CAPPA
APPA Central Region
Since 1953

CAPPA Newsletter

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In This Issue…

From the President

Sheila Awalt
Assistant to the Associate Vice President for Facilities Management
The University of Texas at El Paso

Remember our theme as you continue through your academic year:

Resilience, Connect, Inspire

~Sheila Awalt

It was such a joy to see everyone at the 2021 CAPPA conference! Remember our theme as you continue through your academic year… "*Resilience, Connect, Inspire.*" The conference was all about connecting with our peers, inspiring each other in new ways, and uniting in our efforts to resolve issues.

I am honored to serve as your CAPPA president for 2021–2022. Please join me in the work ahead as we strive to make CAPPA the strongest advocate for our professional staff in the Higher Education Facilities Management world.

First, I would like to state that our success would not be possible without the dedication of our members and business partners, as well as the strong leadership and hard work of our small, but mighty Board of Directors.

It is important for you to know that the CAPPA Board is here to represent you. You are the stakeholders in everything that we do - a connected membership is a viable membership. The CAPPA Board of Directors should be a reliable ally and resource for you; committed to fair and transparent governance. One way you can help us is to volunteer for one of the CAPPA committees - Business Partners, Finance, Information and Communications, Membership, Newsletter and Professional Development. Please reach out to me, or Markus Hogue, our CAPPA Recruiter at Markus.Hogue@austin.utexas.edu.

This coming year, my goals include updating the CAPPA Strategic Plan; successfully launching our new website platform; and, continuing to offer educational scholarship opportunities for you and your staff for the enhanced skills needed in today's Facilities environment.

Please encourage CAPPA membership among your colleagues and peers. Now is the time for the strongest possible advocacy, when our place in addressing some of the most urgent needs in Higher Education is being voiced and sought after. We are a critical piece of the institutional solution.

I look forward to working with you this year, hearing your concerns, sharing your successes, and seeing you again at the 2022 conference in Nebraska.

Sheila Awalt
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My CAPPA Story—Ben Boslaugh
Utilities Manager, Missouri State University

My first time attending a CAPPA event was in 2007. I was new to supervision in a higher education setting.

University of Arkansas Fayetteville was hosting the annual conference. I was attending Supervisor Toolkit with a co-worker. That year's Toolkit facilitators were Glen H., Vickie Y., and Steve M. Toolkit was a great benchmark training experience. More than just a leadership checkup, it laid out some great ground rules. Coaching on the move has always stuck with me. Toolkit helped guide me through the transition of my skills from the military realm to the facilities environment.

The Annual Conference has been and continues to be a catalyst for friendships that have helped my career, with facilities folks and business partners alike. Several forces have influenced and shaped who I am: family, faith, and co-workers. As a professional in facilities management, the folks I have grown to know at CAPPA have added the best seasoning and sage advice. Knowing folks you can email or call for advice and input is critical to our mutual success.

Serving on the Professional Development Committee (PD) is voluntary and very rewarding. I look forward to the PD and Executive Board meetings. The folks I serve with have become my friends, and a few have taken the time and effort to mentor me. I am humbled and forever grateful. If you've not considered it, I encourage you to find your niche – your place to serve in CAPPA.

Training and Professional Development didn't stop with Toolkit. I have benefited from educational sessions and scholarships to attend Academy on Campus (AOC). If you haven't been – you need to attend! Session 2 is one of the best trainings I have participated in during my career. It has helped me be a better communicator by better understanding those around me. Touring other facilities, with their team (*contextual learning in a tactile environment*) is priceless! There are lots of opportunities to grow – no matter where you are in your career.

A lot has happened in the last 15 years. Looking back, I am far better equipped now than I was back then. CAPPA has been a big part of it. Our campuses, chillers, boilers, and budgets may vary, but the fundamentals are the same. Nothing sharpens one better than being around other professionals solving the same problems in a different way.

NOTE: Ben Boslaugh currently serves as Co-Chair of the CAPPA Professional Development Committee for 2021-2022.

COVID-19 Resources & Guidelines

Don't miss APPA's valuable COVID-19 Resources and Guidelines, which include:

- Registration for future **APPA Town Hall Meetings** and **earn CEUs/certificates** for attendance
- APPA Town Hall Archives (**GREAT INFO!**)
- COVID-19 General Information
- Campus Emerging Practices (**CHECK THIS OUT!**)
- Federal/State/Regulatory Guide
- Business Partner Resources
- And MORE!!!

Valued Business Partners

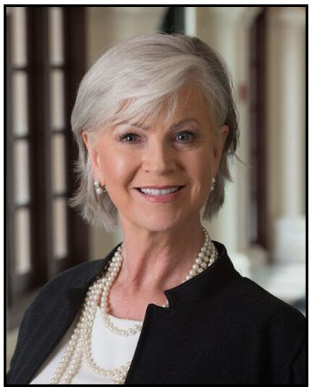
The in-person 2021 CAPPA Conference held October 10-12 in Tulsa, Oklahoma was honored to welcome old and new Business Partners from the following companies or corporations that provide valued resources, services, training and information to CAPPA members:

- Allana, Buick & Bers, Inc.
- AQUIS
- ARC Facilities
- Armstrong International
- Asset Works
- Bernhard, Blackmon-Mooring & BMS
- Choice Partners
- CORE Construction
- Energy Solutions Professionals
- Fire Door Solutions
- HERA Laboratory Planners
- HES Facilities Management
- Hollis + Miller Architects
- IMEG Corporation
- Kurita America
- Performance Services
- Ross & Baruzzini
- Schneider Electric
- Shaw Industries
- SpawGlass Contractors, Inc.
- The Garland Company, Inc.
- Tower Tech
- Treanor HL
- Tremco Roofing & Building Maintenance
- Veregy

Many in attendance at this year's conference were first-time attendees. CAPPA is grateful to each of its valued Business Partners who attended the 2021 CAPPA Conference.

CAPPA is currently developing a new website to be revealed in 2022. On the home page of that website, there will be a tab for Business Partners (BPs) with the opportunity for BPs to enter their contact information into CAPPA's database to encourage CAPPA members to contact them.

If you would like more information about involvement with CAPPA as a BP, please contact Business Partner Representatives, Debra Jones or Allison Anderson-Fobert, Business Partner Representative:
Debra.Jones@se.com
anderson@aquissolutions.com



Debra Jones
Energy Specialist
Schneider Electric
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Allison Anderson-Fobert
Solution Architect
AQUIS Solutions
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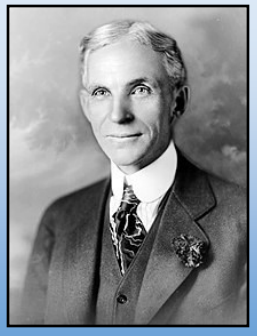

Henry Ford, c. 1919

"Coming together is a beginning;
keeping together is progress;
working together is success."

Resilience Empowered by On-Site Generation

Extreme weather events coupled with increasing electric and thermal demands have exposed vulnerabilities in the existing infrastructure. The result has been major utility failures and interruptions that can have a detrimental impact on many facilities. The importance of evaluating and improving resilience and redundancy at your facility is critical. One solution to support resilience is on-site generation.

Defining Resilience vs. Reliability

Conversations around reliability and resilience are key drivers when identifying risks and methods for mitigation related to utility infrastructure interruptions. While resilience and reliability are related, it is important to understand the differences between the two:

Resilience: Based on the Presidential Policy Directive (PPD) 21, resilience is defined as "the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions." Resilience includes "the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents."

Reliability: As defined by the Department of Energy (DOE), reliability is "the ability of a system or its components to adapt to changing conditions and withstand and rapidly recover from disruptions."

In other words, *resilience* is mitigating risks related to large-scale infrequent major events, whereas *reliability* mitigates risks associated with frequent, smaller events that impact facilities.

Creating Resilience Objectives

Much like sustainability was 20 years ago, resilience has become a lens through which we look for project success; it should be incorporated into every project. When considering resilience, key objectives include:

1. **Developing a comprehensive approach to assessing risks** that could influence your systems and operations.
2. **Redefining risk to be forward-looking rather than backward-looking**. Historical context and trends are useful, but utility enhancements need to accommodate the future.
3. **Recognizing the lag of regulatory framework** to consider that current regulatory standards are likely outdated. Often, projects are being developed today that respond to issues from 30 years ago.

In the context of facilities, resilience is best defined by what it *provides*—risk mitigation. Risks are different in every situation and can vary over time, so it's critical to understand what unique risks or threats exist at your facility or campus and how they could impact the overall mission. Below are a few examples of possible threats related to an electric outage:

On-site Generation

Critical facilities such as hospitals, research facilities, and public buildings often have some form of emergency generators to provide backup power to critical assets in the event of an outage. When properly applied, these assets can provide additional benefits beyond backup power, including electric demand offsets, improved efficiency through heat recovery, and emission reductions. These can also be used to develop advanced microgrids capable of operating independently from the electric grid, which can bring further value by providing energy and cost savings as well as unmatched resilience. These benefits can improve the value proposition of a potential investment in on-site generation.

On-site generation technologies available on today's market include:

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Reciprocating Engines/Combustion Turbine Generators: These fossil-fueled assets are flexible resources that can respond to dynamic loads and are the anchor resource in modern electrical grids. They can be configured to produce power alone or configured as a combined heat and power (CHP) system whereby waste heat is captured to support the heating or cooling demands of your campus or facility, dramatically increasing the system's economics.

Solar Photovoltaic/Energy Storage: Solar photovoltaic technology utilizes an array of solar panels to harvest the sun's energy. Largely a decarbonization technology, solar is not well suited for backup power or microgrid application without some form of anchor resource but does work well in an advanced microgrid in concert with other resources. Pairing solar with energy storage technology can be a key component to improving the economics of system resilience.

Wind Generation/Energy Storage: Wind turbines convert wind energy to electricity. Like solar and energy storage, it can be a useful tool in supporting the economics and decarbonization of the grid, but it is not well suited as a resilient solution alone.

Fuel Cells: Fuel cells generate power through an electro-chemical reaction, which mixes fuel with air, utilizing a catalyst to produce electricity. Fuel cells can operate on biogas, natural gas, or renewable natural gas. Fuel cells have high efficiencies ranging from 47-50% and emit low emission levels. They can be configured to produce solely power, but they also have the ability to capture additional heat from the process to provide steam or hot water in a CHP application.

Though several technologies exist, there is no *one size fits all* solution. Air permitting, load dynamics, response time, and electrical and thermal load phases are among the critical factors to consider when evaluating on-site generation. Your system should be evaluated by a professional with expertise in on-site generation technology to identify the right solution that aligns with the mission and goals of your facility.

Case Study: University of Minnesota

Jacobs worked with the University of Minnesota to create an on-site generation solution by developing a CHP plant that generates approximately 22 MW of electricity. The system employs a combustion turbine generator coupled with a heat recovery steam generator. To enhance resilience in the frigid Minneapolis winters, the combustion turbine is capable of operating on natural gas or fuel oil in case the natural gas supply is curtailed.

With critical facilities such as hospitals and research centers on campus, resilience is essential to the university. As such, reliability of the plant was vital, and considerations for redundant auxiliary equipment were incorporated into the design.

In addition to improving the resilience and reliability of their campus, Jacobs identified several financial and environmental incentives. By installing the new CHP facility, the university was able to offset purchased power and save approximately $5.4 million in annual utility costs. In addition, the project enabled a massive reduction in the campus carbon footprint, allowing for savings of more than 32,000 metric tons per year.

Jacobs

Challenging today.
Reinventing tomorrow.

Casey Reimann, PE
Jacobs Energy & Power Solutions
Mechanical Engineer

JOC (Job Order Contracting), an efficient Integrated Project Delivery (IPD) method to quickly and efficiently get your facilities COVID ready

In the last few years, Integrated Project Delivery (IPD) has emerged as an accepted delivery method along with Design/ Build, CM, CM@R and of course, Job Order Contracting. Several organizations collaborated together and published a white paper titled "Integrated Project Delivery for Public and Private Owners." The paper was authored by NASFA, COAA, APPA, the Association of Higher Education Facilities Officers, AGC and AIA and described the IPD delivery method and explained that it is a collaborative alliance among project stakeholders - owners, designers, contractors and other participants - to optimize the project results. Several years ago, during one of the Construction Owners Association of America conferences, I had the opportunity to attend a one-hour breakout session dedicated to IPD. Two case studies were presented on projects executed by the Corps of Engineers that showed the effectiveness and expediency of this method. Reflecting back on this, I wanted to share the appropriateness of utilizing the JOC as an effective IPD to expedite the execution of projects aimed at reopening facilities of all types. In this article, I will address two questions: What is IPD and how is JOC is inherently an IPD method? The other question is how JOC, as an IPD, can support facilities managers in executing projects to facilitate getting the facilities ready to open as quickly as possible.

So what is IPD and why is JOC an IPD delivery method? Numerous papers and articles have recently been published about IPD detailing this delivery method. In summary, IPD advocates pulling together the owner, contractor, designer, and others to achieve higher project results, which in turn increases the overall value to the owner. It promotes collaboration and partnership; it is about integrating design excellence with constructor's expertise early on during the conceptual stage of a project lifecycle. Accordingly, the risk profile and allocation changes significantly from other traditional delivery methods. It facilitates the expedient execution of projects. It promotes efficient delivery of results in shorter time than traditional delivery methods.

IPD and Job Order contracting (JOC) have several things in common. One can find several similarities between the two delivery methods. For example, JOC is also based on close collaboration between all stake holders. Just as partnering is a prelude to IPD, it is the foundation that a successful JOC program is built on. Traditional construction delivery methods typically have an adversarial relationship. JOC, on the other hand, is a long-term contract of three to five years which promotes close and effective working relationship between contractor, client and subcontractors. A JOC contract is inherently built on partnering in order for the long-term relationship to succeed.

Early involvement of the construction manager and the contractor with the owner and the designer in the conceptual phase of the project is another similarity with IPD that brings value to the owners. Joint scope of work development under the JOC program is a typical feature as the starting point for each project (task order) under the contract. Bringing the JOC contractor together with the owner and the designer, when applicable, provides higher level of common understanding of the scope of work. This helps to eliminate potential disputes and change orders that traditional construction delivery methods are known to suffer from. Another advantage that early involvement brings under a JOC contract is the ability of the contractor to provide input about the potential cost, constructability, and value engineering that aids the designer in making more efficient and cost-effective decisions.

Common processes are yet another similarity between JOC and IPD. Establishing shared processes that govern the flow of information and communication between all project participants is critical in both delivery methods. These processes develop an effective and transparent transfer of information in all directions with the goal of creating and building trust. After all, a JOC program is only as successful as the ability of all participants to trust each other. An effective and successful JOC contractor focuses their efforts on building and maintaining the trust with their clients and subcontractors.

Lastly, risk sharing is an advantage both delivery methods bring to the owner. As scopes of work are jointly developed, discussed, agreed to and finalized, a JOC contract is much less likely to have claims, change orders, and disputes than other traditional delivery methods.

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How can JOC, as an IPD, make facilities managers' jobs easier to be ready to reopen their facilities? JOC processes allow for pricing transparency and flexibility. In other words, the JOC contractor can work with the facilities owner to modify the scope of work to fit the budget. Through price transparency, the owner can easily identify which portions of the scope can be modified to fit the budget. Experienced JOC contractors bring a wealth of design and engineering expertise to the table. When you couple the pricing and scoping flexibility with engineering design expertise provided the JOC contractor, not only do you gain efficiency, but also an expedited delivery process. Currently there are several COVID-related cleaning, purification and mitigation design concepts and equipment. Working with the JOC contractor to provide design expertise and pricing flexibility is very advantageous to facilities owners. If you are one of the fortunate facilities managers who are currently using JOC, your JOC contractor brings the knowledge of your facilities most recent status and needs.

JOC is not the only delivery method to achieve "reopening" your facilities, but as an Integrated Project Delivery, JOC is the most efficient way to expedite the reopening process.

Written by Rick Farrag, Director, Design & Construction
Brown & Root Industrial Services

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APPA's Healthy, Smart Building Framework

Jones Lang Lasalle's 3-30-300 rule postulates that organizations spend on average $3 for Utilities, $30 for Rent/Built Space and $300 on Payroll per square foot per year. As facilities managers, the perceived circle of control has been on the "3" and the "30", with little attention paid to the "300". They have spent the last decade or two on reducing their operational and energy costs. While they have been successful at achieving their goals, it sometimes has been done with minimal focus on occupant comfort, health, or safety. These factors have been shown to have a significant impact on the productivity of an organization's greatest asset, the people. This perception has drastically changed during the COVID pandemic when occupants started asking the facilities managers – "Is my building safe to occupy?". A recent survey of prospective college students' parents, identified Indoor Air Quality as one of the top concerns for university selection (Campus cleanliness and indoor air quality ranked in top three most important factors for college or university selection (jll.com)). This attention to occupant health has brought the facilities manager to the head of the table to answer this question.

Unfortunately, there is not an "easy button" to quantify and communicate the health or safety of facilities. There are several organizations out there now that have a product or certifications to evaluate buildings with occupant health and sustainability at center stage. But most, if not all, require a significant monetary and/or time investment. These are all great organizations with excellent initiatives, but many facilities managers cannot make these investments. However, they are still left with the task of conveying the health of their building(s). It is also imperative that they can also continuously monitor that condition by use of smart building technology.

It is for this reason that APPA Board has decided to make Healthy, Smart Buildings a key initiative. At present, a small group of industry experts are leading the charge to develop *a self-assessment, decision-making framework for healthy buildings with investment in smart technologies across a campus or real estate portfolio.*

The framework will:

- Provide an easy-to-understand healthy rating system for an individual building or group of buildings.
- Prioritize the needs of facilities with a focus on healthy buildings to drive human performance.
- Identify areas of improvement to monitor the current health of buildings using smart technology and analytics periodically or continuously.
- Serve as a communication tool with building owners, campus leadership, or the community the healthy conditions in the building(s).
- Derive actionable data for facilities managers to improve the healthy, smart rating of their building(s) for improved stewardship.

2021 CAPPA CONFERENCE, Tulsa, OK—Attendees and Business Partners

As is tradition, CAPPA Conference attendees and Business Partners for a group photo on the last day of the conference held October 10-12, 2021. Photographer Miles Abernathy had to climb atop a ladder to get this shot, but it is always a welcome challenge to capture this moment. Thank you, Miles, and all who attended this year! We hope to see you again next in 2022!

CAPPA Executive Board 2021-2022

CAPPA is proud to introduce its Executive Board for 2021-2022.
At the podium: Jim Jackson, Immediate Past President, APPA
L-R (back): *Sheila Awalt*, President; *Lalit Agarwal*, 1st VP; *Brian Lasey*, 2nd VP; *Matthew Rom*, 3rd VP ; *Angela Meyer*, APPA Regional Director; *Andrea Smith*, Membership Chair; *Rodolfo Zelaya*, Professional Development Co-Chair; *Lee McQueen*, Historian; *Debra Jones*, Business Partner Representative
L-R (front): *Ben Boslaugh*, Professional Development Co-Chair; *Virginia Smith*, Secretary; *Jennifer Kindt*, Treasurer; *Sue-Anna Miller*, Assistant Treasurer; *Jenny Cundiff*, Newsletter Editor; *Angie Mitchell*, Conference Coordinator; and *Markus Hogue*, Recruiter.

New CAPPA website in 2022

It's been a work in progress, but CAPPA is proud to announce the launch of its newly designed website Monday, January 31. As a team under the leadership of Ian Hadden, CAPPA members Ben Boslaugh, Jenny Cundiff, Nate Benes, Jeanne Knott, and Peter Palacios have worked to divide and conquer the task of updating and streamlining the CAPPA website to make it more user-friendly and relevant for both CAPPA members and Business Partners.

FROM THE EDITOR:

Thank you to those who submitted articles, photographs and information to be included in the CAPPA Newsletter!

Please write and submit articles for the CAPPA Newsletter at any time for consideration. Preferred articles will be BETWEEN 500 words (ex: 1/2 page w/graphic or photo) and 1,000 words (ex: full page with small graphic or photo). Please include names and descriptions with photos. Graphics and charts are always welcome to help tell your story.

If available, please provide a link to full articles. Email articles and photos to Newsletter Editor: jenny.cundiff@okstate.edu