





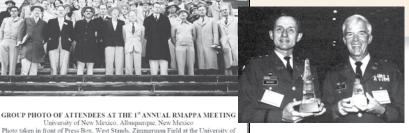




THE STRENGTH OF AN ASSOCIATION

Highlighting APPA's Regions: The Strength of an Association

APPA members started identifying themselves regionally in the early 1950s with the founding of six North American-based regions. Eastern (ERAPPA), Southeastern (SRAPPA), Midwest (MAPPA), Central (CAPPA), Rocky Mountain (RMA), and Pacific Coast (PCAPPA) each possess the rich and deep histories and traditions of their respective regions. Learn more about each region's history, and read a message from the current president.







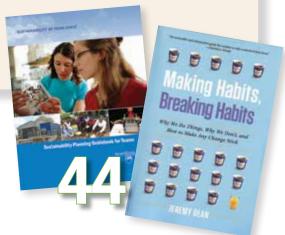
30 ListNotes: Recent APPAinfo Discussions

Compiled by Steve Glazner

What do artificial turf, absenteeism, telecom infrastructure, and lamp post banners have in common? They are just a few of the many topics posted and commented on in APPA's popular APPAinfo e-mail discussion list. We've included a few in this issue to show the breadth of topics, and the willingness of our members to share their experience, opinion, and expertise with others on a variety of campus facilities issues.

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Please share your magazine with others and recycle when discarding.

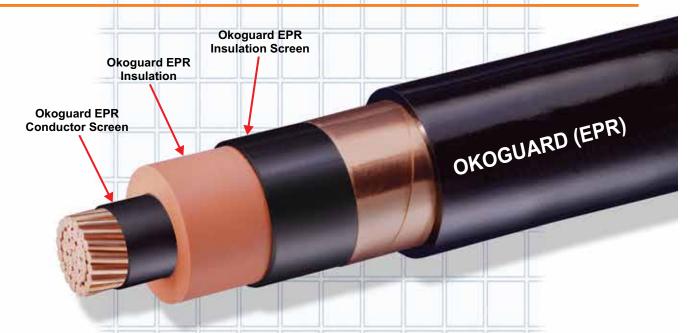






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THOUGHT LEADERS SYMPOSIUM FOCUSES ON COST OF LEVERAGING FACILITIES FOR INSTITUTIONAL BENEFIT

On Tuesday, April 22, APPA

convened its 2014 Thought Leaders symposium in New Orleans, Louisiana. Forty-eight college presidents, provosts, business officers, facilities officers, other campus administrators, consultants, and APPA staff came together to participate in the ninth annual symposium in APPA's Thought Leaders Series. The symposium was hosted by Jack K. Colby, APPA Fellow and Past APPA President, North Carolina State University, and Lander Medlin, APPA's executive vice president.

The college and university presidents participating were the following:

- Antoine Garibaldi, University of Detroit Mercy
- Paul Jones, Darton State College (interim president; returning participant)
- Earl H. Potter III, St. Cloud State University (returning participant)
- **David Ward,** University of Wisconsin Madison (chancellor emeritus)

Thought Leaders is a program of APPA's Center for Facilities Research. The primary topic of discussion for the 2014 symposium, expertly facilitated for the eighth time by **Larry Goldstein** of Campus Strategies, was the theme of leveraging the campus facility assets to achieve institutional outcomes. TLS participants heard short presentations by subject matter experts who each provided background data and provocative concepts for the group to consider.

APPA appreciates the preparation and participation of the following subject matter experts:

- **Brenda N. Albright**, Brenda Albright Consulting (returning participant)
- Harvey H. Kaiser, Harvey H. Kaiser Associates, Inc.

An initial executive summary of the research findings from the 2014 Thought Leaders symposium will be released to the attendees of APPA's Senior Facilities Officers Summit, which will be held July 20 in San Diego, California in advance of the July 21-23 APPA 2014 annual conference and centennial celebration.

As we have done in previous years, we will publish the final Thought Leaders report as a downloadable PDF via the APPA bookstore in mid-September. In addition, we will excerpt the report in the September/October and November/December issues of *Facilities Manager*.

APPA thanks all the participants in the 2014 Thought Leaders symposium, and we are grateful to our TLS sponsors, DTZ, a UGL company, and Jacobs. Be watching for additional educational programming, research, and publications stemming from our work with Thought Leaders.

Coming in July/August 2014

Med Glazne

- Celebrating APPA's 100-Year Anniversary!
- · Facilities and Campus Planning
- Historic Buildings
- FM Salary Analysis Report

FACILITIES manager

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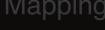
About APPA

APPA promotes leadership in educational facilities for professionals seeking to build their careers, transform their institutions, and elevate the value and recognition of facilities in education. Founded in 1914, APPA provides members the opportunity to explore trends, issues, and best practices in educational facilities through research, publications, professional development, and credentialing. Formerly the Association of Physical Plant Administrators, APPA is the association of choice for 5,200 educational facilities professionals at more than 1,500 learning institutions throughout the United States, Canada, and abroad. For more information, visit us at www.appa.org.

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2014-2015 ELECTION RESULTS

We are pleased to announce the newly elected officers for APPA's 2014-2015 administrative year:

President-Elect:

Peter Strazdas, Western Michigan University

Secretary-Treasurer:

Jerry Carlson, Butler University

Vice President for Professional Affairs:

Paul Wuebold, University of Alabama

The successful candidates will take office at the APPA 2014 conference in San Diego, California in July 2014.

Many thanks to the Tally Committee for counting and verifying the votes:

- H. Allen Stearns, Chair, member emeritus
- Patrick Andriuk, CBRE, Inc.



APPA 100 Years of Conferences!

1914 First Meeting of the Association of Superintendents of Buildings and Grounds, University of Chicago

1915 University of Michigan

1916 University of Wisconsin

1917 Iowa State College

1918 University of Wisconsin

1919 Purdue University (IN)

1920 University of Michigan

1921 University of Chicago

1922 University of Chicago

1923 Iowa State College

1924 Ohio State University

1925 Purdue University (IN)

1926 University of Michigan

1927 University of Minnesota

1930 University of Kentucky

1931 Iowa State College

1932 University of Rochester (NY)

1933 University of Colorado

1934 University of Chicago

1935 University of Wisconsin

1936 University of Illinois

1937 Ohio State University

1938 Harvard University (MA)

1939 ★ 25th Anniversary ★

Michigan State University

1940 University of Washington

1941 University of Cincinnati

1942 University of Pennsylvania and Temple University

1943 No meeting held

1944 Regionally based meetings in Chicago and New York

1945 Indiana University Bloomington

1946 University of Nebraska Lincoln

1947 Ohio State University

1948 University of Minnesota

1949 University of Arkansas Fayetteville

1950 Yale University (CT)

1951 University of Oklahoma

1952 Michigan State University

1953 Alabama Polytechnic Institute

1954 California Institute of Technology

1955 University of Wyoming

1956 University of Wisconsin Madison

1957 Temple University (PA)

1958 North Carolina State University

1959 Kansas State University

1960 Massachusetts Institute of Technology

NEW FROM THE APPA BOOKSTORE

Introducing APPA's New Book Series: Critical Issues in Facilities Management

APPA is pleased to announce a new book series on topics of current and ongoing interest to educational facilities professionals. **Critical Issues in Facilities Management** will be a periodic release of a new



subject-themed anthology, bringing together the writings of the best and brightest in the campus facilities enterprise. The first two books in the series are *Environmental Sustainability* and *Energy Efficiencies*, and the price for each is the price for each is \$30 for APPA member institutions; \$45 for nonmembers.

Environmental Sustainability is an anthology of 14 chapters and an extensive resource list on topics related to campus sustainability and environmental stewardship.

Energy Efficiencies is an anthology of 15 chapters and an extensive resource list on topics related to campus energy management and conservation.

Future topics in the series will cover leadership issues, disaster management case studies, space management and utilization, and more. Interested in writing for a future Critical Issues book? Contact Steve Glazner at APPA.

Operational Guidelines Trilogy Now Available as E-Books!

FVFNTS

APPA EVENTS

Jul 20, 2014 Senior Facilities Officers Summit, San Diego, CA

Jul 20, 2014 Emerging Professionals Summit, San Diego, CA

Jul 21-23, 2014 APPA 2014: Centennial Celebration & Annual Conference, San Diego, CA

Jul 24, 2014 Credentialing Prep Course and Exam (CEFP and EFP), San Diego, CA

Sept 7-11, 2014 APPA U: Institute for Facilities Management and Leadership Academy, Orlando, FL

Sept 12-13, 2014 Credentialing Prep Course & Exam (CEFP & EFP), El Paso, TX

REGIONAL EVENTS

May 5-8, 2014 APPA's Supervisory Toolkit (spons. by RMA), Jackson, WY

May 13-14, 2014 TNAPPA Chapter Conference, Cookeville, TN

May 14-16, 2014 FLAPPA Chapter Conference, Daytona Beach, FL

May 24-28, 2014 GAPPA Chapter Conference, Jekyll Island, GA

June 19-20, 2014 Maryland/DC Chapter Summer Educational Program, Solomons, MD

Sep 16-20, 2014 MAPPA 2014 Conference, West Lafayette, IN

Sep 21-24, 2014 ERAPPA 2014 Conference, Atlantic City, NJ

Sep 22-24, 2014 RMA 2014 Conference, Santa Fe, NM

Oct 4-7, 2014 SRAPPA 2014 Conference, Huntington, WV

Oct 4-8, 2014 PCAPPA 2014 Conference, Vancouver, BC, Canada

Oct 11-15, 2014 CAPPA 2014 Conference, El Paso, TX

For more information or to submit your organization's event, visit www.appa.org/calendar.





intenanc





1961 Oregon State University

1962 McMaster University Ontario, Canada

1963 ★ 50th Anniversary ★
University of Chicago

1964 Trinity College (TX)

1965 North Carolina State University

1966 Stanford University (CA)

1967 University of Montreal (QB)

1968 Colorado College

1969 University of Maryland

1970 University of South Florida

1971 University of Arizona

1972 Cincinnati, Ohio

1973 Honolulu, Hawai'i

1974 Houston, Texas

1975 Salt Lake City, Utah

1976 Atlantic City, New Jersey

1977 Hollywood, Florida

1978 Minneapolis, Minnesota

1979 Seattle, Washington

1980 Toronto, Ontario, Canada

Grounds

1981 Oklahoma City, Oklahoma

1982 Phoenix, Arizona

1983 Louisville, Kentucky

1984 Columbus, Ohio

1985 San Diego, California

1986 Boston, Massachusetts

1987 New Orleans, Louisiana

1988 ★ *75th Anniversary* ★ Washington, D.C.

1989 Reno, Nevada

1990 Ottawa, Ontario, Canada

1991 Orlando, Florida

1992 Indianapolis, Indiana

1993 St. Louis, Missouri

1994 San Antonio, Texas

1995 Philadelphia, Pennsylvania

1996 Salt Lake City, Utah

1997 Orlando, Florida

1998 San Jose, California

1999 Cincinnati, Ohio

2000 Fort Worth, Texas

2001 Montreal, Quebec, Canada

2002 Phoenix, Arizona

2003 Nashville, Tennessee

2004 Washington, D.C.

2005 Orlando, Florida

2006 Honolulu, Hawai'i

2000 Horiolala, Hawaii

2007 Baltimore, Maryland

2008 San Antonio, Texas

2009 Vancouver, British Columbia, Canada

2010 Boston, Massachusetts

2011 Atlanta, Georgia

2012 Denver, Colorado

2013 Minneapolis, Minnesota

2014 ★ 100th Anniversary ★

San Diego, California

facilities



APPA MEMBERSHIP RENEWAL **NOTICES SENT - PAY BY MAIL OR ONLINE**

The 2013-14 APPA membership year began April 1, 2014 and runs through March 31, 2015.

APPA accepts dues payments by major credit card through the APPA website at www.appa.org via myAPPA, your personalized APPA website account.

For assistance or more information, contact Santianna Stewart at santianna@ appa.org. Thank you for continued support of APPA!

APPA CONGRATULATES EFP & CEFP RECIPIENTS

The following professionals have successfully completed the requirements for APPA's CEFP and EFP credentials, from March 15, to April 15, 2014. Congratulations on their personal accomplishments.



CEFP RECIPIENTS

Steve Arnold, Lamar University/Port Arthur James Bevington, University of Virginia Douglas Hurd, University of Virginia Brian Kugler, University of North Carolina/ Charlotte

Catherine Lee, University of Virginia Richard Lobato, El Paso Community College Rick Martinez, University of Mary Hardin-Baylor

Shaun McCready, University of Virginia Terry Pritchett, Tarleton State University Mark Roach, University of Virginia Mark Seely, Individual Member D. Mark Webb, University of Virginia James Williams, Virginia Military Institute

EFP RECIPIENTS

Alfonso Flores, New Mexico State University Doug Laditka, College of Wooster

Upcoming Prep Courses and Exams

October 31, 2014 Kansas City, MO

For further details, got to www.appa.org/

COMING SOON!

Supervisor's Toolkit: June 23-26, 2014.......University of Texas at Austin **APPA U:** September 7-11, 2014...... Orlando, FL

2012-2013 FPI REPORT NOW AVAILABLE

The 2012-2013 FPI Report is now available to help you assess, measure, and lead your institution to success. With over 450 learning institutions now participating, the report will empower you with the vital data, statistical

references, and reporting tools needed to measure operations and performance. The report will also help identify capital asset realities, and lead a successful facilities strategy that supports your institution's mission and vision.

The FPI report answers to the following questions, and more:

- How well is your facilities portfolio in alignment with your institution's strategic direction and academic focus?
- What is your facilities inventory, square footage, and building ownership costs?
- How efficiently do your facilities operate?



- How does your campus facility performance con-
- Is my campus adequately funding the facilities

To access the report, log in to your MyAPPA account page and under the MyResearch heading. Click the link titled "FPI Report Access." The report is free to APPA members who also participated in the survey, or it can be purchased:

- APPA Member/Non-survey Participant Report: \$500.00
- APPA Non-member/Survey Participant Report: \$895.00
- APPA Non-member/Non-survey Participant Report: \$1,000.00

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Why APPA?

By E. Lander Medlin and Glenn Smith

t its core, APPA is about education and professional develop-Lement, whether delivered through face-to-face conferences and institutes, online learning seminars and credentialing programs, from committee and leadership opportunities, or information and research available at your time and place of choice. Given the difference in what membership means to each generation and the expected return it provides, APPA clearly offers an array of programs, products, and services to meet those differences head on. The opportunities abound! APPA has impacted careers, influenced thinking, advanced research, and supported individuals and their institutions fulfill their educational mission.

It's hard to imagine the sheer numbers of people APPA has touched over the past 100 years. Yet that number pales to the number we can possibly reach in the near future through the newly implemented Integrated Institutional Membership model. Ultimately, we are transforming individual facilities professionals into higher performing managers and leaders who, in turn, transform their institutions into more inviting and supportive learning environments, thereby elevating the recognition and value of educational facilities, and their direct impact on the recruitment and retention of students, faculty, and staff.

That's "what" we do—our focus and direction, products and services—but "why" do we, collectively, do this? Without APPA and its associated regions and chapters,

how well would we be able to deal with the mandates that confront us all?

JUST THINK BACK...

There was a time when we were just physical plant administrators—the blue-collar steam plant operators that provided heat in the winter, A/C in the summer, and electricity year-round....but that has become an outdated perception. Today, we actively manage the investment of more money every year (if not every day) than any other department on campus. That demands we be recognized and treated as professionals—leaders in education, not just buildings and grounds.

NOW, FAST FORWARD TO TODAY'S NEEDS...

How do we recruit and successfully hire and retain the very best? How do we stay on top of our game-knowledgeable of the latest tools, techniques, and technology? How do we continue to boost productivity in the face of dwindling resources? How do we get senior administrators and trustees to take our concerns seriously? How do we create a professional work environment where our people are intrinsically motivated, enjoy their work, take pride in their daily contributions, and feel like others notice and appreciate their efforts? Answers to these questions and more get us to the heart of "Why APPA?"

SO, "WHY APPA?"

What moves you? What draws you in? Is it because:

- You want and need to be perceived and recognized as a professional? Seems practically impossible without some form of validation of the profession by a larger body of professionals, a richer network beyond ourselves and our institutions alone.
- You want and need to have a seat at the decision-making table; hence, real influence? We need to convey the message that we do not reside strictly on the expenditure side of the ledger. Truly effective educational facilities professionals are in the cost avoidance business. Institutions will live with the decisions they make regarding the built environment for decades.
- You recognize that "deferred professional development" is a plight more dangerous than "deferred maintenance?" Deferred professional development looks like a frustrated workforce that exhibits low morale, low self-esteem, and a loss of respect, is full of cynicism, and uses ineffective tools, techniques, and practices. Yet, an investment in professional development can ward off and prevent these toxic workplace conditions. It can recharge and reenergize, instill hope through exposure to new ideas, techniques, tools, and provide a supporting structure in the form of networked relationships. Remember, "If you always do what you've always done, you'll always get what you've always got." Where else but International APPA, its regions and chapters, would you amass

the types of programs, products, and services to raise the professional stature of your staff?

- You want and need to have the tools to measure bow you're doing and where you're headed? What is your mission? What are your goals? What are your specific objectives? How well are you doing? How do you stack up against your peers? What are you measuring? Remember, you can't manage what you don't measure. Surveys have shown that only 15 percent of employees can state any of the top three goals of their organization, and only 12 percent of them can tell you how well they're doing on their top goals. Frankly, that's deplorable. We have a lot of room for improvement. Where else but International APPA, its regions, and chapters would you go to get credible comparatives, benchmarks, and credentials?
- You recognize that this is NO time to be spinning or reinventing the proverbial wheel? Do you feel alone in the challenges you face? Are you just combatting the same old issues over and over? Do you get the feeling that nobody is listening? We are not alone in the challenges we face. By networking, connecting, and sharing best practices, we can learn from each other and we can all collectively do better. We gain great value from the synergistic strength between International APPA, its six regions, and associated state/local chapters.
- You must actively create the future, not just react? Do you feel like the forces of change are bouncing you this way and that? Do you find yourself blindsided each day by something you failed to anticipate? Do you feel like you have no control over what will impact you next? "The future is won by those creating the future, not by those maintaining the status quo." Engaging emerging professionals, our colleagues in Mexico and the international community at large, in furthering the field of facilities management and its profes-

sional development is critical to our collective future success.

Studies have shown over and over that the most effective and productive employees are those who enjoy their work, find personal satisfaction in the contributions they make each day and look forward to what each new day brings. All the APPA tools, programs, and services are geared to create a work environment where your people can enjoy and take pride in what they do. True joy and happiness is found in the journey.

What does your APPA journey look like? Does it include:

- Chapter, state, regional, and international gatherings?
- Volunteering to serve?
- Getting involved?
- Attending our 100-year anniversary celebration in San Diego this July?

Ultimately, it's not what we do but why we do it that compels each and every one of you to engage in APPA or simply to remain a member or become one. And now, APPA's streamlined membership model allows more individuals ... EVERY individual ... to be exposed to a wealth of resources just by choosing to become an associate member.

You too can become a member of this rich network. Go to the APPA website... you are just a few clicks away from your exciting journey. (3)

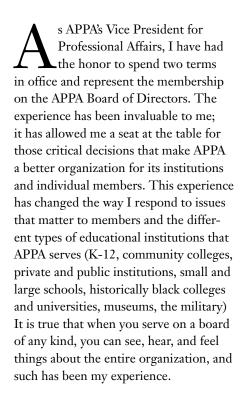
Lander Medlin is APPA's executive vice president; she can be reached at lander@ appa.org. Glenn Smith is APPA President and director of facilities at Bryn Mawr College in Bryn Mawr, PA. He can be reached at gsmith@brynmawr.edu.





Service to APPA

By David A. Cain



MY OWN APPA JOURNEY

My journey began during my graduate studies, by way of conducting research for an advanced degree, while working at a large public institution in facilities management for auxiliaries.

For most of us, APPA has become the "go-to organization of choice." As such, it has helped me frame my employment path and develop how the facilities management profession could become my career. How we all get to FM is our individual journey, and what makes APPA's offerings and its members the best ever.

REFLECTIONS

Along my journey, I have had the

opportunity to play a role in some of APPA's greatest achievements to date.

Among these was being selected as part of the Strategic Assessment Model (SAM) task force, which developed into today's Facilities Performance Indicators (FPI). Being data-driven will help carry APPA into the future to what I think will surely transform facilities

HOW WE ALL GET TO FM IS OUR INDIVIDUAL JOURNEY, AND WHAT MAKES APPA'S OFFERINGS AND ITS MEMBERS THE BEST EVER.

management into the next realm of "asset management." This will broaden our responsibility and duty portfolio. Not only will we be responsible for the physical facilities, but all assets-tangible and non-tangible—thus allowing us leverage for maximum benefit to the entire educational enterprise.

Another APPA program I am proud to have been involved in is the Thought Leaders Series. This education program allows APPA to bring a high level of individuals together in a "think tank" environment to "unpeel the onion" on key issues in higher education that impact the facilities professional. This research is published annually in a concise, easy-to-understand format that provides solutions in today's competitive

environment. This program also directly helps APPA stay on point and charts its future direction.

Certainly, APPA's certification program is near and dear to my heart. From the beginning, it was conceived from a membership study, and was not without some controversy. This venture has had its challenges, but its value to our members has always been evident. The program gives personal recognition to those who become credentialed and/ or certified, and validates their skillset to the institution. Once certification reaches the threshold of 1,000 certified educational facilities professionals, it will be APPA's newest gold standard for the profession.

A REWARDING EXPERIENCE

As I reflect on my APPA journey, I think how it has influenced and shaped me into a much better person. Getting involved in APPA at the local, state, regional, or international level is one of the best things I have done. It has certainly been the most rewarding.

I hope in a small way that my journey encourages you to find your own journey, and a way to give back to your profession. (3)

David Cain is APPA's Vice President for Professional Affairs and an associate faculty member at Coconino Community College in Flagstaff, AZ. He can be reached at cain. david@gmail.com.

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How You Can Help APPA Partner With HCBUs

By Chris Ziolkowski

any African American and other minority students choose to attend an HBCU (historically black college or university) not only to earn a quality education, but also to gain a sense of identity and heritage. Many prominent Americans have graduated from HBCUs, including Dr. Martin Luther King Jr. (Morehouse College), Oprah Winfrey (Tennessee State University), and Andrew Young, former ambassador to the United Nations and Atlanta mayor (Howard University). In fact, in the African American community, 65 percent of physicians, 50 percent of engineers, and 35 percent of lawyers have graduated from an HBCU.

PROBLEMS HBCUS FACE

Along with aging campuses and out-

of-date technology (all HBCUs were established prior to 1965) HBCUs face budget shortfalls. According to the United Negro College Fund, 46 percent of HBCU students come from families with income lower than \$34,000. They also have up to 50 percent lower tuition than their predominantly white counterparts and their endowments are far behind. To put this into perspective, in 2012 the total endowments of over 100 HBCUs was \$1.6 billion compared to Ivy League Harvard's endowment of \$19 billion. HBCUs also have a lower graduation rate due to social and economic circumstances.

HOW APPA CAN HELP

APPA offers benchmarking tools, such as Facilities Performance Indicators

(FPI), and the Facilities Management Evaluation Program (FMEP). These programs can help facilities professionals assess their current situations and make more sound decisions to move forward with projects and spending.

Another area of need in HBCUs is professional development of their facilities personnel. APPA offers the Institute for Facilities Management, the Leadership Academy, the Supervisor's Toolkit, and even offers EFP and CEFP accreditations. APPA now offer the invaluable Body of Knowledge (BOK) to all affiliate members through their website.

Finally APPA offers networking opportunities through conferences, (regional, international, and state) and other programs like Drive-In Workshops to create strong relationships



with other institutions and vendors. APPA also has Job Express, a great tool to recruit talented and trained facilities professionals.

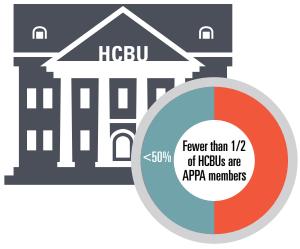
GETTING THERE

There are approximately 105 HCBUs throughout the United States, with about 80 percent in the Southeastern region, yet less than half of HCBUs are APPA members.

In most cases they are located near a non-HCBU university. I would encourage you to reach out to the facilities professionals at these HCBUs and network, share best practices, and maintain good working relationship that could be beneficial for both of you and your community.

To this end, I'd like to share a personal experience. Recently, a local

HBCU was having problems with its housing facilities. Our campus leadership stepped up to assist, and volunteered to house 37 of the displaced nursing students. Upon hearing this news Becky Griffith, assistant director of facilities at ERAU. contacted the new AVP of facilities who was a former coworker and explained the benefit of an APPA membership. I was able to offer the HCBU a trial membership as part of APPA's "Try Before You Buy" campaign. They immediately signed up, saw the benefits, and became permanent members. This forged the beginning of a strong working relationship between us, the HCBU, and the



vast network of facilities professionals throughout APPA. (§)

Chris Ziolkowski is manager, facilities management, at Embry Riddle Aeronautical University, Daytona, FL. He can be reached at ziolkbed@erau.edu. This is his first article for Facilities Manager.

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Look Behind You

New Issues with Workforce Aging are Coming on Fast

By Joe Whitefield

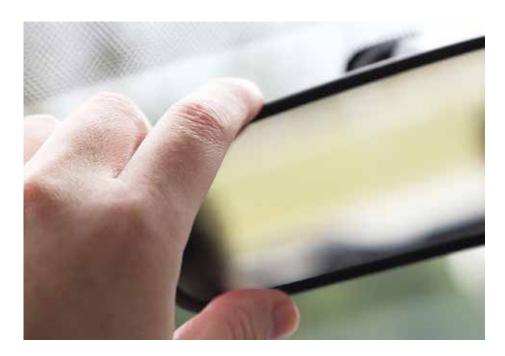
ave you looked in the rearview mirror of your facilities orga-_nization lately? A quick glance may show many objects gaining on you that could have a dramatic impact on your business. And these objects are, most likely, closer than they appear.

We are all familiar with issues associated with aging facilities: budget limitations, energy and environmental stewardship, and shifting customer expectations. But by now you have also noticed a growing number of new challenges (i.e., problems) joining the chase. I want to dedicate this space to one of these formidable challenges that has actually caught up with most educational institutions—the aging of the workforce.

WORKFORCE AGING

Like most issues, this one has the potential to be quite disruptive in and of itself. However, it also has the added potential of combining with other problems and compounding their effects. Consider the following:

The baby boomer generation has had quite an impact on every facet of life. Their contributions to business in terms of innovation, productivity, and achievement are historic. They have really put the "force" in workforce. This is also true in higher education. In case you missed it, 2014 is the year in which the youngest baby boomers—those born in 1964—turn 50. The Wall Street Journal reports that 12,500 Americans are turning 50 every day. That means the rest of the boomers are between 50 and 68. With that,



this generation has now begun retiring. Given the sheer number of boomers in the workforce, their retirements will be as impactful to business as was their entry. Estimates on the current retirement rate tend to be approximately 10,000 per day nationally. Many organizations are beginning to experience an accelerated retirement rate. Keep in mind; this is only the beginning of the mass retirement phenomenon. Barring radical changes in the work-life expectancies, this trend will continue for a decade and a half.

TURNING OVER THE ORGANIZATION CHART

We have all dealt with replacing key personnel who leave our organizations for retirement or other reasons. This

churning of personnel often creates a knowledge or experience gap, at least on a short term basis, as new personnel ride the requisite learning curves.

While inconvenient for a time, these gaps often bring about fresh thinking, innovative practices, organizational restructuring, and opportunities for others to move up professionally-sort of a healthy turnover. Effective succession planning has long been the key to these transitions. These transitions are aided when new personnel (or personnel in new positions) receive the support of colleagues, at all levels, to assist with their knowledge/experience gaps.

Mass retirements, however, require a different calculus for organizational turnover. While some of the opportunities for a healthy turnover are still present, fewer colleagues are in place to assist new personnel with the transition because they are experiencing turnover themselves. This condition permeates the knowledge and experience gaps to a larger section of the organization. Learning curves are extended and important history can be lost—both in terms of what was done and why it was important. Unaccounted for, these affects can compound the problems of turnover and diminish the benefits.

AN EMERGING DIFFICULTY

A new trend that seems to be emerging in higher education is the difficulty in hiring qualified people to replace those who leave our organizations. There are potentially many reasons for this trend. Reasoning aside, the impacts are problematic. Extended positional vacancies require a lot of work-arounds. Loaded employees get overloaded and some work must be deferred. Our employees can suffer from added stress and our customers can suffer from reduced service. In moderation, these problems are normal to most business. However, if hiring problems persist for a long period of time, they will combine with the mass retirement wave to extend, deepen, and compound the normal personnel problems.

CLOSING THOUGHTS

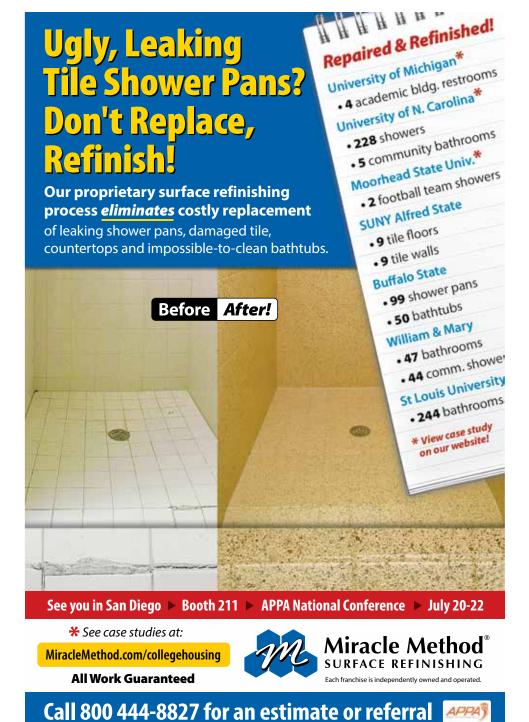
From a personnel perspective, rebuilding an organization is more challenging than replacing or reloading. The retirement trek that has begun for the baby boomers means more rebuilding will be required.

Make the time, while you can, to discover the new calculus for your organization. This should lead to activities that focus on and invest in the people remaining in your organization. Think succession planning on steroids. Prioritize your services and simplify the processes. Eliminate waste. Make sure there is an understanding as to what it takes to keep the lights on.

Finally, learn about any hiring difficulties that are emerging in your area. There is a lot of good information available on these subjects. Study up and network with your colleagues for answers. None of that is effective unless you take the important first steps of understanding your organization's workforce profile and forecasting the impacts

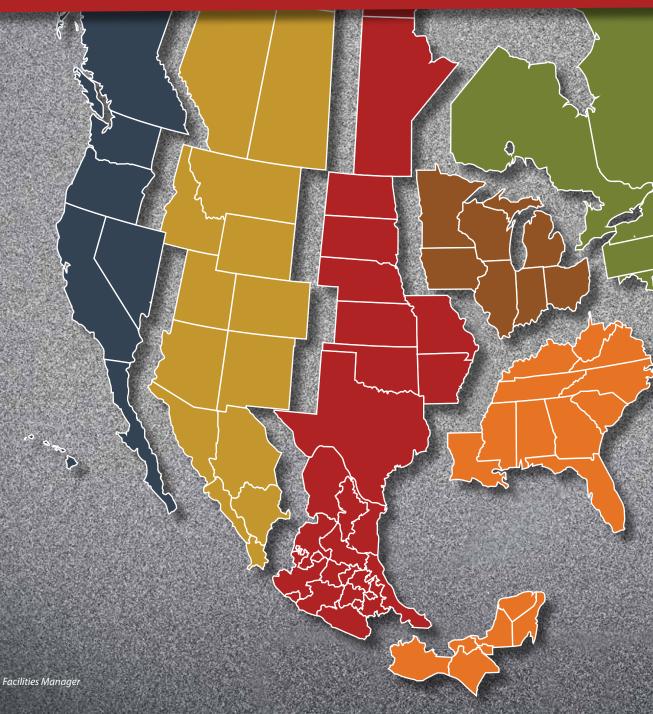
of the impending turnover. The sooner you understand the issues, the sooner your answers can be found. (3)

Joe Whitefield is executive director of facilities services at Middle Tennessee University, Murfreesboro, TN. He can be reached at joe.whitefield@mtsu.edu.





Highlighting A



PPA's Regions

THE STRENGTH OF AN ASSOCIATION

PPA is an educational association made up of six regions, which are made up of states, provinces, and local chapters, which in turn are made from the most important ingredient—its people. And while APPA is an institutionally based organization, the individuals who comprise our current membership—and all those who came before us—are the engine that created and strengthened APPA during our 100-year history.

They developed and constantly improved our professional development programs, shared information and research knowledge and wisdom to help members support their institutions better, and provided innumerable opportunities for educational facilities professionals to convene and network with one another—still the number-one reason that APPA members cite for joining the association.

The discussion of creating APPA regions started in the late-1940s, following World War II, and came to fruition in the early 1950s. All six APPA regions, created much as we know them today, were founded and held their first meetings between 1952 and 1954. U.S. states, and later Canadian provinces, were assigned to a specific region, and just recently APPA has added Mexican states to four of the current APPA regions, thus making a truly North American-based association.

Read on and learn more about each of our APPA regions—Eastern, Southeastern, Midwest, Central, Rocky Mountain, and Pacific Coast—and how they continue to benefit the stewards of our campus' built environment.

> -Steve Glazner Editor, Facilities Manager

Eastern Region

ERAPPA 2014 Regional Conference September 21-24, 2014 · Atlantic City, NJ





ERAPPA Message from President Michelle Frederick, **American University**



he Eastern Region of APPA Interna-▲ tional, ERAPPA, promotes and facilitates the learning and engagement of facilities professionals employed at over 350 educational institutions in the Northeast, from as far north as Newfoundland in Canada to Maryland in the United States. We provide professional

development programming, scholarships, and networking opportunities that advance the profession not only for the individual, but also for the institution.

ERAPPA offers and promotes many professional development opportunities for its members. At ERAPPA 2013, we launched the newest program available to our members, the ERAPPA Mentorship Program. This new program provides members a formal pathway to connect with other members within our region. Many of you already informally serve in a mentor or mentee role at your own institution or local. This program allows our members a formal route to reach out to our experienced members to request a mentor to be identified and assigned to them.

In 2013 we asked ourselves, "Why ERAPPA?" Why should facilities educational professionals participate in ERAPPA? One thread continued to be central to all the answers to the question—the PEOPLE. It's our members, whether they are institutional or business partners, that makes ERAPPA the great organization it is today.

ERAPPA'S EARLY MEETINGS

By Carl M.F. Peterson

[The following was excerpted and adapted from a 1954 report of the first meetings of the Eastern region, written by Carl Peterson of the Massachusetts Institute of Technology to the APPA Board of Directors.]

According to the minutes published in 1944, the Big Ten group held a meeting during 1943 when no National Meeting was held. Again in 1944 no National Meeting was held, but the then-President John J. Colgate of the University of Pennsylvania and the writer arranged a truly regional meeting in New York May 8 and 9, 1944, which had an attendance of 20 members and nine guests.

There were subsequent occasional committee meetings in the East to discuss various Physical Plant Association matters which usually developed into round-table discussions of various operating problems. In 1952 we sent out a letter to all APPA members located from Maryland north and from the western boundaries of Pennsylvania and New York east, asking if these members desired a regional meeting. The response encouraged the planning of such a meeting, and it was held in the Hotel Pennsylvania in New York City. The same pattern was followed in 1953, and a similar one-day meeting was held at the Statler Hotel in New York City.

In 1954 a two-day meeting was scheduled in Providence, Rhode Island, with Brown University as host. Those in attendance were enthusiastic about holding a regional group meeting to discuss common problems. Particularly does the regional meeting appeal to those members of APPA who seldom attend a National Meeting unless it is held within the Eastern region.

The Eastern problem is to keep the group small enough to adequately handle the group discussions, which were emphasized rather than the preparation of formal papers. It may be necessary to split again if many of the institutions eligible for APPA membership join the association. Such a split might form a Northeastern or New England group and a Middle Atlantic group. This is a distinct possibility and certainly influences the reluctance to form an official organization until the situation becomes a little more definite.



Southeastern Region

SRAPPA 2014 Regional Conference October 4-7, 2014 · Huntington, WV



SRAPPA Message from President Jay Williams, Virginia Military Institute



want to personally thank each and every Lone of you for what you have done for our region. We are in our 52nd year as a region, and I am happy to report that the pillars we were founded on-resource for information, educational opportunities, and networking—are firmly in place today.

Our current goals—1) improve communication; 2) promote training and credentialing; increase membership, with a concentration on HBCUs, community colleges, K-12 organizations, and business partners; enhance recognition through the APPA Awards and Recognition Program; and recruit the "best of the best" to fill key roles at the regional and APPA level— align and support the vision of 52 years ago.

It is one thing to establish goals, but the key to achieving them are folks in our region who "step up to the plate" to take on a Supervisor's Toolkit, a Drive-In Workshop, an EFP/CEFP Credentialing Course, and host a state or regional conference.

Keep those sleeves rolled up! Our success depends on your involvement and ideas. I look forward to celebrating our success when we meet at APPA 2014 in San Diego and culminate an outstanding year at SRAPPA 2014 in Huntington, West Virginia.

1952 FIRST MEETING: GETTING ORGANIZED

By Jewell Winn, Ph.D.

[The following article was excerpted and adapted from the SRAPPA publication, 52 Years of History, written and produced in 2003 by Jewell Winn, then-SRAPPA vice president for communications. She is now the chief diversity officer at Tennessee State University, and can be reached at jwinn@tnstate.edu./

SRAPPA's first gathering was an organizational meeting of like-minded colleagues. Acting Chairman Sam F. Brewster, from Alabama Polytechnic Institute (now Auburn University), called the meeting to order on October 21, 1952. At least 202 educational institutions were invited to the first SRAPPA meeting. Of those invited, 66 sent a representative, and spouses were a part of the festivities from the onset with SRAPPA. Twelve women attended as their husband's guests.

The official name of the organization was deemed the Southeastern Regional Association of Physical Plant Administrators of Universities and Colleges. Its intent, as written in the group's first recorded minutes, was to "promote the common interest in the care and operation of physical plants used by universities and colleges in the region, and to foster the professional spirit among the men engaged in this work, and to aid and supplement the work of its parent organization the Association of Physical Plant Administrators of Universities and Colleges."

Originally, members were limited to those who held the position of "administrator or chief executive in responsible charge of the operation and maintenance of the physical plants of education institutions" located in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. Members were to take an "active interest, as shown by contributions in the form of papers, work on committees, and attendance at meetings." Failure to pay dues or "general lack of interest" was cause for separation.

At the first meeting, Mr. Brewster was voted as SRAPPA's first president. He went on to work many years at Brigham Young University, serve as APPA President, and become one of the first three recipients for APPA's Meritorious Service Award in 1958. (§)

Midwest Region

MAPPA 2014 Regional Conference September 16-20, 2014 · West Lafayette, IN





MAPPA Message from President Lowell Bromander, Hamline University



Tam honored and extremely excited to be to ▲be the president of MAPPA during this year of celebration, 100 years of APPA. I am filled with a special sense of pride also, since it is from the Midwest region that APPA was begun.

It was in 1914 that 14 superintendents of buildings and grounds met in Chicago because of the vision-maybe frustration-of

one superintendent from Iowa State University, John M. Fisk. Mr. Fisk saw the value of networking, picking the brains of others in his field, and learning from each other's successes and failures. In a 1930 letter to the membership he spoke of a "real comradeship" and I quote, "to meet for a few days with those with whom I could. To sit and visit and confer with (others), on some particular subject in which I was especially concerned and (to) get some real good advice and information."

I am proud to say that this is the same vision that exists in the work of MAPPA today. In 2014, MAPPA remains the place to go to get some "real good advice and information" for Midwest educational facilities professionals. Our region's leadership works diligently to provide networking and educational opportunities for our membership, not only at our annual conference, but throughout the year. And we are dedicated to serving the needs of the established facilities leader as well as fostering the development of the emerging facilities professional.

I believe that John Fisk would be pleased with where his vision has taken us during the past 100 years. I know that we are, and we are very proud to be a part of it. MAPPA Proud!

MAPPA HISTORY IN OVERVIEW

By Becky Hines

Becky Hines is an APPA Member Emeritus and the MAPPA

Historian. She is the author of the MAPPA history, A History of Our Association (So Far...), and can be reached at beckeyeh@yahoo.com./

At the invitation of John M. Fisk, Iowa State University, a group of 14 superintendents of buildings and grounds from the Midwest met in Chicago in 1914, growing to over 175 institutions in 1953. In 1954, "NAPPA" adopted language in its constitution defining and recognizing regional organizations.

On March 21, 1955, our constitution, name, officers, and boundaries were submitted to the national organization. Since then, MAPPA has met annually in the states within our region: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Meetings have evolved from the "roundtable bull sessions" described in early APPA history, to the thriving organization it is today with formal meetings, professional presentations, and educational sessions. And yes, the informative "bull sessions" continue, only now they're called "experience exchanges."

MAPPA membership now includes more than 230 institutions and in excess of a thousand members. Some of our points of pride include:

- 31 people from the Midwest have served as APPA President since 1914.
- The original Custodial Staffing Guidelines book, published by APPA in 1992, was developed and written by MAPPA members Alan Bigger, Kirk Campbell, Jack Dudley, and Bob Getz. There is now a trilogy of staffing reports that continue to be a best seller for APPA.
- MAPPA's focus has been on education since our early days. In 1999, we created a strategic partnership with the longstanding Big Ten and Friends Trainers group to form the MAPPA Education Committee. This group develops and administers ongoing educational opportunities for our members, and is responsible for the educational program at the annual meetings.
- Our resource library was created in 1982 and is cur-

Midwest Region, cont'd.

rently housed at Illinois State University. Items range from training videos and CDs to MAPPA archival information—all available to our members through online checkout.

Business partners have been an essential part of our cul-

ture since the 1980s. The first trade show was at our annual conference in 1990, and a Business Partner member now sits on our Board.

We are "MAPPA Proud" to celebrate APPA's 100th anniversary this summer!



CAPPA Message from President David Handwork, Arkansas State University



n the campus of Kansas State University in 1953, CAPPA's genesis occurred in APPA's 39th year. It was very likely none of the early CAPPA and APPA pioneers could have envisioned the growth and advancement of educational facilities professionals, nor the importance APPA

provides the complex management of campus built environment. The CAPPA membership is very proud to be an integral part of this historic APPA milestone, as we just celebrated our 60th year. We look to the immediate future of opportunities and challenges with excited expectation. Opportunities include growth internationally in our hemisphere with the Mexico initiative and Canada, and tremendous growth globally. Challenges are always many and ever dynamic. APPA's membership, our family, will support each other through the challenges of budget pressures, cultural shifts, technology integration, and personnel development. As it was 60 and 100 years ago, it's impossible to envision the next volume of our story. Congratulations to the APPA family as we dream and write our next volume together, the next 100 years and beyond.

HIGHLIGHTS IN CAPPA HISTORY

[Art Jones is director of physical facilities at Black Hills State University and CAPPA's Historian; he can be reached at artjones@ bhsu.edu./

1952: During this year, the National Association was forming regional areas and since 1955, the United States and Canada have been divided into six areas for regional organizations. This was for the purpose of problem solving within these regions at roundtable discussions.

1953: In this year, the "Central States Region Association" was founded. Mr. Walter Kraft met with the "CSRA" group of physical plant administrators and was the first speaker. His presentation was entitled "The History of the Physical Plant Organization." At this meeting, in Manhattan, Kansas, 31 joined the CSRA. (In 1951, the National Association met in Norman, Oklahoma at the University of Oklahoma with Walter Kraft as President of the National Association. Walter was the first president to introduce a national newsletter. He was also considered one of the outstanding leaders in the physical plant field.)

1968: The National Association again changed names and became APPA: Association of Physical Plant Admin-

istrators, because of the interest shown internationally by Physical Plant administrators.

1969: The national bylaws were changed to include accredited two-year colleges. CAPPA embraced the two-year institutions and continues to be a leader in recruiting and supporting two-year institutions.

1971: The "APPA Reference Manual" was presented to the national members.

1977: The twenty-fifth Anniversary of CSRA was celebrated in McAllen, Texas. The CSRA changes its Constitution and Bylaws to conform to the new federal laws of a nonprofit organization and also to coincide with the Constitution and Bylaws of the National Association.

1978: CSRA handbook was presented to the membership. It contained a history of APPA, CAPPA, and many of the more recent technical presentations.

1986: Ben Kinder refreshed each member's memory stating that CSRA is the only region that does not have APPA as part of its name. He stated that the Executive Committee voted to propose a name change to be consistent with the

other regions, first to CSAPPA, and finally to CAPPA as printed in the April 1987 newsletter. The Executive Committee recommended that CSRA be changed to CAPPA. They unanimously approved to change the name from CSRA to CAPPA.

1997: The forty-fifth Anniversary of CAPPA was celebrated at the University of Nebraska Medical Center in Omaha Nebraska.

2002: Black Hills State University was proud to have hosted the golden anniversary of CAPPA. Their staff thoroughly enjoyed getting to know people from around their region. The meeting was planned to be a celebration of 50 years of service to higher education, and they celebrated in South Dakota style. Emeritus attendance was great with 13 people in attendance who had served as past presidents of CAPPA. The social events were a highlight for members and their guests. The position of Historian for CAPPA was proposed at this meeting and Ed Rice was selected to serve in that capacity. (3)

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Rocky Mountain Region

RMA 2014 Regional Conference September 22-24, 2014 · Santa Fe, NM



RMA Message from President Brian Johnson. **University of Idaho**



ike the physical variety of the beautiful Rocky Mountain region, with its awe-inspiring peaks, high desert plains, and scenic canyons, Rocky Mountain APPA (RMA) is host to a great diversity of member institutions, from small privates to some of the largest public institutions in North America. RMA is strengthened through

our diversity and our solid ties with business partners in providing effective facilities operations and delivery.

RMA is in the process of welcoming Mexico into the APPA family, with the addition of the states of Sonora, Chihuahua, Sinaloa, Durango, and Nayarit. As a result, RMA has expanded southward 800 miles, growing by an area larger than Arizona and New Mexico combined. With over 11 million people, and hundreds of educational institutions and business partners, this five-state region of Mexico will broaden our collective horizons, and challenge us to serve an even more diverse membership

The process of welcoming our newest members will be ongoing, but initial steps are underway now, including the creation of the Amigo Project, spearheaded by the Facilities Team at University of Arizona. RMA will strive for this to be a seamless integration, with effective educational programming and a networking support system serving the entire RMA membership. I look forward to welcoming and engaging our newest members from Mexico!

RMA HISTORY SECTION

By John Morris

[John Morris is associate vice president of facilities services at Northern Arizona University and is RMA's Historian; he can be reached at john.morris@nau.edu./

The charter meeting of the institutions of higher education in the Rocky Mountain area was held at the University of New Mexico on February 23-25, 1953. The individuals primarily responsible for that first meeting were M.F. Fifield of the University of New Mexico and H.L. Dotson of Colorado State University. Forty-seven individuals from 20 colleges and universities were in attendance at the inaugural meeting.

Annual meetings in the early years of the association's existence were quite simple and elementary by today's standards. Most of the early annual meetings were held on the campus of the host institution, and tours of the campus, its central plant, or state-of-the-art buildings were typically made a featured part of the program.

Over the years the Rocky Mountain Region has matured into a highly professional organization with over 80 member institutions. In turn, the annual meetings have become more and more dependent upon the support of the Business Partners. The RMA annual conference provides a perfect setting for RMA members to meet Business Partners and exhibitors to learn about new products, services, and methods. In turn, the relationship with the Business Partners has advanced from a simple business relationship to one of true friendships.

The region has provided outstanding leadership, not just within RMA but to APPA as well. Over the years there have been 13 APPA presidents coming from the RMA region. RMA is one of the first APPA regions to develop a mentorship program called the Fourteeners Club (aka 14ers Club) in recognition of the 54 mountain peaks over 14,000 feet in the Rocky Mountains. The region actively supports APPA programs including the Supervisor's Toolkit, Drive-In Workshops, and the APPA credentialing programs.

RMA recently celebrated its 60th anniversary in Colorado Springs, Colorado and looks forward to the next 60 years. (3)

Pacific Coast Region

PCAPPA 2014 Regional Conference October 4-8, 2014 · Vancouver, British Columbia, Canada





PCAPPA Message from President David Woodson, University of **British Columbia**

With thanks to Brian Worley



he Pacific Coast Region of APPA (PCAPPA) was founded in 1951 and incorporated in 1982. PCAPPA is represented by institutions from the United States (Alaska, California, Hawaii, Nevada, Oregon, and Washington); Canada (British Columbia and

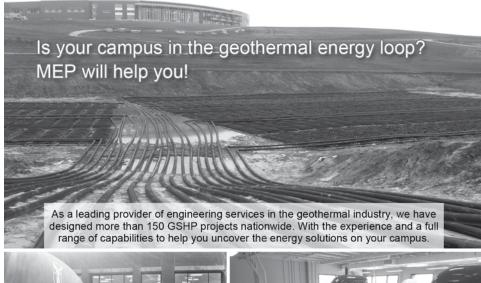
Yukon); and Mexico (Baja South, Baja North). Membership comprises approximately 150 institutions.

Just as APPA has evolved as an organization, PCAPPA has played a role of nurturing facilities professionals both within and outside of the region. In the late 1980s, PCAPPA supported the development of an Australasian Chapter, which then briefly became the seventh region of APPA until breaking off and forming its own organization. In the early 2000s, PCAPPA also participated in

> visits with our Mexican colleagues in an effort to connect them with APPA.

PCAPPA has had 63 presidents dating back to its first president in 1951, Wesley Hertenstein from the California Institute of Technology. Wesley served as PCAPPA's president for three consecutive terms, and then came back for a record fourth term in 1967.

One of PCAPPA's traditions is the passing of the "PCAPPA President's Pounder" from the outgoing president to the incoming president, (the "pounder" is the gavel.). The University of British Columbia will be hosting PCAPPA's 63rd annual conference this October 4-8, in beautiful Vancouver, British Columbia. PCAPPA has come a long way since its first conference in sunny Pasadena, California back in 1952.









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Pacific Coast Region, cont'd.

PCAPPA HISTORY REPORT

By C.L. Blacker

[The following was excerpted and adapted from a 1954 report to the APPA Board of Directors of the beginnings of the Pacific Coast region of APPA. Author C.L. Blacker was at Stanford University at the time.]

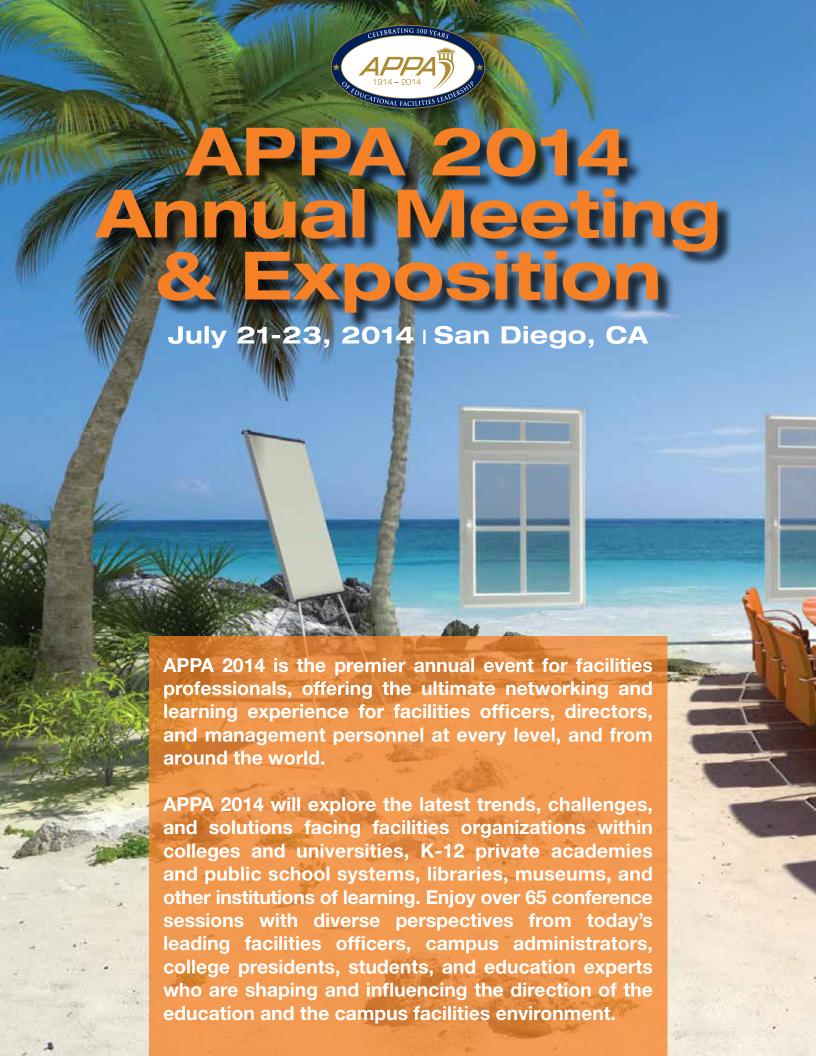
The Pacific Coast Association of Physical Plant Administrators of Universities and Colleges was officially formed in March 1953. Our boundaries have not yet been definitely established. It was our intention to include the seven States of California, Arizona, Nevada, Oregon, Washington, Utah, and Idaho if representatives in those states so desired. So far, only Arizona, California, and Oregon have membership in our organization.

Counting the first meeting called in December of 1952 by Wesley Hertenstein of Caltech, we have had three

meetings. So far we plan to have but one meeting per year to be held in the Fall or early Winter. The last meeting was held at Stanford University on December 4-5, 1953. The next meeting is scheduled for October 1954 at the University of Oregon at Eugene. At the second meeting held March 27-28, 1953 at Fresno State College, we organized and adopted a formal constitution and a set of bylaws.

The value of the regional association to its members, in my opinion, is that we become better administrators at the institution we represent by the interchange of ideas. We learn that our problems in general are common to other institutions, and that there has been more than one way to overcome them, thereby enabling us to solve some of our problems more easily. (3)





Special Program Offerings

Emerging Professionals Summit

APPA is thrilled to announce that our Emerging Professionals Summit will be back by popular The 2014 Emerging Professionals Summit will provide a unique opportunity for emerging professionals to network with senior leaders in the educational facilities field, engage in speed mentoring, hear from invited panelists on the importance of facilities management from an academic perspective, and much more! If you consider yourself to be one of our emerging professionals, this is an event you simply don't want to miss. If you are one of our "more seasoned" educational facilities professionals, you can't afford not to send your emerging professionals to this summit. Our future rests on their shoulders and the opportunities we afford them today! Register today to reserve a spot — seats are limited!

APPA's Senior Facilities Officers Summit

Now in its seventh year of programming, APPA's Senior Facilities Officer Summit provides a unique opportunity to engage with leaders in the higher educational facility management profession.

This is an environment built for networking and idea sharing for those who are new to this level of leadership, as well as those who have been leading for some time. As APPA celebrates its 100th year — and plans for the next 100 — our Senior Facilities Officers Summit will explore subjects such as "Shepherd the Shepherd," "Continuity vs. Succession Planning," "Executive Health Wellness," and much more! This highly rated, and thoughtfully constructed, program is designed with input from leading senior facilities officers within APPA's own membership. We encourage you to register today!



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www.appa.org/training/APPA2014

ListNotes Recent APPAinfo Discussions

COMPILED BY STEVE GLAZNER



We are building two artificial surface football and soccer fields. My engineer does not want sprinkler heads on the playing surface. I would like to have the heads on the playing surface so I don't have to have the high pressure and volume required to water from the sidelines. Do any of you have heads on the playing surface and if so, have your experienced any problems?

> Darrell D. Victory Kansas Wesleyan University

The engineer seems to recognize that artificial turf needs to be watered for health and safety reasons. There are at least two important design issues that must be balanced against the engineer's desire to keep the sprinkler heads out of the center of the field. What is the rationale? Is there a trip hazard? What other installations in the area have sprinkler heads configured as desired?

> Theodore J. Weidner, Ph.D., P.E., AIA, CEFP Noblesville, IN

Aside from the issue that Ted raises, I recently observed a webinar where the academicians presented a rather compelling case based upon actual research that there is not much worthiness in watering synthetic turf fields at all.

> Bill Elvey, APPA Fellow University of Wisconsin Madison

One of the reasons to do turf is player safety. I've never been able to understand how any sprinkler head in any field is safe, and that's speaking as former player. We do have two sprinkled grass turf fields because of the insistence of our coaches. I think they like to have a recruit and family looking out over the field when they come on. In my opinion, we could water as well, less expensively, and more safely, using the crawling water cannons we have for our non-sprinkled fields. When/if we go to turf we'll place hose hydrants in boxes outside the safety zone. I guess I'd look at all the reasons you are going to turf, and rank them. If safety is up there then I am with your engineer.

> Pete Sandberg, LEED AP Saint Olaf College



The only reason we have sprinklers on ours was because of the potential heat of the field in the summer, we were told by our engineers. We have never ever used them, not once, in ten years. A completely wasted expense in my opinion.

> R. Jeff Grimm, P.E. Kutztown University of PA

I've never seen sprinkler heads installed in an artificial turf field. That may be due to the geographical climate here in West Virginia. Apparently it may be more common in southern climates where the turf may need to be cooled on hot days. If the sprinklers are being considered for sanitizing the surface, I suggest a tow-behind sprayer be used to apply a sanitizing/disinfectant agent. That is how we do it, and it works. As for watering the turf to cool it, that seems like an extreme waste of water. One of the advantages of going to an artificial surface is to reduce or eliminate maintenance efforts, i.e., watering. Seems counter-productive to me.

Jeffrey A. Turner Obio County Schools

We installed an infill field for football, lacrosse, and soccer two years ago with no irrigation, and it is fine. We did run water into the field sidelines with recessed hose bibs into which the teams hook the water cows for drinking water. This line does run under the field so we were careful to use a single piece of poly line with NO splices. We installed an Astroturf carpet field in 2005 for field hockey with sideline water cannons. The goal with the wet turf for that field is less about heat and more about friction reduction for the fastest play. It's quite wasteful. It uses about 250,000 gallons of water each fall that passes right through the carpet and into the drainage system. We have had MANY maintenance issues with the cannons, some of which have required excavation of the irrigation lines. The lines are, thankfully, outside the playing surface since it's a perimeter system. I wouldn't have wanted to go through the turf to access those lines.

> Andrew B. Feick Ursinus College



Does anyone know of a reliable source where I can get some idea of what is "normal" in terms of absenteeism on an annual basis for

facilities workers? This wouldn't include vacation time, just sick leave. Several years ago the average was seven days per year, but I'm trying to get an update to that data.

Susie Reid University of Richmond

Our absenteeism rate (excluding vacation and holidays) has ranged over the last eight years from 2.57 percent up to as high as 9 percent a few years ago. Employees are allowed to accrue 12 days per year of sick leave—roughly

4.6 percent of an FTE's annual hours. We have targeted KPIs for most people to maintain a balance of 80 hours of available combined sick and vacation leave, and we have previously targeted a KPI goal of an absenteeism rate no more than 4 percent for all departments. Absenteeism rate includes workers comp and all forms of sick leave. The goal is difficult to achieve and the experience of any organization will vary greatly depending on the organizational culture, HR policies and practices, union contracts, etc. Interestingly, though, we have now stopped tracking and calculating the absenteeism rate and focus our KPIs on "wrench time" as opposed to non-wrench time. We are finding this to be a more productive mindset.

Al Stoverink Arkansas State University

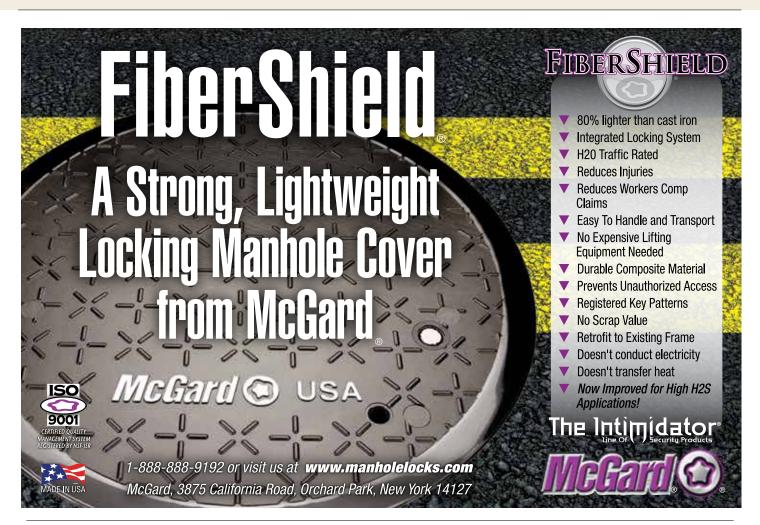
While with a prior employer—which had a very generous sick/personal/bereavement policy—about half the staff would take every opportunity for a day off. In one case I could fill in the calendar ahead of time predicting that Monday morning "sick call." Since the bereavement policy included cousins, aunts, uncles, and in-laws, another employee with huge family connections was out for three days every couple of months over a few years. Now, in my current position I have the opposite problem. My management staff and I have to coax people to take the vacation time they've earned. With two months left in the fiscal year, the person who has the smallest amount of vacation still has 40 unused hours. One guy has over three weeks to use up. My staff routinely leave vacation hours unused, and unused vacation time doesn't carry over. It's use it or lose it.

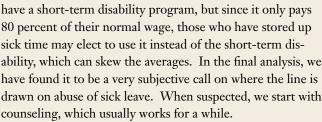
> Brian Kelly Dean College

I currently have both of the situations that Brian referenced. There is one thing that I would add. Each of the employees in my area receives two, three, or four weeks of paid vacation and three personal days per year—use it or lose it. In addition, they receive seven sick days per year that can carry over to a maximum of 160 hours (and they are paid one-half value of all hours over 160 each year). They receive unlimited qualified bereavement in three-day increments per event. Oh, and 18 paid holidays per year. Although it is most frequently a first-year employee whose lost time is prorated, if any employee misses even one hour of work unpaid after expending all lost time, there is no circumstance that is justifiable that will not warrant an immediate written warning and written documentation on the annual employee evaluation.

> Rob Hurlburt St. Bonaventure University

Our people earn nine sick days per year, and there is no limit on how much they can accumulate. They can take sick leave for their own illness or to care for a sick immediate family member. (Employees with young children and working spouses can use quite a bit in this manner.) We also





Glenn Smith Bryn Mawr College

TELECOM INFRASTRUCTURE FOR RESIDENCE HALLS

For years we have been building residence halls with dedicated voice, data, and CATV lines to each resident (the old pillow-and-aport model). Now with the increase in the use of cellphones and the improvements in the reliability/speed of wireless connectivity, our experience is that two of these lines frequently remain unused. Has your institution modified your infrastructure requirements to address this new reality? Are you eliminating some/most/all of these lines? What do telecom connections/options do you provide for emergencies in these "wireless" residence halls?

Robert L. Cornero Monmouth University

Our housing department agrees with your assessment; however, the university's IT department remains committed to keeping things hardwired as an option (especially for Internet speed) in addition to our wireless. We utilize VOIP, so our data/voice are combined, but virtually no students opt for a telephone (additional cost to them) in their room. Our new construction also is a data line converted to a CATV plug end (Z-Bob). We have built five new residence halls and renovating five others with this standard. Bottom line, our IT department's confidence is just not there yet to rely 100 percent on the wireless network.

Matt Frericks, EFP Miami University We pulled out our phone lines in our apartments a few years ago. We received a handful of complaints, but no major issues. Most students were using the phone lines to "work from home." When we built our new housing, we did not install hard-wire phone lines in the rooms or suites. The new generation does not know the difference! We did install an emergency phone line in each hallway near the elevator.

Tara Adams Southern Polytechnic State University

: We disconnected the hard-wired phone service in all residence halls and do not install it in new construction (exceptions - elevators, emergency hall phone on each floor, fire alarm, etc.). In buildings that still have the hard wire we do provide a phone for residence life staff (although, that may go away too). We did have to add some cellphone repeaters in a couple buildings to make sure all of the rooms have service (parent complaints about safety). We provide hard wire data and cable TV to each "bed" as well as wireless throughout all buildings. No complaints at this time. We will be migrating over the VOIP over the next few years, so it may change.

Art Chonko, P.E., C.E.M.

Denison University

Our institution's IT department has implemented a 4-cable CAT6 standard on new construction and renovations. This gives us the option for data/phone with VOIP. The construction cost is not so much to cause budgetary concerns, 2 lines are used, 2 spares. In the past we have had students with medical devices that require a hardwired phone line. Whereas this is not always the case, it has happened. I would suggest keeping you options open, during a power outage hardwired phones will most likely continue to work. For this reason we have all our emergency phones hardwired. In addition our data center has standby power. It's always good to have options.

Beville Lloyd Pitzer College



We are planning to install a number of 18" X 36" banners on our lamp posts throughout campus.... each requiring an upper/lower bracket/pole. My challenge is finding a way to keep the

you to join our conversations about all things related to educational facilities. To subscribe to the list, fill out the form at www. appa.org/discussionlists/index.cfm. (\$)

APPA's Director of Knowledge Management Steve Glazner administers the APPAinfo list; he can be reached at steve@appa.org.

banners from being easily removed (stolen)....given the lamp posts are only 14' tall. I would appreciate any recommendations if you have a bit of a tamper-proof solution for your campus banners.

> Dan Haslag Westminster College

We too have jumped on the banner bandwagon. However, we do not use lights poles, but install a custom made banner pole which solves the structural issues and lets us increase the height of the banner and avoid some vandalism. In addition we only use a top bar and have a grommet installed two-thirds of the way down the banner. Then we zip tie that to the pole. In a normal breeze the banners wave nicely, and in a hard wind the zip ties break.

> Tom Flood, ASLA, EFP Elon University

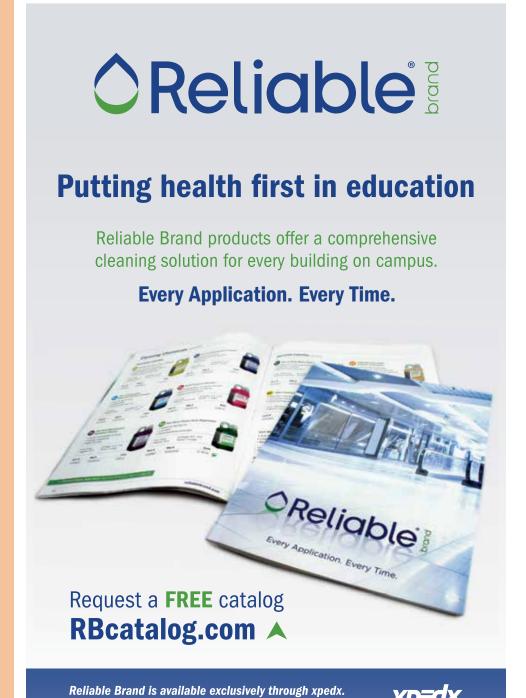
I have used 100 lb. zip ties on the top and bottoms through grommets. This has worked in my experience.

> Todd Efkeman Ohio State University

At a previous institution, we used the zip ties as well and, surprisingly, very few were ever stolen. The light poles were of similar height too.

> Phil Lopes University of the Incarnate Word

If you are not currently subscribed to the APPAinfo discussion list, we invite



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New Proposed Edition of NFPA 101 Released

By Dana Glenn Peterson, AIA

he National Fire Protection Association (NFPA) has released the final standard with proposed text for the 2015 edition of NFPA 101, to be voted on by the NFPA membership at the Association Technical Meeting scheduled for June 11-12 in Las Vegas, Nevada.

As this particular code is employed broadly across the U.S., affecting many APPA member institutions, the APPA Standards and Codes Council wishes to report on the changes that are proposed for inclusion within the 2015 code version. Unless you are in a jurisdiction that automatically updates the code to "the latest edition," the 2015 edition will require adoption through a public process in your jurisdiction and with an effective date established. Typically this is a year or more after the date of edition.

The changes outlined below are the Council's best assessment and interpretation of the most impactful changes found in the final standard that will be voted on in June. This is intended as a good overview of what will likely be coming up, rather than a detailed evaluation. Changes that on the surface appeared to be simply a restatement of current language, minor changes in terminology, or grammatical corrections have not been included.

CHAPTER 7—MEANS OF EGRESS

- Clarifies that it is the walking surfaces of a means of egress that must be slip resistant, rather than walking surfaces in general.
- Requires 13" minimum depth treads

- when there is a change in level of less than 21" in a means of egress.
- Permits floor levels to be lower than the bottom of a door opening onto to them, but only if the space is not normally occupied, and no lower than 8".
- Is stricter on how much the swing of a door can project into required egress widths.
- Removes the permissible conditions under which an outside stairway cannot be separated from a corridor.
- Provides additional restrictions on fire barriers between buildings or areas where there are horizontal exits.
- Permits "industrial stairs" where fire escape ladders are permitted.
- The occupancy load table for calculating occupancy has been revised.
- Permits stairs greater than 44" in width to have a greater capacity.
- Removes the provision to permit delaying of discharge at the exits while the nature of an alarm is being investigated.
- Removes the provision that stairs and ramps be arranged to make clear the direction to the public way.
- Increases the lighting requirement for exit paths to 2 footcandles.

CHAPTER 8—FEATURES OF FIRE

PROTECTION

- New requirement that fire separation assemblies that are not symmetrical need to be tested from both sides of the assembly.
- Permits Authority Housing Jurisdiction's to approve unlabeled steel door frames.

- Replaces existing table for ratings of opening protective with new.
- Prohibits convenience stairs from connecting more than four stories.
- Requires that new escalators be protected only by NFPA 13 design method sprinklers or other method as approved by AHJ.

CHAPTER 9—BUILDING SERVICE AND FIRE PROTECTION EQUIPMENT

 Prohibits smoke detectors from being installed within 36" of a door to a bathroom that contains a shower or a bathtub unless the detector is rated for.

CHAPTER 10—INTERIOR FINISH, CONTENTS, AND FURNISHINGS

 "Grandfather's" existing films, veneers, and coatings less than 9 mm thick from having to be tested for surface burning characteristics.

CHAPTER 11—SPECIAL STRUCTURES AND HIGH-RISE BUILDINGS

 New requirement for real-time video monitoring system in exist stairways in high-rises with an occupant load of more than 4,000.

CHAPTER 12/13—ASSEMBLY

OCCUPANCIES

- Modifications to required widths of stairs and ramps under certain conditions.
- Removes separate requirements for transitions in aisle stairs.
- Provides new requirements for aisle stair risers, landings, and handrails.
- Prohibits alcohol-based hand sanitizers

around cooking equipment. (Requirements for or prohibition of alcoholbased hand sanitizers is a common change across many chapters.)

- Requires Facility Management Operational plans.
- Requires training for Crowd Managers.

CHAPTER 14/15—EDUCATIONAL

OCCUPANCIES

- Sets requirements for alcohol-based hand sanitizers.
- Requires security for recall signal activation in voice/alarm systems, and for signal to be distinctive from alarm signal.

CHAPTER 16/17—DAY CARE

OCCUPANCIES

- Provides a definition for "level of exit discharge."
- Sets requirements for alcohol-based hand sanitizers.

CHAPTER 18/19—HEALTHCARE

OCCUPANCIES

- Sets conditions under which egress doors may be disguised by wall murals.
- Requires sliding doors to latch.
- Establishes minimum corridor widths and addresses obstructions thereto.
- Establishes maximum travel distances from "sleeping suites."
- Defines hazardous areas requiring a one-hour separation (labs covered under NFPA 45 are removed from the list).
- Requires medical gas areas to be regulated under NFPA 99.
- Requires smoke zoning and smoke doors.
- Table for hazardous area protection re-done.
- Adds fire safety plan requirements.

CHAPTER 20/21—AMBULATORY

HEALTHCARE OCCUPANCIES

• New fire drill requirements.

CHAPTER 28/29—HOTELS AND DORMITORY OCCUPANCIES

• Removes exception that permits new

unsprinklered buildings where doors open directly to the exterior.

CHAPTER 32/33—RESIDENTIAL BOARD

AND CARE OCCUPANCIES

- Provides a definition for "level of exit discharge."
- Sets conditions under which doors in a means of egress can be locked.
- Sets conditions under which a cooking facility can be provided that is open to a corridor.

CHAPTER 36/37—MERCANTILE

OCCUPANCIES

- Sets conditions under which unenclosed vertical openings may be permitted.
- Deletes requirements for manual pull stations where sprinklers are in place.
- Sets construction requirements for kiosks.

CHAPTER 38/39—BUSINESS

OCCUPANCIES

- Removes the specific parameters to calculate occupancy load.
- Sets conditions under which stairs and ramps can serve floors located below grade.
- Sets conditions under which unenclosed vertical openings may be permitted.

CHAPTER 40—INDUSTRIAL

OCCUPANCIES

• Removes provision permitting delayed egress. ③

Dana Peterson is associate university architect at the University of New Hampshire, and a member of APPA's Standards and Codes Council; can be reached at *dana*. peterson@unh.edu. This is his first article for Facilities Manager.





CFaR: A History of Sharing and Gaining Knowledge

By Gary Reynolds

PPA's Center for Facilities Research (CFaR) continues to support a number of exciting projects. Established in 2002 by APPA to promote, organize, and consolidate research in educational facilities management, CFaR's mission is to advance the body of knowledge of facilities management through research, discovery, and innovation. By providing mechanisms to promote and share knowledge in a coordinated manner, CFaR provides an important function for APPA, APPA members, and the facilities management profession.

The information and knowledge developed and disseminated by CFaR is an important part of our profession's and APPA's growth and prosperity. By staying current on the many technical, managerial, and leadership issues, APPA and its members maintain their credibility and

CFaR | Center for Facilities Research

ability to communicate strategic issues with our stakeholders. Information and knowledge developed through CFaR's activities can be found in the Body of Knowledge (BOK) (now available to all staff at an APPA member institution), the Institute for Facilities Management, the Leadership Academy, the Facilities Manager magazine, and other APPA resources.

HOW IT WORKS

There are several ways projects are developed by CFaR. Most often, a member comes forward with an idea for a project. Their reasons for involving CFaR can vary, but often include being able to contribute to the profession, support for access to members as

part of their research, or to fulfill the requirements for APPA Fellow. CFaR also undertakes projects that the APPA Board feels are important, such as the implications of LEED and integration into a university's design processes, the study of the sometimes mutually exclusive goals of total cost of ownership and carbon footprint reduction, and an updated evaluation of higher education's deferred maintenance backlog.

Projects are categorized into one of APPA's four main domains of

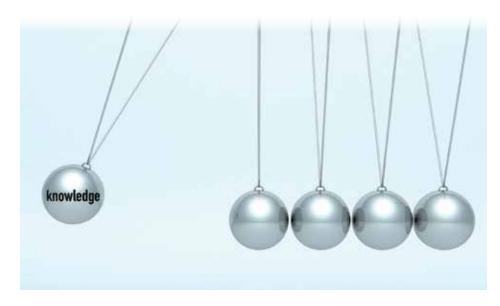
- 1) General Administration,
- 2) Operations and Maintenance,
- 3) Energy, Utilities, and Environmental Stewardship and
- 4) Planning, Design, and Construction.

Upon acceptance of a proposal, a CFaR Advisory Council member familiar with the subject matter is assigned to support the project. When the penultimate report is completed, a select panel of peer reviewers is chosen to review the submission and make recommendations about acceptance of the project. The final product includes a final report and dissemination to our members through the various APPA venues.

Much of this information can be found at http://www.appa.org/research/CFaR.

REAPING THE REWARD

Having conducted a CFaR research project myself, I found it to be reward-



ing and ultimately provided insights that I did not imagine beforehand. One such advantage was being able to do it at my own pace and time, and knowing that there would be an outlet for sharing the information that I developed.

IN THE WORKS

As noted in my opening statement, we have several interesting projects underway. John Morris at Northern Arizona University is gathering information about various APPA region mentoring programs in order to find out what is working (and what is not working) and to suggest what elements of these programs are providing success. Look for John's report in an upcoming Facilities Manager magazine article.

Jerome Roberson at Howard University is completing a study on the

facilities management organization and its alignment with the business goals of the university. He is looking at the various aspects of a facilities management's communication processes, governance decisions, partnerships, and skills resources as they affect alignment. Jerome is working with APPA so that he can involve our membership in his research.

Joseph Han at Cleveland State University just contributed an article for the Facilities Manager magazine (March/ April 2014) based on his research on the "key factors and conditions needed to initiate and sustain a culture of excellence on university campuses." He will receive his CFaR Research Award at APPA 2014 in San Diego.

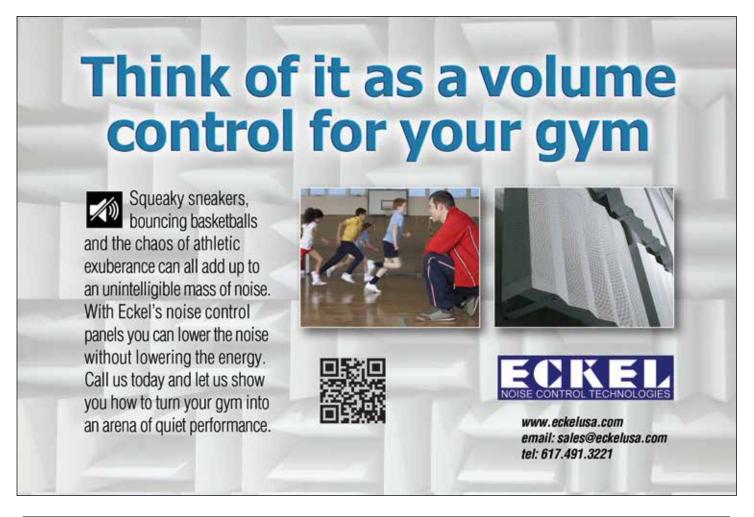
A VITAL ELEMENT

The continuing examination of the

issues that affect our profession, the developing of concepts and ideas-and then providing a venue for sharing is a vital function of our organization. CFaR provides that function as an integral part of APPA's mission and strategic plan.

For those of you who have an interest and would like to contribute, visit the CFaR website. Our website makes it easy to submit, and I am sure you will find your research endeavor extremely rewarding. (§)

Gary Reynolds is executive director of facilities services at the University of Colorado/Colorado Springs, and the co-director of CFaR. He can be reached at greynold@uccs.edu.



New APPA Book Series: Critical Issues in Facilities Management

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Is There a Growing Trend of CFOs Prioritizing Energy Reduction Projects?

By Ed Kirk

et another tight budget year, but a growing number of CFOs are pushing for more spending on energy reduction projects. What has caused this recent shift by the protectors of fiscal responsibility, to actually prioritize funding for energy reduction initiaThe annual budget challenge has been to cut utility spending without allocating any additional project capital. This forced facilities managers to focus on better ways of buying the utilities, improved participation in utility incentives and rebates, internal changes to normal operating set points, and

operating set points, and other no-cost initiatives. Without project funding, these initiatives needed to have substantially less than a two-year payback to be completed with operating funds. Typically, energy reduction projects compete head to head for scarce funding with all the other types of worthy improvement projects.



WHAT IS CAUSING THE NOTICEABLE SHIFT?

Slowly, over the last half decade, and in the midst of this protracted recession, energy reduction projects have emerged as an important part of the project

mix. What is causing this shift?

tives? After all, this is not a new concept—progressive facilities operations managers have been suggesting ways to reduce their overall budgets by reducing utility costs for years. However, the current protracted recession has brought those opportunities to the forefront, and they are attracting more attention.

Maybe it was due to more utility incentives.

More local utilities are doling out rate payer funds for customers to use to cut energy use. The strings attached to get the rebates actually add credibility to the projects. As rate-payers, maybe our institutions just don't want to leave this money on the table. At the same time, the project staff and consultants are getting better at performing the energy and financial analysis for these energy reduction initiatives, which ensures that they qualify for these incentives and rebates.

Maybe it has been the quickly maturing energy code, ASHRAE 90.1.

This decade old code has influenced the choice of HVAC and electrical systems in our new construction and large renovation projects to use less energy. It has also directed designers to use better materials to ensure higher thermal envelope performance. As designers get more creative, select better products and materials, simplify systems, use technology in better ways, predict consumption and track results, they are quickly getting much better at specifying what works. The standard line used to be that you would have to pay a premium for these energy consumption reduction projects. It hasn't been nearly as painful or costly as the nay-sayers were predicting.

Maybe it has been the shift away from using only first cost budgeting for projects impacting energy use, and for performing "value engineering" cost cutting to more financially appropriate tools.

There is growing emphasis to use metrics that reflect the comparative true

costs of ownership, like Net Present Value and Life-Cycle Cost Analysis. These help decision-makers to compare project options by incorporating estimates for operations and maintenance costs, life expectancy of the equipment and components, the interest rate on borrowed money, energy savings, and any other financial incentives.

Perhaps it is the growing attention we are giving to our carbon footprint and our greenhouse gas emissions.

There is a close relationship between the amount and types of energy we use and our carbon footprint. Reducing reliance on grid electricity and fossil fuels and using alternatives with less of a carbon impact is gaining popularity with even the most pragmatic and conservative fiscal planners. Our customers and stakeholders are no longer asking if our institutions are thinking about taking steps to become more sustainable, they are just expecting that we are already doing it.

Many CFOs have started to realize that utilities don't have to be simply the "cost of doing business."

They can be reduced, thereby effectively reducing their portion of the institution's overhead. Some senior leadership has also realized that with sustainability and energy reporting, comes peer institutional comparisons. With emerging Energy Star metrics for buildings, it is becoming much easier to see who has the better performing buildings. No institution wants to be compared unfavorably to their peers. Energy Star's Energy Utilization Index, used by the current energy code and the USGBC's LEED Building rating system, is becoming a more common benchmark for building performance and is influencing choices.

Could it be the new focus on disaster planning or resiliency?

With the recent uptick in severe weather directly impacting vital services to our institutions, there is a scramble to ensure there are viable options to prevent losses or interruptions, and keeping operations as normal as possible. That means a closer look at fuel switching options, redundancy to our current supplies and infrastructure, and the acknowledgment that reduced reliance on water and energy can reduce the critical impact of a supply interruption.

Most realists do not believe low natural gas pricing will last.

Once exporting begins, they expect to see higher price escalation than we currently see. Reducing the quantity of water and energy you rely on, and creating optional sources and infrastructures, will save money and help your operations become more resilient and sustainable. So the bottom line is that you can formulate your own institutional energy independence and sustainability policy to help ensure reduced future budgets, improved disaster recovery, and energy disruption plans.

WHATEVER THE REASON...

The growing attention CFOs are giving energy reduction projects may just be a combination of a more knowledgeable and willing operations staff and the use of better measurements and comparisons to find our worst performing buildings, equipment or systems. Or it could be that reducing our reliance on energy and fossil fuels will also improve the financial health of our institutions in the future. Maybe the emerging need for financial sustainability of our institutions is helping to shift our focus from protecting the money to reducing our future financial risk. (3)

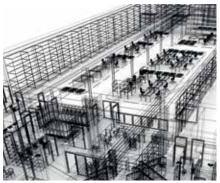
Ed Kirk is university energy manager at Johns Hopkins University in Baltimore, MD. He can be reached at ekirk3@jhu.edu. If you'd like to contribute to Power Tools, please contact Bill Johnson at wcjohnson2@ terracon.com.



Lighting Upgrades



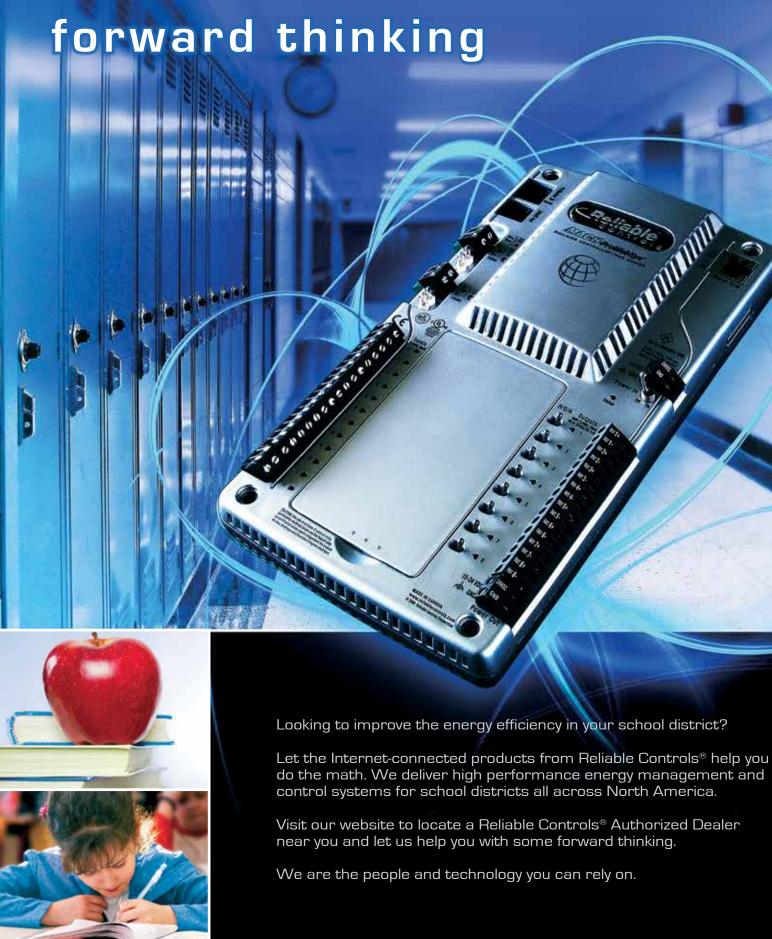
Mechanical System Upgrades



Energy Management Systems



ISO







Book Review Editor: Theodore J. Weidner, Ph.D., P.E., CEFP, AIA

Materials that are not directly

involved with educational facilities, or that are available in a non-traditional format, are fun to discover and present here.

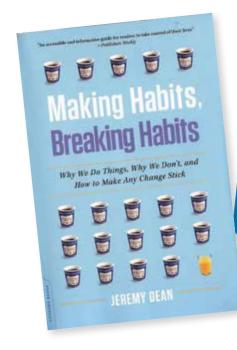
Two such examples are reviewed below. If you see something that might be of interest, but don't have time to review it yourself, please let me know and I'll try to review it for a future issue. In the meantime, enjoy the warmer weather.

MAKING HABITS, BREAKING HABITS: WHY WE DO THINGS, WHY WE DON'T, AND HOW TO MAKE ANY CHANGE STICK

by Jeremy Dean, Da Capo Press, 2013, 228 pp., \$15.99, softcover.

very year, many people make resolu-∡tions to change a habit or institute a new one. Other times of the year, devout people may choose to give up a habit for a limited time. Based on what Jeremy Dean describes in Making Habits, Breaking Habits, it's easier to be devout than to really change. I picked up Dean's book shortly after the new year to see how successful I might be at my resolution for weight loss. To get to the point quickly, I should have read it on the treadmill, but that's not where I do my reading.

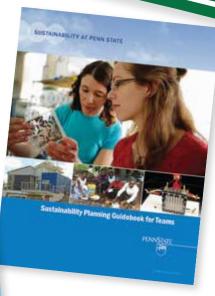
In Making Habits, Breaking Habits, Dean, a psychologist and blogger on psychology, has divided the book into three areas: anatomy, daily, and changing habits. The opening section begins with the physiological reasons of why living beings develop habits. Our pattern recognition skills, interest in being comfortable, and the automatic nature of patterns, are described in an interesting way that is accessible to the lay audience. The examples are somewhat disconcerting. After a winter of some significant driving accidents, it's both easy to under-



stand how these accidents happen and why officials warn people about driving in bad weather. In fact, the officials really need to explain that it's not the weather driving their recommendation, but the driver's inability to change driving habits.

The middle section presents examples of daily habits, why we have developed those habits, and how our lives are simpler as a result—sometimes too simple. At work, we develop habits designed to help us avoid typical mistakes and do things right at all times. However, those habits also work against us when special conditions occur and our habits prevent us from doing the right things. As a result, habits can sometimes cause more harm than good. Obviously, these are habits we need to break or change. The challenge is finding ways to accomplish that.

Having made his points about habits, Dean then describes how to make and/ or break habits. Start with habits you enjoy either for individual reasons or with a group. Seems pretty simple. Probably the more important revelation is about claims by programs or systems to get you into a new habit in 21 days.



They are false; the reality is that it takes humans almost three times that long to break or change a habit. All the more reason to do something you enjoy. Alternatively, changes made in small steps are more lasting that big changes.

So rather than focus on my big weight loss goal, I'm going to start with small steps that help me move toward my goal. As the summer approaches you might consider reading Making Habits, Breaking Habits, or developing your own reading habits.

SUSTAINABILITY PLANNING GUIDEBOOK **FOR TEAMS**

by Erik Foley, Penn State University, sustainability.psu.edu, 2014, 46 pp. free download: http://sustainability.psu. edu/sites/default/files/Sustainability Guidebook_final_feb19.pdf.

The great thing about working in deducation, even if not a direct supplier of education, is the opportunity to share freely and openly. We learn from ourselves and from each other. In early March, Pennsylvania State University released its Sustainability Planning Guidebook for Teams, and presented it at the Smart and Sustainable Campuses Conference, in Baltimore. It was developed by the Sustainability Institute at Penn State, who shared it with facility officers in the Big Ten and Friends group. In addition to fortunate timing, the guidebook is a reference that can be used by others, even though its original purpose was for PSU use.

Since my undergraduate days in Architecture at RPI, I have learned and understood the importance of sustainability. It wasn't identified as such in the '70s; we learned about passive solar design from Professor Walter Kroner as a special topic. However, before that course, we learned to pay attention to nature, understand the microscopic features of building materials such as wood, or how buildings responded to the natural environment based on the site. We then applied those features and characteristics to our designs and learned more following the critiques

of the designs. Our education was infused with many elements that would become part of sustainability decades later.

Now, as more people become aware of and the value of sustainability, they are looking for resources. The Sustainability Planning Guidebook for Teams fills some of those needs. While admittedly written for Penn State with references to the PSU Sustainability Plan and Goals (Learn, Live, Lead), it provides a set of steps and tools that can be used by any campus, including facility officers, to make the campus more sustainable.

As one notices while reading the Guidebook, there are many tools and techniques used to develop sustainability plans that are similar to techniques taught at the APPA U Leadership Academy. The worksheets, while oriented to PSU's plans and details, could be modified to address the needs of a different institution. Facility

officers will be comfortable with the tools presented, and can leverage the different worksheets provided.

The Guidebook provides a clear, six-step process with different worksheets assembled by Foley and his team. There, many more complete references on sustainability published by APPA and others can be found to fill in the details. Many of those references are available only in printed form and are not as sustainable as a PDF download (assuming it isn't printed.)

I appreciate PSU's work to develop this guide and sharing it with others. I expect you'll appreciate it, too. It's great to be part of an industry that shares knowledge. \(\sqrt{y}\)

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>>>FEATURED PUBLICATIONS FROM APPA

Resources for Campus Facilities Management

Strategic Capital Development: The New Model for Campus Investment

Harvey H. Kaiser and Eva Klein

Strategic Capital Development: The New Model for Campus Investment presents a bold approach for planning capital investments from a strategic and long-range perspective. The authors combine their extensive higher education experience and expertise to improve capital planning and decision making and to make a case for a new model that seeks to balance idealism with pragmatism. They define stewardship principles necessary to create and sustain a built environment that is responsive to institutional strategies and functions, remains attractive to faculty and students, and optimizes available resources. (A763)

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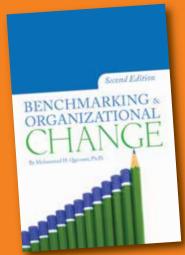
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\$32 APPA Member/\$45 Nonmember







Compiled by Gerry Van Treeck

Sensorex announces The SAM-1TM Smart Aqua Meter which harnesses the convenience of handheld smart devices to measure and record pH, ORP, conductivity, and temperature values. Compatible with both Apple and Android smartphones and tablets, SAM-1 replaces cumbersome test kits containing reagents, vials, or strips



that rely on user interpretation and measurement. Instead, SAM-1 quickly delivers accurate analytical measurements in commercial aquatic centers and spas. The SAM-1 plugs into the headphone jack of a smartphone or tablet and connects to Sensorex smart analytical sensors for measurement. The SAM-1 App, available as a free download, instantly recognizes the smart sensor type and calibration data. For additional information on Sensorex visit www.sensorex.com.

Cree, Inc. introduces SmartCast™ Technology, the first self-programming wireless lighting control system that reduces energy consumption by more than 70 percent, at half the cost of traditional lighting controls. Intuitive and easy to use, luminaires enabled with Cree SmartCast Technology remove the initial and ongoing complexity associated with lighting controls, allowing customers to realize the full savings potential of lighting controls with benefits they've never had before. For



The Asphalt Roofing Manufacturers Association (ARMA) has developed a Fast Facts education site containing more information on sealants that can be downloaded free of charge. There has been increased demand for higherperforming asphalt roofing shingles in the past few years. Manufacturers have responded by producing asphalt shingles designed to withstand high winds and heavy rains. An essential piece to this success has been the sealants that fuse the roofing system together. Sealants are an asphalt-based, heat-activated bonding material



that connects individual unit shingles together to give them increased durability in all weather conditions. For further information on The Asphalt Roofing Manufacturers Association visit www. asphaltroofing.org.

Walter Surface Technologies introduced XCAVATOR, the most powerful member of Walter's family of high performance grinding wheels. Designed for the toughest, most demand-

ing grinding jobs for a range of industry metal fabrication shops the XCAVATOR ultra high removal grinding wheel delivers heavyduty performance and the highest level removal rate grinding wheel products. XCA-



VATOR features an extra strong disc base/backing for more powerful and aggressive grinding action. It also features a patented UHR multi-layer manufacturing technology to prevent edge flakiness-keeping the wheel edge symmetrically round for more safety and longer life. For additional information visit Walter Surface Technologies at www.walter.com.

CR Brands, Mean Green(r) Industrial Strength Cleaner & Degreaser, is a blend of biodegradable detergents specially formulated for challenging cleaning applications. Now available in 275-gallon containers, this new larger size provides maximum value to high-volume commercial and industrial users. The new totes are easily moved on-site via lift truck and can be shipped cost-effectively. Mean Green

Industrial Strength Cleaner Degreaser has 40 percent more cleaning ingredients to quickly dissolve grease and grime. The formula includes 30 percent more solvents and 20 percent more



surfactants to lift stubborn stains off all surfaces—from metal, to painted surfaces, to fabric to concrete, carpet, and more. Mean Green has double the amount of chelating agent, for superior all-around performance. For further information on Mean Green Industrial Strength Cleaner & Degreaser visit www.meangreendegreaser.com/ industrial-strength.

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, e-mail Gerry Van Treeck at gvtgvt@earthlink.net.

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