Building Museums Symposium 2022: Final Program
March 15–17, 2022
Capital Hilton, Washington, D.C.

Tuesday, March 15

8:00pm–4:00pm
*Ready, Aim, Build! – The Museum Capital Project Workshop*
Room: South American AB

**Note: Pre-registration is required for Ready, Aim, Build! participants.**

**Presenters:**
Content developed and presented by multi-disciplinary experts from:
- **SmithGroup** – museum architects, engineers and planners
- **Chora Creative** – museum pre-design services, business & strategic planning, and fundraising
- **G&A** - interpretive planning and exhibition design
- **Clark** – museum pre-con services and construction management
- **Cumming** – museum cost managers and estimators
- **Plus! A special guest perspective** - from inside a museum capital project

**Description:** During this full-day workshop, our multidisciplinary collective of museum experts provide a roadmap of best-practices to guide you through your museum capital project with lessons gleaned from decades of experience in projects like yours. Delivered through a mix of presented content, targeted activities, and open dialogue, our industry experts in institution planning, design, engineering, costing, and construction will lead you through the critical steps of a successful capital project–from inception through to opening day and beyond. And as always, the session includes a special guest speaker from an institution who has been in your shoes before! Leave with an intimate knowledge of a time-tested process that will lead to success on your next project. *Box lunch provided.*

**Learning Objectives:**
1. Attendees will learn about the various studies and due-diligence that are appropriate to precede design
2. Attendees will learn what it takes to solicit, evaluate, and engage a design and technical team with roles and responsibilities for all phases of a project
3. Attendees will learn how to develop and right-size an architectural program that is comprehensive, achievable, and sustainable in all forms
4. Attendees will learn how to anticipate and manage cost issues from pre-design through completion
5. Attendees will learn how to evaluate the appropriateness of various delivery methods (design-bid-building, CM-at-risk, design-build) for their project
10:00am–11:30am

**Offsite Museum Tour: Arlington House, The Robert E. Lee Memorial**

Arlington House, The Robert E. Lee Memorial, a National Park Service unit, recently completed a multi-year rehabilitation of the historic main house and slave quarters, grounds, and other significant outbuildings. This project, completed with the generous support of philanthropist David M. Rubenstein, restored the interior and exterior of the historic structures, upgraded key facilities, improved accessibility on the grounds, expanded the museum collections, and re-invigorated the interpretive exhibits.

Elizabeth Milnarik, PhD., AIA, Historical Architect, NPS National Capital Area and Kimberly Robinson, MA, Staff Curator/Exhibit Planner, NPS Harpers Ferry Center for Interpretive Media will lead a tour through the rehabilitated historic structures with a focus on architectural and mechanical system improvements, key structural benefits, and restoration of the historic faux finish on the façade of the main house.

Free parking is available near the historic site. Attendees planning to drive will need to provide vehicle information (color/make/model) prior to the tour. For GPS, the main entrance address is 1 Memorial Drive, Fort Myer, VA 22211. Arlington National Cemetery is a stop on the blue line of the Washington Metropolitan Area Transit Authority’s Metrorail.

---

**Offsite Museum Tour: Capital Jewish Museum**

In 1969, with the city’s oldest purpose-built synagogue at risk of demolition, local families rallied to save and relocate the historic building. Built in 1876, and listed on the DC Inventory of Historic Sites and the National Register of Historic Places, the building will soon serve as the centerpiece of the new Capital Jewish Museum.

The new Capital Jewish Museum will explore the intersection of the American Jewish experience and American democracy, and serve as a secular space for storytelling, connection, and dialogue across cultural communities in our city. With its unconventional, experimental spirit, the Museum inspires audiences to connect, reflect and act: connect across families and diverse cultures, reflect on the relevance of the past to today, and act on behalf of their communities and values. The new museum, now under construction at 3rd and F Street NW, will open with engaging exhibitions, extensive programming, and creative public experiences.

---

1:00pm–3:00pm

**Offsite Museum Tour: Glenstone**

Join Glenstone’s operations leaders on an in-depth tour focused on the planning, construction, and operation of the museum’s 2018 expansion. Glenstone’s mission is to seamlessly integrate art, architecture, and nature and provide meaningful experiences for their visitors. This tour provides a chance to hear directly from the team who plan and execute day-to-day operations on Glenstone’s nearly 300 acre site. Participants should be prepared to spend a considerable amount of time on foot, and comfortable walking shoes are recommended.
3:00pm–5:00pm

**Offsite Museum Tour: Folger**

The Folger’s 1932 building, designed by architect Paul Cret, is undergoing a major renovation to expand public space, improve accessibility, and enhance the experience for all who come to the Folger. Designed by Kieran Timberlake, the building renovation project will add a 12,000-square-foot public pavilion under the Folger’s front lawn with large, welcoming, and fully accessible entry plazas for all visitors on both the east- and west-facing sides of the building and includes two new exhibition galleries and an education lab. The landscaped entry plazas will connect with open gardens on either side of the building, with paths and benches for visitors and the public. Hard hat tour led by Becker & Frondorf will highlight the active construction and renovations underway.

This will be a hard hat tour of an active construction site. PPE will be required and provided, but please feel free to bring your own.

6:00pm–7:00pm

**Offsite Museum Tour: International Spy Museum**

7:00pm–9:00pm

**Opening Reception: International Spy Museum**

*Sponsored by Gallagher & Associates and kubik maltbie*

Description: Join friends and colleagues at the opening reception at the International Spy Museum. The International Spy Museum opened its new home in May of 2018 in Washington, DC. In the Museum’s new 140,000-square-foot purpose-built facility, interactive exhibits and the world’s largest public display of authentic spy tools and gadgets are augmented by first-person accounts from real spies along with RFID technology that invites visitors to undertake their own spy missions. The non-profit museum, designed by Gallagher & Associates, dives into the alluring pop culture world of spies that the public knows well, but digs much deeper, exploring and demystifying real intelligence work—often stranger than fiction. Its unparalleled collections and extraordinary stories are designed to engage, inform, and entertain visitors from around the country and across the globe, from school-age children to experienced intelligence professionals. Join us before the reception for a self-guided tour with project insiders ready to answer your questions.
**Wednesday, March 16**

**Plenary: 9:00am–10:15am**

*Pushing the Boundaries: Glenstone Reimagines the Museum Experience*

Room: Presidential Ballroom

*Sponsored by Becker & Frondorf*

**Presenters:**

1. Chair: Anthony (Tony) J. Cerveny, Jr., Chief Operating Officer, Glenstone Museum
2. Anita Ayerbe, Principal, The Savias Group
3. Samantha Owens, Assistant Conservator, Glenstone Museum
4. J. Kenny Wieber Jr., P.E., LEED AP BD+C, Principal, Altieri

**Description:** Glenstone Museum is a compelling example of prioritizing the personal encounter between visitor and art—in this case, iconic examples of modern and contemporary art. Glenstone Museum is located on nearly 300 acres in Montgomery County, Maryland, less than 15 miles from Washington, D.C. The museum first opened in 2006 with its original exhibition building (the “Gallery”) and, in 2018, added a 204,000-square foot expansion which includes a new museum building (the “Pavilions”), Arrival Hall, and two café buildings. The project design team—with extensive multidisciplinary expertise—was given a mandate to re-invent the museum experience with highly inventive design solutions targeted at visitor comfort, collections care, and optimization of energy efficiency. Owners, facilities managers, architects, engineers, and sustainability professionals will take away valuable lessons from the team’s experience and priorities, and how it continually meets the challenge to provide a reimagined environment with bold vision, collaboration, creative engineering design, and the optimization of cutting-edge technology and highly-controlled building systems. Presentation of Glenstone Museum’s mission to create meaningful visitor encounters with art, architecture, and nature aligns with three Symposium topics: collections care and facility design, sustainable design, and the visitor experience.

**Learning objectives:**

1. Owner leadership: How strong vision becomes a philosophy that drives success, often in unexpected ways.
2. Collaboration: Successful teamwork and the particular significance of asking each other “What if? How can we do this better? Are we doing too much?”
3. Value of building the optimal team—one that can ask the right questions and provide accurate data-driven answers.
4. Approach: Meeting project objectives with an intensely explorative approach and extraordinary attention to detail. How an explorative approach drives optimization of systems.
Sessions 1: 10:45am–12:00pm

*The Franklin School: Adapting Historic Sites for Interactive Museums*

Room: Federal A

Presenters:
2. Patty Isaacson Sabee, Executive Director, Planet Word, The Museum of Language Arts, Inc.
3. Gretchen Pfaehler, AIA, Partner, Beyer Blinder Belle Architects & Planners

Description: This session will introduce participants to the historic Franklin School, which opened in 1869 as the flagship of a universal public education network. Located mere blocks from the White House, the site is now home to Planet Word, the world’s first voice-activated museum of words and language. Ann Friedman, the museum’s founder and the leader of the Franklin School’s redevelopment will lead a relatively advanced discussion of this recently completed capital project, and she will be joined by Planet Word Executive Director Patty Isaacson Sabee and by Gretchen Pfaehler of Beyer Blinder Belle, the lead architect for the Franklin School’s revitalization.

A case study in effectively stewarding the preservation of historic buildings and adapting them for contemporary use, the Franklin School’s transformation offers helpful lessons for any institution that is considering the acquisition or restoration of a historic site. Discussion topics will include: the opportunities and challenges of facilities that house experiential, non-collections-based museums; the impact of newly activated found space on revenue and on exhibit infrastructure flexibility; capital project team assembly for historic sites; fundraising opportunities; thresholds for building safety and accessibility; and more.

Learning objectives:
1. Become more familiar with the responsibilities of restoring and maintaining a landmarked building.
2. Articulate the architectural and technical needs of a non-collections-based museum, in comparison to a collections-based museum.
3. Develop increased capacity for identifying and celebrating “found” space in an existing building.
Reaching New Heights: Lessons from the Pikes Peak Summit Complex Project  

Room: Federal B

Presenters:
1. Chair: Laura MacDonald, Founder and Principal Benefactor Group Board Chair, Giving USA Foundation
2. Sandy Elliott, CPPB, CPRP, Parks Operations Administrator, Pikes Peak–America’s Mountain
3. Alan Reed, FAIA, LEED AP, Principal, GWWO Architects

Description: How do you create and sustain a multi-year public-private partnership to fund, design and build an iconic destination? When a new visitors center opened on the summit of Pikes Peak, it was the culmination of years of effort by Colorado Springs city leaders, planners, funders, architects, exhibit designers, donors and fundraisers, the Army, US Forest Service, and others. This session will trace the project's ascent from an idea, to a fundraising campaign, to a design meant to exceed LEED® and achieve "Living Building Challenge" standards, to high-altitude construction.

Learning Objectives:
1. How to manage the expectations of multiple stakeholders.
2. Start - up projects: how to build a constituency out of thin air.
3. Leveraging public funding to entice private funders (and vice versa).
4. Making the case for investing in the extraordinary to achieve a world-class destination.
5. Maximizing assets: cross over utilization of design, marketing, and fundraising materials/messages/processes.
Artifact Protection in Daylit Spaces: An Analytic Approach
Room: New York

Presenters:
1. Chair: Michael P. Henry, P.E., Senior Design Manager, Smithsonian Facilities
2. Panelist 1: Leora Mirvish, AIA, LEED AP BD+C, Principal, Quinn Evans
3. Panelist 2: Gary J. Woodall, LEED AP BD+C, LC, IES, IALD, Senior Lighting Designer, Gary Steffy Lighting Design Inc.

Description: Many museum buildings, large and small, both modern era and older historic museums, feature architecturally interesting spaces filled with daylight. From the standpoint of protecting precious artifacts, however, such spaces can be a conservator’s nightmare. The most iconic spaces in Smithsonian’s National Air and Space Museum are the skylit atrium galleries, where planes and spacecraft are displayed against the backdrop of their natural environment, the sky. While these may be among the most memorable spaces in the building, a significant curatorial challenge is how to protect the artifacts from the light that pours in through the massive skylights and window walls. In developing the design for the renovation of the National Air and Space Museum, one of the most significant challenges was how to preserve the character of these iconic spaces while reducing daylight to acceptable levels. A range of options for glazing and shading devices is available. New predictive analytic computer modeling tools allowed the design team and conservators to evaluate any number of daylight treatment options by looking at light levels in specific locations over the course of the day and over the course of the year. These tools can help designers develop shading solutions and help curators strategically place artifacts in three-dimensional space. The designers will present lessons learned from this major project (both from the design process and the actual as-built conditions) that can be applied to smaller-scaled museums. Construction began in 2019 and is currently anticipated to be completed in 2025.

Learning objectives:
1. Understand how the concepts of maximum light level vs. cumulative light exposure can be applied to the conservation of artifacts.
2. Identify the modeling tools currently available for daylight analyses.
3. Describe the range of glazing and shading systems that can be employed to control daylight levels.
4. Understand the implications for construction in implementing these systems.

12:00pm–1:30pm
Lunch
Room: Congressional/Senate
Sessions 2: 1:45pm–3:00pm

Reynolda House Museum of American Art: Facing the Challenges of Replacing the Ludowici Tile Roof on the World’s Largest Bungalow

Room: Federal A

Presenters:
1. Chair: Phil Archer, Betsy Main Babcock Deputy Director, Reynolda House Museum of American Art
4. Panelist 3: Ryan Morris, Senior Superintendent, Frank L. Blum Construction

Description: Reynolda House, built in 1917 by Katharine Smith Reynolds, wife of R. J. Reynolds, founder of R. J. Reynolds Tobacco Company, and designed by Charles Barton Keen of Philadelphia, originally occupied the center of a 1,067-acre estate, envisioned as a model farm and village, including church, stables, dairy, and schools. Reynolda opened to the public as an institution dedicated to arts and education in 1965, and subsequently as an art museum in 1967. It became affiliated with Wake Forest University in 2002.

The 34,000-square-foot bungalow is crowned by a green Ludowici tile roof that imparts much of the architectural character. In 2021, with the aid of a NEH matching grant, Reynolda restored this signature roof, ensuring the long-term preservation of both the collections and the bungalow.

The approach included careful examination and recording of existing conditions, retention of character-defining elements, and limited sensitive upgrading of materials when necessary. Replacement of deteriorated or missing components was based on documentary and physical evidence. Moisture content and breakage tests determined that the existing tiles did not meet required standards and could not be salvaged. Working with Ludowici, new but similar tile was specified that matched all characteristics of the historic tile.

Copper gutters and flashing were replaced, and masonry chimneys were cleaned and repointed. Finally, Reynolda took this opportunity to replace three attic air-handling units with new energy-efficient equipment. The project was reviewed by the North Carolina State Historic Preservation Office, and construction was phased to allow Reynolda to remain open to visitors.

Learning objectives:
1. Attendees will learn how a NEH matching grant was used to help finance a capital project.
2. Attendees will understand the strict preservation approach used for the Reynolda roof replacement and the challenges encountered during design and construction.
3. Attendees will learn the advantages of contracting with a Construction Manager at Risk and why this approach was selected for Reynolda.
4. Attendees will understand the challenges of inserting new building systems into a historic structure and how these challenges were met at Reynolda.
5. Attendees will learn how the roof replacement at Reynolda was carefully phased and executed to allow the museum to remain open to visitors throughout.
**Moving Fast while Moving Slow: Developing Museum Facilities to Serve an Expanding Audience**

Room: Federal B

Presenters:
1. Chair: Christian Rodriguez, AIA, Principal, EskewDumezRipple
2. Panelist 1: Susan M. Taylor, Executive Director, New Orleans Museum of Art
3. Panelist 2: Louanne Greenwald, Director, Hilliard University Art Museum - University of Louisiana at Lafayette
4. Panelist 3: Marcy Goodwin, President, M. Goodwin Museum Planning, Inc.

Description: Museums tend to be long lived and slow to physically evolve when compared to other building types. Physical change to a facility is slow, typically through multi-year capital campaign and construction efforts that are in some cases decades apart. In contrast the content, programming, and services provided by a museum that serve their audience, and in some cases the audience itself, can change much more quickly than the built environment.

This session explores the relationship between the slow to change physical environment and faster to evolve visitor-driven experience and content. We will look at the recent development history across both of these time domains for two different museums: the New Orleans Museum of Art and The Hilliard Art Museum at the University of Louisiana Lafayette.

This panel will explore the intersection between the slower development cycle of the museum across capital campaigns and the faster development cycle of museum programming, with a focus on how a design team can add flexibility wherever possible to “support” spaces like multi-use education a museum café, while also providing longer term design support for expansion that takes place over decades.

The panelists will consist of a cross section of all parties involved in the design of a museum facility, including an architect, museum planner, and museum director.

Learning objectives:
1. Through examination of real world case studies attendees will understand the intersection of long term and short term physical changes to the built environment as it relates to Museums as a building type.
2. Attendees will see how small physical changes might result in larger changes in audience reach and museum programming.
3. Attendees will see how designers and museum planners can engage with a Museum at multiple points, not just a major capital campaign, and that relationship can continue for decades and grow alongside the museum as an organization.
4. A diverse panel with multiple perspectives will allow the audience to engage with this discussion from a variety of viewpoints, both similar to and different from their own.
Rehabilitation of the Hirshhorn Museum Envelope: Correcting the Past to Preserve the Future
Room: New York

Presenters:
1. Chair: Carly Bond, Senior Historic Preservation Specialist, Smithsonian Facilities, Smithsonian Institution
2. Panelist 1: Al Masino, Director of Exhibitions, Design, and Special Projects, Hirshhorn Museum and Sculpture Garden
3. Panelist 2: Lauren McCunney, AIA, LEED AP, Design Manager, Smithsonian Facilities, Smithsonian Institution
4. Panelist 3: Kirill Pivovarov, AIA, Senior Associate Vice President, CallisonRTKL

Description: The Hirshhorn Museum, the Smithsonian’s museum of modern and contemporary art, is an iconic Modern building on the National Mall. Designed by Gordon Bunshaft as a “large piece of functional sculpture”, the circular building is defined by its monolithic cast-in-place concrete drum and aggregate concrete precast panels. Original construction deficiencies resulted in installation defects, panel distress, and poor energy performance. A unique design approach for façade rehabilitation was developed to address historic preservation, performance, and museum programming requirements. Construction on this project began in late 2020 and will be undertaken while the museum is fully occupied.

The presentation will address design and construction history of the Hirshhorn; replacement of precast concrete panels on an iconic mid-century building and the balance achieved between technical performance and historic preservation requirements; strategies for major renovation while keeping a museum open including integration of art into the construction process; and collaborative nature of this design effort.

This session is intended for museum and design professionals. This session addresses the following MAAM topics: strategic and master planning; collections care and facility design; design and pre-construction processes; dealing with existing infrastructure and historic preservation; sustainable design.

Learning objectives:
1. Attendees will understand the importance of historic preservation considerations when correcting deficient infrastructure.
2. Attendees will learn about the unusual design and construction of an iconic Modern building by a master architect, Gordon Bunshaft.
3. Attendees will learn about the aesthetic requirements in matching the unusual aggregate concrete precast panels.
4. Attendees will consider the impact of complete façade replacement on the integrity of an historic building.
5. Attendees will learn about strategies for a major renovation project while keeping a museum open and accommodating museum programs including integration of art into the construction process.
Sessions 3: 3:30pm–4:45pm

Lessons Learned from Planning the Food Service and Retail Spaces at the Museum of Contemporary Art San Diego
Room: Federal A

Presenters:
1. Chair: Tracy Lawler, President, JGL Consultants
2. Panelist 1: Elizabeth Yang-Hellewell, Former Chief Advancement Officer, Museum of Contemporary Art, San Diego
3. Panelist 2: April Erin Farrell, Director of Rentals and Retail, Museum of Contemporary Art, San Diego
4. Panelist 3: David McCallum, Vice President of Consulting Services, Principal Consultant, JGL Consultants

Description: The Museum of Contemporary Art San Diego expansion, designed by Selldorf Architects, will open in Spring of 2022. As with other major museum expansions, the museum planning team understood the importance of planning for visitor amenities such as the café and retail store, as well as spaces that can accommodate facility rentals in order to enhance the visitor experience, broaden the audience base, and generate additional earned revenue. The team responsible for the planning for these spaces at the MCASD will discuss the timeline, process, challenges and lessons learned. The presentation will touch on space planning, the design process, business planning, operational considerations, and early feedback. Topics will include concept development, the challenges of competing priorities, re-thinking local industry models and creating new revenue structures, business planning and vendor selection.

Learning Objectives:
1. The timeline required for planning and execution
2. Key drivers and industry metrics used in business planning for café, catering/rental and retail
3. Operational considerations that impact key decisions
4. How to solve common challenges and resolve competing priorities
5. Options and best practices in the vendor selection process
**Daylight and Northern Climates: Case Study of Quamajuq, the Inuit art centre at Winnipeg Art Gallery**
Room: Federal B

Presenters:

1. Chair: Richard Fisher, National Manager - Cultural Projects, Erco Lighting
2. Panelist 1: Matt Latchford, Principal, Lam Partners
3. Panelist 2: Stephen Borys, Director & CEO, Winnipeg Art Gallery & Quamajug
4. Panelist 3: Gee-Ghid Tse, Principal, Michael Maltzan Architecture

Description: Quamajuq, whose Inuktitut name translates as ‘it is bright, it is lit’, showcases more than 10,000 Inuit works from the WAG’s collection that had been little studied and relegated to storage. Designed by Michael Maltzan Architecture with lighting design by LAM Partners, the centre provides a look at the challenges involved in contemporary museum spaces that desire to introduce natural light. While Quamajuq is in an extreme northern climate, integration of daylight into the public spaces and galleries is made possible with the right planning. That planning includes listening to and considering many perspectives including conservation, curatorial, budget, architecture, and lighting. One thing was certain: the concerns of each stakeholder must be balanced against each other to create a flexible and effective solution ensuring the visitor experience is unparalleled.

This panel discussion pulls together key stakeholders involved in the development of the Quamajuq including the architect, lighting designer, and end-user. It is through the successful lighting design that the session will go through the challenges and solutions that were addressed during the project as well as share anecdotes about how things have been implemented since opening. Attendees will learn how balancing together the architecture, conservation, sustainability, natural light control, and electric lighting technology have impacted the most important museum characteristic: the visitor experience. Meant for those who are interested in having, pursuing, or already have natural light in their gallery spaces, this session will give attendees a sense of what's possible with light in museum spaces.

Learning objectives:

1. Attendees will understand where to start when considering daylight in galleries, how day and electric light work together, why natural light is a growing element of the visitor experience (but not a sustainability silver bullet), and what the impact is for the museum and collection.
Lights, Exhibits, Action!: Making the Academy Museum of Motion Pictures
Room: New York

Presenters:
1. Chair: Basil Katz, CEO, Cinnabar
2. Panelist 1: Brian Butterfield, Director, Museums Workshop, WHY Architecture
3. Panelist 2: Paula Neston, Technical Design Director, Cinnabar
4. Panelist 3: Shraddha Aryal, MIA, Senior Vice President, Exhibition Design & Production, Academy Museum of Motion Pictures

Description: Set in a newly renovated historic structure, the museum required considerable design and technical innovations to bring the sights, sounds, and stories of cinema to life.

Although the Academy Museum's exhibitions cover more than 60,000 square feet, the lessons learned and design approaches developed can be applied by museums with exhibits of varying scales and budgets. This discussion is ideal for museum leaders who are considering or currently charting new paths in their visitor experiences and who are interested in learning about how to innovatively approach unique design challenges.

Join leaders of the Academy Museum of Motion Pictures’ exhibition design and fabrication team for a discussion on how they designed and built – sometimes, simultaneously – the museum's long-awaited and multisensory inaugural exhibitions.

Learning objectives:
1. Understand how to pivot design direction to best serve and engage their visitors
2. Learn how to repurpose an existing structure that is inherently inconducive to its intended use
3. Have a blueprint for designing and building exhibitions simultaneously
4. Gain a sense for how to innovatively integrate built and digital elements to create immersive experiences
5:00pm–6:45pm

*Red Flags: Sharing Lessons Learned to Help Keep Your Project on Track*

Room: Federal A

Presenters:

1. Moderator: David Greenbaum, FAIA
2. Panelist 1: Pamela Hannah, Deputy Director and Head of Operations at Agua Caliente Cultural Museum
3. Panelist 2: Mike Devine, President, Gallagher Museum Services
4. Panelist 3: Marcy Goodwin, President, M. Goodwin Museum Planning, Inc.

This panel is specifically designed as a "core curriculum" panel that addresses current strategies on developing Vision, Implementation and Sustainability. We have selected the speakers to provide input from diverse disciplines in order to provide a balanced perspective. In order to meet the objective, we have included three speakers and the Moderator. The speakers include: An architect/museum planner, two seasoned museum directors and a museum planner with significant museum experience.

This interactive panel discussion will identify and discuss the most common problems found during building campaigns. Take advantage of the lessons learned by many that have come before you in this complex process of creating a new, renovated or expanded museum. These elements can be found at museums of any size and type.

Red Flags are not only valuable warnings of danger, but also opportunities. Despite your best planning efforts, you will have challenges. Expect them. The key is to create a culture that supports positive, active problem solving.

Learning objectives:

1. Gain an appreciation about how strategic planning can serve as an umbrella for guiding the process.
2. Get key insights on the value of business planning, concerns, and warning signs.
3. Understand best practices about the programming, design, and the construction process.
4. Learn more about key challenges in museum operations and process during planning, design, and construction.

6:30pm–8:15pm

Exhibitor Reception
Room: Congressional

*Sponsored by SolidLight*

Description: Unwind after a day of sessions with a drink and hors d’oeuvres in the Exhibitors’ Expo. Meet and mingle with service providers, engineers, architects, and museum professionals.
**Thursday, March 17**

**Plenary: 9:00am–10:15am**

*Kraft®-ing Culture: A Case Study in Leveraging the Fabric of America’s Heartland from the District to the Gallery*

Room: Presidential Ballroom

Presenters:
1. Chair: Brandon Hall, AIA, Architect, Wheeler Kearns Architects
2. Panelist 1: Lawrence Kearns, FAIA, LEED AP, Principal & Cofounder, Wheeler Kearns Architects
3. Panelist 2: Scott Eccleston, Director of Operations, Crystal Bridges Museum of Art
4. Panelist 3: John Houseal, FAICP, Principal & Cofounder, Houseal Lavigne Associates

Description: This session dissects the process of transitioning a defunct industrial quadrant of Bentonville, Arkansas, into a cultural and commercial economic generator. In particular, the speakers will discuss the process of establishing the Momentary, a contemporary arts museum, adapted from a former Kraft cheese plant, within the context of a largely abandoned industrial district.

Houseal Lavigne facilitated the planning process that identified the potential of the district, which also housed a utility yard, a defunct Tyson plant and a foundry. With the vision established, the team at Wheeler Kearns Architects collaborated with Crystal Bridges Museum of American Art to surgically alter the former plant while maintaining its quirky character and authenticity. Unexpected industrial relics were retained as a backdrop for world class contemporary art, while its outdoor spaces connect to an adjacent former Tyson chicken plant reborn as a culinary destination. This session will explain how cultural programming can intersect with the seemingly unremarkable fabric of America’s Heartland to result into something remarkable.

With panelists representing the district master planner, the owner, and the architect, we will tell the story of how this district and the Kraft plant were identified, adapted, and ultimately readopted by the community.

Learning objectives:
1. Instigate a planning process to map stranded assets in districts to assess their potential as cultural or commercial economic generators.
2. Assess the viability and manage the expectations for former industrial structures to house world class contemporary art.
3. Mitigate risks by connecting indoor and outdoor venues, both cultural and commercial, to maximize community benefits.
4. Identify strategies that were used at the Momentary to adapt existing industrial spaces into spaces for world class performing and visual art, including acoustic, lighting, and mechanical system strategies.
Sessions 4: 10:45am–12:00pm

New Possibilities at the Cape Ann Museum: How to Make a Community Destination out of a Storage Building
Room: Federal A

Presenters:
1. Chair: Mary Ann Upton, AIA, Partner, designLAB architects, inc.
2. Panelist 1: Oliver Barker, Executive Director, Cape Ann Museum
3. Panelist 2: Stuart Meurer, President, Windover Construction

Description: The Cape Ann Museum embarked on an important expansion in service of community & the stewardship of its collections. The new James Center and adjacent Green sit at the “gateway” to Gloucester, Massachusetts. The 12,000 SF building’s primary function is to house paintings, photographs, and objects, however a contemporary gallery and public viewing area invite the public in. The siting of the new facility frames a generous lawn, envisioned as a sculpture park long term. The understated design strikes a balance with the three historic structures which ring the campus, creating a new outdoor gathering place.

This case study will include diverse perspectives from the project team. Oliver Barker, Executive Director, will illustrate the institution’s vision for the master plan and discuss the strategic property purchases needed to create a unified campus. He will also enumerate the collection storage considerations and opportunities for new public programs. Stuart Meurer, Vice President of Windover Construction, will share details about the unique mix of building types and the nuances of the Design-Build delivery method. Mary Ann Upton, Partner at designLAB architects, will provide context for the design decisions and demonstrate the inspiration & results.

Learning objectives:
1. Strategic & master planning: Attendees will understand the challenges of developing a remote site and how to leverage it as an asset.
2. Collections care & facility design: Attendees will learn a new approach to the collection storage typology, including compatible mixed uses & non-traditional building types.
3. Project Delivery: Attendees will be able to identify the benefits and trade-offs of the Design Build delivery method.
4. Visitor Experience: Attendees will be inspired to connect history & contemporary programs.
Pay No Attention to the Person Behind the Curtain: A/V and Lighting System Design Strategies for Museum Architecture Planning
Room: Federal B

Presenters:
1. Chair: Steven Rosen, FIALD, IES, President and Creative Director, Available Light
2. Panelist 1: Tony Warner, CTS-D, LEED AP, CDT, President, Phase Shift Consulting
3. Panelist 2: Todd Alan Kinser, Head of Exhibit Planning, Smithsonian Exhibits

Description: In museum planning, the divide between architectural and exhibition design and planning can be blurry. Whether you are building a new facility or renovating an existing space, infrastructure-planning and future-proofing your project is essential. Three industry leaders, Museum Professional Todd Kinser, A/V Design Consultant Tony Warner, and Lighting Designer Steven Rosen will help advance your master-planning efforts with intelligent and timely advice. Todd will detail the trials and tribulations of planning, installing, commissioning, and operating sophisticated lighting and A/V controls systems for museum institutions. From considering future operational/staff support needs to envisioning the application of remote monitoring/programming systems, Tony and Steven will help you focus on what is critical to consider in the early planning stages.

We will share when to begin consideration of A/V and Lighting infrastructure systems and illustrate examples of excellent technology design solutions. We will introduce IoT strategies you might consider and touch on topics as varied as acoustics, artifact conservation, system lifespans, installation details, and 24-hour operations considerations.

Learning objectives:
1. Learn what high level A/V and lighting strategies are critical to early planning.
2. Be exposed to examples of state-of-the-art A/V systems technology solutions.
3. Be exposed to examples of state-of-the-art Lighting systems technology solutions.
4. Understand where planning A/V and Lighting infrastructure planning fits into the process.
Storage Wars: Stewardship of Collections During Simultaneous Museum Renovations
Room: New York

Presenters:
1. Chair: Brian Woodman, PhD, Associate Director of University Collections, Indiana University
2. Panelist 1: Heather K. Calloway, EdD, Executive Director of University Collections, Indiana University
3. Panelist 2: Ed Herrmann, PhD, Executive Director, Indiana University Museum of Archaeology and Anthropology
4. Panelist 3: Kelly Wherley, Facilities Manager, Indiana University

Description: Since the spring of 2020, Indiana University has undertaken several essential renovations of collections-focused facilities, including the newly formed Indiana University Museum of Archaeology and Anthropology and the Collections, Teaching, Research and Exhibition Center at the historic McCalla School (CTREC). The IUMAA renovation combines the collections of the former Mathers Museum of World Cultures and the Glenn Black Lab into a single museum with a shared mission of preserving world cultures. CTREC, in contrast, is a center that does not hold permanent collections but rather is a community hub where any IU collection, whether a large library or small one-room archive, will have access to educational, exhibition, and event space and cutting-edge technology. These renovations have required building cooperation among many several university departments; forming relationships with many stakeholders across IU and the surrounding community; and creative problem solving of many issues, including temporary collections storage, effective space design, and budgetary constraints. The presentation will address the complexities that multiple simultaneous renovations can create; the climate, lighting, and preservation needs of collections occupying new spaces; and workable practical solutions that institutions can use to solve their own renovation-related issues. The presentation will be particularly informative for attendees from large institutions that contain many different museums, libraries, and archives who wish to foster new methods of cross-institutional collaboration.

Learning objectives:
1. Effective temporary collections storage solutions during renovations
2. Scheduling moves of multiple large collections at or near the same time
3. Communication tips between museum professionals and building/facilities teams
4. Planning the public rollout of multiple museums or collections-holding institutions
5. Creating buy-in from multiple types of stakeholders, including collections managers, faculty, students, and community members.
12:00pm–1:30pm

*Buildy Awards Luncheon*
Room: Presidential Ballroom

The Buildy Award recognizes museums’ leadership and exemplary accomplishment through the planning, construction, and life after opening. This year’s awards lunch will feature a panel discussion with the three winning museum directors: Dr. Julie K. Stein, the Burke Museum of Natural History and Culture, Jane Werner, Museum Lab® at Children’s Museum of Pittsburgh, and Karen Goering, Soldiers Memorial Military Museum, moderated by Buildy Award Committee Chair, Craig Williams of David M. Schwarz Architects. The award recognizes the museums as an institution, their directors and staff, and the building/design construction teams whose completed museum construction projects demonstrate high achievement in the lessons of the Building Museums™ Symposium: careful, creative planning and diligent implementation leading to institutional sustainability. The purpose of the Buildy Award is to increase awareness within the field, and by the public at large, of the value of museums and the need for their ongoing rehabilitation and expansion to serve future generations.

The **Burke Museum of Natural History and Culture** has the mission to care for and share natural and cultural collections so all people can learn, be inspired, generate knowledge, feel joy, and heal. The museum’s innovative Inside-Out model, inspired by stakeholders’ interest in transparency and seeing behind the scenes, allows their visitors to see into the places they work, laboratories, and collections and sets the tone for the museum’s responsiveness to the goals and interests of the communities they serve. Making this authentic, substantial experience more accessible and available to all parts of their community became central to the vision of the New Burke, and the project team—including Olson Kundig (architects) and Skanska (contractors)—spent thousands of hours making the case to staff, board members, community members, the University of Washington, and funders for a new museum that would be at the forefront of change in how a museum functions and the way it is perceived by the public. The project team made choices to utilize sustainable resources and increase the site’s overall water and energy efficiency, contributing to the Burke Museum certification as LEED® Gold.

The **MuseumLab® at Children’s Museum of Pittsburgh** has the mission to provide innovative and inclusive museum experiences that inspire kindness, joy, creativity and curiosity for all learners. They forge connections with artists, community partners, and neighbors to work on behalf of children, youth, and families. MuseumLab is the linchpin to making both the mission and vision of the museum a reality. The MuseumLab building is the former Carnegie Library of Allegheny City and the Principal Architect, Julie Eizenberg, describes MuseumLab as “a beautiful ruin.” While giving some hints about what the past once was, this design approach renews and reshapes the spaces for the future. With the opening of MuseumLab, Children’s Museum of Pittsburgh, in concert with Koning Eizenberg Architecture and Mascaro Construction, transformed a significant Pittsburgh landmark into an integral component of the nation’s largest cultural campus for children, focused on serving all children in the community and region and trying new approaches to learning experiences that can transform education in both the formal and informal education sector. The building hosts middle school students year round. This partnership with Manchester Academic Charter School is a collaborative and creative commitment to public education, innovation, and experiential learning.
MuseumLab is the first building to receive the isUD™ (innovative solutions for Universal Design) certification from the University of Buffalo for Inclusive Design and Environmental Access (IDEA Center). Additionally, the design of the building incorporates significant sustainable practices that have garnered many recognitions, including achieving LEED Gold certification. MuseumLab also won the Green Building Alliance’s Vanguard award for its integrated design process where the entire team was invested in maximizing occupant and visitor health, reducing waste and energy consumption and decreasing future costs.

Through the renovation of the Soldiers Memorial Military Museum, the Missouri Historical Society had a vision to bring to life the stories of Missouri soldiers and their families through a shared community space in the setting of a restored historical site. In bringing those stories to life, the Missouri Historical Society envisioned a more inclusive, accessible, and sustainable museum. To promote inclusive planning and design, the Missouri Historical Society consulted community and Veteran groups along with Mackey Mitchell Architects and BSI Constructors to implement an inclusive design which took into consideration all attendants visiting the site. MHS created an Accessibility Panel comprised of a diverse group of local disability advocates–an essential step towards integrating Universal Design goals into the design process from the start. The result is a renovation that maintains the historic integrity of this landmark while making the building, site, and exhibits accessible. The Court of Honor was renovated to enhance its design and provide accessible paths. A new ramp allows all visitors to enter the Memorial from the front, and a new, larger elevator inside provides improved access to all floors. Exhibits include components such as touchable models of the exterior sculpture, closed captioning on all videos, and 3D photographs. With accessibility and sustainability at the forefront of the design process Soldiers became a state-of-the-art museum that not only increased accessibility awareness but highlighted the importance of becoming an environmentally responsible institution through LEED and TRUE green building certification processes.
Sessions 5: 1:45pm–3:00pm

**Conceptual Museum Budgets – Nightmares, Fantasies, or Reality?**
Room: Federal A

Presenters:
1. Chair: Kris Collins, AIA LEED AP, Managing Director, MGAC
2. Panelist 1: Cathlin Bradley, Director of Business Development, Kubik Maltbie, Inc.
3. Panelist 2: Tom Gille, Principal, Museums/Tom Gille
4. Panelist 3: Trent Oliver, Managing Director, Blue Telescope

Description: A budget is the foundation of a project. However, there is often confusion or lack of confidence about how to establish a target budget and what elements must be considered. Is it alchemy? Do you have a Franken-budget made of disparate pieces from projects past? Are there problems lurking in the wings to kill your project?

Mysteries Revealed! Join a panel of experienced museum professionals as they explore the process for setting target budgets, explain what analysis should occur prior to setting budgets, and discuss many items to consider when embarking on such a journey. The panel will share benchmarking data from completed projects (within five years - no names of course), and talk about why googling “how much should a museum or exhibition cost” is likely to turn the project of your dreams into a nightmare.

This session does not only focus on one museum project, but presents information and insight from several perspectives gained from years of developing capital projects. Social media posts, inquiries across the field, and direct requests have shown that this information is highly desired.

Learning objectives:
1. Attendees will gain knowledge of the ideal process of planning a capital project, from early ideation through building your team.
2. Attendees will be exposed to actual budget / cost data from a variety of museum and exhibition projects, gaining an understanding of what different prices per square foot actually mean.
3. Attendees will understand the many line items that go into budgeting, and considerations for each.
4. Attendees will gain insight into classic pitfalls and learn design guidelines that will impact future operational and maintenance costs.
Bringing the Daylight Back: Renovating Art of the Ancient World at the Museum of Fine Arts, Boston
Room: Federal B

Presenters:
1. Chair: Edward O. Rice, AIA, LEED, AP, Senior Associate, Ann Beha Architects
2. Panelist 1: Keith Crippen, Director of Design, Museum of Fine Arts, Boston
3. Panelist 2: Richard Panciera AIA LEED AP, Senior Associate, Ann Beha Architects

Description: The Museum of Fine Arts, Boston is undertaking a phased renovation of its Art of Ancient Greece and Rome Galleries. This session will focus on two gallery renovations as case studies for exploring the benefits of increasing daylight in historic gallery spaces. Completed in 1909, the MFA's Ancient Wing is an exemplar of 1850-1920 era museum architecture which relied heavily on daylight for the display of objects. In these historic spaces, daylight was delivered from skylights, lay lights, and even tilting mirrors. Today many museums have closed off these sources of daylight in favor of artificial lighting to manage risks to objects from excessive daylight, overheating, and moisture concerns. This case study shows that bringing daylight back into the galleries safely can have spectacular results provided the risks are carefully considered. Tools described in the presentation include new metrics and methods for evaluating cumulative daylight on objects, control systems to address overheating, and LED technology to allow artificial lighting to work with daylight in harmony. This presentation will be useful to museum professionals dealing with historic preservation, energy efficiency, and skylight renewal.

Learning objectives:
1. Identify opportunities for introducing daylight into existing galleries
2. Learn how the use of daylight in museum buildings can be consistent with historic preservation goals
3. Identify and address environmental efficiency and resiliency aspects of daylighting systems.
4. Assemble the right team to consider the risks and rewards of daylight
5. Use cumulative quantification metrics and methods to define conservation risks of increased daylight.
6. Learn how to integrate materials, control systems, and architectural treatment can manage daylight.
Sessions 6: 3:30pm–4:45pm

*Metropolitan Museum of Art–European Paintings Skylight and Infrastructure Upgrade*

Room: Federal A

Presenters:
1. Chair: Michael Wetstone, AIA, LEED AP, Principal, Beyer Blinder Belle Architects & Planners
2. Panelist 1: Erik Bodelsen, PE, LEED AP BD+C, Partner, Kohler Ronan
3. Panelist 2: Markus R. Schulte, PE, Principal, NY Facade Group Leader, Arup
4. Panelist 3: Michael Dominick, Senior Associate Buildings Manager for Infrastructure, Buildings Department, The Metropolitan Museum of Art

Description: This presentation will bring the audience through the design process for the skylight replacement and infrastructure upgrades for the European Paintings galleries at The Metropolitan Museum of Art. Constructed between 1880 and 1894, Wings A, B, and C are the oldest parts of The Met’s building on Fifth Avenue. The European Paintings galleries have been located on the second floor of these wings since the nineteenth century. The Met embarked on a project to replace 30,000 SF of skylights with a technologically advanced glazing system that could better address the issues of sunlight control, thermal efficiency, system longevity, and condensation prevention. The project also replaces other critical infrastructure: the aging HVAC system serving the galleries, the interior louvers for sun control, and the glass ceiling panels which admit diffused light into each gallery. Extensive roofing, gutter, and masonry repairs were included as well. The results are a thermally efficient and reliable glass roof that provides subtly improved, even, and diffuse natural daylight in the galleries, enabling The Met to safeguard and display the collection well into the future. The project was approved by the New York City Landmarks Preservation Commission in 2017 and is approaching completion.

Learning objectives:
1. Understand fundamental issues of adapting historic buildings with new high-performing skylights.
2. Understand the latest technology in high-performance skylight systems.
3. Understand the relationship between glass selection and daylighting control.
4. Understand the relationship between HVAC systems, skylight glazing systems, and temperature and humidity control.
Combining and Adapting: Navigating Two Major and Complex Building Projects Across Time and Change
Room: Federal B

Presenters:
1. Chair: Kris Nesbitt, Chief Strategic Initiatives Officer, Chicago History Museum
2. Panelist 1: Tom Featherstone, Featherstone, Inc. Project and Construction Management
3. Panelist 2: Andrew Anway, Founder and Creative Director, Amaze Design
4. Panelist 3: Scott Byron, CEO, Scott Byron, & Co., Landscape Design

Description: In late 2021, Chicago History Museum completed an $11M major capital project that extended from redesign of the grounds around the building to the renovation of an underground archival storage collection facility that had suffered significant water intrusion issues.

The project was a culmination of twin planning process that developed over a decade and saw considerable staff and project team transitions. In this session, we will discuss how parallel planning processes merged in late 2019 to create a combined construction project that leveraged efficiencies and minimized vulnerabilities to the museum’s archival collection. The merger brought together two different design teams, timelines, budgets and priorities that needed to be integrated before a combined bidding process launched in late 2020.

The combined comprehensive project included elements that would have been significant undertakings for the museum each on their own: significant landscape redesign of five acres of land outside the museum owned by the Chicago Park District; interpretive trail and marquee museum sign using newly developed branding; renovation of a 16,000 square foot outdoor plaza/event space; waterproofing interior renovation of the 14,000 square foot underground storage facility; design and installation of a high-density storage system increasing storage capacity 95%; and unearthing and relocating for public access a 13,000 lb relic from the Chicago Fire. The project also required significant coordination and collaboration with various government agencies and approvers, as well as a unique set of stakeholders needing inclusion in the design process.

In the presentation, representatives from the museum and construction and design teams will discuss strategies used to merge the projects and achieve successful completion despite numerous challenges relating to staff and team turnover.

Learning objectives:
1. Attendees will learn about how a complex storage facility renovation project found a unique partnership with an outdoor landscape beautification and interpretive trail project
2. Attendees will see the value in combining projects for coordination and impact
3. Attendees will understand the challenges of working through staff and project team discontinuity over time
4. Attendees will recognize the value of clearly articulating and presenting project needs at appropriate times
Continuing the Conversation: What could (or should) the future of interdisciplinary design look like?
Room: New York

Presenters:
1. Gretchen Coss, Senior Vice President, Strategic Partnerships, G&A
2. Beth Van Why, Senior Project Manager, Becker & Frondorf

Description: In August of 2021, G&A moderated a panel discussion called: What could (or should) the future of interdisciplinary design look like? How can we participate in Design Education and create partnerships to raise awareness of the experiential and interdisciplinary design field, instigating meaningful change in building new roads to the design industry? This panel included industry professionals and clients who highlighted current community outreach and education initiatives they are implementing. The goal was to create an ongoing support network that serves to ensure the sustainable growth of diversity in future industry leaders, as well as the industry itself. As part of this ongoing support network, we would like to continue the conversation at the DC conference.

Learning objectives:
1. Attendees will discuss the changing future of the design industry and add their perspectives
2. Attendees will discuss their community and educational connections through design projects.
3. Attendees will continue to explore meaningful avenues to cultivate and support emerging industry leaders.

4:30pm–5:30pm
Offsite Museum Tour: Smithsonian Arts & Industries Building
We are all set for up to 20 guests at the Arts and Industries Building to learn more about this wonderful 1881 exposition hall and early museum at the Smithsonian. The building has been primarily closed since 2004 with only sporadic openings. It is currently open for the FUTURES exhibit in celebration of the Smithsonian’s 175th birthday and the exhibit will close July 6th, 2022 for 3 years of comprehensive revitalization. Be sure to join us for a tour led by Sharon Park, head of historic preservation for the Smithsonian and Ashley Meadows, staff for the exhibit. Note: at this time, there is no check for vaccine cards for entry to the museum. However, this could change.