



# Design Review Committee Briefing #17

**Subject:** Delivery Method Assessment

**Date:** January 14, 2019

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## The Issue

The Design Review Committee (DRC) participated in a survey during DRC Meeting #4 designed to solicit feedback on specific aspects of project delivery to inform a delivery method determination. The same survey was administered to the City staff participating in the preliminary design process in December 2018. This briefing summarizes the results of those surveys and uses these results to recommend preferred delivery methods for the Nampa WWTP Phase II Upgrades.

## Background and Analysis

Procurement methods and their resulting delivery models take numerous forms. For the Phase II Upgrades the delivery methods under consideration are design-bid-build (DBB), construction manager/general contractor (CM/GC), progressive design-build (PDB), and fixed-price design-build (FPDB). These delivery methods are described in more detail in DRC Briefing #10.

The survey administered to the DRC and City staff is an objective method for evaluating delivery methods. Brown and Caldwell (BC) used an anonymous, interactive polling methodology to force-rank priorities relative to each other during DRC Meeting #4. City staff also provided feedback to the same questions via an electronically-distributed survey. This prioritization process is based on the premise that all identified issues are fundamentally important but that there is a degree of relative importance among them. Internal to each primary issue, the questions within each group were also all considered to be critical, important issues. Similarly, each of these issues is assumed to have a relative importance. Responses were also used to create a relative weighting for the primary issue groups as well as for the questions/issues contained within each group. Based on the responses to the survey, the following list indicates the priorities for the Phase II Upgrades delivery options. The numbers in the parentheses following the category indicate the relative weighting of the group on a scale from 0 to 100.

1. Getting the “best” value (71.1)
2. Clearly defining scope and configuration (67.0)
3. Establishing accountability for performance (59.9)
4. Retaining Nampa control and decision-making (57.9)
5. Getting the “best” price (56.9)

Within these priorities the following aspects of the delivery method carried the most weight within the overall evaluation and recommendation.

1. Considering the entire lifecycle versus just the capital cost
2. Seeing real cost versus just the price
3. Achieving quality and performance
4. Accommodating project complexity during design/construction
5. Focusing on operations to increase lifecycle efficiency
6. Requiring proven solutions to reduce risk
7. Coordinating among other projects and systems

- 8. Controlling and making design decisions
- 9. Integrating O&M expertise into the design process\*

\*Applicable to new construction projects.

Based on the identified priorities BC developed an assessment of the effectiveness of each delivery model in addressing each identified concern or objective. This assessment accounted for the relative importance of each issue in respect to the favorability (or unfavorability) of each potential delivery model. The output of the assessment ranked each delivery model relative to the others. Figure 1 presents the results of this analysis. Although the survey asked for feedback on new construction and rehabilitation projects, there was little overall variance between the responses; therefore, Figure 1 is applicable to both types of projects.

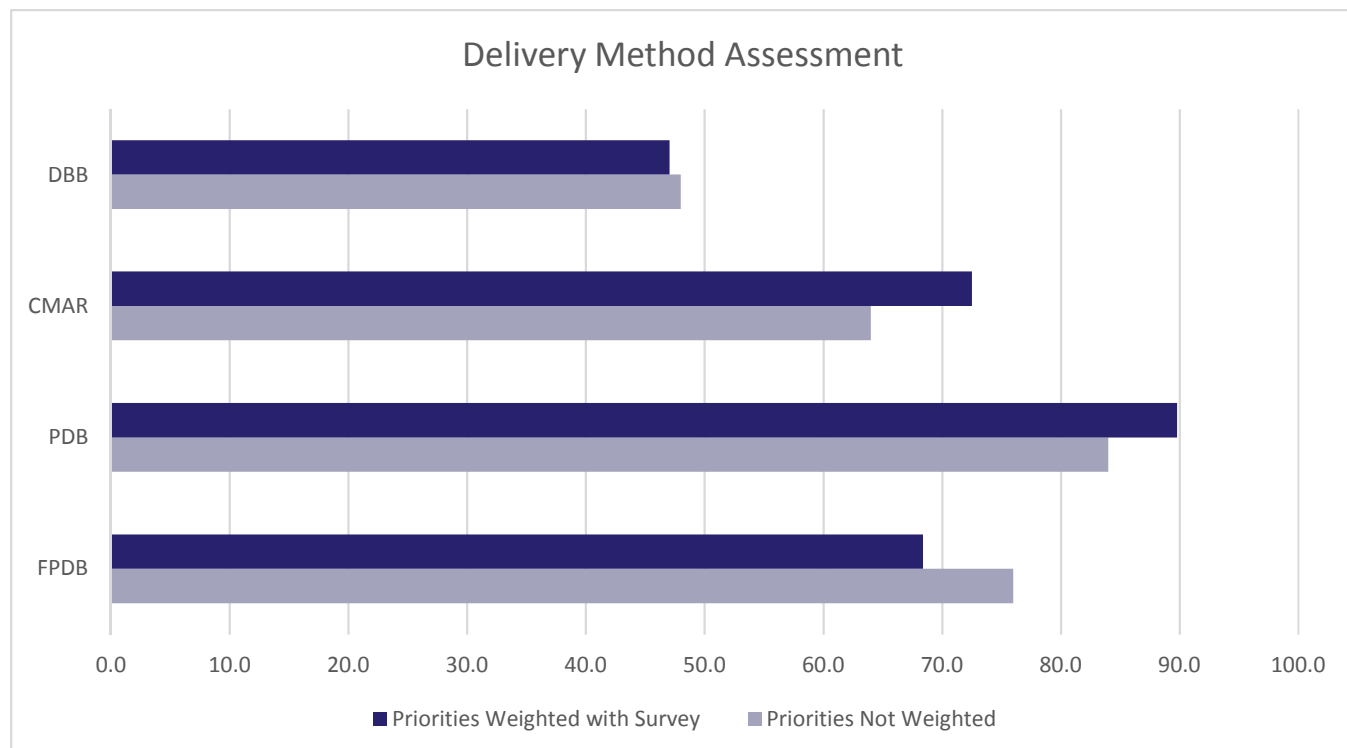


Figure 1 - Delivery Method Assessment

The results of the delivery method analysis indicate a preference towards the PDB delivery model for both new construction and rehabilitation projects. This preference is a result of several factors. First, there is an interest in cost transparency and the consideration of life-cycle costs within design and construction decisions. This lends itself towards the CM/GC and PDB delivery models. Second, there is an interest in maintaining input in the design process. This makes the FPDB approach less favorable. Finally, there is also an interest in assigning performance requirements to the designer, which lends itself to a PDB approach. With all of these considerations, the Preliminary Design Technical Team (Technical Team) recommends using the PDB delivery model to deliver the largest, most complex project group of the Phase II Upgrades.

### Potential Consequences

There are several potential items the DRC should be aware of related to the recommended delivery method.

- **Procurement Approach and Document Preparation:** The City has not used the PDB model for project delivery on any previous projects. Therefore, the procurement approach and documents will need to be prepared to support this delivery method. This will require input from the City Attorney and the Wastewater Program Management Team. Because of the time required to prepare these documents, the use of the PDB model may not be suitable for early project groups (see DRC Briefing #18).

- **State Revolving Fund Coordination:** The Idaho Department of Environmental Quality's (IDEQ's) State Revolving Fund loan process is built around the DBB delivery model. As such, many of the required IDEQ approvals are tied to milestones within the DBB delivery. Coordination with IDEQ throughout the procurement and execution process for the PDB delivery will be critical to successful program execution.
- **Market Feedback:** PDB has been shown to align well with the City's interests based on its advantages and disadvantages. However, the market acceptance of this delivery method has not yet been tested in a robust manner. Therefore, it is recommended that further discussions with potentially interested firms/teams be conducted to understand their perspective on the preferred delivery method. This information can then be used to inform the procurement process for the PDB team.

## Recommendation

The results of the surveying from the DRC and City staff indicate a preference towards the PDB delivery model. This preference is primarily driven by a desire for cost transparency and an interest in maintaining City input throughout the design process. ***Considering these factors, the Technical Team recommends using the PDB delivery method for the largest, most complex project group of the Phase II Upgrades.*** Because of the time required to prepare the necessary procurement documents, ***the Technical Team recommends that the early, smaller project groups use the more traditional DBB delivery method.*** DRC Briefing #18 presents the full recommendation of delivery methods for each project group within the Phase II Upgrades.