



San Francisco Int'l Cuts Costs & Construction Time With Partnering

By Jennifer Bradley



factsfigures

- Project:** Boarding Area East Remodel
- Location:** San Francisco Int'l Airport
- Terminal:** 3
- Contractor:** Hensel Phelps
- Architects:** Gensler; KPA Group
- Project Budget:** \$140 million
- Total Cost:** \$138 million
- Project Duration:** 18 months
- Workers' Compensation Claim:** 0
- Partnering Support:** OrgMetrics; International Partnering Institute
- Of Note:** Project was completed under budget & within original timeframe, despite considerable expansion to scope of work; airport credits collaborative partnering strategy for reducing costs, increasing worksite safety & shortening overall schedule

Twenty percent below standard industry cost — that's how San Francisco International Airport (SFO) is completing major infrastructure projects these days. It's also often finishing them early and with stellar jobsite safety records. For instance, the Bay area airport didn't have a single workers' compensation claim (or general litigation) during the \$800 million of work recently completed on its long-term \$4 billion terminal renovation program.

SFO's impressive stats didn't occur by accident, but through a 20-year commitment to partnering that started, and continues, with Airport Director John Martin.

Geoffrey Neumayr, deputy airport director of Design and Construction for SFO, describes partnering as a pro-active approach that integrates all of a project's key participants on the same level.

"It's a trusted leader model," he explains. "It creates an environment that allows people to bring up issues without fear of retribution. The first step of partnering is to make an environment that's conducive to the identification of issues, and then working together to solve them."

Schedule reductions, cost decreases, labor savings and other impressive performance measures are the proof in the pudding, says Sue Dyer, president of OrgMetrics and SFO's partnering consultant ever since Martin launched the initiative.

"Airport projects are unique: They are highly complex, involve lots of systems and lots of people; and that's why they are so tough," says Dyer. "This process brings everyone together."



Sue Dyer

Dyer also founded the International Partnering Institute, a non-profit corporation that teaches organizations about partnering and is pushing for cultural change in the overall construction industry. SFO is a founding member of the institute and supports its research and outreach efforts; and Martin and Neumayr currently serve on its board of advisors, Martin as its chair. Several airport consultants and contractors, including Parsons Brinckerhoff, Skanska and Hensel Phelps, are also members of the institute.

Tried & True

SFO began implementing partnering basics in the 1990s, during its \$3 billion capital improvement program, recalls Ivar Satero, the airport's chief operating officer. "We knew given the risks of such a major program and a lot of exposure to other major airport programs, it was going to be very important to take a partnered approach with our stakeholders, agencies we relied on to be successful, as well as our contractors."



Ivar Satero

Partnering worked well then, and again in 2007 with another major capital project, Satero reports. The practice has been used throughout major projects ever since, each time with more

people and strength, as more lessons have been learned. It is now wholly integrated into the way SFO bids and executes construction projects, notes Satero.

Neumayr has a knack for putting the cost of partnering — usually .1% to .2% of a project's total budget — into perspective: "The investment is worth a hundred times what you would put aside for an unforeseen condition contingency."



Geoff Neumayr

Airport officials cite SFO's Terminal 3 Boarding Area East project, which opened to the public earlier this year, as its latest partnering success. The project began as an uncomplicated \$30 million "patch-and-paint" endeavor, recalls Satero. But SFO was also finishing Terminal 2 at the same time, and airport officials decided to carry its new, modern theme into Terminal 3. In order to accomplish a host of additional goals, the project cost rose to \$140 million — "quite different than we envisioned when we started," Satero muses.

The 10-gate United Airlines terminal was stripped to the bones. A total of 100,000 square feet on two levels was completely renovated with new architecture, interiors and systems. Using the principles of partnering, SFO completed



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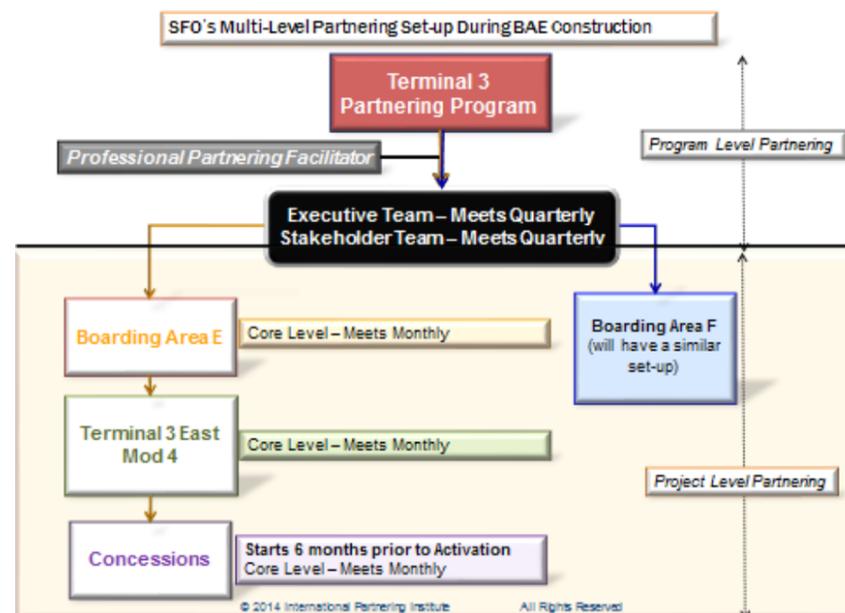
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the major remodel in 18 months — the time allotted for the original, much smaller project. By industry standards, it should have taken five years, notes Dyer. It also finished \$2 million under budget.

The reason for such efficiency? No lingering issues among key project participants, says Neumayr. Partnering

enables all players to sort through problems immediately, in an open manner, he explains. “In our case, we really never missed a beat. It was always clear the exact direction of what we were doing; everyone on the team knew where they were going, because the issues were all identified and put on the table.”



The Partnering Process

“What other industry on earth would start a multi-million or billion dollar business venture without a board of directors?” asks Sue Dyer, president of OrgMetrics and founder of the International Partnering Institute.

The leadership of San Francisco International Airport (SFO) began asking itself the same question about 20 years ago, and has been taking a partnering approach to its construction efforts ever since.

Its program, as taught by the International Partnering Institute, includes three groups of participants:

- 1) Executive
 - Includes owners, contractors, architect and other key project influencers
 - Meets quarterly
 - Defines policies and procedures; allocates resources
- 2) Core Team
 - Includes key field personnel (designer, managers, owner, etc.) and representative(s) from department(s) affected by the project
 - Initially meets monthly, then weekly as projects progress
 - Identifies immediate issues in project execution
- 3) Stakeholders
 - Includes those engaged by the project (airlines, city, etc.)
 - Meets every three months with Core Team

Collaborative partnering integrates all three groups on the same level. SFO personnel credit the approach with decreasing the airport's construction costs by 20%, increasing jobsite safety, shortening project timetables and expediting the resolution of problems. ✈️

In general, airports spend a lot of money protecting themselves from any possible risk during construction, Neumayr observes. In contrast, partnering allows SFO to re-emphasize a common end goal — “that exceptional project outcome,” in Neumayr's parlance. “Instead of pushing, everyone is pulling for the project,” he remarks. “And it changes the whole paradigm of how a team works together.”

Dyer adds that partnering also allows each player personal “ownership” in a project, and the strong effect that can have was obvious at the opening celebration for SFO's Boarding Area East. “(Team members) were high-fiving each other, and really loved and owned that building,” she recalls. “It makes for a very different atmosphere and most importantly, they are having fun.”

Top-Down Commitment

“We started at the strategic level, a long time ago, to create really the culture and values of collaboration,” says Dyer, noting that partnering is now the airport's standard approach to construction.

Robert Reaugh, executive director of the International Partnering Institute, emphasizes that successful partnering takes commitment at the executive level; value for the approach, and faith in it, then trickle down the organizational chart.



Robert Reaugh

Reaugh and SFO personnel alike credit Martin with driving the partnering culture at SFO. “He believes strongly in it,” says Satero.

Most professionals involved in partnering are high-level players in their own right, observes Dyer. Tapping into their individual wisdom is what makes this way of working so profound, she explains. “When you have a very high-performing team, they do lots of things that may be smarter,” she continues. “What keeps me so excited about this is how it taps into the collective wisdom of the entire team.”

The frequency SFO's core team meets with project stakeholders (airlines, concessionaires, the city, etc.) is a unique aspect to its partnering approach, says Reaugh. The group gathers every month to discuss issues and solutions, and to make sure the project is in line with the stakeholders' expectations.

For many years, the success of SFO projects was gauged by time and cost, recalls Neumayr. And while those benchmarks are still important, he feels that the ultimate success of a project depends on the perceptions of stakeholders and airport users. “We braved the idea that if we are going to be successful, we have to engage our stakeholders and listen to them from the very beginning,” he explains.

Expectations & Trust

Satero recalls experiencing a few challenges during the airport's early partnering days. A concerted effort had to be made to “sell” the idea to the construction community, and it became important to show why SFO was still the agency of choice to work with, he explains.

“We (stressed that) when you work here, you not only get to do really cool projects, you are going to be treated fairly, and do things in an honest, consistent way,” adds Neumayr. “Having an equal voice is a big deal; people want that.”

Failing to set expectations up front for subcontractors was initially an oversight, Satero acknowledges. “(But) we overcame

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SFO officials say partnering helped save millions of dollars and years in time during recent renovations to Terminal 3.

that once they saw the opportunity to work at a transparent level and develop trust," he remarks.

A "neutral facilitator" is a must in any partnership, emphasizes Reaugh. As SFO's neutral facilitator, Dyer considers it her role to make sure projects proceed smoothly. She uses monthly scorecards filled out by core team members to determine if issues are emerging and/or an extra meeting needs to be held.

Reaugh says that using a neutral facilitator is the only way to balance power and allow truth to emerge. "Ultimately, that's the biggest problem with large, complex projects," he explains. "The people in the field know what's wrong; but unless you have a culture where they trust that they can tell the truth, they will not. A highly trusted environment allows people to share bad news openly and become problem solvers rather than problem diagnosers."

Because SFO understands that design/build teams need to budget for partnering, planners write provisions for it directly into request for proposal documents. It's important for companies to understand the stakeholder engagement process, as it will have a significant impact on their resourcing — and also save them time and money over the long term, Reaugh notes.

A good project will also enhance their resumes, adds Roddy Boggus, senior vice president/national aviation director at Parsons Brinckerhoff and advisory board member



Roddy Boggus

for the International Partnering Institute. When all of a project's players are on the same page and working together, it's a shared risk, but also a shared victory, Boggus relates. The ability to demonstrate partnering experience offers contractors and consultants added value beyond single projects, he adds.

Boggus cautions airports that it might be tough to convince their contractors and consultants about the benefits of partnering, and some may need to be forced to conform to its methods.

"The owner has to understand what the possibilities are and put in the work to make it work," he remarks. "You have to have somebody driving it, and as people get into it and see that it works, conformance turns to belief."

What's Ahead

While SFO has become a poster child for partnering in aviation, Boggus notes that it's a model any organization can, and should, emulate. Research from the International Partnering Institute documents total installed cost savings of around 10% across all industries.

Dyer describes SFO's success with partnering as "astounding and repeatable."

After seeing noteworthy results on airport projects, the California Department of Transportation followed SFO's lead and began partnering. Now, it's experiencing schedule reductions of up to a third and huge reductions in claims and arbitrations, reports Dyer.

Because Boggus appreciates the magnitude of SFO's success with partnering, he cautions other executives not to expect the same immediate results. After all, Martin has spent the last 20 years refining SFO's project delivery approach to what it is today. That said, he reminds airport leaders that any organizational change requires a first step, and they are the only ones who can take it.

These days, SFO's construction meetings typically focus on solving day-to-day technical concerns, notes Neumayr. "That's a very comfortable place to be," he reflects. "We're talking about the business we all love and solving the exact problems we signed up to. How good is that? No one wants to focus on contract disputes."

Satero agrees: "We believe that people who are having fun and happy will do a better job." ✈️

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