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Facilities Manager

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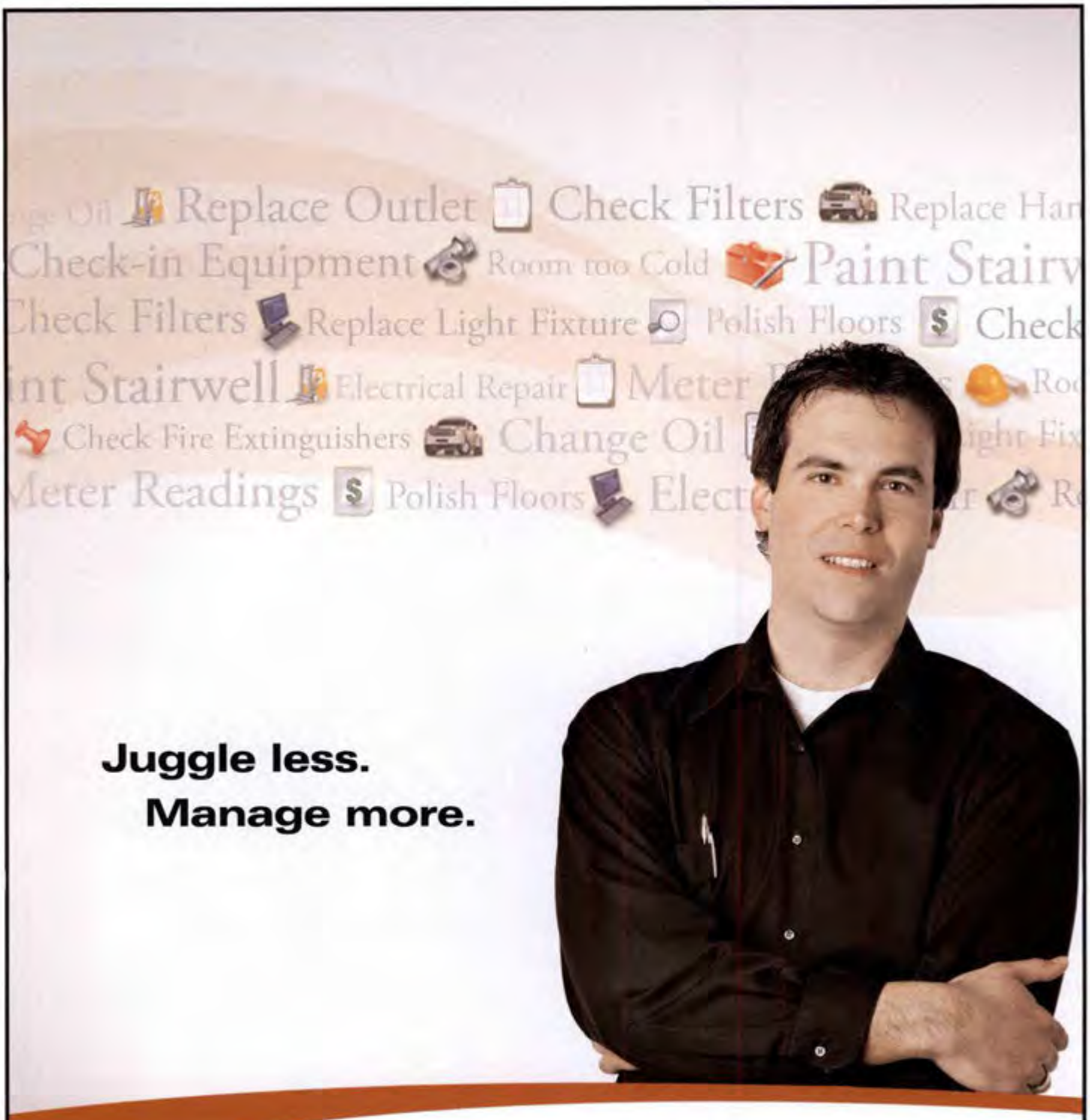

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Volume 23 Number 3 May/June 2007

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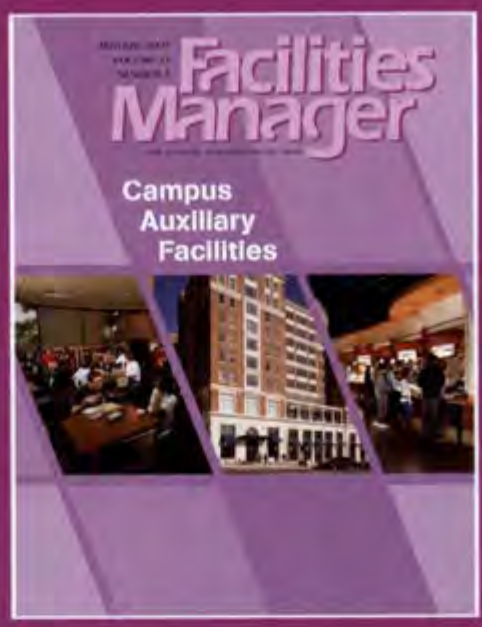

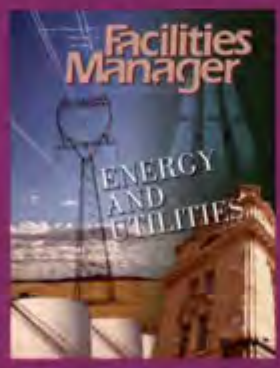

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From the Editor

by Steve Glazner

We are pleased to announce that the 2005-06 Facilities Performance Indicators (FPI) report is now available for purchase at the APPA website. The report—based on information gathered from the 2005-06 Facilities Core Data Survey—includes charts, graphs, and a peer-to-peer comparison tool to review results from up to three different schools at one time.

AT PRESS TIME, Virginia Tech was struck with tragedy in the April 16, 2007 shooting massacre when 32 promising students and committed faculty died. The entire APPA community (the membership and its staff) extends its deepest sympathies to the families of these victims and the entire Virginia Tech community.

Facilities Performance Indicators

Schools that participated in the survey have the added benefit of reviewing data from other participating schools by name. You'll also find critical continuous improvement measures presented in a balanced scorecard format:

- Financial
- Internal processes
- Customer satisfaction
- Innovation and learning

A bonus feature added to this year's report is a set of nearly 400 dashboard indicators showing the minimum, maximum, and average for each of the report's performance measures. With the assistance of ARCHIBUS, APPA has raised the value and usefulness of the FPI report, by enabling you to see the range of peer responses and to insert your own goal for each particular indicator.

We thank APPA's Information and Research Committee for their leadership and direction throughout the FCDS/FPI process. We also thank consultants Laura Long, Ann Palmer, Heather Lukes, and Brad Peterson and his ARCHIBUS team for their many contributions to our efforts.

To purchase the 2005-06 FPI report and dashboard indicators, visit www.appa.org/research/fcds. The 2006-07 Facilities Core Data Survey will open in late-August 2007. We look forward to your participation in the survey.

COMING

IN **JULY/AUGUST** ISSUE OF **FACILITIES MANAGER**

- **APPA 2007 Back to the Future:** What's Next for Educational Facilities?
- **APPA 2006-07 Annual Report**

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by Kisha D. DeSandies

APPA's 2007 Election Results

APPA is pleased to present the new officers for the 2007-08 administrative year:

- Bill Elvey, President-Elect
- B. Kevin Folsom, Vice President for Professional Affairs
- Nancy Hurt, Secretary-Treasurer

These candidates will take office at the APPA 2007 conference in Baltimore, Maryland, July 15-17. We are also pleased to announce that both proposed Bylaws changes were passed. Visit www.appa.org to view information on the candidates and the revised Bylaws.

Thank you to all the primary Institutional and Affiliate representatives who voted. Thanks also to members emeritus Al Stearns and Allan Guggolz for serving on the Tally Committee.

Register for APPA 2007

APPA 2007: Back to the Future, July 15-17, 2007 in Baltimore, Maryland, will help you prepare your institution for the future. Key influencers shaping today's educational facilities industry will offer solutions to our most pressing issues in three key areas: energy strategies, workforce demographics, and emerging technologies. Each day will include an opening plenary, general session, and breakout sessions. APPA 2007 is also the time to enhance your skills and build an essential network of educational facilities professionals.

The Supervisor's Toolkit will be offered concurrently with APPA 2007. You can either attend the Toolkit as a participant or begin the first-step to become a Qualified Toolkit Trainer. Other conference highlights include: Welcome party, hosted by Johnson Control; Lab of the Future; the 10th anniversary 5K Run/Walk, sponsored by TMA; the Hall of Resources, featuring APPA's Strategic Business Partners and Business Partners; and the Educational Facilities Professional (EFP) credentialing preparatory course.

The Roadmap to EFP Credentialing

Later this year, APPA will offer Educational Facilities Professional (EFP) credentialing to up-and-coming facilities professionals to recognize achievement and experience in our field. The following are frequently asked questions about the new EFP program.

So what exactly is an EFP anyway?

Educational facilities professionals have vast and diverse expertise. Based on research, APPA has identified core competency areas of an experienced educational facilities professional. The EFP credential allows for a universal professional standard that recognizes the unique set of experience, knowledge, talents, and skills required in educational facilities management.

Why is this credentialing relevant to my profession?

- EFP credential will be the standard in recognizing achievement and experience in our field.
- It will reduce the impact on pressures affecting the educational facilities profession.
- It will give you leverage at the institutional decision-making table.

What are the steps to an EFP credential?

You can take the first preparatory course for the EFP credentialing exam July 18, following the APPA 2007 conference. Another course will be offered September 14, after the Institute for Facilities Management in Phoenix, Arizona. The first exam will be administered September 15.

2005-06 Facilities Performance Indicators Released

APPA's Facilities Performance Indicators (FPI) report includes the comprehensive findings of the annual Facilities Core Data Survey, which collects costs, staffing, and building and space data from colleges, universities, K-12 schools and districts, and other educational

facilities. The FPI Report features data on operating costs, building and space, personnel and internal processes. Each purchase allows your institution to identify up to five users who can access your report. In addition, you'll have access to nearly 400 dashboard gauges for all performance indicators. Anyone who purchases the 2005-06 FPI report will have access to the past two years worth of data (2004-05 and 2003-04).

To buy the 2005-06 FPI report, visit http://www.appa.org/research/fcds/. The online Facilities Core Data Survey will begin collecting data for fiscal year 2006-07 in August 2007.

Campus Renewable Energy Project Resource

APPA's Bookstore offers the comprehensive book, *The Business Case For Renewable Energy* by Andrea Putman and Michael Phillips. Colleges and universities are saving and even making money with renewable energy. This book examines two approaches: building a renewable energy project on or near campus, or buying renewable electricity generated by others through a local utility or other supplier. It explains how and

why growing numbers of higher education institutions are powered by renewable energy. It also provides guidance on how to consider the various technologies, ownership options, relationships with utilities, and financial strategies.

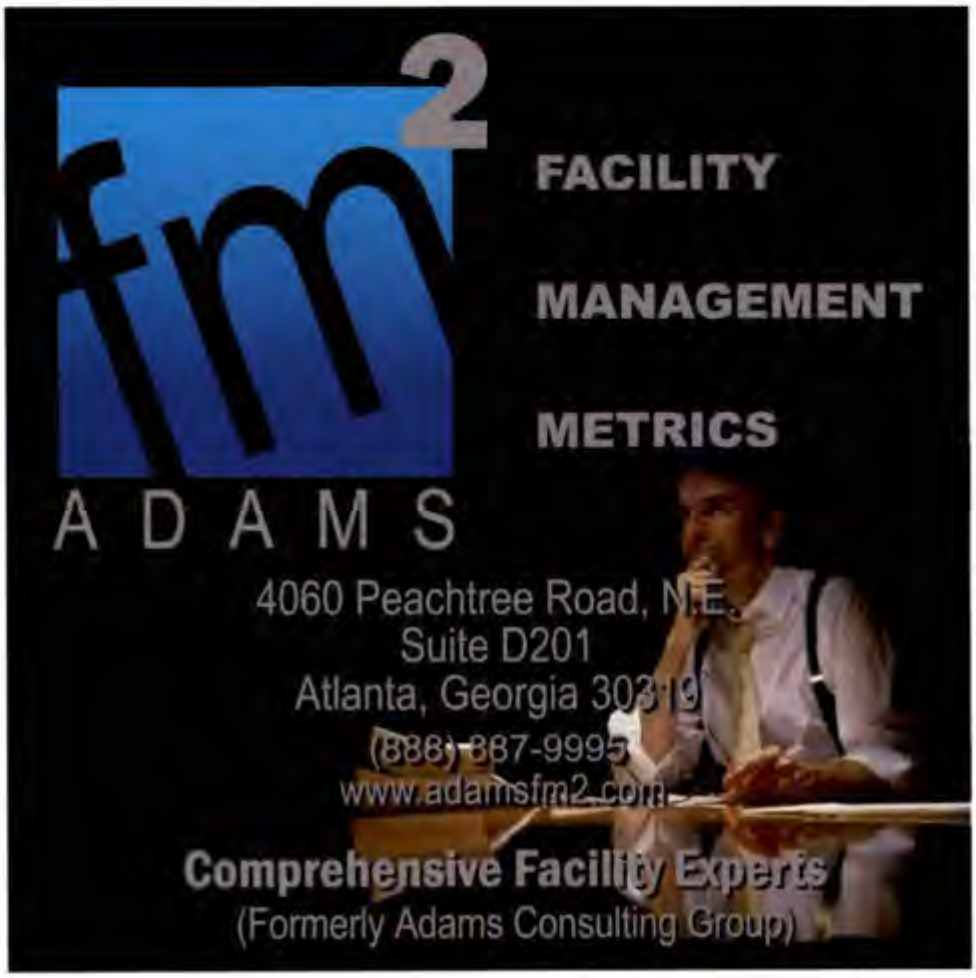
AASHE Releases Guide on Funding Campus Sustainability Projects

Association for the Advancement of Sustainability in Higher Education (AASHE) recently released a guide intended to help campuses overcome a major barrier to implementing sustainability projects. *Creating a Campus Sustainability Revolving Loan Fund: A Guide for Students* describes an innovative and powerful mechanism for financing sustainability projects, such as energy efficiency upgrades and renewable energy installations, on campus. The guide provides step-by-step directions for establishing such a fund, based on the experiences of the authors in setting up a revolving loan

fund at Macalester College. The two authors—who are sophomores at Macalester—led the effort to create the College's Clean Energy Revolving Fund (CERF). CERF is distinct from most other campus sustainability revolving loan funds in that students sit on the board that administers the fund and evaluate project proposals. Download the manual at: http://www.aashe.org/resources/pdf/CERF.pdf.

IU Administrator Elected NAEP President

The National Association of Educational Procurement (NAEP) recently elected Lorelei Meeker, director of purchasing at Indiana University, as their new president. Meeker also supervises the procurement aspects of the university's Business Diversity Program, the development of system-wide contracts, Travel, Srplus Stores, and Printing. During her 14 years in the procurement industry, Meeker served on the editorial board of the NAEP's *Educational Procurement Journal*, benchmarking committee, and as Indiana chapter president. She also served on the NAEP board as the association's District IV representative. Based in Baltimore, Maryland on the campus of the University of Maryland Baltimore County, NAEP serves more than 4,000 procurement professionals at educational institutions.



Anticipating Demographic Trends Impacting the Workforce

by E. Lander Medlin

Changing demographics are significant forces impacting educational institutions. As stated in the 2006 CHEMA Futures Report, we can either view these forces as dark clouds on the horizon or as agents of change that will enable us to reinvent ourselves in positive ways.

Therefore, it is essential for us to increase our understanding of the demographic trends, their expected impact on the composition of the workforce, and their implications for workforce management. This knowledge will enhance our ability to shape the future and to make the changes needed to support that future. As computer pioneer Alan Kay so aptly advised, "The best way to predict the future is to invent it." So what are the demographic trends?

- 76 million people—"The Baby Boom"—comprise the boomer generation. Nearly one-third of all Americans were born between 1946 and 1964.
- 77 years of age—"The Longevity Boom"—the average life expectancy today (up from 47 in the early 1900's).
- 2 children per woman—"The Birth Dearth"—the average number of children per woman today, down from 3.7 in the mid-1950's.

These three factors drive the "age wave" or the unprecedented, unfathomable shift in the age distribution of the population. Yet, as publicized and well-known as this phenomenon is, few organizations are actively preparing for this workforce transformation.

Lander Medlin is APPA's executive vice president and can be reached at lander@appa.org.

Although demographic and economic projections reflect a shortage in the *supply* of workers, this impending labor shortage will also involve a shortage of *skills*. Some additional statistics reinforce this notion:

- 80 percent of the impending labor shortage will involve skills, not the numbers of workers potentially available.
- 85 percent of the jobs in the United States alone are now classified as skilled, requiring education beyond high school, according to a 2003 report issued by the American Council of Education.
- 25 percent of all workers will be in professional occupations by 2010.

In his book *Workforce Crisis*, Ken Dychtwald wrote, "Education—not just the number of workers but what they can actually do—factors heavily in almost every new job created. The technological demands of even 'unskilled' entry-level jobs are increasing and professional and technical fields are already experiencing labor shortages. . . occupations that demand extensive education, ongoing training, independent thinking, and decisive action." The numbers tell the story:

- The United States ranks seventh among industrialized nations in college graduation rates.
- American universities produce 500,000 science and engineering graduates, versus 1.2 million from Asian universities and 850,000 in Europe.
- In 2012, the workforce will require 18 million new college degree holders. Given current graduation rates, we are currently 6 million short.

In a global economy dependent upon a skilled, creative, and innovative workforce, these trends threaten global competitiveness. Equally significant at the local or organizational level, this "education deficit" could negatively affect our ability to recruit and retain the skilled, educated staff we need to operate our facilities effectively and successfully.

Workforce participation rates will also affect the labor pool. As the data suggests, we have too few young workers to replace the labor, skills, and talent of the boomer retirees. And, since overall participation rates for men and women alike have basically leveled off for the foreseeable future, the room for potential growth exists among older workers. In essence, we need to find ways to delay full or wholesale retirement of older workers from the workforce. Therefore, not only must we find mutually beneficial ways to engage both young and mid-career professionals, we must explore mutually beneficial ways to retain older/mature workers.

The higher education workplace is not immune to the effects of these trends. We need to look at these

changes in workforce composition quite differently and seek to address our management policies and practices in more adaptable and flexible ways.

In examining our workforce, three categories of workers emerge—mature workers, mid-career workers, and young workers—each requiring different strategies for successful intervention, retention and/or recruitment. For example:

- By retaining **mature workers** longer, we can fill the skills gaps with a rich supply of talent and experience, imagination and drive. This requires modifying human resources policies and practices in regards to hiring and retiring, adjusting roles and schedules, and rethinking retirement/pension and benefits arrangements. A meaningful work experience with these considerations will help retain these valuable employees and curb the brain drain of their skills and experiences.
- **Mid-career workers** want the security of a solid benefits package given their family responsibilities. However, these individuals also highly value an enjoyable workplace where they can be passionate about their jobs and energized by their work. This translates to targeted technical and managerial training and accelerated leadership development opportunities and programs (such as APPA's Supervisor's Toolkit, Institute for Facilities Management, and Leadership Academy programs, as well as the two certification/credentials presently in development). Also, focus on flexible schedules, fresh assignments, experience-sharing roles, sabbaticals, and extended vacation time can go a long way to rekindle the productive engagement and commitment of these employees.
- **Young workers** (age 35 and under) presently turnover faster than their cohorts averaging less than three years. The competition for these skilled, educated workers is intensifying. Retention strategies must focus on greater freedom, flexibility, and independence, as well as increased responsibility and decision-making very early on in their careers. Opportunities for growth and development are essential. APPA's new entry-level credential—Educational Facilities

...it is essential for us to increase our understanding of the demographic trends, their expected impact on the composition of the workforce, and their implications for workforce management.

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Professional (EFP)—will be a great addition to the facility professional's toolkit. Incorporating these young workers into the organization rapidly and effectively will ignite the passion of their spirit and fuel their innovative ideas.

Clearly, greater attention must be paid to customizing the employer-employee relationship contract. Three areas of opportunity emerge—flexible work arrangements, flexible learning, and flexible compensation and benefits.

- **Flexible work arrangements:** Customized work schedules, location, and formats to increase productivity and loyalty.
- **Flexible learning:** Emphasis on life-long learning, growth, and development for all employees, while using learning experiences to bring the team together.

In examining our workforce, three categories of workers emerge—mature workers, mid-career workers, and young workers—each requiring different strategies for successful intervention, retention and/or recruitment.

- **Flexible compensation and benefits:** Promote better work/life balance and ensure clarity with respect to the larger performance management system.

I liken this situation to the parable of the boiling frog. The frog that jumps in hot water quickly jumps out recognizing the immediate sense of urgency and danger. Whereas the frog that jumps in soothing cool water is lulled into complacency as the slow but steady rise in temperature finally reaches its boiling point. When we are faced with gradual change, we often do not recognize the urgency to respond. Will we remain complacent to what is occurring slowly around us or seize the day with a sense of urgency and respond accordingly?

The worst thing we can do is do nothing. Yet, taking action will require imagination, courage, and hard work, facilitated by explicit, sustained, and informed leadership. The final pay off for your time and effort will be tangible and long-term, and ultimately be part of your legacy to your institution.

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Standardizing Facility Cleaning and Maintenance

by Daniel S. Wagner

Ask most higher education presidents to list 10 campus issues that concern them and I can guarantee that the cleanliness of facilities will not be included on the list. Expand the list to include the top 25 issues of concern, and cleaning is still likely nowhere to be found. Yet, the cleaning and maintenance of facilities is paramount with growing public health threats and increased occupant demands. It can also add up to 40 percent of most campus maintenance and operations budgets.

Last summer, APPA released the results of a comprehensive study on the effects of facilities on student recruitment and retention, concluding that the condition of an institution's facilities can have a tremendous impact on college choice. (*More than 16,000 college students from 46 institutions across the U.S. and Canada completed a recruitment and retention survey as part of the study.*) In fact, 76 percent of the study's respondents agreed that facility condition was important in their choice regarding which institution to attend. The study, The Impact of Facilities on the Recruitment and Retention of Students, was conducted by APPA's Center for Facilities Research (CFaR) and confirmed the findings of a study conducted in the 1980's by the Carnegie Foundation, which concluded the biggest influential factor for prospective students in selecting a college was the appearance of campus grounds and buildings.

Daniel S. Wagner is standards development manager and manager of regulatory compliance for ISSA, the experts on cleaning and maintenance in Lincolnwood, Illinois. He can be reached at daniel@issa.com.

It is clear that universities and colleges need to take a closer look at how facilities are maintained and perceived by prospective students, staff, and visitors, who will not accept substandard conditions. Cleaning plays a major role in maintaining the attractive outward appearance of facilities and indoor environment in a manner that protects building occupants from potentially harmful microorganisms. However, it is becoming increasingly difficult to perform the necessary cleaning and maintenance services and meet occupant needs in a world of shrinking budgets and rising expectations. New and increasingly difficult challenges are arising every day and innovative resources are needed to help navigate through a maze of uncertainty.

Enter the new ISSA Cleaning Industry Management Standard (CIMS), a management framework designed to assist cleaning departments in developing and maintaining effective and efficient operations, as well as to help qualify contract service providers. Based on universally-accepted management principles that have proven to be the hallmarks of successful service providers, CIMS provides a cleaning department with the structure needed to perform services in the most productive and "customer-focused" manner.

Providing quality cleaning services in an efficient and effective manner depends on having the right systems, processes, and policies in place, as well as making sure that they are implemented throughout the chain. With this premise as its backbone, CIMS demands open and honest communication with the "customer"—the administrator, student or other building occupants. It also requires understanding of staffing and service requirements, and the effective management of the most valuable asset we have—human resources. And it relies on a commitment to worker safety, health, and environmental stewardship, as well as the dedication of management at all levels.

While it may seem like a daunting task to review your entire department management structure, CIMS offers an easy to follow road map, leading to operational success. The Standard is divided into five key sections:

1. Quality Systems
2. Service Delivery
3. Human Resources
4. Safety, Health & Environmental Stewardship
5. Management Commitment

With these tools, it is easier to validate the efforts of an in-house cleaning department and demonstrate a commitment to quality service deliv-

Continued on page 14

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Continued from page 12

ery. With the ever-present threat of outsourcing hanging over an in-house cleaning department's head, CIMS can help promote a department's attributes to upper management and act as a tool to evaluate and elevate operations.

Further, those educational institutions that outsource portions of their cleaning services can take advantage of CIMS, by using it to pre-qualify contractors, helping assure that a provider's management systems are structured to deliver the services that you expect.

Today, any building service contractor can claim that they are dedicated to quality and meeting customer needs, but CIMS provides a comprehensive checklist and outlines the management principles that every service contract should demand. Require CIMS compliance in your contract specifications, and you take the guesswork out of the equation by lowering the risk that your contracted organization will be unable to deliver the quality service you require.

...universities and colleges need to take a closer look at how facilities are maintained and perceived by prospective students, staff, and visitors, who will not accept substandard conditions.

While some standards are often difficult to merge with existing operational frameworks, CIMS is non-prescriptive and, therefore, does not require or even recommend the use of specific products or cleaning procedures. It allows each organization to select and utilize those products, methods, and procedures that are most appropriate for a particular situation. As CIMS was being developed, all participants agreed that maintaining flexibility was of paramount importance.

CIMS was developed through a true consensus-based effort that involved collaboration between the cleaning, facility management, higher education, and purchasing communities, ultimately involving organizations representing more than 100,000 constituents. Serving as an advisor to the development process was APPA's President-Elect Alan Bigger, director of building services at the University of Notre Dame, who helped ISSA and the Standard development technical committee better understand how the Standard applies to higher education cleaning departments.

CIMS delivers the management structure that can lead you on the path to operational success. It is a powerful tool that outlines the basic

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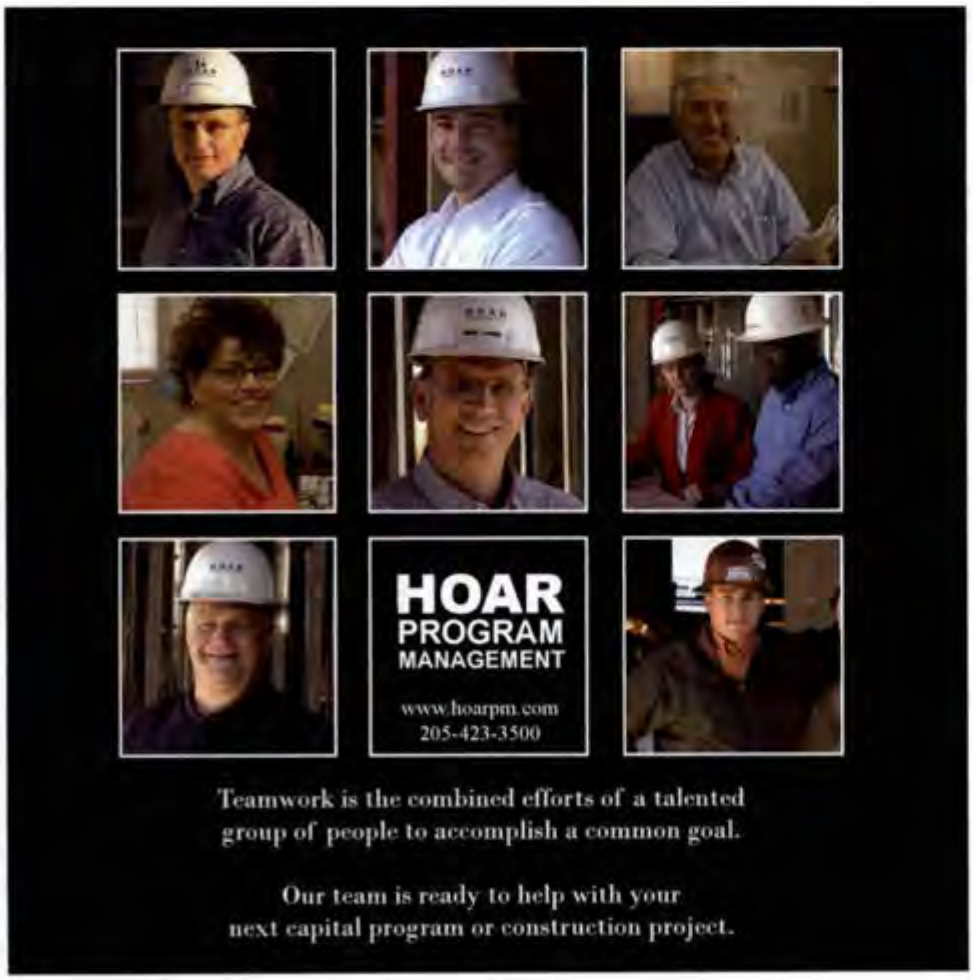
management principles that need to be installed to maximize efficiency and facilitate the delivery of quality service. Gary E. Reynolds, facilities director at Colorado College and one of the primary authors of the APPA study *The Impact of Facilities on the Recruitment and Retention of Students* noted that "the best and brightest students will choose those institutions that commit to providing a high-quality learning environment" and cleanliness plays a crucial role in preserving such an environment. Cleanliness may not be on the president's top 10 list, but you can bet that the students, staff, and campus visitors will be grateful that their institution has made the commitment.

For more information on the ISSA Cleaning Industry Management Standard (CIMS) and Certification Program, and a complimentary self-assessment checklist, please visit www.issa.com/standard or contact ISSA at 800-225-4772; cims@issa.com.



Become CIMS Certified

ISSA is developing a certification program to allow cleaning organizations to distinguish themselves in the market and identify themselves as leaders committed to the delivery of consistent, quality services. To become certified, an organization must undergo a comprehensive assessment by an accredited third party and demonstrate compliance with the elements of CIMS.

Certification is expected to be available to all cleaning organizations in October 2007. In the meantime, 24 organizations have been selected to participate in the CIMS Case Study Certification Program, including both the University of Michigan and the University of Guelph. Both universities have made a commitment to achieving certification and, in the process, improving the efficiency and effectiveness of their cleaning operations. Should they successfully establish compliance with CIMS, they will position themselves as leaders who are equipped to help the entire higher education community understand the real-world benefits associated with improved service and cleanliness.

Departments who wish to position themselves at the front of the line, in anticipation of the full industry certification launch later this year, are encouraged to apply today and schedule their future assessments. Certification applications are available at www.issa.com/standard/certification.jsp.

Those institutions that outsource cleaning services are encouraged to take advantage of CIMS certification as a pre-qualification tool by requiring certification in their existing specifications.

This fall Daniel Wagner, ISSA standards development manager, will present findings from the University of Michigan and the University of Guelph's participation in the Case Study Certification Program in *Facilities Manager*.

The Vision has Been Cast, it's Time to Embrace it

by Jim Barbush, P.E.

The recent buzz—articles, talks, and branding surveys—about APPA's 7 Key Strategies and the overall organization's revitalization efforts is trickling down to the regional and chapter levels of our membership with the goal to solidify APPA as the association of choice for educational facilities professionals.

APPA is providing the opportunity for our leaders and members to take a step back and really think about what APPA means to them and what role the organization will play in providing solutions to key issues affecting educational facilities management. For example, as a Baby Boomer, I was not specifically considering the next generation of APPA members and leaders. However, as an officer on a regional board, I did understand the importance of providing excellent educational offerings. This thought process revealed that I need to determine how I fit into the broadcasting, development, and execution of the new direction of APPA.

My involvement in APPA started out as unexplored and uncertain territory—a place of discovery, meeting many new people and learning new things. When I embraced the vision presented at an APPA regional conference, I reached a new plateau—a place where I can look back at where I have been, rest in what has been established, look to what could happen next, consider how to get to the next plateau, and also prepare on how to get there.

Jim Barbush, P.E., is the facilities contracts manager at the State System of Higher Education in Harrisburg, Pennsylvania. He can be reached at jbarbush@passhe.edu.

The Advancement of Facilities Management

APPA's vision is based on 7 Key Strategies, which are listed on APPA's website. I encourage you to eagerly discuss this vision with members and share the ideas with potential members. Again, I heard these concepts at a regional conference from Lander Medlin, APPA executive vice president, and Jack Colby, immediate past president. Their enthusiasm was contagious. There are four Key Strategies that really resonate with me:

- ***Branding Initiative.*** The re-branding effort has evolved into a consideration of a name change. However, despite this identity challenge, it is evident that education facilities professionals and organizations already know what APPA offers and its value to the industry.
- ***Collaborative Initiative.*** APPA's joint venture with SCUP and NACUBO in July 2007, *Campus of the Future*, was rewarding since we, as "facilities people," were able to network with other groups in higher education. Now we have access to a broader information base that provides us with a big-picture view of how we can best manage facilities on our campuses.
- ***Generational Initiative.*** APPA is creating a mentoring base and open forum for the young educational facilities professional and I am very interested in being able to competently converse with them and share my experience for their benefit.
- ***Educational Initiative.*** Last spring, the Eastern Region of APPA (ERAPPA) cast the following educational vision—*Be The Preeminent Source Of Training In Facilities Related Education*. It is a lofty goal, but based on the observance of recent offerings at ERAPPA events, it is an attainable goal. APPA is revamping its annual conference, shifting its focus from reviewing past successes to future needs. Thus, APPA 2007: Back to the Future will provide strategic offerings for educational facilities professionals to apply at their institutions.

A Charge to Embrace Change

The APPA vision has been cast. To carry the vision forward, we need

APPA Members gain valuable information in a session at last year's Campus of the Future conference.

to identify two types of APPA members—*vision casters* and *vision receivers*.

- ***Vision Caster:*** If you are an APPA officer and have caught the vision, figure out how you are going to broadcast it to educational facilities professionals in your network. You will help solidify APPA's value as the go-to organization for key players, research, and innovative practices in the field.
- ***Vision Receiver:*** If you are a member and have not caught the vision, it's not too late. Go to a chapter meeting to see APPA at the grassroots level. Contact your regional representatives to ask how you can be more involved and consider going to a regional meeting. Attend APPA 2007, July 15-17 in Baltimore, Maryland. You will not only hear about the APPA vision, but have an opportunity to discuss it with other members.

If you are not an APPA member and are not sure what all this vision talk is about, the first step to fill the gap is to visit www.appa.org. Then, take advantage of APPA's vast offerings that will help develop your insight and skills. Once you understand and embrace the vision, you will see the future of educational facilities management from exciting new plateaus, and the view is clear.

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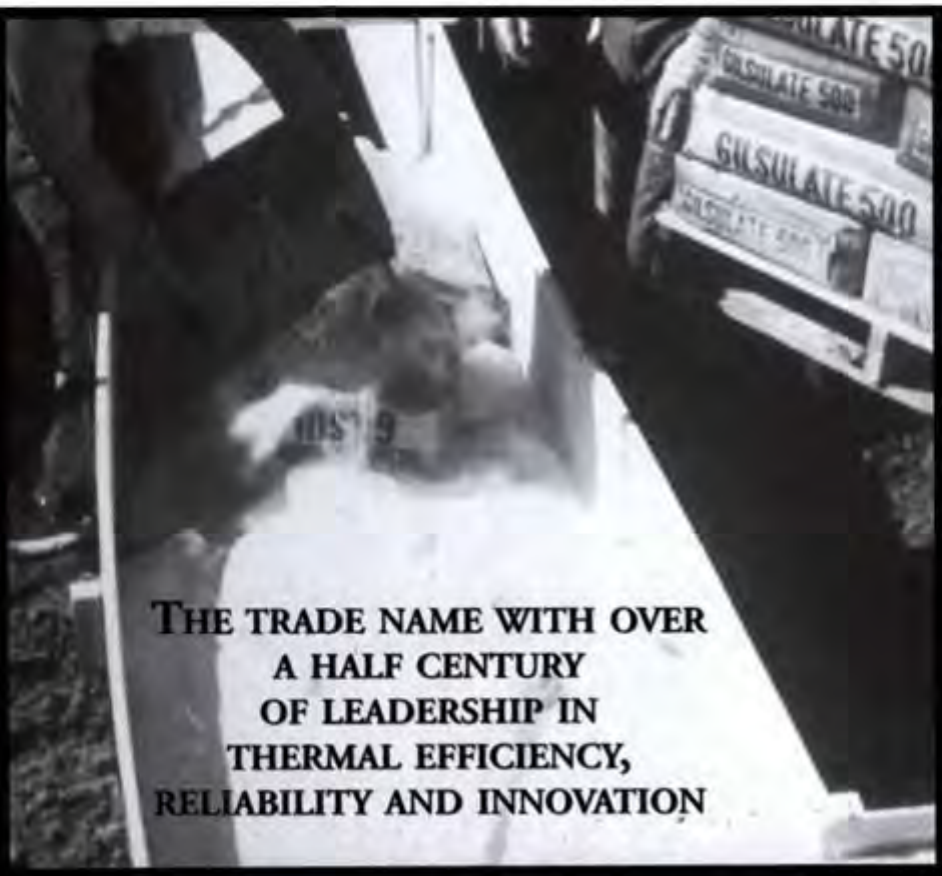

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Small College Core Data Value

by Dan Young

Hidden under a stack of papers, hiding from my view, is a notification of a due date for information needed to upgrade an HVAC technician's and an electrician's job descriptions. Why do I continue to work hard and find myself buried in processes that have questionable value?

Employee evaluations that are due every year and energy consumption reports that people only glance at seem to occupy most of our time. That is how we have worked for years as physical plant directors of small colleges and universities with limited staff and budgets.

We have a difficult time setting daily priorities because the priorities change daily. It's easy to redirect a team of one, but it becomes difficult to delegate responsibilities within that team when you are the only one standing. What was important today may have very little significance tomorrow.

"I am willing to guess that 90 percent of directors feel like they have no time to do the work to develop mandated reports," says Pete Sandburg of St. Olaf College, Northfield, Minnesota.

Ron Dupuis of Wilfrid Laurier University, Waterloo, Ontario says, "Surveys are time-consuming tasks with no payback." A physical plant director needs to learn effective time management. Every hour has to produce a result or solve a problem.

How many e-mails does it take to destroy your day?

APPA has been developing tools for years that assist us in saving time and presenting our fiscal pictures to our administrative front offices. Some have been relatively easy to understand and some have been a challenge. Starting in 2004 APPA unveiled a new tool, the Facilities Core Data Survey. Evolving from earlier data collection efforts—the Comparative Costs and Staffing Report (CCAS) and the Strategic Assessment Model (SAM)—the new Core Data Survey was developed by APPA's Information and Research Committee to provide an annual survey that would result in the Web-based *Facilities Performance Indicators* report and dashboard indicators.

The value of the Facilities Core Data Survey can only be realized by your regular contribution of data and use of the reports. Yes, it will take time from your busy day, but there is credibility in the database for small and large schools alike. The survey is *not* for larger schools only; in fact, my own school was part of the first cycle of information gathering.

This new tool requires some study to understand the dedication to complete the task of initial submittal. After that it's like doing your taxes with a "box" software package.

Once data has been entered, it's a matter of supplying new data when another cycle has been initiated. If you want to compare your school's data with a similar institution, then the option is available. The Information and Research Committee, the generators of the tool, have realized the level of effort required to become fluent with the software and continue to develop a user-friendly package for small school administrators.

Even though larger colleges and universities have more staff, they also are looking for time and person power to address the never ending request for credible information.

We, as facilities and physical plant directors, are placed in positions of continual justifications, return on

We have a difficult time setting priorities daily because the priorities change daily. It's easy to redirect a team of one, but it becomes difficult to delegate responsibilities within that team when you are the only one standing.

***Dan Young is facilities director at Embry-Riddle Aeronautical University, Daytona Beach, Florida, and the Southeastern Region representative to APPA's Information and Research Committee; he can be reached at younghe9@erau.edu. This is his first article for* Facilities Manager.**

The value of the Facilities Core Data Survey can only be realized by your regular contribution of data and use of the reports. Yes, it will take time from your busy day, but there is credibility in the database for small and large schools alike.

investments, and never-ending utility increases that forever consume our budgets. The major part of our long-range planning is to try to anticipate fiscal needs. In the Core Data Survey, APPA has developed a tool that captures general data that can be shared and compared to support your facilities decisions.

"I am willing to guess that 90 percent of directors feel like they have no time to do the work to develop mandated reports," says Pete Sandburg of St. Olaf College, Northfield, Minnesota.

ARCHIBUS developed the Facilities Performanace Indicators Dashboard Reports that translates the survey data into hundreds of easy-to-read gauges.

Precious time and reliable tools make our operations functional. The manager must search for the best tools that make his or her time produce successful results. Our time is our most-valued commodity.

APPA has addressed our needs and welcomes fellow directors to get better results with their time through the Facilities Core Data Survey tool. I urge all small colleges to participate in the next cycle of data collection in August 2007.

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-William Wise, Facilities Trade Manager, Colorado College

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CAMPUS AUXILIARY FACILITIES:

Universities Strive to Accommodate Student Desires and Future Trends

by Alan Dessoff

From student housing and food services to student unions and bookstores, things are not the way they used to be on college and university campuses. The needs and demands of current students, as well as faculty and staff—and the pressures on institutions to compete for new students—are driving changes in auxiliary facilities that are a growing component of support for the academic side of campus life.

These issues also are driving facilities managers and other administrators to consider how to renovate older buildings or construct new ones to provide the contemporary lifestyle arrangements that students are used to, including the latest technological advances. Then they have to plan how they will pay for these enhancements and justify costs in proposed budgets.

"The needs and desires of students and their families have changed over the past ten years, more so than in any other period I have seen," says Connie Carson, president of the Association of College and University Housing Officers-International (ACUHO-I). The former executive director of residential services at Wake Forest University, Carson now oversees a broad range of changes at Wake Forest as the institution's assistant vice president for campus services and planning.

The Demands for Campus Housing

Student housing is one element undergoing dramatic change on campuses across the country. It is no longer enough for a college or university to provide students with four walls and a bed. Students are demanding more from their residential experience, and institutional administrators recognize that by offering a unique, functional, and technologically advanced living experience, they can better attract and retain students.

"There's a lot more interest in housing with more amenities than the basic ones that historically have been provided on campuses. Suite-style and apartment housing has become the trend," Carson says.

Kids want privacy because most students have never shared a bedroom or bathroom with another person, says Jim Roberts, vice president for business and administration at Campbell University, which offers single rooms and apartment-style suites for students.

That's the type of lifestyle many institutions are seeking to accommodate, says Andy Hofmeister, director of residential facilities at Ohio State University.

Alan Dessoff is a frequent contributor to* Facilities Manager. *He is based in Bethesda, Maryland and can be reached at adedit@verizon.net.

At his university, a new 512-bed facility nearing completion was partly designed for students who want to live in their own little bubble, completely isolated from the world.

However Hofmeister says isolated living is not necessarily a good thing. Accordingly, the facility features "super suites" housing eight students—two in each of three shared bedrooms and two in their own private rooms, with all the students sharing bathrooms. Ohio State plans to renovate two existing seven-story residential towers in similar suite-type arrangements.

A significant trend in housing is the integration of students' in-classroom and out-of-classroom experiences in new residential facilities where students both live and engage academically in a different way.

Campbell University is adding stand-alone brand-name snack bars, including Quizno's Subs and Starbucks, where students can use their meal plan cards to pay for their choices.

The newest student housing facility at Wake Forest includes classroom and multi-purpose space, some student organization office space, and private study areas, as well as fully-furnished apartments where students live.

Technology is a key part of students' housing expectations. Ohio State's new building will include the latest technological advances, and the university will begin this summer to install about 300 new wireless access points throughout its entire housing system.

"Thirty years ago, nobody knew about broadband, the Internet, those kinds of things," Hasmiller says. "The trend is to build flexibility into new buildings today, so tomorrow universities can implement what people today don't know and can't even imagine what they will need."

Housing and other auxiliary facilities usually generate revenue and are sometimes self-sustaining. Carson says housing is typically a cash cow that contributes to an institution's operating budget. But she adds that many residential facilities and other buildings usually are built to last 50 to 100 years and fiscal issues come into play when both public and private institutions consider how to pay to renovate them or build new facilities. Then it needs to be implemented at a relatively fast pace, to meet student demands and keep up with trends.

"How do you fund that as an auxiliary enterprise? Do you do bonds? Or work with a private developer? That's a huge issue for housing professionals," Carson says.

Many schools do not want their bond ratings to change so they limit bond applications, or states impose limits for public institutions. Meanwhile, senior administrators at institutions often have to be convinced that financing is going to pay off and make money for the institution.

Competition for students, sometimes through their parents, can be a convincing factor. Parents recognize that if students are happy outside the classroom, they will perform better inside. Carson says research shows that students who live on campus tend to be more successful academically than students who live elsewhere. Yet, she says providing additional amenities need to come at a cost that students can afford.

Through the 21st Century Project, ACUHO-I is assisting colleges and universities in designing new residential facilities that reflect the changing roles residences play in the collegiate experience. Stackable rooms, fold-out beds, and a one-piece sink and toilet will be some of the features in the residence hall of the future, according to Jonathan Levi Architects of Boston, which won the grand prize for best design at a 21st Century Project design showcase presented by ACUHO-I early this year. The winning firm's innovative ideas also included technological advances like a smart-media wall and glass walls with adjustable transparencies.

Carson suggests there is still a place for the least expensive type of campus housing—the traditional double room in a corridor-style dormitory. A lot of institutions still believe that having that experience with a roommate is a part of college life.

The new Adele H. Stamp Student Union at University of Maryland-College Park includes 13 food operations; a mailing and shipping center; a full-service bank; and a "Terp Zone" with pool tables, bowling, big-screen televisions, and interactive video games.

Food Service Has Changed Dramatically

In addition to where they live, students want more choices in what and where they eat on campuses. Carson, whose responsibilities at Wake Forest include dining services, suggests that this part of campus life has changed even more than housing.

"The biggest trend is variation in types of food and styles of service. Students want a meal to be an event," says Jodi Smith, marketing director of the National Association of College and University Food Services.

To make it an event, many campus dining halls now offer foods cooked to order as students watch. There is no more mystery about what goes on back in the kitchen. Everything is done out front. That means food service workers need more training in customer service.

"Instead of being in the back of the house chopping things all day, they're interacting with their customers. It creates a more engaging experience for the students," Smith says.

Many institutions, particularly in urban areas, find themselves competing with local eateries and even late-night pizza deliveries, since most students today grew up eating out. Some dining departments are trying to keep students on campus by putting convenience store-type facilities, often kiosks, in popular locations.

"The small retail spaces are where they want to go,whether they are self-operated or outsourced," says Bob Hasmiller, CEO of the National Association of College Auxiliary Services.

Campbell University is adding stand-alone brand-name snack bars, including Quizno's Subs and Starbucks, where students can use their meal plan cards to pay for their choices. Campbell also renovated its dining halls, with repainted walls, new tables and chairs, and other improvements.

"They get a sandwich, fries and a drink, and it's considered a meal," Roberts says. "If they want to add desert or something else, they can take it off their card."

Smith says many institutions are renovating how their dining halls look from the outside as well as inside, seeking to give modernistic updates to buildings constructed several decades ago. But that probably won't work on campuses where facilities have established looks that are part of the campus image, she adds.

Revitalizing the Student Union and Campus Bookstore

The student union is the central hub of the college campus, thus the whole campus community—students, faculty and staff—visit this area at least once a day. The University of Maryland-College Park recently completed a six-year, $60 million complete gut and renovation to bring its Adele H. Stamp Student Union up to speed to serve the daily needs of its users. Stephen Gnadt, associate director of the facility, says up to 25,000 people go through the building every day.

There are about 34,000 students on the College Park campus, including 10,000 who live there. Gnadt sees the union as a vital resource for students, as well as faculty and staff, who are reluctant to leave the campus, especially at night, because of crime in nearby areas.

The facility now includes 13 food operations, from a full-service restaurant and student-run natural foods co-op to a food court with brands like McDonalds and Taco Bell; a mailing and shipping center; full-service bank; student organization offices; and a "Terp Zone," with pool tables, bowling, big-screen televisions, interactive video games, and more food choices.

The building offers a wireless Internet service, so students can sit anywhere and use their computers. Students without their own computers can check out laptops from the main information desk.

In renovating the building, Maryland paid particular attention to environmentally friendly and healthy elements. The university placed new recycling containers all around the building and installed low-capacity flush toilets to conserve water.

The Maryland student union also houses the university's bookstore, another auxiliary facility that is changing dramatically on many campuses. Textbooks still account for about 65 percent of total bookstore sales nationally, but new trends in marketing are changing the way bookstores look and operate, says Ed Schlichenmayer, senior vice president of the National Association of College Stores.

"E-commerce has opened up new ways for students to get course materials, so we're seeing a lot more actual merchandising of textbooks—more point-of-purchase signing, maybe hanging cards if a digital book is available, freshening up the textbook section so it doesn't look like a warehouse," Schlichenmayer says.

From books to staples like notebooks and pens, bookstores are trying to look and feel more like Office Depot, Staples, Office Max and other popular retail emporiums.

"From an aesthetic perspective, what's mostly changing is the look and feel of bookstores. They're becoming more like convenience centers, akin to drug stores, where students can pop in and pick up school supplies, clothing, health and beauty aids, and electronics," Schlichenmayer says.

Other auxiliary facilities and services are also changing on many campuses. More institutions face growing parking needs as virtually every student now tries to bring a car on campus and want to park as close as possible to where they are going.

Hasmiller suggests steering more students to transportation systems. More colleges are either taking over local transportation systems or partnering with them, he says.

Whatever their auxiliary facilities and services, a continuing challenge for administrators is adapting buildings constructed decades ago for long-term use to fast-developing current needs, and planning new buildings for needs not yet known.

"Thirty years ago, nobody knew about broadband, the Internet, those kinds of things," Hasmiller says. "The trend is to build flexibility into new buildings today, so tomorrow universities can implement what people today don't know and can't even imagine what they will need."

CHEMA Auxiliary Associations

- **Association of College and University Housing Officers–International (ACUHO-I):** www.acuho-i.org
- **National Association of College Auxiliary Services (NACAS):** www.nacas.org
- **National Association of College Stores (NACS):** www.nacs.org
- **The National Association of College & University Food Services (NACUFS):** www.nacufs.org

Serving Students, Enhancing Campus Life

Iowa State University Memorial Union

Following is a compilation of recent campus renovations and new construction of auxiliary facilities, which include residence halls, dining and bookstore facilities, student union complexes, sports and recreation, and parking structures.

Compiled by Steve Glazner

Carleton University

Ottawa, Ontario, Canada

Darryl K. Boyce, assistant vice-president, facilities management and planning

Campus GSF: 3.8 million

 # Students: 24,085

 # Students Living on Campus: 2,600

Do your auxiliaries have a separate facilities crew? No

What areas, if any, use contracted facilities services? Snow clearing of parking lots, elevator maintenance, fire prevention systems maintenance, pest control, custodial services, waste removal, recycling, facility maintenance service, loading dock cleaning, sports field maintenance, glass repair, and street lighting maintenance.

Most recent auxiliary facility construction or renovation project(s): University Centre Expansion ($14.6M), University Centre Cafeteria Fit-Up ($3.3M), University Centre Bookstore Fit-Up ($625K), University Centre Campus Card Fit-Up ($300K), University Centre Oliver's Renovation ($1M), University Centre Washroom Renovations ($200K), University Centre Galleria Furnishings Level 1 and 2 ($200K), East and West Entrance Upgrades ($300K), Glengarry Building Renewal ($5M), Grenville Residence Roof Replacement ($250K), and Parking Lot 5 Paving, Curbing, and Line Painting ($290K).

What do you see as the "next trend" in campus auxiliaries? "Greener" facilities, more sustainable operation (e.g., packaging, recycling, garbage, energy, and resources).

What do you want others to know about your campus auxiliary facilities? The importance of the state and condition of auxiliary facilities on the overall student experience demands that there be a good and effective connection between Physical Plant and the various auxiliary services.

Creighton University

Omaha, Nebraska

Lennis Pederson, associate vice president for administration

Campus GSF: 3.3 million

 # Students: 6,981

 # Students Living on Campus: 2,266 living on campus; 2,413 beds available

Do your auxiliaries have a separate facilities crew? Limited to small summer projects by a few students.

What areas, if any, use contracted facilities services? None for routine work; contractors are employed for building improvement projects.

Most recent auxiliary facility construction or renovation project(s): The remodel of the Skutt Student Center included creation of a coffee café that incorporated state-of-the-art computer technology with the ambiance of the history of the school including building a wall with a trolley track in brick

Steve Glazner is APPA's director of knowledge management and editor of Facilities Manager; *he can be reached at steve@appa.org.*

salvaged from an adjacent street. Two apartment-style residence halls for juniors and seniors have been completed in the past three years, adding 525 beds. Amenities include: full-size kitchen; private bedroom and shares a bathroom with only one roommate; and voice/data and TV connections.

What innovations (design, operational, other) are represented in your auxiliary facilities? Auxiliary facilities are designed to enhance the development of the holistic student while providing an opportunity for independence and free thinking.

What do you see as the "next trend" in campus auxiliaries? Student security.

What do you want others to know about your campus auxiliary facilities? The campus auxiliary facilities are operated to make life on campus a total experience that fosters the development of leaders through community activity while enhancing the sense of individual responsibility and learning.

Haverford College

Haverford, Pennsylvania

Shelley McConkie, public relations coordinator, Metcalfe Architecture & Design and Kathy DiJoseph, project manager at Haverford College

Campus GSF: 1.5 million

 # Students: 1,168

 # Students Living on Campus: 99 percent of students live in Haverford owned, operated, or affiliated housing

Do your auxiliaries have a separate facilities crew? No

What areas, if any, use contracted facilities services? They are separate, but not contracted. No area of the campus uses contracted facilities services.

Most recent auxiliary facility construction or renovation project(s): 4,000 sq. ft. addition to student center (Coop) dining facility. With an $800K construction budget, the challenge was to inexpensively double the seating and renovate/expand the cooking capacities of an existing facility with minimum disturbance to college life, while also creating an updated image to complement the college's adjacent new gym.

What innovations (design, operational, other) are represented in your auxiliary facilities? Creating a space that serviced students at different hours of the day. The dining facility provides food prepared to order during traditional meal hours, yet the coffee bar remains open during extended hours. This provides students with access to coffees, snacks, and television late at night. The café has become more of an after-hours gathering spot, reflecting students' lifestyle and provides a space with more character than can be found in a traditional cafeteria setting.

Iowa State University

Ames, Iowa

Christopher K. Ahoy, associate vice president for facilities and A. Dean Morton, university architect

Campus GSF: 12.7 million

 # Students: Full-time: 22,180, part-time: 3,282; Total: 25,462

 # Students Living on Campus: 8,112

Do your auxiliaries have a separate facilities crew? Yes

What areas, if any, use contracted facilities services? None

Most recent auxiliary facility construction or renovation project(s): *Memorial Union:* renovation and addition ($20.8M). Goal is to reorganize and improve existing circulation; create architectural unity between past additions; and update meeting spaces and public areas to accommodate current technological needs. The Iowa State University Book Store will be expanded in a new south building addition. The overall project consists of approximately 32,000 NSF of new construction along with 48,000 NSF of interior renovation. Completion is scheduled for 2008. *East Parking Structure:* Created an additional 185 vehicle spaces over an existing 200-space, on-grade parking lot. Because of existing topography, both levels are able to be accessed without ramps. Construction cost was $2.67 million, project cost $3.11 million. Construction completed in December 2003. *Hilton Coliseum Addition:* Will provide a new basketball/volleyball practice facility for the Department of Athletics. The new 98,500 GSF basketball/volleyball practice facility will provide full-size practice courts for the men's and women's varsity programs, the women's varsity volleyball program, and related support spaces.

What innovations (design, operational, other) are represented in your auxiliary facilities? Energy conservations and sustainability awareness.

What do you see as the "next trend" in campus auxiliaries? Outsourcing university bookstores, dining, and residential life; partnerships where university provides the land and private entity builds and operates the facilities and manages the operations for a fee.

What do you want others to know about your campus auxiliary facilities? They are self-sustaining and well run.

North Carolina State University

Raleigh, North Carolina

Gary Thompson, associate director for facilities—NCSU housing

Campus GSF: 2.2 million housing inventory

 # Students: Approximately 31,000 students total enrollment

 # Students Living on Campus: 8,350

Do your auxiliaries have a separate facilities crew? Yes

What areas, if any, use contracted facilities services? Elevator service, preventive maintenance, housekeeping.

Most recent auxiliary facility construction or renovation project(s): New $80M, 1,208-bed student apartment-style housing; four bedrooms, two baths, living room, full kitchen, and laundry in each unit. Project included eight residential buildings and one utility services building.

What innovations (design, operational, other) are represented in your auxiliary facilities? Most recent construction centered on a "village" approach with four core buildings and four outer buildings, including a town square, food options, classroom space, recreation and multi-purpose space all designed for high aesthetic value and low maintenance.

What do you see as the "next trend" in campus auxiliaries? Financial assessment of campus auxiliaries to help address aging campus infrastructure deficiencies and sustainability issues. The aging out and deterioration of the utility infrastructure coupled with the desire to increase sustainability will challenge all campus areas including auxiliary services.

What do you want others to know about your campus auxiliary facilities? University has a highly skilled (all 10 HVAC, electrical, and plumbing trades personnel are licensed) and dedicated workforce who understand and respond to the needs of a campus residential environment.

St. Francis Xavier University

Antigonish, Nova Scotia, Canada

Lisa Little MacKay, facilities coordinator

Campus GSF: 1.7 million

 # Students: 4,600

 # Students Living on Campus: 2,000

Do your auxiliaries have a separate facilities crew? No

What areas, if any, use contracted facilities services? None

Most recent auxiliary facility construction or renovation project(s):

Governors Hall Residence, July 2006 ($19M): 226 single rooms with private bathrooms; fully furnished with a 20" TV; fully-equipped kitchens; two large laundry rooms, each with six washers and 12 dryers; seven lounges throughout the first and second floors; individual climate control (heat and cooling). *Renovated MacIsaac Hall Residence, summer 2006* ($8.6M): New ventilation, heating, plumbing, and electrical systems; installed sprinkler system; added 22 beds; lounges moved to one central space per floor; coed washrooms and three private washrooms per floor. *Renovating Bishop Hall Residence, summer 2007* ($11M): Converting rooms to singles, minimal double rooms available; private bathrooms; addition of two floors, elevator, solarium, and kitchens.

What innovations (design, operational, other) are represented in your auxiliary facilities? All buildings have entrances with porticos and columns; quality of finishes including color and material has increased to "hotel" quality; Governors Hall has in-suite bathroom for each room; large flat screen TVs and leather furniture in lounges.

What do you see as the "next trend" in campus auxiliaries? Quality, privacy, security, and fun.

What do you want others to know about your campus auxiliary facilities? Quality.

Stevens Institute of Technology

Hoboken, New Jersey

Trina Ballantyne, dean of residence life

 # Students: Undergraduate 1,850; graduate 3,000

 # Students Living on Campus: 1,100

Do your auxiliaries have a separate facilities crew? No, but offer a physical plant department that services all of campus.

What areas, if any, use contracted facilities services? Dining
Most recent auxiliary facility construction or renovation project(s): America's Cup is one of the most recent new facilities. **What innovations (design, operational, other) are represented in your auxiliary facilities?** America's Cup combines Internet access in a relaxed lounge-type setting. Students are able to study, hold informal meetings, and exchange ideas in a less traditional classroom atmosphere.
What do you see as the "next trend" in campus auxiliaries? In fall 2007, unlimited dining from 7:00 a.m. until midnight. Students don't keep traditional hours and want to be able to dine at more convenient hours that are less like business hours and more like their study hours.
What do you want others to know about your campus auxiliary facilities? Committed to using technology to the benefit students whenever possible.

University of Massachusetts-Dartmouth

North Dartmouth, Massachusetts
Leslye Kornegay, associate director, housing facilities operations & services (HFOS)
Campus GSF: 2 million, 18 halls, one commons building, and 65 acres
 # Students: 8,500
 # Students Living on Campus: Capacity for 4,600
Do your auxiliaries have a separate facilities crew? Yes, facilities, landscape services, housekeeping and conference services
What areas, if any, use contracted facilities services? Pest management, elevator maintenance, maintenance service contracts for electronics, laundry service contracts, etc.
Most recent auxiliary facility construction or renovation project(s): 34 renovation and renewal projects 2006, six new apartment-style residence halls & a student common building 2005.
What do you see as the "next trend" in campus auxiliaries? Sustainability, LEED for CM and existing buildings, redesign of existing spaces and going green as existing facility spaces will be obsolete in 40+ years.
What do you want others to know about your campus auxiliary facilities? Housing has its own freestanding facilities department to support services within all student halls, grounds, and conferences services.
What would I like to see? A database and listserv for facilities departments of peers housed within Student Affairs.

University of Nebraska-Lincoln

Lincoln, Nebraska
Doug Zatechka, director of housing and food services and Ted Weidner, assistant vice chancellor for facilities management and planning
Campus GSF: 11.9 million (Lincoln only, no out-state facilities)
 # Students: 22,106
 # Students Living on Campus: 6,068
Do your auxiliaries have a separate facilities crew? Yes
What areas, if any, use contracted facilities services? Auxiliary facilities are maintained by university personnel with selected outsourcing.
Most recent auxiliary facility construction or renovation project(s):
The Village (2005): 229,877 sq. ft.; 526 fully furnished, two- and four- bedroom apartments; convenience store; free cable TV; full kitchen; study and social lounges, clubhouse; free high-speed Internet. Harper Dining Center (2006): 59,561 sq. ft.
What innovations (design, operational, other) are represented in your auxiliary facilities? *The Village:* Fully furnished apartment-style units; large walk-in closets; bathroom shared with only one other resident and cleaned by university housing staff every other week; full balconies; high-speed Internet access; cable TV access in each bedroom, hook-up in living room; residents receive two meals per week, can purchase additional discounted weekly meal plan; convenience store; and accommodations for disabled students. *Harper Dining Center:* Upscale, marché dining; unlimited student access/food; accommodates 2,500-2,800 customers per day; seats 535 in three dining rooms; renovation costs, $8M for the two-story building, including meeting space on both floors, Equipment costs, $1.3M.
What do you see as the "next trend" in campus auxiliaries? Upscale, marché dining with freshness and variety; fully furnished apartment-style units with convenience stores in the building.
What do you want others to know about your campus auxiliary facilities?
Universities should consider student enrollment retention of students returning to live on campus; fully-furnished units make move-in/move-out easier and reduce wear and tear on walls, carpet, etc.

University of North Dakota

Grand Forks, North Dakota

Larry Zitzow, director of facilities

Campus GSF: 5.2 million

 # Students: 13,000

 # Students Living on Campus: 3,400

Do your auxiliaries have a separate facilities crew? No. All services come from Facilities and are charged back to housing.

What areas, if any, use contracted facilities services? Elevators, some snow removal, window cleaning, pest control.

Most recent auxiliary facility construction or renovation project(s): A 276-bed facility with suites is under construction and will be completed in August 2008; cost $20M.

What innovations (design, operational, other) are represented in your auxiliary facilities? This facility will have card access, and there is an emporium with a drive-up coffee service.

What do you see as the "next trend" in campus auxiliaries? Family housing is going away. As the campuses become more aware of the competition around them, they realize the need to be more appealing to the students.

What do you want others to know about your campus auxiliary facilities? The university will eventually get away from family housing entirely.

University of Virginia

Charlottesville, Virginia

Jay Klingel, director, business management services

Campus GSF: 13.9 million

 # Students: 20,397

 # Students Living on Campus: 6,500

Do your auxiliaries have a separate facilities crew? Yes

What areas, if any, use contracted facilities services? Grounds services

Most recent auxiliary facility construction or renovation project(s): Observatory Dining Hall.

Western Michigan University

Kalamazoo, Michigan

Peter J. Strazdas, director, physical plant maintenance services

Campus GSF: 8.8 million

 # Students: 25,000

 # Students Living on Campus: 5,000

Do your auxiliaries have a separate facilities crew? Yes

What areas, if any, use contracted facilities services? Cleaning and custodial services for residence halls/campus apartments; pest control; elevator service/maintenance; vending; water softener service; fire system maintenance.

Most recent auxiliary facility construction or renovation project(s):

Britton/Hadley residence halls: lobby renovation;

Faunce Student Services building: Residence Life offices renovation. The university's Division of Student Affairs (DOSA) oversees many auxiliary facilities, primarily the campus residence buildings and their related areas. Each year, about $2M is available for renovation(s) and renewal projects.

What innovations (design, operational, other) are represented in your auxiliary facilities? Funding for new construction and/or renewal is limited, therefore, the Maintenance Services Division focuses on operations to achieve improved customer service, accountability for costs, as well as justifying the time spent (labor) addressing and resolving maintenance issues.

What do you see as the "next trend" in campus auxiliaries? Cost containment, cost justification, and continuous improvement in customer service.

What do you want others to know about your campus auxiliary facilities? Maintenance Services personnel are focused on improving customer service, containing costs, and justifying dollars spent on service across campus and especially in the auxiliary facilities. ▲

BACK TO THE FUTURE

APPA 2007

JULY 15–17

BALTIMORE, MARYLAND

Three days of unmatched professional development

EXAMINE WHAT IS NEW, WHAT HAS CHANGED, AND WHAT IS YET TO COME!

APPA

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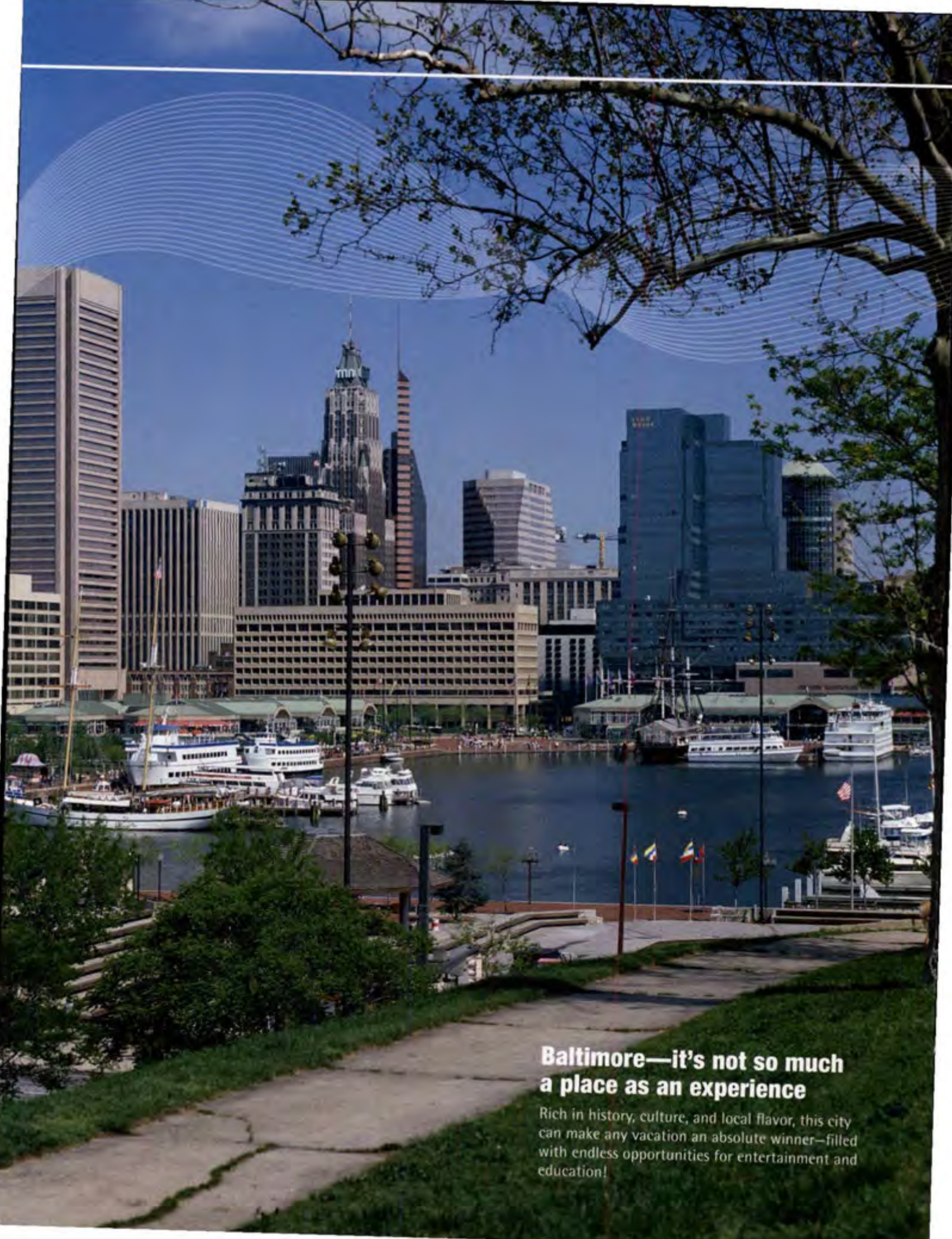


Baltimore—it's not so much a place as an experience

Rich in history, culture, and local flavor, this city can make any vacation an absolute winner—filled with endless opportunities for entertainment and education!

BACK TO THE FUTURE

APPA 2007

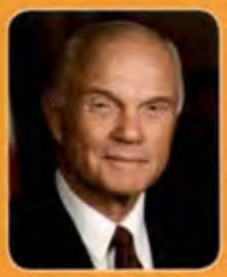
JULY 15–17

APPA 2007—Back to the Future—will bring facilities professionals from around the world together for three days of unmatched professional development. APPA 2007 will prepare you for those moments when change is happening at light speed by examining what has changed, what is new, and what is coming around the bend. You will hear from international experts, senior facilities officers, and peers, and will also learn from one another as you network and share your questions, experiences, and solutions.

Keynote Speakers

Senator John Glenn

APPA is pleased to announce that Senator John Glenn will deliver a keynote address on *The Importance of Leaving The World a Better Place for Future Generations.* Senator Glenn's career has been one of taking risks in order to positively impact the future. The current state of the educational environment combined with shrinking state/provincial budgets, and the changing needs of today's students can be overwhelming for those of us struggling to achieve excellence in education. Senator Glenn's address will inspire us to understand that we can make a difference if we give voice to the passion inside us. Hear from a man who listened to the passionate voice within himself and literally shot for the stars. This keynote is sponsored by SIEMENS.



About John Glenn: In 1962, John Glenn climbed into NASA's tiny Mercury capsule, was launched into the still-mysterious and consuming darkness of space, and circumnavigated the Earth three times. After that historic flight, President Kennedy would not allow NASA to send John Glenn back into space, deeming him too valuable a national hero. So, Mr. Glenn left NASA and entered the private sector. In 1974 he was elected as a Democratic Senator from his home state of Ohio, and served for 24 years. On October 29, 1998, at the age of 77, John Glenn returned to space with a crew of astronauts who were not yet born when he made his first ascent into space. Currently, Mr. Glenn heads the John Glenn Institute for Public Service and Public Policy at The Ohio State University. He is chairman of the National Commission on Service Learning, which focuses on integrating service to others with classroom instruction in grades K-12.

Dr. Eric Schmidt, Google (invited)

Dr. Eric Schmidt, Chairman of the Executive Committee and CEO of Google, has been invited to present the APPA 2007 closing plenary. Schmidt will use his 20-year record of achievement as an Internet strategist, entrepreneur and developer of great technologies to highlight best practices for the future.

PROGRAM HIGHLIGHTS

The following is just a sample of the many educational offerings that will be presented at APPA 2007 to help prepare you for the future of educational facilities management.

Sustainable Strategies for Success

Sustainability efforts take into consideration the cultivation of the entire campus environment. These sessions will examine trends in sustainable practices and guidance on how to implement them on your campus, including a focus on short-term actions as well as long-term planning.

- **Understand and Make Energy Sources Work for You – Oil, Gas, Nuclear & Coal**
  Department of Energy Panel
- **Organizations for a Sustainable Future**
  Judy Walton, AASHE
- **Designing & Implementing Business Continuity**
  Mohammad Qayoumi, California State University/East Bay
- **Performing a Successful Energy Audit**
  Lucinda Andreani, Energy & Renewables, O'Brien Engineers

Planning for a Better Tomorrow

Transform your thought process and hone your management methods to build a stronger workforce. Understanding the challenges of motivating and collaborating with Generation X and the Millennial generation is vital to the creation of a productive campus workforce and succession planning for our organizations. Learn approaches to deal with the work ethics and priorities of the newest generations.

- **Now to 2015—What Kind of Leaders Are We Fostering?**
  Michelle Estep-Frederick, American University
  Kevin Folsom, Dallas Theological Seminary
  Andy Brantley, CUPA HR
- **Succession Planning for a Stronger Tomorrow**
  Chris Ahoy, Iowa State University
  Sarah High, American University
  Ruthann Manlet, University of Minnesota/Twin Cities
- **Attracting and Retaining a New Generation of Employees—Management and Human Resources**
  Cam Marston, Author (invited)

Technology—Watch Out Here It Comes

Capitalize on the newest trends in technology that are not only changing the way business is done but how this change impacts facilities. Learn ways you can embrace the future of technology and the impact on data, methods of operation and the advancement of the campus community.

- **Facilitating Future Communication through Technology**
  Charles Andersen, Brigham Young University/Idaho
- **Emerging Tools in the Learning Environment**
  The Sextant Group
- **Smart Building—Dealing with Access & Security**
  Ron Bernstein, ECHELON
  Lynda Stanley, Federal Facilities Council
- **APPA's Benchmarks: Facility Core Data Survey & Facilities Performance Indicators**
  Brad Peterson, ARCHIBUS
  Maggie Kinnaman, University of Maryland/Baltimore
  Michael Sofield, The Smithsonian Institution

Keeping Current—Your Professional Development

Sharing information and learning from peers and colleagues is one of the best ways to grow as a professional. These sessions will give you the opportunity to hear from other APPA members, including members of the Board of Directors and APPA committees, as well as a number of our Strategic Alliance Partners.

- **APPA Futures Look: Thought Leaders Summit, Center for Facilities Research & Senior Facilities Officer Summit Panel**
- **ACUHO-I 21st Century Project**
  Michael Coakley, Chair, 21st Century Project
- **Legislating Stewardship**
  Rod Rose, STRATUS, a Division of Heery International, Inc.

SCHEDULE AT A GLANCE

Subject to Change

Wednesday, July 11

12:30pm – 4:30pm ..... Executive Committee Meeting
4:30pm – 6:30pm ..... Regional Representative Meeting
6:00pm – 9:30pm ..... Executive Committee Dinner (Invitation Only)

Thursday, July 12

7:00am – 8:00am ..... 2006-07 Board of Directors Breakfast
8:00am – 9:00am ..... Planning Committee Meeting
..... Bylaws Committee Meeting
9:00am – 10:00am ..... Nominating Committee Meeting
10:00am – 5:00pm ..... Board of Directors Meeting
12:00pm – 1:30pm ..... Board of Director's Luncheon
6:30pm – 8:00pm ..... SFO Summit Opening Reception (Invitation Only)
8:00pm – 10:00pm ..... Board of Director's Dinner (Invitation Only)

Friday, July 13

1:00pm – 4:00pm ..... CFaR Advisory Council Meeting
6:00pm – 8:00pm ..... SFO Summit Reception (Invitation Only)

Saturday, July 14

7:00am – 5:00pm ..... Registration Open
12:00pm – 1:00pm ..... APPA Committee Luncheon
12:30pm – 1:00pm ..... President's Plenary Session
1:00pm – 5:00pm ..... Committee Meetings
5:45pm – 7:00pm ..... International & VIP Reception (Invitation Only)
7:00pm – 9:00pm ..... Opening Welcome Party

Sunday, July 15

6:00am – 5:00pm ..... Registration Open
7:30am – 8:45am ..... Welcome Breakfast & Business Meeitng
9:00am – 10:00am ..... Opening Keynote
10:15am ..... Ribbon Cutting on Hall of Resources
10:30am – 1:30pm ..... Hall of Resources (Lunch)
1:45pm – 2:30pm ..... General Session
2:45pm – 3:45pm ..... Panel Discussion
4:00pm – 5:00pm ..... Breakout Sessions
5:45pm – 6:45pm ..... Awards Reception

Monday, July 16

6:00am – 3:00pm ..... Registration Open
7:30am – 8:30am ..... Breakfast
8:45am – 9:45am ..... General Session
10:00am – 11:45am ..... Panel Discussions
11:00am – 2:00pm ..... Hall of Resources (Lunch)
2:15pm – 3:15pm ..... Breakout Sessions
3:45pm – 4:45pm ..... Regional Business Meetings
6:00pm – 8:00pm ..... Awards Banquet

Tuesday, July 17

6:00am – 2:30pm ..... Registration Open
7:00am – 8:45am ..... Hall of Resources (Breakfast)
9:00am – 9:45am ..... General Session
10:00am – 10:45am ..... Panel Sessions
11:00am – 12:00pm ..... Breakout Sessions
12:15pm – 1:00pm ..... Lunch
1:15pm – 2:15pm ..... Breakout Sessions
2:30pm – 3:30pm ..... Closing Keynote

Wednesday, July 18

8:30am – 11:30am ..... 2007-08 Board of Directors Meeting
9:00am – 3:00pm ..... EFP Preparatory Course

APPA 2007 will feature speakers with creative and innovative thoughts about future solutions to pressing issues in three key areas: energy strategies, workforce demographics, and emerging technologies. Each day will focus on one topic, starting with the day's plenary and general sessions which will be followed by panel and break-out sessions designed to provide practical tools and technologies to use on current and future projects on your campus.

Special Program: Supervisor's Toolkit

Offered concurrently to the APPA 2007 program is APPA's Supervisor's Toolkit. Specifically designed to meet the needs of the facilities management employee, the Supervisor's Toolkit is a structured, open-ended, and pragmatic approach designed to help supervisors realize both personal and professional growth.

Toolkit topics include:

- Supervision, What Is It?
- It's More Than Administrivia
- Communication, Let's Talk!
- If It Weren't for the People
- Motivation and Performance
- Customer Service Triangle
- Supervisors as Leaders
- Success, What Does It Take?

Individuals may attend the Toolkit as a participant or begin the first-step to become a Qualified Toolkit Trainer. For more information and registration, contact Suzanne Healy
703.684.1446 ext. 233 or suzanne@appa.org

Take the First Step in the EFP Credentialing Process

APPA's new Educational Facilities Professional (EFP) credentialing program is designed to recognize those up-and-coming professionals who have achieved a fundamental level of mastery in the field.

The first preparatory course for EFP credentialing will be Wednesday, July 18, immediately following APPA 2007.

For more information on this program and to register for the preparatory course, contact Berlos Davis at 703.684.1446 ext. 228 or efpcredentialing@appa.org.

BACK TO THE FUTURE

APPA 2007

JULY 15–17

GENERAL INFORMATION

Baltimore—it's not so much a place as an experience. Rich in history, culture, and local flavor, this city can make any vacation an absolute winner—filled with fun family days, romantic evening getaways, and endless opportunities for entertainment and education. Oh, and it's also a top notch city to hold an annual conference. Spend a few days with us in Baltimore and see why it's called charm city! www.baltimore.org

CEU Credits

At APPA 2007, you can earn continuing education units (CEUs), allowing you to keep current with your professional development. Your transcript of participation will be available approximately four weeks after the conclusion of the meeting. Learn more about the process for applying for your CEUs and distribution of them on the APPA website: www.appa.org/education.

APPA Bookstore

At the APPA Bookstore, located onsite at APPA 2007, you will have the opportunity to purchase the latest publications in the facilities management field and much more. Special conference pricing will be available to all, with an extra 10% discount given to all first time attendees. Stop in between sessions so you don't miss out on the latest releases from APPA members, including *Leadership in Educational Facilities Administration* by APPA President Chris Ahoy.

Appropriate Dress

Casual business attire is suitable for all meetings, sessions, and the opening reception. Business attire is recommended for the awards reception and awards banquet. Please remember to bring a sweater or jacket for air-conditioned rooms.

Accessibility

The Baltimore Convention Center provides service ramps to entrances and elevated areas, an array of passenger elevators, restroom facilities for the disabled, and Braille instructions/directions at strategic locations throughout the building. Wheelchairs are also available upon request.

Weather

The average high temperature in Baltimore in July is 90 degrees, and the average low is 73 degrees. On average, July is the warmest month in Baltimore, so please dress accordingly.

www.appa.org

EVENTS/SPECIAL PROGRAMMING

Welcome Party

Connect with old friends and meet new colleagues as we kick off APPA 2007 with our annual Welcome Party, sponsored by Johnson Controls, Inc.

Effective & Innovative Practices

APPA's Effective & Innovative Practices award program, sponsored by Sodexho, recognizes programs and processes that enhance service delivery, lower costs, increase productivity, improve customer service, generate revenue, or otherwise benefit educational institutions. Visit the displays in the Hall of Resources and start to plan improvements on your campus!

Lab of the Future

Back by popular demand, the interactive laboratory of the future, strategically located within the Hall of Resources, will take you through the technology applications of today and into innovations on the horizon.

Fun Run/Walk

Join us early Monday morning for the annual APPA Fun Run/Walk, as we celebrate the 10-year anniversary of TMA's sponsorship of and partnership in this 5K event.

APPA's Awards Reception

Join us to recognize the outstanding achievements of institutions, individuals, and organizations across our membership. During this reception, we will honor our Business Partners for their annual support, including recognition of our prestigious Strategic Business Partner recipients; recognize those individuals completing research under the Center for Facilities Research; celebrate with those who receive the Pacesetter, Effective & Innovative Practices, and Rex Dillow awards; and present the prestigious President's Awards.

APPA's Closing Banquet

APPA's annual banquet allows us time together to celebrate a prosperous year. The evening is highlighted by the awarding of APPA's highest honors: the Meritorious Service Award and the Award for Excellence. The festivities also include a changing of the guard as we recognize our President from 2006-2007 and welcome the new officers who will lead us forward.

On behalf of APPA's Board of Directors, we wish to thank those who are responsible for bringing you the outstanding programming for APPA 2007.

Polly Pinney, APPA Vice President for Educational Programming, Arizona State University

Doug Christensen, Brigham Young University
Johnny Eaddy, San Diego State University
Michelle Estep-Frederick, American University
Wally Glasscock, Glasscock Development & Training
David Gray, Middle Tennessee State University
Jay Klingel, University of Virginia
Ruthann Manlet, University of Minnesota/Twin Cities
Shari Philpott, University of Colorado/Boulder
Terry Ruprecht, University of Illinois/Urbana-Champaign
Vickie Younger, Kansas State University

REGISTRATION

Advanced Rates:

Register by Monday, June 25, 2007

Member	$675
Non-Member	$875
Spouse/Guest*	$250
One-Day Registration	$225
One-Day Hall of Resources	$75

On-Site Rates:

After Monday, June 25, 2007

Member	$725
Non-Member	$925
Spouse/Guest*	$250
One-Day Registration	$225
One-Day Hall of Resources	$75

* Applies for individuals 16 years or older. If you will require passes for an individual under the age of 16 years, please contact APPA Education, suzanne@appa.org.

Full Meeting Registration—Member & Non-Member

Includes Educational Sessions, Hall of Resources, Opening and Closing Events, breakfast Sunday-Tuesday, lunch Sunday-Monday, Awards Reception, and Awards Banquet.

Full Meeting Registration—Spouse/Guest

Includes Hall of Resources, Opening and Closing Events, breakfast Sunday-Tuesday, lunch Sunday-Monday, Awards Reception, and Annual Banquet.

CONTACT INFORMATION

For assistance at any time during the registration process, please contact APPA Education:

Telephone: 703-684-1446

Fax: 703-549-2772

Email: suzanne@appa.org

APPA 2007
1643 Prince Street
Alexandria, VA 22314
Fax: 703-549-2772

BACK TO THE FUTURE

APPA 2007
JULY 15–17

REGISTER ON-LINE AT: WWW.APPA.ORG

HOTEL

APPA has secured special conference rates at the following hotels:

Radisson Hotel

20 W. Baltimore Street
Baltimore, MD 21201
www.radisson.com
For reservations please call 410-539-8400 or 800-333-3333.
Room Rate:
$149 per night + 12.5% tax (Single Occupancy)
$169 per night +12.5% tax (Double Occupancy)
Reservations are on a first-come, first-served basis.

Sheraton Hotel

101 W. Fayette Street
Baltimore, MD 21201
www.sheraton.com
For reservations please call 410-385-6700.
Room Rate:
$149 per night + 12.5% tax (Single Occupancy)
$169 per night +12.5% tax (Double Occupancy)
Reservations are on a first-come, first-served basis.
Please note: Regrettably, APPA cannot make your reservation for you.

AIR TRAVEL

Both conference hotels and the Convention Center can be reached by traveling to Baltimore/Washington International Airport (BWI). For more specific information on the Baltimore/Washington International Airport please visit www.bwiairport.com.

GROUND TRANSPORTATION

Taxi service is available from Baltimore/Washington International Airport at a one way rate of $23. For additional information, please call 410-859-1100.

The Airport Shuttle offers door to door reservation service covering the State of Maryland. For reservations and information, visit www.theairportshuttle.com or call 1-800-776-0323.

HALL OF RESOURCES

We invite you to participate in the largest gathering of educational facilities professionals in the country as APPA hosts its 2007 annual conference, designed specifically for the benefit of the educational facilities community.

Our exhibitors are an integral part of the learning experience, making this the conference of choice for educational facilities professionals. APPA 2007 offers plenty of opportunities to meet attendees and showcase your products and services.

Businesses attending APPA 2007 to date include:

2/90 Sign Systems
3D/I-Parsons
ABM Janitorial
Adams FM2
Advanced Technologies Group, Inc.
Applied Management Engineering, Inc.
ARCHIBUS, Inc.
Architectural Sign Associates
Avian Flyaway, Inc.
Ayers/Saint/Gross Architects & Planners
Barclay Water Management, Inc.
Bobrick Washroom Equipment, Inc.
Breeze Software
BRG Precision Products
Building Automation Institute
The Cadmus Group, Inc.
Carl Walker, Inc.
Carrier Rental Systems
Carrier Corporation
Centi Mark Corporation
Chevron Energy Solutions
ClimateCraft, Inc.
Club Car, Inc.
College Planning & Management
Compliance Environmental International, Inc.
Construction Owners Associaton of America, Inc.
Degussa CHEM-TRETE
Design Materials, Inc.
Diversified Woodcrafts, Inc.
The Dow Chemical Company
Dritherm International
DYK Incorporated
E & I Cooperative Purchasing
Eaton Corporation
Eclipse Lighting
Elevator Controls Corporation
EMG
Energy Systems Group
Entech Engineering, Inc.
Facility Engineering Associates, P.C.
Falcon Waterfree Technologies
FAMIS Software, Inc.
FiberTite Roofing Systems: Seaman Corporation
Gale Associates, Inc.
Gali Service Industries, Inc.
Gilbane Building Company
Good Steward Software
Grainger
Green Contracting Company, Inc.
HID Identity
The Home Depot Supply
Horizon Engineering Associates, LLP
Ingersoll Rand Security Technologies
Irwin Seating Company
ISES Corporation
Itron
ITW Alma
Jani King International
Johnson Controls, Inc.
JumpStart Wireless
Kaivac, Inc.
KAS Estimating Services, Inc.
Kenall Lighting
Lerch Bates, Inc.
Marcis & Associates, Inc.
Maximus, Inc.
McDonough Bolyard, Peck, Inc.
Motion Control Engineering
Munters MCS Division
Musco Lighting, LLC
Nalco Company
Natare Corporation
National Environmental Balancing Bureau
Onicon, Inc.
Onity, Inc.
Pro Tecs, LLC
R S Means
SaniGlaze International
SchoolDude.Com
Sebesta Blomberg
Siemens Building Technologies
Skire, Inc.
Sodexho
Solar Turbines, Inc.
SolarOne Solutions, LLC
Spartan Chemical Company
Spirotherm, Inc.
SSC Service Solutions
StageRight Corporation
Stanley Consultants
Stonhard
StoreRoom Solutions, Inc.
STV Architects
TAC
Technical Concepts
Tero Consulting Ltd.
Thermal Science Technologies
TMA Systems, LLC
TopChoice
Van Deusen & Associates—Elevator Consultants
Varsity Education Services, LLC
Victor Stanley, Inc.
Von Schrader Company
Webb Designs, Inc.
Western Construction Group
WFF Facility Servings
The Whiting-Turner Contracting Company
Williams Scotsman, Inc.
Wooster Products, Inc.

Don't be left out—reserve your space today: 703-684-1446

EXHIBIT HOURS

Saturday, July 14, 2007
7:00am – 5:00pm.....Set-up and Registration

Sunday, July 15, 2007
10:30am – 1:30pm.....Exhibit Hall Open

Monday, July 16, 2007
11:00am – 2:00pm.....Exhibit Hall Open

Tuesday, July 17, 2007
7:00am – 8:45am.....Exhibit Hall Open
8:45am .....Exhibit Hall Closed

EXHIBITOR PACKAGE

- 10' x 10' booth with pipe and drape
- Three (3) fully registered individuals
- Two (2) booth only personnel
- An ID sign
- 24 hour security
- Listing in the Preliminary Program
- Listing in *Facilities Manager* magazine
- Listing in the Final Program
- A listing of conference attendees

BOOTH FEES

APPA Members: $2,500 per 10' x 10' space
Non-Members: $3,800 per 10' x 10' space

Non-Members—Want to Save Money?

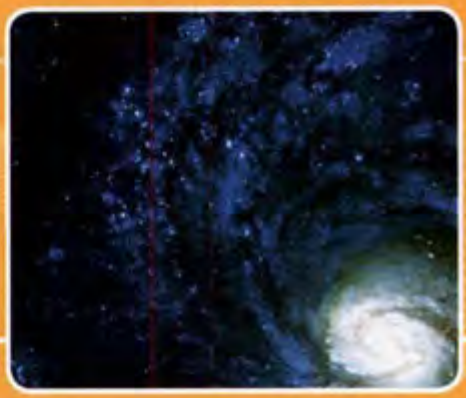
Contact APPA Membership and Outreach at 703-684-1446 ext. 232 or 227 for information on how to become a member.

Payment

Full payment is required before booth space is assigned. Payment must be made by check or credit card. Please make checks payable to APPA in U.S. funds.

Please contact:

Suzanne Healy
Director of Educational Programming
suzanne@appa.org
703-684-1446 ext. 233



SPONSORSHIP OPPORTUNITIES

Why Should You Sponsor?... Why Wouldn't You?!

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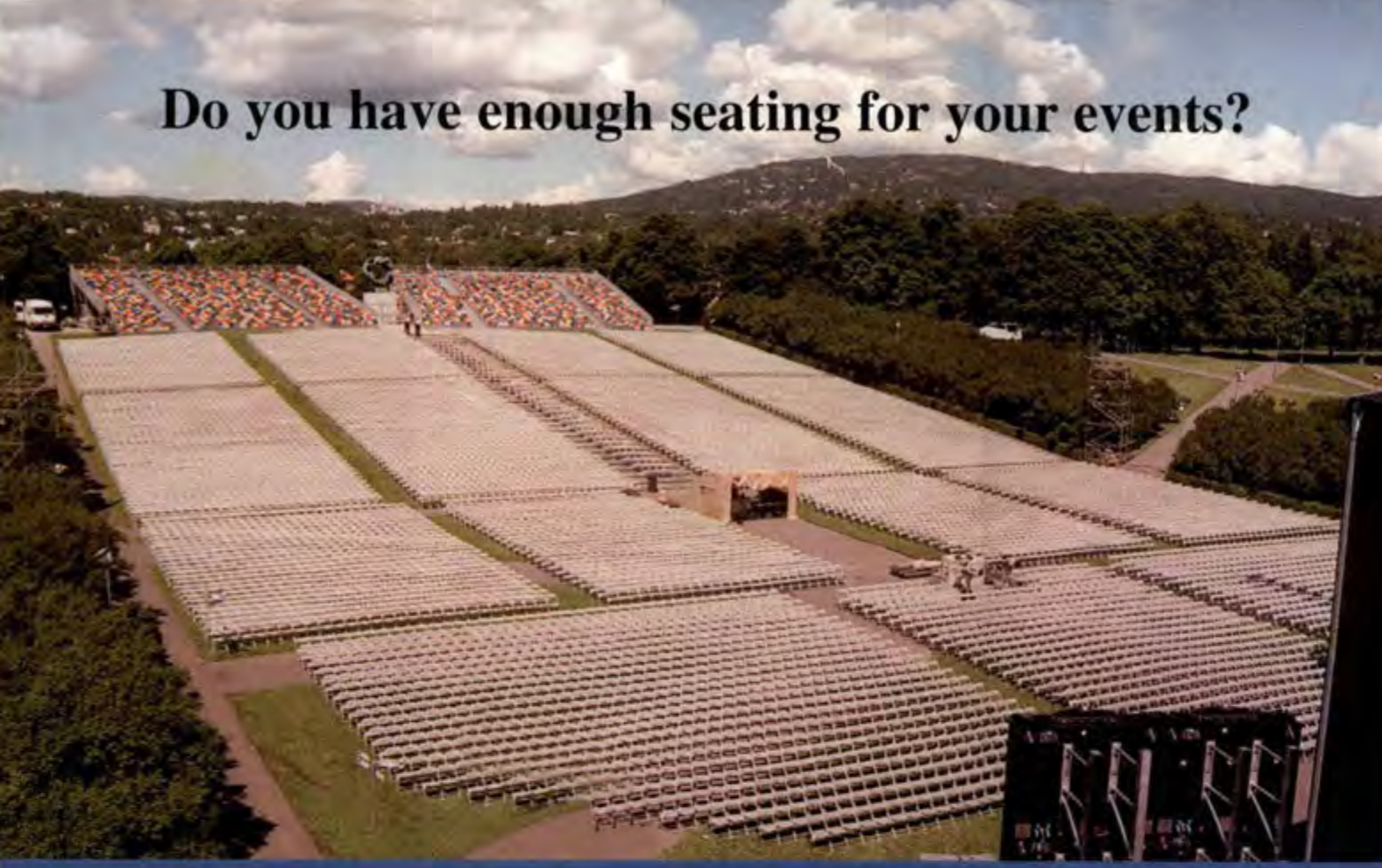

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Planning and Designing Off-Campus Facilities

by Luis Bernardo

Today it seems that more university officials, administrators, and facility managers are faced with the challenge of planning and designing more off-campus facilities. As urban universities become more competitive in how they attract and retain new students, some are turning to sites in surrounding communities to increase campus appeal and solve their facilities needs. These universities are increasingly seeking ways to connect the campus to the community, significantly benefiting both.

For an off-campus facility to succeed, the university must first answer the strategic questions that connect the facility to the college or university and also to the local community. Four important questions include:

- Where do the institution and the off-campus community find common ground?
- How does the site selected for the project link to the campus? How will it link to the local community?
- Sending students off-campus creates new security concerns for colleges and universities as well as for local communities where students now spend time. How will the project ensure their safety?
- What amenities will develop and enrich the project for both the students and community residents?

Officials at Johns Hopkins University (JHU) in Baltimore answered each of these questions during the development of an $80 million mixed-use off-campus project called Charles Commons, which opened last September in the Charles Village community, adjacent to the JHU main Homewood campus.

The 313,000 square foot complex spans a city block and reflects both the spirit and tradition of the Georgian style architecture that characterizes the main JHU campus, as well as the early 20th century style of architecture typical of Charles Village.

In developing Charles Commons, JHU used four strategies that can offer insights for other off-campus facilities.

Strategy 1: Make Sure the Community Benefits Too

To succeed, an off-campus facility must benefit both the college or university and the local neighborhood. The trick is to find a common ground and use it as a catalyst. Like many urban universities, JHU had essentially built out the available space for housing on its campus long ago. As a result, juniors and seniors typically find their own housing off campus.

JHU established a goal of developing better residential options for juniors and seniors. Specifically, a 2003 report from the University's Commission on Undergraduate Education (CUE) recommended that the University begin immediately to develop new residences at Homewood which would, over a period of 10 years, guarantee four years of housing to all arts & sciences and engineering undergraduates who wish to remain in undergraduate housing.

At the same time, the Charles Village community neighboring the JHU campus had begun seeking redevelopment options to help reverse the neighborhood's declining economic fortunes and rising crime rate.

***Luis Bernardo is a principal for the Design Collective, Baltimore, Maryland. He can be reached at luisbernardo@designcollective.com. This is his first article for* Facilities Manager.**

Charles Commons, which opened last fall, has a Barnes & Noble bookstore and café on the first two floors of the building. Other amenities for students and the public include additional retail shops and a dining hall.

The university hoped to build an off-campus student housing facility with more than 600 beds. The redevelopment initiatives of JHU, working with the community, led to the development of Charles Commons.

But common ground is just the catalyst. The result cannot simply be the student housing that the university needs. The community must receive something in return. Why? Students do not always make the best neighbors, but a well-conceived facility can compensate for that.

A mixed-use project can provide for student housing needs, while offering plenty of benefits to the community. The JHU project installed a 30,000-square-foot Barnes & Noble bookstore and café on the first two floors of the building. Other amenities for students and the public include additional retail shops and a dining hall.

The design also sought to invite the community to the facility with wide sidewalks and seating that spills outside from the café. Another part of the strategy for ensuring community benefits is to allow plenty of time between proposing a project, designing it, and breaking ground. Time enables the institution and the community to get to know each other by holding community meetings, sharing concepts and plans, and asking for advice. Both sides will eventually take ownership of the idea.

The community contributed to the JHU Charles Commons design in Charles Village. During informational meetings held during the design process, the architects solicited ideas from the community and adopted several suggestions. Charles Village residents suggested changing the color of the storefronts at the base of the building to delineate the entrances. They also suggested canopy treatments for the St. Paul Street entrance. The designers implemented both suggestions.

The design process begins the process of building relationships with the community. Site selection can take that process a step further.

Strategy 2: Use Site Selection to Link Campus and Community

Not every community in Baltimore needs a Barnes & Noble Bookstore and a university residence hall. Set in the wrong community, Charles Commons may not have worked. The same is true of site selection. The wrong site in the right community might lead to failure.

To succeed, an off-campus facility must benefit both the college or university and the local neighborhood. The trick is to find a common ground and use it as a catalyst.

A site that links the community and the school has the best chance of succeeding. To find such a site, it is important to recognize that an off-campus facility plays multiple roles. It plays a role in an institution's master plan. And, it plays a role in the city planner's concept of the neighborhood and the neighborhood's evolution over time. The roles must be compatible and not competitive. Student housing over street level retail may fit a building, while an arena or science lab might be entirely inappropriate.

Finally, select a site that maximizes view corridors to iconic buildings or entries on campus. Use color, materials and architectural design to reinforce the effect of axial relationships, street edges and public spaces.

The Charles Commons site fit JHU's needs. It sits directly across the street from a JHU classroom building. The build-

ing's main entrance features a large, two-story portico that makes a powerful connection to JHU's traditional campus architecture. At the same time, a secondary entrance on 33rd street encourages interaction with the neighborhood.

Dual towers that rise 10 and 12 stories above the street ensure that the structure has a mass and a height that blend with the neighborhood. A skywalk connects the two towers at the third floor and marks the dividing line between the lower floors that allow public access and the access-controlled secure entrance to the section of the building where the students reside.

Strategy 3: Match Security Provisions to the Facility and the Community

Moving students off campus always raises security concerns for college and university officials. On an urban campus, officials might worry about the potential for rising crime rates to spill over onto the neighboring campus. JHU officials believed that buying property and initiating redevelopment in Charles Village would improve the neighborhood and reduce the threat of campus crime.

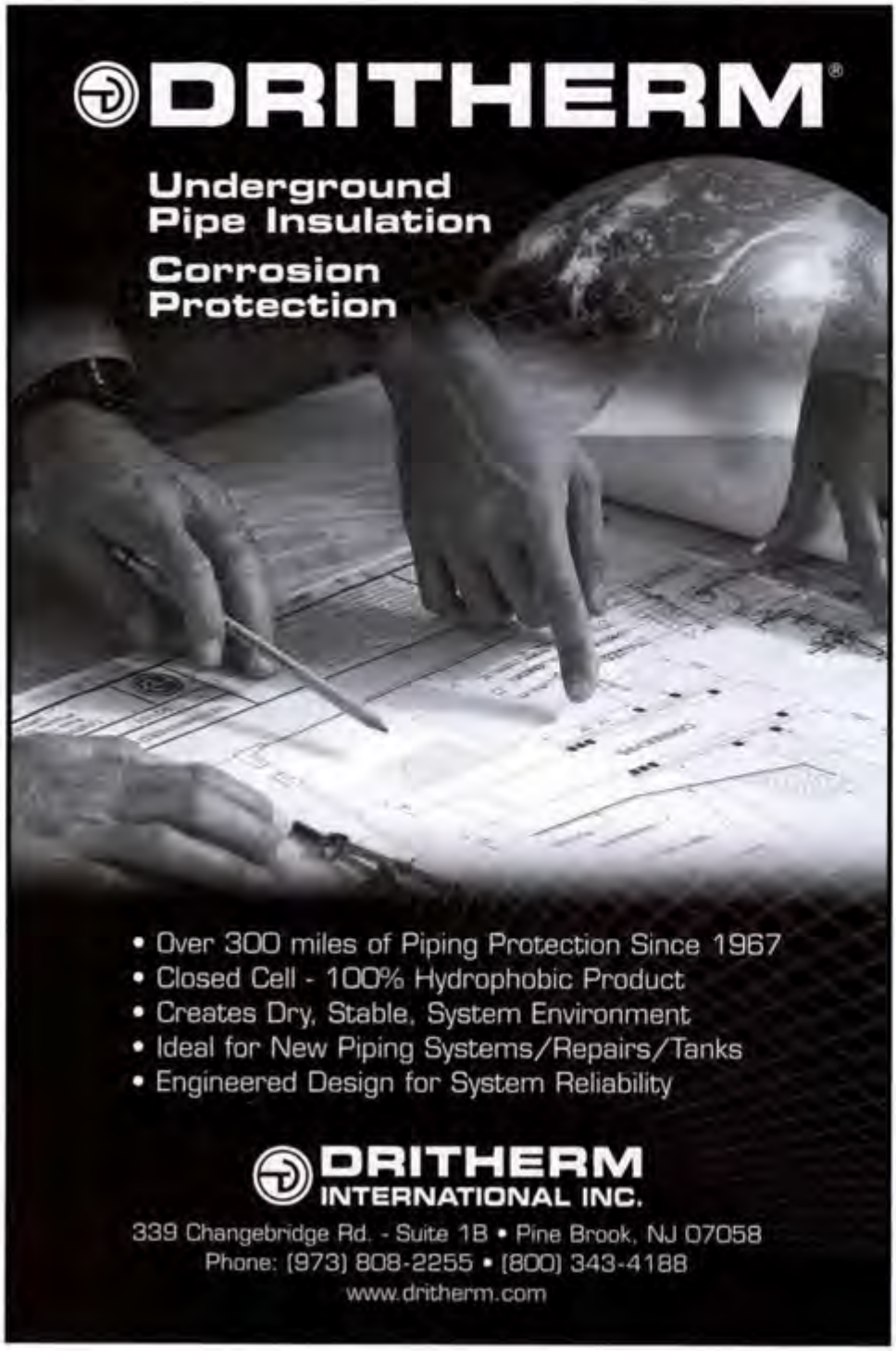
Off-campus student housing, of course, must provide all necessary security tools for students living in the facility. In a mixed-use building with retail downstairs and student apartments upstairs, members of the public may come and go as they please in public areas. Access to the residence floors of the building must be carefully controlled. At Charles Commons, a 24-hour guard observes those who enter the student living area. A modern access card system and turnstiles provide students a secure entrance. Security cameras scan hallways inside the security entrance as well.

Among the amenities for students in the secure residential section of the building are large study lounges. Designed into each floor, the lounges feature floor to ceiling glass allowing students to see out and the public to see in. At night, light from the lounges transforms the upper floor of the building into a shining beacon, illuminating the sidewalk and streetscape below and creating a more inviting, safer pedestrian environment. The overall effect is an appealing place—for students and the community—that draws people to enjoy and benefit from the amenities it offers.

Strategy 4: Take Advantage of the Richer Amenities Available Off Campus

Student housing projects typically have little common space. A classroom, lounge or small fitness center might round out many housing facilities. Off campus, more is possible—and desirable.

Why would people living in the community visit the facility? Why would students want to live there? Why would students from the main campus want to visit? To take advan-



At Charles Commons, a 24-hour guard observes those who enter the student living area. A modern access card system and turnstiles provide students a secure entrance. Security cameras scan hallways inside the security entrance as well.

tage of the amenities. Amenities attract people to facilities.

The retail bookstore—for students as well as members of the public—at Charles Commons has helped to re-invigorate a struggling retail corridor. The bookstore has also sparked other retail developments. The newly renovated corridor is proving attractive to students and residents alike.

Another example: The students needed additional dining options. The designers developed a facility that not only offered food court style dining for students, but was also open to the community. With the inclusion of pool tables, fireplaces, stages for live performances, and outdoor seating, this facility created more opportunities for the campus and community to interact.

A conference center in Charles Commons gives the university the ability to host special functions throughout the year, bringing visitors to the community to patronize other available restaurants and stores.

Results

These strategies have worked well with Charles Commons, leading to the consideration of more off-campus facilities at JHU. "This project (Charles Commons) is the beginning of that," says Larry Kilduff, executive director of facilities operations at JHU. He adds that Hopkins wants to create a safer place for students to live both on and off campus.

Safe and appealing communities alongside college campuses can be reawakened to new development through new campus housing and connections. The key is to form sound collaborations to tap into students' needs, because students ultimately drive partnerships between universities and the community.

"The wow-factor when students first moved in was pretty dramatic," says Paula Burger, JHU's dean of undergraduate education. "They knew it was very nice and above and beyond what is offered at many universities. With this building, students are getting more out of their overall Hopkins experience."

There's a wow-factor for the community as well, as Charles Commons contributes to the restoration of the retail economy and residential life in what was once—and may again be—a signature Baltimore community.

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Spring is here. Renewal and change are in the air, and APPA has new opportunities for our membership on the horizon. I am passionate about the opportunity before us. Three days focused on the future of our profession and institutions is a fitting follow-up to last summer's Campus of the Future (COTF), which was a splendid blend of three professional giants (APPA, NACUBO, and SCUP) in Hawaii.

Utilizing survey instruments and lessons learned from COTF, a dedicated team of your colleagues has crafted a new opportunity for our membership to gather and recharge this summer at APPA 2007: Back to the Future, in Baltimore, Maryland, July 15-17.

New Strategic Focus

APPA 2007 will feature best-of-breed speakers who will infuse our minds with creative and innovative thoughts about the future solutions to our most pressing issues in three key areas: energy strategies with a sustainability focus, workforce demographics, and emerging technologies. The enhanced framework will consist of a daily opening plenary and general session, followed by panel sessions and breakout sessions designed to provide practical tools and technologies to use on current and future projects on your campus.

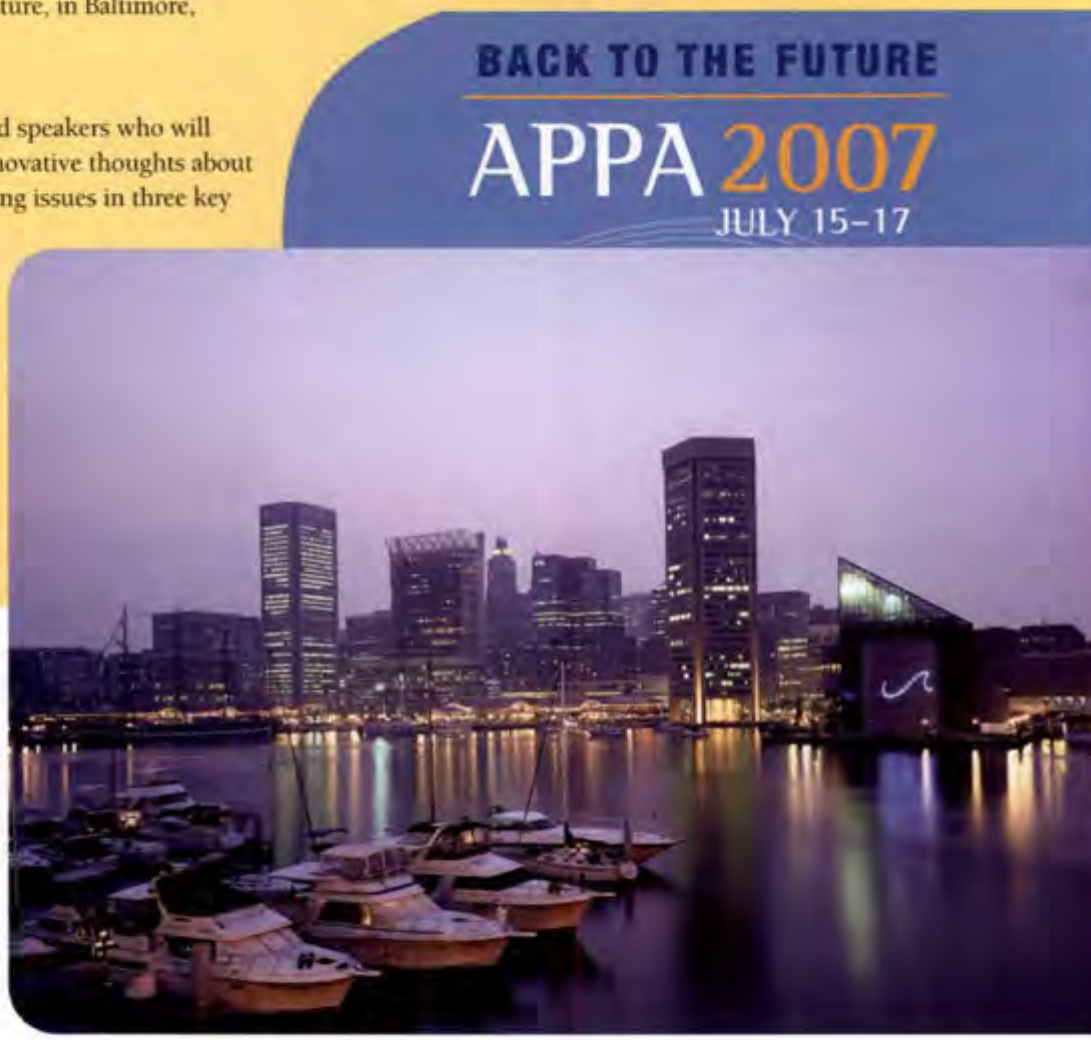
Day One

APPA 2007 will begin with our opening keynote speaker, John Glenn. The former senator and astronaut will speak to us on the Importance of Leaving the World a Better Place for Future Generations. The establishment of green campuses has become a high priority for all of us. David Orr of Oberlin College has been invited to lead a plenary on Sustainability and Energy Strategies in Totally Green Buildings. The session will be followed by panel sessions on Oil, Gas, Nuclear, and Coal as Energy Sources; the Business Case for Sustainable Practices; Institutional Collaboration for Sustainable Practices; and Organizations for a Sustainable Future.

Sunday's breakout sessions will feature speakers on the Student Sustainability Movement, Business Continuity, and Energy Audits.

Day Two

Significant challenges that will impact the future of our field include understanding, motivating, and collaborating with Generation X (Gen X) and the Millennial generations. Noted speaker Morris Massey, has been invited to present the Monday plenary. Author of *What You Are is Where You Were When, What You Are Is What You Choose…So Don't Screw It Up*, and numerous other books, articles, videos, and CDs, Massey will challenge us to address the issues of workforce demographics in our organizations.



Later that morning, panel sessions on Now to 2015—What Kind of Leaders Are We Fostering?, Intergenerational Values, Succession Planning, and an additional session by Massey will give us multiple perspectives on this important issue. The afternoon will bring us practical work sessions on Intergenerational Conflict Resolution, Diversity in Workforce Cultures, Recruiting Practices for Gen X and Millennials, and Modernizing our Workforce.

Day Three

The father of artificial intelligence, Ray Kurzweil has been invited to present the plenary session. Author of numerous books and scholarly journals including *The Age of Intelligent Machines, The Age of Spiritual Machines, Fantastic Voyage: Live*

***Polly Pinney is director of facilities management at Arizona State University, Tempe, Arizona and APPA's vice president for educational programs. She can be reached at polly.pinney@asu.edu. This is her first article for* Facilities Manager.**

Long Enough to Live Forever, and *The Singularity is Near, When Humans Transcend Biology*, Kurzweil has written four best-sellers and is the 1999 recipient of the National Medal of Technology, the United State's highest honor in technology.

The plenary will be followed by panels on Facilitating Future Communication Through Technology, Emerging Tools in the Learning Environment, Smart Buildings, and BIM/AIM for Integrated Decision Making. Our breakout sessions on this final day of APPA 2007 will include practical applications on Optimizing Field Communications, Architectural Design for Life Standards, and presentations on the Facilities Core Data Survey.

to help supervisors realize both personal and professional growth. You can either attend the Toolkit as a participant or begin the first-step to become a Qualified Toolkit Trainer. Toolkit topics include:

- Supervision, What Is It
- It's More Than Administrivia
- Communication, Let's Talk!
- If It Weren't for the People
- Motivation and Performance
- Customer Service Triangle
- Supervisors as Leaders
- Success, What Does It Take?

New Format, Strategic Focus for the Future of Educational Facility Management

by Polly Pinney

Baltimore, Maryland

The session Tuesday afternoon will give us opportunities for professional development. Topics to be covered include: Change; a summation of the APPA Thought Leaders Summit; CFAR projects; a report on the "nuggets" gathered from the new Senior Facility Officers (SFO) Summit conducted prior to APPA 2007; a report on the 21st Century Project by Association of College and University Housing Officers-International (ACUHO-I); a session on Presentation Skills for Executives; Regulatory and Legal Updates for the Facility Profession; and Legislating Stewardship by Rod Rose.

Google Chairman of the Executive Committee and CEO Dr. Eric Schmidt has been invited to present the closing plenary. Schmidt will use his 20-year record of achievement as an Internet strategist, entrepreneur and developer of great technologies to highlight best practices for the future.

Additional Focus Areas

This year, the popular Supervisor's Toolkit will be offered concurrently to APPA 2007. Specifically designed to meet the needs of the facilities management professional, the Toolkit is a structured, open-ended, and pragmatic approach designed

APPA's Strategic Business Partners, Business Partners and new exhibitors will bring top-notch information about the tools you need to operate an effective and efficient campus.

There will also be an offering of the APPA Educational Facilities Professional (EFP) credentialing preparatory course. The EFP credentialing program will recognize those up-and-coming professionals who have achieved a fundamental level of mastery in the field. How appropriate and exciting that the first preparatory course for the EFP credentialing will be Wednesday (July 18) immediately following APPA 2007. The EFP will be a universal

professional standard, officially recognizing the unique and substantial body of knowledge that exists in the educational facilities profession.

Conference Highlights

- **Welcome Party:** Hosted by Johnson Control will kick off what will prove to be an outstanding three days. Meet up with old friends and meet new colleagues.
- **Awards Reception:** This is a time when APPA recognizes the outstanding achievements of institutions, individuals, and organizations across our membership. Sunday evening we will honor our Business Partners for their annual support including recognition of our prestigious Strategic Business Partner recipients; acknowledge those individuals completing research for the Center for Facilities Research; celebrate with those who receive the Pacesetter, Effective & Innovative Practices, and Rex Dillow awards; and present the prestigious President's Awards.
- **Lab of the Future:** Back by popular demand is our interactive laboratory of the future, strategically located within the Hall of Resources. This lab will take you through the technology applications of today and well into innovations believed to be on the future horizon.
- **Run/Walk:** Join us on early Monday morning for the annual APPA Fun Run/Walk as we celebrate the 10-year anniversary of TMA's sponsorship and partnership of this 5K event.

The interactive laboratory of the future will take you through the technology applications of today and well into innovations believed to be on the future horizon.

- **Awards Banquet:** Celebrate with us Monday evening as we congratulate President Chris Ahoy on an outstanding year of service to APPA and witness the changing of the guard. We will also bestow the honor of APPA's highest awards of Meritorious Service and Awards for Excellence during the festivities.
- **Hall of Resources:** The conference will feature the largest gathering of educational facilities professionals in the country. APPA's Strategic Business Partners, Business Partners and new exhibitors will bring top-notch information about the tools you need to operate an effective and efficient campus.
- **APPA Bookstore:** Located onsite at APPA 2007, you will have the opportunity to purchase the latest publications in the field facilities management and much more. Special conference pricing will be available to all with an extra 10 percent discount given to all first time attendees. Stop in between sessions so you don't miss out on the latest releases including, *Buildings…the Gifts That Keep on Taking* by Rodney Rose and *Leadership in Educational Facilities Administration* by APPA President Chris Ahoy.

We look forward to this opportunity and hope to see each and every member July 15-17 in Baltimore. Join us at APPA 2007 and take advantage of the opportunity to launch yourselves Back to the Future and gain the essential tools to bolster our skills and prepare your institution for the next generation of facility management practices.

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APPA's Information and Research Committee has worked diligently to create a quality tool, the Facilities Core Data Survey, to help our membership focus on the data points that can be indicators of a quality organization. This data collection effort and the resulting Web-based *Facilities Performance Indicators* reports and dashboard indicators help improve our members' competency, credibility, and ability to converse compellingly with campus decision makers. The committee continues to improve the thought process and the focus of the survey and introduces a new way of looking at our Needs Index that makes the indicator more strategic and much more compelling.

How many times have you heard campus decision makers comment that the Capital Renewal and Deferred Maintenance (CRDM) problem is just too large to deal with? It makes more sense to come to the table not only with a picture of the entire need, but also a picture of the need most critical to the organization; hence a proposal to introduce the concept of Mission Centered Asset Management Plan (MCAMP).

Mission-Centered Asset Management

by Harry Singh and Maggie Kinnaman

An MCAMP is required to ensure expenditure of scarce resources through the use of a decision-support tool called the Mission Dependency Index (MDI). MDI is a performance metric that streamlines the process of determining project funding priorities based on mission criticality. It helps with investing funds where they are most needed to support mission critical functions. It is aligned with the Facility Condition Index (FCI), Needs Index (NI), and the metrics of the Strategic Financial Perspective of APPA's Facilities Core Data Survey. The facility needs are related with their relative importance to the mission, instead of being based solely on condition, which helps in assessing facilities' performance from a mission criticality point of view.

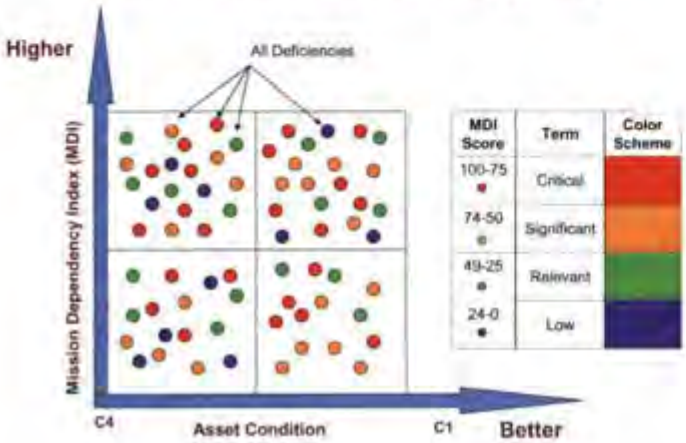
Historically, the conditions of facilities have been determined through continuous condition assessments. These assessments provide a source for identifying the exist-

Harry Singh is a project director for Woolpert, Inc., Arlington, Virginia; he can be reached at harry.singh@woolpert.com. This is his first article for* Facilities Manager. *Maggie Kinnaman is director of business administration, division of facilities management, for the University of Maryland, Baltimore. She can be reached at mkinnaman@af.umaryland.edu.

ing physical condition and functional performance of buildings and infrastructure as well as their maintenance deficiencies, also called deferred maintenance, or backlog of maintenance and repair. From the information gathered, a Facility Condition Index is calculated by dividing the cost of repairing all of these deficiencies with the Current Replacement Value (CRV). All deficiencies are assigned the same weight value, irrespective of their relationship to the organization's mission. A maintenance action plan is developed as shown in Figure 1.

Figure 1.

Maintenance Action Plan (As-Is)



The reality is that only a small amount of these deficiencies are funded on a regular basis. As a result, the backlog of maintenance and repair continues to grow instead of going down. Therefore, a prioritized Mission Centered Asset Management Plan is needed to ensure mission critical deficiencies are addressed in a timely manner. The most important metrics of the Facilities Core Data Survey's Strategic Financial Perspective are FCI and NI. FCI is expressed as a ratio of the cost of remedying all maintenance deficiencies to the current replacement value (CRV).

Equation:

$$FCI = \frac{\text{Deferred Maintenance Deficiencies (\$)}}{\text{Current Replacement Value (CRV)}}$$

This calculation also provides a corresponding rule of thumb for the annual reinvestment rate (funding percentage) of deferred maintenance deficiencies. The Needs Index is expressed as a ratio between the sum of Capital Renewal, DM, Plant Adaptation, and Renovation and Modernization, divided by CRV. NI is an indicator that determines the overall condition of the campus, which is an indicator of how well the physical space supports the academic program. It is influenced by resource availability and utilization.

Equation:

$$NI = \frac{\text{Capital Renewal + Deferred Maintenance + Plant Adaptability + Renovation/Modernization (\$)}}{\text{Current Replacement Value (CRV)}}$$

As reported in APPA's 2004-05 FPI report, the average Needs Index for private institutions is approximately 13.9 percent; for public institutions, 19.5 percent; for all institutions, a startling 18.3 percent. This indicates that on average, 18.3 percent of our campus buildings and infrastructure do not appropriately support our academic missions, creating an incredible opportunity.

Linking Facilities Condition with Mission Criticality

As stated above, the Needs Index is the indicator that highlights the overall condition of the campus as influenced by resource availability and utilization. But in today's funding environment, there will never be enough funding to repair all the deficiencies. Therefore, an alignment of deficiencies with the mission is needed to ensure proper expenditure of scarce resources to fix what is most essential in meeting the mission. This is accomplished by linking the condition with its mission criticality using MDI, calculated as a numerical number from 0-100, determined through various levels of surveys. The three levels of surveys are shown in Figure 2 (on page 40) and defined below.

Level 1 - (Modeling): This is a knowledge-based level that utilizes the existing information/knowledge about the mission of various functions at a campus. Modeling provides sufficient information for programming and budgeting at a high level. It relies on the knowledge of the operators and available databases to assign a rating of mission criticality and condition as defined below.

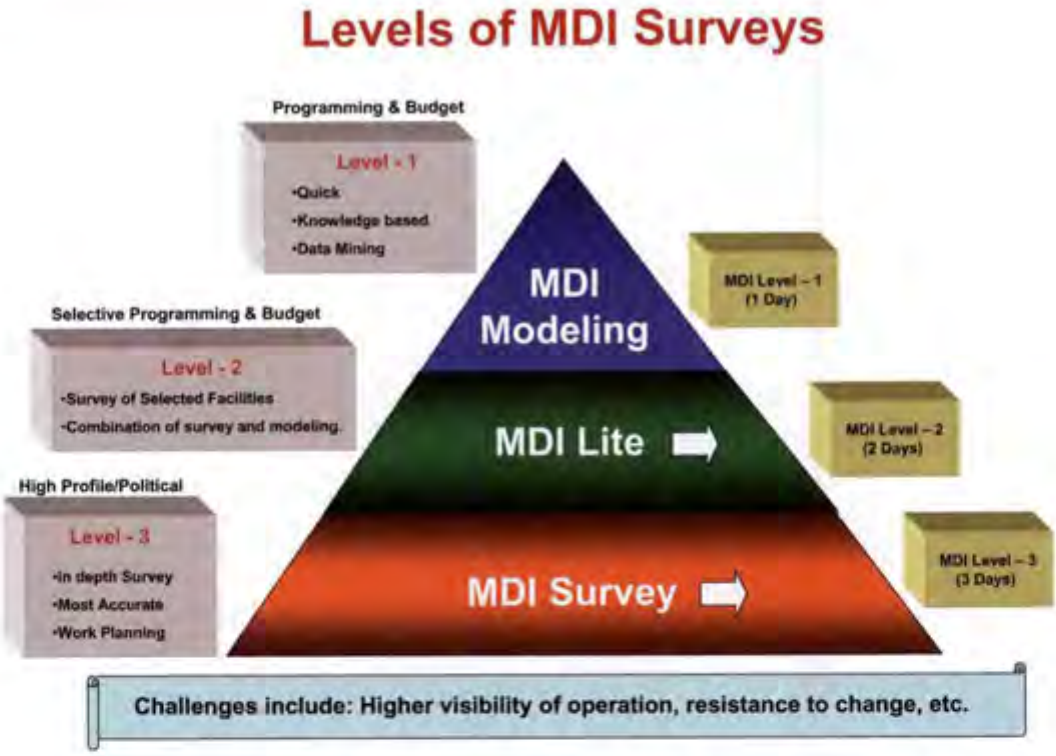
Criteria for Levels of Mission Criticality

- **M1 (Highly Mission Critical, Score 75-100):** Failure to fix the deficiency will significantly contribute to major interference or total loss of assigned mission capability and could cause catastrophic damage.
- **M2 (Significantly Mission Critical, Score 50-74):** Failure to fix the deficiency will significantly contribute to interference or partial loss of assigned mission capability and could cause further damage.
- **M3 (Critical, Score 25-49):** Failure to fix the deficiency will contribute to interference or some loss of assigned mission capability and could cause some damage.
- **M4 (Not Critical, Score 0-24):** Failure to fix the deficiency will contribute little loss of assigned mission capability and could cause minimal damage.

Criteria for Levels of Condition

- **C1 - Excellent.** Only minor deficiencies with negligible impact on capability to perform required functions.

Figure 2.



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- **C2 – Good.** Some deficiencies with limited impact on capability to perform required functions.
- **C3 – Fair.** Significant deficiencies that prevent performing some required functions.
- **C4 – Poor.** Major deficiencies that preclude satisfactory functions accomplishments.

Level – 2 (MDI Lite): This level focuses on surveying 20-30 percent of the most critical buildings on campus, such as medicine, nursing and pharmacy. These surveys utilize formal interviews with the representatives of specific professional schools. It provides information on the most mission-critical schools at the campus and raises the level of programming and budget accuracy. For the rest of the inventory, the criteria from level one are used to calculate the MDI ratings.

Level – 3 (MDI Survey): This survey uses the operational risk management techniques of probability and severity and applies them to facilities in terms

Figure 3.

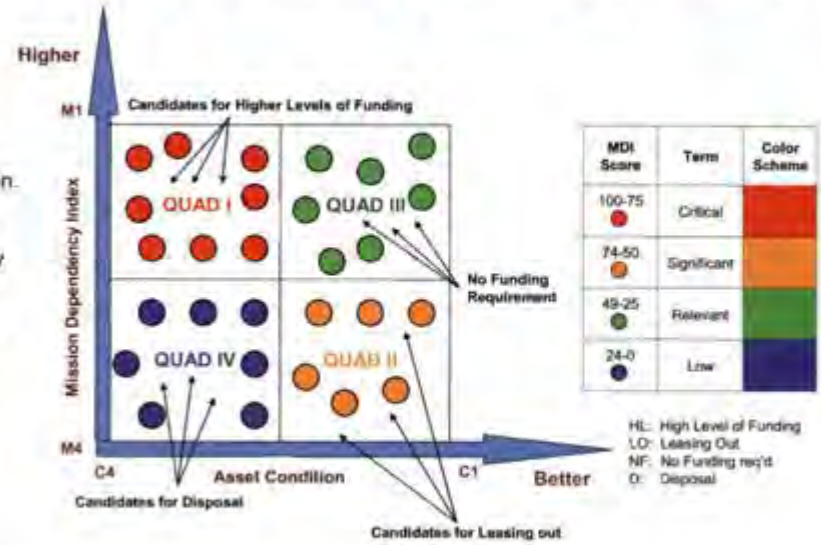
Mission Centered Asset Management Plan

Quadrant: I: Candidates for higher levels of funding. These assets are highly mission critical and are in bad condition.

Quadrant II: Candidates for leasing out if there are enough of these types of assets. These assets have low mission criticality and they are in good condition.

Quadrant III: Candidates do not require any funding because they are in good condition and are highly mission-critical.

Quadrant IV: Candidates for disposal because they have low mission criticality and they are in bad condition.



of ability to sustain interruption, relocation, and replacement of functions. It also takes into account mission dependencies residing within an organization and between other organizations, through structured interviews with the institution's representatives of individual units that cover a finite geographical area. Based on the answers, mission criticality values of MDI are calculated using an algorithm. They are then mapped against the condition or deficiencies to generate a mission centered funding plan. The idea is to fund those deficiencies first that are highly mission critical and are in bad condition and then fund those that are in relatively bad condition and less mission critical. MDI is applied at all levels of the facility, building, system, and component and is a driver for prioritizing projects. The MDI can also be applied to facilities at a portfolio level.

MDI was developed in the Navy's military environment to assist the "war fighter" in prioritizing its highly mission-critical functions including, antiterrorism and force protection (AT/FP) issues. For the academic environment, levels 1 and 2 can be equally effective.

The MDI is a decision support metric that helps to relate condition of facilities with the importance of the mission of the facility. The condition of the facility is determined through continuous inspections. However, criteria for the condition levels highlighted above can be utilized for mapping with the mission criticality. Based on these criteria and actual surveys, a prioritized MCAMP can be

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developed based on the importance of the deficiency as it relates to the institution's core business as shown in Figure 3.

Figure 3 describes that each deficiency does not carry the same weight value and priority when it comes to funding decisions. For example, deficiencies in Quadrant I require the highest levels of funding and should receive the highest priority, because they directly affect the accomplishment of the core business. The deficiencies in Quadrant II and IV can guide decisions to generate income to fund some of the deficiencies in Quadrant I. The deficiencies in Quadrant III do not require any funding.

A prototype to validate the concept was tested by inserting actual information at one of the campuses as shown in Figure 4 (pages 44 and 45), which highlights application of the MDI filter. The overall NI is 36 percent, whereas the NI for the most mission-critical buildings goes up to 62 percent. The alignment of the condition with the mission requires funding, shown in red, due to their higher mission criticality. Those requiring relatively smaller amounts of funding for facilities are shown in orange, green, and blue. The analysis also highlights those facilities that are least mission-critical and those that are in relatively bad condition. These could be considered for disposal or leasing, thereby reducing overall cost of ownership.

Final Implications

The Mission Dependency Index was refined and implemented by Coast Guard and NASA. GSA is also considering its use. The MDI's true power is that it is straightforward and eloquent in its simplicity. By linking facilities to the core business of the institution, MDI scores simply communicate a critical and heretofore missing detail in infrastructure-related decision making. MDI is currently being deployed worldwide at U.S. Naval installations, all U.S. Coast Guard installations, and at 11 NASA Centers.

Implementing the MDI in educational facilities would give APPA members a new tool to more compellingly present the overall picture of the campus need while also demonstrating a keen understanding of the realities, finite resources and competing interests. The MDI helps to focus the institution's scarce resources on the greatest academic need. It also helps the institution demonstrate its commitment to frontline services first: education, research and community service. After all, an institution cannot say it strives for excellence when the realities point to a mission-critical facility with an NI of 62 percent.

Facility managers have the information at their fingertips to help paint the real picture of need and collaborate with the affected academic arm of the institution to strategically influence the outcome. Use of the MDI can truly help our members become more credible partners at the campus decision-making table.

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Needs Index Sorted by Mission Dependency and Condition Codes

Updated: September 18, 2006

Figure 4

BUILDING	YEAR BUILT	LAST RENO	GSF	RENO GSF	AGING FACTOR	CRDM BACKLOG	CRDM BKLG/INFR	COST GSF	CRV	CRV w/ INFR	COND CODE	MISSION CODE	Quad No.
Building 1	1920	1992	33,009	$135	52%	$2,317,232	$2,458,815	$180	$5,941,620	$7,427,025	C3	M1	I
Building 2	1976	1976	334,571	$263	100%	$87,824,888	$93,190,988	$350	$117,099,850	$146,374,813	C3	M1	I
Building 3	1978	1978	314,158	$263	100%	$82,466,475	$87,505,177	$350	$109,955,300	$137,444,125	C3	M1	I
Building 4	1970	1970	67,283	$203	100%	$13,624,808	$14,457,283	$270	$18,166,410	$22,708,013	C3	M1	I
Building 5	1982	1982	103,166	$263	92%	$24,914,589	$26,436,870	$350	$36,108,100	$45,135,125	C3	M1	I
Building 6	1983	1983	72,176	$169	88%	$10,718,136	$11,373,014	$225	$16,239,600	$20,299,500	C3	M1	I
											62.00%	Needs	
Building 7	1993	1993	84,391	$193	48%	$7,807,855	$8,284,915	$257	$21,688,487	$27,110,609	C2	M1	III
Building 8	1993	1993	56,759	$263	48%	$7,151,634	$7,588,599	$350	$19,865,650	$24,832,063	C2	M1	III
Building 9	1959	1998	232,384	$263	28%	$17,080,224	$18,123,826	$350	$81,334,400	$101,668,000	C2	M1	III
Building 10	1968	1968	8,096	$135	100%	$1,092,960	$1,159,740	$180	$1,457,280	$1,821,600	C2	M1	III
Building 11	1995	1995	214,946	$263	40%	$22,569,330	$23,948,318	$350	$75,231,100	$94,038,875	C1	M1	III
Building 112	2003	2003	191,572	$263	8%	$4,023,012	$4,268,818	$350	$67,050,200	$83,812,750	C1	M1	III
Building 13	2006	2006	322,000	$263	0%	$0	$0	$350	$112,700,000	$140,875,000	C1	M1	III
Building 14	1998	1998	15,621	$169	28%	$738,092	$783,190	$225	$3,514,725	$4,393,406	C1	M1	III
Building 15	2002	2002	256,353	$135	12%	$4,152,919	$4,406,662	$180	$46,143,540	$57,679,425	C1	M1	III
Building 16	1998	1998	151,824	$203	28%	$8,608,421	$9,134,395	$270	$40,992,480	$51,240,600	C1	M1	III
Building 17	1932	1972	22,704	$169	100%	$3,831,300	$4,065,392	$225	$5,108,400	$6,385,500	C4	M2	I
Building 18	1900	1985	75,513	$135	80%	$8,155,404	$8,653,699	$180	$13,592,340	$16,990,425	C3	M2	I
Building 19	1990	2005	3,779	$135	0%	$0	$0	$180	$680,220	$850,275	C1	M2	
Building 20	1995	2000	6,912	$135	20%	$186,624	$198,027	$180	$1,244,160	$1,555,200	C2	M3	IV
Building 21	1993	1993	16,828	$203	48%	$1,635,682	$1,735,622	$270	$4,543,560	$5,679,450	C1	M3	IV
Building 22	1840	2000	18,528	$135	50%	$1,250,640	$1,327,054	$180	$3,335,040	$4,168,800	C3	M4	IV
Building 23	1878	1991	9,028	$450	56%	$2,275,056	$2,414,062	$600	$5,416,800	$6,771,000	C2	M4	IV
Building 24	1998	1998	175,961	$169	28%	$8,314,157	$8,822,152	$225	$39,591,225	$49,489,031	C1	M4	IV
Building 25	2004	2004	7,838	$135	4%	$42,325	$44,911	$180	$1,410,840	$1,763,550	C1	M4	IV
Building 26	2004	2004	98,901	$135	4%	$534,065	$566,697	$180	$17,802,180	$22,252,725	C1	M4	IV
Building 27	1970	1983	301,181	$263	88%	$69,572,811	$73,823,710	$350	$105,413,350	$131,766,688	C4	M5	IV
Building 28	1894	1970	46,850	$193	100%	$9,030,338	$9,582,091	$257	$12,040,450	$15,050,563	C4	M5	IV
Building 29	1950	1950	10,600	$135	100%	$1,431,000	$1,518,434	$180	$1,908,000	$2,385,000	C4	M5	IV
Building 30	1950	1950	10,000	$135	100%	$1,350,000	$1,432,485	$180	$1,800,000	$2,250,000	C4	M5	IV
Building 31	1950	1950	3,051	$135	100%	$411,885	$437,051	$180	$549,180	$686,475	C4	M5	IV
Building 32	1950	1950	2,840	$135	100%	$383,400	$406,826	$180	$511,200	$639,000	C4	M5	IV
Building 33	1950	1950	2,840	$135	100%	$383,400	$406,826	$180	$511,200	$639,000	C4	M5	IV
Building 34	1950	1950	10,830	$135	100%	$1,462,050	$1,551,381	$180	$1,949,400	$2,436,750	C4	M5	IV
Building 35	1950	1950	6,980	$135	100%	$942,300	$999,875	$180	$1,256,400	$1,570,500	C4	M5	IV

BUILDING	YEAR BUILT	LAST RENO	GSF	RENO GSF	AGING FACTOR	CRDM BACKLOG	CRDM BKLG/INFR	COST GSF	CRV	CRV w/ INFR	COND CODE	MISSION CODE	Quad No.
Building 36	1900	1900	25,172	$135	100%	$3,398,220	$3,605,851	$180	$4,530,960	$5,663,700	C4	M5	IV
Building 37	1950	1950	3,061	$135	100%	$413,235	$438,484	$180	$550,980	$688,725	C4	M5	IV
Building 38	1950	1950	2,973	$135	100%	$401,355	$425,878	$180	$535,140	$668,925	C4	M5	IV
Building 39	1950	1950	2,938	$135	100%	$396,630	$420,864	$180	$528,840	$661,050	C4	M5	IV
Building 40	1950	1950	4,028	$135	100%	$543,780	$577,005	$180	$725,040	$906,300	C4	M5	IV
Building 41	1950	1950	4,929	$135	100%	$665,415	$706,072	$180	$887,220	$1,109,025	C4	M5	IV
Building 42	1950	1950	5,000	$135	100%	$675,000	$716,243	$180	$900,000	$1,125,000	C4	M5	IV
Building 43	1950	1950	5,000	$135	100%	$675,000	$716,243	$180	$900,000	$1,125,000	C4	M5	IV
Building 44	1981	1981	26,177	$135	100%	$3,533,895	$3,749,816	$180	$4,711,860	$5,889,825	C4	M5	IV
Building 45	1960	1985	80,727	$135	80%	$8,718,516	$9,251,217	$180	$14,530,860	$18,163,575	C4	M5	IV
Building 46		1980	4,132	$135	100%	$557,820	$591,903	$180	$743,760	$929,700	C3	M5	IV
Building 47	1950	1950	6,844	$135	100%	$923,940	$980,393	$180	$1,231,920	$1,539,900	C3	M5	IV
Building 48	1812	1983	19,490	$450	88%	$7,718,040	$8,189,612	$600	$11,694,000	$14,617,500	C3	M5	IV
Building 49	1884	1972	7,277	$135	100%	$982,395	$1,042,419	$180	$1,309,860	$1,637,325	C3	M5	IV
Building 50	1984	1984	1,882	$263	84%	$414,981	$472,101	$350	$658,700	$823,375	C3	M5	IV
Building 51	1990	1990	36,806	$135	60%	$2,981,286	$3,163,443	$180	$6,625,080	$8,281,350	C2	M5	III
Building 52	<1900	1998	800	$135	28%	$30,240	$32,088	$180	$144,000	$180,000	C1	M5	III
					Subtotal	$439,312,759			$1,043,360,907				
Infrastructure	1900	1972			100%	**$27,500,000**			$260,840,227				
TOTAL			3,526,709			**$466,812,759**	**$466,186,533**		**$1,304,201,134**	**$1,304,201,134**			
						0.36	**Needs Index**						

Note: School Backlog is inflated 6.11% for infrastructure, CRV inflated 25% for infrastructure

Current Replacement Key

Classroom/Admin	$180
Hi-Tech Admin	$225
Admin/Research	$270
Research	$350
Historic	$600

Renovation costs are generally 75% of construction costs

LEGEND:

Quad I	High Mission Dependency (M1) and Lower Levels of Condition - Higher Levels of Funding Required
Quad II	High Mission Dependency (M1) and Good Condition - No Funding Required
Quad III	Medium Level of Mission Dependency (M2) and Good Condition - Funding required for Repairs & Replacements
Quad IV	Lower Levels of Mission Dependency (M3, M4, M5) and Lower Levels of Condition (C3) - Candidates for Disposal

The Hidden Costs of Campus Recycling

by Robert G. Brooks, P.E.

I review quite a few Request-for-Proposals (RFPs). These RFPs are not limited to the higher education community, but all state, local, county, and federal solicitations as well. I recently saw one from a small city that was truly unique.

The Public Works (PW) Department was issuing the RFP for someone to put up, take down, and store the city-owned Christmas decorations. At first, I thought how odd is this project? The city was small, so how much work could it be? Then I thought this was sort of wasteful; why not get the staff do it? It might even help get everyone in the mood of the season.

When I thought about it, the brilliance of the PW director hit me. The PW director wanted everyone to know there is a cost to decorating for the holidays, which includes:

- Buying and assembling decorations.
- Acquiring and managing the use of assistant tools, such as ladders and bucket trucks.
- Commissioning of electricians, landscapers and other laborers to do the work.
- Scheduling police support to direct traffic, as vehicles and pedestrians will need to be re-routed from the work area.

After the season is over, the city will have to repeat the whole process to take down and store the decorations in an out-of-the way place until the following holiday season.

Bob Brooks is a founding member and past president of Applied Management Engineering, Inc. He is also a past faculty member of APPA's Institute for Facilities Management and currently serves on the Advisory Council of APPA's Center for Facilities Research (CFaR). He can be reached at bob@ameinc.biz.

So, what does all this work have to with PW maintenance? The PW director demonstrated that when city council approves a plan to do anything, even something as seemingly small as decorating the city, there is a cost to the city, and planning should consider that in annual budgets.

Implications for Higher Education

With the various holidays, university programs, and student events—many of which may "pop up," the seemingly minor tasks of hanging building posters or setting seasonal displays across campus can end in a large unplanned price tag. I see these types of issues discussed on the APPAInfo Discussion List, specifically with campus recycling programs.

Students and faculty are all ready to start a recycling program, but ask who will monitor the collection, separate recycling items (paper, from plastic, etc.) filter non-recyclable materials, and transport materials to recycle stations? More importantly, what costs will be incurred in doing this? When students, faculty, and department heads are not jumping up to volunteer, the most common solution may be to incorporate those tasks as part of the custodians' daily duties.

The handling of materials is at the heart of the cost of everything we purchase, own, or consume. For example, the oil in the ground is free, but costs start to accumulate when you have to "handle it" out of the ground. Then you have to "handle it" to the refinery; "handle it" to the distributors, who then "handle it" to the retailers. You can be sure that if you had home delivery of gasoline, it would cost more than you driving over and pumping it yourself. Handling materials, even for recycling, is no different.

In terms of the campus recycling program, this sometimes starts innocently enough. The logic is: Custodians have to carry out the trash anyhow, right? So coordinators place separate containers, and have the custodians frequently double-check the contents to separate paper, from glass, from plastic and then separate paper: cardboard from white, from colored paper. Depending on how much your university recycles, left-

> ...the handling of materials is at the heart of the cost of everything we purchase, own, or consume.

over building materials may need to be recycled—the wood from the drywall; the copper from the steel; paper from the plastic, etc.

Also, the removal of all of these materials needs to be in accordance with local, state, EPA, and federal guidelines. If this always falls to the custodians, when are they going to have time to provide the necessary custodial services they were hired to do? In short, something has to give.

Continued on page 48

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Continued from page 46

In terms of costs, as everyone in the APPA community knows full well, the cost per square foot of custodial services is one of the most commonly quoted and reported of all facility benchmarks. A few pennies per square foot either way can cause eyebrows to raise and the telephone to ring. The presumption is that an institution with custodial costs at $.86 per square foot, is better than the institution getting them for $1.10 PSF. Of course, we really can't be sure unless consistent APPA cleaning levels are achieved, and whether they both have equally ambitious recycling programs. (See *Custodial Staffing Guidelines*, and *Facilities Performance Indicators*, both APPA publications).

Contracting out the recycling program is at least one way to identify the true costs of the collection effort. A scope that defines a level of effort, frequency, applicable laws, etc. would help keep the costs in proper perspective. If after a few years of contracted services, the institution may decide that the program could be returned to in-house forces with new funding the same money could be programmed for overtime for the in-house landscapers, custodians, etc.

The University of Oregon uses the fully electronic Tiger Star truck to lessen its recycling loads. The truck costs about $300 to maintain per year compared to the $1,400 it costs to maintain the traditional step van.

In 2004, the University of Oregon (UO) Campus Recycling Program purchased a fully electric truck to help the program collect recycling and compost material on campus and at events. The Tiger Star—smaller than the traditional step van UO Facilities Services uses—is able to carry 1,200 pounds on its truck bed and is used for handling recycled paper, cans, bottles, compost, and events recycling material. The university recycles more than 1,200 tons a year.

The truck has been effective in managing recycling at campus events and assisting in gathering recyclable items on campus. Also, the truck costs about $300 to maintain per year compared to the $1,400 it costs to maintain the traditional step van.

The University of Missouri-Columbia (UM) recycles about 1,900 tons of trash each year, including paper, cardboard, beverage containers, and other items such as ink/toner cartridges, batteries, and electronics.

Steve Burdic, UM solid waste and recycling coordinator, says the school currently recycles about 25 percent of its solid waste. The university plans to increase its indoor beverage container and paper recycling by providing cardboard trays and recycling containers in common areas of academic buildings.

Burdic says people will be asked to sort their materials into the common area containers which should free custodians to remove the materials from the building. Custodians are currently not participating in the program.

"All forces need to come together to make these things happen—administration, custodians, solid waste managers, faculty and students. Any of these groups can start the process, says Burdic. "If there is nothing going on I would suggest recruiting students to ask for recycling opportunities and solid waste managers to support reductions in solid waste costs."

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"If there is nothing going on I would suggest recruiting students to ask for recycling opportunities and solid waste managers to support reductions in solid waste costs." Steve Burdic, UM solid waste and recycling coordinator.

Here is an overview of recycling management and costs at UM:

- The school has used the same private recycling group for the last 20 years—a service that was initially free, now cost about $25,000 per year. The recycling group picks up 1.3 million pounds of mixed paper including white and colored paper, newsprint, and phone books and about 800,000 pounds of cardboard.
- The city of Columbia picks up about 150,000 pounds of cardboard per year at no cost. This is part of the normal service they provide to commercial customers.
- Several groups on campus, like Printing Services and Records Management arrange their own paper pickup. Normally paper is picked up for free and represents about one million pounds per year.
- UM recycled about 19 tons of mixed beverage containers at home football games this year. Transportation was provided by the city; the school's Landscape Services provided logistical support like drivers and pickup trucks. Anheuser Busch and the local solid waste management district provided recycling bins and bags. A student group, Sustain Mizzou, provided the volunteer labor to hand out bags and pick up materials.
- Several years ago, student fees were tapped to purchase 110 sidewalk recycling containers that are placed in high traffic areas around campus. They are serviced under the contract with the city that also handles solid waste. This costs about $2,000 per year.

Future versions of APPA's Facility Performance Indicators (FPI) should examine how colleges and universities monitor the per square-foot costs of recycling. It is an undeniable part of maintenance and operational costs, but it is buried within job categories so the actual costs are lost. The recycling program should be treated as any task or duty to be managed. Remember: if you can't measure it, you can't manage it.

Kisha D. DeSandies, assistant editor,* Facilities Manager, *contributed to this article.

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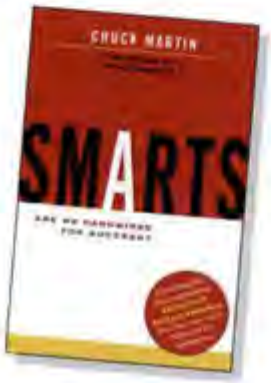
Planning Engineering Restoration

This month we look at two different, but valuable books for facility officers as we attempt to maximize both our human and physical resources. The first is a leadership development book reviewed by Suzanne Drew, staff development and management director at the University of Nebraska-Lincoln, who is now eager to apply the concepts covered. While studying to become LEED-AP, Ted Weidner reviewed a book on sustainability.



SMARTS: Are We Hardwired for Success?, by Chuck Martin, Peg Dawson, and Richard Guare, AMACOM, New York, 2007, 240 pages, hardcover, $21.95.

Reviewed by Suzanne Drew

Executive skills,

as referenced throughout Chuck Martin's *SMARTS*, do not describe skills used specifically by senior managers,

Suzanne Drew is the director of staff development and management at the University of Nebraska-Lincoln. She can be reached at sdrew2@unl.edu. Ted Weidner is assistant vice chancellor of facilities management & planning at the University of Nebraska-Lincoln and president of Facility Asset Consulting. He can be reached at tweidner@unl.edu.

The authors... suggest that rather than trying to improve those least developed skills, we should focus instead on developing accommodation strategies to help us work around our shortcomings....

but is a phrase borrowed from the neurosciences to refer to how we regulate our behaviors and speech.

This book discusses 12 such skills and provides a variety of practical ideas to help us identify, maximize, and accommodate differing abilities in these areas. The skills include:

1. the ability to think before you speak
2. working memory
3. emotion control
4. the capacity to maintain attention in spite of distractions
5. the ability to act without undue procrastination
6. planning and prioritization
7. organization
8. time management
9. defining and achieving goals
10. flexibility
11. the capacity to take an unbiased view of oneself
12. stress tolerance

While we regularly employ all of these skills, we are significantly better at two or three of them. These strengths we generally do without effort and often expect others to perform as easily. However, because some of the skills offset each other, we also have two or three that are less developed than the others and these are the ones that are likely to get us into trouble from time to time.

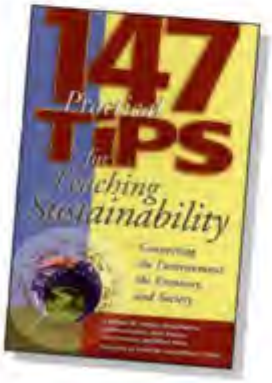
The authors advise that these capacities are generally fixed by young adulthood and there is little room after that for material improvement regardless of individual commitment to change or managerial intervention. Thus, they suggest that rather than trying to improve those least developed skills, we should focus instead on developing accommodation strategies to help us work around our shortcomings and recovery plans for dealing with the fall out that they are likely to cause. Practical tools for effectively managing these skills include:

- simple questionnaires to identify the relative strengths of your executive skills, as well as the strengths of those around you
- lists of common behaviors associated with strong and weak manifestations of each skill
- detailed descriptions of the environments, tasks, and projects best suited for each

There are descriptions of how lesser developed skill sets may be misconstrued by others and a list of tactics to help minimize or at least address the often-resulting problems or conflicts. Also included are interview questions to identify the degree of development of applicants' executive skills as well as tools to assess the skill mix required for any given assignment.

Given this framework, it becomes possible, if not likely, that many of the employees we perceive on the

job as having poor motivation and communication skills may in fact be highly motivated and capable and just as frustrated and confounded with the situation as we are. With this resource, we have opportunity to revisit these situations with new understanding and tools so that we can work together to understand and address, once and for all, the real and perhaps underlying issues.



147 Practical Tips for Teaching Sustainability; Connecting the Environment, the Economy, and Society, by William M. Timpson, et al., Atwood Publishing, Madison, WI, 2006, 119 pages, paperback, $12.50.

Reviewed by Theodore J. Weidner, Ph.D., P.E., AIA

Colleagues at Colorado State University and elsewhere (plus 57 others identified in the acknowledgements) collaborated to write *147 Tips*. Weaving the work of six authors together can lead to a disjointed product but that is not the case here. The format of the book, while deliberately choppy, is organized into 17 sections that allow the user/reader to gather five or more useful tips or ideals that teach and demonstrate the importance of a sustainable approach to what we do.

Early in the book, facilities are identified as major consumers of national resources. Rather than making a big deal of the consumption statistics the tips begin immediately. Some of the tips are familiar to readers of APPA publications. Others are more focused on educational factors. There are exercises student teams can follow to gain an understanding of sustainability that may have limited value to a facility officer. Occasionally, the supporting material for each tip may be recycled from a previous tip. Overall, the approach is good and reader-friendly.

In a student-centered environment we are often pressed by bright and active student groups to do more to protect the environment and our collective future. Sometimes, the student groups are more enthusiastic than practical, other times they are too idealistic. While many of the tips lean in these directions, they also provide some great reference for sustainability approaches, tools, and devices. Facility officers can use the tips to illustrate to students how they are already working toward a more sustainable campus, because we're all familiar with limited resources and the need for creative solutions. When faced with a new challenge, the tips provide some creative ideas.

This is a nice reference for every facility officer. It is inexpensive, provides plenty of good ideas and helpful references, and it offers a perspective different from our normal view, which will help address student (and faculty) concerns with campus operations. If you get the book but don't agree, be sure to pass it on to some who will want it (reuse). If you aren't interested, don't get the book (reduce). And if you like the subject, use the book over and over again (recycle).

New Products

New Products listings are provided by the manufacturers and suppliers and selected by the editors for variety and innovation. For more information or to submit a New Products listing, contact Gerry Van Treeck, Achieve Communications, 3221 Prestwick Lane, Northbrook, IL 60062, 847-562-8633, gvtgvt@earthlink.net.

Carrier Rental Systems asks, "Are you prepared if suddenly your building's heating, ventilation, air-conditioning or power systems were to break down for a lengthy amount of time?" Carrier Rental Systems has designed a flyer to help facilities professionals create their own contingency plan. For more information or have a contingency plan flyer mailed to you, contact Carrier Rental Systems at 800-586-9020 or www.carrierrentals.com.

Devcon announces TrimBonder™, a new structural acrylic adhesive. TrimBonder forms durable, permanent bonds on AZEK® Trimboards and other outdoor assemblies made of wood, urethane, or aluminum. It is UV-stable and waterproof, withstanding harsh weather without shrinking, yellowing, or otherwise discoloring. TrimBonder is also excellent for filling gaps and nail holes in AZEK boards. TrimBonder can be applied with a regular caulking gun and comes with a mixing nozzle to dispense the two-part adhesive quickly and easily. For more information call 800-933-8266.

ShockWatch introduces the EquipManager™. This device wirelessly monitors impacts, access, usage, and location of material handling equipment and fleet vehicles. OSHA and other safety regulatory compliance is ensured by an onboard, customer-configurable, pre-shift safety checklist with an audio/visual display that features a full user menu and text messaging. EquipManager reduces costs associated with damage and injuries caused by the improper use and operation of equipment, as well as the costs of maintenance and repair. EquipManager also increases operator productivity, maximizes equipment utilization, and creates a significantly safer work environment. For more information visit www.shockwatch.com.

Filmop presents its new Morgan cart. Did you like playing with LEGOS®? Meet the industrial version in Filmop's Morgan cart. The simple click-in-place system means no screws or tools required. Made of heavy-duty, closed-celled, impact-resistant plastic, there are five models and hundreds of different configurations for any cleaning environment. Easy convertibility changes the configuration in minutes, and the cart quickly collapses to fit in small closets. A unique storage drawer is an added feature. For additional details visit www.filmopusa.com.

illbruck acoustic, inc. provides a ceiling grid system in colors that match the company's ceiling tiles for a smooth, sophisticated look. The grids match the Hypalon® coating or natural colors of illbruck's HARMONI™, CONTOUR® and WHITELINE® ceiling tiles and SQUARELINE® metal ceiling tiles. Standard colors include white, almond, grey, black and satin chrome. Custom colors also are available. illbruck's commercial-quality ceiling grid system features standard 15/16" capped grid face and a double web design for added strength. All components, main runners and high-profile cross-tees, are manufactured from hot-dipped galvanized steel for superior strength and stability. The grid can be installed easily in any drop ceiling application and works with standard ceiling tiles. For more information call 800-662-0032.

Capital Safety introduces the Protecta Compliance-in-a-Can™ now upgraded to a 5/8" lifeline and rope adjuster that will provide fundamental fall protection. Compliance-in-a-Can™ is a fall protection system available in a convenient container that includes a full body harness, shock absorbing lanyard with attached rope grab, roof anchor device, and 50-foot rope lifeline all conveniently packaged in a can which also acts as a counterweight. Compliance-in-a-Can™ complies with OSHA and ANSI standards. Call 800-328-6146 for additional information.

GET CREDIT – AND CREDENTIALING – FOR ALL YOUR HARD WORK

Later this year, APPA will be offering the first of two standards for educational facilities professionals. The Educational Facilities Professional (EFP) credentialing program gives up-and-coming facilities professionals the opportunity to be recognized – with EFP credentialing – for their achievement and experience in our field.

What EFP Credentialing Means to our Profession

- Managing a campus is like managing a small city, requiring us to manage toward a larger, collective campus vision – seeing how each building, each structure, and each space contributes to the environment as a whole.
- EFP credentialing recognizes the unique set of experience, knowledge, talents and skills required in educational facilities management.
- Credentialing establishes our accountability and commitment to ongoing growth and mastery.
- It will serve as a continued source of inspiration to us and evidence of our level of achievement to others.

More information on EFP qualifications and the process will be available soon. To stay informed, visit www.appa.org or contact Berlos Davis, efpcredentialing@appa.org to be added to our special EFP email distribution list.

What EFP Credentialing Means to You

- Earn EFP credentialing and earn the recognition from the profession for having achieved a level of mastery in the specialized field of educational facilities management.
- As you progress through your career, the EFP will help demonstrate your commitment to your work, your institution, and your management.
- The EFP will be earned by you – not your institution – so it will stay with you throughout your career as endorsement of your accomplishments.

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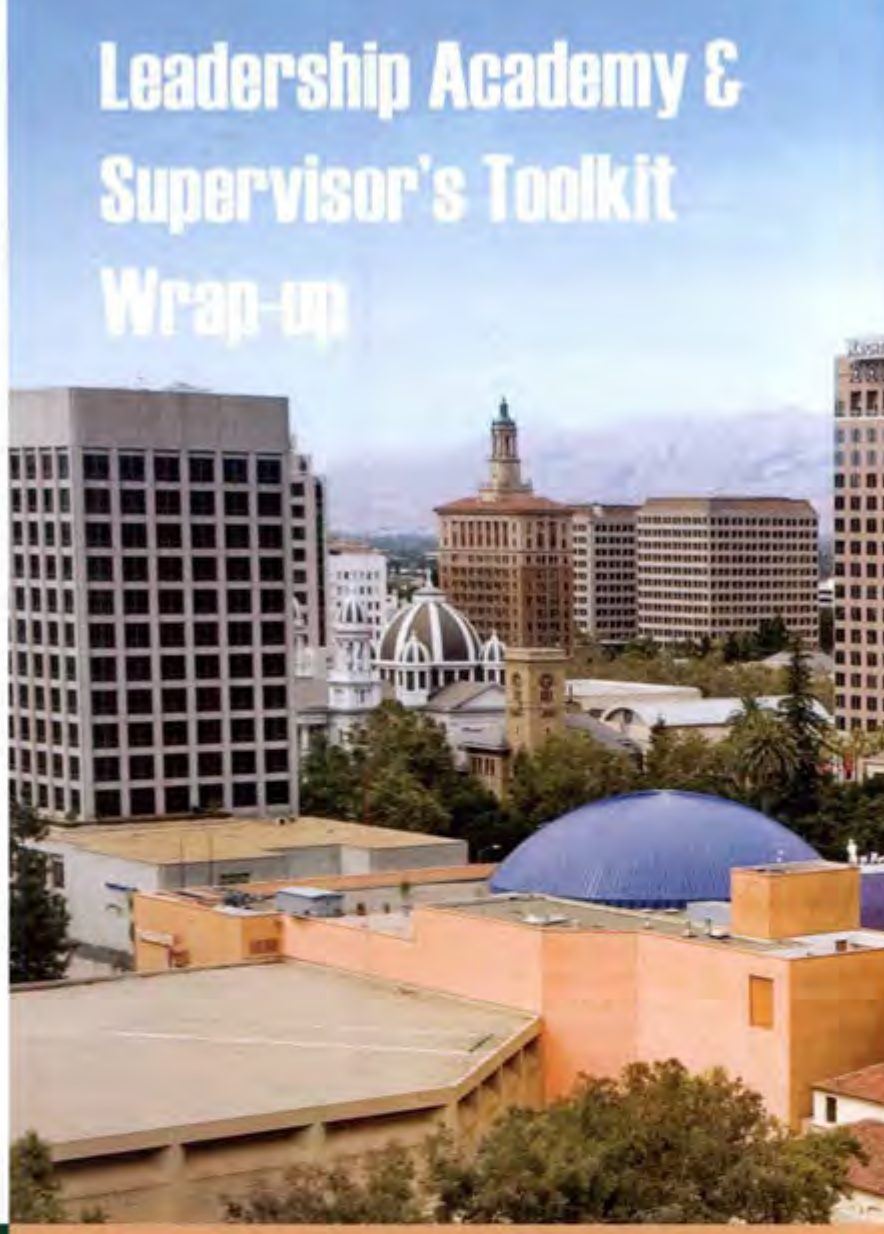
How You Can Begin

- Plan to take the preparatory course for the EFP credentialing exam on July 18, 2007 following APPA's 2007 Conference in Baltimore.
- A preparatory course will also be offered on September 14, 2007 at the Institute for Facilities Management in Phoenix, AZ
- The first exam will be administered after the Institute for Facilities Management in Phoenix on September 15, 2007.

April 2007 Academy Graduates

Linda M. Adamos, *Virginia Commonwealth University*
Anita Bailey, *Phillips Exeter Academy*
Timothy Ball, *California State University/Long Beach*
Scott Bitikofer, *Rollins College*
Marion B. Bracey, *Xavier University of Louisiana*
Maria Cruz, *Florida International University*
Gregory Gibson, *University of Miami/Coral Gables*
Gaston G. Gosselin, *Michigan State University*
David Gronquist, *Kansas State University*
Karen Z. Lovell, *Punahoe School*
Richard M. Magere, *University of Rochester*
Robert McMains, *Emory University*
Charles Morris, *Maricopa County Community College*
Edna Schultz, *Texas A&M University*
Connie Simmons, *Phillips Exeter Academy*
Joe Standridge, Jr., *Tarleton State University*
Sharon K. Wilson, *Dallas County Community College District*
Vickie Younger, *Kansas State University*

Leadership Academy & Supervisor's Toolkit Wrap-up



Nearly 200 facilities professionals participated in APPA's Leadership Academy and Supervisor's Toolkit programs, April 15-19 in San Jose, California. Each program provided key skills to enhance their individual, interpersonal, managerial, and organizational effectiveness.

Special thanks to Academy presenters who continue to raise the level of professional development: Gary Reynolds, Barbara Hudson, Lander Medlin, Glen Smith, Ann Jenkins, Charles Anderson, David Judge, Cheryl Braxton, Jack Hug, Bill Daigneau, Doug Christensen, Maggie Kinnaman, and Tom Stepnowski. Without their expertise, APPA would not be able to provide outstanding quality at the Academy.

The Supervisors' Toolkit trainers provided techniques for individuals in new supervisory roles and others who needed to improve certain skills. Special thanks to the trainers, Carol Trexlor and Julie Stitt.

Upcoming Educational Programs

- **The Supervisor's Toolkit will be offered concurrently to APPA 2007, July 15-17 in Baltimore, MD. You can either attend the Toolkit as a participant or begin the first-step to become a Qualified Toolkit Trainer.**

- **APPA will offer the Institute and Toolkit programs September 9-13 in Phoenix, AZ. Registration opens June 1.**

To register, call 703.684.1446 or visit www.appa.org/education.

The week ended with a celebration to mark the completion of the programs and to recognize those who officially graduated from the Academy.

This week offered quality training, key networking opportunities and a bevy of professional tools to use on the job. APPA looks forward to hosting a new crop of educational facilities professionals at one of our future educational programs.

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April 2007 Toolkit Participants

Joshua Alton, *California Polytechnic State University*
Jose Barraza, *University of California/Los Angeles*
Kenneth Black, *University of California/Davis*
Roy Blackmon, *Riverside County Office of Education*
Joe Borrowman, *Los Rios Community College District*
Brenda Briscoe, *Saint Mary's College/Maryland*
Bettye Cain, *University of California/Los Angeles*
Kimberly Case-Solanilla, *Stanford University*
Victor Cedano, *University of California/Los Angeles*
Curtis Davis, *Georgia Tech*
Morris Fenwick, *St. Mary's College*
Sharon Ferguson, *Georgia Tech*
Ann Gooley Mai, *Portland State University*
Chuck Grant, *California State University/Chico*
Roosevelt Hamilton, *University of California/Los Angeles*
Thomas Hamilton, *Georgia Tech*
Jerry Hauck, *Georgia Tech*
Teresa Hawkins, *Auburn University*
David Hester, *Georgia Tech*
Frank Karcic, *Riverside County Office of Education*
Michael Kinley, *Evergreen State College*
Anne Krieghoff, *University of California/Irvine*
Lap Lau, *North Lake College*
Daniel Marquez, *University of California/Santa Barbara*
Jesse Martinez, *University of California/Los Angeles*
Ed Mayer, *California State University/Chico*
Chris McCurley, *Catholic University of America*
David Meyers, *San Diego State University*
Lewis Palmer, *University of Utah*
Joseph Ramos, *University of California/Merced*
Gerardo Reynosa, *Chadwick School*
German Roa, *American University*
Kerry Robinson, *Georgia Tech*
Salvador Roman, *Riverside County Office of Education*
Jeffrey Smith, *California State University/San Bernardino*
Jason Thomson, *California Polytechnic State University*
Gloria Torbeck, *California State University, Chico*
Thomas Walker, *Georgia Tech*
James West, *Georgia Tech*

Coming Events

Coming Events

For more information on APPA's educational programs, visit www.appa.org/education, call 703-684-1446, or e-mail education@appa.org. Also visit our website's interactive calendar of events at www.appa.org/applications/calendar/events.cfm.

APPA Events - 2007

July 15-17—*APPA 2007: Back to the Future.* Baltimore, MD.

July 15-17—*Supervisor's Toolkit: Nuts and Bolts of Facilities Supervision.* Baltimore, MD.

Sep 9-13—*Institute for Facilities Management.* Phoenix, AZ.

Sep 9-13—*Supervisor's Toolkit: Nuts and Bolts of Facilities Supervision.* Phoenix, AZ.

Other Events - 2007

June 7-9—*Faculty Diversity and Environmental Justice Research Symposium.* University of Michigan, Ann Arbor, MI. Visit: http://sitemaker.umich.edu/diversityejresearchsymposium.

June 11-12—*Science Buildings Canada 2007.* Ottawa, ON. Visit: www.tradelineinc.com/conferences.

July 7-11—*SCUP-42–Shaping the Academic Landscape: Integrated Solutions.* Chicago, IL. Visit: www.scup.org.

June 20-22—*Planning for a One-Stop Enrollment Services Model.* Pittsburgh, PA. Contact: Kevin Kientz, 720.488.6800 x202 or kevin@academicimpressions.com.

July 21-24—*NACUBO's Annual Conference.* National Association of College & University Business Officers. New Orleans, LA. Visit: www.nacubo.org/x41.xml.

Sep 3-7—*22nd European Photovoltaic Solar Energy Conference & Expo.* Fiera Milano, Milan, Italy. Visit: www.photovoltaic-conference.com.

Sep 20—*Stars of Energy Efficiency Awards Dinner.* Alliance to Save Energy. Washington, DC. Visit: www.ase.org/dinner.

Sep 25-28—*Association of University Interior Designers (AUID) Annual Conference.* University of Louisville, Louisville, KY. Contact: majohn01@louisville.edu.

Oct 28-31—*NACAS 39th Annual Conference.* National Association of College Auxiliary Services. Las Vegas, NV. Contact: www.nacas.org.

Nov 7-9—*Greenbuild 2007.* Chicago, IL. Visit: www.greenbuildexpo.org.

Nov 11—*Energy Efficiency Global Forum and Exposition.* Washington, DC. Visit: www.eeglobalforum.com.

November 14-16—*Construction Owners Association of America (COAA) Fall Owners Leadership Conference.* Las Vegas, NV Visit: www.coaa.org.

Dec 3-4—*Academic Medical Centers: Capital Projects & Facility Management.* San Diego, CA. Contact: www.tradelineinc.com/conferences.

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Last year Michigan State University celebrated its sesquicentennial, one hundred and fifty years of excellence in higher education. Founded in 1855 and later designated one of the earliest land-grant institutions in the United States, MSU has evolved from an education icon in the state of Michigan to a teaching and research university esteemed throughout the world. 4,500 faculty and academic staff. 6,000 support staff. 45,000 students. On a 5,200-acre campus with over 660 buildings. Their touchstone for meeting the challenges of change: "Boldness by Design." Their Integrated Workplace Management system of choice: FAMIS.

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