

SR 18 Widening

Issaquah-Hobart Rd to Raging River – Phase 1

Project Delivery Method Selection

April 24, 2024

Opportunity for Improvement

- In alignment with legislative direction, WSDOT implement common-sense changes in the mid-2010's that foster efficient, effective, and accountable government for those we serve.
- Department identified a series of reforms including those that:
 - Expedited project delivery,
 - Saved money and mitigated risk
- Project Delivery Method Selection process was developed to expand and strengthen construction contracting methods and protocols

Project Delivery Method Selection

- Goals:
 1. Establish a systematic consistent approach to be applied throughout WSDOT,
 2. Establish how and when a project should be assessed,
 3. A scalable selection process,
 4. Provide the documentation for Project Delivery Method approval, and
 5. Identify approval levels and endorsements in the process

Project Delivery Method Selection

- Delivery Methods
 - Design Bid Build
 - Design Build
 - General Contractor/Construction Manager (GC/CM)
 - WSDOT has limited experience.
 - Progressive Design Build (*relatively new*)
 - WSDOT has 4 contracts moving forward with this approach
 - Need time to evaluate how successful this approach is and identify any lessons learned before allowing systemic deployment

Project Delivery Method Selection

- All projects are evaluated in two steps:
 - The Probable PDM is established during the Scoping Phase
 - The Final PDM at 10% to 30% design
- The process is scalable to the project.
 - A '*Selection Checklist*' identifies the optimal Project Delivery Method.
 - A '*Selection Matrix*' may be used for some projects as a second step if deemed appropriate.

Project Delivery Method Selection

- A key to a successful implementation includes:
 - Unbiased assessment of projects.
 - Understanding of project risks and opportunities
 - A balanced conversation with subject matter experts to assess each unique project and identify the appropriate delivery method

SR18 Widening PDMS

- On December 15, 2022 a PDMS workshop was held
- Workshop attendees included:
 - Project Design Team
 - Project Engineer
 - Engineering Manager
 - Subject Matter Experts from Geotech office and Environmental office
 - Assistant State Design Engineers
 - Assistant State Construction Engineer

Project Delivery Method Selection Checklist

Part 1 – RCW Qualifications

- The attendees discussed and all agreed on the following determinations on the PDMSG checklist

Part I — RCW 47.20.785 Project Qualifications for Design-Build Method		
1. Are construction activities highly specialized?	<input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No
2. Are there complex staging, maintenance of traffic, constraints, risks, etc. that will affect the construction methodology?	<input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No
3. Does the project provide opportunity for greater innovation & efficiencies between the designer &	<input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No
4. Would use of DB result in significant reduction to the overall project schedule or critical milestones?	<input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No
If Yes was selected for <u>any</u> of questions 1 through 4 above, Design-Build is a viable PDM option. (Go to Part II)		
If No was selected for <u>all</u> of the questions 1 through 4 above, it indicates Design-Bid-Build as the PDM — get Authorization Level listed at end of form.		

Checklist Part 2 – Project Questions

Schedule

SCHEDULE	<p>A. Are there 3rd party agreements with local government or agencies that require a full design before execution? (Is a significant portion of the project impacted?)</p> <p>Justification: We don't think local gov't or agencies need a full design.</p>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	<p>B. Are there long lead, lengthy environmental permits or ROW issues that would delay start of Construction? (Is a significant portion of the project impacted?)</p> <p>Justification: Design builder is responsible to prepare JARPA which is controlling element of the overall project schedule. DNR access issue has potential delay to RW plan approval.</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<p>C. Is early obligation of funds necessary? (Such as a deadline to obligate grant funding)</p> <p>Justification: If we don't get fund 2023-2025 we will be short in the next biennium due to inflation. Funding in 2023 deliver legislature and local gov't expectation on CN start (2025).</p>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
	<p>D. Is there time to prepare 100% design?</p> <p>Justification:</p>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	<p>E. Is there a need to compress the schedule?</p> <p>Justification: Will help shorten MOT schedule on a T1 truck route highway.</p>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
	<p>F. Do funding limits restrict when the schedule can start? (Such as the Biennium)</p> <p>Justification: If we don't get fund 2023-2025 we will be short in the next biennium due to inflation.</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Checklist Part 2 – Project Questions Complexity & Innovation

<p>G. Are there significant risks that could be better managed by others than WSDOT?</p> <p>Justification: JARPA, CN risk, Landslide zone</p>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
<p>H. Does the project involve specialty engineering or high-tech designs or have other opportunities for innovation?</p> <p>Justification: Landslides and difficult terrain which need Geotechnical engineers and Hydraulics engineers.</p>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
<p>I. Does the project require complex phasing and staging with the possibility of high impacts to the public?</p> <p>Justification: One lane reduction during MOT which impact the public and freight movement.</p>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
<p>J. Does an existing road or facility need to remain in service? (no options for detour, or no alternate facility available, and a significant portion of the project is impacted)</p> <p>Justification: This section of SR 18 is T1 truck route and National Highway System (NHS). Some access points along this corridor need to remain open for the public and DNR interest. There will be no truck climbing lanes and keep one lane open in each direction during the MOT phases.</p>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
<p>K. Is WSDOT willing to give up control of design and/or construction on this project?</p> <p>Justification: It will give opportunity for innovation and efficiencies.</p>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
<p>L. Are critical 3rd party involvement and changes likely during design & construction?</p> <p>Justification: DNR, Tribes, WDFW, local agencies have interest in this project.</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Checklist Part 2 – Project Questions

Cost

COST	M. Is early certainty of the total project cost important? (Increased certainty of total cost early in the project needed due to funding or project constraints)	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
	Justification: Due to complexity of the project such as mountainous terrain, landslide area, and length of the project limit.		

Checklist Summary

Sum each column to the right—a checked answer is worth one (1) point. The column with the most points indicates the recommended delivery method.

	DBB	DB
Project Delivery Method indicated from the responses to the questions in Part III (above)	Score: 3	10

DBB DB Inconclusive

The project cost is:

- less than \$25 million — get Authorization Level 1 (below)
- \$25 million or greater, but less than \$100 million — get Authorization Levels 1 & 2 (below)
- \$100 million or greater — Workshop to get Authorization Levels 1 & 2 (below)

Final Project Delivery Method Selected	
<input type="checkbox"/> Design-Bid-Build <input checked="" type="checkbox"/> Design-Build	
Authorization Level 1	
Project Engineer	
Name: Mark Allison	Signature: <u>Mark R. Allison</u> Digitally signed by Mark Allison Date: 2023.01.22 22:06:13 08'00'
PDE/EM Manager	
Name: John Chi	Signature: <u>John Chi</u> Digitally signed by John Chi Date: 2023.02.03 09:34:14 -08'00'
Authorization Level 2	
Regional Administrator	
Name: Brian Nielsen	Signature: <u>Brian D. Nielsen</u> Brian D. Nielsen (Feb 7, 2023 09:15 PST)

SR18 Widening PDMSG Results

- The workshop concluded that Design – Build was the appropriate delivery method
- The checklist was signed by
 - Project Engineer
 - Engineering Manager
 - Regional Administrator