SUMMARY:
San Francisco (CA) Unified School District

San Francisco Unified School District (SFUSD) serves approximately 60,000 students and manages about 160 buildings. *See* http://portal.sfusd.edu/template/default.cfm?page=about. The district recently incorporated the high performance design approach developed by the California Collaborative for High Performance Schools (CHPS) into the district's existing guidelines for the planning and design of its facilities. Since most of the district's capital projects are renovations of existing school buildings, the focus of the SFUSD initiative is on the application of high performance building strategies to renovation projects.

BACKGROUND

Building Program

According to district officials, most of SFUSD's buildings need some degree of renovation or modernization. In 2003, a $295 million bond referendum provided funding for 31 SFUSD renovation projects. SFUSD is beginning the first round of these renovations during 2005.

School District Support for High Performance Building

In October 2003, the San Francisco Board of Education passed a resolution in support of using CHPS-based high performance design criteria for SFUSD building projects. Noting that high performance design "will improve the learning environment while saving energy, resources and money," the School Board specifically directed the district to "develop resource efficient design criteria for use in the construction and modernization of existing district schools . . . ." *See* SFUSD Board of Education Resolution No. 38-26A7 (Oct. 14, 2003) (on file with ELI). These design criteria are to be used "when appropriate and possible" by architects in the design development of school facilities. *Id.* Additionally, the Board tasked the district with developing a model for effective implementation of a High Performance Building Design and Implementation Plan, in concert with the Department of Environment and other city agencies as appropriate. *Id.*

Outside Support for High Performance Building

A children's health advocacy organization based in San Francisco was a driving force behind the SFUSD initiative, raising the issue of high performance school design and construction with the Board of Education and supporting development of the SFUSD initiative. Another factor in the development of the initiative has been the CHPS program (described in the summary of LAUSD), which is headquartered in San Francisco. As mentioned below, individuals and agencies affiliated with CHPS have played a role in drafting the SFUSD high performance school building guidance documents. The City of San Francisco's green building program has also been involved in the development of SFUSD's initiative.

PROGRAM COMPONENTS

Program Planning

The SFUSD Board of Education resolution directs the district to include a number of elements in the development of design guidelines – site orientation, energy-efficient envelope, lighting, space conditioning, water efficiency, waste management, material resource efficiency, and heat island mitigation measures. To guide the district through the process of formalizing high performance design criteria, SFUSD convened a Working Committee of SFUSD, CHPS, other area professionals, and the local children's health advocacy organization supporting the initiative.

In March 2004, the Board of Education adopted the district's Model for Implementation of a High Performance Design and Implementation Plan. *See* SFUSD Superintendent's Proposal 41-13Sp5 (Adopted by Board of Education Mar. 9, 2004) (on file with ELI). The Model for Implementation noted that the Working Committee members had agreed on four areas of initial focus: (1) energy efficiency (lighting in particular); (2) building materials (low-emitting surface finishes in particular); (3) maximizing the use of natural ventilation; and (4) building commissioning. *Id.*

The Model also noted the need to develop a set of high performance guidelines for SFUSD that focused specifically on renovation, since the bulk of SFUSD projects will be renovations of existing buildings. *Id.*

SUMMARY:
San Francisco (CA) Unified School District
(Continued)

The current CHPS guidance document and scoring system are geared mainly toward new construction, and the Committee felt that renovation projects would require a more flexible system of scoring. *Id.*

The Model for Implementation emphasizes the importance of using the high performance guidelines early in the project planning and design process. *Id.* The Model calls on SFUSD to: determine high performance goals for each building project; integrate those goals into the project's construction documents; review how well those goals were implemented as part of project close-out; and perform periodic assessments of new building systems and materials. *Id.*

Framework for High Performance Design

In Spring 2005, after receiving comments from the Working Group, the district finished updating its Project Standard Guidelines, which apply to the planning and design of all SFUSD facilities, and which include both required standards and "strong design recommendations." *See* SFUSD, Project Standard Guidelines at 1 (2005) (on file with ELI) (hereinafter "Guidelines").

The Guidelines now include selected CHPS components, many of which have been incorporated as "special requirements." *See* Guidelines at 16. To deviate from a special requirement, A/E firms must obtain approval from the District Project Manager and District Architect. The special requirements include guidance on life-cycle cost analysis, site survey, commissioning, recycling/reuse of building materials, and hazardous materials. *Id.* The Guidelines note that "new construction will afford more opportunities to incorporate the CHPS criteria than renovation projects. For renovation projects, the District's goal is to satisfy the CHPS criteria for the systems, equipment, and/or the materials within the scope of the renovation." *Id.* at 18.

The revised Guidelines now also include a CHPS Peer Review Checklist. *See* Project Guidelines at Appendix D6. The Checklist presents a summary of how a project has incorporated high performance goals in several key areas: site selection; transportation; stormwater management; outdoor surfaces; outdoor lighting; outdoor systems; indoor systems; energy efficiency; alternate energy sources; commissioning and verification; waste reduction and efficient material use; sustainable materials; daylighting; indoor air quality; acoustics; and thermal comfort. *Id.* The district has highlighted on the checklist a number of credits that are particularly relevant for the district's current renovation projects, reflecting an emphasis on energy efficiency, indoor air quality, waste reduction, materials and commissioning. The Checklist also cross-references the requirements contained in the Project Standard Guidelines; for example, under "Low-Emitting Materials," the Checklist notes that the project team must comply with the Guidelines' requirements for low-emitting paints and adhesives. *Id.*