



www.cashnet.org

Volume XXIX, No. 6

REGISTER

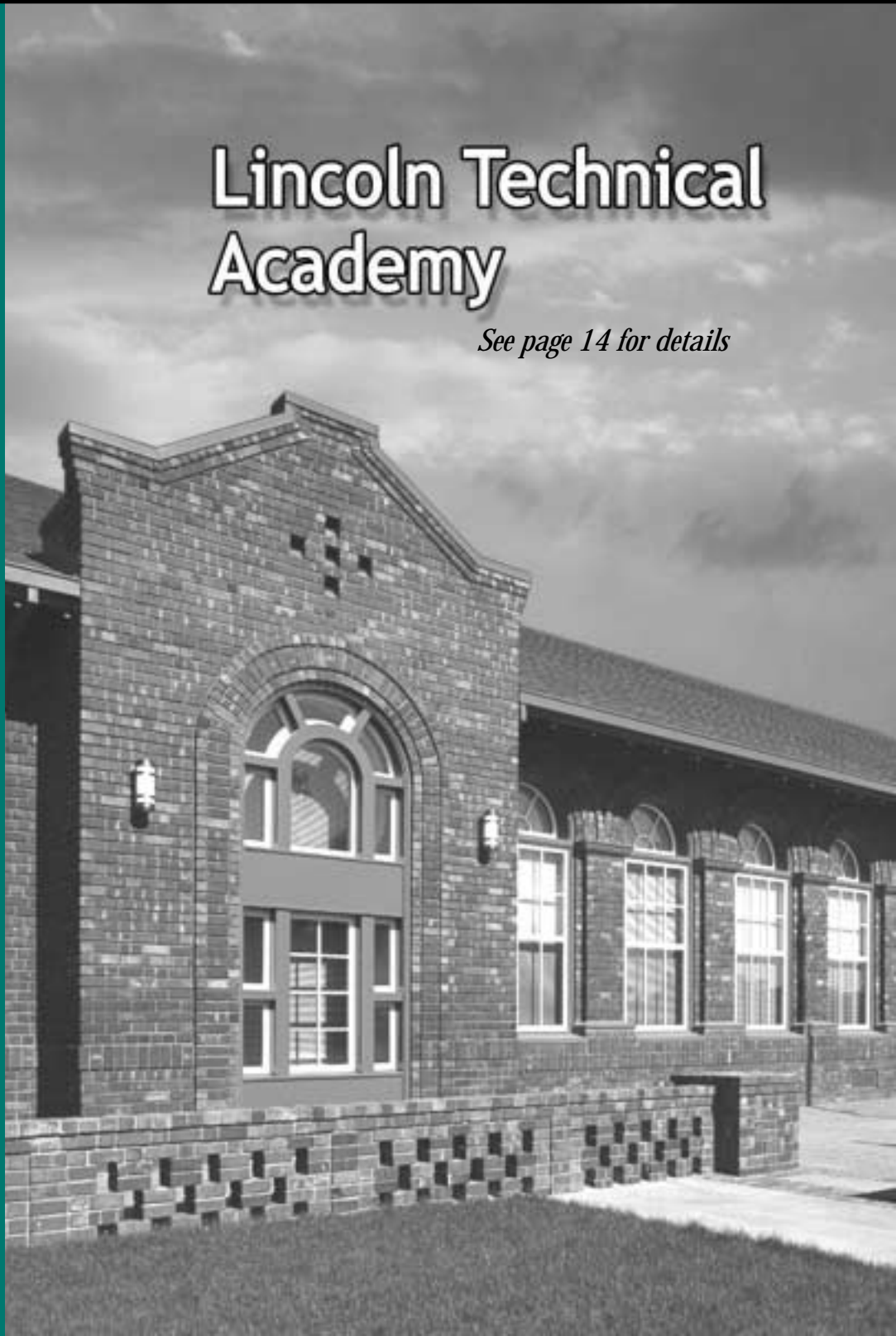
THE NEWSLETTER OF THE COALITION FOR ADEQUATE SCHOOL HOUSING

In This Issue...

- 2 ▶ Message From The Chair
- 3 ▶ C.A.S.H. School Facilities Leadership Academy Graduates Second Cohort
- 6 ▶ Spruce Up Your Facilities for Summer
- 8 ▶ California Classroom VAV with IAQ and Energy Savings, Too
- 10 ▶ The Collaborative for High Performance Schools (CHPS): New Tools for Building the Next Generation of Green, Healthy Schools
- 12 ▶ Building Operator Certification (BOC)
- 13 ▶ June 25 State Allocation Board Meeting Notes
- 14 ▶ Lincoln Technical Academy
- 24 ▶ Upcoming Meetings, Conferences & Workshops

Lincoln Technical Academy

See page 14 for details



Message From The Chair



Ted E. Rozzi, C.A.S.H. Chair

It has been a challenging year for school districts as they ponder how they will continue to adequately serve their students in light of proposed state budget cuts, and the school facilities community has not been immune from these challenges. We have seen legislation and budget items which propose to cut the Deferred Maintenance Program (DMP) and allow school districts to

C.A.S.H. Making Progress in Difficult Times

contribute less to their Routine Restricted Maintenance Accounts (RRMA). C.A.S.H. continues to fight to save these programs and ensure that our schools are clean, safe and functional. Meanwhile, C.A.S.H. has continued to advocate for the issues of most concern to the school facilities community even in the current fiscally constrained environment – an increase in state and local school facilities funding and better access to the State program.

In previous *Messages from the Chair*, I have highlighted C.A.S.H.'s advocacy for an increase in the base School Facility Program (SFP) grants to help reflect the increased costs of building schools, and in last month's *Message*, I reported that on May 28, 2008 the State Allocation Board (SAB) approved a 6% increase to the New Construction per pupil grants retroactive to January 2008. This was a great victory for C.A.S.H., the school facilities community, and most importantly for the children of California.

In this month's *Message*, I want to make you aware of legislation that is currently making its way through the Legislature, which, if approved, would move C.A.S.H. closer to achieving its objective of more funding to build schools and easier access to that funding.

AB 2173 (Caballero)

This bill is sponsored by C.A.S.H. and will allow school districts to assess more Level 2 developer fees to better match what the state contributes for new school construction.

The bill changes current law by:

- Including specific new construction funding above the base per-pupil grants in the calculation of Level 2 fees (augmentations for geographic location, individuals with exceptional needs, fire code compliance, project management assistance, general site allowance)
- Using current CDE site size standards when calculating site acquisition costs for Level 2 developer fees
- Making improvements to the conditions that school districts must meet in order to assess Level 2 fees, including: (1) improving the local bond condition by expanding the timeframe that a district would be required to have put a local bond on the ballot to eight, rather than four, years, and (2) adding a \$5 million bonding capacity threshold as one of the conditions a school district can meet.

These improvements to current Level 2 developer fee law will provide greater access to critical local resources to match state dollars for new school projects.

Continued on page 11



REGISTER

Volume XXIX, Number 6
June 2008

© 2008 The Coalition for Adequate School Housing

ISSN: 1081-9088

Publisher: Coalition for Adequate School Housing • Editor: Greg Golik

The CASH Register is published eleven times a year (January through November) by the Coalition for Adequate School Housing (C.A.S.H.) and distributed to C.A.S.H. members. Over 1,000 rapidly growing school districts, county offices of education, architects, attorneys, bond counsel, financial institutions, developers, contractors, consultants, inspectors, licensed professionals, manufacturers of portable classrooms, maintenance suppliers and others who are concerned about school construction issues hold C.A.S.H. memberships.

The CASH Register solicits articles on school facility-related topics from the membership. If you are interested in submitting an article, please send it or a letter of inquiry to: Editor, CASH Register editorial office, 1130 K Street - Suite 210, Sacramento, CA 95814. Sorry, we are unable to return or acknowledge unpublished manuscripts. The views expressed herein are those of the authors and not necessarily those of the Coalition for Adequate School Housing, its board, staff or general membership.

C.A.S.H. School Facilities Leadership Academy Graduates Second Cohort

After a rigorous 10-month program of study, the second class of the C.A.S.H. School Facilities Leadership Academy graduated June 6 in Sacramento.

The 25 members of this second cohort represented a cross-section of the professional disciplines that help design, build, and maintain the facilities serving California's public schools – chief business officers, facility directors, planners, maintenance & operations supervisors – from both the public and private sectors. They came from varied backgrounds and from across the state; their only similarity being exceptional capability and commitment and, of course, the bright red Academy shirts, that have, over the past two years, become a conspicuous badge of honor at C.A.S.H. events.



Academy Graduate Tom Rizzuti, Anaheim City Schools

The graduation ceremonies featured comments from several of the State's leaders in the realm of school facilities. Deputy Superintendent for Public

Instruction William Ellerbee, who noted his own continuing presence at key Academy events since the very inception of the program, thanked the students for their commitment and then lobbied for a bright red Academy shirt of his own. The Department of Finance's Deputy Director, Anne Sheehan, who represents the Governor on the State Allocation Board, and Rob Cook, Executive Officer of the Office of Public School Construction, reprised the visits they made as guest instructors earlier in the year, but this time to offer congratulations instead of information and advice. Connie Baranoff, former C.A.S.H. Chair and an Academy Mentor, spoke on behalf of his fellow mentors, advising the graduates to always be both fair and consistent in their actions. Bill Savidge, exchanging his hat for a moment from core faculty

Continued on page 4



The graduating class of the 2nd cohort of the C.A.S.H. School Facilities Leadership Academy. See page 5 for a list of the graduates.

**C.A.S.H. School Facilities
Leadership Academy
Graduates Second Cohort**

Continued from page 3

member to incoming C.A.S.H. Chair (February 2009), opened the ceremony with a brief history of the Academy



*Anne Sheehan, Deputy Director
Department of Finance*

before closing it with heartfelt congratulations.

Tom Rizzuti from Anaheim City Schools gave a straight-from-the-heart address on behalf of the students themselves, thanking them for their friendship as well as their shared expertise, and promising to keep alive the camaraderie and the commitment of Cohort Two.

During the course of the previous 10 months, each of the participants was paired with an individual mentor from the ranks of today's school facilities experts, and then put through an intensive schedule of two-day classes each month in Sacramento interspersed with rigorous homework assignments taken from real-world challenges. The curriculum covered, both in theory and practical detail, the entire field of public school facilities, ranging from site selection and architectural design through facility financing to program management, maintenance and operations, and modernization, with a focus on the leadership challenges, responsibilities and responses that emerge in each of these areas. The classes were taught by a



*William Ellerbee, Deputy Superintendent
for Public Instruction*

combination of core Academy faculty and guest experts from the public and private sectors, including state agency heads and their staffs from Office of Public School Construction, the



*Academy Core Faculty (l to r) Bill Savidge, West Contra Costa USD; Eric Hall,
Eric Hall & Associates; Lettie Boggs, Colbi Technologies, Inc.*



*Rob Cook, Executive Officer of the
Office of Public School Construction*



Academy Mentor Constantine Baranoff, Baranoff Group

Division of the State Architect, the School Facilities Planning Division of the California Department of Education and Department of Toxic Substances Control – the unquestioned authorities on the subjects they were asked to teach.

Joel Montero of FCMAT, which partnered with C.A.S.H. in establishing the program, said, “With the graduation of this second class, the Academy has now prepared almost 50 individuals to take leadership roles in the extraordinarily complicated but important world of school facilities. This course provides the in-depth, hands-on, California-specific training found nowhere else; our state and its students will be exceptionally well-served by these graduates in the years to come.”



Following is a list of 2007-08 Graduates:

- Les Alexander, San Bernardino County Superintendent of Schools*
- Bibi Alvarado, Montebello Unified School District*
- Mary Baker, Kern County Superintendent of Schools*
- Teri Castaneda, Pasadena Unified School District*
- Michael Coleman, Fairfax Elementary School District*
- Joe Dixon, Santa Ana Unified School District*
- Sharon Dobbins, Cajon Valley Union School District*
- Steve Doyle, Keppel Union Elementary School District*
- Jenny Hannah, Kern County Superintendent of Schools*
- John Heredia, Chula Vista Elementary School District*
- Glynn Hoekstra, Barnhart Inc.*
- Rick Huston, Butte County Office of Education*
- David Keil, San Luis Obispo County Office of Education*
- Sharon Kurtz, Hollister School District*
- Jimmy LeGrande, Woodland Joint Unified School District*
- Shawn Lohman, Capistrano Unified School District*
- Cathy Mak, Palo Alto Unified School District*
- John Messick, Sundt Construction*
- Gerry Mulligan, Hanford Elementary School District*
- Phillip Nelson, Conejo Valley Unified School District*
- Jaime Quintana, Merced County Office of Education*
- Tom Rizzuti, Anaheim City School District*
- June Rono, East Side Union High School District*
- Darryl Taylor, Santa Ana Unified School District*
- Richard Thompson, Chaffey Joint Union High School District*

Spruce Up Your Facilities for Summer

By Maureen Lally

The troubled economy in the U.S. is creating further difficulties for school administrators grappling with tighter budgets and services that cannot be cut. Spring is a good time to spruce up your facilities and save on energy costs.

Spring is generally the time of year when teachers and students are thinking about wrapping up the school year and planning for warm weather and summer vacation. However, spring is actually the perfect time for school facility managers to prepare cleaning, construction and renovation projects that will take place during the summer break when occupancy is reduced.

With increased attention being paid to green building and methods to reduce energy consumption in the US, a heightened awareness has developed among school administrators of the various benefits of building green. In most U.S. school districts, utilities are the second largest budget item after personnel related items, according to the Department of Energy. In the U.S., this totals more than \$6 billion spent on energy by schools nationwide. Unfortunately, about 25 percent of the energy used in a typical school is wasted because of inefficient building systems and operations. This amounts to \$1.5 billion annually in the U.S. - money that could be used to hire approximately 30,000 new teachers.

The troubled economy in the US is creating further difficulties for school administrators grappling with tighter budgets and services that cannot be cut. Uncertainty about financial conditions or fiscal hangovers from the cooler months may cause some schools to forego capital improvement projects like installing new systems, routine spring

maintenance and annual audits. However, efficient energy operations and building management are primary methods of achieving cost avoidance that schools should be looking to leverage.

Pressure to cut operational costs, yet maintain high performance school buildings, has forced school officials to closely scrutinize services and expenditures. High performance schools, with properly designed and maintained heating, ventilating and air conditioning (HVAC) and control systems, improve the learning environment while saving energy, resources and money.

Spring is the time to arrange financing plans for projects that will improve school building performance. Schools, like many American businesses, may have to do more with less this spring to either prepare to get their building systems up to par during the summer months or achieve the high-performance status modern educational facilities enjoy.

When schools defer upgrades and capital improvement projects to later years due to budget constraints, they need to make do with their current systems. There are several ways to create high performance schools by making older systems run more efficiently, saving the school capital, reducing risk of failure and maintaining the green sensibility that contributes to environmental health. Saving a small percentage on energy costs creates capital to pay for essentials like technology, teacher salaries and supplies.

Multiple Benefits of High Performance Schools

Improving student learning and creating great schools with high academic standards is of vital interest to educators and administrators in the U.S. and throughout the world. There

are several factors that affect how students learn, but research has demonstrated that one important factor is the buildings themselves.

High-performance schools conserve energy, resources and money using design and construction concepts that improve a building's function. According to the Sustainable Buildings Industry Council, a school renovation that incorporates high-performance design can net a 20 to 30 percent annual savings on utility costs.

Not only do high performance schools save money, but research has shown that they can bolster academic performance and improve the health of occupants. According to the U.S. Environmental Protection Agency (EPA), more than 53 million children and about 6 million adults, or one in five Americans, spend a portion of their day inside school buildings. A significant number of students and teachers struggle with distractions, including noise, glare, mildew, lack of fresh air and hot or cold temperatures.

Children have greater susceptibility to environmental pollutants than adults because they breathe higher volumes of air relative to their body weights and their tissue and organs are actively growing. One adverse effect of poor indoor environmental conditions is asthma. The American Lung Association found that American children miss more than ten million days of school each year because of asthma exacerbated by poor indoor air quality (IAQ).

A high-performance school has these three characteristics:

A healthy and productive place for students to learn and teachers to work.

Students and teachers enjoy large amounts of natural daylight, good acoustics, superior IAQ, and the safety and security of automated building systems.

Cost effective and easy to operate and maintain. High performance schools employ cost-effective design practices such as the use of energy analysis tools that optimize energy performance, a life cycle cost approach that reduces the total cost of ownership, and a commissioning process that ensures operations follow the design's intent. These practices reduce utilities costs and avoid constant servicing.

Integrate several systems for sustainable operations. These structures combine energy conservation and renewable energy strategies with highly efficient mechanical and lighting systems, environmentally responsive site planning, environmentally preferable materials and products, and water-efficient design.

Going Green This Spring to Achieve High Performance

Going green does not require all new energy systems. Energy audits and other forms of light maintenance can deliver earth-friendly energy management to a school and its surrounding community. Instituting these improvements in schools can provide remarkable benefits, including increased attendance, healthier IAQ reduced operating costs, reduced liability, and reduced environmental impact.

Typically, this involves servicing or renovating building systems like controls, lighting, HVAC, electrical, plumbing, flooring and ceiling. Some of this work can come in conjunction with the seasonal servicing a school might choose to do before the spring months.

Using Performance Contracting to Finance Improvements

School administrators should use the spring months to create a financing plan for summer building improvements. As long-term owners, school districts can use a lifecycle cost analysis to compare HVAC system choices. Consider the significant reductions in overall costs that can be achieved by owning and operating an energy-

efficient HVAC system. In many cases, the first-cost premium for more efficient equipment will be paid back through reduced operating costs in the first year or two.

Since many school districts face increasing energy costs and aging equipment, but lack the funds to make building improvements, Performance Contracting (PC) provides an innovative option for funding energy-saving improvements in buildings. In PC, the contractor is accountable for the entire package of services (design, purchase, installation, maintenance and equipment/system performance). Furthermore, no up-front money is needed from the building owner.

According to the International Performance Measurement and Verification Protocol (IPMVP), which almost all performance contracting firms comply with, PC provides customers with an alternative method for financing projects. A performance contractor guarantees both operating cost savings and implementation costs and these guarantees are used to secure financing of projects. The objectives of a PC project are to determine whether savings are likely to pay for capital and financing costs for a building over an acceptable time period by performing a building assessment and identifying primary saving sources.

Performance contracts guarantee energy and operating cost savings over the life of the contract and mitigate risks that impede financing such as measurement of savings, estimated cost of improvement and longevity of savings. This ensures that solutions will be manufactured and installed correctly, achieve fastest time to project completion and generate lowest life-cycle cost. Performance contracts also deliver stable, predictable energy and operating budgets over the length of the contract.

Services that can be included under the performance contract to produce long-term cost savings include:

- Continuous engagement and oversight of operations and maintenance

(O&M) practices

- Energy and utility consulting services, including systems design and application services
- New high-efficiency HVAC equipment, including boilers, rooftop units, etc.
- Upgraded classroom ventilation
- Renewable energy such as Geothermal heat pumps, solar, photovoltaic
- High-efficiency lighting
- Automated control systems to optimize heating, cooling, and lighting
- Energy efficient window replacement
- Water conservation equipment and practices
- Maintenance services over the lifetime of the project
- Commissioning of new equipment and systems or retro-commissioning of existing equipment and systems to ensure systems are performing as intended

An Ounce of Prevention Equals a Pound of Savings

Now that the heating season is behind us, the time has come to focus on prevention. During the spring, facility managers should update their summertime operation and maintenance (O&M) plans and make sure personnel are informed about the tasks and procedures. Some items for the preventative maintenance schedule as we prepare for summer include:

- Replace and maintain filters regularly
- Make sure all supply and return vents are clean and not blocked
- Ensure drain pans properly drain
- Check for piping damage and inspect condensate traps
- Clean cooling and heating coils as necessary
- Inspect plumbing and conduct any repairs immediately
- Repair roof leaks and other sources of unwanted moisture
- Repair any moisture damaged ceiling tiles
- Identify the best summertime

Continued on page 11

California Classroom VAV with IAQ and Energy Savings, Too

By Mike Scofield and Keith Marchando

This text was extracted from two of Scofield's HPAC Engineering magazine articles previously published. California Classroom VAV with IAQ and Energy Savings, Too was featured in the January 1994 issue, page 89, and Indirect/Direct Evaporative Cooling was included in the July 2005 issue, page 38.

Variable Air Volume (VAV) systems have created indoor air quality (IAQ) problems for the HVAC industry as a result of throttling the supply air volume with reduced building cooling loads. When a VAV supply air system is coupled with an air-side economizer section, positioning of outside-return-exhaust air dampers can cause the outside air fraction to fall below an acceptable minimum. If the ventilation rate falls below 15 to 20 cfm per building occupant, indoor air quality begins

to deteriorate. As a result, VAV and IAQ have become mutually exclusive acronyms in school applications.

IAQ In Schools

Table 2 in ASHRAE Standard 62-1989, Ventilation for Acceptable Indoor Air Quality, lists an estimated maximum occupancy for classrooms of 50 per 1000 sq ft of floor area. Based on this ASHRAE standard, the outside air fraction for classroom ventilation can be as high as 0.75 cfm per sq ft, which translates to approximately 40 percent outside air for an air-side economizer.

Numerous investigations have shown that with many sick building syndrome (SBS) complaints, inadequate ventilation is a causative factor. This may be due to insufficient outside air, poor ventilation effectiveness, or both. Since

most public school funding is tied to attendance, SBS hits school districts where it hurts most – right in the pocketbook.

That's the bad news. The good news is that most localities within our nation's most populous state enjoy a semi-arid summer climate and mild winter temperatures, which allow a heat-pipe economizer to furnish 100 percent outside air to classroom VAV systems all year long while reducing HVAC energy costs.

Peak Cooling Reduction

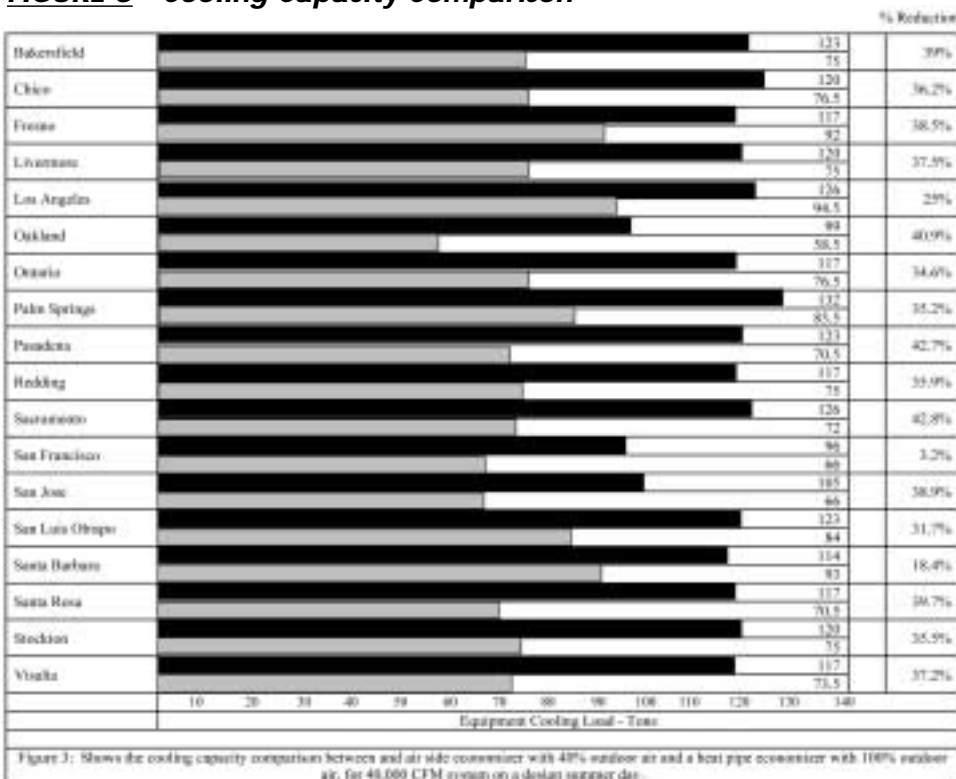
Figure 3 shows several California cities in which this VAV design concept can work to reduce peak cooling loads and guarantee IAQ. California utilities are very interested in reducing summer electrical peak demands since projections for statewide electrical energy usage outstrip projections of electrical generating capacity. Throughout California's San Joaquin Valley, where population growth is still occurring, this design technique could reduce summer classroom design cooling loads by an average of 33.8 percent while assuring that state energy code ventilation requirements are met.

The Sonoma State University Experience

The former Ruben Salazar Library, located on the campus of Sonoma State University in Rohnert Park, California, is a model for any facility committed to using innovative design and resources to achieve maximum efficiency. In Fall 2001, the university set out to transform and reoccupy the vacant building with one goal in mind: not to increase the campus' peak-load demand.

The university exceeded this goal by applying a unique indirect/direct

FIGURE 3 - Cooling Capacity Comparison



evaporative cooling (IEC/DEC) process and a 76-kw-per-alternating-current solar photovoltaic rooftop system. The result is a building that is cooled completely even during the hottest days of summer—without any chilled water. At the same time, the building enjoys 100-percent outdoor air. The project demonstrates the potential of IEC/DEC to reduce chilled-water tonnage in similar climates, as well as some of the lesser-known benefits of this type of system.

Avoiding Peak Rates

The two-story, 116,000-sq-ft Ruben Salazar building was the original library for Sonoma State University, although it had been vacant for 18 months prior to the renovation. In Fall 2001, Keith Marchando, project engineer at Sonoma State University, began working with TLCD Architecture of Santa Rosa, California and Costa Engineers, Inc., of Napa, California, to implement a \$20 million renovation that would see the old library converted into a multi-use facility that would include classrooms, a student-services office area, and headquarters for the university's new master's program in computer and engineering sciences. Marchando was interested in utilizing both IEC/DEC and solar panels to offset the added load this renovation would bring about. Costa Engineers, Inc., having successfully applied IEC/DEC to another school project in Sonoma County, began designing a system for the university.

After examining the costs of expanding the central chiller plant, it was concluded that an IEC/DEC system was less costly to design and install. Although the evaporative-cooling system costs an estimated \$347,400 over conventional chilled-water air-handling units (AHUs), this was less than the estimated central-plant expansion costs. In addition, the first cost of the evaporative-cooling design was partially offset by the \$106,279 in rebates offered by Pacific Gas & Electric

(PG&E) for an innovative, energy-efficient design. This was in addition to the \$16,000 PG&E awarded to the engineering firm for pursuing an energy-efficient design.

Operationally, the IEC/DEC system was projected to save more than \$30,000 in annual utility costs because the alternative of adding straight chiller capacity would mean the university would be paying an unavoidable maximum peak rate of 16 cents per kilowatt-hour.

Performance Exceeds Expectations

After two and one-half cooling seasons, the Ruben Salazar building has not required any mechanical cooling beyond what the evaporative-cooling system has been able to provide. Chilled-water lines are installed and available; however, to date, no flow has been required—even after two of California's hottest summers on record (2002 and 2003). According to data provided by PG&E, the renovation has yielded a total cooling-load savings of up to 400,000 ton-hours per year. The savings attributable to the entire renovation, including both the cooling and solar components, comes to 206-kw peak energy demand and 477,556 kwh per year. The building as a whole is 42-percent below the 1999 Title 24 California Energy Standard.


On June 26, 2003, while ambient outdoor conditions reached 100.3 F and 14.6-percent relative humidity (RH), the evaporative-cooling system held building conditions at a comfortable 70 to 73 F. Using building return air at 71.7 F and 58.6 RH for indirect cooling, supply air off one of the rooftop units measured 58.1 F after both the IEC and DEC stages. In addition to the cooling, the direct evaporative stage provided sufficient humidification on this especially dry day.

On July 18, 2003, unusually high dew points presented the toughest challenge yet for the system. On this

day, Hurricane Claudette caused dew points to soar throughout Sonoma Valley. While afternoon temperatures reached the mid-90s, the dew point at Salazar reached 68.5 F—3.5 F above its design dew point. Despite these conditions, Salazar return-air temperatures ranged from 70.8 to 74.1 F, while relative humidity never exceeded 66.6 percent. Again, no chilled water from the central plant was required to maintain these conditions.

Better IAQ

The introduction of 100-percent outdoor air is a high benefit, as long as there are not associated penalties from humidification. In the Salazar Hall case, the rooftop units actually provide free humidification when needed by the DEC media. Indoor relative humidity usually is maintained in the range of 40- to 50-percent during the driest months of the year. Because there are no concerns with maintaining minimum outdoor air, VAV boxes can be dropped to about 20 percent of maximum flow, which results in substantial savings in fan horsepower.

One hundred percent outdoor air also purges the building of any indoor out gassing that may occur during unoccupied hours. At the same time, the DEC media wash out most of the microscopic pollen and dust that otherwise would be circulated in the supply air. 

The Authors:

C. Mike Scofield is President of Conservation Mechanical Systems Company in Sebastopol, California. He is a registered Mechanical Engineer and an ASHRAE Fellow. He may be reached at Mike@ConservationMechSys.com.

Keith Marchando, Director of Sustainable Design and Construction for Sonoma State University in Rohnert Park, California, may be reached at Keith.Marchando@sonoma.edu.

The authors would like to acknowledge Ms. Kristin Heinemeier, PhD, PE, Senior Engineer with the Western Cooling Efficiency Center at UC Davis for her continued support of evaporative cooling designs for school applications. Kristin may be reached at kheinemeier@ucdavis.edu.

The Collaborative for High Performance Schools (CHPS): New Tools for Building the Next Generation of Green, Healthy Schools

By Charles Eley, FAIA, P.E., CHPS Executive Director

The mission of the Collaborative for High Performance Schools (CHPS) is simple – to make schools better places for learning. CHPS provides school districts and design teams with in-depth resources and technical training to facilitate the design, construction and operation of high performance schools. In turn, schools built using the CHPS Criteria and Best Practices improve student performance, increase occupant health and satisfaction, and conserve resources and funds.

At CHPS, we believe that schools are special places that deserve unique attention. Schools are built environments that require not only attention to environmental responsibility, but also occupant health, comfort, safety, and ease of use. A high performance school should also benefit the community, be adaptable to changing needs and be designed as a tool to teach occupants about the built and natural environment. CHPS provides resources and tools that help school districts and their design teams to achieve all of these goals.

CHPS currently offers five regional/state-specific criteria for high performance schools. The California CHPS Criteria, which was created in 2002, undergoes a revision every three years, in conjunction with Title 24, California's energy efficiency standard. The 2009 Edition of the Criteria was released for public review on June 16, 2008, and will be available for public comment until July 31, 2008. The 2009 Criteria for California has six major categories of credits: Site, Water, Energy, Materials, Indoor Environmental Quality, and Leadership, Education & Innovation. The latter category replaces the Policy and Operations category from the 2006 Criteria. Many of the 2006 Policy and Operations credits will be incorporated into a new CHPS Criteria for existing school performance and operations, which is under development.

While the prerequisites from 2006 have remained the same, the 2009 Criteria contain new credits to address pressing environmental challenges. New additions include credits for

school gardens, safe routes to schools, and net-zero energy schools. New credits for reducing mercury and testing indoor air quality continue to promote the health and safety of all the occupants of school buildings.

One of the biggest changes to the California Criteria is in the area of schools' contributions to climate change and greenhouse gases. Even as awareness of climate change grows, so does the depth of the problem. Schools play a part in contributing to climate change, but also present a unique opportunity to address the problem as centers of their communities. As the Collaborative for High Performance Schools (CHPS) considers revisions to its high performance building criteria, measuring, reporting and reducing greenhouse gas emissions has become a priority for the 2009 Edition.

CHPS believes there are multiple factors that schools need to measure to understand their greenhouse gas, emission contributions. Schools contributions can include emissions through electricity usage, water consumption, solid waste disposal, building material manufacturing, construction and demolition, and transportation. Measuring greenhouse gas emissions from each of these sources involves reviewing energy and water utility bills, quantifying waste leaving the school site, and trips taken to and from school.

At the beginning of 2008, CHPS brought together school climate change stakeholders to discuss methods of addressing greenhouse gas emissions and climate change in its criteria. Stakeholders identified several key findings at the meeting including:

- School design and

Apply for a Free CHPS Design Charrette at Greentools 2008!

CHPS is happy to announce that Greentools 2008 will include free, half-day professionally facilitated charrettes for selected school districts. The primary goal of these charrettes is to bring CHPS best practices and goals into the project as early as possible to ensure greater success. A school district charrette is one of the best strategies possible to ensure that the benefits of CHPS and high performance, green, healthy schools are delivered. School districts that have projects in early programming phases in late summer or fall of 2008 are prime candidates for a school district charrette.

Apply today! Selected school districts receive free registration to Greentools 2008 for up to five members of the project team. <http://www.chps.net/greentools/charrette.htm>.


construction greenhouse gas emissions account for five to seven times the amount of greenhouse gases that would be emitted by operating an average school for seven years.

- The largest single contributor to greenhouse gas emissions in schools on an ongoing basis is transportation to and from school. The major barrier to reducing the impact in this area is student safety on transportation routes to and from school.
- Life cycle impacts need to be taken into consideration in calculating climate impact because a vast majority of greenhouse gases come from indirect sources.
- Informed operations and maintenance of schools on an ongoing basis are key to ensuring high performance benefits and greenhouse gas targets are achieved.
- Occupant and staff behavior modification training, monitoring and rewards may be useful so that school occupants know how to assist in and are invested in reducing emissions.
- Federal, state and utility incentives are essential for implementation of many greenhouse gas emissions reducing measures.

As a result of this stakeholder meeting, the CHPS Technical Committee developed the new Climate category for the California Criteria. Schools can receive an additional point for achieving nine CHPS credits that have been identified as reducing greenhouse gas emissions, registering with the Climate Action Registry, and up to five points for becoming a “net zero energy” school.

CHPS will also be addressing climate change at its annual conference, Greentools for Healthy Schools. This year, Greentools will take place in Sacramento, CA and will feature two days of trainings, roundtables, a school tour and networking opportunities for school officials, design, construction and maintenance professionals, and others working in the school facilities field. The conference will focus on the

three largest challenges to the goal of healthy schools on a healthy planet: climate change, existing schools and high performance school policy. Learn more about the conference here: www.chps.net/greentools.

Many of CHPS resources are available free to the public on the CHPS website: www.chps.net. Users can download the Best Practices Manual, view online trainings, peruse resources and learn more about CHPS’ program offerings. CHPS can also be contacted at 415-957-9888 or info@chps.net. 

– *Charles N. Eley, FAIA, PE is an architect, mechanical engineer, and energy consultant with more than 25 years experience in energy efficient and sustainable design. Mr. Eley is the Executive Director of the Collaborative for High Performance Schools (CHPS) and the technical editor of the six volume set of CHPS Best Practices Manuals.*

Message From The Chair

Continued from page 2

AB 1014 Implementation

This bill was signed into law last year, and new regulations approved by the SAB at the June 25 SAB meeting will help districts access critical state funding. It is expected that the regulations will be approved by the Office of Administrative Law in time for districts to update their SFP eligibility in the late fall.

AB 1014 regulations will help school districts with SFP eligibility by:

- Allowing school districts to use birth-attendance rates to project kindergarten enrollments in a five-year projection.
- Allowing school districts to use an alternative weighting method in a five-year projection, including reverse weighting (reversing the weighting under the traditional cohort survival enrollment projection method) and no weighting if the alternative proves to represent the districts’ enrollment trends more accurately.
- Allowing school districts to use pupil residency when projecting enroll-


ment on a high school attendance area or super high school attendance area basis.

- Allowing school districts to project enrollment on a 10-year, rather than five-year, basis.

AB 100 (Mullin)

This bill provides specified increases to the SFP New Construction grant. Specifically, the bill would do the following:

- Provide a 5% increase for SFP New Construction grants in January 2009.
- Provides a 4% increase for SFP New Construction grants in January 2010.
- Deletes the SAB’s current authority to make indefinite adjustments of up to 6% to SFP New Construction grant amounts established in AB 127.

With the help of our members and our C.A.S.H. staff, even during difficult times we have been able to make significant progress toward the kind of adequate funding and programmatic efficiency that will allow school districts to build more complete schools to meet the increasingly complex educational needs of California’s school children. 

Spruce Up Your Facilities for Summer

Continued from page 7

- operating settings for the HVAC system according to occupancy schedules
- To conserve energy, cool only the spaces that will be in use (if your local climate permits this practice without causing humidity control problems)

Plan for Energy Efficiency in the Summer

School administrators should plan now to make building upgrades in the summer and get financing plans in

Continued on page 15

Building Operator Certification (BOC)

By Maya Craig, Strategic Energy Innovations

The Building Operator Certification (BOC) is a professional development course for maintenance and operations staff designed to improve resource and energy efficient facilities operations. Administered by the Northwest Energy Efficiency Council, a new member of C.A.S.H., this certification course provides public, institutional, and commercial building operators with low cost methods to save energy and improve building management.

With over 100 school districts nationally having enrolled employees to BOC (a total of 50 California school districts have participated in the BOC program) and some 400 school M&O staff earning BOC certification, the BOC program has acquired nationwide recognition and a strong reputation within the industry. The course im-

proves professionalism and provides a means for employees to distinguish themselves through improved job skills and commitment to the profession, while enabling building operators to be more responsive to discomfort, complaints, and emergencies.

In particular, in the wake of recent school budget cuts in California, energy management has taken on high stakes. Pleasant Valley Elementary School District exemplified the benefits of efficiency when, in response to having been forced to close one of its schools in 2003 due to budget cuts, energy efficiency was identified as having significant potential for cost savings. The new management strategy included enrolling two district HVAC technicians in the BOC training, both of whom were requested to provide input

into the energy management process. The technicians played key roles in assisting the district to implement measures that led to \$250,000 savings annually. One of the technicians was promoted to Maintenance Supervisor, and the other now works for the County Office of Education. Over 50% of BOC graduates report an increase in job competency and responsibilities after having received the certification, as well as compensation.

The BOC program continues to expand its presence nationally and to gain recognition as a leading provider of training for facilities managers and staff. American Council for an Energy-Efficient Economy (ACEEE) has recognized BOC as an "exemplary program" as part of a national awards

Continued on page 15

The following school districts in California have participated in BOC:

- Arcata School District
- Bakersfield City School District
- Beaumont Unified School District
- Capistrano Unified School District
- Centinela Valley Union High School District
- Clovis Unified School District
- Contra Costa Community School District
- Dixon Unified School District
- Durham Unified School District
- Eureka City Unified School District
- Evergreen School District
- Fallbrook Union High School District
- Folsom-Cordova Unified School District
- Fontana Unified School District
- Fortuna Union High School District
- Fremont Unified School District
- Hesperia Unified School District
- Hueneme School District
- Humboldt County Office of Education
- Kern County Superintendent of Schools
- Kern Union High School District
- Las Virgenes Unified School District
- Lincoln Unified School District
- McKinleyville Union School District
- Morgan Hill Unified School District
- Murrieta Valley Unified School District
- Northern Humboldt Union High School District
- Norwalk-La Mirada Unified School District
- Novato Unified School District
- Oakdale Joint Unified School District
- Oakland Unified School District
- Oxnard Union High School District
- Oxnard School District
- Palo Alto Unified School District
- Pleasant Valley School District
- Pleasanton Unified School District
- Rio Linda Union School District
- Rosalia School District
- Sacramento City Unified School District
- Saddleback Valley Unified School District
- San Bernardino City Unified School District
- San Diego Unified School District
- San Marcos Unified School District
- San Miguel Joint Union School District
- Saugus Union School District
- Sonoma Valley Unified School District
- Travis Unified School District
- Vacaville Unified School District
- Vista Unified School District

June 25 State Allocation Board Meeting Notes

Executive Officer Statement

1. Rob Cook stated that the Office of Administrative Law has approved the regulations requiring completion of the Project Information Worksheet as a condition of fund release, and the requirement will be implemented soon.
2. The 6% new construction grant increase will be applied to all projects approved through May 2008, and those projects now will be considered full and final. All new construction projects approved beginning with the June 2008 SAB include the 6% increase.

Status of Funds

After apportioning \$164 million in new construction, \$85 million in modernization, and \$9.8 million in emergency repair program funds at the June SAB meeting, there is \$1.166 billion left in new construction, \$2.45 billion left in modernization, and \$75.5 million left in ERP funds.

OPSC stated that it had \$590 million in ERP applications on its workload list. It also stated that \$21 million in COS funds were recaptured and returned to the COS funds.

Overcrowding Relief Grant Funding

The SAB ORG regulations provide that a maximum of \$500 million of the \$1 billion in Prop 1D funding for ORG can be approved for funding in the first funding cycle. The SAB approved 5 ORG applications totaling just under \$40 million as the State's share. Funds remaining from the first cycle of funding will be available for the second funding cycle that has a filing deadline to OPSC of July 31, 2008. The SAB did not approve a request by Lennox to be included in the first funding cycle. Lennox must wait until the revised ORG regulations (described

below) are approved by the Office of Administrative Law.

LAUSD New Construction Eligibility and 60% Commensurate (withdrawn at the request of the district)

LAUSD requested to reinstate new construction eligibility reduced from the District's baseline pursuant to SAB Regulation 1859.51(i)(7) and to review use of the 60% commensurate regulation. The item was pulled from the agenda.

Overcrowding Relief Grant Regulation Changes

The SAB approved proposed regulation changes to modify program requirements for school districts with current financial hardship (FH) approval that require the use of condemnation to obtain a site; proposed the addition of two new funding cycle application deadlines (July 31, 2009 and January 29, 2010); and clarified the project narrative description requirement that demonstrates that the project relieves overcrowding.

The proposed amendment for FH districts will make it possible for FH districts to receive an advance fund release for site acquisition when the proposed project involves condemnation. The clarification regarding relief of overcrowding requires applications filed after July 31, 2008 (the application deadline for the second funding cycle) must provide a narrative that demonstrates that the project will relieve overcrowding at the eligible school by increasing useable outdoor space for uses such as play areas, green space, or outdoor lunch areas.

Project Information Worksheet Material Inaccuracy Regulations

The SAB approved proposed language that would provide protection

against Material Inaccuracy findings when the information provided at the time of filing is the best available.

Information in the worksheet will not be used as part of a project audit, but will be analyzed to determine the annual adjustment to the SFP new construction grants. The language proposed to be added to the bottom of Regulation Section 1859.104.1 is, "A school district filing a Project Information Worksheet with the best available information at the time of filing will not be subject to a Material Inaccuracy for that information."

AB 1014 Proposed Regulations

AB 1014 authorized the SAB to modify enrollment projection calculation methods for new construction eligibility. Components of the proposed regulations include modified weighting mechanisms; birth rate augmentation to kindergarten and first grade enrollment; tenth-year projection; and utilization of pupil residence for High School Attendance Area (HSAA) reporting.

Modified weighting methods for fifth-year projection

The regulations contain three standard weighting methods, and allow a district to propose an additional alternative weighting method for comparison. The three projection options are 1-2-3 (the existing weighting formula), 3-2-1 (for districts where the more recent trends are contrary to the long term trends), and 1-1-1 (for districts that have varied enrollment from year to year and do not grow or decline in a more predictable manner.) Districts may have all three options run to determine which weighting mechanism yields the more accurate results. After the results are run the district may utilize other Cohort supplements in their projection. The district may also choose to use the existing projection method.

Continued on page 16



Lincoln Technical Academy

Community support for the preservation of Lincoln School was the first and driving element of the project's planning. Lodi Unified School District staff pursued a combination of program and funding that produced a viable solution to meet the community's desire. As the District started to receive funding for the program, Stafford King Wiese Architects was hired to assist with facilities programming, master planning and building design. Stafford

King Wiese Architects facilitated a series of meetings with District educators in specific program areas to develop the facilities.

Program/Scope

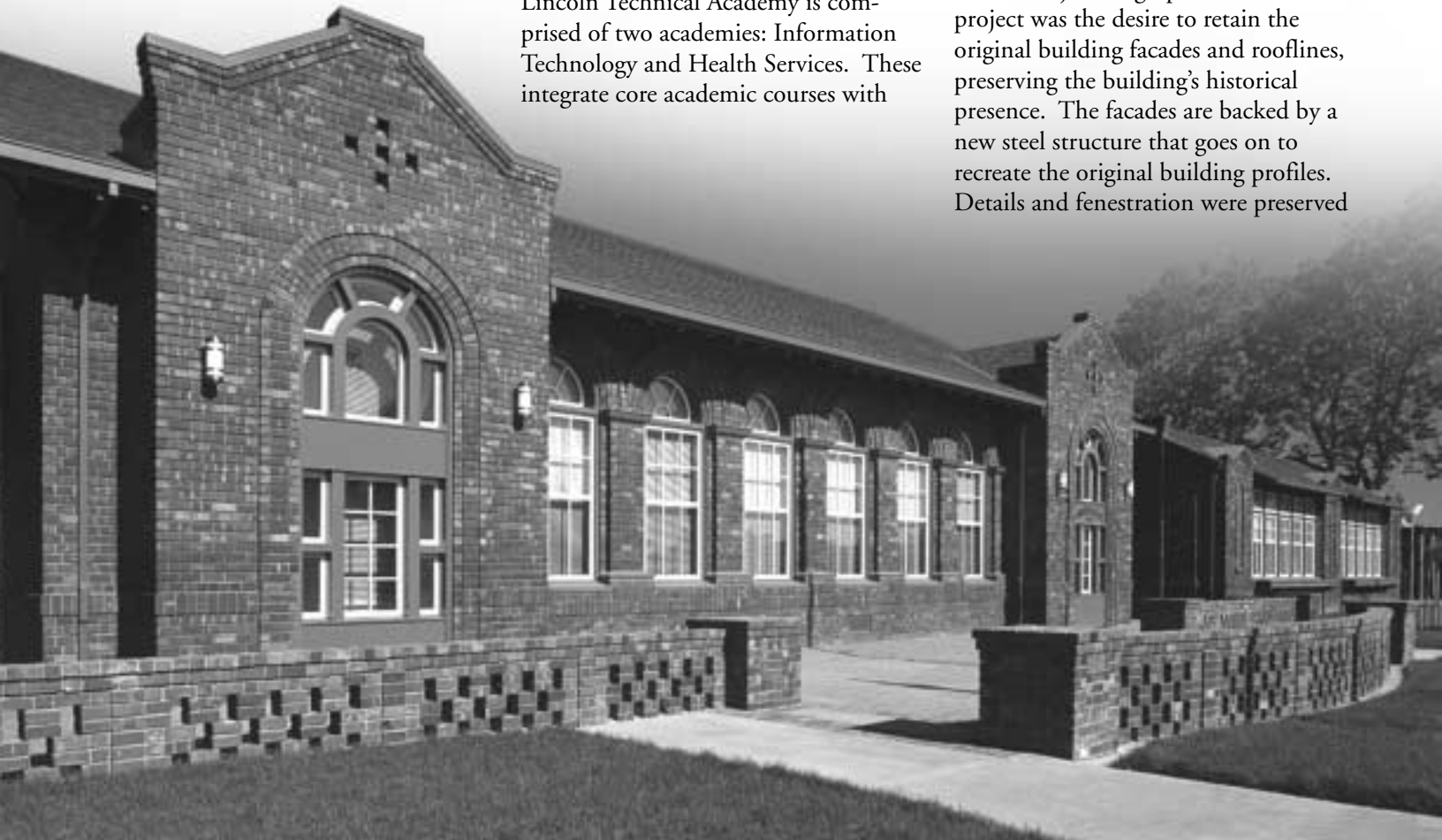
Lincoln School was originally built and opened in 1916. After being unused for many years, the District hired Stafford King Wiese Architects in 2003 to renovate the building to house its R.O.P. vocational training program. Lincoln Technical Academy is comprised of two academies: Information Technology and Health Services. These integrate core academic courses with

high-level career instruction for students in grades 11 through adults, using the effective "academy model" to motivate students to stay in or return to school, graduate and pursue successful vocations or post-secondary training and education. The Information Technology Academy focuses on vocational technology. Students have the opportunity to obtain industry-recognized certifications upon graduation that prepare them for ongoing technology education and careers. The Health Services Academy offers vocational certifications that will lead to immediate employment or continuing education in many medical, dental and health-related fields. Specialized facilities to support these programs, both indoor and outdoor, are provided.

The school serves as a community center, with representatives from many social and career service agencies, including the Career Information Center, to provide counseling, assessment, career information and job-seeking skills.

Design

The major design parameter for the project was the desire to retain the original building facades and rooflines, preserving the building's historical presence. The facades are backed by a new steel structure that goes on to recreate the original building profiles. Details and fenestration were preserved






and replaced when missing. Interiors expose the contemporary construction, efficient building systems and the interface between old and new.

Within the new structure, new instructional and administrative spaces are provided. The details and character of the original multipurpose room were recreated by Stafford King Wiese Architects for school and community use. The restored street facades address the community and celebrate the revitalization of this landmark and gateway. The courtyard serves as the entry for the building, and the new materials reflect the transformed use of the facility.

This 18,000 square foot campus was completed in March 2007 for a construction cost of \$7,900,000.

High Performance

Up-to-date energy, lighting and technology systems transform the building's energy usage 90 years after the first brick was laid, extending its history as a sustainable feature in the community. These systems combine to surpass Title 24 energy usage requirements by over 22 percent.

The project would not exist without the outpouring of community support that rallied around this 1916 structure as it faced demolition. As a landmark, it has always been a focal point in the community and now it has returned as a community centerpiece. 

Building Operator Certification

Continued from page 12

program to honor America's best energy efficiency programs. An extensive body of evaluation research has shown, among other things, average annual per participant energy savings are estimated to be 172,000 kWh per year, equivalent to \$12,000 annually at national electricity rates.

BOC is offered statewide with sponsorship from Pacific Gas & Electric, Sacramento Municipal Utility District, San Diego Gas & Electric, Southern California Edison, Southern California Gas Co., and the Federal Energy Management Program. BOC Level I certification is earned by completing 56 hours of classroom training and written exams in addition to hands-on projects conducted at the operator's facility. Topics include HVAC systems and controls, energy conservation techniques, electrical systems, and indoor air quality. Level II certification requires 49 hours of classroom training, with increased technical depth. Each course consists of 7/8 one-day classes, held once per month, and earns participants 5.6 continuing education units. Courses are offered multiple times each year throughout California. The class schedule can be found at http://www.theboc.info/ca/schedule_ca.html.

Additional course details as well as an extensive body of evaluation research can be found at the BOC web site: www.theBOC.info.

About NEEC

The Northwest Energy Efficiency Council (NEEC) is a non-profit business association of the energy efficiency industry and has recently joined C.A.S.H. NEEC's mission is to promote policies and programs that enhance market opportunities for energy efficiency, of which BOC is one such program. Further information on the BOC program, training schedules, and locations, can be found on the national website: www.theboc.info.

National partners with NEEC in the BOC program include: the Northeast Energy Efficiency Partnership, the Midwest Energy Efficiency Alliance, the Wisconsin Focus on Energy, the North Carolina Community College System at AB Tech, the Sacramento Municipal Utility District, the Northwest Energy Education Institute at Lane Community College, New York State Energy Research & Development Authority, and National School Plant Managers Association (http://www.theboc.info/pdf/PRelease_NSPMA_10_30_06.pdf). 


Spruce Up Your Facilities for Summer

Continued from page 11

place. They should also review and document last season's energy performance of building equipment and target areas for efficiency improvements.

Programmable thermostats, web-based facility management systems, lighting sensors and carbon dioxide sensors are some examples of controls that can improve the indoor environment while saving energy.

In the American Society of Civil Engineers' latest assessment of the nation's infrastructure, U.S. schools earned a D grade. This is hardly the ideal environment in which children, our most precious commodity, should learn.

Creating a comfortable, high performance environment for U.S. students and teachers can improve their performance and make education a more enjoyable and rewarding experience. Plan to take advantage of the summer slowdown to get high grades for performance when things get back in swing in the fall. 

Maureen Lally is the market segment leader for Trane, where she works to understand the needs of Trane's education and healthcare customers and provide solutions that manage and control the indoor environment, thereby improving the performance of all who work in the building. Trane is the global leader in providing energy-efficient HVAC systems and solutions to schools and has provided services to education customers for over 50 years.

SAB Meeting Notes

Continued from page 13

Birth Rate Supplements to the fifth-year projection

The regulations provide for an average birth-attendance rate which compares historical birth numbers to past kindergarten enrollment to determine how many children born will attend the district 5 years later. The rate is applied to birth numbers corresponding to the projection years to determine the kindergarten enrollment. The kindergarten enrollment is then survived through the remaining grade levels.

Tenth-year projection

The regulations provide for an extension of the current calculation process, utilizing the Cohort and eight years of past enrollment data. Staff interpreted the law to say that the tenth-year calculation is a stand alone option and does not allow for the use of dwelling unit augmentation, modified weighting mechanisms, or the birth rate supplement.


Pupil Residence for HSAA

Under AB 1014 Districts filing with HSAA or Super HSAA have the option of reporting based on school attendance or school of residency. Some students a district could count using attendance reporting will not be allowed to be included in residency reporting, such as inter-district transfer students. Also, if a district switches from residence reporting to attendance reporting, the district must complete all residency projection-based projects before switching their projection to attendance. This residency restriction will not prevent a district using attendance from switching to residency, nor will it prevent a district from re-filing with district-wide enrollment when available.

Two districts, San Bernardino and LAUSD, addressed the SAB with several concerns regarding the proposed regulations. A major concern was staff's interpretation that districts choosing to use the tenth-year projection option could not use the dwelling unit augmentation, modified weighting mechanisms or birth rate supplement. San

Diego COE also requested that districts be allowed to use straight CBEDS data rather than splitting out Special Day Class students. OPSC stated that they could address the CBEDS issue through worksheet instructions.

LAUSD requested that the SAB send the tenth-year projection portion of the regulations back to the Implementation Committee for further discussion. The chair stated that she was not in favor of dividing the regulations. She recommended that the SAB either approve the entire package or send the entire package back to the Imp Committee. The SAB voted 6 to 1 to approve the entire package, with the chair being the only no vote.

The chair announced that if the legislature is in recess on July 23, the SAB will meet at 2:00 p.m. Unless a state budget is approved, which is unlikely by July 23, the legislature probably will not be in recess. Therefore it is likely, but not certain, that the July 23 SAB meeting will be at 4:00 p.m. 

- C.A.S.H. Staff



"Far beyond the standard of 'on time and under budget,' Blach's performance on our bond program has set a new standard for public education construction. On nearly \$100 million of projects, Blach's work is of the highest quality and value, without any problems or surprises, and has won universal acclaim from my Board, our educators, and the entire community."

Alan Garofalo
Associate Superintendent of Student Services and Facilities, East Side Union High School District, San Jose

 **BLACH** CONSTRUCTION
Together. Building Dreams.™

408.244.7100 | www.blach.com
CA Contractor License No. 290418

POP QUIZ!



1. **Renting Portable Classrooms** makes sense for:

- A. Modernization
- B. Reconstruction
- C. Growth
- D. Budget Constraints
- E. All of the above

2. **Mobile Modular** has:

- A. Large inventory selection
- B. Immediate delivery
- C. Piggyback bid programs
- D. Qualified technicians to service your building
- E. Project managers who are expert with DSA regulation and code requirements
- F. Buildings customized to your specific needs
- G. All of the above

If you chose **"All of the above"** for both questions, go to the head of the class!

BONUS QUESTION:

3. **Who should you call when you need classroom buildings?**
- Why, **Mobile Modular** of course!



866-342-3998
MobileModularRents.com

**Mobile Modular – Portable Classrooms
for Rent, Lease or Purchase**



“Keep my kids safe and sound. Build our school with concrete block.”

Concrete block schools are beautiful and economical, as well as fire, weather, and earthquake resistant.

Concrete block schools and buildings are

Safe & Sound.

www.cmacn.org



COMMUNITY starts with *my* school.

Building better communities is a core value at McCarthy, and we take personal pride in helping to create learning environments that evoke a feeling of pride for our clients.

Our clients may be small, but we know their potential is limitless.



McCarthy...Keeping Our Promise to California Kids.

Construction Management • General Contracting • Design-Build • Lease/Leaseback

Newport Beach 949-851-8383 • San Diego 858-784-0347 • Sacramento 916-786-3833 • San Francisco 415-397-5151
www.mccarthy.com



EDGE | EXECUTE | EXCEL

As a leader in providing professional Program, Project, and Construction Management services, we help our clients in the delivery of educational facilities, transportation projects and infrastructure work including water, wastewater, highways and power projects.

We strive to provide the *EDGE* to not only *EXECUTE* the work of our clients, but to *EXCEL* through trust and teamwork.

To learn more about our services please call or visit us online.

PROGRAM MANAGEMENT
PROJECT MANAGEMENT
CONSTRUCTION MANAGEMENT



199 S. Hudson Avenue, Pasadena, CA 91101 | 626-395-7474 | www.sgicm.com

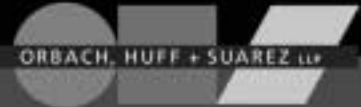


Your legal resource in building
the best learning environment for
the current generation ...

and beyond.

Public Facility Attorneys

- Land Acquisition
- CEQA
- Contracts and Construction
- Labor Compliance
- Litigation



OFFICES

Suite 575
1901 Avenue of the Stars
Los Angeles, CA 90067

310 788-9200 -PHONE
310 788-9210 -FAX

17th Floor
1212 K Street
Sacramento, CA 95814

916 503-3174 -PHONE
916 503-2401 -FAX

info@ohslegal.com

**Your Ad
Could be Here!**

For more information
about Advertising visit
the C.A.S.H. website at
www.cashnet.org in the
members only section or
contact Shannon Mahoney;
sfife@m-w-h.com
(916) 448-8577

**Jack Schreder
& Associates**

Governmental Relations Consultants

"Planning for the Future of California's Public Schools"

- ⇨ **School Facility Program**
Construction & Modernization Facilitation
School Facility Program Eligibility Reports
Audit & Close-Out Assistance
- ⇨ **Redevelopment Revenue Calculations**
- ⇨ **Facility Planning & Demographics**
Developer Fee Justification Studies
& Implementation
Facility Master Plans, Student Yield Studies
Enrollment Projections
Year Round Analysis and Studies
- ⇨ **Facility Needs Analysis (Level 2 & 3 Fees)**
- ⇨ **Local Facility Funding Options**

<i>Jack Schreder</i>	<i>Cheryl King</i>
<i>Kristen Schreder</i>	<i>Jamie King</i>
<i>Elona Cunningham</i>	<i>Tamara Caspar</i>
<i>Carrie Sehon-Sabillon</i>	<i>Evelyn Schafer</i>

2230 K Street
Sacramento, CA 95816
www.jschreder.com

(916) 441-0986
FAX 441-3048
jschreder@jschreder.com

Work with a Team That Knows Your Issues

We represent only owners on construction programs — not contractors, designers, or other consultants — we know how to help you structure your expectations and needs, and how to meet them. We counsel our clients through all phases of planning and building their construction projects, from complying with environmental laws and state requirements, through design and bidding, to project closeout and occupancy. We are ready to defend and pursue claims if they arise and have a particular expertise in mediating multi-million dollar construction disputes.



**MILLER
BROWN
DANNIS**
ATTORNEYS

We were the first education law firm to form a separate construction group. We are uniquely positioned to help you in:

- Pre-Construction Planning
- Construction Projects — from Contracting to Closeout
- Claims, Disputes & Litigation

Put us on your team — contact us today!

www.mbdlaw.com

San Francisco
Tel 415-543-4111

Long Beach
Tel 562-366-8300

San Diego
Tel 619-595-0202



Environmental & Health Risk Advisors Facing Challenges, Finding Solutions

Landfills
Poor Soils
Adjoining Agriculture
Air Quality
Noise
Light and Glare

Toxic Air Emissions
Power Lines
Pipelines
Water Tanks
Railroad Tracks
Site Contamination



**THE
PLANNING
CENTER**

www.planningcenter.com

Offices:
Orange County 714.966.0228
Los Angeles 310.670.0221
Inland Empire 909.933.1300
Coastal Valley 310.324.4956

Field Offices:
Sacramento 916.000.0808
Reno 775.653.8000

Solutions to Environmental & Health Risk Challenges:

CEQA/NEPA Compliance
Site Assessment/DTSC Compliance
Phase I ESA, PEAs, Public Participation
Title 5 Risk Assessments
Rail, Geohazards, Hazardous Air, Pipelines, Tanks
Environmental Studies
Noise, Air Quality, Biological, Aesthetics, Lighting
School Site Selection & Planning
Feasibility, GIS Mapping, Grading/Access Studies
Building Health
Asbestos/Lead Assessment

www.schoolplanning.com



**CONSTRUCTION MANAGEMENT
PROGRAM MANAGEMENT
GENERAL CONTRACTING
DESIGN-BUILD**



LOS ANGELES • ORANGE COUNTY



FRESNO • INLAND EMPIRE

618 San Fernando Road | San Fernando, CA 91340 | 818.898.1521 T | 818.365.0065 F | www.bernards.com | License No. 302007

Solutions for Success



Working in every facet of the construction industry has given Vanir the intelligence and expertise our clients need. We bring the best advice, the best service, and the best solutions.

Program Management / Project Management /
Construction Management / Master Planning /
Constructability Review / Scheduling / Cost Estimating

Build your career at www.vanir.com / 888.912.1201



GET SOME GREEN FOR GOING GREEN!




- REDUCED BUILDING FOOTPRINT
- COOL ROOF
- SUPERIOR ENERGY PERFORMANCE
- EXCEPTIONAL ACOUSTICAL PERFORMANCE
- TEMPERATURE & LIGHTING CONTROLS IN ALL CLASSROOMS
- LOW EMITTING MATERIALS
- EXCELLENT INDOOR AIR QUALITY
- ADVANCED ENERGY MANAGEMENT SYSTEM
- SUSTAINABLE MATERIALS
- LARGE VIEW WINDOWS

Introducing PreFast Buildings' First High Performance Incentive Grant Award!

For Northern California Contact Brad Swan: (650) 375-5840 ext. 136 or bswan@prefast.com

For Southern California Contact Mark Lovie: (650) 375-5840 ext. 132 or mlovie@prefast.com



How come every time I want to pay an invoice the accounting system says I have no money?

CPM understands the importance of anticipating expenditures and establishing accurate budgets that let you readily access funds.

CPM
Plan • Execute • Succeed
Capital Program Management, Inc.

Did you know?
CPM prepares capital outlay budgets that interface with Districts' Standard Account Code Structure (SACS) systems.

Contact Cecile Nunley, CPA 916-553-4400 www.capitalpm.com



ORRICK

The XYZs of California School District Debt Financing



We are proud to present *The XYZs of California School District Debt Financing, Third Edition*.

The XYZs has been revised to reflect the many changes that have taken place in the world of school district debt finance since the publication of the second edition in 1996.

To obtain your free copy, please contact publicfinance@orrick.com.

For more information, visit www.orrick.com/public_finance.

ORRICK, HERRINGTON & SUTCLIFFE LLP publicfinance@orrick.com WWW.ORRICK.COM
 HONG KONG LONDON LOS ANGELES MILAN MOSCOW NEW YORK
 ORANGE COUNTY PACIFIC NORTHWEST PARIS ROME SACRAMENTO
 SAN FRANCISCO SILICON VALLEY TAIPEI TOKYO WASHINGTON DC



Can you hear me now?

Yes, they can.

Bard's "Quiet Climate" is 50% quieter than previous models. With noise levels this low, the only sound students hear is the teacher's voice.



Call toll-free or visit our website today and learn how you can improve classroom ventilation and comfort with Bard.

Distributed by **Geary Pacific Supply**
 Phone: 800-444-3279 ext. 122 • Fax: 714-279-2940
www.gearypacific.com

**Schools: the Foundation
of Our Future.**



*As one of the nation's leading public finance
law practices, we are proud to play our
part in improving our school system.*

**FULBRIGHT
& Jaworski L.L.P.**
Attorneys at Law

Contact Lisalee Anne Wells at 213 892 9323
555 South Flower Street • Forty-First Floor
Los Angeles, CA 90071

**BUILDING BLOCKS
FOR THE FUTURE**



LOS ANGELES • CENTRAL VALLEY • INLAND EMPIRE

Managing construction
programs through trust,
teamwork & leadership.

**LM LUNDGREN
MANAGEMENT**
Construction Management & Consulting
661.257.1805



ENVIROPLEX, INC.

4777 E. CARPENTER ROAD
FAX (209) 461-6555

STOCKTON, CA 95215
(866) 466-8001

MANUFACTURERS OF DSA-APPROVED RIGID STEELFRAME MODULAR SCHOOL FACILITIES

Complete School Projects

"Piggyback Contracts"



2-Story Buildings!

- Classrooms
- Restrooms
- Science Labs
- Admin Offices
- Libraries
- Cafeterias
- Daycares
- Computer Labs

Visit our web-site at: www.enviroplexinc.com

C.A.S.H. Meetings, Conferences & Workshops

- July 22, 2008**
Tuesday
Not Just Another “Green” Workshop
Doubletree Hotel, 2001 Point West Way, Sacramento CA
- July 23, 2008**
C.A.S.H. General Membership Meeting
1020 11th Street, 2nd Floor, Sacramento CA
- July 25, 2008**
Friday
Not Just Another “Green” Workshop
Ontario Airport Marriott, 2200 E. Holt Blvd., Ontario, CA
- August 26, 2008**
Tuesday
The New Enrollment Projection Methodology Alternatives Allowed by Statute: What’s Best for Your District? (a.m.) and Am I Getting My Fair Share of Redevelopment Funding?(p.m.)
Doubletree Hotel, 2001 Point West Way, Sacramento CA
- August 27, 2008**
Wednesday
General Membership Meeting
1020 11th Street, 2nd Floor, Sacramento CA
- August 29, 2008**
Friday
The New Enrollment Projection Methodology Alternatives Allowed by Statute: What’s Best for Your District? (a.m.) and Am I Getting My Fair Share of Redevelopment Funding? (p.m.)
Ontario Airport Marriott, 2200 E. Holt Blvd., Ontario, CA

Monthly C.A.S.H. meetings are held from 11:00 a.m. to Noon in Sacramento. The monthly meetings are always scheduled to coincide with the monthly meetings of the State Allocation Board on the fourth Wednesday of the month, except in November and December, to enable C.A.S.H. members to attend the SAB’s afternoon session. Both SAB meetings and General membership meetings are subject to change.



CALIFORNIA'S
COALITION
for ADEQUATE
SCHOOL HOUSINGSM

c/o Murdoch, Walrath & Holmes
1130 K Street, Suite 210
Sacramento, CA 95814

PRESORTED
FIRST CLASS
U.S. POSTAGE
PAID
SACRAMENTO, CA
PERMIT #949

**POSTMASTER – TIME VALUE
PLEASE DELIVER PROMPTLY**