



Community college district changes delivery method, streamlines construction process

By **CARLOS RICO**, The Daily Transcript

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Historically, the San Diego Community College District has used the traditional construction delivery method, design-bid-build, to amass new buildings and structures. With the hard-bid construction mechanism, projects were completed, but were often delayed and/or over budget due to frequent change orders and no real partnership between architects and builders.

This contracting philosophy changed after Dave Umstot took over as vice chancellor of facilities management for the San Diego Community College District about four years ago.

“When I arrived here, a lot of the projects were behind schedule,” said Umstot. “Change management issues were taking a lot of time. Our change order rates were trending at 10 percent. So we looked hard at how can we deliver projects in a better manner.”

Since arriving at the San Diego Community College District, Umstot has helped get more construction projects done on time, and on or under budget, by changing the delivery method.

According to California’s public contract code, public works projects for community colleges must use one of three construction delivery mechanisms: design-bid-build, construction management multiple-prime or design-build.

Umstot decided it was far more efficient on larger projects to either use construction management multiple-prime or design-build.

Construction management multiple-prime is a delivery method where the owner, in this case the community college district, serves as the general contractor and hires subcontractors directly. An outside construction management firm is also hired to help with pre-construction services.

Since Umstot came on board, the Community College District has completed around 15 projects using this construction delivery method. “It’s worked a lot better for us” compared to design-bid-build, he explained. “It’s enabled us to really get the right construction managers associated with the right jobs based on their experience and the personnel they have available, rather than who happens to be the lowest responsible bidder ...”

But the most successful construction delivery method for the community college district has been design-build, which involves hiring the architect and general contractor as a partnership. Additionally, all of the subcontractors are hired beforehand by the general contractor as part of the design-build team.

Umstot said the community college district takes anywhere between 60-120 days off the project’s timeline when using the design-build construction delivery method, since subcontracted work does not have to be put up for bid.

“Under construction management multiple prime or hard bid, we would actually have to get the documents (ready) that go out to bid, advertise the project, review the bids (and) go to the board for awarding,” Umstot said.

Once the California Division of State Architects approves a project, the design-build team can move immediately to construction.

“Time is money,” said Umstot, who spent his first 20 years in the private sector using mostly the design-build delivery method.

The use of building information modeling (BIM) also allows for savings in design-build. This tool allows for the project to be built through a computer software program in a virtual 5-D world (time and cost being the fourth and fifth dimensions), and the architect and general contractor work together from the beginning of the entire project.

"By building everything in virtual space first, as opposed to waiting to get out on the field to build it, you resolve all of the clashes and conflicts," Umstot explained. He added that **Sundt Construction**, which has performed work for the district, did a study and found on average \$3,000-4,000 is saved when a clash detection is found.

This also helps lower change orders, cuts construction time and thus saves money. Umstot said when the community college district hired him, change order rates were at 10 percent. Now they average 3 percent.

California allowed for design-build contracting in January 2008, with some prerequisites: the project must be \$2.5 million in value or greater, and the community college district's board of trustees must approve use of the delivery method.

Umstot also said his staff has to go through five criteria in choosing the design-build team to hire. These include bid price, technical expertise, designed life cycle cost over 15 years or more, safety record, availability of skilled labor force like apprentices, design approach and a subcontractor outreach plan that encourages hiring small or disadvantaged businesses.

"It's been working pretty well for us," he said.

Umstot also said the district likes to use elements of Integrated Project Delivery in its design-build method, which comes from health care industry.

"It's an approach to delivering a project whereby there's a shared risk and shared reward," he said.

The district prefers to hire contractors and architects who have used this delivery method and will encourage the shared risk and shared reward factor.

"We really want people to make decisions that are in the best interest of the project as opposed to what is in the best interest of my company," said Umstot, adding this delivery method gives contractors incentives to finish the job on time or ahead of schedule, saving the owner money.

The district currently has eight design-build projects, including one at San Diego City College that calls for a new math and social science building.

The community college district is in the midst of constructing new classroom buildings and renovating existing ones, thanks to Propositions S and N, school bond measures passed by voters in 2002 and 2006 totaling \$1.55 billion.

Umstot got his feet wet in the public sector locally with the San Diego Unified School District around 10 years ago. He managed Proposition MM, a \$1.51 billion construction school bond measure similar to Propositions S and N, which helped fund modernization and rebuilding of 164 existing schools and construction of 12 new schools.