South Bay Union School District Uses Prolog® Manager Software to Improve Efficiency, Collaboration and Cost Control on US$82M Modernization Program

In 1920, the Highland, South San Diego and Oneonta School Districts united to form the South Bay Union School District, and by 1925 enrollment had reached 110 pupils. The Monument School District joined the South Bay District in 1940, and Imperial Beach Elementary School was built in 1943. By 1945, enrollment in the District reached 800 pupils. Today, the South Bay Union School District (SBUSD) includes twelve elementary schools located in and around Imperial Beach, CA. The District now serves over 8,000 students in the communities of Imperial Beach, San Ysidro and South San Diego.

Proposition X, which was approved by voters in November 2008, is a school classroom, safety and repair measure that provides US$59.4 million in funds necessary to address the critical and urgent needs of schools in the SBUSD. Proposition X, along with nearly US$23M in additional funds, will pay for the repairs and improvements needed to ensure that the District students have a safe, healthy, technologically-modernized and quality learning environment.

To perform program management and construction management services related to Proposition X, the District hired SGI Construction Management, a leader in the delivery of educational facilities, transportation projects and other civil works throughout California. SGI was chosen, in part, because of their work on a similar large, multi-year bond program for the neighboring Sweetwater Union High School District. As the owner’s representative, SGI was charged with selecting and implementing a program management solution for the District that would meet the document management, financial management and complex reporting requirements associated with Proposition X.

The Need for Financial Accountability

Proposition X has multiple projects that are being funded by seven different financial sources, and requires funding accountability to many groups, including the Board of Trustees, the Citizen’s Oversight Committee, the State of California Office of Public School Construction and the senior District administrative staff. “From the beginning,” says licensed architect and SGI Program Manager, Kent Brown, “our program was challenged by the State’s uncertain financial situation, which made it critical for us to manage the District’s construction funding position on a monthly basis. Staying ahead financially while still meeting the program’s scope expectations would require detailed tracking of budgeted versus actual cost.”
To meet these financial requirements, SBUSD needed a robust technology solution that would allow the program management team to closely manage individual project budgets as well as the overall bond budget, and track the allocation of various funding sources. To meet strict auditing requirements, the District also needed a centralized data repository and strong document management capabilities. In addition, custom report writing features were required in order to share specific financial data with District accounting staff.

A Proven Program Management Solution

SGI had been using Prolog Manager from Meridian Systems for their other program management contracts and recommended the solution to SBUSD. On behalf of the District, SGI procured Prolog from Meridian Value Added Reseller (VAR), Rotech Consulting, Inc., a construction technology firm headquartered in San Diego. SGI also hired Rotech to help with the implementation and configuration of the software.

SGI had an established relationship with Rotech; the two firms had worked together on the implementation of Prolog for the Sweetwater bond program. Utilizing this previous implementation as a configuration template, Rotech was able to expedite the setup of SBUSD’s Prolog solution. The District and SGI also chose to have a full time Rotech consultant, Garet McInroe, on their program management team.

With Rotech’s help, SBUSD’s Prolog system was fully operational in just a few short months. Remarkably, a small three-person team uses Prolog to manage nearly US$82M in design and construction related to Proposition X. Brown performs overall program and construction management responsibilities; Luz Aguirre serves as the office manager; and McInroe provides ongoing financial and construction management support, and creates custom Prolog reports. The software is being used to track and manage every detail of Proposition X, including individual projects, funding allocation and overall cost control and budget management.

Meeting Program Deliverables

According to Brown, the most obvious benefits of Prolog are the standardization of data and document entry and the easy retrieval of information. These two functions have become essential elements for optimizing the management of SBUSD’s bond program and meeting important program deliverables. Other important benefits include:

**Increased efficiency.** In construction, efficiency translates into savings. “Prolog allows each person to accomplish more in less time,” Brown states. “This efficiency has provided a direct savings back to the client, which has allowed us to deliver additional scope of work within the specified budget. That’s a real plus for the owner.”

**Centralized document repository.** Having project and program documentation stored electronically in Prolog improves information visibility, which reduces risk, improves reporting and eliminates the need to manually handle paper documents. “Before electronic data storage, we would need four dozen file drawers for a program of this size,” says Brown. “Now, we’ve got our master files in three, two-drawer file cabinets.”

**Cost control.** Prolog’s ability to provide over/under projections for budget forecasting purposes has given the program management team the visibility to anticipate financial demands and make changes when necessary to correct potential cost overruns. “The ability to track changes from a financial standpoint and tie them back to the overall budget is important,” Brown says. “That’s a strength that Prolog provides to us.”

**Audits/accountability.** Having the necessary reporting capabilities to provide regular executive summaries, meet various program audits and perform day-to-day reporting functions are also key benefits of Prolog. Periodic audits can cause significant stress for District staff, but Prolog provides a solid audit trail with detailed documentation to back-up every transaction. “Prolog will ultimately assist the client in retrieving information to establish credibility during their first few audits,” Brown explains, “so subsequent audits become less of a burden.”

**Financial Reporting.** Although Prolog is not integrated with SBUSD’s proprietary accounting system, Prolog has been configured to support easy reconciliation of financial data from both systems and provide fund-specific financial reporting. “Luz and Garet run a cash flow analysis each month that accurately reflects the monthly cash flow expenditure for each fund and the available cash at the end of the fiscal year,” Brown explains. “That simple, one-page report goes to the administrative superintendent for the district and the director of fiscal services.” Whether information about a specific funding source is needed, or cost details related to a particular school, the information can quickly be generated in Prolog and presented in a way that is easy to understand.
Collaboration. “Our entire program is based on the concept of collaboration, rather than confrontation,” Brown says. “We even require our project general contractor to utilize Prolog because the ability to exchange information between our two organizations is essential for the overall program success.” This collaborative approach has lead to more direct sharing of information between the field and the office, and better documentation of those interactions. “As a team, Prolog helps us work efficiently and effectively.”

Prolog: A Solid Investment

Ultimately, by using Prolog to manage Proposition X, SBUSD employees who must provide financial accountability for the various funding sources can rest assured that their reporting is accurate, that they have a solid audit trail of every transaction and expenditure and that their bond program is being managed with the utmost attention to detail. This provides peace of mind to all involved, including the taxpayers who have trusted the District to spend their bond dollars wisely.

As SBUSD’s bond program continues, Brown looks forward to expanding the use of Prolog by getting the design team actively using the software for tasks such as responding to RFIs. “For collaboration, information tracking and cost control, Prolog is very effective tool,” he says. “It is relatively easy to use, produces clear and concise reports and allows us to effectively monitor our construction costs. For project and program management, Prolog is a solid investment.”

Meridian Partner Profile

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South Bay Union School District Project Profile

South Bay Union School District Proposition X Bond Program

The South Bay Union School District (SBUSD) has twelve elementary schools that serve more than 8,000 students in the California communities of Imperial Beach, San Ysidro and South San Diego. Many of those schools are no longer equipped to provide students with the environment and learning tools they need to succeed. While facilities have been well-maintained over the years, the average age of each facility exceeds 44 years, and the oldest school was first constructed in 1931.

 Proposition X is a school classroom, safety and repair measure that provides $59.4 million in funds necessary to address the critical and urgent needs of SBUSD schools. Six additional funds are included in the overall program, for total funding of nearly $82M. Proposition X will fund the repairs and improvements needed to ensure that SBUSD elementary students have a safe, healthy, technologically-modernized and quality learning environment.

Key Project Elements

› Making health and safety improvements, including removing asbestos, upgrading electrical systems and replacing outdated fire alarms
› Improving student access to computers and modern technology
› Modernizing classrooms, restrooms and cafeterias
› Making handicap accessibility (ADA) improvements
› Repairing and replacing deteriorating plumbing and sewer systems
› Renovate and repair outdated restrooms
› Make repairs and improvements to classrooms and school facilities, and replace old windows
› Make upgrades to the kitchen facilities
› Make general site improvements, including replacing deteriorating concrete sidewalks/steps

Program/Construction Manager: SGi Construction Management

Estimated Total Program Cost: US$82M

Anticipated Results: Proposition X will completely modernize seven of the District’s 12 elementary schools and make various improvements at the remaining five schools. In addition, four other District facilities are included in the modernization program: VIP Village Preschool Facility, Education Center, Facilities/Transportation Facility and the Purchasing/Child Nutrition Facility. Phase one, which is the modernization of the first seven schools, should be complete by the 2014/2015 school year.