

January 7, 2014

Counties and Design-Build

LEGISLATIVE ANALYST'S OFFICE

Pursuant to Section 20133 of the Public Contract Code



Summary

Section 20133 of the Public Contract Code requires counties to submit a report to our office containing specified information on each project that they completed with a design-build delivery method after November 1, 2009 and before August 1, 2013. The statute requires our office to issue a report by January 2014 that analyzes the county submissions, as well as any independent information provided by the public or interested parties. The statute further requires our office to select a representative sample of projects and incorporate a review of available public records and reports, media reports, and related information on those projects into our analysis.

Based on the reports we received and the information we gathered from the representative sample of projects, it is difficult to draw conclusions about the effectiveness of design-build compared to other project delivery methods (such as design-bid-build). Nonetheless, we do not think that the information we reviewed provides any evidence that would discourage the Legislature from granting design-build authority to local agencies on an ongoing basis. In doing so, however, we recommend the Legislature consider some changes such as creating uniform design-build statute for agencies that have design-build authority (such as counties, cities, and school districts), eliminating cost limitations, and requiring project cost to be a larger factor in awarding the design-build contract.

Background

Traditionally, state and local agencies have used a project delivery method known as design-bid-build for construction projects. Under design-bid-build, an agency contracts separately for the design and construction of a project. The agency must award the construction contract to the lowest responsible bidder. Alternatively, under a design-build project delivery method, an agency contracts with a single firm to provide both design and construction services. The agency can select the design-build firm using either the lowest responsible bidder or the “best value” approach.

Prior to 2007, only certain specified counties had authorization to use the design-build project delivery method. In 2007, the Legislature extended the authority to enter into design-build contracts to all counties on a limited-term basis. Specifically, the law allowed counties to use this authority to construct buildings and county sanitation wastewater treatment projects over \$2.5 million through January 1, 2011. In order to help the Legislature evaluate the effectiveness of the design-build process, the law required counties that completed design-build projects by November 1, 2009 to submit a report to our office. In response to this requirement, our office received information on five completed design-build projects and submitted a summary of these reports along with recommendations to the Legislature in January 2010.

In August 2010, the Legislature extended the sunset on the county use of design-build from January 1, 2011 to July 1, 2014 with the passage of Chapter 629, Statutes of 2010 (SB 879, Cox). The statute requires counties to submit a report to our office on any design-build projects completed after November 1, 2009 and before August 1, 2013. The report must contain the following information for each county design-build project:

- Type of project.
- Gross square footage of the project.
- Name of the design-build entity awarded the project.
- The estimated and actual project schedule and cost.
- Whether the project was met or altered.
- Number and amount of project change orders.
- A description of any protests concerning the solicitation or award of the design-build contract.
- An assessment of the prequalification process and criteria.
- An assessment of the effect of withholding 5 percent on the project until completion.
- A description of the Labor Force Compliance Program used and an assessment of the project impact.
- A description of the method used to award the contract and the factors used to evaluate the bids.
- An assessment of the project impact of skilled labor force availability.
- An assessment of limiting design-build to projects with costs greater than \$2.5 million.
- An assessment of the most appropriate uses for the design-build approach.

In August 2013, the Legislature enacted Chapter 121, Statutes of 2013 (AB 195, Hall), extending county design-build authority until July 2016.

Limitations of the Reporting Requirement

In general, it was difficult to draw conclusions about the effectiveness of the design-build delivery method from the reports received. Twelve counties submitted reports on a total of 27 projects that were completed within the specified time frame. Some of the submitted reports appeared to interpret questions in different ways or did not provide complete information. Additionally, while the reports provided information on the design-build projects, they generally did not provide information on comparable projects delivered under alternative methods, such as design-bid-build. One county did reference a design-bid-build project that appeared to parallel design-build projects. However, it is impossible to draw conclusions about the relative effectiveness of project delivery

methods from such a small sample and the limited information that was provided on this particular project.

Summary of County Reports

Below is a summary of the responses we received for each of the reporting requirements in the legislation, as well as other information that we gathered.

Type of Project and Gross Square Footage. Counties reported using design-build for many types of projects with a large variation in size and scope. The projects included both renovations and new construction projects. The types of projects included photovoltaic (PV) systems, office buildings, swimming pools, community centers, libraries, fire stations, medical centers, correctional facilities, airport facilities, and an animal services building. The gross square footage of these projects ranged from 4,000 square feet (Los Angeles interpretive center) to 740,000 square feet (Sacramento airport). The median project was 40,000 square feet in size.

Project Cost. Counties reported that estimated costs of the design-build projects ranged from a low of \$4.5 million (Ventura PV system) to a high of \$1.1 billion (Sacramento airport). The median project cost was \$11.5 million. According to the county reports, most projects finished close to their estimated costs—roughly 70 percent within 10 percent of their original estimates. The median difference between the county reported estimated and actual project costs was 3 percent. However, several projects finished as much as roughly 30 percent above and below estimated costs.

There were some limitations to the project cost information described above. The reports only compared estimated and actual costs under the design-build method, without any detail on how the projects costs might have differed under alternative delivery methods. In addition, counties appeared to vary from each other in how they reported estimated and actual costs. For example, some counties reported only the costs for the design-build component of the project while others included the costs for the entire project, which could include items such as site acquisition, site preparation, and environmental compliance. Finally, there were some apparent inconsistencies between some of the reported numbers and publicly available information (such as staff reports). Given these issues, the reported cost information may not allow for the reliable comparison of estimated costs to actual costs.

Project Schedule. There was a similar mix of results for project schedules, with most projects finishing close to their targeted schedule and a few projects finishing well before or after their targeted completion date. According to the reports we received, the median project finished roughly a month behind schedule. However, one county reported that their project finished well ahead of schedule, requiring 10 months on a 16- to 18-month project. In contrast, another county reported a delay of more than 14 months on a two-year project.

Due to the overlap in design and construction phases, proponents of design-build typically argue that the delivery method achieves time savings—and therefore cost savings—compared to traditional delivery methods. It is not possible to determine from

the reports, however, if this is the case. The reports only compared estimated and actual schedules under the design-build method, but they were not asked to provide information on how the projects' schedules might have differed under an alternative delivery method. Similar design-bid-build projects may also have come in ahead or behind schedule.

There also appears to be variation in what counties reported as estimated and actual project schedules. For example, counties appear to have varied in whether they report working days or calendar days, which could make it more challenging to make comparisons across projects. There also seem to be differences in what counties identified as the start and end of projects. For example, the award of bid, execution of contract, and issuance of notice to proceed were different stages identified by counties as the start of their projects. Similarly, the completion of major project elements, acceptance of work, beneficial occupancy, and opening of the project were used by different counties to identify the completion of their projects. Since there can sometimes be differences of a number of months in the timing of these project milestones, these inconsistent interpretations make it more difficult to draw comparisons.

Finally, some counties noted that some project delays resulted from factors such as weather, soil remediation by property owners, and client requests for changes in project scope. It is possible that not all delays are equally problematic, but the information we received and gathered does not enable us to adequately explore this possibility.

Whether the Project Was Met or Altered. The majority of counties that responded to this question reported that their projects were met. However, one county noted that their projects exceeded initial objectives and some counties mentioned that their projects were altered to expand its scope. We should note that some projects that were described as "met" also had scope changes, so there may have been some variation in interpretations of what constitutes a project being met or altered.

Number and Amount of Project Change Orders. Counties reported a wide variety of experiences with change orders associated with these projects. The median number of change orders reported for a project was 16, and the median change as a percentage of estimated project costs was 7 percent. One project reported only two change orders, which resulted in a net decrease of \$76,000 or 2 percent of project costs. On the other hand, one county reported over 300 change orders totaling \$6 million (less than 1 percent of the estimated project cost) and another county reported over 200 change orders totaling nearly \$7 million (almost a quarter of the estimated project cost).

Proponents of design-build typically argue that it results in fewer change orders than the traditional design-bid-build approach. Again, the reports included information on design-build change orders, but did not allow for comparison with other delivery methods. Without information on comparable projects using other project delivery methods, it is impossible to determine whether design-build is associated with fewer or more change orders than other alternatives for project delivery.

Additionally, some counties noted that change orders compensated contractors for client-requested changes in project scope or for weather delays. These types of change

orders may be less problematic than those that result from factors such as design errors or omissions. Thus, it is not clear how meaningful the number of change orders, in isolation, is in evaluating project delivery methods.

Protests Concerning the Solicitation or Award of the Contract. Two counties reported that they received written protests concerning the solicitation, bid, proposal, or award of the design-build contract on a total of three projects. On one project, the protest came from a bidder that the county declared non-responsive for failing to provide the information required in the Request for Qualifications. On another project, the protest came from a bidder with references that reported “less than satisfactory” performance. On the third project, bidders lodged two separate protests covering a number of allegations with regard to other bidders, including lack of required licensing, adjustments to price after submission of proposals, and omissions in bid documents. Counties reported that they did not receive protests on the other 24 projects.

An Assessment of the Prequalification Process and Criteria. There are two major steps in the process for awarding a design-build contract. First, design-build contractors must prequalify for the project by meeting minimum requirements set by the county. In the second step, prequalified entities submit formal bids on the project that the county evaluates based upon predetermined criteria.

Public Contract Code stipulates some of the criteria to be used in the prequalification process including previous experience, financial capacity, credentials, safety record, evidence of ability to provide insurance and bonding, and previous performance. Many counties reported that they used questionnaires based on these criteria. These questionnaires were developed internally or adapted from the Department of Industrial Relations or other counties. Generally, the counties that elaborated on their experience with the prequalification process noted that it worked well and resulted in the selection of experienced and qualified contractors without adversely affecting the number or quality of bids. However, one county noted that the process was lengthy and that some of the criteria were redundant with those included in the second step of the evaluation process.

A Description of the Method Used to Award the Contract and the Factors Used to Evaluate the Bids. In the second step of awarding the contract, the legislation requires counties to award the design-build contract to a prequalified firm through (1) a competitive bidding process in which the contract is awarded to the prequalified firm with the lowest responsible bid or (2) a design-build competition based upon best value criteria. In every case, the counties reported using the best value award procedure rather than the lowest responsible bid procedure for their design-build projects.

Most counties provided information on the point systems they used to evaluate bids on best value. The statute requires that price, technical design, construction expertise, life cycle costs (which factors in operating costs for the structure), skilled labor force availability, and safety record each account for at least 10 percent of the total weight in the criteria. These criteria were often weighted equally at the minimum of 10 percent with the exception of price, which comprised up to 40 percent of the available points.

Some counties commented on their perspectives on the required criteria, with a couple noting that life cycle costs, skilled labor force availability, and safety record were not of great value as criteria. A few counties also appear to have exercised some discretion in interpreting the required criteria. For example, two counties reported that they made some of the required criteria pass/fail. As allowed by law, counties also chose to consider a variety of non-required criteria such as schedule, presentation or interview, outreach plan, enhancements, and aesthetics.

An Assessment of the Effect of Withholding 5 Percent Retention on the Project. Two counties noted that they retained 10 percent of the project cost for at least part of the project. One of these counties expressed concern that a 5 percent retention would not adequately protect the county in the event that a contractor failed to complete the project. The other counties indicated that they used a 5 percent retention on their projects and did not report any problems with this limitation. One county even suggested that limiting the retention to 5 percent was helpful as it encouraged small, local, and minority business participation.

A Description of the Labor Force Compliance Program and an Assessment of the Project Impact. Counties typically reported either hiring a third-party consultant to monitor labor force compliance or forming a Project Labor Agreement with a local trades council. Counties generally did not mention any concerns with the labor compliance provisions specified in statute. However, a few counties noted that there are costs associated with labor force compliance.

An Assessment of the Project Impact of Skilled Labor Force Availability. One county reported that the skilled labor force availability project selection criterion required contractors to obtain apprentices from approved apprenticeship programs, which the county felt was cumbersome. However, none of the other counties reported that the skilled labor force availability requirement affected their project.

An Assessment of Limiting Design-Build to Projects With Costs Greater Than \$2.5 Million. Most counties preferred either no cost threshold or a lower cost threshold for the use of design-build. A couple counties reported considering additional projects for design-build, but being unable to proceed because the project's cost was less than \$2.5 million. One of these counties provided an example of a library project that was just under the cost threshold and thus did not qualify for design-build. The county indicated that this project ended in litigation and behind schedule, while other design-build library projects were completed successfully. If the threshold were to be changed, suggestions for a new minimum cost were between \$500,000 and \$1.5 million.

An Assessment of the Most Appropriate Uses for the Design-Build Approach. As already discussed, counties used design-build for a variety of projects. A couple counties reported that they preferred design-build for simple projects that do not have many unknown variables or where design criteria are easy to quantify. However, others indicated that design-build was especially valuable for specialty projects or for large, complex projects. Although these projects were complex, county officials believed design-build gave them a better opportunity to consider quality in their selection

process. Some counties also reported that the design-build delivery method was faster and therefore well suited to time sensitive projects, while others indicated that it can be valuable for a variety of types of projects if managed appropriately.

LAO Observations and Recommendations

From the reports we received and the information we gathered on the sample of projects, it is difficult to find conclusive evidence as to the benefits of the design-build method. The counties, however, expressed support for the design-build process and were generally pleased with the project outcomes. Their experience tends to support our past findings that design-build can be a useful alternative delivery method. (See, for instance, our 2005 report *Design-Build: An Alternative Construction System* and our 2010 report *Counties and Design-Build*). In August 2013, the Legislature extended county design-build authority to July 2016. When it next considers extending design-build authority to counties or other local agencies, we recommend the Legislature make a number of changes as discussed below.

Inclusive, Uniform Statute. Currently, separate legislation provides design-build authority of varying duration and breadth to a variety of agencies, such as cities, counties, and school districts. If the Legislature extends design-build authority to any of these agencies, the Legislature could adopt a single statute that covers all public entities providing similar authority and limitations as we have recommended in the past. Creating a uniform standard would help contractors become more familiar with one standard for doing design-build on public works projects in California.

No Cost Limitations. We recommend there be no maximum or minimum project cost threshold imposed on design-build authority. Several counties identified smaller projects that they felt could benefit from a design-build approach, and it appears that design-build could provide additional flexibility for these types of projects.

Weighting of Selective Criteria. When the Legislature considers extending design-build authority to local agencies, it may want to reconsider the weighting of certain criteria based on concerns expressed by counties. For example, the Legislature could increase the weight of price in the best value criteria. To maintain flexibility, the Legislature could reduce or eliminate some of the other best value criteria—currently mandated at 10 percent—which the reports identified as less useful and potentially redundant with prequalification criteria.



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