



Meeting 2 Questions and Answers

JTC Public-Private Partnership (P3) Work Group

December 1, 2023

**CDM
Smith**

Key questions from Work Group meeting 2

- **Question 1:** Where does the value (cost savings) for the state come from?
- **Question 2:** What are some examples of challenges unique to P3 delivery?
- **Question 3:** What are some examples of remedies for P3 delivery challenges?
- **Question 4:** How does WSDOT decide which delivery method to use: design-bid-build, design-build, or progressive design-build?

Q1. Where does the value (cost savings?) for the state come from in Value for Money (VfM) assessments?

- In the I-405 project example, where does the value come from (i.e., cost savings under P3 model)?**
 - Risk transfer.** For the public party, the value comes from risk transfer, shifting risks associated with construction, operations, and maintenance. Different elements of risk are “priced” in a VfM analysis, so shifting that risk to the private party has an associated cost savings for the state. In this project example, the state would receive a concession payment. The public sector has more retained risk than the P3 model in this case, where the public model retains \$170M in risk, and the private model retains \$30M in risk.
 - Operations and maintenance savings.** There are significant O&M savings to the public sector associated with tolling costs in using a P3 model (34%).
 - Accelerated project delivery.** Public value also comes from accelerated project delivery, resulting in time and cost savings on delivery as well as the ability to collect tolls sooner.

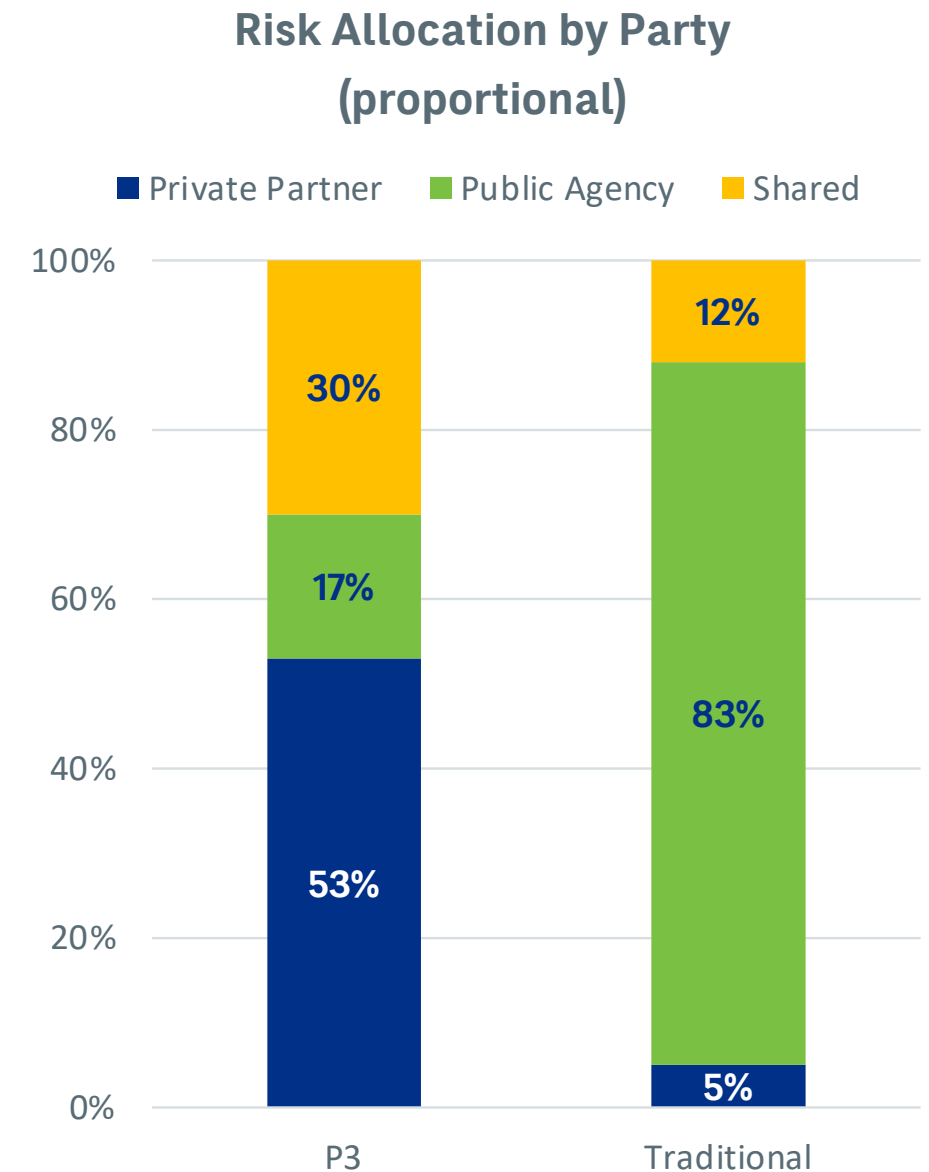
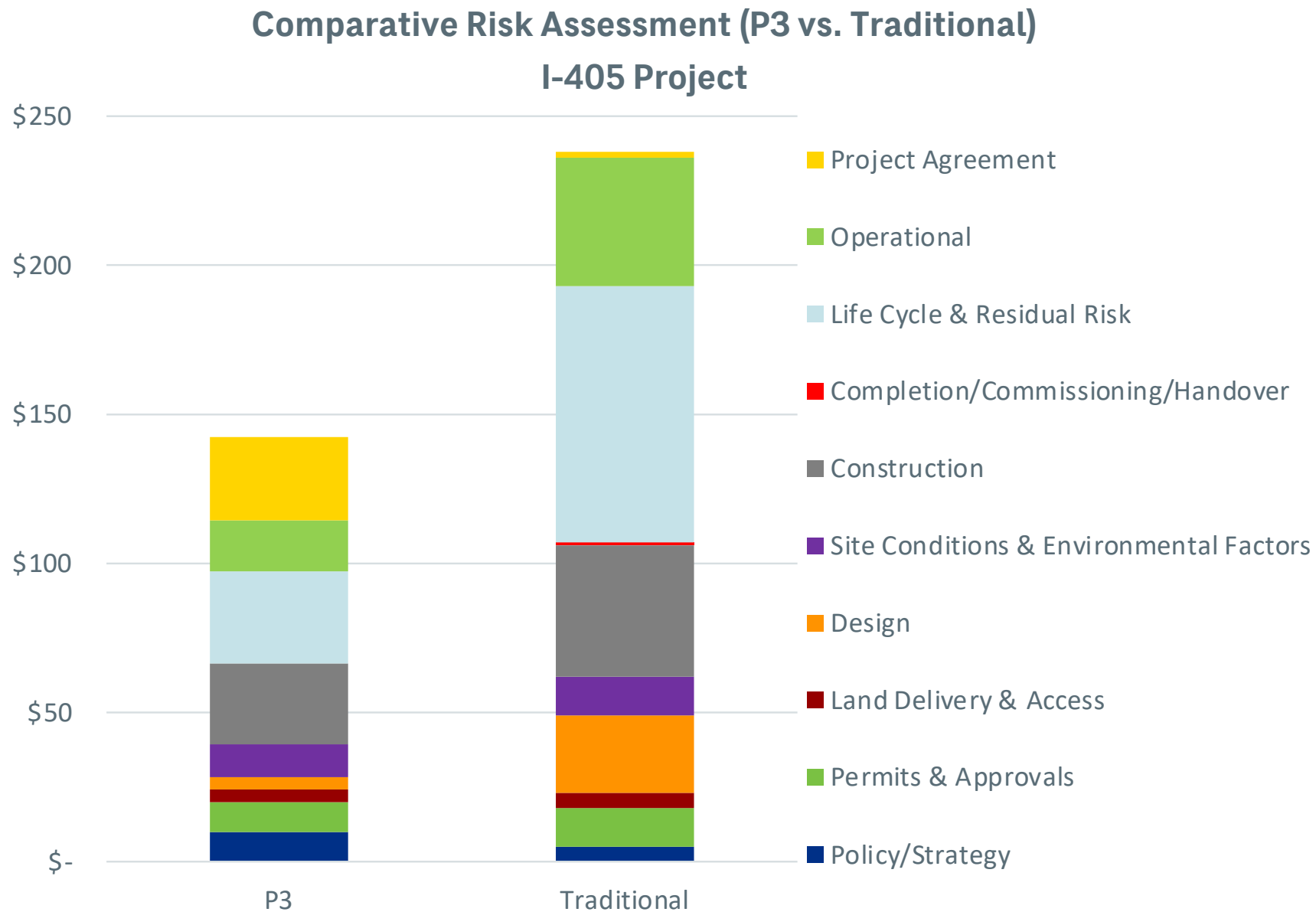
Category	Traditional Toll Revenue Bond	Traditional General Obligation Bond	P3 Toll Concession
Concession Payment	-	-	1,040
Excess Cash Flow	610-740	780	0
Retained Risk	(170)	(170)	(30)
Pre-Development Cost	(100)	(100)	(100)
Net Project Value	340-470	510	910

Source: [Evaluation of Public Private Partnerships, Washington State JTC, January 2012](#)

Q1. Where does the value (cost savings?) for the state come from in Value for Money (VfM) assessments? (continued)

- **How is risk priced when the state keeps the risk (either in public sector comparator analysis or in actual project)?**
 - **Different elements of risk are “priced” in a VfM analysis.** These values are subjective but based on expert judgment. Shifting the risk to the private party has an associated cost savings for the state. The example shown here is for I-405.
 - **Risk assessment breaks risk into categories** such as permits and approvals, land delivery and access, design, site conditions and environmental factors, construction, commissioning, and operations. The value of each category of risk is quantified under a public sector comparator (PSC) vs. P3 model to identify which risks are best managed by the respective parties.

Q1. Where does the value (cost savings?) for the state come from in Value for Money (VfM) assessments? (continued)



Q1. Where does the value (cost savings?) for the state come from in Value for Money (VfM) assessments? (continued)

■ Are there examples of projects that do not merit delivery as a P3 based on analysis?

- Of the projects evaluated in the 2012 P3 study, several were not viable as P3 delivery. The SR 167 Extension project did not prove viable under a P3 model. While the P3 model would provide a higher net project value than traditional delivery, there was still a large funding gap across all scenarios considered.
- The I-5 Columbia River Crossing was also estimated to have a funding gap across all public funding models and a P3 model. The cost savings between a General Obligation Bond model delivery and a P3 DBFOM model were competitive and too close to definitively conclude that a P3 model would be preferred.

Delivery Model and Financial Assessment		SR 167 Extension	I-5 Columbia River Crossing
Traditional Toll Revenue Bond	Concession Payment	(480)	(1,720) – (1,750)
	Excess Cash Flow	100	200 – 240
	Retained Risks	(120)	(120)
	Pre-Development Cost	(240)	(330)
	Net Project Value	(740)	(1,930) – (2,000)
Traditional GO Bond	Concession Payment		(1,120)
	Excess Cash Flow		-
	Retained Risks		(120)
	Pre-Development Cost		(330)
	Net Project Value	Not Assessed	(1,570)
P3 Toll Concession	Concession Payment		(870) – (1,100)
	Excess Cash Flow		-
	Retained Risks		(50)
	Pre-Development Cost		(330)
	Net Project Value	Not Assessed	(1,250) – (1,480)
P3 Availability Concession	Concession Payment	(630)	(2,370)
	Excess Cash Flow	520 (offset only)	1,190 (offset only)
	Retained Risks	(40)	(50)
	Pre-Development Cost	(220)	(330)
	Net Project Value	(370)	(1,560)

Source: [Evaluation of Public Private Partnerships, Washington State JTC, January 2012](#)

Q2. What are some examples of delivery challenges unique to P3s?

■ Meeting 3 Spotlight: Indiana

- At Work Group meeting #3, a representative of the Indiana Finance Authority (IFA) will present how Indiana has structured P3 agreements to address delivery challenges

- **Projects delivered as P3s can face many of the same challenges as projects delivered under traditional procurement models, such as delays, quality deficiencies, cost overruns, and contractor financial difficulties. P3 projects tend to be larger and more technically complex, which can magnify the impact when challenges are encountered. P3s also introduce additional areas for possible delivery challenges:**
 - Reliance on private equity to fund a significant portion of project delivery may be more likely to lead to delays or disruptions if the private partner experiences financial difficulties.
 - Given the limited legal exposure that special purpose entities represent, they may be more likely to default or declare bankruptcy than traditional construction firms, which can lead to delays and disruptions in delivery.
 - Given the tendency toward large, complex projects, P3s may attract a relatively small number of prospective partners (bidders). Without sufficient competitive pressure to incentivize cost efficiency, project bids may significantly exceed original estimates.
 - If the expertise and financial risk appetite needed to carry out a complex P3 project is scarce, a P3 delivery partner might only be found from outside the state, region, or country, and not be sufficiently familiar with the geography and circumstances surrounding the project.
 - **Delivery challenges can be addressed through contractual remedies.**

Q3. What are some example of remedies for P3 delivery challenges?

- Private equity is at risk, as it is the first source of payment for any unanticipated project costs or overruns. This protects the public agency from liability for cost overruns to an extent. In a non-P3 delivery model, there is no private equity investment to tap for cost increases.
- For slow (or non) project delivery, and/or failure to meet agreed service standards (traffic flows, safety, asset condition, etc.), the private partner can be contractually required to compensate the state.
- Under certain conditions (negotiated in the contract), the state can replace the P3 developer, facility operator, or the project's financing arrangements.

Q4. How does WSDOT decide which delivery method to use: design-bid-build, design-build, or progressive design-build?

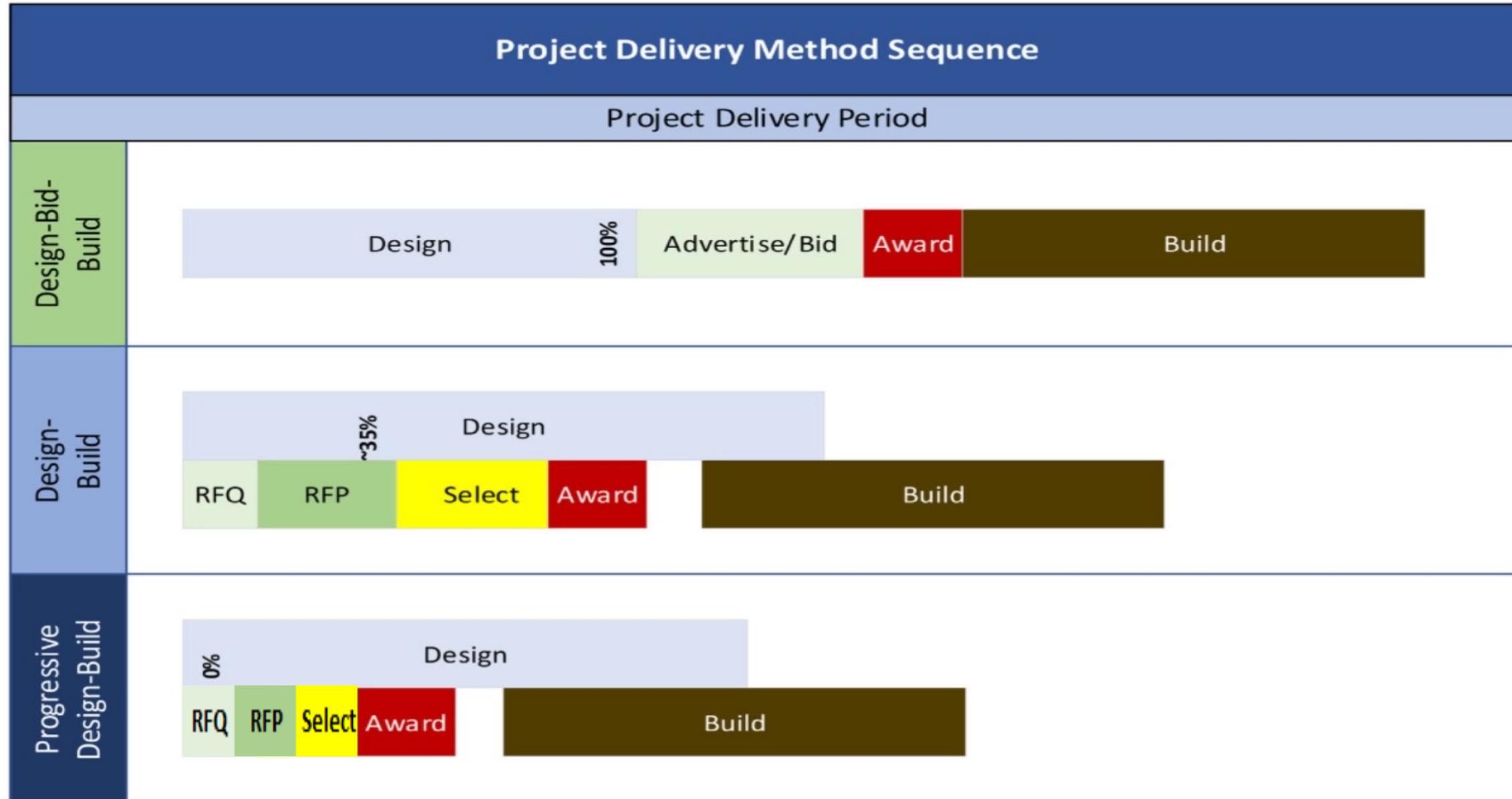
Delivery method history

- In **1998**, the Legislature authorized use of alternative public works contracting methods
- In **2001**, WSDOT contracted its first project using an alternative delivery method (Design-Build)
- WSDOT's experience includes:
 - **15,000+** design-bid-build contracts delivered
 - **81** design-build projects delivered/underway
 - **3** progressive design-build projects underway



Q4. How does WSDOT decide which delivery method to use? (continued)

Project Delivery Sequence



Q4. How does WSDOT decide which delivery method to use? (continued)

Delivery method overview

	Design-Bid-Build	Design-Build	Progressive Design Build
Process	<ol style="list-style-type: none"> 1. WSDOT fully designs (100%) 2. Contract advertised 3. Contractor builds 	<ol style="list-style-type: none"> 1. WSDOT designs to conceptual level (~30%) 2. WSDOT identifies what end results need to be 3. Contract advertised 4. Design-builder completes design and constructs 	<ol style="list-style-type: none"> 1. WSDOT hires a design builder 2. WSDOT/D-B collaboratively finalize design 3. Negotiate price 4. Design-builder constructs project
Ideal project (type/size)	<ul style="list-style-type: none"> • Standard projects, with limited complexity and innovation opportunities 	<ul style="list-style-type: none"> • Complex projects • High-risk projects • Typically projects more than \$100M 	<ul style="list-style-type: none"> • Complex projects • High-risk projects • When early builder involvement is beneficial

Q4. How does WSDOT decide which delivery method to use? (continued)

Delivery method overview (continued)

	Design-Bid-Build	Design-Build	Progressive Design-Build
Benefits	<ul style="list-style-type: none"> • Effective delivery method when clear and narrow scope • Low cost to submit bids • Depth of industry experience 	<ul style="list-style-type: none"> • Schedule savings • Opportunities for innovation • More risk is shared by the builder • Often more cost certainty, less change orders 	<ul style="list-style-type: none"> • Schedule savings • Relatively low effort to get the design-builder on board • Early involvement of builder • Negotiate price and risk along the way
Drawbacks	<ul style="list-style-type: none"> • Limited opportunity for innovation • WSDOT typically owns risk of contract changes 	<ul style="list-style-type: none"> • High effort for D-B to prepare proposals • Limited pool of designers and builders • There is a limit to risk design-builders are willing to take 	<ul style="list-style-type: none"> • Limited pool of qualified designers and builders • Price negotiations are complex and require staffing expertise • Final cost is not known until negotiations are complete

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Meeting 2 Questions and Answers
October 20, 2023

