date 11/1/2017	
Require Project Completion or Milestone Dates (if applicable): Must Complete Milestone for Part 1 of project to allow Project-Y project to start 8/15/2016	
Source(s) of Project Funding: Transportation package	
Project Corridor: IA	
Major Features of Work – pavement, bridges, sound barriers, etc.: Bridge replacement and HOV connector	



Project Commitments, Decisions and Assumptions

- **Project Commitments:** Know commitments and limitations to the project that may affect Project scope, risks, budget or schedule.
- **Project Decisions:** Decisions that cannot be changed due to Funding Source, Project Approval, Legislative Mandate or other sources that may affect Project scope, risks, budget or schedule.



Project Commitments, Decisions and Assumptions

- Project Assumptions: A deduction based on incomplete Project information that may affect Project scope, risks, budget or schedule if there are changes.



Questions?



Project Goals

- What additional Project Goals (if any) are needed on the Project Delivery Description Worksheet?
- What goals would contribute to project success?



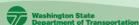
Project Delivery Goals

- Project Delivery Goals are goals related to the characteristics of the PDMs.
- A Project Goal may be identical to a Project Delivery Goal or it may have a related goal determined by the Project Goal specifics, causes or risks;
- Project Delivery Goals are a refinement of the Project Goals and are used to evaluate the ability of the PDMs to meet the Project Goals based on the characteristics of the PDMs.



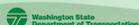
Weigh Project Delivery Goals

- Use 10 (highest) to 1 (lowest) to indicate the relative importance of your goals to achieving a successful project.
- Pick out the Goal you consider most important and assign it a 10;
- Evaluate each Goal by comparing it to your highest weight Goal;
- Continue until all Goals are weighed.



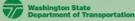
Neutral Goals

- A Neutral Goal is a Project Goal that has the same rating for each proposed PDM in the Selection Matrix;
- These would be goals that have the same relative ability to be achieved, regardless of the PDM.



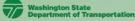
Project Constraints

- Constraints differ from Project Goals in that they MUST be accomplished for project success;
- Evaluate the Highest Priority Project Goals ("10's") to determine if any are constraints;
- Project Commitments and Decisions may create "Constraints";
- Constraints are not scored, they are Pass/Fail when evaluation the optimal PDM for the Project.
- Constraints tend to be rare in this process.

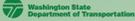


Project Risks

- Preliminary Risks should be identified in the Project Summary Package and may be further developed as part of the PMP;
- Utilize the resources on the WSDOT Risk Assessment webpage <http://www.wsdot.wa.gov/Projects/ProjectMgmt/RiskAssessment/> and/or Appendix A.6- Typical Transportation Project Risks List, General Project Risks Matrix;
- Validate/Update a Qualitative Risk Analysis or use a more detailed and current Risk Analysis from your PMP.



Questions?



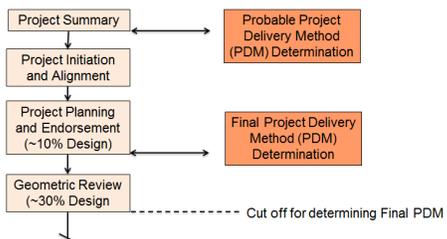
Final PDM Selection Process Requirements

Estimated Project Cost	Required Process
<ul style="list-style-type: none"> Less than \$2 Million* 	Validate or Revise Part I and V of Selection Checklist
<ul style="list-style-type: none"> Equal to or greater than \$2 Million* but less than \$25 Million 	Validate, Revise or Complete Part I, II, III and V of Selection Checklist
<ul style="list-style-type: none"> \$25 Million or greater but less than \$100 Million, or Validation/Revision of Parts II and III of the Checklist does not determine a Final PDM 	Validate, Revise or Complete Selection Matrix
<ul style="list-style-type: none"> \$100 Million or more, or Validation/Revision of the Selection Matrix does not determine a Final PDM 	Selection Matrix Workshop

*This limitation relates to Design-Build Contracts so the estimated contract cost includes Construction and Design costs included in a potential DB contract. Project Cost is used in all other cases.

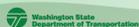


Recommended Timing for Determining Final PDM



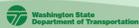
Project Basis of Design

- The Basis of Design (BOD) will include the Final PDM determination.



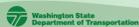
Participation

- Project Engineer/Project Design Lead assigned the design/construction of the project (this may be different offices.)
- Project Office/staff assigned to the design and construction of the project, as appropriate and available



Final PDM Determination Selection Matrix

- Review Project Summary Package, PMP and other current project information including scope, schedule, and budget.
- Updated Project Delivery Description Worksheet.
- Updated Project Goals and priorities.
- Updated Project Constraints.
- Qualitative or other Risk Analysis.



Final PDM Determination Selection Matrix

- Identify Project Goals in the matrix.
 - Eliminate provided Goals that do not apply to the project, secondary, or neutral.
 - Clarify the language of the provided Project Delivery Goals that apply
 - Add Project Delivery Goals, if needed



Final PDM Determination Selection Matrix

- Identify Project Constraints, if any, and evaluate possible methods as pass/fail.
 - Cross out columns for PDM's that fail Constraints, and do not consider further



Final PDM Determination Selection Matrix

- Weigh Project Delivery Goals
 - Relative importance to a successful project.
 - Use established weights or priorities, 10 (highest) – 1 (lowest), to evaluate relative importance.
 - Weigh any new Project Delivery Goals using the same process.



Final PDM Determination Selection Matrix

- Rate each PDM's relative ability to achieve the Project Delivery Goal 10 (highest) -1 (lowest).
 - Review and adjust the rating for provided Project Delivery Goals or Goals from the Probable PDM Selection Matrix.
 - Develop ratings for PDM's relating to new or revised Project Delivery Goals.



Final PDM Determination Selection Matrix

- Score each PDM by multiplying each Goal Weight by PDM Rating.
- Add up the score in each Column.



Final PDM Determination Selection Matrix

- If there is a clear choice of PDM, then:
 - Perform an initial risk assessment for the Final PDM (evaluate the Final PDM ability to overcome the project risks and/or if the PDM creates additional risks and if these are acceptable).
- If there is not a clear choice of Final PDM, then:
 - Perform an initial risk assessment on all remaining PDM's.



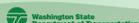
Final PDM Determination Selection Matrix

- If:
 - The Selection Matrix process did not validate the Probable PDM, and the revised Selection Checklist does not clearly indicate a Final PDM;
 - The Project Engineer chooses additional evaluation;Then the Project Engineer will complete a Selection Matrix Workshop to determine the Final PDM.



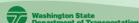
Final PDM Approval Process

- If the Project contract cost is less than \$100 Million and complies with the guidance; then the Regional Administrator reviews and approves the Final PDM.



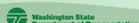
Final PDM Approval Process

- If an exception to the guidance is requested, then;
 - The Regional Administrator endorses the Final PDM and submits it to HQ; and
 - The Assistant State Design Engineer and Assistant State Construction Engineer endorse the Final PDM.
 - The Chief Engineer approves the Final PDM (delegated to the Deputy Chief Engineer in the 10/28/2015 PDMSG memo from the Chief Engineer)



Changes to the Final PDM Determination

- Significant Project change may change the Final PDM
 - Assess impacts to see if a change to the Final PDM is indicated;
 - Update the Final PDM Checklist and documentation;
 - Seek approval of Final PDM per Section 3.10 of the guidance- same as an exception if occurs after 30% Design.



Questions?



The logo for the Washington State Department of Transportation is located in the bottom-left corner of the slide. It features a stylized green and white graphic of a mountain and water, followed by the text "Washington State Department of Transportation".
