

WisDOT Design-Build Pilot Program Evaluation

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Project Objective

...conduct a third-party evaluation of WisDOT's design build pilot program. The research study will review peer state programs, national best practices, the department's project selection and qualification/proposal evaluation processes and provide a full report with recommendations for process improvement. The third-party evaluation will also establish criteria that WisDOT may use for on-going performance/evaluation of the alternative delivery program.



Introduction

- Adoption of design-build in Wisconsin
 - Enabling legislation
 - Hire consultant/develop policies and procedures
 - Stakeholder outreach
 - Select first three pilot projects
- Commonly used methods of project delivery
 - Design-bid-build
 - Design-build
 - Construction Manager/General Contractor (CM/GC)
 - Progressive design-build



Methodology

- Review of data sources
- Literature review
- Review applicable statutes and federal regulations
- Peer-state interviews
- Pilot project reviews
 - D-B team interviews
 - WisDOT team interviews
 - Analysis



Statutes and Federal Regulations

Wisconsin Statute 84.062

- Number, type, size of projects
- Technical Review Committee with two external members
- SOQ/Proposal procedures
- Stipulated fees – 0.3% minimum stipend
- Appeal process

23 CFR 636 – More flexible than Wisconsin law

- General requirements
- Selection procedures and award criteria, incl. one-step procurement
- Proposal evaluation factors
- Information exchange
- Appeal process



Peer-State Interview Key Takeaways

- **Arkansas**
 - Moving from traditional D-B to “Progressive D-B”
 - Implementing “On-call CM/GC”
- **Colorado**
 - Hold the teams responsible for their designs (E&O)
- **Maryland**
 - Identifying projects pre-NEPA maximizes the opportunity for innovation
- **Michigan**
 - Adequate internal staffing is important
 - Use CM/GC where early contractor involvement is critical (complex projects)



Conclusions/Recommendations

- Pilot projects followed statutory and CFR requirements
- Pilot projects followed requirements of the Design-Build Manual
- 17 recommendations in four categories
 - Program organization and administration
 - Project selection
 - Qualification and proposal phase
 - Miscellaneous recommendations

Program Organization and Administration Recommendations

Strengthen staffing and training

- Minimum 3 FTE, including full time program manager
- Formalized internal training/knowledge transfer program

Identify regional alternative delivery “champions”

- Seek out engineers/PMs who express interest and have sound understanding of the requirements/benefits of alternative delivery



Program Organization and Administration

Recommendations (continued)

Continue outreach and stakeholder education

- Goal is to increase competition by expanding the base of Wisconsin engineering firms and contractors willing and able to participate in alternative delivery projects



Project Selection Recommendations

Greater use of the Request for Letters of Interest (RLI)

- Allows early, less costly assessment of the competitive environment before moving forward

Higher minimum project cost

- Projects should be large and/or complex enough to realize benefits of alternative delivery (innovation, schedule acceleration, etc.)



Qualification and Proposal Phase Recommendations

Consider one-step procurement

- Potentially useful for less complex or low-bid projects
- Reduces costs for proposers and WisDOT
- Accelerates procurement
- Requires statutory change

Revisit TRC membership and qualifications

- Reduce or eliminate external members
- Require specific qualifications for external members
- Would require statutory change to eliminate external members, but not to establish qualifications



Qualification and Proposal Phase Recommendations (continued)

Increase minimum recommended shortlists

- Two proposals is problematic
- More competition is good for WisDOT
- Require three proposals if there are three qualified teams

For traditional design-build projects, require receipt of environmental permits before issuing RFQ or RFP.



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Qualification and Proposal Phase Recommendations (continued)

Allow ATCs for pavement design

- Increases potential for innovation and life-cycle benefit

Allow more time for development of ATCs

- Iterative process takes time for development, review and approval of quality proposals

Revise stipend policy

- 0.3% minimum is too high for non-complex or low-bid projects
- Other states use 0.1% or 0.15%
- Would require statutory change



Miscellaneous Recommendations

Expand WisDOT's alternative delivery toolbox

- CM/GC and Progressive D-B have significant potential benefits to WisDOT
- Arkansas' "on-call CM/GC" is innovative
- Would require statutory change

Incorporate alternative delivery into WisDOT's performance improvement program (MAPSS)

- Report identifies several possible metrics



Miscellaneous Recommendations

(continued)

Adapt the public information process to the different characteristics of design-build

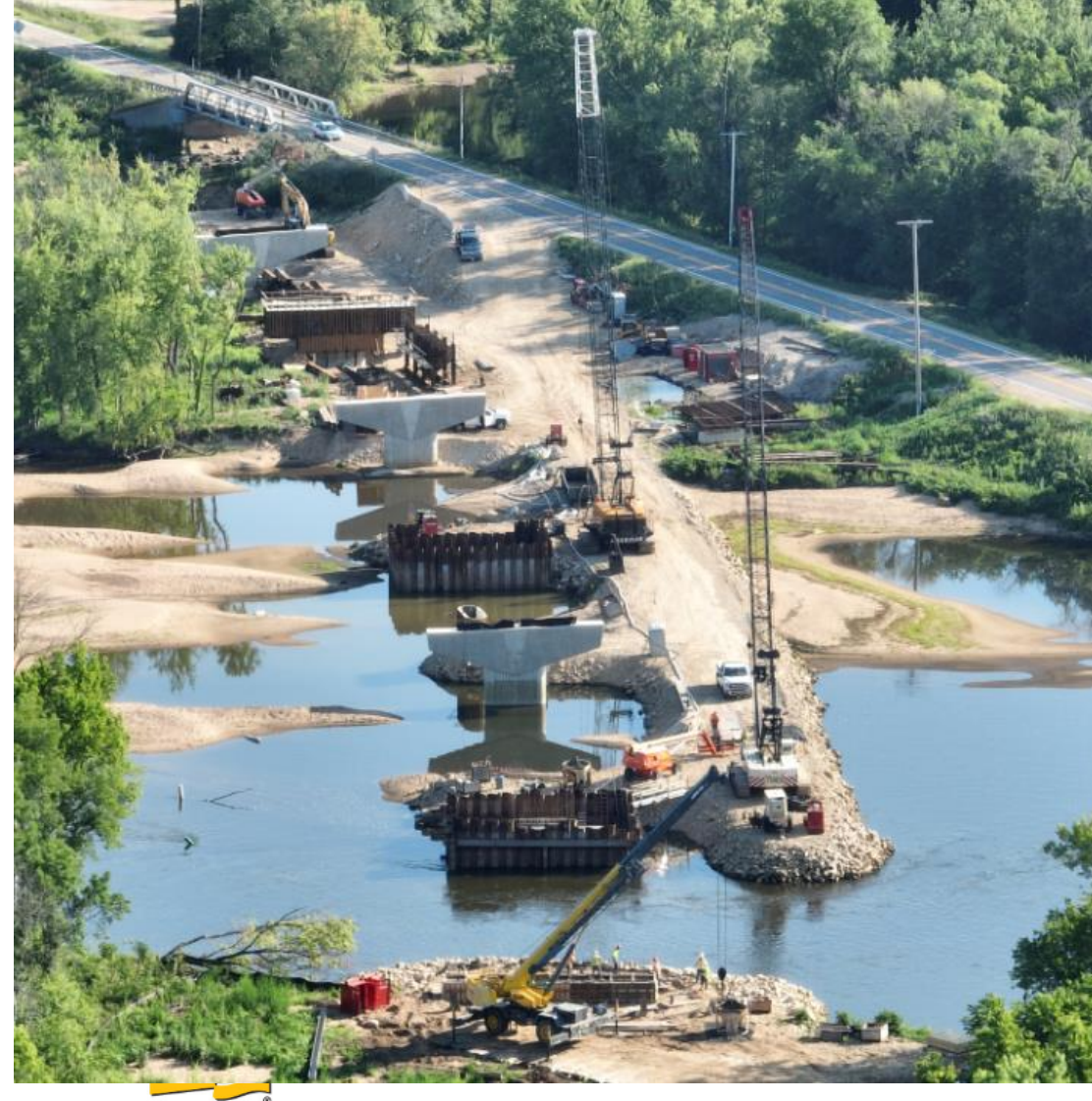
- Individuals and businesses need to understand the differences between when information becomes available in design-build vs. design-bid-build projects



Projects Underway

Lone Rock Bridges

- **5770-01-02/71, STH 130. Lone Rock Bridge Replacement**
 - Under Construction.
 - Design complete (some re-design ongoing)
 - Most up-to-date information at <https://projects.511wi.gov/wis130-bridge-replacement/>



Projects Underway Lone Rock Bridges

STH 133 closure to end Nov 2023.



Projects Underway

Lone Rock Bridges

Bridges to be complete Fall 2024.
Construction to be complete Fall 2025.



Pilot Project – WIS 130

Project Participant Comments

Good candidate for design-build (size, scope, complexity)
Contract awarded to Kraemer NA team

D-B team comments

- Should have solicited more than two proposals
- ATC process was overly compressed
- Lack of environmental permits was a risk factor

WisDOT comments

- Schedule was very accelerated
- Lack of permits was a risk factor
- Needed more support from General Engineering Consultant
- Impact on workloads



Projects Underway

College Ave - Appleton

6526-00-00/71, STH 125. College Avenue Structure Replacement

- Design Complete.

- Construction begun August 2023.
- Most up-to-date information at <https://projects.511wi.gov/wis125db/>



Projects Underway

College Ave - Appleton

Construction to be complete Nov 2023



Pilot Project – WIS 125

Project Participant Comments

Possibly too small for design-build, but some benefit was realized (schedule/closure plan)

D-B team comments

- Project too small and simple for design-build
- 60% design didn't allow for innovative ideas

WisDOT comments

- Accelerated schedule didn't allow sufficient time to develop project books or ATCs
- Partner agencies (DNR/utilities) had hard time understanding and adapting to d-b
- Must consider how the design-build process will work within the DNR cooperative agreement
- Projects should be selected for d-b prior to commencement of environmental process
- Needed more support from General Engineering Consultant
- Requires different approach to PI process
- Impact on workloads



Pilot Project – US 45

- Project received only one SOQ, which was deemed non-responsive
- Why only one SOQ?
 - Lack of interest in the project
 - Project type
 - Project location
 - Relatively low-cost project which did not justify the non-reimbursable cost of SOQ preparation.
 - New method in Wisconsin
 - Lack of experience with design-build by Wisconsin-based designers and constructors



WisDOT Implementation

- **Report recommendations**

- General agreement with or openness to the findings of the report
- Intent to seek implementation of many of the report recommendations
- Further experience with ongoing and future design-build projects may influence plans for implementation



WisDOT Implementation

Program Organization and Administration

- **Strengthen staffing and training**
 - Second Alternative Contracting Engineer onboard
 - Updating WisDOT Design-Build Manual to facilitate knowledge transfer
- **Identify regional alternative delivery “champions”**
 - Region PMs on design-build projects
 - No plans to identify more dedicated champions until after pilot phase
- **Continue outreach and stakeholder education**
 - Planning for trainings for industry, agencies, WisDOT personnel



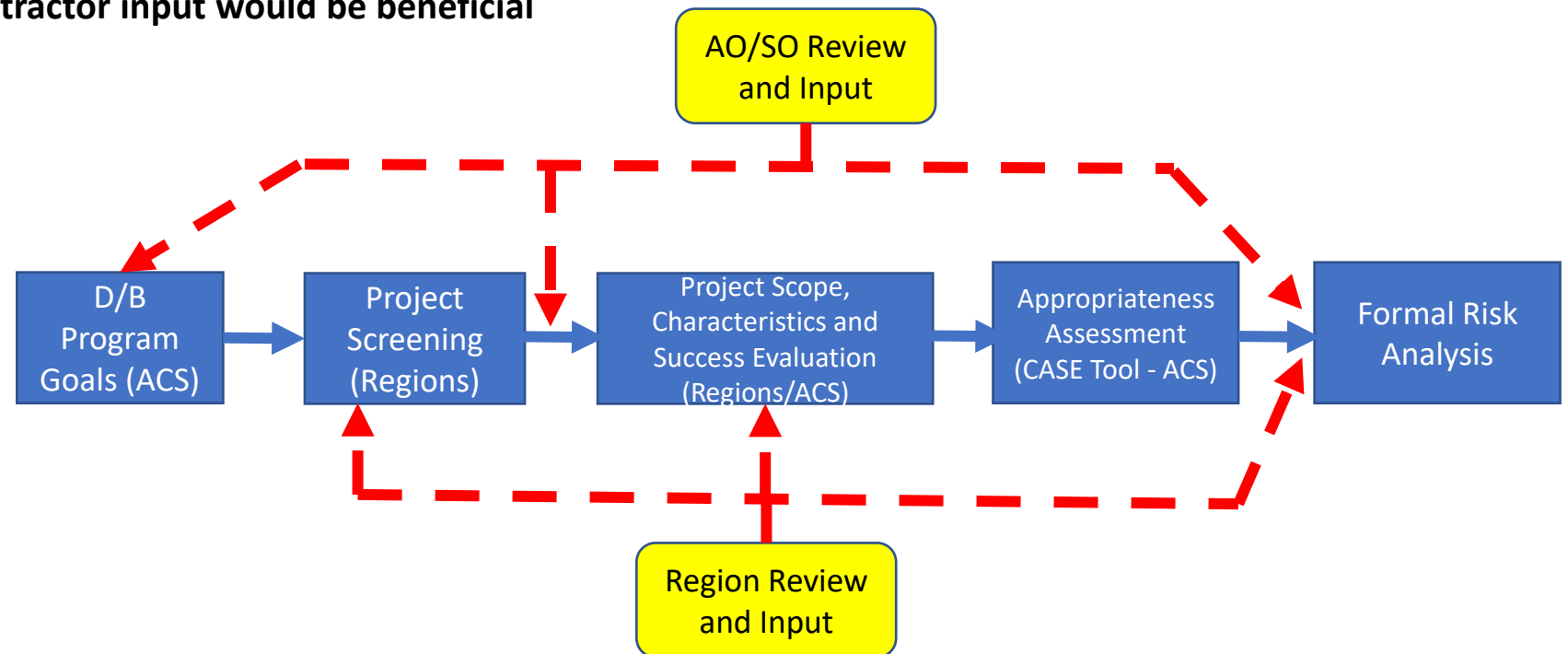
WisDOT Implementation Project Selection

- **Greater use of the Request for Letters of Interest (RLI)**
 - Will implement the use of RLI beginning with the next design-build project to enter procurement
- **Higher minimum project cost**
 - Currently implementing this recommendation in project selection process within the bounds of the statute
 - (increased minimum projects considered to \$7 million)



WisDOT Design-Build Project Selection Goals

- **Shortened closure duration could be impactful**
 - High Traffic volumes or long detours, or significant impacts to businesses
- **Benefit from an accelerated schedule date**
 - Safety improvements, deterioration
- **Unusually difficult design/constructability elements**
 - Limited or complicated staging areas/access, unusual site conditions
- **Innovative ideas or early contractor input would be beneficial**
- **Fairly simple or well-defined in the following areas:**
 - RR impacts, real estate requirements, utility impacts, 3rd party involvement (e.g., outside stakeholder organizations, local agreements)
- **No identified concerns about getting at least 2 bidders**
- **Early in design; projects should not be past 30% complete**
- **Target projects with costs from \$7 million - \$20 million**



WisDOT Implementation Qualification and Proposal Phase

- **Consider one-step procurement**
 - Will consider potential statutory change proposal in final report
- **Revisit TRC membership and qualifications**
 - Most states do not use 'outside' personnel on TRC.
 - Difficult to recruit and retain contractor and engineering community representatives.
 - Anticipating proposing statutory change to implement this recommendation
- **Increase minimum recommended shortlists**
 - 3 shortlisted firms preferred
 - May recommend shortlisting 3 firms, but not require a minimum
 - Selection still case-by-case;
 - 3 will not always be the appropriate number
 - based on SOQs received
- **Require receipt of environmental permits before issuing RFQ or RFP.**
 - This continues to be preferred practice
 - Working with WDNR to develop MOU to create the best possible permitting process for design-build projects.
- **Allow ATCs for pavement design**
 - Not under consideration for the pilot projects
- **Allow more time for development of ATCs**
 - Re-examine time frames and requirements to maximize development and inclusion of ATCs
- **Revise stipend policy**
 - Gathering data on pilot projects
 - Will consider recommendations based on pilot project performance when developing final report



WisDOT Implementation Miscellaneous Recommendations

- **Expand WisDOT's alternative delivery toolbox**
 - Will consider a request in the final report to the Legislature to investigate or provide authority for progressive design-build and possibly CM-GC.
- **Incorporate alternative delivery into WisDOT's performance improvement program (MAPSS)**
 - Considering measures to include if/when design-build moves out of the pilot phase
- **Resolve statutory ambiguity**
 - Language does not limit the options available to WisDOT when there are exactly two qualified teams
- **Address issue related to encumbrance of funds**
 - Agree this is an issue, but funding changes would be tied to earlier project selection, as well as continuation of the program beyond the pilot phase
- **Adapt the public information process to the different characteristics of design-build**
 - Area for continued investigation.
 - Also tied to the education, training and outreach.



Ongoing Project Selection

- **Project Types**

- Project using **Fixed-Price Variable-Scope** design-build method
- Potential 3rd **project using best value** design-build method
- Potential project using **low-bid** design-build method

- **Draft Procurement Schedule**

- Projects selected: Fall 2023
- Letters of Interest Requested: Late Fall 2023
- Next Request for Qualifications (RFQ) released: second quarter of 2024
- Proposals received for next project: 4th quarter of 2024.
- Design-builder for next project under contract: 1st quarter of 2025
- Potential construction start for next project: 2nd quarter of 2025.



Internal Recommendations

WisDOT internal process recommendations:

- Investigate creating an internal working group to identify appropriate projects at earlier stages of their life cycle
- Develop a more standardized approach to evaluating project appropriateness
- Use design-build more ‘intentionally’ where the project goals/needs drive selection more than project characteristics
- Update WisDOT-WDNR cooperative agreement to cover design-build projects
- Continue trainings and outreach within and outside of WisDOT
- Continue to work to utilize WisDOT subject matter experts as efficiently as possible.



Program Goals

- **Complete pilot program**
 - Procure the six DB projects permitted by statute
 - Best value, low-bid, FPVS
 - Update Design-Build policies, processes, project selection and documents based on experience and feedback
 - Compile project information and recommendations for final report to Legislature
- **Investigate CM/GC and Progressive Design-Build for future authority**
- **Integrate Design-build into WisDOT's program**
 - Integrate earlier project selection process with current programming/scoping/asset management processes
 - Provide adequate time to develop and procure design-build projects
 - Develop proficiency at selecting projects where design-build holds a high potential for improving project outcomes
 - Train staff/ Regional design-build champions
 - Train industry/regulatory agencies on design-build implementation
 - Improve/standardize regulatory agency design-build processes

