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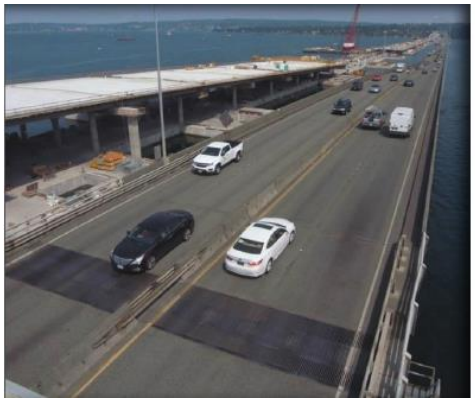
STATE OF WASHINGTON | JOINT TRANSPORTATION COMMITTEE

Review of WSDOT's Implementation of Design-Build Project Delivery

October 22, 2015 | PRESENTATION



Sid Scott, Project Manager
Michael Loulakis, National Design-Build Expert

Agenda

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1. Introductions
2. Study Overview
3. Team
4. Scope of Study
5. Schedule and Deliverables
6. Task 1 Preliminary Findings
7. Closing and Questions

Study Overview

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"The Washington State Legislature is interested in exploring the Washington State Department of Transportation's (WSDOT) use of the design-build project delivery method, and identifying potential changes in law, practice or policy that will allow WSDOT to optimally employ design-build in order to maximize efficiencies in cost and schedule, and ensure that project risk is borne by the appropriate party."

- Study start date: September 28, 2015
- Final report due: December 1, 2016
- Study budget: $439,999

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Eight Tasks to Complete in Study

1. Prepare basic overview of design-build vs. design-bid-build
2. Identify best practices in design-build project delivery
3. Evaluate WSDOT's current use of design-build project delivery
4. Propose improvements to maximize cost and schedule efficiencies, and ensure project risk is borne by the appropriate party
5. Propose next steps for the public and private sectors to adopt the report's recommendations
6. Work with review panel, legislators and staff workgroup
7. Presentations
8. Draft and final reports

JTC DB Review Team Organization Chart

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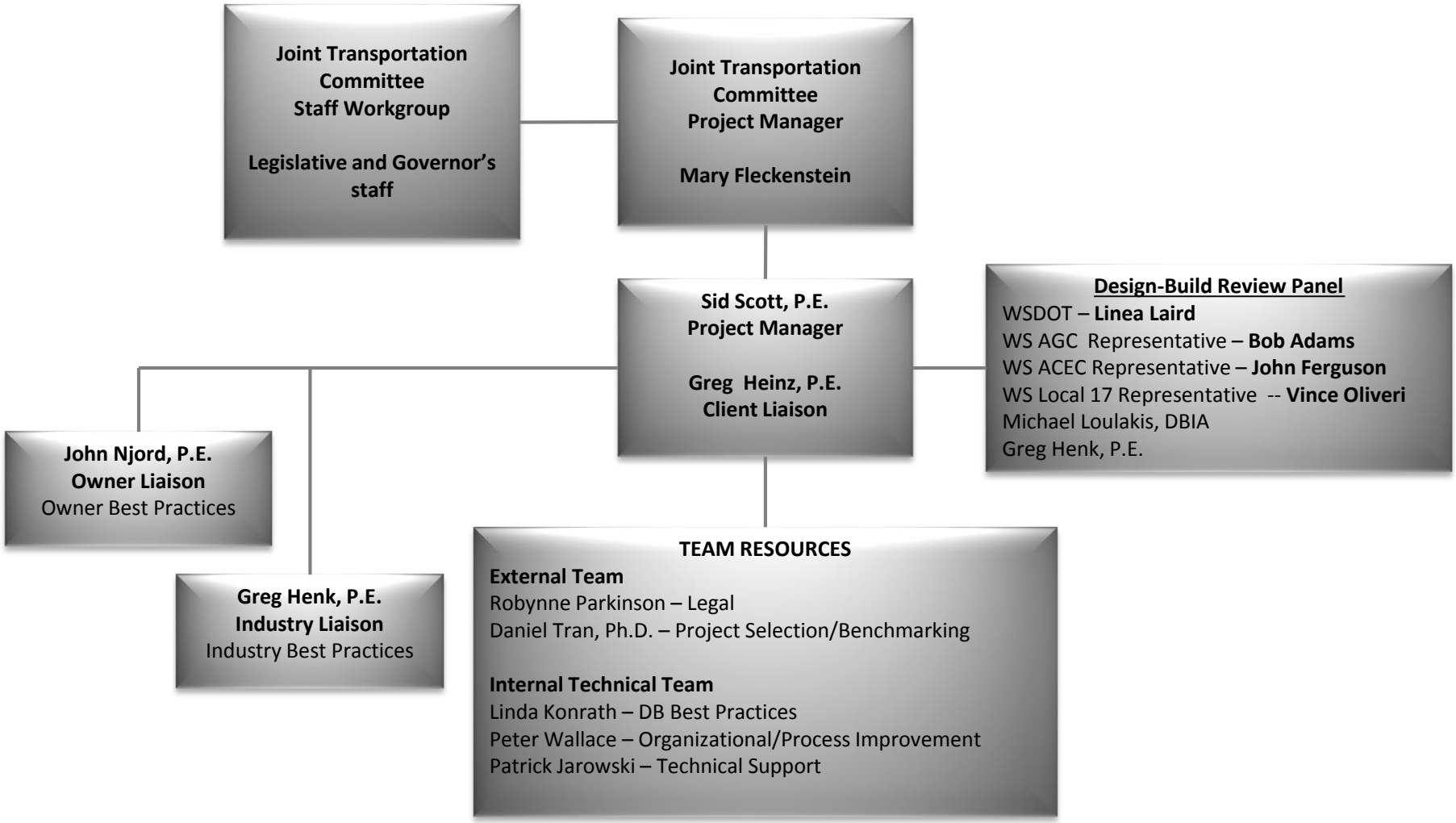

Scope of Study

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- Examine WSDOT implementation of DB delivery to date
- Evaluate whether WSDOT's use of DB can be improved (maximizing effectiveness and efficiency of taxpayer dollars expended)
- Examine whether WSDOT's current project selection criteria determines optimal delivery method
- Educate legislators and other stakeholders on appropriate use of DB
- Develop strategies for WSDOT and industry to adopt study recommendations

Scope of Study

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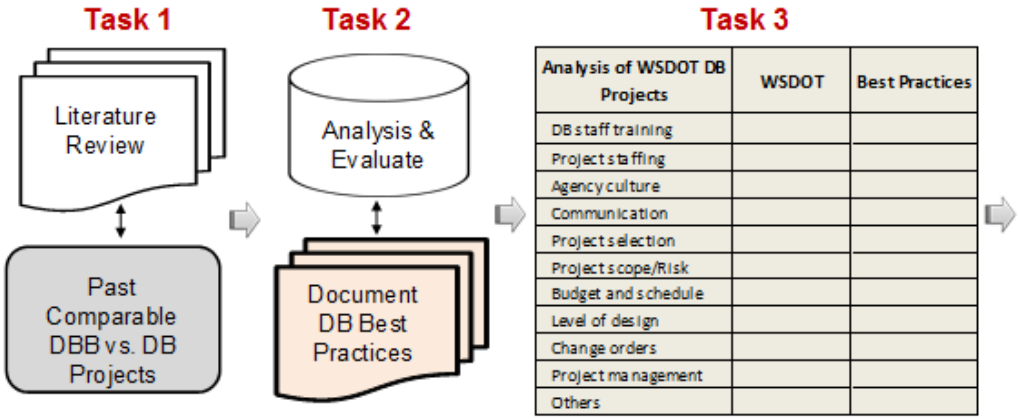
Task 1 – Basic Overview of DB v DBB

- Pros and cons of DBB v DB
- Key project considerations for selection
- Organizational considerations
- Extent of Legislature's involvement
- Best practices



Scope of Study

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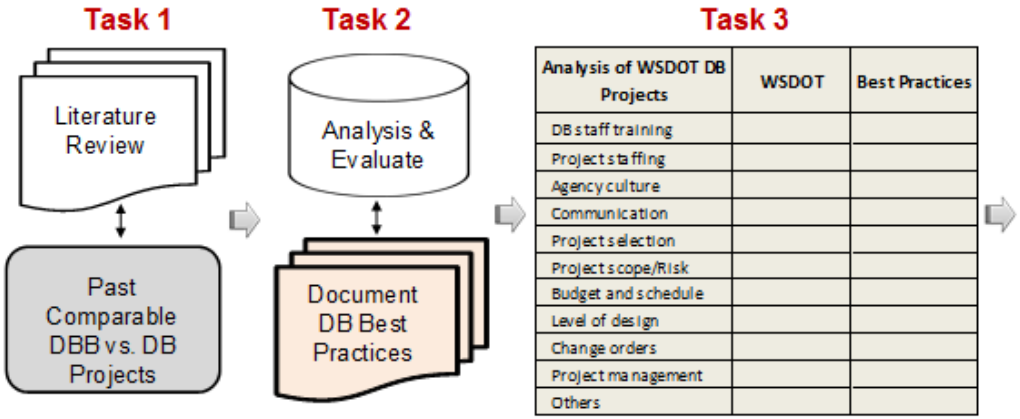
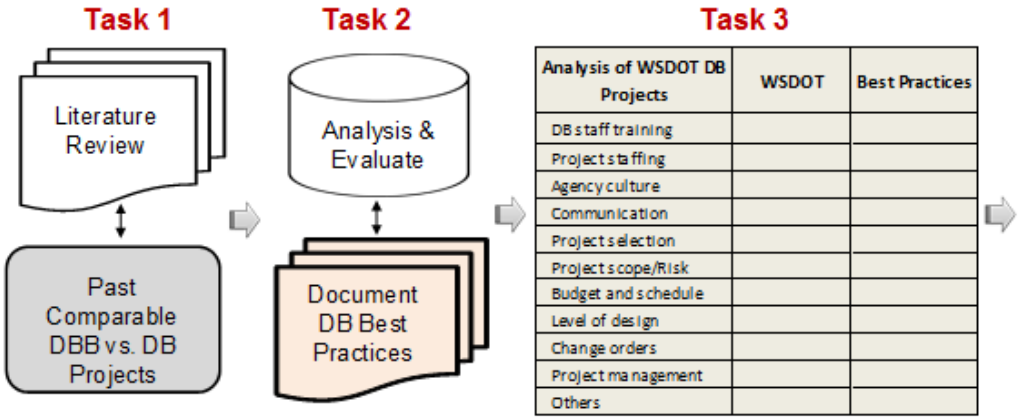
Task 2 – Identify Best Practices in DB Delivery (trends)

- Agency culture
- Project selection
- Project development
- DB contracts
- Risk management and allocation
- Contract administration (design & construction)



Task 3 – Evaluate WSDOT's Current Use of DB Delivery

- Staffing
- Training
- Organization
- Project selection
- Project development
- Project risk, scope
- Project budget, schedule
- Level of design
- Change orders
- Project management



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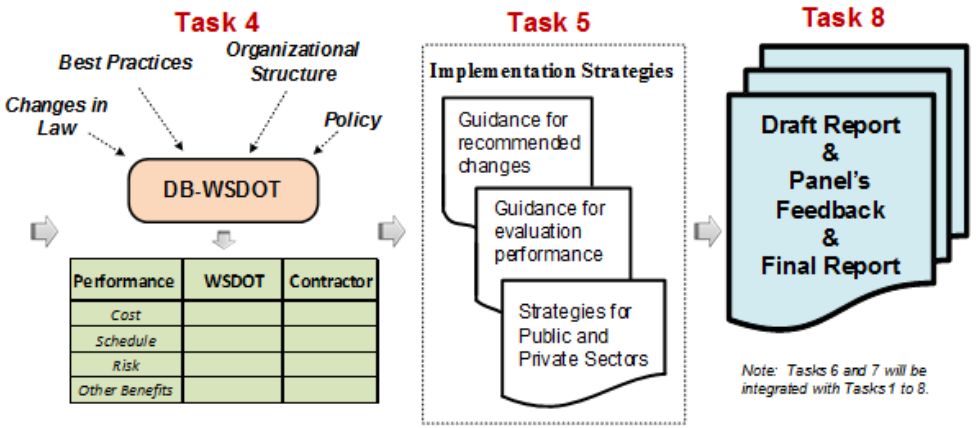
Task 4 – Propose Improvements in WSDOT DB Program

- Compare WSDOT current practices with national (international) best practice results
- Determine where WSDOT practices are in alignment and where there is significant divergence from national best practices (law, policy, organization, project delivery practices)
- Prioritize and propose improvements with greatest net positive effect on program



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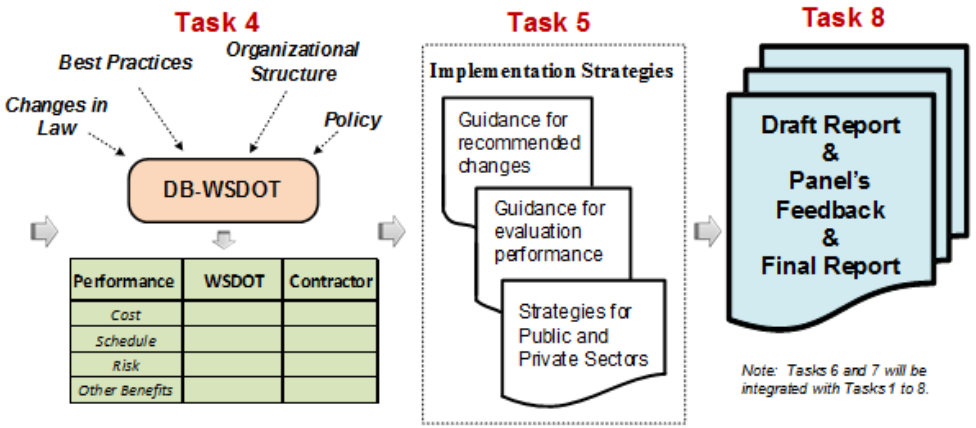
Task 5 – Propose Next Steps or Strategies to Adopt Recommendations

- Guidance to WSDOT for developing its construction program business plan (per 2015 legislation, 2ESSB 5997)
- Evaluation and performance criteria needed to measure success of DB implementation
- Private sector role/considerations in recommended changes



Task 6 – Work With Review Panel, Legislators, and Staff Workgroup

- Review Panel
  - Objectives
  - Coordination of panel (meeting schedule, protocol)
  - Role of DB experts
  - Work product reviews and input
  - Process for arriving at final recommendations that consider Review Panel's input
- JTC Committee Briefings
- JTC Staff Workgroup Coordination

Task 7 – Presentations

- PowerPoint presentations at planned intervals noted in schedule based on approved work plan (6 presentations)
- Briefing materials
- Study updates

Task 8 – Draft and Final Reports

- Study process and findings
- Results from Tasks 1 – 3
- Recommendations from Tasks 4 & 5
- Draft report 3 weeks before final due date

Schedule

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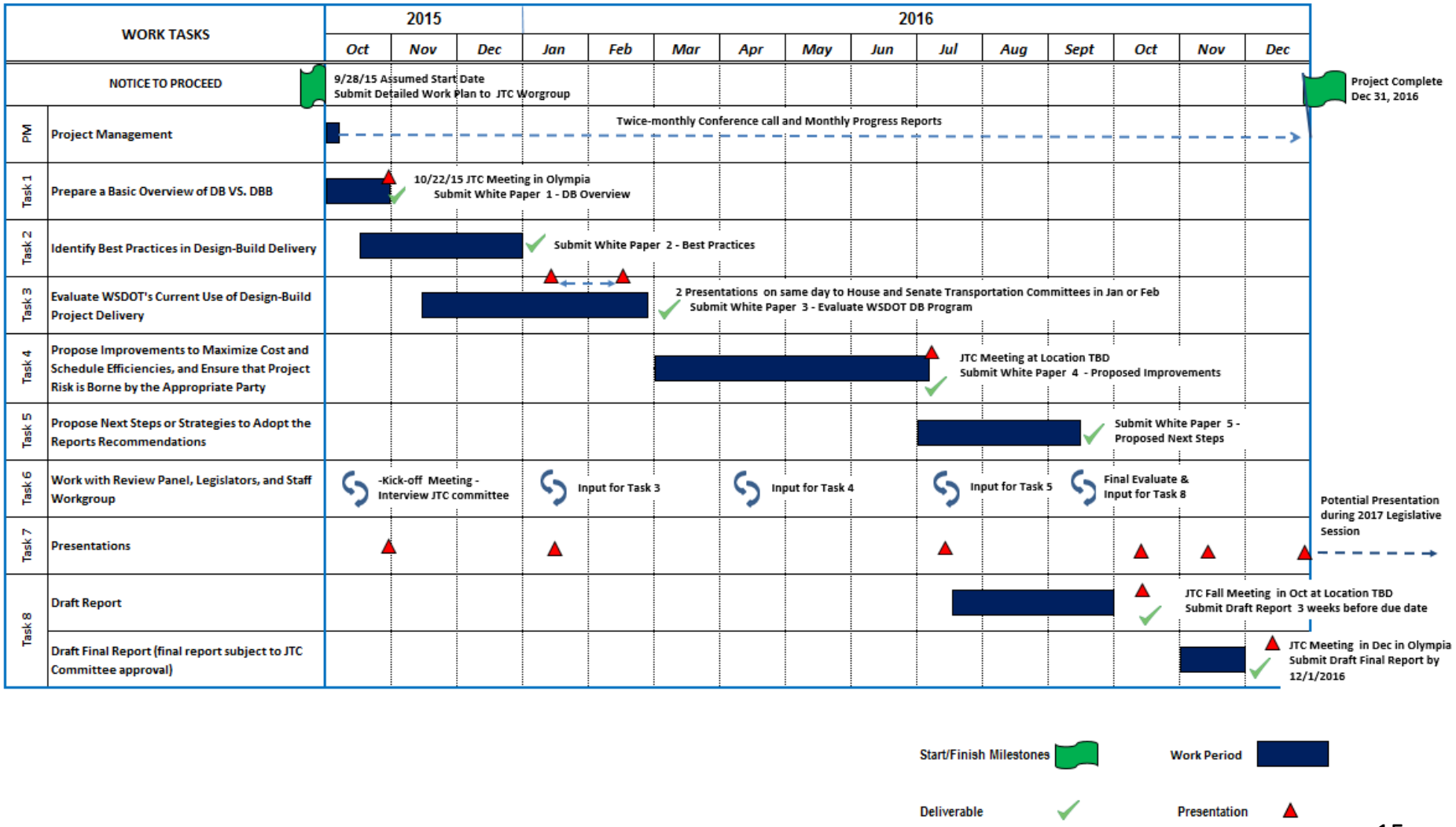

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Design-Bid-Build

Pros	Cons
• Traditional delivery system for public sector • Well established and understood • Separation of design and construction services • Lowest responsible/responsive bid • Final design product is fully under owner's control	• Linear, sequential process • No input from contractor during design stage • Owner largely bears risk of design problems • Potential for adversarial relationships • Contractor and designer are frequently misaligned

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Design-Build

Pros	Cons
• Time savings • Earlier cost and schedule certainty • Opportunity for innovation • Single point of responsibility creates opportunity for efficient risk transfer • Early contractor involvement • Contractor and designer alignment	• Owner does not have contract with designer • Owner challenges in acting on design submittals • Reduced owner control over design process • Time and cost to run a competitive procurement process • Challenges with scoring technical evaluation factors • Personnel learning curve (changed roles and responsibilities)

Task 1: Basic Overview of DBB v DB

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Key Project Considerations for Selection

- DB is not the right choice for every project
- Selection should consider project characteristics, goals, risks, and constraints that align with the most appropriate delivery methodology
- Typical project selection considerations:
  - Delivery schedule
  - Project complexity and innovation
  - Use of performance specifications allowing innovation
  - Level of design
  - Cost
  - Significant risks
  - Staff experience and availability
  - Level of oversight and control
  - Competition and contractor experience

Project Characteristics

Design-Build	Design-Bid-Build
• A compressed schedule is needed • Early cost certainty is desirable • Project scope can be adequately defined without 100% complete plans, specifications, and estimates • Project allows for innovative design or constructability solutions • Project is complex, requiring early contractor involvement • Project quality can be effectively managed by DB team • Minimal third party risks exist or can be mitigated or managed by owner or DB team	• Projects that must be designed to or near 100% complete before hiring design-builder • Project type is typical and common (i.e. limited opportunities for innovation, constructability or value engineering) • High level of design completion (i.e. 80% or 90% complete) was present • Projects involves risks and unknowns that are best managed by the owner • Schedule constraints are not a critical issue

Organizational Considerations

- Staffing (how much, what experience, outsourcing options)
- Policies and guidance
  - Scalability across large and small projects
- Training
- Performance metrics

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Extent of Legislature's Involvement

- Being well-informed on pros and cons of delivery methods and effective project selection
- Determining public policy issues that need to be prescribed
- Evaluating project performance on objective performance metrics
- Revisiting public policy issues

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DB Best Practices

- Establish processes to optimize DB delivery
- Use different forms of DB depending on unique needs of project
- Procurement
  - Balance best practices with pragmatics of an expedited procurement
  - Use meaningful distinctions in selection
  - Use of non-numerical ratings
- Flexibility in design
- Use of alternative technical concepts (ATCs)
- Communication/partnering philosophy
- DB Training
  - Different forms of DB procurement and delivery
  - Owner and industry relationships

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Thank you

Questions?

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