

Partnering Program Yields Big Benefits

Study Finds Resolving Potential Conflicts Prior to Construction Lowers Claims



Caltrans and contractors used the Partnering Program to reconstruct a portion of State Route 89 in El Dorado County, north of South Lake Tahoe. The project came in almost \$2 million under budget and 39 days ahead of schedule despite work taking place on a highly traveled roadway.

Construction projects that used Caltrans' Partnering Program experienced fewer delays and post-construction claims, independent researchers found. As a result, fewer projects ended up in arbitration.

Caltrans contracted with the University of California, Davis, to analyze hundreds of construction projects that were completed during a six-year period. Many of the projects used an outside facilitator and partnering best practices to mitigate disputes. Projects that employed the partnering process were compared with those that did not.

Each project in the program had a budget of at

least \$10 million and construction schedule of 100 days or longer — the threshold established in 2008, two years after the study period began.

The U.C. Davis report, finalized in January, shows that more was spent on contract change orders in general for partnered projects than for non-partnered projects (see table, next page). These change orders are seen as a reflection of a collaborative partnering environment in which the team worked together during the project to resolve issues before the construction contract was accepted.

The Partnering Program helps Caltrans meet the stewardship and efficiency goals outlined in the

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[2015-2020 Strategic Management Plan](#). In its effort to efficiently deliver projects and services on time and on budget, Caltrans aims to deliver 100 percent of its planned projects for each fiscal year. The department delivered 98 percent of its projects in 2015-16.

Researchers studied 274 projects completed between 2006 and 2012. Of those studied, 192 employed Partnering Program techniques and 82 did not.

Caltrans developed its partnering program in the early 1990s, but has employed it more robustly since 2006. Since that time, participation in the program involving major projects has risen from 58 percent in 2006 to 87 percent in 2012 — the final year of the study, chosen to ensure that all projects in the study had reached completion.

Partnering Results in Lower Claims

	Partnered	Non-partnered
Average Total Claims Value	\$0.78 Million	\$1.03 Million
Average Total CCO Value	\$6.1 Million	\$3.2 Million
Average Budget Growth	7.9%	9.2%
Average Schedule Growth	7.6%	11.1%

Projects that were included in the Caltrans Partnering Program incurred claims that were, on average, considerably less than non-partnered programs. Some of that success is attributed to construction change orders (CCOs) that are worked out during construction rather than after the project is completed.

Source: Caltrans Division of Construction

Keys to Partnering

The [“Field Guide to Partnering on Caltrans Construction Projects”](#) lays out a step-by-step process that involves an outside facilitator, a partnering charter, a dispute resolution plan and a closeout plan, along with follow-up meetings and monthly surveys. The close-out plan includes a workshop and lessons-learned survey at the end of the project.

Throughout the process, a Caltrans resident engineer and project manager are responsible for leading the partnering effort and are accountable for a project’s day-to-day operations. They are considered the key to partnering success.

Top Partnering Projects

Each year project teams are recognized, at the Caltrans Excellence in Partnering Awards Ceremony, for using partnering and its best practices to finish projects safely, on time and within budget. In 2016, Caltrans recognized 13 qualified projects. Of those, nine had zero lost-time accidents; nine came within or under budget for a total of \$18 million in savings for the 13 projects; 13 were completed on time or early (saving a combined 75 days); and 10 incurred no claims. In the previous year, 14 projects that had a combined savings of \$21 million and 299 days saved were recognized, with 10 projects experiencing no time lost due to accidents over a period of 5,200-plus working days.

One such project was the reconstruction of a portion of State Route 89 in El Dorado County, north of South Lake Tahoe. The project had its share of challenges, with work taking place on a highly traveled roadway with limited workspace, but it was completed for \$11.8 million, almost \$2 million under budget, and took 211 days — 39 days ahead of schedule.

The partnering team included Caltrans, Diablo Contractors, Inc., property owners, Lahontan Regional Water Quality Control Board, Tahoe Regional Planning Agency, California Highway Patrol, California State Parks, U.S. Forest Service and other local agencies. The partnering program noted that construction partners resolved issues “at the lowest level” and coordinated efforts with other ongoing nearby highway construction projects, reducing the impact to the public by developing strategic road

closures and staging locations. No claims were filed against the project.

Room for Improvement

Caltrans encourages, but does not require, that projects valued between \$1 million and \$10 million incorporate the partnering program “even if a professional facilitator is not used.” Likewise, the U.C. Davis report suggests many projects smaller than those required to participate would benefit from partnering, because some may be more complex than more costly projects that are larger but more straightforward.

The report’s authors note that not all partnering activities are equally useful — or even used in the field. “Kick-off and follow-up meetings were perceived as the most worthwhile activities to engage in, while skills training, monthly surveys, and close-out meetings were perceived to have little utility in maintaining a smoothly running project,” the report said.

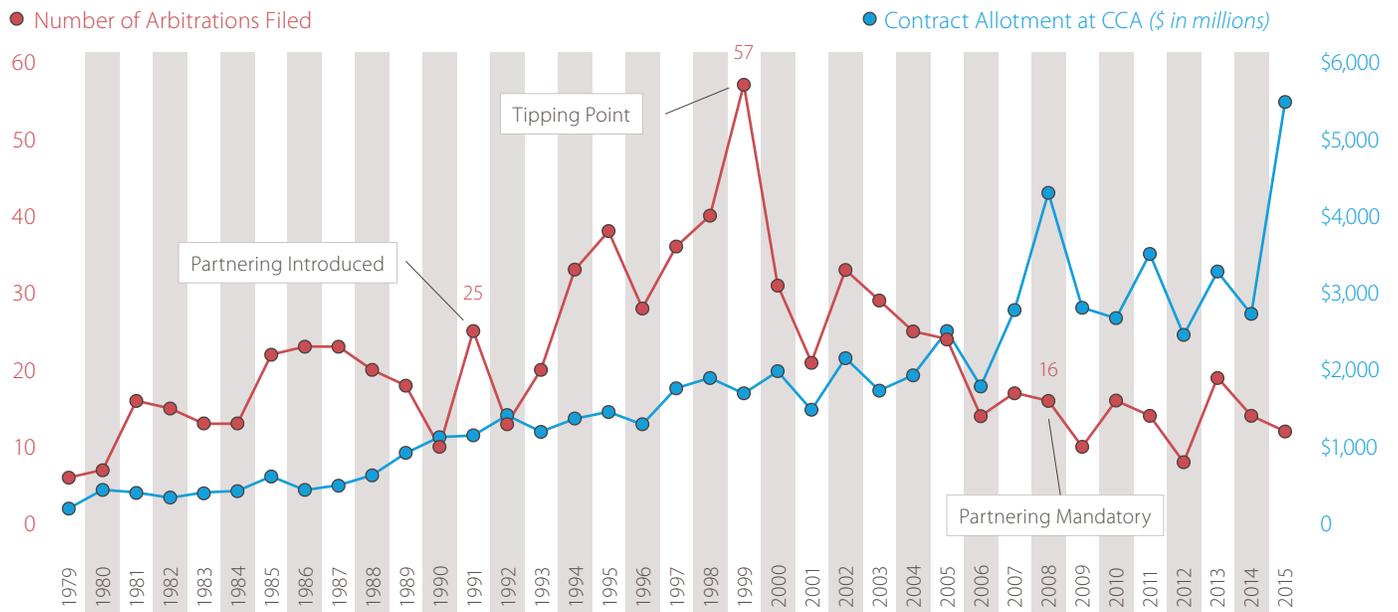
As a result, the independent report recommends

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two major changes: basing participation on project complexity and traffic patterns rather than cost or the number of projected days, and removing some of the partnering program’s training elements. Caltrans has shared the report with its industry partners and is evaluating the report recommendations to further improve the partnering program.

Source: Ken Solak, Caltrans Division of Construction, HQ Partnering Program Manager; University of California, Davis, “Effects of Collaborative Partnering on Major Capital Projects”

Caltrans Arbitration Filing History



The Caltrans Partnering Program measures much of its success by looking at the decrease in the number of construction projects that end up in contract disputes (settled through arbitration) despite an increase in contract allotments.

Source: Caltrans Division of Construction