SUMMARY: Los Angeles (CA) Unified School District

he Los Angeles Unified School District (LAUSD) is the second largest school district in the country, with nearly 750,000 K-12 students and over 800 K-12 school facilities within the district. See LAUSD, Fingertip Facts: 2004-2005, at: http://www.lau sd.k12. ca.us/lausd/offices/Office_of_Communications/Fingertip_Facts_2004_2005.pdf. In conjunction with its current multi-year school building program, LAUSD is implementing a broad high performance school building initiative, which aims to integrate health and environmental goals into all new capital projects, building on the framework established by the California Collaborative for High Performance Schools (CHPS) program.

BACKGROUND

Building Program

Beginning in the late 1990s, LAUSD embarked on the largest school building program in its history. As of early 2005, the district noted that the new construction program is "valued at over \$9.2 billion and will deliver approximately 170,000 new seats by the end of the year 2012," with funding derived primarily from state and local bonds. *See* http://laschools.org/sep/sep-2005-introduction-executive-summary.pdf. A new local bond measure is scheduled for November 2005.

Outside Support for High Performance Schools

Community Support. An important factor in the development of the LAUSD high performance school building initiative was public concern about the siting of schools on contaminated property and about the general management of school facilities. In light of these concerns, the sheer magnitude of the new school building program focused attention on establishing procedures and practices to ensure that the investment would result in high quality facilities.

School Board Support. Public concern also had an impact on the composition of the LAUSD School Board and on the Board's support for the high performance school building initiative. In February 2001, the Board unanimously adopted the High Performance Schools Resolution sponsored by district officials and the district's High Performance Schools Working Group. See Los Angeles City Board of Education Resolution of February 13, 2001, at: http://www.ciwmb.ca.gov/GreenBuilding/Schools/LAUSD/Resolution.htm. The

resolution explicitly calls on the district to work with state's Collaborative for High Performance Schools in developing high performance building criteria and to include specific issues such as site orientation, energy efficiency, water efficiency, waste management, and material resource efficiency. To ensure effective implementation, the Board required district staff to present a plan including performance measures and a performance tracking mechanism.

Two years later, following initial progress in implementing the initiative, the School Board adopted a second resolution commending the district for its efforts and directing district staff to continue the initiative. See LAUSD Board of Education, Resolution on Sustainability & the Design & Construction of High Performance Schools (October 27, 2003), at: http://www.chps.net/chps_schools/pdfs/LAUSD-Resolution-102703.pdf. Among other things, the resolution requires that all new construction and modernization achieve a minimum level of high performance design and that the district provide the Board with quarterly progress reports.

State Support. California has been at the forefront in developing policies and programs to promote energy efficiency and to protect the environment, including activities to advance sustainability in the public building arena. In 2000, state agencies launched an innovative partnership with utility companies to facilitate a high performance approach to local school design and construction. The partnership led to the formation of the Collaborative for High Performance Schools, a public-private entity that has brought together the expertise and resources of numerous agencies, organizations and individuals. In a relatively short period of time, CHPS has developed an extensive set of technical materials and tools for incorporating a wide range of environmental and health goals into the school building process, and has assisted school officials and design professionals throughout California and in other states in using the CHPS approach.

SUMMARY: Los Angeles (CA) Unified School District (Continued)

According to many people involved in the LAUSD high performance school building initiative, the encouragement and assistance provided by CHPS members was a significant factor in the creation and development of the LAUSD initiative. Through informal consultation, facilitation of a district workshop on sustainable design, participation in the LAUSD High Performance Working Group, and funding of a sustainability consultant, state agencies (along with federal offices and utility companies) played an important role in jump-starting the district's initiative.

School District Support for High Performance Schools

At the outset of the new building program, the School Board hired managers for two key district offices – the Office of Environmental Health and Safety and the Office of School Building Planning and Construction. Both new managers had backgrounds in environmental and health issues and immediately brought these issues to the forefront in the district's facilities programs. This upper-management support has been vital to the development of the LAUSD initiative. The district also recently assigned responsibility to a staff member for coordinating CHPS implementation issues for the new construction program. Another staff person coordinates CHPS for existing facilities, including the district's modernization program.

PROGRAM COMPONENTS

Technical Assistance

One of the key actions taken by LAUSD in implementing the School Board resolution was to apply for a grant from the California Energy Commission for funding through the U.S. Department of Energy's Rebuild America program. The funding was used to hire an outside consultant – a planner with considerable experience working on sustainable development and sustainable design projects in California – who was charged with institutionalizing high performance school design and construction within the district. The consultant was hired in early 2002, and the district has extended the contract using its own funds. The sustainability consultant has been critical to the progress of each element of the high performance schools initiative. The district also has worked with a variety of other outside experts in various stages of its initiative, as described below.

Program Planning

In early 2001, the head of LAUSD's Office of Environmental Health and Safety convened a High Performance Schools Working Group. The group comprises representatives from LAUSD, area utility companies, state agencies, private architecture firms and vendors, non-governmental organizations, and interested citizens. The initial focus of the group was on drafting and reviewing the high performance schools resolution and seeking approval of the resolution by the Board of Education. The group has continued to meet regularly as LAUSD implements its high performance initiative, providing an important, formal mechanism for convening experts within and outside the district to consider strategies for advancing high performance design and to make recommendations to the district. See John S. Zinner, Implementing CHPS: The Los Angeles Unified School District Experience (February 2003) (on file with ELI).

SUMMARY: Los Angeles (CA) Unified School District (Continued)

Framework for High Performance Design

Development and Application of High Performance Design Criteria and Metric. The LAUSD initiative incorporates the CHPS criteria for high performance design. LAUSD took the important step of creating a "scorecard" to measure implementation of the CHPS criteria. See CHPS Scorecard, at: http://www.chps. net/manual/documents/CHPS Scorecard 041027.xls. The scorecard lists numerous design features and provides corresponding points for including those features. All new projects must achieve 28 points from the scorecard, in addition to meeting nine prerequisites. LAUSD has developed a "baseline" score of 20 points, which it expects all projects to achieve simply by following existing law and best practices outlined in the district's Design Guidelines. The district requires that architects submit a CHPS scorecard at three points during the design process: schematic design, design development, and final design. LAUSD, Design Guidelines, Section 2.4(A) (2005), at: http://www.laschools.org/employee/design/fs-designguide/. To ensure compliance with CHPS requirements, the district has been working with an environmental non-profit that has expertise in green building to review CHPS submissions. To assist in the process, the district recently assigned responsibility for coordinating this review to a staff person within its design department.

Revision of Existing Design Guidelines. Another important component of the LAUSD initiative is the revision of the district's existing Design Guidelines to incorporate and highlight specific environmental and health features. Following the 2001 School Board resolution, the district reviewed its Guidelines to identify possibilities for strengthening its provisions and made changes in a number of areas. For example, the Guidelines now state that "[a]dequate daylighting, integrated with electric lighting and controls, is required in all classrooms," and specify two options for meeting this requirement. LAUSD Design Guidelines, Section 2.4(B). The Guidelines require energy performance of 20 percent beyond state energy efficiency standards (15 percent in limited circumstances) and mandate that new

construction and modernization projects apply for any available utility energy efficiency incentive programs during the schematic design phase. LAUSD Design Guidelines, Section 2.4(C). The Guidelines also include requirements and recommendations for acoustics, and affirm the general requirement that all projects submit the CHPS scorecard and attain the minimum 28 points. LAUSD Design Guidelines, Section 2.4(A).

Pilot Projects. LAUSD has worked with the CHPS program to develop two "showcase schools," or model high performance facilities, each sponsored by a utility company. Each project incorporates a range of high performance features, with each exceeding California's energy efficiency standards by at least 30 percent and achieving nearly all of the possible CHPS points in the site planning and indoor environmental quality categories. See CHPS Schools, at: http://www.chps.net/chps_schools/index.htm. According to district officials, the higher design costs for these schools were covered by utility incentive programs. LAUSD is planning to use the projects' specifications related to high performance features as a model for other district projects.

Application of high performance goals to renovation projects. Although LAUSD's initiative has focused mainly on new construction to date, the district is developing guidance for incorporating high performance goals into its modernization (renovation) projects. According to those involved in the initiative, the guidance will identify CHPS strategies that are appropriate for common modernization projects such as re-roofing and HVAC work.