

AN INNOVATIVE APPROACH TO COST AND SCHEDULING CHALLENGES IN COUNTY CAPITAL PROJECTS

SUMMARY

Taxpayers and other members of the public who follow the actions of San Luis Obispo County government have sometimes expressed the concern that County capital projects tend to overrun their budgets and finish later than their scheduled completion dates. (It doesn't help when even projects that have significantly increased in cost and schedule since they were originally publicized are reported by the County as having come in "on time and within budget."¹)

The San Luis Obispo County Grand Jury investigated this concern, finding that, while construction costs frequently exceed original estimates adopted in the planning process, County capital projects are generally carefully planned, prioritized, budgeted and overseen. The perception that they are not appears to be more a function of miscommunication than of mismanagement.

In this connection, the Grand Jury also investigated the County's decision to pilot the use of the Design-Build method – a new approach that may help to minimize budget increases and schedule delays in its high-value capital projects. This investigation suggests that Design-Build represents a significant step forward in improving performance, cost effectiveness and financial responsibility for the County's high-value capital projects (*i.e.*, projects whose costs are estimated at one million dollars or more).

ORIGIN

This report arises from a complaint received by the Grand Jury expressing concern that large County capital projects are often completed late and well over the cost estimates that formed the

¹ See, *e.g.*, "Juvenile Hall Expansion Completed On Time, Under Budget;" SLO County Government Blog (E-newsletter) Post. Undated, but apparently posted in October, 2016.

basis of the County’s original go-ahead decision. The complainant questioned whether this record could engender doubts about the County’s level of responsibility for the taxpayers’ money. Upon further investigation, it appeared that other taxpayers share the same concern, leading the Grand Jury to investigate how County capital projects are budgeted and overseen and what the County is doing to minimize project cost overruns and delays.

AUTHORITY

California Penal Code section 925 authorizes the Grand Jury to investigate and report on the operations, accounts and records of any County officer, department or function.

METHOD/PROCEDURE

The Grand Jury conducted interviews of high-level County employees and former employees with experience in awarding, delivery and oversight of County capital projects; and additional interviews with, respectively, a contractor with public contract work experience and a senior university academic in the field of construction management. In addition, as reflected in the bibliography, this report reflects information gleaned from County documents (minutes, budgets, audio files and other data relating to capital projects) a range of California state agencies, and national and international organizations of professionals in the field of public construction.

While the issue of County capital projects² is broad and multifaceted, the concerns that underlie this report are relatively narrow. To address them, this report focuses on “vertical” capital projects (*i.e.*, building construction and retrofit/maintenance, as opposed to “horizontal” infrastructure projects such as streets, highways and water.) The report is further limited to “large capital projects,” defined here as projects valued at more than one million dollars.

² For an appropriate definition of “capital project,” this report turned to the County’s Fiscal Year Final Budget (FY 2016-2017), which describes the items included in the County’s “capital projects budget” as “financing for major one-time capital projects such as the acquisition of land and buildings, construction of buildings and structures, and significant improvements to facilities.”

NARRATIVE

To address concerns regarding cost overruns and schedule delays in the County's large capital projects, the Grand Jury's first step was to investigate the County's financial and scheduling performance in recent projects by comparing final project costs and completion dates against original budgeted costs and schedules. The investigation then examined relevant aspects of the County's project planning and budgeting processes, noting in particular the challenges of cost increases and schedule delays after the relevant contracts have been awarded.

The report also discusses the Design-Build approach, and how and why the County hopes that it will help to address many of these challenges. In essence, the Design-Build approach changes the way construction contracts are written, and the way the construction work under them is performed, by changing the alignments among the owner, designer and builder. The goal of the Design-Build approach is to decrease the owner's risk of post-contract cost increases and schedule changes. A more detailed explanation of the Design-Build approach and the County's recent moves to try it out in two upcoming capital projects are discussed in the final sections of this report.

DO LARGE COUNTY PROJECTS EXCEED BUDGETED COSTS AND SCHEDULES?

Seeking an initial understanding of the basic facts underlying this investigation, the Grand Jury began by interviewing County officials, reviewing state and County reports, and comparing the most accessible cost and schedule information about 20 large-value capital projects completed by the County between 2012 and 2016.³ On the surface, the results of this cursory examination aligned with the complainant's perception (described above) and the media reports that appear when a new County project is completed. The initial estimates used by the County in deciding to go ahead with a project were nearly always less than the final costs and completion date. Moving on from this analysis, however, the Grand Jury's investigation found the true situation with regard to the County's control of costs and delays to be very different. To understand the Grand

³ This sampling was deemed representative of the Board's research which was in turn based on several reports and sources, which compiled some of this data for all projects completed in FYs 2012-13 through 2015-16.

Jury's conclusions in this report, it is necessary to understand (1) how County staff prioritizes, budgets and oversees contracts; and (2) how the Board of Supervisors makes capital decisions.

County Capital Project Priorities and Budget/Schedule Development

In February of each year, the Board of Supervisors adopts an *Infrastructure and Facilities Capital Improvement Program Five Year Plan* (CIP) for the following fiscal year, covering that year and the next four fiscal years. Each CIP is the product of an eight-month-long CIP-development process conducted by County staff, which began the previous June or July.

Initially, all County departments are asked to submit proposals for necessary capital projects valued at \$100,000 or more, including both vertical and horizontal projects, and both new capital development and “major” maintenance projects. These are amalgamated with the list of ongoing project development work, then prioritized. An estimation process identifies the highest priority projects, assesses the apparent cost of each, and divides those costs over the years that the project would be developed. This information is then forwarded to the Capital Improvement Executive Steering Committee,⁴ which (under the budgeting, direction and oversight of the County Administrative Office) organizes it into a prioritized list, fine-tuning it based on a range of established criteria (including level of need for the project, availability of outside funding, etc.).

The draft CIP is presented to the Board of Supervisors, which adopts it as a basis for ensuring that the next fiscal year's capital expenditure decisions will be well and carefully considered. The CIP may be amended over the year, whenever new needs come before the Board. It is, in essence, a prioritization of project options, leaving it to the Board to choose which projects it will take forward, and what budgeted funds it will commit to each project.

Although it provides one of the most comprehensive sources of public information on County projects, the CIP is not a formal approval of the listed projects – it is only a plan for possible projects that might be approved over the coming five years, should funding be available. Some CIP-listed projects have been previously initiated, some are under construction, some have been

⁴ The members of this committee include specifically designated representatives from many departments with direct responsibility for capital project issues (Public Works, Planning, Central Services, etc.)

partially investigated, and many have yet to be approved. Before the County commits to any expenditure related to a proposed capital project, that project must be presented individually to the Board, as discussed below.

The County's Project Approval Process

When the Board of Supervisors makes its initial decision to begin analysis of a proposed project, its process is comparable to the actions of a would-be homeowner who is considering building a house. For example, the Board's initial decision is based on staff's best estimate about what the project will cost and how long it will take. Unlike the homeowner, however, the County must publicly mention this estimate in its initial go-ahead for the project.

After this initial decision, the County (like any prospective homeowner) has a lot of work to do, firming up this estimate. Many factors may affect this process, including inflation over the time spent finding funding and finalizing the proposal. Other factors include increases in the cost of funds, changes in the law that require different construction materials and practices and discovery of on-site conditions that need to be addressed, as well as less predictable impacts such as weather and "acts of God."⁵ With this firmer estimate in hand, the County must investigate the price that will be charged for the services of the architect and contractor, and for other services. By the time these investigations are complete, the figures regarding cost and schedule will normally be quite different from the original estimate. At this point, the Board of Supervisors must reevaluate its earlier decision, to determine whether it can go forward. That determination is reflected in another formal budgetary approval decision, after which the County enters into one or more contracts for completion of the project.

Post-Contract Cost Increases and Scheduling Delays

After County capital construction contracts are in place, their costs often increase further during the period of construction. Construction schedules frequently expand, sometimes dramatically.

⁵ For example, following Hurricane Katrina, construction projects in California became more expensive due to that disaster, which led to a decrease in petroleum-based ingredients from the affected area that are used in the production of roofing materials. Other commonly needed construction materials are also produced in and/or shipped through the affected region and were less available and more expensive during that time. In addition, region-wide demand in the afflicted area affected the availability of lumber and cement throughout North America.

As an example of this evolution, Table 1 shows how annual increases in the Juvenile Hall Expansion – one of the County’s largest recent capital projects – came to be reflected in the County’s capital improvement budget:

Table 1: Changes over Time – the Budgetary Approvals of the Juvenile Hall Expansion *

	Initial Cost Estimates (2008)	Re-evaluation of Cost Estimates (2009) ⁶	Updated Estimates (2013)	FY 2013-14 (ground-breaking)	FY 2014-15 (Budget)	FY 2016-17 (Completion)
Overall Cost	\$12,500,000	\$17,500,000	\$18,553,283	\$18,572,778	\$21,337,168	\$19,984,110
State Bond Financing (75% of application amount)	\$9,375,000	\$13,100,000	\$13,120,983 ⁷	\$13,100,000	\$13,120,983	\$13,120,983
Costs paid by the County (“Matching funds”)	\$3,125,000	\$4,400,000	\$5,432,300	\$5,472, 778	\$8,216,185	\$6,863,127
Estimated completion date	2013	-	2015	(work began Nov. 2014)	July 2016	(Completed 10/18/2016)

*Source: Grand Jury compilation (Note: Sources vary slightly from year to year, but all information taken from official County records)

The Juvenile Hall expansion project was, upon completion, publicized by the County as having come in “on-time and under budget.”⁸

Over the life of each project, changes may be reflected in the County’s budget in one of three ways. First, some adjustments may be under the “contingency” budget line of the approved contract.⁹ The change orders for these adjustments are approved using a relatively quick and simple process. Second, if the change amounts to more than a specified percentage (usually less than 10%) of the contracted total price, it may be addressed as a “change order,” which is

⁶ Based on the re-evaluation of its cost estimates, the County was able to obtain the maximum amount of state co-funding: \$13.1 million.

⁷ The figure \$13,120,983, appears to be a more precise version of the rounded figure \$13.1 million that appears in previous estimates and reports.

⁸ See footnote 1

⁹ In the County’s public contracts, a construction contingency of ten percent is normally included. Some projects also include a “soft-cost contingency” of between five and ten percent.

approved by staff and later submitted for budgetary approval as a new appropriation. Finally, regardless of contract size, any change that will increase project costs by more than \$210,000 must be directly submitted to and approved by the Board of Supervisors.

A number of factors may give rise to the need for a change. The most commonly cited recent example of cost increases above the originally agreed contract price is the Women's Jail Expansion, on which the County began to plan and find funding in 2009.¹⁰ The project broke ground in 2014 under a contract for approximately \$28 million. In 2016, it was reported as having required 23 change orders totaling approximately \$1.4 million, and requiring additional change orders estimated at over \$800,000. The first phase of this project was completed in 2017. Like most other such works, this project's cost increases and delays were partly caused by the passage of time between the adoption of the decision to go ahead with the project and the final approvals of external funding and other key requirements. The primary reason for most of the cost increase and delay, however, arose out of an unexpected subsurface problem. Soil conditions on the site made the drilling and construction of caissons (foundations) a much more difficult process, leading to unexpected delays and cost increases. Additional changes were required by the State Fire Marshall.

Unforeseen site conditions have arisen in other projects, although not usually so dramatically. Other common reasons for cost increases and schedule extensions include late-discovered problems with the design; unavailability of necessary materials; unexpected construction or labor problems; and changes in relevant regulations.

As noted above, the County is bound by the California Public Contract Code, which requires that its contracts must be developed in a manner that conforms to detailed rules and practices (mandated by state law) regarding whether and how such changes are approved. Those provisions require that both the County and the contractor comply with those rules throughout their execution of the contract.¹¹ If the project goes forward to completion, all approved changes

¹⁰ Although discussions in the Board of Supervisors and elsewhere began as early as 2005, the go-ahead for planning the project was given in 2009.

¹¹ After the start of construction, the County has limited options. If it feels a contractor is making outrageous demands, it may refuse the change, leading the contractor to cancel the contract. Most public projects must be

are, by definition, included in the County's budget and schedule as they arise. Thus, the statements issued by the County are factually correct in reporting that, as of the date of completion of a project, that project was "on-time and within budget," because those statements are made on the basis of the various formal amendments of the contract. Such statements, however, are perhaps inadvisable, without clearer explanation of the various evolutions of the budget. County residents who follow the actions of the County, especially those with an interest in how their tax dollars are spent, will often recall the cost and schedule estimates included in the publicity surrounding the original decision to go forward with the project. They will naturally arrive at the misunderstanding first mentioned above.¹²

THE DESIGN-BUILD APPROACH: A SMALL STEP FOR CONTRACTORS; A GIANT LEAP FOR SLO COUNTY?

While many of the causes of post-contract changes to schedule and cost are "unforeseen," only some are actually unforeseeable. Failure to foresee problems may be an error of the architect, of the contractor, or even of the original proposal and contract. As noted below, this situation often places the owner (i.e., the County, in the case of county projects) in the position where it may have to shoulder the blame, if it wants to complete the project. For private owners, there are many options that help them legally protect themselves against the risks of unforeseen problems. Until recently, however, the law governing public contracts prevented California counties and local agencies from using the types of innovative contractual mechanisms and project delivery options that are becoming common practice in private-sector construction contracts.

Up to now, San Luis Obispo County has utilized only one option for large capital project delivery: opening the project to competitive bidding (the conventional Design-Bid-Build approach) and awarding contracts on the basis of the "lowest responsible bid." This option may often pose challenges to effective County oversight of large capital project development. The

bonded; however, bond agencies carefully scrutinize all dealings searching for a reason that the bond should not be paid, in whole or in part. Even where the bond is paid, the County would then have to go through the public bid process to find a new contractor to complete the work. There is no certainty that the new contract price will be less than the sum of the bond plus the unpaid portion of the original price, or that the new contractor will not require additional change orders

¹² This impression may be underscored by media reporting that, again, is based on comparing the initial project estimates with the final costs and completion date, without in-depth inquiry into what occurred in the interim.

County is currently taking the initial steps that will enable it to use another tool for addressing these challenges – the “Design-Build” approach.¹³ An understanding of these two project-delivery methods could help concerned taxpayers gain greater confidence in the County’s management of public projects.

Current Practices: The “Design-Bid-Build” Approach and the “Lowest Responsible Bid”

The basic operation of the Design-Bid-Build approach as used by the County is as follows:

- The County decides to engage an architect to design the project.
- The architect is administratively selected from among a small number of qualified professionals, and the cost of this service is normally estimated at between five and ten percent of the total project cost.
- Based on this design, the County seeks a general contractor to construct the project. In choosing the contractor, the County is legally required to hold an open “public bidding” process, under which any contractor may submit its bid to build the project as designed.¹⁴

When bids are received, the County is subject to a requirement that is very different from anything required of private owners. Specifically, as a public agency, the County is bound under California law to award the construction contract to the contractor who submits the “lowest responsible bid.” This legal requirement was originally adopted in the 1920s to prevent “pork-barrel” contracts, in which government officials unduly favor their friends, relatives and contributors, by awarding them high-value contracts to do low-value work. Today, it has become apparent that the lowest-responsible-bid requirement has many shortcomings for local agencies.

In particular, the lowest-responsible-bid system is believed to pressure bidders to submit a very low bid, possibly relying on future “change orders” to increase the eventual contract amount. Where change orders are not possible the low bidder may take short-cuts and quality trims, in

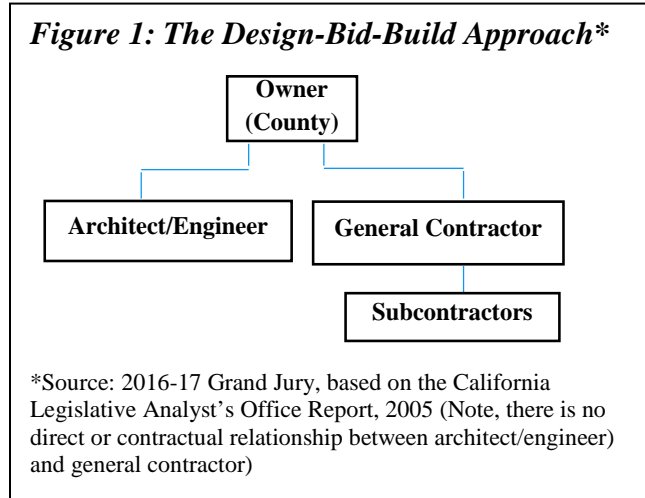
¹³ Another type of contracting, the “Construction Manager at-Risk” (CMAR) contract is also technically possible for projects above \$1 million. California Public Contract Code § 20146. Although it is not a “project approach,” in many iterations, CMAR may be used as a component of the overall Design-Build approach used in a particular project. CMAR is generally viewed as less common and more difficult to apply fairly.

¹⁴ For most private owners, the “bid” part of “Design-Bid-Build” involves visiting one or more contractors who have been recommended, getting a bid from each, and then choosing one.

order to maximize profits. Public agencies like the County often find it very challenging to address these shortcomings within the framework of the public bidding laws.

The most important drawback of all Design-Bid-Build arrangements is diagrammed in Figure 1.

The owner has contractual relationships with both the architect and the contractor separately, but the architect and contractor are not contractually linked. As a result, a contractor will often seek a “change order” when the costs of completing the structure increase, claiming that the additional costs arose because of a defect in the design. The architect may respond that problems arose due to the contractor’s workmanship or



errors in his interpretation of the architect’s plans, and state that these are the reasons for the additional costs. The owner, in the middle, has no short-term way¹⁵ to force the two to collaborate to finish on time. All too often, the owner’s only option is to agree to the change order.

In essence, the Design-Bid-Build approach creates an “accountability vacuum” for the owner, who must bear the responsibility for problems whenever the architect and contractor disagree over which of them should be held responsible. Bound by the lowest-responsible-bid process, the County has had limited options – it has been forced to operate within this vacuum.

The Design-Build Project Delivery Method

The “Design-Build” approach to contract delivery is not new. It has long been used in private contracts, where owners rely on it to stimulate greater accountability and shift some of the risks described above from the owner to the design/build team. The basic operation of this process is that the owner (County), having decided on a project, hires a person or entity – the “Design-

¹⁵ In the long term, he or she may attempt a lawsuit.

Build contractor” – who will have responsibility for *both* design and construction of the project. As it will be used by the County, that process is as follows:

- The County’s first step is to hire a person or company to serve as the project’s “Project/ Construction Manager” (PM/CM.) The PM/CM is a specially trained, experienced expert, generally described as the County’s “primary single point of contact” for the project. He or she is responsible for overseeing all work, in conjunction with County staff, consultants and the Design-Build contractor. He or she coordinates the County’s side of the process, from selection of the Design-Build contractor through construction oversight.
- With the help of the PM/CM, the County then prepares a general “bridging document” explaining the essential elements that it requires the Design-Build project to include. This document may include input from many staff members and consultants.¹⁶
- Next, as a public entity, the County is required to put the proposed project out for public bid, but this process occurs in two stages (both primarily shepherded by the PM/CM):
 - First, the “Design/Build Pre-qualification” (RFQ) document is prepared and published. It invites all interested bidders to submit documentation of their qualifications. From this, the County identifies a few “prequalified bidders.”
 - On the basis of a “Design/Build Request for Proposals” (RFP,) the prequalified bidders each develop and submit a proposal including a basic design and a bid that sets out the fixed price to be paid and the proposed schedule.
- The County chooses the winning bid through a judging process, based on its identification of the “best value,” using a set of previously adopted standards.¹⁷
- At this point, a final contract is negotiated. The PM/CM and the winning bidder may discuss the possibility of altering the winning proposal to include features from other bidders’ proposals. The final contract specifies a single price to be paid for the work.

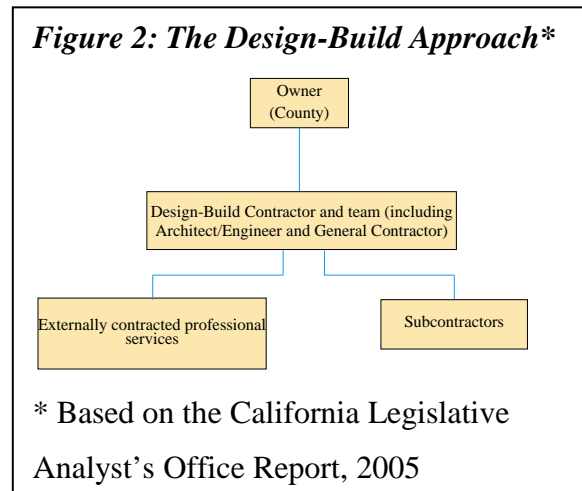
¹⁶ For example, in the new Animal Shelter project, discussed below, the bridging document will include input from a “master architect,” a structural engineer, mechanical/plumbing engineers, an electrical engineer, a network communications engineer, a civil engineer and a landscape architect. The bridging document will also discuss the Leadership in Energy and Environmental Design (LEED) certification standards that will be required for the project.

¹⁷ California Public Contract Code § 26161 briefly summarizes the components of “best value” as follows: “ ‘Best value’ means a value determined by evaluation of objective criteria that relate to price, features, functions, life-cycle costs, experience, and past performance. A best value determination may involve the selection of the lowest cost proposal meeting the interests of the local agency and meeting the objectives of the project, selection of the best proposal for a stipulated sum established by the procuring agency, or a tradeoff between price and other specified factors.” See also § 22164, for more discussion of the selection process and criteria.

- Finally, in completing the project, the work is both designed and built by the selected Design-Build contractor, in collaboration with the County.

The Design-Build approach has numerous advantages over the Design-Bid-Build approach. As diagrammed in Figure 2, the primary advantage is that it eliminates the accountability vacuum of the Design-Bid-Build system, as described above. Rather than pitting the architect and contractor

against one another in a system that emphasizes finger-pointing and leaves the County “holding the bag,” the Design-Build approach promotes coordination by the professionals working on the project. In this way, it fosters an innovative approach to practical design, through which the project can more effectively achieve the County’s objective. When a challenge arises, whether in design or construction, the collaborative approach enables the contractor’s practical skills and



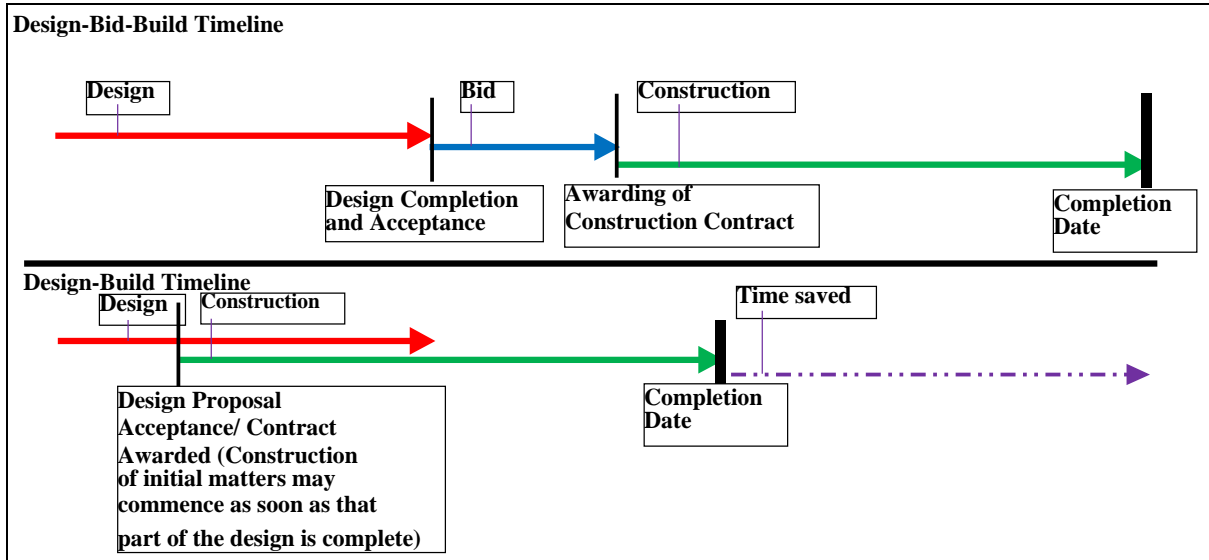
knowledge to combine with the unique skills of the architect and engineer, as well as the special knowledge of the County regarding its regulations, needs and experience with similar facilities. In essence, the buck stops with the Design-Build team, rather than leaving the owner in the middle with little or no recourse beyond agreeing to a change order and its resulting costs.

The Design-Build approach can offer several other benefits not as readily available under the Design-Bid-Build approach. One of these is price certainty. As the accountability vacuum disappears, the number of change orders becomes fewer. Another advantage is the involvement of the builder (a professional whose focus is on practical issues of project completion) at the design level, where practicalities often do not get sufficient attention.

In addition, the integration of the builders and the designers into a collaborative team may enable faster completion of the project. As noted above, in a Design-Bid-Build project, the bidding cannot begin until the design of the project is essentially complete. By contrast, as shown in Figure 3, the coordinated Design-Build team may be able to begin construction of initial

elements of a Design-Build project as soon as those elements are designed, often well before the design documents are fully complete (Figure 3.)

Figure 3: Design-Bid-Build/Design-Build Timeline Comparison*



*Based on information supplied by a professor of construction management

The California Legislative Analyst’s¹⁸ office has identified a few possible disadvantages and risks connected to the use of the Design-Build approach and awarding contracts on a best-value basis:

- The Design-Build system leaves quality control in the direct responsibility of the Design-Build contractor, rather than the owner. This may limit the County’s direct assurance of quality control.¹⁹
- The subjective nature of the best-value selection process minimizes the County’s ability to rely on the anti-favoritism protections underlying the lowest-responsible-bid system.²⁰ The process is, by definition, less transparent than open bidding. In addition, the subjective point system can make comparing proposals difficult.

¹⁸ A component of the California Legislature’s Nonpartisan Fiscal and Policy Advisor.

¹⁹ Reportedly, to address this risk, the County will hire an external expert to serve as the “inspector of record.”

²⁰ To address this concern, § 22162(c) of the California Public Contracts Code requires each county/local agency using Design-Build to adopt its own “organizational conflict-of-interest policy” addressing relationships to Design-Build entities and members of a Design-Build team seeking to submit qualifications or proposals.

- The prequalification element of the process may limit the ability of small contractors and new companies to have access to the system. In this regard, this Grand Jury's investigation has indicated that few contractors within SLO County have Design-Build experience. While there are solutions that help minimize this disadvantage, they require careful attention by the PM/CMs who implement the County's Design-Build process.

Could Design-Build Have Resolved Recent Capital Project Challenges?

While Design-Build may have significant positive impacts on the management of the County's capital projects, it cannot resolve all types of challenges. In particular, the Design-Build approach cannot prevent cost increases and delays caused by the emergence of unexpected site conditions (as experienced in the Women's Jail Expansion). In these situations, the key question is who has responsibility for investigating site conditions prior to entering into the contract, and whether those investigations satisfied reasonable professional standards. In the case of the Women's Jail Expansion, that question leads inevitably to a conflict between the architectural staff and the contractor. In a Design-Build project, the question is more direct: whether or not the responsibility rested with the County or the Design-Build contractor. The result is not predictable, but depends on the conditions underlying each project. Clearly, some projects might have placed this responsibility on the Design-Build team, which may have failed to meet its obligation. In that situation, the Design-Build team would have to go forward without additional compensation. In other situations, this responsibility may rest with the County. Or, the Design-Build team may be found to have satisfied professional standards in its investigation, despite the fact that this investigation did not disclose the hidden problem. In either of these instances, the only solution will be contract adjustment – a change order. Even then, the adjustment may be more unified and final in Design-Build projects. The collaborative Design-Build team will be called upon to address this issue directly and completely in a single re-adjustment design process, leading to a fixed price that will not change unless a new and different unforeseen condition is discovered later.

In the New Animal Shelter Project (discussed below), for example, the PM/CM contract states that the County will be responsible for obtaining consultant services that determine site features, adjacent uses, boundaries, topography, soil conditions, seismic conditions, hydrology, biological,

archeology, utilities, planning/building code requirements and other matters. In addition, the County will be responsible if the preparation of a formal environmental impact report is required.

ENABLING SAN LUIS OBISPO COUNTY’S USE OF DESIGN-BUILD

Before the County could use the Design-Build approach, several key actions were necessary.

Changes to State Law

Prior to 2014, the general law applicable to county governments required them to use only the Design-Bid-Build approach and to award contracts on the basis of lowest responsible bid.²¹ Since 1993, the state legislature has been aware of growing concerns about the negative impacts of competitive bidding for local and county public contracts, and deeply involved in a careful process of trying out the Design-Build approach at the local and county level.²² Then, in 2014, the state legislature changed the law.²³ While counties, cities and other local agencies are still allowed to use the Design-Bid-Build/lowest responsible bid system when they feel it is a better option, they are now also permitted to choose the Design-Build method, awarding contracts based on a “best value” determination, for any public works contracts costing more than one million dollars, with limited exceptions.²⁴ The County may now choose between the two methods, on a project-by-project basis.

This law includes a specific finding that Design-Build “using a best value procurement methodology, has been authorized for various agencies that have reported benefits from such projects including reduced project costs, expedited project completion, and design features that are not achievable through the traditional design-bid-build method.”

²¹ California Public Contract Code §§ 20161 and 20162.

²² Since 1993, seventeen statutes have been enacted authorizing limited use of Design-Build in specific instances. Most of these statutes gave specific counties permission to use Design-Build, sometimes limited to specified projects or project types. All of them set time limits by which their authority would expire, whether used or not.

²³ This law is generally time-limited; however, the limit is quite long (the sunset date of the law is 2025) indicating that its purpose is to give the legislature the option to amend or repeal, if counties do not use it in the meantime.

²⁴ The Design-Build authority does not include certain kinds of horizontal infrastructure (streets and highways, highway infrastructure, public rail transit, or water resources facilities California Public Contracts Code, § 22160, *et seq.* See especially §§ 22161(g)(1) and 22162(a).

San Luis Obispo County's Acceptance of Design-Build

In the final months of 2016, the Board of Supervisors authorized two new capital projects that will serve as the County's "pilot projects" for the use of the Design-Build method – the new Animal Shelter (currently estimated at \$14.8 million²⁵) and the Co-located Emergency Dispatch Center (currently estimated at \$13.4 million). In agreeing to use this method, the Board of Supervisors stated that its goal was "to minimize the County's exposure to costly change orders and contractor claims." This choice increases the County's ability to utilize the experiences of other counties in similar projects. For example, the request for Design-Build proposals on the Animal Shelter project will go out through a state-wide system, encouraging teams that worked on similar projects throughout the state to submit proposals based on that experience.

In order to comply with the new state law authorizing its use of Design-Build, the County was required to develop a range of procedures and standards. This meant that, before beginning the pilot projects, it was necessary to adopt pilot versions of these documents. In this connection, the County found useful guidance from other California counties that gained significant experience with the Design-Build approach by using that approach under earlier pilot state legislation. Among other benefits of piloting Design-Build, the experience gained will enable SLO County to fine-tune these procedures and standards to best reflect its needs and situation.

The County has already begun the Design-Build process for the Animal Shelter project, having selected Kitchell Construction as the PM/CM for the project, through a public request for proposals. Kitchell will prepare the RFQ/RFP for the selection of a Design-Build contractor. The RFQ process will prequalify the top three Design-Build firms²⁶ that apply, authorizing each to submit its Design-Build proposal. One of these three will be selected, after which the contract will be negotiated to finalize the proposal, price, schedules and other factors. This same process has begun for the Co-located Emergency Dispatch Facility.

²⁵ WBS 320088. The current total to design and construct of the New Animal Shelter project is estimated at \$13.7 million. This figure excludes \$1.1 million of other costs (demolition, depreciation and land costs.)

²⁶ "Design-Build firms" is a term used to describe all who submit documents in response to the RFQ. Although in some cases, a single firm will submit qualification, other submissions may come from joint ventures and other collaborative arrangements between cooperating professionals (architectural, contracting, and engineering firms) who band together to aggregate their qualifications.

Even though the County has not used Design-Build in the past, there are County staff members who already have experience with and/or education in the application of the method. As a result, there is a high level of staff support for the decision to enable future use of Design-Build. This is reflected in the text of the *Infrastructure and Facilities Capital Improvement Program Five Year Plan FY 2017-18 through FY 2021-22*,²⁷ which notes that “streamlined project delivery tools such as Design-Build ... are means to keep pace with the concentrated facilities replacement activities.” The CIP also describes the goal underlying County’s decision to utilize Design-Build: “to streamline the project delivery process and eliminate unnecessary risk to the County.”

Contrary to nearly all other sources consulted, however, the CIP also suggests limiting the use of Design-Build approach to “larger projects in excess of \$5 million.” In the course of the Grand Jury’s investigation, state, county and private experts generally agreed that there is no evidence to suggest that the authority to use Design-Build should be restricted only to the highest value projects (i.e., those above \$5 million). Most affirmatively indicate that if any threshold should apply, it should be much lower. As noted above, the state law governing the use of Design-Build by counties allows its use for projects costing more than \$1 million. The California Legislative Analyst’s Office, reviewing the experiences of counties that have utilized the Design-Build approach under earlier laws, specifically noted that “local agencies do not see any compelling reason for imposing cost thresholds” on the use of Design-Build, and ultimately agreed that no such reason is apparent. Other experts consulted recommended keeping the value threshold as low as possible, and could find no reason that Design-Build should not be available as an option for any County vertical capital project.

FINDINGS

F1. The first public announcement of the cost and schedule of an approved project is an initial estimate, which is usually lower than the eventually approved budget for the project based on the building contract costs and similar factors.

²⁷ The Board of Supervisors adopted the 2016-17 CIP on February 21, 2017, without discussion of any of the issues or statements discussed here.

F2. Major factors contributing to the increase in final cost/completion over original estimates include the passage of time between initial estimates and the execution of project contracts, changes in the cost of funds, late-discovered need for changes of design, unavailability of necessary materials, unexpected construction/labor problems, and changes in relevant regulations.

F3. The reporting of final project completion sometimes includes statements that give rise to speculation that projects are not well managed.

F4. California law imposes detailed process requirements on all counties awarding building contracts for capital projects, with the clear intent of eliminating the possibility that anyone could allege bias, nepotism, or preferential treatment in the awarding of any public contract.

F5. As the state authorizes it and as the County proposes to use it, the Design-Build project delivery method has generally proven in practice to expedite project completion and enable more cost-effective contracting with less financial and other risk to the owner.

F6. While experts generally indicate that the Design-Build method can be useful for all types and sizes of projects, under California law there is a limit: If County policy permits, the County may use Design-Build for any vertical project with a price tag that will exceed one million dollars.

RECOMMENDATIONS

R1. Recognizing that many County residents and taxpayers are concerned about capital project development costs and delays, the County should keep the public abreast of the extent of its efforts to ensure financial rigor in the management/delivery of capital projects.

R2. Rather than simply stating at the time of completion that a project came in “on-time and within budget,” the County should provide more detailed information in a reader-friendly way,

with a goal of diffusing the erroneous perception that project cost-overruns are being “slipped past the voters.”

R3. The County should give itself the option to use Design-Build for any project valued above one million dollars (as opposed to the current five million dollar threshold.)

COMMENDATION

The Grand Jury commends the County on its efforts to take advantage of the new opportunity to add the Design-Build approach to its toolbox for managing the delivery of County capital projects. In particular, the Grand Jury agrees with and applauds its decision to take this step carefully, with due consideration and the use of two pilot projects as a means of gaining experience to evaluate the use of the Design-Build delivery method in the future, before making commitments to a permanent change from prior practices.

REQUIRED RESPONSES

The Board of Supervisors is required to respond to Findings 1, 3, 5 and 6 and Recommendations 1, 2 and 3, with particular attention to their policy impact.

The Department of Public Works is required to respond to Findings 1, 2, 4, 5 and 6, and Recommendations 1, 2 and 3.

The responses shall be submitted to the Presiding Judge of the San Luis Obispo County Superior Court. Please provide a paper copy and an electronic version of all responses to the Grand Jury.

Presiding Judge	Grand Jury
Presiding Judge Barry T. LaBarbera Superior Court of California 1035 Palm Street Room 355 San Luis Obispo, CA 93408	San Luis Obispo County Grand Jury P.O. Box 4910 San Luis Obispo, CA 93403 grandjury@co.slo.ca.us

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