

State Government Efficiency Review Committee Design-Build Contracting at Regents Institutions

October 29, 2015

Discussion Outline

- The BOR institutions are increasingly asked to deliver projects faster to meet donor expectations, funding criteria, meet the challenges of increasing enrollment, or to compete with other institutions (potentially for key faculty with large research grants) who can deliver projects faster. We are expected to be able to deliver projects on pace with the private sector, but traditional design bid build includes some inherent constraints that other delivery methods do not.
- The Board of Regents institutions conduct the overwhelming majority of their projects utilizing the traditional design-bid-build delivery system. Design-Bid-Build (DBB) fits most projects well and the majority of the projects will continue to be constructed using this approach. In FY 2015, 94.1% of projects with budgets exceeding \$250,000 utilized this method; all projects below this threshold used this method.
- Although the DBB process assures that the project can be contracted at the lowest initial cost, low cost does not always equate to maximum value. To optimize the success of major projects the project delivery system must be matched to the key project criteria and characteristics.
- The construction industry is changing. Attrition due to the recent recession and workforce shortages are among factors affecting competition and the ability of the construction industry to meet demand. Emphasis on energy efficient and high performing buildings has increased the complexity of projects and put an emphasis on integrated building systems.
- The trend in both the public and private sectors over the past 20 plus years has moved away from the traditional design-bid-build process to integrated and collaborative delivery systems. In 1993, design-build was permitted for use in the public sector in one state (Virginia). As of 2013, design-build is now permitted in 46 of the 50 states per data published by the Design Build Institute of America. The use of design-build has been permitted on federal government projects since 1996 and federal government projects are now commonly conducted using Design-Build methods.
- The value that the builder can provide to a project during the design phases of a project is widely recognized. Most design professionals are accustomed to and value having a construction professional as a partner during design. When the designer and the builder work together in a collaborative manner from the very beginning of a project, a better coordinated and higher quality project will likely result.
- Collaborative delivery systems improve the effectiveness of technologies such as computer modeling and building information modeling (BIM) to enhance collaboration, improve coordination, and increase opportunities for prefabrication. A study conducted by the Construction Industry Institute and Penn State University indicates that design-build delivery outperforms DBB in delivery speed, construction speed, unit cost, cost growth and schedule growth. Increased value to the project results, while maintaining good market competition with increased local participation.
- While specific cost benefits are difficult to measure because of the unique nature of each project – a 1% reduction in change orders on a \$50 million dollar project will save \$500,000. Likewise, at today's escalation rates, a one month reduction in schedule on a \$50 million dollar project will create a savings of \$250,000 – not including job site overhead costs.
- Delivery methods other than DBB are only considered by the Regents Institutions on select projects when the institution can reasonably expect to achieve advantages and efficiencies in the areas of time, cost, and quality. Each project where delivery methods other than DBB requires specific authorization by the Board of Regents.
- The Regent institutions are committed to maintaining objective selection processes for construction services while providing best project value. All delivery systems include cost as a consideration, use of design specifications/qualifications, established evaluation criteria, objective selection committees, and commitment to transparency and public accountability.

- Factors to be considered in making the determination of whether the delivery methods other than DBB would add value include: likelihood of savings of time or money; significant phasing or technical complexities; use of an accelerated schedule (or overlap of design and construction).
- The University of Iowa and Iowa State University, in cooperation with Board of Regents has now engaged in four projects using the Design-Build (D-B) method of project delivery:
 - University of Iowa: Hawkeye Tennis & Recreation Indoor Turf Facility (Complete)
 - University of Iowa: Oakdale Research Support Facility (Complete)
 - University of Iowa: Madison Street Residence Hall (Under Construction)
 - Iowa State University: Buchanan Residence Hall 2 (Under Construction)

All of these projects have or are demonstrating the value that design-build can deliver. All of these projects have been completed on schedule or are currently on schedule and the completed projects have been completed with significantly lower change order rates than traditionally delivered projects.