Track 1: Reimagining Campus Space

- **A 12-Year Campus Energy Conversion: How Swarthmore College is Planning the Conversion of 45 Buildings to Decarbonize Their Campus**
  Presenters: Christopher Lee, Jacobs Wyper Architects; Andy Feick, Swarthmore College; and, Michael Gilroy, BR+A Consulting Engineers

  Swarthmore College is committed to achieving carbon neutrality by 2035, aiming to eliminate, reduce, or offset all direct and indirect carbon emissions from college operations. To reach this ambitious goal, the college has developed a bold energy plan, To Zero by Thirty-Five (20X35), which includes transitioning to a combustion-free energy campus. This involves upgrading the central plant to a state-of-the-art heating and cooling geo-exchange system, enhancing building efficiency, incorporating onsite solar energy, and procuring off-site renewable energy.

  This session explores strategic planning and preparation required to connect Swarthmore's 45 buildings to the new geo-exchange plant, while decommissioning the legacy combustion steam plant. Presenters will provide an overview of the 20X35 energy plan and highlight key milestones since its approval in February 2021, including the Building Upgrade Study (BUS).

- **From Data to Decision University of Southern Mississippi's Strategic Approach to Facility Management**
  Presenters: Bill Roth, Roth IAMS; and, Lucas Applewhite and Brian Hauff, University of Southern Mississippi

  The University of Southern Mississippi (USM), along with Roth IAMS, shares their story of successfully taking on the challenges of managing their campus facilities and infrastructure in unique ways. By leveraging their Facility Condition Assessment (FCA) data, USM embarked on a unique path distinct from other state institutions.

  This session explores the challenges faced by higher education institutions in managing campus facilities and infrastructure. See how USM transitioned a pilot program at one of their coastal campuses to an institution-wide roll-out, including successfully securing money to do address some important deferred capital renewal and Maintenance needs.

- **Data-Informed Design: The Future of Education Workspace**
  Presenters: Chuck Rudalavage AIA LEED AP and Jill Sirota, Gensler; and, Casey Boss, University of Pennsylvania

  Join a university administrator, a higher education workplace designer, and an education strategist as they delve into three robust case studies from the University of Pennsylvania's real estate portfolio: the Wharton Business School, the Office of the Provost, and Facilities and Real Estate Services (FRES). Drawing on over 15 years of Gensler's research into work and workplace dynamics.

  This session explores how physical spaces influence employee performance, experience, and engagement in higher education settings. Through these case studies, the presenters will examine how data-driven design strategies that integrate culture, technology, physical space, and policy are reshaping workplace environments across campuses. The discussions will highlight how these approaches are enhancing employee experience,

fostering innovation, and increasing staff engagement—ultimately creating more vibrant and dynamic ecosystems within higher education institutions.

- **Navigating Facility Condition & Energy Studies When Capital Planning**
  Presenters: Matt Calle, Farnsworth Group; and, Michael Gorham, St. Francis Health Care

  Matt Cale of Farnsworth Group will share a successful approach to strategic capital planning at the Children's Wisconsin healthcare campus in Milwaukee, integrating facility condition assessments and energy master planning. This comprehensive approach included a thorough assessment of the campus's deferred maintenance backlog, resulting in an actionable list of priorities that clearly identified where each dollar should be spent. By aligning the energy master planning efforts with high-impact, high-savings energy projects, the team was able to create a self-funding model that accelerated the campus's path toward achieving Energy Star certification.

  This session explores the importance of being lean and agile in response to rapidly evolving legislative environments, funding sources, certifications, and evaluation protocols. The discussion will also address the challenges of meeting evolving customer needs, adapting to emerging technologies, and navigating supply chain disruptions.

- **Planning for a Barrier-Free, Accessible Campus**
  Presenter: Andre Gordon, University of Victoria

  As accessibility becomes an increasingly vital priority for organizations, developing a coordinated, long-term strategy to remove physical barriers across campus facilities is essential. A key tool in this process is the Rick Hansen Foundation Accessibility Certification (RHFAC) rating system, which provides a comprehensive audit of both existing facilities and plans for future projects. The RHFAC system evaluates the level of meaningful access a building or site provides, assigning an overall percentage score that helps guide improvements. By combining the AREA methodology with the RHFAC rating system, post-secondary institutions can develop a clear, actionable path to systematically eliminate physical barriers.

  This session explores how to create a comprehensive approach to achieving a barrier-free campus, emphasizing the need for involvement across all levels of Facilities Management and governance. This approach not only ensures accessibility but also fosters meaningful engagement with the campus community and stakeholders, driving long-term change.

- **Reimaging Century Old Residential Properties With the 21st Century in Mind**
  Presenter: Hunter Gellman, Stevens Institute of Technology

  Stevens Institute of Technology, established in 1870 and situated on the banks of the Hudson River in New Jersey, shares many challenges with other major northeastern universities. Known for its rigorous academics and proximity to New York City, Stevens attracts prospective engineers to its picturesque campus, which spans over forty acres and features century-old buildings. While the historic charm of its ornate details is undeniable, like many institutions, Stevens faces a significant backlog of deferred maintenance across its facilities, particularly in its residential properties. Since 2018, Stevens has committed to revitalizing its residential properties, investing heavily in upgrades across sixteen of its seventeen buildings over the past six years.

  This session explores how Stevens successfully modernized and reimagined these properties by integrating student micro-feedback, materials standardization, energy

stewardship, and other innovative strategies. While the focus will be on project-based outcomes, the session will also highlight the operational improvements achieved through these efforts.

Track 2: Capital Planning

- **Blockbuster Strategies for Integrated Campus Planning at Caltech**
  Presenters: Dave Kang, Leandra Davis and Tyler Durchslag-Richardson, California Institute of Technology

  In today's environment of tight budgets and growing demands, managing campus facilities efficiently is more critical than ever. Learn a comprehensive framework for prioritizing deferred maintenance, optimizing space utilization, and addressing the unique needs of new faculty, all the while developing strategic spending plans to manage Facilities Condition Index (FCI) growth. The integration of technology, strategic planning, and asset management is essential for operational efficiency and meeting the dynamic needs of modern campuses. With financial constraints, making a compelling case for funding and resource allocation is crucial, learn innovative strategies and innovative technologies that can transform Facilities Condition Assessment (FCA) data into actionable insights.

  This session explores real-world examples and case studies of successful implementations of these strategies, offering valuable takeaways for driving similar successes on their own campuses. Learn how to turn challenges into opportunities, ensuring that your campus not only meets immediate needs but also positions itself for long-term growth and sustainability.

- **Future Facing Green Research Facility Support: Stony Brook University School of Medicine's Freezer Farm**
  Presenter: Glen Itzkowitz, Stony Brook University Renaissance School of Medicine

  Stony Brook University's Renaissance School of Medicine in Stony Brook, NY, has significantly enhanced its capacity for ultra-low-temperature freezer storage, a critical need that became particularly urgent in early 2021 when the Pfizer COVID-19 vaccine required such storage conditions. This demand limited the ability of many hospitals and pharmacies to offer the vaccine. To address this challenge, Stony Brook has developed a state-of-the-art solution within its 560,000 square-foot Medical and Research Translation facility.

  This session explores the newest core facility at Stony Brook. The freezer farm is designed to provide safe, dependable, cost-effective, and energy-efficient storage for samples requiring ultra-low temperatures. It not only helps streamline storage for the university's vast research needs but has also contributed to reducing the carbon footprint of its research program. Furthermore, the new freezer farm has led to a reduction in campus emergency power demand, generating significant energy cost savings while ensuring the university remains at the forefront of innovative research infrastructure.

- **Recalibration and Beyond: How Data and Placemaking will Define the Future at Western Michigan University**
  Presenters: Angela Harrison, Gordian; David Dakin and Anand Sankey, Western Michigan University: and, Andrew Broderick, Perkins & Will

  Higher education is navigating unprecedented challenges, from pandemic recovery to the looming demographic cliff, which have contributed to unstable student enrollment. In this

evolving landscape, how can campuses reduce their physical footprint while still providing a thriving, engaging experience for all? The answer lies in a forward-thinking, data-driven campus plan that serves as a roadmap to guide universities toward long-term sustainability and success. Western Michigan University has positioned itself as a leader in responding to shifts in enrollment, operating costs, and deferred maintenance. By closely monitoring and analyzing building utilization and facilities conditions, the university is proactively driving its campus toward a sustainable and adaptable future.

This session explores Western Michigan University's innovative approach, demonstrating how data and design are shaping their vision for the future. Learn how this forward-thinking approach is not only optimizing space and resources but also fostering an environment where students, faculty, and staff can thrive.

- **Transforming Capital Planning: Leveraging Facilities Condition Assessments, Computerized Maintenance Management Systems, and Asset Investment Planning for Future-Ready Campuses**
  Presenters: Katie Gramajo, Brightly; and, Michael Panman, Campbell Hall School

  Effective capital planning is essential for educational institutions grappling with the challenges of deferred maintenance. Presenters will discuss the three critical areas that drive successful capital planning: strategies for conducting and leveraging Facilities Condition Assessments (FCAs) to address deferred maintenance and inform long-term capital planning decisions; best practices for integrating FCA data into Computerized Maintenance Management Systems (CMMS) to ensure comprehensive, efficient asset management; and, using Asset Investment Planning (AIP) software to create data-driven, strategic capital plans that effectively justify budget requests and prioritize investments.

  This session explores optimizing FCAs for school facilities management, exploring both internal and external assessment methods. Learn how to initiate and manage internal FCAs, understand various methodologies and tools, and integrate FCA data into CMMS software to maintain accurate and actionable asset information. With a focus on creating actionable, data-driven capital plans, learn how to leverage FCA and CMMS data to address deferred maintenance, enhance asset management, and support justifiable budget requests.

- **How Ole Miss Leveraged their ESPC to Not Only Address Capital Facility Needs but Also Provide Enhanced Learning Opportunities for Students**
  Presenters: Dean Hansen, University of Mississippi; and, Nancy McBee, Trane

  Delve into the transformative partnership between the University of Mississippi and Trane, focusing on energy-saving initiatives, addressing deferred maintenance, active student engagement, and the integration of emerging technologies through an Energy Savings Performance Contract (ESPC). These initiatives have resulted in significant energy savings, timely project completion, and enhanced HVAC system control. Beyond infrastructure improvements, Trane has integrated deeply with the University, providing technical expertise, facility staff training, and immersive student engagement opportunities.

  The session explores examples of how our facilities team enhances the campus experience for students through augmented real-world learning, while optimizing operations. This partnership has garnered national attention and media coverage, highlighting the University's commitment to sustainability and student learning.

Track 3: Talent Recruiting and Retention

- **Best of the Best: Building the Best Team Through Recruitment, Retention, and Development**
  Presenter: Andy Krouse PhD, University of Texas at Tyler

  In today's competitive hiring landscape, attracting and retaining the right talent for your organization is increasingly challenging. Once you have found top candidates, it is just as crucial to keep them engaged and committed to your institution. A cornerstone of any successful organization is effective leadership—leaders who inspire and elevate their teams rather than detract from their success. While this may seem like a given, negative leadership tendencies can often transform high-performing teams into vacant positions and disengaged employees.

  This session explores the key strategies for recruiting top facilities talent, retaining high performers, and developing homegrown leaders for the future. It will also address how to avoid these pitfalls and cultivate a culture of positive, growth-oriented leadership.

- **Building Connections for a Sustainable Future: Pathways to Securing Tomorrow's Workforce for Facilities Management**
  Presenters: Vimol Mitchell, Alexandria Tannehill, and Gana Rinchinjugder, University of Colorado Anschutz Medical Campus - Facilities Management Services

  Over the past decade, the Facilities Management Services Department at the University of Colorado Anschutz Medical Campus has faced increasing competition in recruiting qualified trades technicians, maintenance staff, and other critical roles. With an aging workforce and the added impact of the COVID-19 pandemic—resulting in a loss of over 35% of their staff—the department has struggled to attract and retain talent, compounded by non-competitive starting salaries despite offering strong benefits.

  This session explores innovative strategies for overcoming workforce challenges in facilities management by fostering sustainable partnerships and creating clear career pathways, including apprenticeship programs and employee retention initiatives. To address these challenges, the department launched a paid internship program in collaboration with Pickens Community College, which led to full-time apprenticeship opportunities. Further enhancing their recruitment efforts, the department worked closely with Human Resources and Finance teams to introduce sign-on and referral bonuses, as well as adjust starting salaries based on a comprehensive market study.

- **Creating the Workforce of 2030**
  Presenter: Hayley White, Auburn University

  Over the past decade, colleges and universities have experienced significant growth in campus square footage, while the number of skilled trades technicians needed to maintain these facilities has remained stagnant or declined. By 2021, the average age of Auburn University Facilities Management (AUFM) employees was forty-nine, signaling an urgent need for change. In response, AUFM began exploring best practices from other universities but found limited inspiration. Instead, they took an initiative-taking approach, developing their own strategies focused on two key areas: training, upskilling, and cross-Training current employees; and, creating a Workforce Development (WFD) Program to build a sustainable pipeline of skilled trades workers from local high schools.

This session explores how AUFM became a premier employer in their community and developed award-winning WFD programs that address critical workforce shortages while fostering long-term success.

- **Leveraging Technology to Address Workforce Challenges and Boost Efficiency**
  Presenters: Jessi Bienert and Phil Garcia, Bernhard; Dhanika Galloway, Tulane University; and, Charles Cansler, Hampton University

  Workforce shortages are affecting industries nationwide, and educational facilities are no exception. The pandemic exacerbated staffing challenges, particularly in skilled trades such as electricians, HVAC technicians, and maintenance personnel—critical roles for keeping campuses operational. This issue has been building for years, as many in the workforce approach retirement, and fewer young workers are entering the trades. As educational institutions continue to grow, they must find ways to do more with fewer resources. So, how can campuses address the skilled trades shortage while maintaining operational efficiency and sustainability?

  This session explores how technologies like Computerized Maintenance Management Systems (CMMS), automated monitoring tools, and energy management platforms can alleviate staffing pressures. By embracing these smart technologies, universities can optimize maintenance, reduce energy consumption, and streamline operations with a smaller workforce.

- **Mentorship Matters: Building Bridges in Higher Education Operations**
  Presenters: Marla Childers and Sharon Rhodes, Texas Tech University

  Mentoring plays a vital role in shaping a positive workplace culture and fostering professional growth within facilities and operations in higher education. Mentoring programs are essential, with a particular focus on their impact on employee engagement, retention, and overall satisfaction.

  This session explores a step-by-step framework for developing a mentoring program. From conceptualizing and designing to building and implementing, this guide will help create tailored programs that address the specific needs of the organization. Practical applications of mentoring in facilities and operations will also be explored, equipping participants with the tools to launch and sustain effective programs. There will be a discussion on the concept that “culture eats strategy for breakfast,” emphasizing the critical role of cultivating a strong organizational culture that supports mentoring and enhances operational success.

- **Recruit, Develop, Succeed: Leveraging Local Education to Build Texas Tech Operations Workforce**
  P*resenters: Sharon Rhodes and Marla Childers, Texas Tech University*

  Texas Tech Operations developed an innovative recruitment and development program by partnering with local technical education programs in the Lubbock community. By targeting skilled students enrolled in these programs, Texas Tech Operations successfully created a sustainable pipeline of qualified workers for its trades. Learn the recruitment and development process to gain valuable tools and strategies to implement a similar program to meet evolving staffing needs in higher education facilities.

  This session explores the strategies Texas Tech Operations used to attract and develop skilled students, focusing on aligning recruitment efforts with current staffing needs in the trades. The session will cover key aspects such as building partnerships with local technical

education programs and structuring internship opportunities to enhance student employees' skill sets.

- **The Geezer and the Slacker: Harnessing Generational Lessons from the APPA Supervisor's Toolkit Trainers for a Thriving Workplace**
  Presenters: Glen Haubold, APPA Fellow; and, Marissa Pierson, University of Oklahoma

  While discussing generational diversity in the workplace is important, it often remains theoretical and focuses primarily on identifying challenges. This session will move beyond theory, exploring how to harness generational diversity to create a dynamic, engaging workplace that not only attracts top talent but also retains the employees Facilities Management needs for the future.

  This session explores actionable strategies to make the workplace environment appealing to staff of all ages and backgrounds. Presenters will share their own experiences and the generational challenges they have faced, offering practical solutions for fostering a thriving workplace that ensures staff stay engaged, motivated, and committed.

- **APPA 101**
  Presenters: Lalit Agarwal and Michelle Frederick, APPA

  Do you want to be perceived and recognized as a professional in the field of educational management? APPA is the gathering place for those of us engaged in the field of educational facilities management and its future. APPA has a broad selection of services and programs to educate and advance facilities organizations and professionals.

  This session explores all the programs and services provided to APPA members, along with opportunities to be engaged at the national, regional and chapter levels. Come learn about our educational offerings, benchmarking services and publications.

Track 4: Technology as a Catalyst

- **Embracing AI for Enhanced Facilities and Operations**
  Presenters: Sanjyot Bhusari, Affiliated Engineers Inc; Veerendra Veerabhadrappa, PE, University of North Carolina at Chapel Hill; and, Gregg Clarke, University of Florida

  As educational institutions navigate a rapidly evolving landscape, emerging technologies like artificial intelligence (AI) are revolutionizing campus facilities and operations. Currently, design and construction data are underutilized in operational settings, despite their potential to significantly enhance efficiency and decision-making. By leveraging a data historian or data lake to store this information, institutions can unlock the power of comprehensive datasets for AI-driven analytics and insights. The University of Florida (UF) and the University of North Carolina (UNC) will offer best practices and strategies for leveraging technology to enhance campus infrastructure and streamline operations.

  This session explores how AI and other innovative technologies can optimize the built environment, improve sustainability, and foster inclusivity across campus spaces. A central focus will be on the importance of digitizing and collecting design, construction, and operational data, with an emphasis on establishing data standards for naming conventions, ontology, and relationship modeling.

- **The Proof Is in the Numbers: Leverage Smart Technologies Optimization Strategies for Maximum Payback and Budget Stability**
  Presenters: David Fuqua, Siemens Smart Infrastructure; and, Michael Molina, Southern Methodist University

  How can your campus balance the challenges to streamline Operations & Maintenance (O&M), improve staff efficiency, save energy, and reduce overall costs – all while ensuring an excellent campus experience for students, faculty, and staff? Southern Methodist University (SMU) developed and optimized their top-tier energy management and data-driven facilities maintenance programs to drastically improve campus operations while reducing their energy cost index (ECI) by 28%.

  This session explores how SMU's investments in comprehensive data collection campus-wide allow real-time measurement, tracking of Key Performance Indicators (KPI), and continuous analytics and optimization, as well as capital prioritization. Digital and remote services, combined with integrated workflows drive a streamlined, preventive maintenance program which has improved campus performance, increased staff efficiency by 26%, and helps extend equipment life. Central plant efficiency has increased 55% by investing in equipment upgrades and leveraging the machine-learning for continuous optimization. Overall, SMU is realizing over $2.5M annual budget savings.

- **Transforming Daily Work: Leveraging Generative Artificial Intelligence (AI) for Everyday Tasks**
  Presenter: Margaret Murphy, University of Wisconsin - Madison

  Generative AI can automate routine tasks such as creating and updating Standard Operating Procedures (SOPs), training programs, and schedules, significantly improving efficiency across the board. Additionally, AI can help revise existing materials to ensure they are gender-neutral and culturally inclusive, supporting diversity, equity, and inclusion (DEI) initiatives on campus. AI also enables personalized learning by adapting content to meet individual student needs, boosting engagement and outcomes. It plays a pivotal role in modernizing outdated curricula, ensuring they align with program goals, inclusivity standards, and the evolving needs of today's diverse student population.

  This session explores how generative AI is revolutionizing campuses by enhancing workforce learning, optimizing operations, and fostering more inclusive environments. As institutions strive to create smarter, more sustainable spaces, AI provides innovative solutions to streamline both academic and administrative functions. Gain insights into the practical applications of generative AI and how it can be leveraged to create more efficient, inclusive, and dynamic campus environments.

- **Transforming Document Management into a User-Friendly Cloud-Based Solution**
  Presenters: Joanna Groberg, Georgetown University; and, Vivica Williams, archSCAN, LLC

  Are you overwhelmed by countless paper documents and drawings, unsure of what you have and where to find it? Do you find yourself sifting through decades of clutter just to locate the information you need? Imagine transforming your chaotic filing system into an efficient, streamlined process that lets you access critical documents instantly. By adopting modern document management practices, you can move from inefficient blind searches to precise, targeted keyword searches—saving you valuable time and resources. With cloud-based systems, customized databases, scanning, OCR, and metadata capture, you can turn outdated paper archives into innovative digital repositories.

This session will explore Georgetown University's transformative journey from a cumbersome paper plan room to an efficient Cloud-Based Document Management System. Facilities Archivist Joanna Groberg will share how the university gained instant access to drawings, O&M manuals, and construction documents for over 115 buildings, significantly improving operations. Effective document management does more than save time and space—it reduces costs, enhances safety, and offers a surprisingly quick return on investment.

- **Using Data to Drive Change: Let Data be the Bad Guy… and the Hero!**
  Presenter: Josh Sylvester, Salt Lake Community College

  Explore how to rethink how embracing data can drive evolution within the organization. The goal is to empower facilities professionals with practical strategies to harness the full potential of data—not only for informed decision-making, but also to inspire behavior change and foster organizational transformation.

  This session explores how to leverage data analytics to identify challenges, optimize processes, and implement changes that lead to cost savings, improved efficiency, and greater sustainability. Gain insights and tools to turn data into a powerful ally for overcoming obstacles and driving long-lasting, sustainable improvements in facilities management.