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FACILITIES manager

Managing and Prioritizing Risk



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2015 APPA
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features

MANAGING AND PRIORITIZING RISK

COVER STORY

28 Managed Risk and Facilities Management: A Balancing Act

By Mark Crawford

In a campus context, managed risk may be the prioritized list of capital reinvestment (deferred maintenance/component renewal) that brings the higher-impact investments to the top, or it may be the day-to-day choices to determine which problem to address first. Both deal with some of the more direct risks and management strategies. Balancing the risk is key.

34 Seven Facility Maintenance Practices Costing You Money

By Mark L. Heroux, CPMM

Avoiding the “Seven Worst Practices” outlined by facility management experts can help educational facilities managers do more with less, while effectively managing their institution’s critical operations. The list—which includes both errors of commission as well as omission—will help staff better focus their time and energies where they will have the biggest impact.

38 Campus Housing Projects Display Variety and Innovation

Compiled by Steve Glazner

Review a sampling of 26 recent or in-process residence hall projects from 20 different institutions showing the wide range of architectural styles, building technologies, student services, and other features found at our college and university campuses.

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Managing Risk is Universal

Managing and Prioritizing Risk

is the theme of this issue, and it's a universal topic for facilities management. Everything you do during the workday, every decision you make regarding the use of your resources, is your attempt to manage the risks and potential consequences in your support of your department and the institution you serve.

Of course, you may not always think in quite those terms, especially when you find yourself reacting to daily demands on staff, budget, or equipment. But the strength and stamina of your leadership can be measured in how you plan, how you anticipate, how you adjust, how you communicate, and how you respond to every aspect of your position as a facilities professional.

For his lead story on managed risk, writer Mark Crawford interviewed an SFO, a campus risk and life safety manager, two innovative business partners, a campus CFO, and a rep from a risk management association. They each provide a different perspective and insight into the definition, prioritization, process, and execution of managed risk. In addition, Mark Heroux's feature on the "Seven Facility Maintenance Practices Costing You Money" dives deeper into one important aspect of facilities risk management.

Also in this issue we're pleased to share with you a lengthy sampling of beautiful, functional, and student-focused housing at 20 college and university campuses throughout the United States. These include recent renovations and new construction, as well as several forthcoming projects that further enhance the educational experience. You'll find photos, project details, and special features for each of the 26 different residential facilities highlighted here.

A regular feature of the January/February issue are the reports from each

of the annual conferences held by the six APPA regions. The 2015 reports begin on page 18, where you'll see the variety of special events, the quality of the programming, and the tremendous opportunities for networking that our regional conferences provide.

These same elements can be found at the many state and local APPA chapter conferences and meetings held during the year. Many of those chapter conferences take place in the March through June timeframe, but a few are held at other times. APPA promotes all regional and chapter conferences through our events listings published in *Facilities Manager* and the *Inside APPA* e-newsletter, as well as in the online calendar found at the APPA website. Please send any regional or chapter events listings directly to me at steve@appa.org for inclusion.

Finally, you may notice a few cosmetic tweaks to the magazine with this issue. We took the opportunity to change the font and line spacing to increase readability, modify the look of the regular department pages, and change the paper stock to a brighter white, among other minor modifications. We'll be asking you to participate in our periodic readership survey in the next few months, and we look forward to your honest and thoughtful comments and suggestions regarding the magazine's look and content. Thank you for your continued readership and support. ☺



COMING IN MARCH/APRIL 2016

- Campus sustainability projects
- A programmatic approach to energy efficiency
- USGBC's LEED Lab

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 more than 13,000 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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1. Log in to myAPPA (<http://www.appa.org/login.cfm>).
2. Under myAccount, click "Personal Information," then click "Update Information."
3. Enter in any new information and click "Save."

Should you need further assistance, please contact membership@appa.org or 703-684-1446.



APPA 2016 Annual Meeting & Exposition

July 12-14 2016

Mark your calendar to attend next year's meeting and exposition. You won't want to miss this exciting gathering of fellow facilities professionals and exceptional speakers! Co-located with SRAPPA and TNAPPA 2016 in downtown Nashville, Tennessee.

GRITS for APPA

On October 19, the Sustainable Endowments Institute (SEI) and APPA launched a new partnership that will provide all APPA members with free access to the Green Revolving Investment Tracking System (GRITS)!

GRITS is a project-management Web tool that allows users to track and analyze the energy, financial, and carbon savings data from their energy- and resource-efficiency projects, as well as access a library of more than 1,400 projects completed by other GRITS users across the U.S. and Canada.

Now, APPA member institutions can access the core features of the GRITS tool at no cost.

To learn more, visit <http://appa.org/grits.cfm>.



New Look for FM!

We hope you like *Facilities Manager's* new look for 2016! As part of the natural evolution of any publication, we thought it was time to revisit the magazine design and make some changes and updates. We been working with Vanessa Sifford, FM's designer from Touch 3, to freshen up the look, while maintaining the readability and functionality that FM readers enjoy. We think we've found a nice balance, and hope that you are as happy with the new look as we are.



APPA Lands' End Store Open for Business

Show the world you are part of the educational facilities world's top professional organization. At the APPA Land's End store, you can purchase high-quality apparel and other gear of your choice and have it personalized with the APPA logo. All personalized products



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are backed 100 percent by the Land's End's product guarantee. Polo shirts and caps are now available. They are ready to have the APPA logo added—and product offerings are growing. Visit <http://ces.landsend.com/APPASTORE> today to fulfill your APPA gear needs—and those of your staff—at the APPA Land's End store.

APPA's Facilities Management Evaluation program (FMEP)

The quality of an educational organization's facilities has a major impact on attracting and keeping students. But how do the many people who depend on your facilities define quality? How do your facilities meet their expectations? And how do they measure up against other campuses?

APPA's Facilities Management Evaluation Program (FMEP) helps you turn these questions into a powerful catalyst for improving how you manage your facilities. Modeled after the Baldrige National Quality Program Criteria for Performance Excellence, the FMEP criteria provide a framework for continuous improvement. This customized evaluation gives you the feedback and actions you need to transform your educational facilities program into one worthy of international recognition for quality.

The FMEP is not a cookie-cutter process. Each FMEP is customized and tailored to the specific institution for which it is conducted. The evaluation team is handpicked so that each institution is evaluated by a select group of peers from campuses sharing similar educational, financial, and physical characteristics.

If you are interested in:

- Achieving continuous quality improvement
- Exceeding customer expectations
- Improving your understanding of facilities issues, and
- Changing your organization's responsiveness to the demands it faces...

Consider the APPA FMEP! For more information, visit www.appa.org/fmep/ or contact Holly Judd at holly@appa.org.

APPA EVENTS

Jan 17-21, 2016

APPA U, New Orleans, LA

Jan 25-28, 2016

Supervisor's Toolkit, University of North Texas

Jan 25-29, 2016

Supervisor's Toolkit, University of Memphis

Feb 15-19, 2016

Supervisor's Toolkit, University of Kentucky

Feb 24, 2016

Drive-In Workshop, Butler University

Apr 4-5, 2016

Smart and Sustainable Campuses Conference, Inner Harbor, Baltimore, MD

Apr 5, 2016

Drive-In Workshop, University of Colorado-Colorado Springs

Apr 12, 2016

Drive-In Workshop, University of Maryland

Apr 15, 2016

Drive-In Workshop, Auraria Higher Education Center

Jul 11, 2016

Emerging Professionals Summit, Nashville, TN

Jul 11, 2016

Senior Facilities Officers Summit, Nashville, TN

Jul 12-14, 2016

APPA 2016, Nashville, TN

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

APPA Congratulates EFP & CEFP recipients

The following professionals have successfully completed the requirements for APPA's CEFP and EFP credentials, from February 3–November 10, 2015.

Congratulations on their personal accomplishments.



CEFP RECIPIENTS

Ken Albright, Butte-Glenn Community College

Roger Bizzotto, University of British Columbia-Okanagan

Nicholas Brege, Alpena Community College

John Furman, Western Washington University

David Graem, Trinity Valley Community College

Robert Morro, Villanova University

Mike O'Connor, Appalachian State University

Todd Pegg, Virginia Military Institute

Kathy Richards, Northern Michigan University

Wes Stewart, University of Texas Health Science Center at Houston

David Van Hook, Kennesaw State University



EFP RECIPIENTS

Darryl Brotemarkle, Arkansas State University

Edward Cook, Elgin Community College

Martin McBurney, Balfour Beatty Communities

Eugene McCurdy, Viterbo University

Yvonne Roberts, Oklahoma State University

APPA Credentialing Prep Course

The APPA credential prep course and exams are offered exclusively online. This enables self-paced study and eliminates the need for travel budgets and days away from the office.

THE PREP COURSE

Here are some of the characteristics of this effective and convenient prep course:

- Covers all four core Body of Knowledge (BOK) areas
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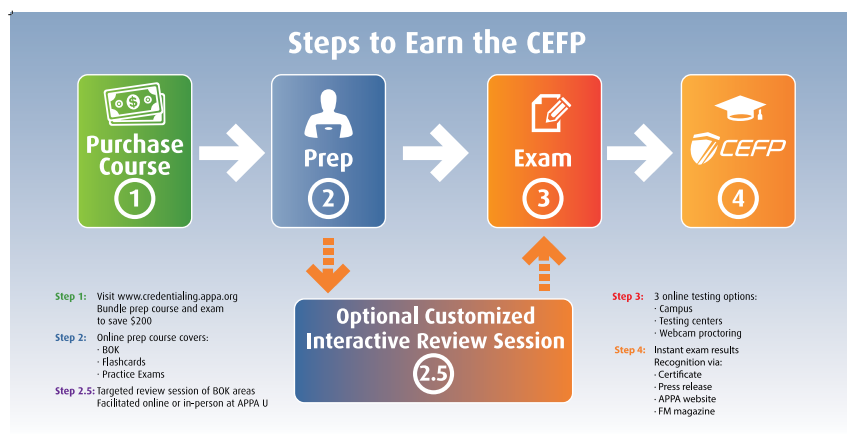
The platform provides an exciting array of online testing options to suit test-takers' needs:

- At a local Kryterion testing center staffed with professional proctors; or
- On campus or at home, utilizing a webcam-enabled online proctor arranged by Kryterion.

OPTIONAL REVIEW SESSIONS

Customized Interactive Review (CIR) sessions are available online or in person to exam candidates who have completed the online prep course. The instructor will have access to all practice exam results to customize/tailor the venue and spend more time productively and efficiently, maximizing the content areas that need to be addressed before taking the exams.

Visit the APPA website to learn more about this exciting new option, and register to prep for your CEFP credential today! Questions? Contact Christina Hills at christina@appa.org or call 703-542-3844.



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Contact APPA's staff for any questions regarding membership, programs, or publications via phone or e-mail.



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Chief staff officer of the association. Contact for the Facilities Management Evaluation Program (FMEP). Serves as staff liaison to the Board of Directors, and the Executive Committee.



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Provides management oversight for APPA programs, administrative support, and assists the Executive Vice President in general association management. Staff liaison to the ERAPPA region, the Community College Engagement Group, and the Standards and Codes Council.



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Provides IT, telecommunications, and help desk support to APPA staff. Assists with Web management and design. Provides support to Associate Vice President with building facilities and vendor relations.



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Managing editor of *Facilities Manager*, production manager of the APPA BOK (Body of Knowledge), and manager of the APPA Bookstore. Manages the development and production of a full range of print and online materials.



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Directs book, periodical, and research development, including the BOK (Body of Knowledge). Editor of *Facilities Manager* and *Inside APPA*. Staff liaison to the SRAPPA region, Information and Research Committee, the Center for Facilities Research (CFaR), and the BOK Editorial Board.



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Directs APPA's professional development programming initiatives through the Supervisor's Toolkit, Institute for Facilities Management, Leadership Academy, and Annual Meeting. Coordinates corporate development opportunities through the APPA's tradeshow and sponsorship initiatives. Staff liaison to the MAPPA region and the Professional Development Committee.



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Directs the coordination and evaluation of human resources functions, supports EVP, and is administrator for the Facilities Management Evaluation Program (FMEP).



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Manages logistics and promotions for all APPA professional development programs, conferences and events. Areas of responsibility include the APPA Supervisor's Toolkit, Facilities Drive-In Workshops, APPA Annual Conference and Exposition, Institute for Facilities Management, and Leadership Academy.



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Supports membership recruitment and retention, new member inquiries, invoicing, and other customer service questions. Provides outreach support for regional and chapter events and projects. Also serves as the administrator of APPA's Standards and Codes Council and its standards Work Groups.



Director of Membership and Outreach

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Responsible for the recruitment and retention of institutions and business partners in all categories of membership. Reviews membership needs and coordinates the development and implementation of membership marketing campaigns. Oversees database and records management and assesses current and future requirements. Serves as the staff liaison to the APPA Membership Committee and the RMA and PCAPPA regions.

A Renewed Focus on Collaboration

By E. Lander Medlin

Collaboration has long been a part of APPA's strategy to effectively leverage its resources. Frankly, collaboration is an imperative if we are to deliver what's best for our members and their institutions. Furthermore, collaboration has allowed the organization to greatly expand the depth and breadth of programs, products, and services for our members benefit. A true win-win-win for everyone. Yet collaboration is complicated, requiring time and effort, discipline and focus, commitment and communication. All geared to a shared vision and clear goals if we are to truly encourage cooperative engagement by all parties.

COLLABORATION STARTS AT HOME

Indeed, the significant update and revision of APPA's 2020 Strategic Plan is laser focused on engagement and collaboration as critical elements for our future success. And, in fact, our president,

Pete Strazdas, AVP for facilities at Western Michigan University, is passionate about broad-based engagement in collaborative activities. So much so that the theme for his presidency is "Advancing the Profession through Engagement & Collaboration." In his banquet speech at the July 2015 annual conference, Pete stated,

"Member engagement is all over our strategic plan, but we intend to put engagement on steroids! In order to do more for our members, we must partner and collaborate with other associations. Our members need services or alignment with a myriad of associations. Our collaboration between other professional organizations will provide better value and increased membership for APPA. The theme of engagement and collaboration for this year is integrated into the strategic plan. It's now time for all of us to work that plan!"

Now that's clarity! Accordingly, our 2020 Strategic Plan serves as the framework providing this kind of rigor, focus, and direction for our collaborative engagement efforts.

WITH A LITTLE HELP FROM OUR FRIENDS

Additionally, we invited the volunteer leadership (current APPA board and committee members and current regional board members) to take a quick survey to help us finetune the collaboration component of APPA's new strategic plan. We asked this group of volunteers to answer just one question: "To identify the Top 10 association or organizations with whom you believe APPA should increase its collaboration for the benefit of APPA's members."

As you can well imagine, NACUBO (National Association of



*MOUs or Strategic Alliance Agreements in Place.

College & University Business Officers), ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers), and SCUP (Society for College & University Planning) were viewed as the top three organizations with whom APPA should be collaborating.

Others included: AASHE (Association for the Advancement of Sustainability in Higher Education), ACUHO-I (Association of College & University Housing Officers-International), ANSI (American National Standards Institute), NFPA (National Fire Protection Association), AIA (American Institute of Architects), PGMS (Professional Grounds Management Society), USGBC (U.S. Green Building Council), and CSHEMA (Campus Safety, Health, and Environmental Managers Association).

This list affirms the organizations with whom we have been engaged for many years and renews our commitment to develop these relationships even further. As such, we will be strengthening these relationships by undertaking even more collaborative activities (writing articles, coordinating conference presentations, elaborating on meaningful and mutually beneficial metrics, expanding our codes and regulatory discussions,

and identifying mutual research needs among others).

The outcomes of the survey have most definitely given us renewed commitment toward these and other collaborative activities and provide the necessary momentum moving forward. See the collaboration wheel graphic for the connections these organizations have with various facilities management roles and activities.

We have had an impressive array of strategic partners with which to collaborate (sister associations, agencies and organizations, corporate entities, etc.) who share our vision for long-term, mutually beneficial engagement for the success of our members and their institutions. Ultimately, it's all about building effective relationships and forging a successful path forward together for the long haul. The leadership and staff remain committed to paving a great future so you can be successful at your institution and prepare the next generation of educational facility professionals. §

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

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The Value of My MAPPA/APPa Journey

By Jerry Carlson, Secretary-Treasurer



My personal MAPPA/APPa journey has been valuable and rewarding for me. During the past 25 years, I have been able to meet many colleagues, business partners, and APPa staff members that I can call my friends!

To begin with, my collegiate coursework focused mostly on accounting, business administration, management and marketing, and business law classes. After all, my degrees were in finance, law, and accounting. Although my coursework prepared me for the business side of facilities, it did not prepare me for the physical side of the university.

I graduated in 1980 and began working at Illinois State University as an Accountant II in the Athletic Department. Through my various campus interactions, I was fortunate to meet the associate vice president for facilities and planning, Richard Runner. Over time, Dick and I grew to be colleagues and friends. In 1987, Illinois State University began designing and building a new basketball arena. The new building was scheduled to open January 1, 1989. The facility needed an assistant director for concession operations, building entertainment contract management, and merchandise sales. In the fall of 1988, Dick Runner asked me to apply for the assistant director's position at the arena. I did and was fortunate to have landed that position.

THE APPa INTRODUCTION

It was my first building-management related experience. Dick apparently liked what I was doing, and 20 months later asked that I apply to head the work management center at the physical plant (facilities). It was this position that introduced me to MAPPA (Midwestern Region APPa) and APPa. Jim Demarest was the executive director at the time. He was a big supporter of APPa and a member of the professional development committee. When I started my new position, we had three people

manually typing work orders on IBM Selectric typewriters. Jim asked that I work with Bob McMains to tour campuses to move from a manual process to an automated way to issue work orders. In the spring of 1991, Bob and I went to the University of Notre Dame, the University of Iowa, Northern Illinois University, and the University of Wisconsin to look at their operations and to glean information on what software they were using so that we could set up an automated work order system of our own. While at Notre Dame, we met Gary Shumaker and Mike Smith. We looked at their "Chief" computerized maintenance management system (CMMS) software. It was one of many software offerings for work order creation.

Later that fall, Jim encouraged me to attend the MAPPA conference to be held in Minneapolis. I flew to Chicago, changed planes and found out that Gary and Mike were on the same plane and were going to MAPPA too. This was my first introduction to MAPPA and APPa. I was impressed with the conference and knew I had found a home and a new career in facilities management. While at MAPPA, I was able to network with other facility professionals. I met so many facilities professionals who were eager to share what they knew and offer assistance if I had questions. Through the years, I was able to grow my position into the director for administrative services, and developing these initial contacts made that transition easier.

At subsequent MAPPA and APPa conferences, I learned about all of the educational opportunities and publications APPa had to offer. I started building my own library, first purchasing the Body of Knowledge (BOK), then adding the *Operational Guidelines for Educational Facilities: Custodial, Maintenance, and Grounds*, and adding other publications as they were created. I was able to attend and graduate from the APPa Institute for Facilities Management and

the Leadership Academy. In October 2013 I was able to obtain my CEFP.

Over the years, my MAPPA/APPa connections helped me out tremendously. I felt I needed to get more involved and had expressed interest in assisting MAPPA in some way. In 2000, some of the MAPPA board members approached me and asked if I would be interested in running for MAPPA treasurer. I was flattered that this group asked me to run for a MAPPA board position, and I gladly did! I served as MAPPA's treasurer for two terms (four years). At the end of my term as treasurer, I was asked again to run for MAPPA's president-elect position. I gladly accepted that challenge and became the president-elect. In the fall of 2005 I became MAPPA's president. I was installed at the MAPPA meeting in Minneapolis. How interesting that my first MAPPA experience was 14 years prior in Minnesota, and now I was fortunate to become the regional president.

The MAPPA meeting in 2006 was hosted by Indiana University–Purdue University Indianapolis (IUPUI) and scheduled to be held in downtown Indianapolis. In the early spring I changed positions and moved from Illinois State University to become director of maintenance services at Butler University in Indianapolis. What a coincidence! As MAPPA's president, IUPUI invited me to their monthly organizational host committee meetings. Emily Wren assembled a great group of individuals to help with the logistics of hosting a regional meeting.

SEIZING OPPORTUNITIES

My first APPa Board experience was in 2007 as MAPPA's junior representative to the APPa Board. That was an eye-opener for me. As with the regional boards, APPa's Board consists solely of volunteers. I was impressed with the APPa Board. These were facility professionals and leaders in the higher education industry. Their sole purpose was to promote the facilities profession and to enhance the APPa membership experience.

At the end of my year as senior representative, I knew that my time with the MAPPA and APPa Boards were coming to a close. I did not want that relationship to end. John Ott was serving as the MAPPA representative to APPa's Awards and Recognition Committee (ARC). He wanted to move to the Professional Affairs Committee (PAC), and asked me to serve on the ARC. I did for three years and then moved to the PAC. At the end of my appointment to the PAC, Chuck Scott, Ruthann Manlet, and Brandon Baswell asked if I would

consider running for APPa's Secretary-Treasurer position. Once again I seized the opportunity. I was both fortunate and grateful that the membership elected me to this position. APPa is near and dear to my heart. The more I put into being involved, the more I have received, tenfold!

MAKE OF IT WHAT YOU WILL

Membership in APPa is what you make of it. There are so many opportunities to participate. You can network with colleagues to bounce ideas off of them, or find like issues to discuss and problem solve. You can take advantage of the course offerings through the Institute, the Leadership Academy, the Supervisor's Toolkit, the Drive-In Workshops, the Credentialing Program, etc. You can attend local, regional, and international meetings. You can use the publications offered to research and find solutions to your issues or concerns. You can participate in the Facilities Performance Indicators (FPI) survey by entering your institution's information and then being able to see how your peer and aspirant institutions compare to you. You can request that a Facilities Management Evaluation Program (FMEP) be conducted at your institution to measure your organization's overall health and obtain suggestions for improvements. You can volunteer to serve at the local or regional chapters or on the international level.

Being a MAPPA/APPa member has helped me tremendously over the past 25 years. I have been able to use many opportunities to network and expand my facilities education through the Institute and the Academy, participated in local Drive-In Workshop deliveries, attended several regional and international meetings, participated on the regional board and the international board, and I finally have the opportunity to serve as APPa's Secretary-Treasurer. It is an honor to serve this great organization. I encourage you all to seek opportunities to participate at whatever level you deem appropriate for you.

As George B. Wright once said, "All of us are smarter than any one of us." I am APPa; we are APPa! 

Jerry Carlson is director of maintenance services at Butler University, Indianapolis, IN. He is APPa's Secretary-Treasurer, and can be reached at gcarlson@butler.edu.

REMINDER

APPa's 2016-2017 dues billing begins mid-February.

Getting Invited to Dinner

By Lindsay E. Wagner

If I had a dollar for every time I have been involved in a conversation about facilities managers not having a seat at the table, there is a good chance I could retire. Why are you still standing outside the dinner party talking about this? It is time to knock on the door and provide the host a gift that not only gets you a seat, but also makes you the guest of honor. I am sure when you hear “gift,” you think of money and you are right back to pacing around outside the dinner party because you have no money. What if I told you that the greatest gift you could give is free?

Over 450 learning institutions are currently realizing the benefits of APPA's **Facilities Performance Indicators (FPI)** measurement services. FPI empowers the educational facilities professional with the vital data, statistical references, and reporting tools needed to measure operations and performance, identify capital asset realities, and lead a successful facilities strategy that supports the institution's mission and vision.

What does this have to do with being invited to dinner? Well, data is defined as “facts or statistics gathered together for reference or analysis.” It is the plural form of “datum,” which is a single piece of information or a fixed starting

point from which inferences may be drawn. The origin of “datum” is the Latin *dare*, meaning “to give,” so “datum” means “something given.” Could the FPI data be the gift that gets you a seat at the table? Yes, but there are some goals that you should keep in mind as you complete your annual FPI survey and package up your data to present as gifts.

ALIGNMENT

The presentation of your data must be in alignment with your institution's goals, mission, and strategy. The first step in developing this alignment is establishing a firm understanding of what the institutional mission is and relating that to the maintenance and operation of the buildings and grounds. The FPI survey provides data that can potentially answer questions regarding how well your facilities portfolio aligns with your institution's strategic direction and academic focus, but this quantitative data alone holds little meaning. You must gather some qualitative data of your own and figure out how you can best influence the execution of the broader institutional mission and how the data you possess can be a driving force in institutional planning and decision making.

ACCURACY

The accuracy and reliability of the data that you collect is paramount. If you are new to the FPI survey, spend time getting familiar with the definitions that are provided for all inputs. As you move through the survey, take notes that define the location of the data you will input in the survey, so that you can return to the same source each year. If there are multiple sources for a single input that show different results, be sure you know why and are able to explain the difference if it is questioned. It is possible that multiple departments across an institution may track and house what is perceived to be the same data, yet the numbers are different. Don't get caught up in this. Simply see to it that you can justify and ensure continuity of all data inputs year after year.

CREDIBILITY

If you can establish alignment with your institutional mission and show accuracy, you will begin to build credibility. You will become the source of information required to answer questions regarding operational efficiency, funding levels, ownership costs, and investment decisions. If you make it known that you have an accurate data source that



you know how to unpack and present in context with your institutional mission, people will be fighting to sit next to you at the dinner table.

RELATIONSHIPS

There is something in the FPI for every possible stakeholder in the institution, from the president to the students. You have to be willing to get to know each one of these stakeholders and develop an understanding of their role in the broader institutional mission. How can you use the gifts you possess to assist them? If they had an understanding of your role in the big picture, how could they assist you? As your credibility grows, people will seek out relationships with you. The key to a fruitful relationship is a willingness to understand their roles and how you can assist in their success. Then their success will become your success, because ultimately you have a shared mission.

PARTICIPATION

Get your staff involved. As you develop skills in unpacking the data and using it as a gift, have them do the same with their department-specific data. In the APPA delivery of the Supervisor's Toolkit, a supervisor's requirement to manage both up and down is discussed repeatedly. Armed with the FPI data, the supervisor could use it as a motivational tool for frontline workers and as a justification when bringing forward budget requests or annual plans. Department-wide participation allows the development of a common language and the ability to move forward with a unified front.

PROFESSIONALISM

It is APPA's mission to transform facilities professionals into higher-performing managers and leaders, which helps transform member institutions into more inviting and supportive learning environments, which in turn elevates educational facilities' recognition and value and their direct impact on the recruitment and retention of students, faculty, and staff. APPA provides the FPI survey to member institutions as one tool to utilize. It is up to you to use it and to know and understand the data and how it relates to your institution's mission. Taking responsibility for the presentation and productive use of this data is the ultimate expression of professionalism.


DECIDING ON THE GIFT

Now that you know the extent of the data that is available, you have to decide on the perfect gift that

will get you the dinner invitation you are after. Start by aligning with your institutional mission. Be sure you have a clear understanding of your institutional goals and strategies, and then figure out how you can best present yourself as an asset to the institution.

Ensure that the data you are collecting and using as inputs in the FPI survey is accurate. Develop confidence in the data and use it to establish credibility with campus stakeholders. Build relationships with all those stakeholders and develop an understanding of their role in the mission and how you can provide gifts that will help them succeed. Get your staff involved. Empower them with data and the ability to use it effectively. Ultimately, use the FPI to display your professionalism. Knock on the door and provide the greatest gift a person can give: relevant and accurate information.

If you need some assistance gift shopping, APPA can help. The 2015-2016 APPA FPI Survey cycle begins in July 2016, giving you plenty of time to start thinking about this gift. There is no cost for member institutions to participate, and the FPI report is free to all participating institutions.

APPA offers FPI training and consulting services that are delivered by a team of qualified facilities performance advisors. FPI advisors are seasoned and experienced educational facilities professionals who have a career history with APPA member institutions. They understand the business and what can be achieved through the FPI. They can train campus personnel in FPI data collection or collect the data on your behalf. They can also provide a third-party interpretation of your data and help you unpack it, creating the perfect gifts for key campus stakeholders. Contact Christina Hills for more information on these services at christina@appa.org. 

Lindsay Wagner is a Ph.D. student at Colorado State University, a professor at Wentworth Institute of Technology, and a freelance consultant. You can reach her at lindsayevawagner@gmail.com.

“Knock on the door and provide the greatest gift a person can give: relevant and accurate information.”



LEARN MORE ABOUT FPI @

www.appa.org/research/fpi

Embracing the Struggle

By Joe Whitefield



If you want to have some fun, look up the greatest songs of all time. It is a great stroll down memory lane. From “Born to Run” (Bruce Springsteen) to “Good Vibrations” (The Beach Boys) to “Smells Like Teen Spirit” (Nirvana), there is something for everyone. No doubt, you have participated in an epic debate or two about the best songs and artists—never totally settling on a consensus for number one.

Behind the debates is a broader question: What makes a song a classic? Because I have no musical talents or gifts whatsoever, I may be the wrong person to comment, but that won’t stop me. I enjoy great music and marvel at the mysterious combination of music, lyrics, and vocals that can connect with my thoughts and trigger certain emotions. Along those lines, I have often imagined how easy it must be for musicians and artists to produce great music and

instant classics. After all, they are so talented it must come naturally. I recently discovered that this isn’t always the case.

Bob Dylan provides an insightful, behind-the-scenes look at the recording process for three albums from 1965 through 1966 in the 18-CD set entitled *The Cutting Edge 1965-1966: The Bootleg Series Vol. 12*. To my surprise, there is a portion of the recordings that chronicles what can only be described as an *absolute struggle* in recording the classic hit “Like a Rolling Stone.” The session lasted two days. The song was played to different beats, including a waltz arrangement. Some of the takes were terrible. Everyone involved expressed considerable frustration with the way things were going. Ultimately, the cut that would become the classic was made somewhere near the middle of the session—with an ad-lib organ section that proved to be an essential element to the song. I couldn’t believe the painstaking process that was involved to produce this signature song. It is a wonder that it was recorded.

As I listened to the documentary, I thought about the similarities of Bob Dylan’s recording process with organizational leadership. Some days, it feels like a real struggle to pull everyone together to accomplish an important task. The purpose of this article is to suggest that when dealing with the challenges of today, effective leaders should expect and be prepared for a few struggles. How does one prepare? Let’s look at a few keys.


First, acknowledge the degree of difficulty of the task at hand. This seems obvious to most people. However, there can always be pressure to oversimplify the situation and understate the challenges and obstacles involved. In this regard, very few teachers are as good as first-hand experience. Experience teaches the lessons that were not mentioned in someone’s how-to lecture. Reality meets theory and reactions counter actions when ideas are implemented. At this point you can possibly draw on the experience of others. Benchmarking can be quite useful—as long as you don’t simply assume others’ outcomes for your situation.

Second, embrace the struggle that comes with working through the challenges and obstacles. This usually starts with separating necessary resistance and healthy skepticism from unnecessary obstruction. Good ideas and innovations should be challenged. Don't be offended at this; if ideas are really that good, they can withstand the scrutiny. Good ideas will produce tangible benefits that exceed the costs incurred and other benefits that were traded-off. In fact, good ideas can become great ideas and accomplishments when they are allowed to be critiqued and revised. It is also entirely possible that your ideas will receive valuable input from people you might not have considered as key players.

Finally, learn the lessons along the way. Experience is only good if you learn from it and if it makes you better prepared the next time. Whether things go exactly as planned or fail altogether, commit to a process that draws out the critical lessons that lead to improvement. Think creatively as well as critically. How did this succeed or fail? Who contributed to the success? What happened that I did not expect? If I

could change one thing next time, what would it be? Answers to questions like these will invariably lead to better judgment. Don't shy away from the chance to grow by passing on the opportunity to learn.

We are all looking for ways to improve our organizations and institutions through any means possible. Innovation and change certainly require a healthy measure of risk-taking. Breaking from the status quo always does. Do not expect things to be easy. Instead, recognize the impending struggle that comes with doing something different and better, and especially with doing something great. Struggle is not an indication of poor leadership. Rather, it is often a prerequisite for innovation and indicates the need for strong leadership. So, prepare yourself for some hard work. The reward could be well worth the effort.

By the way, *Rolling Stone* magazine lists "Like a Rolling Stone" as the greatest song of all time. 

Joe Whitefield is assistant vice president at Middle Tennessee State University, Murfreesboro, TN. He can be reached at joe.whitefield@mtsu.edu.

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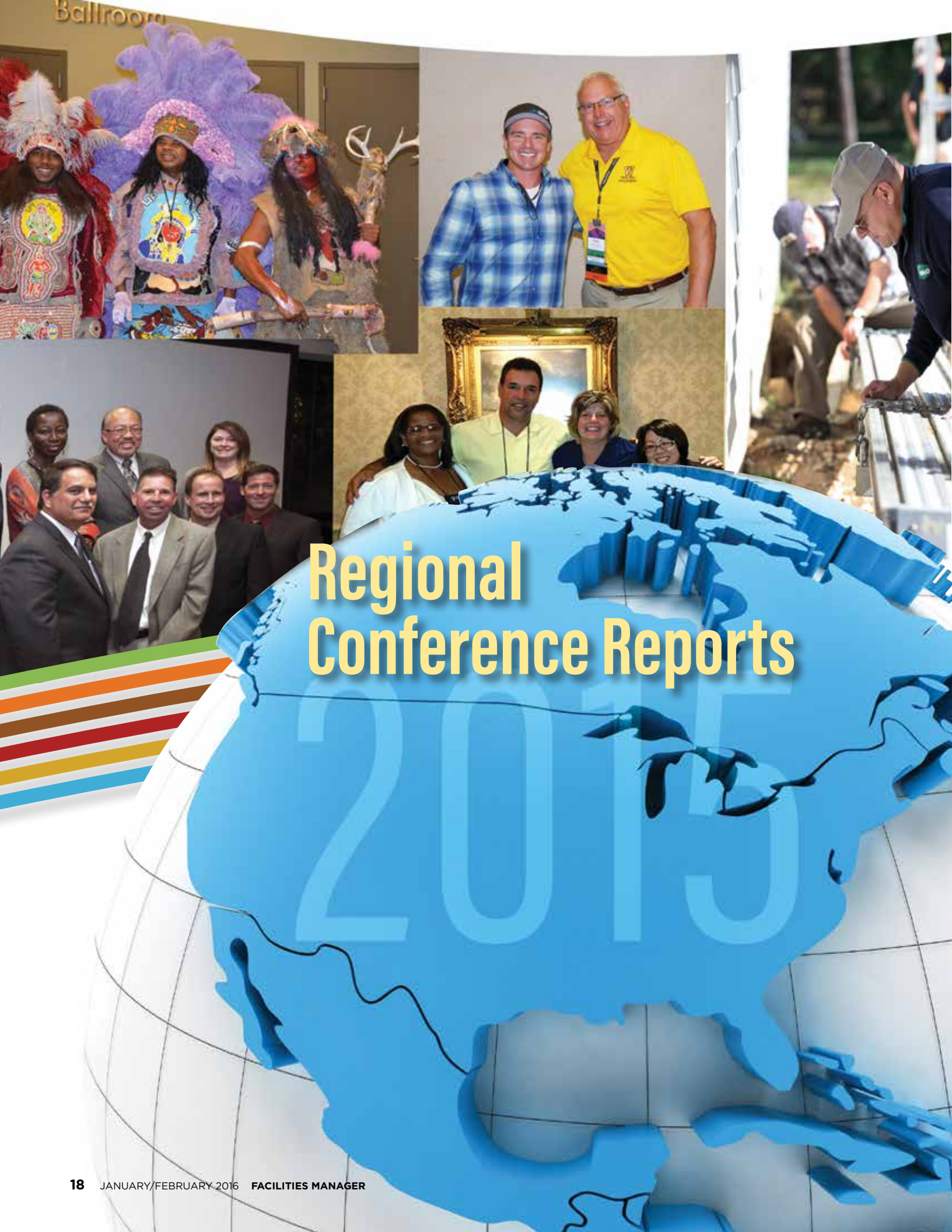
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Regional Conference Reports

Eastern Region

ERAPPA



By Beth Clark
ERAPPA President
Pennsylvania State University

More than 625 participants representing 124 educational institutions attended the 2015 ERAPPA Annual Meeting in **Providence, Rhode Island** from October 4 through October 7. The conference theme was “Lighting Our Future.” Keynote speaker Bob Kelleher’s presentation on employee engagement, workforce trends, and leadership was well received and quite timely. Plenary speaker Dr. Ned Hallowell encouraged the audience to slow down, disconnect from technology, and reconnect with each other during his “Crazy Busy” talk.

The 2015 conference was hosted by the Southern New England Chapter of APPA (SNEAPPA) under the leadership of John Cannon (College of the Holy Cross). The host committee delivered an engaging, thought-provoking, and thoroughly enjoyable program that included a five-track professional development program, APPA’s Supervisor’s Toolkit, a Hall of Resources featuring a variety of business partners, and an evening of autumnal splendor at the Roger Williams Park Zoo’s Jack-O-Lantern Spectacular.

Four board members were elected at the Annual Business Meeting on Tuesday afternoon. Steve Peary (University of Vermont) was elected president-elect, Pete Buchheit (University of Pittsburgh–Bradford) was reelected vice president for chapter affairs, Paul Martin (University of Western Ontario) was elected vice president for technology & communications, and Arthur Walsh (University of New Brunswick–Fredericton) was reelected treasurer. Also at the Annual Business Meeting, the entire allotment of ERAPPA professional development scholarships was awarded—six educational scholarships, three credentialing scholarships, and ten ambassador scholarships.

At the Awards Banquet, Certificates of Appreciation were awarded to outgoing



Beth Clark



Above: A bird’s-eye view of the ERAPPA 2015 Hall of Resources—110-plus business-partner booths and plenty of space for networking.

Left: This year’s Annual Meeting included a Habitat for Humanity service project as a way of giving back to the host city of Providence.



Photos by H&J Photography.

chapter presidents, ERAPPA committee members, and host committee members. Merit Awards were given to the host committee chair, outgoing ERAPPA liaisons to APPA committees, and outgoing board members. Rick Phillips (Penn State University), Todd Miller (Centenary College), and Chuck Bagley (University of Maryland) were recognized with ERAPPA’s Rising Star Award. John Cannon and Penn State University were awarded ERAPPA’s Chapter Champion Award for SNEAPPA and the Keystone Chapter of APPA (KAPPA) respectively. ERAPPA President Dale DeBlois bestowed President’s Awards upon Pete Buchheit, Steve Peary, Keith Woodward (Quinnipiac University), and Dan Gearan (New England College).

Beth Clark assumed the role of ERAPPA president at the end of the Annual Meeting. Clark spoke of her motto for the coming year—“Think Differently”—and encouraged her ERAPPA colleagues to do the same as it relates to the ERAPPA organization, recruiting and retaining engaged employees, and our profession as a whole.

THE 2015-2016 ERAPPA OFFICERS

President—**Beth Clark**, Penn State University

President-Elect—**Steve Peary**, University of Vermont

Secretary—**Andrew Christ**, New Jersey Institute of Technology

Treasurer—**Arthur Walsh**, University of New Brunswick–Fredericton

APPA Senior Representative—

Dale DeBlois, Colby College

APPA Junior Representative—**Beth Clark**, Penn State University

APPA Liaison—**John Bernhards**

To view ERAPPA’s website and find a complete listing of the board of directors, please go to <http://www.appa.org/regions/erappa.cfm>.

2016 CONFERENCE: October 16-19, 2016 • Niagara Falls, Ontario, Canada

Southeastern Region

SRAPPA



By the SRAPPA Board

Red, Hot, & Rouge, SRAPPA's 64th annual conference, convened from October 10-13 in **Baton Rouge, Louisiana**. The educational program "Facility Professionals Advancing the Education Mission" gave over 180 participants representing 58 institutions along with 197 business partners the opportunity to attend 34 awesome educational sessions. Louisiana State University hosted SRAPPA 2015 and included an Exhibit Hall of 80 booths providing solutions to the issues facing our institutions.

SRAPPA is all about family and giving back to our communities. SRAPPA volunteers made 1,000 sandwiches and packed 500 lunches for St. Vincent de Paul's Bags of Hope program to be distributed to local homeless people, and also made a \$375 donation.

Peter Strazdas, APPA President, and Lander Medlin, APPA Executive Vice President, conducted the general session, emphasizing engagement among educational institutions as well as sister organizations and stressing what each of us can do to make APPA even better.

Keynote speaker Lieutenant General (ret.) Russel L. Honoré, Joint Task Force-Katrina Commander, discussed



Mardi Gras Indians at President's Banquet.

operating in the "new normal," and that to be effective, one must "See First, Understand First, Act First." The Monday night "Get Your Game On" tailgate was a combination of fun, BBQ, dancing, and friendly competition of both cornhole and MashBall, as teams threw against each other for supremacy. Plenary speaker Ira Blumenthal's presentation, "Change Is Mandatory, Growth Is Optional," illustrated how people and institutions need to change in order to remain relevant and be successful.

On the final night, conference goers danced from the "Celebrating Red Hot Success" reception to the President's Banquet, led by a trumpeter and Mardi Gras Indians.

The President's Banquet provided a fitting end to an exciting conference, as the outgoing president, Jodie Sweat, recapped the



Jodie Sweat passes gavel to incoming president, Dave Maharrey.

region's successful year and awarded the SRAPPA President's Awards to Andy Maddox and Mark Cutlip. She

also recognized board members who received awards for their service to the board: Dan Young, Chris Ziolkowski, and Andy Maddox. David Gray received the SRAPPA Emeritus Award, and recognition was given to SRAPPA members who received APPA awards in July at the Annual APPA Conference in Chicago, Illinois.

APPA President Peter Strazdas installed the 2015-16 SRAPPA board, and the night and conference concluded with fabulous music, and as always, more dancing.

THE 2015-2016 SRAPPA OFFICERS

President—**Dave Maharrey**, Louisiana State University

President-Elect—**Dan Wooten**, Tennessee State University

Vice President for Communications—**Kelly Ostergrant**, Middle Tennessee State University

Treasurer—**Becky Griffith**, Embry-Riddle Aeronautical University

APPA Senior Representative—**Wayne Goodwin**, Jackson State University

APPA Junior Representative—**Jay Williams**, Virginia Military Institute

APPA Liaison—**Steve Glazner**

To view SRAPPA's website and find a complete listing of the board of directors, please visit www.srappa.org.



SRAPPA 2015-2016 Board.

2016 CONFERENCE: July 12-14, 2016 • Nashville, Tennessee (co-located with APPA)

Midwest Region

MAPPA



By Becky Guelig
MAPPA Communications
Coordinator
Wisconsin School of Business

Embracing the emphasis on change from last year's conference, Greg Adams, Dawn Aguilera, and Rick Koehler of the University of Wisconsin–Milwaukee, hosted a lively 2015 MAPPA Conference. Held September 20-24 in **Milwaukee, Wisconsin**, the conference was nothing short of consequential.

Keynote speaker Kevin Brown initiated the conference with an enthusiastic and humorous talk on how we can be daily heroes. Supporting the facility services ideal to provide outstanding customer service, Brown shared about how everyday experiences can become opportunities to create the best possible outcomes.

Participants attended trainings on “Creating a People-Centered Organization” and “Achieving Institutional Goals through Facilities,” which emphasized the importance of customer service—both internal and external—to facility operations. The Big Ten Trainers Network, which tackles topics on training facility professionals, again joined MAPPA along with the Big Ten and Friends Conference, which facilitates idea sharing and networking for regional custodial professionals.

APPA President Peter Strazdas (Western Michigan University) and APPA Executive Vice President Lander Medlin joined the MAPPA fun this year with updates from APPA. Strazdas focused on the importance of member engagement and collaboration.

MAPPA transitioned 10 leadership positions at this year's conference. Most notable were the musical transitions of MAPPA President Mike Hamilton (Iowa State University) and Professional



2015-16 MAPPA Officers.



MAPPA President Greg Adams.

Development Chair Dana Gillon (University of Illinois at Urbana–Champaign). Hamilton spectacularly executed an a cappella rendition of “My Way” by Frank Sinatra, and Gillon's team celebrated via flash

mob—which included MAPPA leadership—after Tuesday's president's speech.

Greg Adams (Marquette University) is now MAPPA president; Mike is MAPPA past-president; Dana is MAPPA treasurer; and Tim Thimmesch (Grand Valley State University) was welcomed as president-elect.

MAPPA facilitated the donation of almost \$1,000 for the Sojourner Family Peace Center during the conference. President's Awards were received by Kristie Kowall (Illinois State University), Dana Gillon, and Jim Bogan (University of Wisconsin). Outgoing board member awards went to Brandon Baswell (Michigan State University), Ruthann Manlet (University of Minnesota), and Dana Gillon.

The president's reception and dinner ended with an inspiring speech from newly elected President Greg Adams. MAPPA's goal, to “steadfastly promote diversity in our leadership and membership,” was the highlight of his talk. Adams related his experience



MAPPA certified trainers for Supervisor's Toolkit (Karen Walker, Mario Barcena, Ruthann Manlet, Shoko Miyagi).

Photos by Margaret Hamilton.

from facilities departments in multiple universities to MAPPA's and APPA's rich resources for developing people and their careers within the profession of educational facilities management.

THE 2015-2016 MAPPA OFFICERS

President—**Greg Adams**, Marquette University

President-Elect—**Tim Thimmesch**, Grand Valley State University

Secretary—**Bob Currie**, Iowa State University

Treasurer—**Dana Gillon**, University of Illinois at Urbana–Champaign

APPA Senior Representative—**Kristie Kowall**, Illinois State University

APPA Junior Representative—**Lowell Bromander**, Hamline University

APPA Liaison—**Suzanne Healy**

To view MAPPA's website and find a complete listing of the board of directors, please go to <http://www.appa.org/regions/mapa.cfm>.

2016 CONFERENCE: October 1-5, 2016 • Des Moines, Iowa

Central Region

CAPPA



By Ed Heptig
CAPPA President
Kansas State University

Kansas State University (K-State) hosted the CAPPA 2015 Annual Conference

October 9-14 in **Manhattan, Kansas**, with the theme of "The Future? It's Now." A total of 279 attendees representing both higher education and business partners took part in the event.

K-State President Dr. Kirk Schulz delivered the keynote address and spoke about the institution's achievements, opportunities, and challenges. Day two was launched by the

dine at the Flint Hills Discovery Center, a museum showcasing the tallgrass prairie and the Flint Hills of Kansas.

CAPPA 2015 offered sessions in tracks ranging from facilities administration to maintenance, project management, and utilities. The educational sessions allowed attendees to see benchmarks and new innovations from other institutions so they could gain insights into facility improvements at their own campuses. A walking tour of the K-State campus highlighted recent and current renovations, including those at



Outgoing CAPPA President Glen Haubold passes gavel to 2015 President Ed Heptig.

sponsor prizes, meals, and refreshments in the exhibit hall, and provide other networking opportunities throughout the conference.

The closing banquet was held Tuesday evening. Norm Young, APPA Vice President for Information and Research, assisted in recognizing CAPPA award winners: Newsletter Award, Ana Thiemer and Sterling Miller; Certificate of Meritorious Service, Julio Cisneros and Mike Miller; Distinguished Member Award, Miles Abernathy and Shelton Riley; and the President's Award, Sue-Anna Miller and Bob Eckels. The KC Improv Company provided entertainment at the awards banquet. The professional comedy troupe persuaded the crowd to relax with laughter and skits that included CAPPA's President and Third Vice President participating as "volunteers."

The conference concluded with the annual business meeting, passing of the gavel, and induction of executive committee members for 2015-16.



Photos by Miles Abernathy

2015 CAPPA Officer Team.

mascot of the Kansas City Chiefs, "KC Wolf" Dan Meers. Meers spoke inspiringly of injuries he suffered in a zip-line accident that changed his outlook on life. He also was available to autograph his book, *Wolves Can't Fly: Faith, Family, and Fur*.

Before the exhibit hall opened Sunday evening, attendees selected different outings, depending on their interests. They could join a golf tournament at the scenic Colbert Hills, tour a brewery and the Sunset Zoo, or head for the Prairie Band Casino. A football watching party and tour of the Bill Snyder Family Stadium was available on Sunday evening for football enthusiasts. In the exhibit hall, baseball fans watched the Kansas City Royals win a Major League playoff game. Monday evening allowed participants to tour and

Hale Library, the College of Business Administration, and the College of Engineering complex, as well as the chilled water plant and utility line improvements. The tour concluded at the newly renovated West Memorial Stadium, where attendees enjoyed Call Hall ice cream and posed for a group photo.

Collaboration was clearly evident in the exhibit hall, where business partners staffed exhibits geared to the needs and interests of CAPPA members. Higher education attendees could discuss issues with vendors and develop relationships they could build on when returning to their own facility. CAPPA is honored to have so many business partners

THE 2015-2016 CAPPA OFFICERS

President—**Edward Heptig**, Kansas State University

First Vice President—**Ian Hadden**,

University of Arkansas at Little Rock
Secretary—**Sheila Awalt**, University of Texas at El Paso

Treasurer—**Tim Stiger**, Oklahoma City Public Schools

APPA Senior Representative—**Shelton Riley**, Texas Christian University

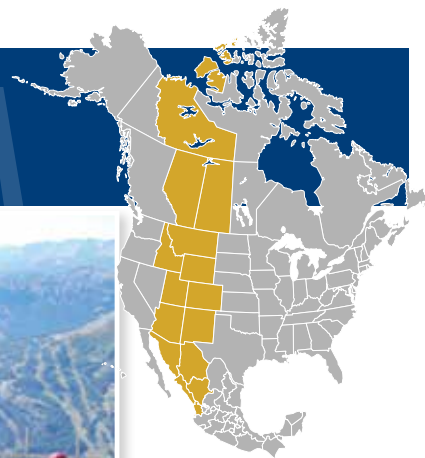
APPA Junior Representative—**David Handwork**, Arkansas State University
APPA Liaison—**Christina Hills**

To view CAPPA's website and find a complete listing of the board of directors, visit <http://www.cappaedu.org>.

2016 CONFERENCE: October 8-12, 2016 • Little Rock, Arkansas

Rocky Mountain Region

RMA



By Victoria Drummond
2015 Host Committee Chair
Montana State University

RMA's 2015 Annual Meeting was held September 9-11 at the Big Sky Resort in **Big Sky, Montana**. Preconference activities included the RMA board's fall meeting, fishing, golf, and tours of Montana State University's campus. The golf tournament hosted 62 golfers sponsored by McKinstry. Fishing included 35 anglers on the Madison and Gallatin Rivers, sponsored by Nalco Company and Armstrong International.

At the opening reception, RMA members reconnected under the big sky and late sunset with guitar music played by Kevin Fabozzi and enjoyed Montana wild-meats appetizers featuring elk, venison, and trout hosted by OpTerra.

Attendees were captivated by Chad Pregracke's keynote talk about his crusade to clean America's rivers and a gift copy of his book, *From the Bottom Up*, sponsored by Republic Services and MSU Facilities Services. Friday's keynote speaker, Jim Evanoff, presented Yellowstone National Park's historical management approaches to recreation or conservation.

The session tracks were "Institutional & Organizational Leadership," "Technology & Methods," "Maintaining a Culture of Service Excellence," and "Sustainability & Stewardship," and are available at <http://rma.appa.org/History-events.html>.

Mobile sessions (new this year) featured behind-the-scenes operational maintenance of a tram, including a trip up Lone Peak's summit (11,166 feet), and service excellence at Yellowstone Club, a private residential development. Other give-back opportunities included a Real Colors workshop sponsored by GLHN.

The AZ Sponsor Group hosted Business Partner Bingo, encouraging booth interactions with a chance to win either a fly fishing rod, gourmet chocolate, or a



APPA President Peter Strazdas and keynote speaker Chad Pregracke after speaking on cleaning America's rivers.



Attendees at the top of Big Sky's Lone Peak (11,166 feet elevation) for the tram expedition mobile session.



Photos by Gary Gramer.

Twenty-five RMA Conference first timers attended a special welcoming session to meet the RMA Board and have a chance to win RMA and APPA scholarships.

check to a charity of choice.

The theme dinner along the banks of the Gallatin River at the historic 320 Guest Ranch featured a barbeque with make-your-own s'mores around a campfire and dancing to the lively Bottom of the Barrel band.

The closing ceremony and Awards Banquet began with appetizers in Chet's Bar and background music by the MSU Jazz Band (students) and ended with dancing to Little Jane and the Pistol Whips. During dinner, RMA President Emmet Boyle presented the following awards:

- **H. Val Peterson Award:** Lisa Potter
- **Lee Newman Award:** INVISTA
- **RMA President's Award:** Chris Kopach
- **APPA's Unsung Hero Award:** Steve Hoskins
- **APPA's Effective and Innovative Practices Award:** The University of Colorado Boulder
- **APPA's Award for Excellence:** Weber State University
- **Host Committee Award:** Victoria Drummond and MSU's Host Committee

Boyle also recognized RMA leading APPA with EFP/CEFP credentials. The ceremony culminated with APPA President Peter Strazdas swearing in the 2015-16 RMA board officers.

THE 2015-2016 RMA OFFICERS

President—**David Turnquist**, University of Colorado

President-Elect—**Lisa Potter**, University of Colorado Boulder

Secretary—**Mike Millsapps**, Aims Community College

Treasurer—**Steve Hoskins**, University of Utah

APPA Senior Representative—**Brian Johnson**, University of Idaho

APPA Junior Representative—**Emmet Boyle**, University of Regina

APPA Liaison—**Kristin Witters**

To view RMA's website and find a complete listing of the board of directors, visit <http://www.appa.org/regions/rma.cfm>.

2016 CONFERENCE: September 25-28, 2016 • Flagstaff, Arizona

Pacific Coast Region

PCAPPA



By Tony Ichsan
PCAPPA President
Sonoma County Junior College
District—Santa Rosa Junior College

A good time was had by all at our 2015 annual meeting, held October 11-13 in **Portland, Oregon** and graciously hosted by Oregon State University. This amazing host team was visible throughout all the program areas and provided assistance to our 233 institutional member attendees. Success would not have been possible without the support of our 5 sponsors, 37 exhibiting companies, and 96 business partners. A big Pacific Coast welcome to our many first-time attendees, and kudos to the 33 Supervisor's Toolkit participants. With a focus on "Renew, Rebuild, Redefine," attendees were encouraged to capture best practices to bring back to their institutions.

The adventure began with three tour choices of Portland State University, including one solely on sustainable features and initiatives. Our keynote speaker was Jeff Harvey, CEO of Burgerville. Although Burgerville did not set out to be a sustainable company, its core value of "Commitment to the Community" meant doing the right things to provide the best service to its customers. Accordingly, Burgerville became a sustainable company and an inspirational topic for our attendees.

Washington APPA (WAPPA) chapter has been renamed "Northwest APPA" (NWAPPA) to better reflect the growth in participation from Oregon, Idaho, and British Columbia. And please join us in welcoming another new chapter, Bay Area APPA (BAYAPPA).

We were pleased to have APPA's incoming president, Chuck Scott (Illinois State University), and his wife Vicky attend



PCAPPA President,
Tony Ichsan.

their first PCAPPA conference. Chuck's participation in our board meetings provided insight and collaborative opportunities with APPA and other regions. During the business meeting, Chuck shared updates on APPA International. At our Award Dinner, 2014-15 President Chuck Davis provided a thoughtful and poignant speech to encourage all members to stand up and do the right thing. This was followed by Chuck Scott installing the new 2015-16 officers.

President Tony Ichsan encouraged members to take advantage of all available APPA tools and to participate in local PCAPPA opportunities during this "Year of Engagement." In preparation for PCAPPA 2016 (September 18-20), hosted by the California Institute of Technology in Pasadena, California, Ichsan is ensuring that the issues keeping our members awake at night will be addressed through the conference's "Resource, Ready, Renew and Reengage" theme.

Finally, a big note of thanks to Jason Wang, Master of Ceremonies extraordinaire, who kept the entire conference moving along and entertained,



PCAPPA Board at
awards dinner.



PCAPPA attendees at the exhibit hall.

Photo by Jason Toth

particularly during the Awards Dinner. Come and see him first hand in Pasadena next year and learn how to make cricket sounds for your next meeting!

THE 2015-2016 PCAPPA OFFICERS

President—**Tony Ichsan**, Sonoma County Junior College District—Santa Rosa Junior College

President-Elect—**John Ferris**, San Diego State University

Secretary—**Chuck Davis**, Seattle Central College

Treasurer—**Tony Guerrero**, University of Washington Bothell and Cascadia Community College

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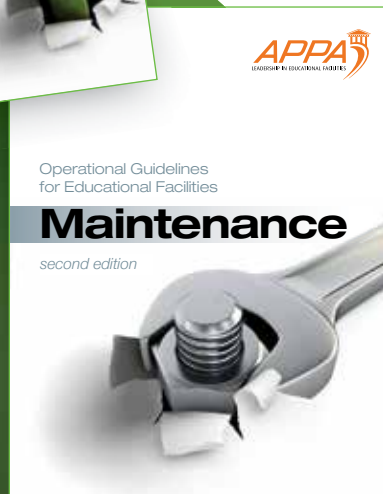
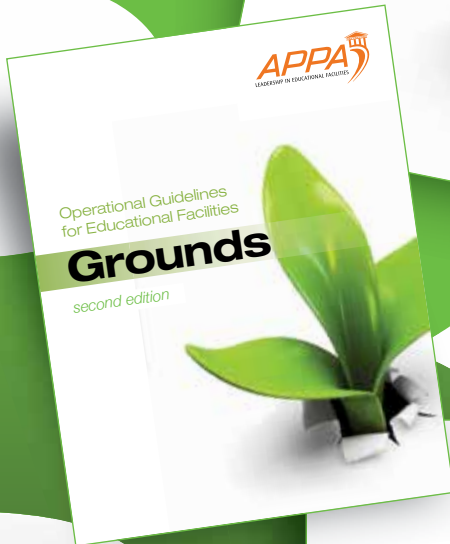
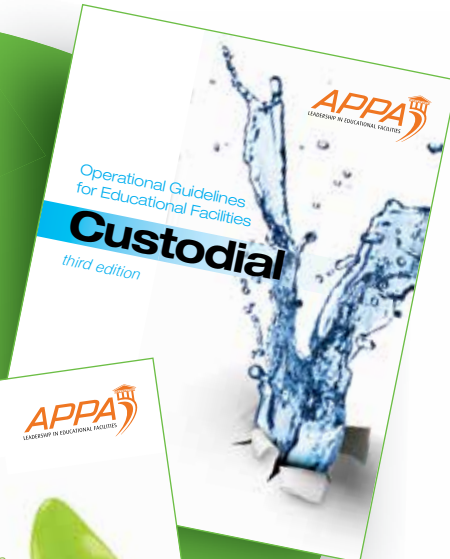
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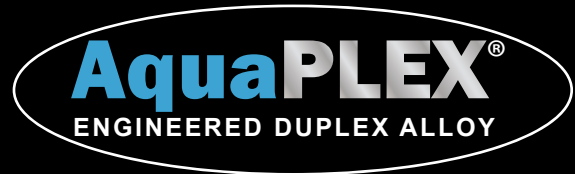
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MANAGED RISK

In the broadest sense, risk is anything that keeps an organization from achieving its objectives. Risk management is the process of determining what can go wrong and developing strategies to prevent these events from happening (and if they



Glenn Klinksiek

do happen, mitigating loss). According to **Glenn Klinksiek**, content manager for the knowledge center at the University Risk Management and Insurance Association in Bloomington, Indiana, URMIA has identified more than 250 areas of risk for colleges and universities. "Of these, nearly 30 are facilities related and are associated with institutional strategy, operations, and compliance," he says.

could have major adverse impacts. Examples include preventive maintenance, business continuity planning, and adequate planning around enterprise risk management, emergency response planning, and storm preparedness. Risk is managed through training staff adequately, managing processes effectively, and keeping campus physical assets in top working order. Failure to sustain these efforts will result in increased risk. "In fact, managed risk is a process endpoint that in itself requires regular maintenance," says DeLaHunt.

A few examples of managed risks include electrical and mechanical equipment, uneven sidewalks, deteriorated handrails, broken windows, pedestrian crossings, poor lighting or visibility, and large trees that are not maintained. Issues that are often shifted toward deferred maintenance include leaking roofs and

and Facilities Management

A Balancing Act

As defined by www.businessdictionary.com, managed risk is the "identified probability of loss, or exposure to a danger, that has been minimized to an acceptable level through careful planning and implementation of effective countermeasures."

Managed risk is centered on proactive troubleshooting for operational problems that could result in disruption, loss, or injury. "It is the end state of a process that includes objective assessment of risk, consensus agreement to a point of completion (a 'planning frontier' or point where the stakeholders agree that the risk is acceptable), implementation of the mitigation measures to which the process stakeholders have agreed, and sustained funding for ongoing costs to maintain the mitigation strategies," states **John DeLaHunt**, risk and life safety manager for the University of Texas at San Antonio.



John DeLaHunt

It is important to integrate managed risk into a campus-wide plan that is applied to key areas of operation where disruption

pipes, envelope gaps, asbestos and lead exposure, poor indoor air quality, and environmental exposures in labs.

In a campus context, managed risk may be the institution's prioritized list of capital reinvestment (deferred maintenance/ component renewal) that brings the



Nina Wollman

higher-impact investments to the top, or it may be the day-to-day choices that determine which problem to address first. Both areas deal with some of the more direct risk management strategies. "The subtle risks on campus that may fall into the managed-risk category are in-source versus outsource decisions, capital investment decisions that take on a higher risk

of failure in order to reduce initial construction costs, or the practice of stretching out maintenance intervals during reduced funding cycles," says **Nina Wollman**, national director of asset management assessment services for Jacobs, a professional services company based in Fort Worth, Texas.

A BALANCING ACT

Managed risk is essentially a balancing act. It involves a number of variables (often interconnected and quickly changing) that are combined with a complicated mix of priorities, including funding. It is the “best guess” determination of the trade-off between an incident happening and the consequences that could



Michael Johnson

result—such as deferring maintenance in one area in order to focus on another investment area—as well as what actions are needed to keep that risk under control.

Although organizations develop overarching goals for asset management, tactical implementation is a function of manpower and budget, often resulting in the short-term fix being selected. “When this happens, facilities managers may

forget to ‘price in’ or monetize the risk they are taking when they defer or trade off investment choices,” says Wollman. This, of course, often results in higher costs down the road.

That’s why it is important to “get ahead of potentially reactive issues and make them more predictable,” states **Michael Johnson**, associate vice chancellor for facilities at the University of Arkansas in Fayetteville. “Because there are never enough resources for everything at once, this helps ensure that resources can be found quickly through prioritization against other needs with lower priorities.”

Examples of Managed Risk Points

- Creating a walkway behind a student center to keep students from taking a shortcut through a hazardous loading dock area
- Replacing a roof at a residence hall that was at the end of its useful life but not yet leaking
- Discussing action plans before and after weather-related events and assessing buildings and walkways after storms
- Investing in occupational safety programs to improve safety and reduce operational and medical costs
- Installing a fire sprinkler system, even though the fire code does not require a fire sprinkler system for the building
- Having enough heating and cooling capacity to cover the loss of the single largest unit, should a mechanical failure occur
- Installing redundant systems in research institutions to prevent the loss of research data in the event of a failure
- Outsourcing dangerous maintenance work such as plumbing work on buried piping, rather than using staff

In recent years, college and university leaders have been implementing enterprise risk management (ERM) programs to address risk to their institutions. These programs typically involve boards and senior leadership for prioritizing risk and monitoring the effectiveness of risk management strategies. “An opportunity for facilities managers lies in the risk identification process, which allows them to make known the importance of facilities issues and the consequences of inadequate responses,” says URMIA’s Klinksiek.

As a process, ERM intentionally factors in potential upsides to business opportunities. The range of risks and opportunities surveyed in an ERM program will result in better buy-in for risk-mitigation approaches. “The opportunity-seeking nature of enterprise risk management helps define the opportunity costs of risk-mitigation strategies,” says DeLaHunt. “This helps organizations understand the true cost of its risks.” Once the top priorities are addressed, the ERM team reassesses progress and selects new projects.



Randall D. Gentzler

Some colleges and universities are challenged by not having an ERM system that is fully capable of identifying and prioritizing risks and supporting mitigation strategies. New and improved ERM systems are constantly being developed. “Other risk management approaches include incorporating strategic risk into ERM, getting project management offices involved with capital planning to

evaluate risks, and strategic planning that focuses more on risk factors,” states **Randall D. Gentzler**, vice president for finance and treasurer for Loyola University Maryland in Baltimore.

Another metric to consider is total cost of ownership (TCO). There is currently a strong emphasis on reducing TCO; but what if the institutional outcome of a higher TCO results in greater throughput? “Shouldn’t a higher TCO be acceptable if the productivity supports the cost?” asks Wollman. “Understanding the relationship between value delivered and cost is the future lens of risk associated with any asset and is the great equalizer for assets of all types—for example, buildings versus roads versus utilities.”

Additionally, sometimes there is simply too much information to process. Assessing current asset investments and plans for future facilities and infrastructure in the context of life-cycle viability, TCO, and mission goals for energy generation and sustainable consumption represents a challenge for data collection and management.

“Volume often degrades quality when it comes to data,” Wollman adds. “It is the scenario of being data rich, yet information poor. Facilities managers need to define the right variables and tools that will inform consequence management. In an environment of diminishing resources, such as in higher education, it becomes critical to maximize the effectiveness of asset resources investments across the entire portfolio.”

ARE YOU READY?

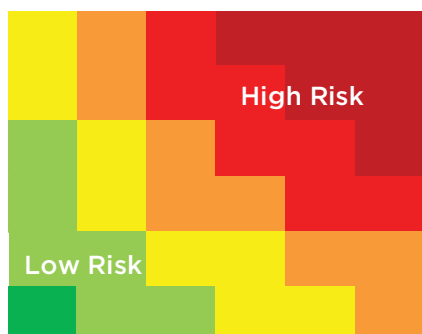
Some facilities officers do not fully understand the cost and consequences of being unprepared, especially when it comes to preventive maintenance and deferred maintenance: Something as simple as a pipe break can flood a building and cause considerable damage. Therefore it is critical that the facilities managers take a broader, more holistic approach to operations management. “Facilities managers should know all the options, including both the short- and long-term impact of new building decisions,” says Gentzler. “For example, should they construct, buy, or lease new facilities? Institutions have been doing off-balance sheet housing and mixed-use projects. Knowing the financial risk associated with each option is critical to the long-term health of the university.”

Matt Adams, a principal with FM Squared in Dunwoody, Georgia, teaches managerial effectiveness at APPA’s Leadership Academy. His students are up-and-coming senior administrators who may have little or no understanding of complex management issues, including risk management. During the Academy’s week-long course, his students work on case studies, nearly all of which involve some form of evaluating managed risk. “Their results gradually improve from poor at the beginning of the course to relatively competent by the end of the week,” says Adams. “I have to continually push them to drop their perceived boundaries in order to solve the problems, which is very hard for them to do. For example, they have great difficulty in considering external contractors as partners for anything outside of construction activities; that’s a very limited viewpoint when it comes to managed risk.”



Matt Adams

It is important for facilities managers to measure risk in two ways: risk to the facility as well as risk to the business process in the facility. What many facility professionals miss is how to align risk to the institutional mission and the business of higher education. “When should consequences matter to the greater institution?” asks Wollman. “Facility managers need to be risk-informed, not risk-adverse. Applying a heart matrix, where one axis is probability and the other is consequence, helps to physically represent trade-offs.” (See diagram below.)



Another key principle of managed risk is opportunity cost. Resources applied to mitigate a risk will not be available for other opportunities. This increases the cost of mitigation measures to include foregone opportunities. “Facility managers must engage the campus community as a whole when implementing risk-mitigation strategies to ensure that the process best serves the interests of the institution, writ large,” says DeLaHunt. “Public-benefit organizations, like nonprofit or state agencies, pay for everything with opportunity cost. What we do not spend on risk mitigation can be spent on deferred maintenance, capital improvement, compensation, program expansion, or at the very least, lowering the cost of attendance.”

MOVING FORWARD

Components to a robust risk management program include assigning responsibility for risk at the appropriate levels of the organization, providing resources to address the risk, and reporting on the success of the risk-mitigation strategies. Success also requires staff training and excellent communication. For example, because facilities officers, supervisors, and front-line workers may be focused on quick results, they may not fully understand their responsibilities or have the resources they need to deal with the issues.


Teamwork, proactive collaboration, and communication are essential for securing resources for risk management. Annual reporting to senior leadership is always helpful to keep resources flowing in some manner. “Some type of agreed-upon strategy for the blending of risk categories is also necessary at times, or the minimal, low, and medium risks will not be accomplished in a timely manner, increasing those risks over time—through too much deferred maintenance, for example,” says Johnson.

Gentzler recommends getting the entire facilities management team involved in risk identification and prevention. “The people on your team who are in buildings on a daily basis can keep you informed of what risks might be on the horizon,” he says.

Anyone with a concern should be encouraged to raise the issue to the appropriate person for evaluation and action. This is sometimes easier said than done. Universities should provide various mechanisms to assist and encourage all employees to come forward in good faith with reports or concerns about suspected compliance or risk issues, without fear of reprisal or retaliation. “These [mechanisms] should include avenues that provide for anonymous reporting, such as whistleblower hotlines,” says Klinksiek. “The sad fact is that circumstances that lead to adverse events are often known to those closest to the situation but were not communicated and so went unaddressed.”

For many institutions, the current approach to facilities management imposes a consistent level of detail on the entire portfolio, regardless of the criticality of the asset or component. Although this approach is desirable from a consistency and work-management basis, it can lead to higher administrative costs on low-risk or supporting assets, taking money away from

other areas that are critical to the success of the institutional mission.

"In contrast," says Wollman, "a risk-informed asset management approach that enables strategic investment decisions at the institutional level will maximize the value to the institution from every dollar invested." An example would be developing an institutional framework that considers life cycle as well as system trade-offs for a portfolio, rather than a project-by-project approach to strategic investments. In addition to an internal shift to strategic asset management, she says, "institutions should continue to pursue a multiyear approach to resource investments that allows them to improve the efficiency of investments to meet the challenges of today's higher education marketplace." 

Mark Crawford is a freelance writer based in Madison, WI; he can be reached at mark.crawford@charter.net.

Parting Thoughts

"Facilities managers and risk managers should establish working relationships that support each other in the process of managing institutional risk." —*Glenn Klinksiek*

"For higher risks, ensure that your facilities management team is specifically empowered to take on-site action to stop life-threatening events."

—*Mike Johnson*

"Managed risk is seldom a one-time activity: Whether it is maintenance of current risk-mitigation programs, or undergoing new risk evaluations, there is always risk to manage." —*John DeLaHunt*

"Facilities managers assign or even mentally develop a risk profile to a building and then forget to modify it as circumstances change: The shift of use can have a dramatic impact on the consequences of failure."

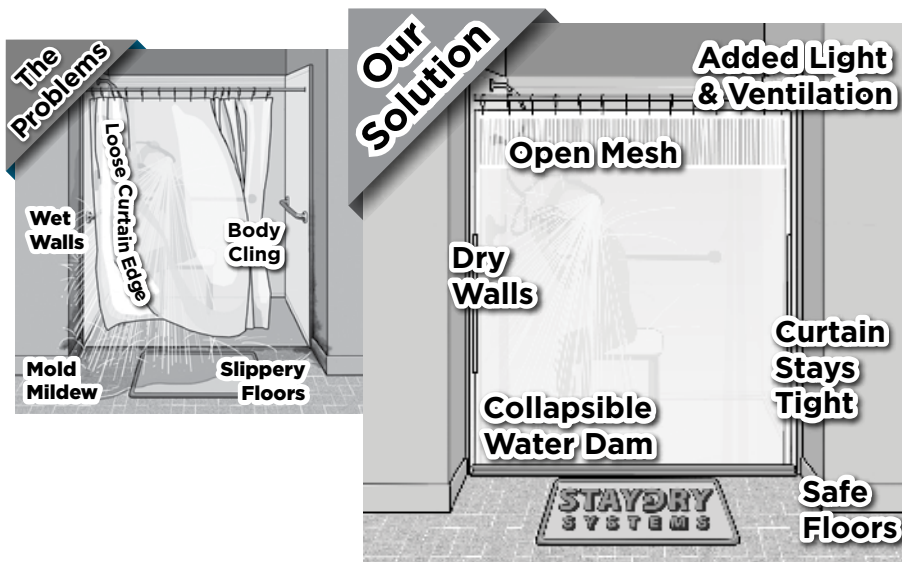
—*Nina Wollman*

"Perform regular walkthroughs. It is amazing how much you see and learn if you just walk through spaces and listen to people's concerns or suggestions." —*Randy Gentzler*

"Public-private partnerships with service vendors provide one form of managed risk for facilities management departments with very dynamic activities on campus." —*Matt Adams*

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7 Facility Maintenance Practices Costing You Money

By Mark L. Heroux, CPMM

How can college facilities managers do more with less while effectively managing their institution's critical operations? One way is to avoid these "seven worst practices" outlined by facility management experts. Written for those who want to stay ahead of the curve, deliver high service levels and keep costs down, this article provides insights and reminders about the importance of good maintenance procedures and processes. The list—which includes errors of commission as well as omission—will help staff better focus their time and energies where they will have the biggest impact.

Educational facilities managers and staff are a great bunch, often with very full plates, given their charge to ensure the proper care and maintenance of the campuses they oversee. Their main goal is to keep things working, respond to problems, and stay ahead of the ever-changing needs of aging building components and the diverse needs of administration, faculty, and students. They must juggle many balls and serve many masters. They play an important role, with oversight of critical operational and safety issues that affect the entire organization.

There is also the constant pressure for facilities operations to do better, and—as the executive management of today’s higher education institutions look to tighten their belts—to do more with less. Today’s facilities manager and staff must embrace best practices and new, more effective approaches.

But where to start? The checklist that follows offers a summary of what we call the “seven worst practices” found on today’s campuses. These include errors of all kinds—both what facilities managers do wrong and what they fail to do right.

Evaluating your campus on how you rate on each of these items will provide some real insights into how you can turn them around to improve your operations. This list, therefore, is offered for your review, amusement, and inspiration. If you find yourself guilty of a few of these mistakes, please know that simple awareness is a step in the right direction, because as the saying goes, “We can all *do* better when we *know* better.” In that light, we ask you to kindly share this list with your facility management colleagues.

In our experience, avoiding these worst practices will make a significant impact on your performance.

1 NOT USING THE CMMS—ERROR OF OMISSION

Far too few organizations avail themselves of even half the capability of some of today’s leading computerized maintenance management systems (CMMS)—and that’s both a real shame and an opportunity. We have seen organizations invest considerable time and money to find the “right” CMMS, only to have it gather dust from lack of use. When we review facility maintenance processes, we find the following:

- Failure to track inventory
- Failure to track time
- Failure to enter work orders
- Failure to enter preventive maintenance tasks
- Failure to close out work orders
- Failure to create reports
- Your additions here

In our data-driven world, information from the CMSS can be a powerful management and productivity tool. Its report capabilities can provide great visibility into how your operations are performing—but only if data is entered completely and consistently. Many colleges, universities, and schools only partially track their activities. To glean useful data, staff must be trained and measured in their use of the CMMS. All staff must understand that its use is not optional, but instead a critical part of operations.

If your staff is not fully utilizing this tool, you are not getting the full value from your technology investment. Worse, it might mean that you have blinders on when it comes to some critical information about how you and your team are performing. When you truly embrace your CMMS, what you get is increased visibility into what is going on day to day and month to month. This data can help you make better management decisions.

2 FAILURE TO DEVELOP A DEFERRED MAINTENANCE PLAN—ERROR OF OMISSION

We often witness a disconnect on this topic between executive management and facility staff.

Deferred maintenance activities are critical but poorly understood, and often not given proper attention. One earnest university president recently told us that his campus had little in the way of accumulated deferred maintenance. Wishful thinking! Only a few days prior, as part of our staff interviews, his own chief facilities officer disclosed that there was no current or valid facilities condition assessment for the institution’s buildings and grounds. Having a deferred maintenance plan—and keeping it updated—is a much-needed tool that executive management can use to improve their planning and budgeting and overall facilities operations. More importantly, it can help executive management prevent being blindsided.

Ignorance is not bliss when emergency issues arise that could have been avoided or mitigated by a good deferred maintenance plan. No one wins when this happens, and the sudden awakening is often accompanied by the need to write big checks. In our experience, high-performing leaders know the projected full-project cost for the backlog of carefully documented facilities needs, and they make institutional decisions around how long it will take to retire that deficit and how to make sure the work gets done.

In addition, when your vendors don’t have a clear view of who last worked on an asset and no one is tracking when maintenance on a given asset is due, cost overruns rule the day. Documenting and updating a good preventive maintenance plan or policy and procedures manual will help you make sure that assets are in good working order for as long as possible and allow you to better budget for the future.

3 FAILURE TO BUDGET FOR CAPITAL MAINTENANCE—ERROR OF OMISSION

Realistic budgets are important. The concept behind a depreciation schedule for capital assets is that facilities get “used up” over time. The accounting depreciation schedule often doesn’t match the actual rate of consumption.

Well-intentioned leaders may make a conscious allocation of funds for facilities capital maintenance, but often this allocation is either intuitive or based on what they think they can afford. Rarely is the allotment based on a carefully debated and designed process. And here again, surprises often come unexpectedly, jeopardizing other projects or even cutting into core budget areas. Good fiscal policy calls for honestly assessing and planning for these expenses, and the sharpest board members, trustees, and stockholders will insist upon it in a timely manner.

Most facility departments need to spend more time to research and properly budget for capital maintenance. Facility managers need to take initiative and raise questions about anticipated future capital needs. A “head in the sand” approach will always backfire in this critical area.

4

SPENDING CAPITAL MAINTENANCE MONEY ON OTHER THINGS—ERROR OF COMMISSION

To the undisciplined, many items call out to be purchased and allocated elsewhere, either because they were not included in the budget at all or grossly underbudgeted. On examination, we have seen organizations incorrectly put the following in the capital maintenance bucket:

- Code-mandated upgrades
- Insertion of new technology
- Alterations for changing uses
- Building additions
- New fixtures, furnishings, or equipment
- Routine and customary maintenance
- Or even (gasp!) new construction

Such creative accounting is very poor practice. For every dollar of capital maintenance money diverted to other uses, a dollar is added to the backlog of deferred maintenance. Budget categories should be assigned correctly, in spite of political pressures.



Developing Preventive Maintenance Policies and Procedures

Jim Wallace

Director of Facilities Operations
Suffolk University
Boston, Massachusetts

We are always looking to be more efficient, so we wanted to better manage our cost controls for preventive maintenance. To do that, we needed to make sure we understood and documented the required maintenance tasks for each of our assets. Quite simply, this is not something that can be done well on an ad hoc basis. We committed to developing a written policy and procedures plan for facilities management that included preventive maintenance. This plan benefits us in four ways:

1. It gives us clearer priorities, so work gets done when it is needed.
2. Everyone who touches an asset (including outside vendors) is on the same page about the status of an asset's maintenance.
3. Our staff can get their heads around preventive maintenance—always a complex part of facility operations.
4. We can actively manage preventive maintenance work and associated costs better than before.

5

GIVING SPECIAL TREATMENT TO PREFERRED VENDORS—ERROR OF COMMISSION

Although it can be comfortable to pick up the phone and call a known vendor whenever a problem arises, there need to be written rules around pricing, quoting, and other practices. There should also be an arm's length relationship between any organization and its business partners.

Good business practices are designed to establish rules that support your organization and protect its interests. We have many times observed practices that, through negligence or intent, make it easy for vendors to take advantage of organizations, who pay a heavy cost for their lack of checks and balances.

Oversight is important to ensure that business is conducted fairly and that proper value is received for goods and services. We have seen preferred vendors with:

- No set rates
- No unit prices
- No term agreements
- No competition for their work

We see this all the time, but proper procedures are required to ensure cost-effective, quality buying of products and services. We understand that organizations will have favorite vendors and believe that good service should be rewarded, but not at the expense of prudence and common sense.

6

FAILURE TO PREPARE A PREVENTIVE MAINTENANCE PLAN—ERROR OF OMISSION

As the saying goes, you only need to brush the teeth you want to keep. An ounce of prevention goes a long way toward keeping infrastructure safe and extending its life, but all too often, otherwise smart and successful organizations sometimes turn a blind eye to what's right in front of them.

Today's facility operations managers need to see that it is truly part of their job to educate other departments about facilities practices and how those practices impact their organization. They need to stress the importance of good maintenance procedures and processes in all their interactions with management and other departments. Too often, facility managers and their staff are not vocal about this. Staying silent does both their departments and their institutions a disservice.

7

FAILURE TO FOCUS: DISTRACTIONS RULE THE DAY—ERROR OF COMMISSION

It can seem a frantic world for facilities maintenance staff, running back and forth between one task and another, responding to the loudest requests instead of the most important ones. The unfocused facilities management department has staff bogged down in addressing trivial

instead of strategic tasks, working busily but not efficiently or effectively. This malady comes with a number of familiar symptoms, including mounting work backlogs, work being rushed or performed inadequately, outside contractors being called in on a regular basis, unattended preventive maintenance, blown budgets, and deteriorating customer satisfaction.

At times this is exacerbated by internal culture. Other departments in the organization may take advantage of facilities staff being willing to please, to the detriment of smart facilities practices. A mechanic may not want to say no to the “while you’re at it” request. If facility staff are the only ones prepared to deliver manual labor, other departments may routinely ask for help with moving, setup services, or other “favors” that lie outside the facility department’s official responsibilities. It is important for facility management departments to chart their institutions’ needs for these kinds of services so that they can be properly accounted for and managed. It’s not fair to your facilities staff or your organization to do otherwise.

CLOSING

If a number of these practices hit close to home, please note that these are common patterns seen throughout educational facilities organizations, businesses, and governments—all are equally guilty. And remember that an organization’s size, large or small, is no guard against such practices—even organizations with highly skilled management teams and well-trained facilities staff can fall into these traps.

Eliminating these worst practices will help you and your staff focus your time and energies where they will have the biggest impact. If your institution wants to stay ahead of the curve, deliver high service levels, and keep costs down, your facility department must continue to educate itself. Help is available, either by reading articles like this one, getting more training, and/or obtaining outside counsel from experts when it’s needed. There is no need to reinvent the wheel. ☎

Mark Heroux is managing partner at Performance Resource Partners, a facilities operations consulting company focused on helping private colleges and universities improve performance. Based in Holbrook, MA, he can be reached at mheroux@prpconsultants.com. This is his first article for *Facilities Manager*.

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According to the U.S. Census, there are more than 2.5 million college and university students living on campus in the United States. The U.S. Department of Education reports that 2,171 institutions include housing facilities; 1,873 of them (86.3%) are four-year institutions.

Colleges and universities are constructing and renovating residence halls at a fast pace, trying to keep up with the ever-increasing demand of incoming students. Many institutions require first-year students (or older) to live on campus in university-owned facilities; others are jammed so tight that they actively encourage students to find their own apartments after freshman year.

The 2015 MGT and ACUHO-I Construction and Renovation Survey, published by the Association of College and University Housing Officers-International, found that 63 percent of reporting institutions had completed new construction of residence halls (13%), renovated existing facilities (33%), or undertook both new construction and renovation (17%). Construction costs averaged between \$217 and \$232 per gross square foot (GSF) for “super suites,” apartments, and adjoining suites. The primary method of funding both new construction and renovation projects was tax-exempt revenue bonds, followed by the use of reserve funds, bank loans, operating funds, and other funding approaches.

We’ve collected a sampling of 26 recent or in-process residence hall projects from 20 different institutions to show you the wide range of architectural styles, building technologies, student services, and other features found at our college and university campuses. We hope you enjoy the housing tour!

Keene State College, cutaway rendering of Living Learning Residence Hall.

Unless otherwise noted, all photos and drawings are used with permission of the institutions or their design firms.

UNIVERSITY OF CHICAGO

Chicago, Illinois



University of Chicago, Campus North Residence Hall and Dining Commons.

Contributor: Gerald McGillian

Student FTE: 14,181

% Residential: 14% undergraduate plus 10% faculty/staff/graduate on campus and surrounding area (excluding medical center); this project contains 27% of all undergraduate residential space and is 4% of campus total gross area.

Name of Project/Facility: Campus North Residence Hall and Dining Commons

When Planned for Completion: Fall 2016

How Many Beds: 800 beds

Special Features:

- Located near the core of campus
- Will expand the quality of housing options
- Will enable the housing of more undergraduate students in the University House System
- Will improve the quality of the undergraduate student experience
- Will enhance the sense of connection between all members of the campus community
- The project will include retail space to activate 55th Street and open space to link the northern blocks of the campus.
- Each house will be structured around a three-story common area
- The project will also feature a small number of retail spaces, offices, multiuse rooms, and classrooms
- The space will include lawns, paths, and recreation areas, opening up the area to the university community and surrounding neighborhood

Add Anything Else of Interest:

- Sustainability features: design target of LEED Gold, active public green spaces
- 415,000 GSF

UNIVERSITY AT ALBANY, SUNY

Albany, New York



University at Albany, SUNY, Liberty Terrace Apartments.

Contributor: John Giarrusso

Student FTE: Without graduate students: 13,105; with graduate students: 17,280

% Residential: Without graduate students: 58.1%; with graduate students: 44.4%

Name of Project/Facility: Liberty Terrace Apartments

When Completed: Fall 2012

How Many Beds: 504

Special Features:

- Apartment-style (4 bedroom, 2 bath units) with fitness center and entertainment, gaming, and meeting rooms
- Precast and plank construction
- LEED Gold, ground source heat pump (geothermal) heating and cooling, green roof, permeable paving, rain gardens

UNIVERSITY OF IOWA

Iowa City, Iowa



University of Iowa, Mary Louise Petersen Residence Hall.

Contributor: Wendy Moorehead

Student FTE: 28,149

% Residential: University of Iowa (UI) residence halls accommodate approximately 6,200 students. The addition of the Madison Street Residence Hall (see next project) will bring the count to about 7,200. More than 90% of first-year students stay in residence halls.

Name of Project/Facility: Mary Louise Petersen Residence Hall

When Completed: July 2015; opened for student occupation fall semester 2015

How Many Beds: 501 beds, 10-story, 187,000 GSF

Special Features: The facility was specifically designed to enhance UI's living-learning communities with study lounges on each floor. The floor populations are much smaller than other residence halls on campus to encourage making connections with other students who share similar interests and majors. The hall features shared rooms, semiprivate bathrooms, a multipurpose room accommodating up to 300 people, and a sports grill open until the late hours.

Add Anything Else of Interest: First new on-campus residence hall built on the UI campus since 1968. UI student population has doubled since then. Projected LEED Silver.



University of Iowa, rendering of Madison Street Residence Hall.

Name of Project/Facility: Madison Street Residence Hall

When Planned for Completion: Estimated summer 2017, with occupation for fall 2017

How Many Beds: 1,049 beds; 12-story (three 9-story residential towers built atop a 3-story base to include a dining hall, residence life functions, and building services areas); 303,000 GSF.

Special Features: The building will overlook the Iowa River and

includes kitchen and dining facilities to serve 2,000 students, study rooms, a recreation room, a fitness center, lounges on every floor, "pod-style" bathrooms, and laundry. Floors will be assigned as part of the university's Living-Learning Communities program. Once built, this new residence hall will be the largest on the UI campus.

Add Anything Else of Interest: Although it is built along a stretch of the Iowa River that experienced severe flooding in 2008, the lowest occupied level is built above the 500-year flood level. Over 2,000 cubic yards of concrete were placed in the mat slab and tower crane foundations alone; on average 60-75 workers onsite per day. The university is using a design-build method to save time and cap costs, allowing the building to be constructed under an aggressive timeline; this is the first residence hall and second building on the UI campus to be built under this method. Projected LEED Silver.

UNIVERSITY OF SOUTHERN MISSISSIPPI

Hattiesburg, Mississippi



University of Southern Mississippi Century Park South.

Contributor: Dr. Chris Crenshaw

Student FTE: 14,579

% Residential: 24%

Name of Project/Facility: Century Park South

When Completed: Final phase completed January 2015

How Many Beds: 954

Special Features: Consists of 3 buildings housing 954 students, including a university health clinic and Luckyday Citizenship Scholarship program offices.

Add Anything Else of Interest: 245,530 sq. ft., mixed-use project; primarily double rooms with private baths, kitchens, common space, and laundry. The Luckyday Citizenship Scholarship Program Offices and multipurpose room make up almost 7,000 sq. ft. of the project. This cohort program

includes a residential room design of double-occupancy student rooms surrounding modified pod-style bathrooms, serving approximately 150 of the 954 residents. The state-of-the-art Moffitt Health Center is nearly 14,000 sq. ft. and located on the first floor of one of the residence halls. This project is on target to achieve LEED Gold certification.

CENTRAL OREGON COMMUNITY COLLEGE

Bend, Oregon



Central Oregon Community College, The Residence Hall at COCC.

Contributor: **Stephanie Bilbrey**

Student FTE: 5,750

% Residential: 25% of students are “in-district.”

Name of Project/Facility: **The Residence Hall at COCC**

When Completed: July 2015

How Many Beds: 330 (320 student, 10 community assistants), plus 1 live-in professional staff apartment

Special Features:

- Brand new; broke ground May 2014
- All suite-style quads
 - » 10 single units featuring 4 private bedrooms plus shared common area and bath
 - » 70 double units featuring 2 bedrooms (sleeping 2) plus shared common area and bath
- Student amenities
 - » in-suite wireless network router
 - » cable TV access
 - » group study rooms
 - » community kitchen
 - » laundry room
 - » secure/controlled access

Add Anything Else of Interest:

- Earth Advantage certified
- Design
 - » emphasizes natural light

- » maximizes prime mountain views of Cascades
- » multiple gathering spaces to promote engagement and community
- Structure
 - » 5 stories, 84,000 sq. ft.
 - » reinforced concrete and wood framing
 - » supported by individual columns and continuous wall footing
- Designed by Mahlum Architects, a Portland-based architectural firm
 - » collaborated with local firm of Pinnacle Architecture to aid in local construction and permitting requirements
- Construction manager/general contractor approach
 - » involved our contractor, Lease-Crutcher-Lewis, in the design process to maintain the requirements of the building and the quality of construction required
- \$21 million project, financed by bonds

UNIVERSITY OF WISCONSIN OSHKOSH

Oshkosh, Wisconsin



University of Wisconsin—Oshkosh, Main lobby lounge of Fletcher Hall.

Contributor: **University of Wisconsin System**

Administration—Office of Capital Planning and Budget (A/E: Eppstein Uhen Architects)

Student FTE: 14,300

% Residential: 23%

Name of Project/Facility: **Fletcher Hall**

When Planned for Completion: Summer 2017

How Many Beds: 503

Special Features: This project renovates the existing 65,518 assignable sq. ft. (ASF)/98,700 GSF Fletcher Residence Hall constructed in 1964, to provide programmatic and infrastructure, replaces exterior doors and windows, and constructs a 13,045 ASF/17,530 GSF addition to accommodate a new accessible building entrance with elevator, increased bath/shower rooms on each floor,

additional double occupancy resident rooms, increased programming space, and new central stairs. The addition will add 21 beds, bringing the total bed count to 503. The building's functional layout does not meet current student demands; existing mechanical, electrical, and plumbing (MEP) systems do not have the same efficiency as modern systems, and replacement parts are difficult to find. Special features of the proposed renovation:

- A building addition that will increase bed capacity while also providing an accessible main entry and accessible circulation throughout the building
- New bathrooms that meet students' expectations for privacy
- Inclusion of spaces for group activities that help form a sense of community at the house, floor, and hall levels
- Installation of modern, efficient MEP systems including air conditioning (which makes the building rentable for programs during summer months), fire sprinklers, and installation of modern IT systems

Add Anything Else of Interest: The existing building's superstructure is mild steel reinforced concrete, partitions are 6-in. concrete masonry units (CMUs), and floor-to-floor heights are 8 ft. 8 in. This makes for a durable, long-lasting building, but it poses challenges for installing modern MEP systems and deinstitutionalizing the aesthetics. To overcome these challenges:

- MEP systems were carefully coordinated via building information modeling (BIM) and extensive clash detection/reconciliation during design
- Skim coat plaster will be installed over the CMUs to conceal "institutional looking" walls

Exterior spaces were carefully designed to integrate seamlessly with other residence halls in this campus sector, providing outdoor activity spaces and engaging with adjacent campus circulation amenities. This project is seeking LEED Silver certification, and includes many sustainable design features such as reuse of an existing facility, low volatile organic compound finishes, renewable and recycled materials, provision of an energy monitoring system that can be accessed by building residents, energy recovery systems, and onsite stormwater management systems.

UNIVERSITY OF COLORADO

Boulder, Colorado

Contributor:

Steve Hecht

Student FTE:

25,000 full-time students

% Residential:

80%

**Name of Project/
Facility:** **Kittredge
Central**

When Completed:

2014

How Many Beds:

263

Special Features:

- Multipurpose room
- Residential academic program space: classrooms and offices
- LEED Gold



University of Colorado, Kittredge Central.

CARNEGIE MELLON UNIVERSITY

Pittsburgh, Pennsylvania



Carnegie Mellon University, Makerspace in Residence—Morewood Gardens.

Contributor: **Tom Cooley**

Student FTE: 13,648 total—6,362 undergraduates

% Residential: 62.4% of the undergraduates live on campus

Name of Project/Facility: **Makerspace in Residence—
Morewood Gardens**

When Completed: Fall 2015

How Many Beds: Morewood Gardens and Morewood E-Tower have access to the space. These two residence halls combined have 652 beds.

Special Features: The Morewood Makerspace was designed as a beyond-the-classroom learning environment by engineering everyday living spaces to invoke learning while passing by, socializing, studying, attending meetings and programs, dining, and simply living in Morewood Gardens and E-Tower. Makerspaces A and B are meant to inspire interdisciplinary engagement through research and creative practices that merge technology and the arts. A “Creative Corner” was also established that contains a Rabbit RL-60 laser cutting machine. Housing Services partnered with IDEATE (Integrative Design, Arts and Technology Network) at Carnegie Mellon to create these makerspaces within Morewood Gardens.

Additionally, the Morewood community spaces now include these newly renovated spaces:

- Two music studios
- Quiet study room
- Reservable multifunctional space
- Open study areas
- Fitness room with yoga mats
- Programmatic community kitchen

UNIVERSITY OF ARKANSAS

Fayetteville, Arkansas



University of Arkansas, Founders.

Contributor: WER Architects/Planners in association with Hanbury Evans Wright Vlattas

Student FTE: 26,237

% Residential: 25.8%

Name of Project/Facility: Founders Hall

When Completed: Fall 2013

How Many Beds: 212

Special Features: Founders Hall is a new construction, six-story mixed-use building in the heart of the University of Arkansas campus. Retail and restaurant space occupy the first and second floor, with a mix of food-court style and traditional dining-hall seating. Living spaces are a traditional double room occupancy with 212 beds and semiprivate bathrooms. Common spaces throughout the building include study rooms, conferencing rooms, living spaces, and a full kitchen.

Add Anything Else of Interest: It is a New Construction v2009 Silver facility.



University of Arkansas, Hotz Hall Renovation.

Contributors: Paul Heck and Jeff Vinger

Name of Project/Facility: Hotz Hall Renovation

When Completed: 2013

How Many Beds: 416

Special Features: Hotz Hall involved the full-scale renovation of a nine-story 1960s dormitory that resulted in the transformation of the facility into a student-focused residence hall for honors students. The renovation project was designed to achieve LEED Silver, which among several sustainable goals emphasized energy efficiency, the introduction of natural light into expanded community spaces on all floors, and recycling and waste reduction by the student residents who occupy the facility. A notable component is the installation of metered water-bottle filling stations, which track the students' reduction in plastic bottle use with each refilling of a reusable container. Other student-focused amenities within the residence hall include intimate socializing spaces on the ground floor, a computer lab, fitness center, movie theater, music room, and pool table and table tennis area, with a student kitchenette and study rooms on each floor.

Add Anything Else of Interest: Architect—SCM Architects

ST. OLAF COLLEGE

Northfield, Minnesota



St. Olaf College, Ellingson Hall.

Contributor: Pete Sandberg

Student FTE: 2,989

% Residential: 92%

Name of Project/Facility: Ellingson Hall

When Completed: 2013

How Many Beds: 192

Special Features:

- Renovation of a 1960 HUD-funded residence with an addition for all-new bath facilities
- Ellingson had internal bath facilities on each floor, with narrow corridors on either side of the core spaces, and student rooms on the outside. We decided to add bath facilities rather than trying to renovate in place. An elevator was included in the addition
- The opportunity to remove the interior construction created a large, collaborative study space for each floor. We spray-foamed the entire perimeter, provided new curtain wall, ran ventilation air into the rooms, converted low-pressure steam heat to hot water with a thermostat away from the radiation, and removed all vinyl tile and replaced it with quarry tile in the circulation areas and Interface carpet tile in the rooms and lounges. This allowed us to remove an entire family of custodial chemicals from the building and greatly reduced our custodial load
- We created a single user, nongendered, accessible bath facility along with two fully accessible student rooms for each floor
- This was achieved at a project cost of \$6.9 million, or \$36,000 per bed



St. Olaf College, Kildahl Hall.

Name of Project/Facility: Kildahl Hall

When Completed: 2013

How Many Beds: 168

Special Features:

- Renovation of a 1957 HUD-funded residence with an addition for all-new bath facilities
- Kildahl Hall has a very low floor-to-floor height that drove many decisions and design ideas
- It had internal bath facilities on each floor, with narrow corridors on either side of the core spaces, and student rooms on the outside. We decided to add bath facilities rather than trying to renovate in place
- The opportunity to remove the interior construction created a large, collaborative study space for each floor. We spray-foamed the entire perimeter, provided new curtain wall, ran ventilation air into the rooms, converted low-pressure steam heat to hot water with a thermostat away from the radiation, removed all vinyl tile and replaced it with quarry tile in the circulation areas and Interface carpet tile in the rooms and lounges. This allowed us to remove an entire family of custodial chemicals from the building and greatly reduced our custodial load
- Because of the low floor-to-floor, there was no space available for ventilation ductwork to serve the rooms. The air handler is in a basement mechanical room in the addition, so we routed ductwork up to a new faux-mansard roof and distributed air around the perimeter. A shaft was created as a part of the curtain-wall system, and rooms are served by this distribution that is outside of the structure
- The roof structure was designed at the optimum angle for photovoltaics (PVs) at our location, and the south face includes a 14-kWh PV system
- We created a single user, nongendered, bath facility for each floor
- This was achieved at a project cost of \$7 million, or about \$42,000 per bed

FURMAN UNIVERSITY

Greenville, South Carolina



Furman University, Judson Hall Renovation.

Contributor: Steve Long

Student FTE: 2,700

% Residential: Four-year residency requirement

Name of Project/Facility: Judson Hall Renovation

When Completed: August 2015

How Many Beds: 56

Special Features: New entrance lobby; upgraded two “parlors” into student lounge/seminar teaching space; all-new HVAC (induction units), plumbing (new fixtures, bathroom finishes), and electrical (all-new LED lighting); replaced carpeted floors with luxury vinyl tile; new room doors/locks.

Add Anything Else of Interest: This is an existing steel/concrete/brick construction building built in 1960. The existing entrance lobby leading to a circular staircase was enclosed and uninviting. The walls around the staircase were demolished and an open entry and stairwell were created to enhance the look and feel of the building. This renovation also opened up a view from the main level through the building to the campus lake and Bell Tower.

UNIVERSITY OF WISCONSIN WHITEWATER

Whitewater, Wisconsin



University of Wisconsin Whitewater, West Campus Residence Hall exterior.

Contributor: University of Wisconsin System—Office of Capital Planning and Budget (A/E: Mead & Hunt)

Student FTE: 12,351

% Residential: 34.6%

Name of Project/Facility: West Campus Residence Hall Renovation

When Completed: October 2015

How Many Beds: 489

Special Features: The A/E firm of Mead & Hunt undertook a master plan to renovate six 1960s-era residence halls clustered together on the west side of the campus. The planning goals were to provide an updated image for all six halls and incorporate key components of the campus mission for universal design, thus exceeding basic Americans with Disabilities Act (ADA) guidelines. The intention was to then bring two of the six halls forward as the first phase of a renovation addition project. Instead of the typical single addition to each building that had been done in prior residence hall renovations, the solution constructed a “link” building between two existing buildings. The building link solution provided numerous benefits, offering more social spaces, elevator redundancy, a defined front entry offering secure access, consolidating front desk services and, most importantly, allowing access for *all* students to visit and live on *all* floors.

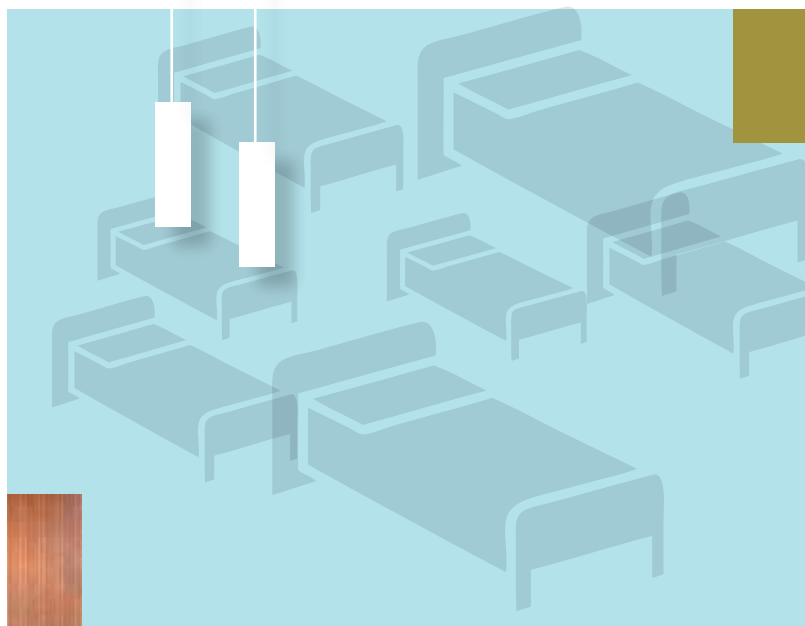
This project renovates Arey and Fricker Residence halls. Both are a four-story plus basement, (28,359/47,733 ASF/GSF) residence hall constructed in 1963 and 1964. The project adds 19,835 GSF to connect the two halls and provide program space. The project renovated existing rooms, renewed building finishes, replaced windows and exterior doors, enlarged and reconfigured restrooms, addressed deferred maintenance, replaced the roofs, addressed health and safety code compliance issues, replaced MEP systems, provided standby power and added fire sprinklers throughout.

The exterior envelope design solution offered complementary

materials of metal panels, cast stone, and curtain walls to distinguish new areas from the adjoining, existing brick masonry buildings. Dark bronze windows, roof caps, and metal panels on the “link” match similar components on the existing buildings to tie the three areas together. Dark bronze canopies distinguish the entries and provide covered outdoor gathering areas.

The challenges of this project were meeting the expectations of universal design, current code, and the modern amenities of a new residence hall while also aligning with the existing building constraints of an existing shell and a 7-8 ft. $\frac{5}{8}$ in. floor-to-ceiling height. All new mechanical, plumbing, and technology systems were carefully coordinated to distribute horizontally in the lower level ceiling, where the headroom was less constrained, and then run vertically to each of the floors with repetitive floor plans. Electrical routing was then weaved horizontally through the floors.

The design team also took special care to provide additional universal design features at the interior. These features include ADA residence rooms on all floors; a double ADA residence room so students in wheelchairs can also have roommates; a private, accessible toilet/shower room on each floor; swing-clear hinge replacements on existing residence room door frames; and ADA-compliant operable windows for all rooms.



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BOSTON

BALTIMORE

ORLANDO

BEDFORD, NH

WASHINGTON, DC

HARTFORD

PURDUE UNIVERSITY

West Lafayette, Indiana



Purdue University, rendering of Honors College and Residences.

Contributor: Chris Skiba

Student FTE: 37,341

% Residential: 31%

Name of Project/Facility: Honors College and Residences

When Planned for Completion: June 2016

How Many Beds: 817

Special Features: This fully accessible facility consists of two buildings (North and South) that will house 817 residents, including 23 resident assistants, on five residential floors.

Through a partnership with the Purdue Honors College, the new residence hall will make on-campus living and learning a more seamless experience by integrating planned academic space.

The Honors College and Residences 320,000-sq. ft. facility has more than 40,000 sq. ft. dedicated to academics. The first floor will include Honors College offices for the dean, faculty, and support staff as well as a STEAM (science, tech, engineering, art, math) class lab, and a computer Collab (the next generation of computer lab, encouraging student interaction).

There is also an Honors Hall with seating for more than 400, for presentations, lectures, movies, and when not reserved for an activity, group and individual studying. The Honors College and Residences also feature multiple large and small study rooms, reading rooms, recreational lounges, community living rooms, and a retail dining operation. Residential rooms are organized in “pod” groupings, which include a mix of single, double, and triple occupancy rooms in small clusters around central restrooms and lounge areas on each floor.

Add Anything Else of Interest: The construction manager has hired a current honors college student to be on the construction staff. She is serving as the “go-between” person with the Honors College, Purdue’s housing and food services, the contractors, and the students. She is also blogging the entire construction process and updating the social media sites. The building will be LEED certified.

UNIVERSITY OF RICHMOND

Richmond, Virginia



University of Richmond, Westhampton Hall.

Contributor: Chuck Rogers

Student FTE: 4,200

% Residential: 90%

Name of Project/Facility: Westhampton Hall

When Completed: July 2014

How Many Beds: 157

Special Features: Westhampton Hall is a new residence hall built in the prevailing Collegiate Gothic style on the University of Richmond (UR) campus. The building has a suite configuration with a maximum of four beds per suite. The hall features a faculty apartment, several lounge and study spaces, and a seminar/conference room. The architect designed several limestone details into the exterior façade depicting local floral and leaf patterns as well as a panel over the entry door depicting the school’s mascot (the spider).

Add Anything Else of Interest: As with all new construction on the University of Richmond campus, the building achieved LEED Silver. Architect: Hanbury Evans Wright Vlattas. Contractor: Donley’s.



Name of Project/Facility: Jeter Hall Renovation

When Completed: July 2015

How Many Beds: 83

Special Features: Jeter Hall is one of the original buildings on the current UR campus. Opened in 1914, Jeter Hall was designed by renowned architect Ralph Adams Cram and was one of two housing facilities for men at Richmond College. The building was constructed as a traditional dorm-style arrangement: double rooms with a shared bath on the hall. This renovation modified the rooms to suite-style: 2 to 4 beds sharing a bathroom. Efforts were made to create as many lounge and study spaces as



University of Richmond, Jeter Hall Renovation.

possible within the existing building envelope. A new accessible entrance was added to the building, but few additional exterior modifications were made—new windows, new slate roofing, and some waterproofing upgrades were the extent of the work.

Add Anything Else of Interest: Similar to new buildings, all major renovations target LEED Silver. This project has met those requirements. Architect: BCWH. Contractor: Trent.

KEENE STATE COLLEGE

Keene, New Hampshire



Keene State College, Rendering of Living Learning Residence Hall.

Contributor: Keene State College and Perkins + Will
Student FTE: 4,250

% Residential: 70% of the building is devoted to residential use; 30% is common space and classrooms for the living-learning program.

Name of Project/Facility: Living Learning Residence Hall

When Planned for Completion: August 2016

How Many Beds: 348

Special Features: This building houses the living-learning program. It provides classrooms, vertically connected lounges, 90% double bedrooms/10% single bedrooms, and two apartments (residential director and faculty in residence).

Add Anything Else of Interest: The building is located near the campus admissions building and was conceptualized as a gateway into campus. The ground level is transparent and features common spaces for the students as well as three classrooms that will serve as the foundation for the living-learning community. The building is steel construction with highly insulated brick, curtain wall, and rainscreen facades. This is an energy-efficient building that meets Keene State's climate action plan, and its energy consumption will beat the 2030 challenge levels. The high-performance mechanical systems include geothermal wells to heat and cool the building, and it is fossil-fuel free. In addition to low-flow plumbing fixtures, the stormwater management is resolved through a rain garden system that doubles as an outdoor classroom.

TRUMAN STATE UNIVERSITY

Kirkville, Missouri



Truman State University, Centennial Hall lobby.

Contributor: International Architects Atelier

Student FTE: 5,700

% Residential: 49%

Name of Project/Facility: Centennial Hall

When Completed: July 2014

How Many Beds: 630

Special Features: A mix of historic and modern, an updated dining facility, and bright accent colors in lounges and hallways to create identity and wayfinding for each floor.

UNIVERSITY OF WISCONSIN MADISON

Madison, Wisconsin



University of Wisconsin Madison, sustainable design features of Aldo Leopold Hall.

Contributor: University of Wisconsin System

Administration—Office of Capital Planning and Budget

(A/E: Eppstein Uhen Architects)

Student FTE: 43,200

% Residential: 20%

Name of Project/Facility: Aldo Leopold Hall

When Completed: August 2013

How Many Beds: 176

Special Features: Leopold Hall is a five-level (four stories with walkout basement), 176-bed student residence hall of approximately 44,200/64,400 ASF/GSF, nestled among historic, small-scale residence halls and adjacent to the Centennial Gardens in the Lakeshore Residence District. This residence hall includes the GreenHouse, a living-learning community focused on sustainable practices in learning, living, and working. A 1,400 sq. ft. greenhouse provides a working laboratory for an environmental-oriented living-learning community. The GreenHouse educates students and the campus community in thinking, working, and living in more sustainable ways by planting, growing, and distributing produce year-round. Residents are also given the opportunity to practice energy conservation awareness by utilizing the web-based electrical metering system.

Add Anything Else of Interest: This building is built to last, with CMU bearing walls carrying precast plank, and a long-lasting brick and stone exterior. Interior spaces are bright and efficient, with comfortably sized bedrooms and modern gathering spaces that have fantastic views of the lake and gardens.

Aldo Leopold Hall received LEED Gold certification. Sustainable features include roof-mounted solar panels, low-

flow plumbing fixtures, operable windows, individual climate controls in each room, solar domestic hot-water heating, an energy air exhaust recovery wheel, and green power (wind). Aldo Leopold Hall is 23% more energy efficient than the University of Wisconsin baseline building (based on cost).

Interior finish materials were reviewed by the maintenance staff for durability and were selected based on recycled content and impact on indoor air quality, with 47% of materials locally extracted or manufactured (based on cost).

With nearly 100% of residents utilizing public transportation including bicycles, the hall provides parking for more than 100 bicycles.

UNIVERSITY OF MISSOURI

Columbia, Missouri



University of Missouri, Johnston Hall dining facility.

Contributor: International Architects Atelier

Student FTE: 27,812

% Residential: 21%

Name of Project/Facility: Johnston Hall

When Completed: July 2015

How Many Beds: 300

Special Features: "Living-learning" concept with increased common living space, new dining facility, and a courtyard connecting the two buildings. Pursuing LEED Gold certification.



University of Missouri, Mid-Campus Housing study lounges.

Name of Project/Facility: Mid-Campus Housing

When Completed: July 2009

How Many Beds: 835

Special Features: Internal courtyard connecting the buildings; floor-to-ceiling glazed openings; classrooms and study lounges take up the ground floor of each building. Design-build project.

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

Champaign, Illinois



University of Illinois Urbana-Champaign, rendering of Stanley O. Ikenberry Commons—Wassaja Hall.

Credit: FGM Architects (Architect of Record) and Mackey Mitchell Architects (Design Architect.) Image by Mackey Mitchell Architects.

Contributor: UIUC University Housing/FGM Architects Inc.

Student FTE: 504

% Residential: Total = 43,603: 32,579 undergraduates; 11,024 graduate and professional students. 23% live in university-owned housing; 13.6% live in private certified or Greek housing, which

is not owned by the university but is approved for freshmen.

Name of Project/Facility: Stanley O. Ikenberry Commons—Wassaja Hall

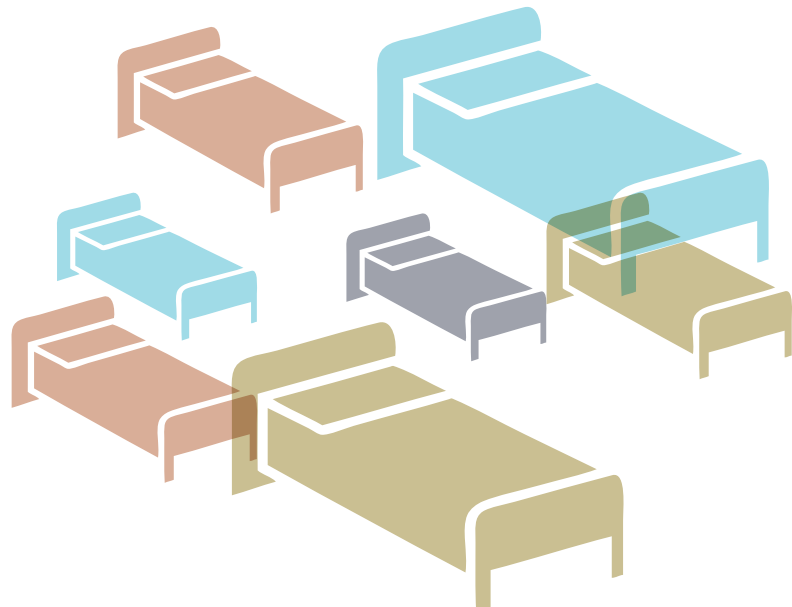
University Housing's newest residence hall has been named Wassaja, after the University of Illinois' first Native American graduate, a pioneer in advocating for Native American rights. Wassaja was born in 1866 in the Arizona territory; his name (pronounced WAHS-as-jah) means "beckoning" in his native Yavapai language. As a small boy, he was stolen from his family and later sold. He spent his early childhood on the road performing with Buffalo Bill's Wild West Show. He was purchased by an Italian photographer, Carlos Gentile, who changed his name to Carlos Montezuma. They lived together in Chicago, where he started school.

In 1884, Wassaja was the first Native American to graduate from the University of Illinois, and later became one of the first to earn a medical degree. He was the first U.S. individual of color to graduate from Illinois. After working for the Bureau of Indian Affairs as a reservation doctor and witnessing widespread poverty and bureaucratic corruption, he fought tirelessly for Native American rights and citizenship. When his own Yavapai tribe faced removal from their ancestral home, he went to Washington, D.C., to fight for and finally secure their land and water rights, setting a precedent for other Indian nations.

As part of the initial naming process, the Fort McDowell Yavapai Nation Tribal Council was approached about the residence hall. The Yavapai Tribal Council endorsed the naming of the hall, and also received support for using the name from Wassaja's descendants.

When Planned for Completion: May 2016

How Many Beds: 504



Special Features:

- Traditional double rooms organized in “pods” with private single-use bathrooms. Slant on a traditional arrangement provides an alternative for first- and second-year students
- Building includes floor lounges, public meeting spaces, professional staff apartments, laundry and mailroom facilities, and appropriate storage and staff offices
- Safety and security for residents is a high priority and needs to be built into the design of this space in a way that is apparent but not overwhelming to the residents

Add Anything Else of Interest:

- Sustainability goal of LEED Gold. Sustainability features include a sustainable site, highly efficient building envelope, photovoltaics, reduced water usage, enhanced recycling, and covered bike parking. UIUC Housing is also providing green cleaning and certified pest management as part of the maintenance and operation of the building
- Construction type: The building is four stories with a partial basement and a cast-in-place concrete structure. The exterior design of this new residence hall is to reflect that of previously completed buildings, with similar proportions of brick, stone trim, and aluminum windows and curtain wall
- Location: Located in Stanley O. Ikenberry Commons as part of the phased redevelopment of the residential neighborhood on the existing UIUC campus. The new building defines the northeast corner of the residential neighborhood and is located to help break up the perceived “wall” of recently constructed buildings along Gregory Avenue

MISSISSIPPI STATE UNIVERSITY

Starkville, Mississippi



Mississippi State University, construction of Azalea Hall and Dogwood Hall.

Contributor: Avent VanHorn and Megan Bean

Student FTE: 20,873

% Residential: 28%

Name of Project/Facility: Azalea Hall and Dogwood Hall

When Planned for Completion: Under construction; completion August 2016.

How Many Beds: 752

Special Features: Quad suites and deluxe double rooms

Add Anything Else of Interest: Convenience market, multiuse rooms, Department of Housing and Residence Life central office. Concrete and steel, metal roof, four stories.

PENNSYLVANIA STATE UNIVERSITY

University Park, Pennsylvania



Penn State's planned East Halls renovation.



Contributor: Conal E. Carr and Stephen Emer

Student FTE: 45,660

% Residential: 29%

Name of Project/Facility: East Halls

When Planned for Completion:

Phase 1A: Summer 2017

Phase 1B: Summer 2018

Phase 1C: Summer 2019

Phase 2: Summer 2024 (anticipated – in four or five annual construction periods)

How Many Beds: Current total beds in the area = 4,274; proposed beds at the completion of Phase 2 = 4,570. Phase 1A includes 336 beds in a new hall; 14 existing halls will be renovated. The existing hall bed counts range from 243 to 302. 120 RAs, 11 Res Life Directors within East Halls

Special Features of the New/Renovated Facility: Given an industry standard of 35 years as the ideal point of facility renewal, across Penn State's nine residential campuses, more than half of the residence halls are at least 43 years old and at University Park, the average age is 52 years. The East Halls Transformation is only one component of a huge capital

campaign aimed at implementing fundamental building system upgrades with student life program enhancements consistent with 21st century housing standards throughout the University Park campus.

Add Anything Else of Interest: The scope for all of the renovation projects included new systems upgrades, including air conditioning, which has proven to be a challenge given the low floor-to-floor height – 8'-4"! Exterior envelope remediation is required to varying degrees on each building, but all windows will be replaced. Insulation is being added to comply with current energy codes. The new hall will utilize a steel stud structural system with brick masonry veneer with cast stone accents. The original community bathrooms will be completely reconfigured and will incorporate single user bathrooms and vanity sinks located in circulation zones just outside the bathrooms. ⑨

This feature was compiled by editor Steve Glazner; you can reach him at steve@appa.org. Many thanks to Emily Glenn of ACUHO-I for her assistance, and to the housing, facilities, and design professionals who submitted their projects.



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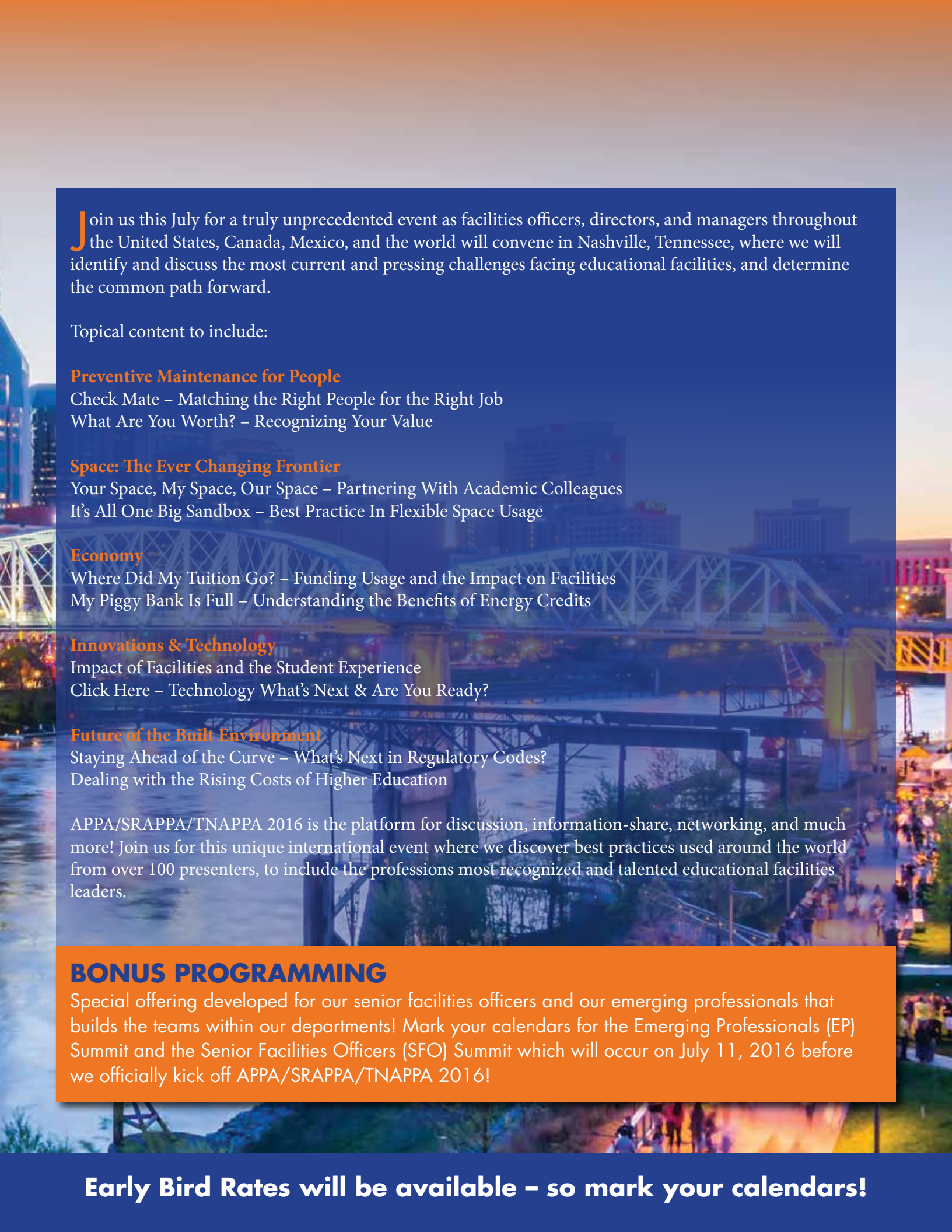
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Early Bird Rates will be available – so mark your calendars!

Fire Sprinkler System Standards: Are They Meeting Our Expectations?

APPA, other key stakeholders gather at NFPA Workshop to discuss effectiveness of residential sprinkler system standards

By John Bernhards

On July 12, 2015, firefighters in Oviedo, Florida responded to a sweeping, three-alarm fire at the Tivoli Apartments, a privately owned off-campus residential complex adjacent to the University of Central Florida. Thankfully there were no casualties. The Tivoli fire did, however, displace 75 residents—including 25 undergraduates of UCF—many of whom moved to temporary housing on campus or moved in with local family and friends. Interestingly, the Tivoli fire has become, in recent months, a focal point for discussion among sprinkler manufacturers, the insurance industry, fire and life safety personnel, APPA, and other stakeholders who are now evaluating the overall effectiveness of the NFPA 13 sprinkler system installation standards.

The Tivoli Apartments were designed and built to comply with NFPA 13R, *Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies*. Unlike the bellwether sprinkler standard NFPA 13, the NFPA 13R standard does not require sprinklers in certain areas deemed as “unoccupied” such as attics and apartment closets. In the case of the Tivoli apartments, the fire originated on a third-floor residence apartment balcony before reaching into the non-sprinkled attic and eventually collapsing the apartment roof.

At NFPA’s invitation, APPA participated in a two-day Sprinkler System Workshop, joining over 70 subject matter experts, NFPA 13 committee leaders and other stakeholders to offer observations and recommendations for improvement with regard to the current 2016 edition of NFPA 13 and NFPA 13R. The findings of the workshop will be published by NFPA in early summer 2016.

THE KEY DISTINCTIONS BETWEEN NFPA 13 AND NFPA 13R

Among the oldest of NFPA standards (the first version was written in 1896), NFPA 13 is a fire sprinkler system standard designed to accommodate all buildings, and to provide both life safety and protection to the facility and its assets to include unoccupied spaces (attics, closets, etc.). In contrast, NFPA 13R provides a high but not absolute level of life safety to building occupants in residential properties that are four stories or less in height, yet a lesser degree of property protection than NFPA 13.

NFPA 13R was first developed in 1989 and in response to stakeholders seeking a more cost-effective solution that was specific to low-rise residences, in contrast to NFPA 13 compliant sprinkler systems. The key distinctions between NFPA 13 and NFPA 13R are:

- NFPA 13R commonly allows for the elimination of fire protection in attics, closets, porches, balconies, and certain bathrooms
- NFPA 13R allows for a lesser water discharge demand from the sprinkler system, leading to smaller pipe sizes
- NFPA 13R allows for a shorter duration of water supply than NFPA 13. In situations where water storage tanks supply the sprinkler system, a smaller tank can be used.

OBSERVATIONS

In general, most participants in the NFPA Workshop view NFPA 13R as a standard that meets its primary objective of life safety. However, there was agreement that opportunities exist to further improve the standard. Additionally, it was agreed that there needs to be greater awareness among



stakeholders—most notably owners and tenants—of the goals as well as the limitations of differing fire sprinkler systems, so that prudent installation decisions can be made and expectations best served. At least one insurance industry representative present indicated that his company will not insure buildings using NFPA 13R approved systems.

Also observed was that the increasing use of manufactured synthetic materials found in construction, furniture, and household items poses the risk of spreading fires more rapidly. The increasing popularity of wood framing in low-rise residences, and whether the intent and goals of NFPA 13R can be realized as envisioned as when the standard was first introduced prior to increased use of wood framing, were raised as additional concerns.

NEXT STEPS FOR APPA

NFPA 13 and NFPA 13R are part of a suite of 20 standards recently identified by APPA's NFPA Standards Work Group as primary areas of interest

to APPA members. More detailed observations from the recent Workshop will be reviewed by APPA's Work Group members early this year, as it prepares to submit to NFPA its comments and suggested improvements on NFPA sprinkler standards.

Employees from all APPA member institutions are encouraged and welcome to participate in the APPA NFPA Standards Work Group. Please contact me for more information on how you and others within your facilities and/or life safety department can engage in our Work Group efforts. ☎

John Bernhards is the associate vice president for APPA and is a staff liaison to the APPA Standards and Codes Council. He can be reached at 703-542-3848, or via e-mail at john@appa.org.

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APPA Membership = M³

By Patty Smith

Magnificent, marvelous, and meaningful! There you have it. In my world, those three words best describe APPA membership. I hope to convince you that these words are indeed true.

If you are reading this article, you are most likely already a card-carrying APPA member. Why does it matter, you might ask? Why belong? If you joined because you are on the college, university, or school facilities payroll, it might behoove you to explore the many leveraging opportunities that APPA has to offer.

LET'S START WITH *MAGNIFICENT*

I like the word *magnificent*. It signifies grand, impressive, and superb. Using such a strong adjective to describe the initiatives, programs, and opportunities that come with APPA membership may seem like too big of a stretch. However, I would boldly state that by belonging to APPA, one can benefit from impressive programs that initiate, sustain, and grow our institutions through offerings that are at the forefront of the industry. For example, the newest APPA initiative, Total Cost of Ownership (TCO), is a significant tool, developed, tested, and soon to be fleshed out by members like you and me. The fact that it will be published as a viable tool for future facility professionals is both momentous and critical to APPA's success. Score a big point for APPA being magnificent!

FOLLOWED BY *MARVELOUS*

But without another component—people—these programs could not be developed. Are you investigating ways to improve yourself, your institution, or your local chapter through APPA's educational offerings?

Membership is where *marvelous* enters my APPA vocabulary. It is our people who make the greatest difference. Where are all of the wonderful, excellent, and awe-inspiring APPA members? Put this magazine down and go look in the mirror. With your APPA membership card and by virtue of working in the educational industry, you are a great contributor to a team that offers students, faculty, and staff a clean, safe, and well-maintained campus in which learning

is the number one priority. Review your accomplishments and remember the last time you or your team did something that made a student smile or solved a facilities problem. That makes you very special.

APPA has remarkable members who, in addition to their regular jobs, teach, learn, and share experiences in the most professional manner. Without APPA members sharing their amazing talents, there would not be a Body of Knowledge, a Supervisor's Toolkit, an APPA U, etc.

These programs were created by APPA members for members, and they are constantly refined for future members. Are you leveraging your APPA membership by seeking opportunities to pursue new ideas, learning new strategies, and positioning yourself to share with others? What are your APPA experiences?

Membership at any APPA level yields good experiences. At the local chapter we gain knowledge of APPA at the grassroots level. We attend programs, partner on discussions, and lean on each other for "how to" feedback. Hopefully you are one of the lucky members who has or wants to step up and do more. Getting more involved leads you to greater regional and national experiences.

There are times when we need "super strength" at the local and regional level, such as what we experienced when hosting the 2014 ERAPPA Regional Conference. Under the leadership of Andrew Christ of the New Jersey Institute of Technology, along with recently retired Mark Showers of Rowan University, our state chapter hosted the 2014 regional meeting, which was fraught with more than a few obstacles. But, under the leadership of our professional development leader Dianne Gravatt, we provided record-setting educational offerings from the American Institute of Architects to conference attendees. This is just one simple example of APPA members performing amazing feats.

Looking forward, our NJAPPA (New Jersey APPA) chapter is cultivating membership and developing members who should rise to the task of APPA leaders. I ask you to look at what your current APPA



membership affiliations are. Have you volunteered for anything lately? Have you reached out to your state, regional, or national APPA colleague to get an answer to a question? Or looked at program offerings for those in your organization who are ready for an APPA offering from talented teachers? Are you volunteering for anything in your region? That should be both your privilege and your duty as an APPA member.

AND WRAP IT UP WITH **MEANINGFUL**


Meaning matters, and APPA has a *meaningful* purpose. APPA membership epitomizes this concept and is best exhibited by the manner in which our association maintains a steadfast stream of consistency in the midst of rapid change (take, for example, code compliance.) Our industry faces changes. Our membership in the association gives us the lead on facing these changes through publications and webinars.

Membership in APPA gives each of us at any level the opportunity to rub shoulders (real or virtual) and learn from the best and the brightest. Because of these experiences, we are able to maintain standards that represent the profession. With this representation and

maintenance of membership, we, the facility leaders and APPA members, advance the ideal of volunteerism.

A PRIVILEGE

As APPA members, we seek both to exemplify and to leverage the knowledge that will most benefit the facilities profession. Do we do this for our own benefit? Yes and no. As APPA members, we certainly have the privilege to advance ourselves through continued education from APPA through any venue we choose. But in doing so, we improve not just ourselves, but our institutions and our communities as well.

So be proud of your APPA membership card—membership makes you “M³”: magnificent, marvelous, and certainly meaningful. 

Patty Smith is associate director for facilities and quality assurance at Drew University, Madison, NJ. She is the membership director for NJAPPA, ERAPPA Membership Committee, and ERAPPA liaison to the APPA Membership Committee. She can be reached at psmith3@drew.edu. This is her first article for *Facilities Manager*.

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Building a Legacy: One Piece at a Time

By Laura S. Illanes

“It’s not only what we do now that matters; it’s the path we’ve established for the next generation that will be our legacy,” states Darnell Mack, an electrical engineer and project manager with Facilities Operations and Maintenance (FOM), a division of the Facilities Services Department at the University of Texas at Austin. This is her vision, but she is not alone.

DEFINING QUALITY PREVENTIVE MAINTENANCE

She is part of the Maintenance Improvement Initiative, or MI², a core strategy for FOM. What does MI² mean to the university? As Darnell explains, “By developing preventive maintenance (PM) service levels for every piece of equipment within the context of its use in a particular facility and describing exactly how to perform the PM service, we can make this information readily available to the people who maintain our facilities. We define and build quality into the work we do now—and for those who will do this important work long after we’re gone. This consistency in doing things the right way, at the right time, helps ensure that the facilities entrusted to us will work better and last longer. These are our guiding principles, and our legacy.”

Darnell is quick to add that when she says “our,”

she means everyone working on the university’s facilities. “Everybody owns quality. Quality is not limited to the quality assurance experts who help us define and document our maintenance services procedures. It comes from the people who manage and perform the maintenance work every day.”

CROSS-DISCIPLINE TEAMWORK

She also emphasizes that a multidiscipline, multidepartment team is involved in developing the MI² service levels and procedures. The chart below in Figure 1 provides a detailed example of how the cross-discipline team is developing the MI² initiative, which looks at both existing equipment and new equipment coming online. The team documents tasks for each component of each type of equipment maintained, in each context (where it is located). Take for example a review of an HVAC control valve at the Student Activity Center (SAC).

CONSISTENCY IS KEY

For equipment already online, Darnell and her colleagues have found that either no documentation on service protocols exist, or if any do exist, they must be rewritten. They know that consistency is impossible to attain without proper documentation accessible on the work order and inventory management system (facilities asset management information system (FAMIS)) used by facilities staff.

For new equipment (in new or existing facilities), the team works to document the protocols and procedures for the equipment to ensure that maintenance can begin as soon as the new building comes online. The flow chart in Figure 2 shows how the team transfers the equipment information into the FAMIS CMMS system.

Whether the equipment is already in place or about to be installed, the outcome of this review process improves or

Figure 1: Maintenance Improvement Initiative team example.

Who is on the team	What the team does
<ul style="list-style-type: none"> Engineers HVAC mechanics Instrumentation & controls technicians 	Define the PM task list to verify operation and calibration of the valve. For example, the team documents the steps that will complete the task correctly and without impact to occupants.
<ul style="list-style-type: none"> Darnell Mack, Project Manager Planner/schedulers QA/process improvement staff FAMIS Administrator 	Input the defined PM task list into FAMIS so that it is assigned every year to the relevant crew.

instills efficiency and sets the standard for quality; efficiency and quality are the cornerstones of the MI² initiative.

DATA QUANTIFY RESOURCES

The vastness and complexity of this initiative becomes clear when extrapolated to more than 80,000 unique pieces of equipment the team must review. Plus, some tasks take longer than others to perform, which is why the time involved to perform each task is another piece of information that must be loaded into the work-order system. The team uses a formula that translates tasks into the number of hours required to carry out the task, as shown below:

$$\text{Time to perform task} \times \text{pieces of equipment} \times \text{frequency} = \text{technician hours required}$$

For example, it takes about a half-hour to perform the PM on an exhaust fan. Facilities technicians are responsible for maintaining over 1,000 exhaust fans for the university. (Source: FAMIS work order and inventory management system.) Proper maintenance for the fans requires that PM be completed at a frequency of three times per year. The calculation reveals that 1,500 hours per year should be allotted for this one component:

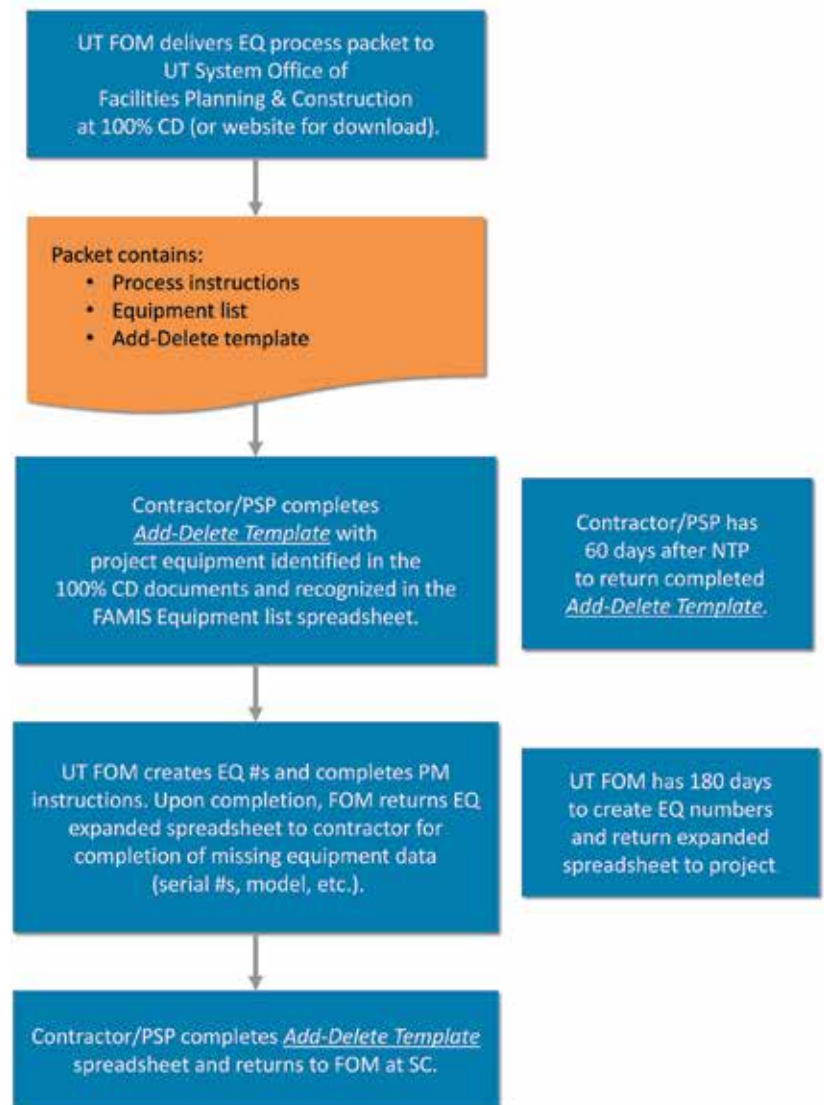
$$.50 \times 1,000 \times 3 = 1,500 \text{ hours per year}$$

The above equation illustrates how data gained from the initiative helps the team to quantify the resources needed to carry out the university's facilities maintenance mission—especially its most important resource: people.

Loading better information *into* FAMIS with help from the FAMIS administrator and database technicians helps the team get better information out of the system, as jobs are completed. Data from the system helps facilities stewards see how well they are doing. For instance, how much time should it take to complete a particular PM for this particular piece of equipment at this particular site? If it takes this much time to complete the tasks we should do, can we get this work completed with the resources we have available? If we don't have adequate resources, then what task are we NOT completing? What are the implications of not completing certain tasks?

Darnell and her MI² team hope to provide the answers to these and other maintenance performance questions. As Darnell emphasizes, "Our goal is to do more than keep the buildings running right now. This university has been around for over

Figure 2: Process for transfer of equipment information into FAMIS.



100 years. With some help from the stewards of today, it will be around for another 100 years or more for the stewards of tomorrow."

For more information, contact Darnell Mack at darnell.mack@austin.utexas.edu. ☎

Laura Illanes is communications coordinator for the Facilities Services Department at the University of Texas at Austin. She can be reached at laura.illanes@austin.utexas.edu. This is her first article for *Facilities Manager*.

How Complex Facilities Strategies Have Changed Recruitment

By Jim Lord

Facilities management plays an instrumental role in educational institutions as these organizations develop and execute strategies to maximize budgets, reduce operating costs, leverage advanced technologies, and integrate sustainability. Such initiatives infiltrate all aspects of facilities, including maintenance, capital programs, and utilities management, and while they may seem like challenges, in reality, they are opportunities to efficiently and effectively manage a campus and its real estate portfolio.

For many institutions, the most difficult questions to consider aren't "What goals do we want to achieve?" and "How can we meet our objectives?" but rather, "Do we have a facilities leader who can develop and lead strategies?" and "Do we have the staff who can execute those strategies?" Those of us involved in facilities management directly or indirectly realize there is a significant shortage of talent at all levels of the industry, from senior management to maintenance personnel, which can interfere with both the short- and long-term plans of our educational institutions. Therefore, recruitment is a key part of an effective facilities management program.

MULTIPLE AND INTANGIBLE SKILLS REQUIRED

An interesting fact about facilities recruitment today is that because of the level of talent needed to successfully perform in most facilities roles, technical skills aren't the only requirements that organizations seek. Objectives and plans now require facilities professionals who have strong financial aptitudes and business acumens, who understand how to effectively manage large capital programs and analyze life-cycle operating costs and return on investment, and who are well informed on the latest advancements in energy management and sustainability.

Capital planning and construction, a tangential

arm of facilities management, demands certain capabilities as well. With major capital program investments comes the need for executives who can oversee construction processes, institute alternative building methods, monitor budgets, and implement cost-saving measures to ensure projects are successful and have high returns on investment.

Let's not forget the intangible skills that have always been in demand—personal drive; strong communication and presentation skills; the ability to build, manage, and empower a team; and the strength to lead an organization or department through major changes. Higher education institutions also want professionals who can communicate with researchers, board members, and the community at large. These are skills that can't be obtained by taking a class or passing a certification exam. A person either has them or they don't.

RECRUITMENT AND TALENT SHORTAGE

All of this said, effective recruitment is critical to successful facilities management programs simply because of the complexities of such programs. Due to the widespread shortage of talent and the impending retirement of the majority of baby boomers, especially in the upper-tier of professionals, prospective employees have to be aggressively pursued because they're probably not looking for new career opportunities.

Over the past few years, universities and colleges have addressed the talent shortage by looking outside of the higher education sector for viable "nontraditional" candidates, meaning those professionals who are involved in a tangential industry but who have skill sets that are applicable to an institution's facilities role.

For example, attracting a professional from a corporate environment to that of higher education can bring a fresh perspective and a solid understanding of return on investment. Academic

institutions have become much more open to nontraditional candidates than they were in the early 2000s, because they've realized the value that these types of employees can offer them.

Another interesting component of facilities recruitment is that many individuals now entering the field are coming from more of a white-collar background involving property/asset management and computerized systems. Acquiring individuals with high-tech experience and partnering them with seasoned facilities professionals who are possibly nearing retirement can create tremendous opportunities for educational institutions.


A TIGHT CANDIDATE MARKET CAN MEAN A FAVORABLE JOB MARKET

Although there are many strategies to acquire facilities talent in this tight candidate market, the basics of a successful talent acquisition plan are simple. First, it's essential to know what needs to be accomplished and what an institution wants in a candidate before initiating the recruitment process. Responsibilities and objectives should be clarified and agreed upon by all parties well before recruitment ads are placed and résumés are reviewed.

Additionally, preferred qualifications and experiences should be carefully considered not only for a role's current responsibilities but its expansion and the extended value it can provide to an institution. When an institution's facilities department is clear about what it needs and wants, recruitment can be much more focused and strategic.

It should be noted that all of these circumstances have generated a favorable job market for facilities and capital programs professionals who are adept at what they do, ready to take on more responsibilities, and have the soft skills that are in high demand.

The many changes and advancements occurring in facilities management can be demanding on educational institutions, but when handled correctly they can be stimulating and inspiring. Institutions that embrace these changes and view them as opportunities to

improve their campus and portfolio management will undoubtedly create bright futures for their organizations, students, and communities. 

Jim Lord is a managing director with Helbling & Associates, a retained executive search firm based in Pittsburgh, PA. He can be reached at jiml@helblingsearch.com. This is his first article for *Facilities Manager*.



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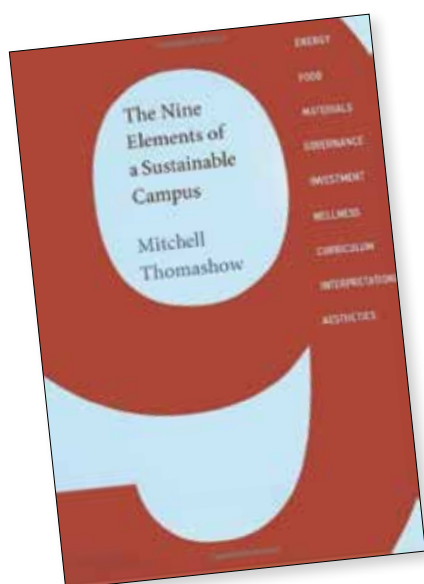


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Book Review Editor: Theodore J. Weidner, Ph.D., P.E., CEFP, AIA

The start of the New Year means a new beginning to many. However, the topic for this column is about more than a new beginning: It is about retaining the beginning, i.e., sustaining for the future after a movement started a little over 10 years ago. The approach to this column is a little different than in most columns, because I'm comparing and critiquing two books about sustainability against what I view as APPA's approach to sustainability over my 35 years of facilities experience and association with APPA. As this column reveals my personal bias, it may offend some. Nevertheless, I have strong feelings about sustainability and its focus in higher education. And it won't be the first time I have taken a contrary position.



THE NINE ELEMENTS OF A SUSTAINABLE CAMPUS

Mitchell Thomashow, The MIT Press, Cambridge, MA, 2014, 248 pp. Available in hardcover, softcover, and Kindle.

ENHANCING SUSTAINABILITY CAMPUSWIDE: NEW DIRECTIONS FOR STUDENT SERVICES, NUMBER 137

Bruce A. Jacobs and Jillian Kinzie, editors, Wiley Periodicals, Spring 2012, 88 pp. Available in hardcover, softcover, and Kindle.



Let's first look at a quote I often reference. It is attributed to James A. Garfield, the 20th President of the United States, and suggested by some to be among the most educated leaders of the country. At a Williams College alumni gathering, referring to the president of the college, he said, "The ideal college is Mark Hopkins at one end of a log and a student at the other."

Those are powerful words about the professor-student relationship, but also about how it relates to facilities. Think about it: Williams College is located in the extreme northwest corner of Massachusetts, about as far away from Boston as one can get. It is also in a mountain valley and receives its fair share of snow and cold temperatures in the middle of the academic year. Education delivered on a log in January or February would be rare in most locations but an endurance test at Williams.

But think about the metaphor and then about how

education is delivered at your campus. Which is more sustainable? Is it environmentally, economically, and socially sustainable? Education on a log is very sustainable because the log is economical and free of societal bias and access restrictions. So why have our campuses become so developed with special facilities for a wide range of nonacademic purposes? Is a climbing wall a sustainable feature? What about a hot tub or "lazy river"? Granted, some basic research (and instruction) must be accomplished in specialized, relatively new, sophisticated facilities, but do we really need the latest and greatest facility to attract students? Apparently so.

I conducted a brief study of the American College & University Presidents' Climate Commitment (ACUPCC) charter signatories. The study showed 44 percent had an indoor climbing wall even though 77 percent of those campuses had similar rocky terrain

within an hour of campus (some on campus). Is it sustainable to provide an indoor venue when part of the concept of sustainability is to get people to recognize the value and beauty of the natural world so it will be conserved? Maybe it is more conservative to create an artificial venue so rock climbers don't destroy nature. But then is it necessary to have it indoors, heated in the winter, and cooled in the summer?

So why are our students demanding sustainable programs and climate commitments from the administration? Are they aware of their surroundings or simply engrossed in the latest app on their smartphone or tablet? Have they selected the institution for its sustainability programs or because it is really sustainable? Are our institutions recruiting students based on their demonstrated sustainability? Or is it really just a lot of talk? Remember, the most sustainable building is the one that is not yet constructed.

Students seem to have several attitudes about sustainability. They can be described generally by a scale that ranges from:

- committed to sustainability
- involved in sustainability, and
- ignorant or unconcerned about sustainability

The *committed* students have changed their lifestyle and pay close attention to their carbon footprint. They are a minority of the students but are vocal and active both within and outside their college. The *involved* students, for the most part, are supportive of sustainability, but only as long as their lifestyle preferences are not severely affected—they want to drive to the gym, fly to spring break, and eat fresh tomatoes in the winter. The *ignorant* students are a minority at the opposite end of the scale. As is often the case, there is a virtual bell curve of attitudes about sustainability among students in higher education.

These two books address students at the involved and committed portions of this bell curve. *Enhancing Sustainability Campuswide* feels like more of a greenwashing effort. It identifies projects for students to do when not in class that make them more aware of sustainability, but really doesn't help them understand sustainability nor how to implement it in a way that will last. It takes the approach of making students comfortable with sustainability and making it fun. These techniques are important but don't address the deep thinking that I believe is needed to implement sustainability in meaningful ways.

On the other hand, *The Nine Elements of a Sustainable Campus* is written for a principled leader who is committed to sustainability and educating others. It looks at the fundamentals needed to make sustainability long-lasting and compatible with modern systems. It identifies principles of sustainability and its implementation in the physical, economic, and social world of higher education. The author does an excellent job describing strategic approaches to sustainability that will result in real outcomes rather than an activity to keep students out of the bars on the weekend. That's a tall order and may only be applicable at a small number of institutions, but is much closer to the "log" example than what we have today.

I have advocated the sustainability approach that APPA has advanced for decades: identify organizational needs, identify what resources can be adjusted or must be supplemented, and obtain support for the plan. That's the same thing described in *Nine Elements*. It's not easy and it's not trendy. But then many things that make our institutions great are not easy but they all require a seat at the table either physically or virtually. Instead of implementing nice to do things as described in books like *Enhancing Sustainability Campuswide*, facility officers should be involved in meaningful actions such as those described in *The Nine Elements of a Sustainable Campus*. There's a place for both, but if pressed to select one or the other, my money is on the *Nine Elements*. ☛

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If you would like to write a book review, please contact Ted Weidner at tjweidne@purdue.edu.



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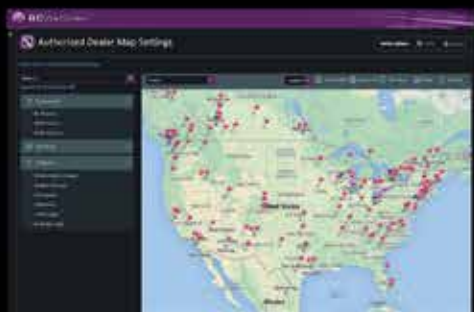
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