



# Minnesota Conference on Architecture 2024

## A'24 MN Session Learning Objectives

### **M01. Cultivating Discussion During Healthcare Design**

- Support the owner in creating open communication between healthcare construction stakeholders to ensure the health and safety of building occupants and transparency during construction.
- Identify how the Facility Guidelines Institute (FGI) can provide a proactive approach to the design phase mitigating risk and providing transparency.
- Describe the infection control responsibilities that must be assessed before construction begins by using the CMS-required Infection Control Risk Assessment (ICRA).
- Support clients by using virtual tools and providing real-time infection prevention details that can lead to fewer unforeseen costs and increased patient safety.

### **M02. Enclosures for the Future: Designing and Detailing with New Data, Tools, and Methodologies**

- Skillfully use detailing processes that take into account LIFE CYCLES of facade details and their individual components which will help direct facade maintenance and replacement and keep the building structurally safe and sound.
- Describe the roles of HISTORICAL AND PROJECTED CLIMATE CHANGE and how they can be addressed in enclosure design to reduce energy consumption and carbon dioxide emissions resulting in a healthier environment and planet.
- Explain the effects of MATERIALS FAILURE and with this knowledge, identify ways to achieve durable detail design.
- Identify the changing forces that impact building design performance and identify the TOOLS that will inform design using proactive preventative measures to ensure a safe building enclosure.

### **M03. Achieving Sustainable Affordable Housing: Case Studies and Design Challenges**

- Explain the content and requirements of programs in each of the Enhanced Sustainability Tiers offered by Minnesota Housing.
- Explore the differences between sustainability programs in terms of impact to project design, cost, occupant health and welfare, durability, and operations.
- Communicate with your clients the multiple short-term and long-term benefits of using a sustainable program including the welfare of the user and the long-term positive impact on the planet.
- Be prepared to more seamlessly integrate sustainability programs into your design process, avoiding the pitfalls and reaping the benefits.

#### **M04. Transforming Building Energy Impacts: Navigating SB 2030 and Beyond**

- Explain the role of buildings in the system-wide clean energy transition in Minnesota.
- Examine the SB 2030 Energy Standard program objectives, compliance pathways, and upcoming program updates.
- Provide guidance for project design teams to evaluate energy efficiency and renewable energy strategies during project planning and design.
- Incorporate decarbonization strategies into project planning, design, and development to ensure energy and carbon reductions in building operations.

#### **M05. Sensory Room Design and Expanding Access to the Traveling Public at MSP Airport**

- Develop an understanding of the design factors involved in creating effective and dignified spaces for neurodivergent users.
- Develop an awareness of the coordination issues that should be addressed when working with lighting designers, engineers, technology and security integrators, and maintenance staff for the space to be effective on a continuous and long-term basis.
- Describe how spaces (or portions of spaces) can be designed to be more friendly and accessible to users with differing cognitive and physical abilities.
- Engage clients and consultants in conversations about neurodivergence and cognitive differences to better inform the design of a space for their sensory needs.

#### **M06. Demystifying Decarbonization**

- Examine the differences between operational and embodied carbon as well as help explain them to clients in future discussions.
- Assess what falls in the different three scopes of carbon emissions and identify where their services have the greatest impact on a project.
- Identify actionable steps to start the decarbonization process and recognize the needed resources to achieve it.
- Explain the importance of the roles of the advisory firm, architect, engineer, and owner to create a successful decarbonization project.

#### **M07. Transformation of a Campus and its Unique Challenges of Building on Top of Existing Buildings**

- Identify and investigate constructability complexities of building on top of several existing buildings by implementing key strategies that contribute to future safety and comfort of the building's users.
- Summarize challenges to the life safety plan development when building on top of existing buildings and list potential solutions/resources to resolve them.
- Assess the existing entry sequence to evaluate solutions for patient/visitors/staff as well as each department to move forward within a vertical expansion with a goal to better patient care.
- Evaluate how the combination of on-stage/off-stage paired with staff lactation and respite rooms can reduce the burnout of staff and increase patient satisfaction.

#### **M08. Sustainably Designed & Economically Resilient Projects**

- Identify core green financing tools for consideration.
- Explain how the IRA applies to buildings and sites and extends and expands rebates and credits for clean energy projects.

- Communicate to clients how green design, coupled with unlocked green financing, can provide significant savings on current, future, and even past projects, resulting in lower costs and reduced carbon outputs.
- Explain how IRA funding can be applied to their clients' work, even if they are non-tax-paying entities like nonprofits or state/local governments.

#### **M09. Through the Lens of Trauma-Informed Design**

- Explore the history behind Trauma Informed Design (TID) and examine how both past and current responses have informed the design of empathic and equitable spaces.
- Recognize how a poorly designed space can create a feeling of indignity and even re-traumatize a user.
- Examine TID principles providing questions that can be integrated into project visioning and processes.
- Examine the TID framework for considering trauma and its impacts throughout the design process and recognize how that framework helps shape design solutions and achieve more equitable project outcomes.

#### **M10. Charting Paths: Career Evolution, Resilience, and Diversity in Architecture**

- Recognize the importance of diversity and inclusivity in architecture and identify the ways it can positively influence practice and project outcomes.
- Describe the role of mentorship and the impact it has on career development and the ability to adapt and thrive in a dynamic professional environment.
- Develop a comprehensive approach to career development including setting goals, seeking mentorship, and taking advantage of professional development opportunities.
- Identify strategies for overcoming professional challenges and gain insights on effective strategies and solutions for overcoming these obstacles.

#### **M11. WIA Networking | 10 Years Looking Back to Look Forward**

- Analyze changes in architectural practice over the last 10 years and reflect on how these experiences shape the future of the profession.
- Identify and discuss challenges and growing pains of changing leadership, culture, and the status quo.
- Evaluate current and future support systems to cultivate future talent and leadership.
- Engage in meaningful conversations that promote positive change and professional growth for all.

#### **M15. Gateway Sketchwalk: Exploring the Framework for Design Excellence**

- Evaluate elements of Minneapolis' urban environment with ten principles of the Framework for Design Excellence recognizing relationships between built and natural environments within the urban realm.
- Develop analog sketching skills for use in analysis of urban environments and documentation of the Framework for Design Excellent categories, considering the historical (colonial and native) context and modern infrastructure needs.
- Explore how designers are influenced by and design for successful sustainable urban environments, considering cultural and environmental context by studying existing buildings and infrastructure in a northern climate and documenting strategies employed.
- Improve analog visualization skills through hand drawing on-site and peer evaluation to explore the poetic and analytic potential of sketching

#### **M16. What Would You Do? Navigating the Intersection of Building Codes and Ethics**

- Explore the ethical obligations for architects to address code deficiencies observed in existing conditions.
- Examine the ethical obligation for architects to address observed code deficiencies if they are outside the contractual scope.
- Examine the ethical obligation for architects to address code deficiencies if observed in a client's office while discussing other projects.
- Examine the ethical obligation for architects to address code deficiencies if observed in the course of daily living and not associated with any specific project.

#### **M17. AIA 2030 Reporting for Small Projects**

- Calculate U values of small projects – a measure of how well a building's insulation works, ie. how much heat flow or heat loss occurs.
- Identify potential envelope losses which is related to its ability to control heat, moisture, air, and sound, all directly impacting the comfort and health of the occupants.
- Translate EUI, Energy Use Intensity, data for reporting to the AIA 2030 commitment, a commitment to protecting the health of our planet and the health of all people.
- Learn how to verify basic assembly compositions against an ASHRAE table to calculate U-values (ASHRAE being the governing society responsible for developing building design as well as energy efficiency standards and guidelines for the new construction environment).

#### **M18. Impacts of Common Building Products and the Path Toward Health and Low Carbon**

- Examine how the use of many of the common building products used in Minnesota buildings impact health and health equity.
- Identify healthier, non-plastic/lower carbon, and Just product options.
- Use a scientifically rigorous, red (most hazardous) to green (healthiest) ranking approach to more easily and confidently select safer options.
- Explain how local leaders are demonstrating a commitment to healthier and Just products, and realizing that safer product selection is possible within cost and performance criteria.

#### **M19. Your Next Act: Finding Purpose and Happiness in Retirement and Beyond**

- Examine how five other architects have used design thinking to constantly evolve throughout their careers and through the most difficult stage: the “reorientation” that comes with the end of full-time work and retirement.
- Discover how other architects have found meaning, purpose, and physical and mental health through continuing to practice, as well as through volunteer work, travel, education, creative pursuits, and remaining physically and socially active.
- Discover how architects in transition have successfully invested in cultivating new relationships and networks while maintaining existing ones.
- Discover how to think about your career as a series of chapters, how to write the next chapter of your life story, and prepare your firm/practice and yourself for your next act.

#### **M20. Applying Skill in Bridging Difference to Views on Alternative Pathways to Licensure**

- Describe the intercultural development continuum in the context of recognizing, appreciating, and bridging difference on policy issues, working from policy related to licensure pathways as a case study.
- Utilize the “one-to-one” approach to quickly learn about another’s perspective.

- Recognize areas of commonality and respect areas of difference among people of varying positions on policy issues.
- Practice identifying shared goals and bridging effectively across difference.

### **M21. Breaking Free of Leadership**

- Analyze the definition of the word "leadership" and recognize the archetypes, caricatures, and personas that the word often brings to mind.
- Recognize and interpret signs of performative leadership.
- Construct a definition of leadership free from archetypes, caricatures, and personas.
- Examine practical ways to contribute toward advancing a Break Free of Leadership movement.

### **M22. Designing an XL Hospital: The First 150 Days Full Throttle**

- Examine the vision and methodologies used to transform a medical institution that will attract top talent and improve the human experience in order to enhance patient outcomes.
- Discover how data-driven design tools can be used to create efficient, flexible, and safe healthcare spaces that improve patient care while enhancing the functionality and adaptability of hospital environments.
- Recognize the importance of Immersive Design Events (IDE) – an incubator process to evaluate options and build consensus through visualization, proof of concept, and validation in the first 150 days.
- Examine critical steps in the cost-certainty process that ensure project delivery meets budget constraints while maintaining safety, quality of care, and the well-being of patients and staff.

### **M23. Holistic Investing and Financial Planning for Architects: Your Money, Your Practice, Your Life**

- Identify and understand a variety of investing concepts and their utility and application to their work and life.
- Identify and understand a variety of financial planning concepts and their utility and application to their work and life.
- Identify and explain a variety of estate and exit planning concepts and their utility and application to their work and life.
- Identify and explain when financial advice is needed, how to differentiate amongst different potential advisors, and the meaning and value of a fiduciary.

### **M26. Small Firm Challenge Smackdown**

- Identify common issues small firm leaders face and where they can learn from each others' experiences.
- Compare, contrast, and seek solutions on challenges related to business practices.
- Discover how other firms are staying current (or working to catch up) on new technologies, in the context of lean budgets.
- Discuss the challenges small firms face in achieving various elements of the AIA Framework for Design Excellence, including those related to sustainability and resilience.

### **T27. Ethics in Public Interest Design**

- Define and describe what Public Interest Design (PID) is and how it has emerged as a movement in architecture.

- Recognize the relationship of Public Interest Design to the AIA's Code of Ethics and Professional Conduct.
- Examine the PID work of Minnesota architects and how it is changing the role and services of our profession.
- Explore how you can participate in PID and the Citizen Architect movement and make it a part of your practice, and the value it provides to staff.

#### **T28. Specifications and the Role of the Dedicated Specifier**

- Explain the job requirements of a dedicated specification writer.
- Examine what is required to effectively communicate project details to the design and construction team.
- Explore ways to write specifications from scratch as well as using tools such as AIA MasterSpec, BSD SpecLink and Arcat Guide Specification Services.
- Explore the correlation between clear, concise, and complete specifications and a building that is safe, sustainable, accessible, and built to code, limiting liability for a design firm.

#### **T29. Design Without Bias**

- Define bias and explore how to recognize it in yourself and others.
- Research user groups to understand and address their needs and experience.
- Develop a problem statement and user focused outcomes for the project that address bias and confirm users have been engaged.
- Identify opportunities for a project to address bias.
- Build trust and gain buy-in from decision makers.

#### **T30. Business Foundations (FFF)**

- Outline a business plan based on their strengths, weaknesses, opportunities and threats in comparison to their own personal and professional goals.
- Reflect on the motives that define their decision making process through the Five Frameworks: 1. Projects 2. People 3. Profit 4. Process and 5. Purpose
- Examine strategies for creating financial projections based on value pricing and marketing strategies to maintain resilience in the current economy.
- Strategize for success by aligning their plan for business growth with a series of bird analogies: waiting for the right project like a flycatcher; showcasing their style like a peacock; knowing their community like a heron; cold calling like a woodpecker; quietly kick-starting their business like a night owl; or starting as a consultant like an oxpecker.

#### **T31. Architectural Statehouse Rock**

- Identify advocacy skills and priorities for architects at the city, state, and federal levels, and explore how architects can best engage in advocacy.
- Identify ways to engage in advocacy to protect the health, safety, and welfare of Minnesotans facing housing, climate, and economic challenges.
- Examine current AIA Minnesota policy work to create resilient communities, and identify ways to support AIA Minnesota's advocacy efforts throughout the year and at different scales.
- Discover the significant impact architects can make by serving in elected roles in government at all levels.

#### **T32. Form Follows Pipelines: The (Continued) Weaponization of Architecture**

- Articulate a values-based approach to academic + design practice.

- Question and critique the academic-professional pipeline, re: accreditation and student performance criteria.
- Identify opportunities for meaningful, transformative and supportive approaches to Equity, Diversity, and Inclusivity (anti-racist and anti-colonial) design work and organizing.
- Identify – and counter – teaching/design practices that empower those most at liberty to speak, while amplifying marginalization.

### **T33. Revolutionizing the Industry: How The Standard at Dinkytown is shaping the Future of Design**

- Examine the historical context of the site and the design and development process, including the building conversion mid-process to achieve the final building solution.
- Gain perspective from a national architect, developer, and building solution provider team on how a prefabricated building envelope solution shaped their project.
- Examine the schedule and cost benefits of transitioning to an integrated scope cladding solution as exemplified by the Standard at Dinkytown luxury student housing, delivering the needed building to a community faster.
- Learn about the aesthetic flexibility, expansive windows, and performance of fully unitized building enclosure systems for better long-term building durability, performance, and energy efficiency.

### **T34. Building Classification: IBC Chapters 3, 5, & 6**

- Identify and describe the various occupancy groups in the IBC.
- Identify the characteristics of the types of construction found in the IBC.
- Use information learned to determine allowable height and area.
- Explain how the correct building classification effects other code decisions.

### **T35. Leveraging Technology to Enhance the Design Process: Augmented Reality in Practice**

- Explain how Augmented Reality can positively impact project budgets.
- Describe how the implementation of AR in the user-review process can lead to safer Healthcare environments.
- Describe how the implementation of AR in the constructability-review process can lead to safer Healthcare environments.
- Examine how the implementation of AR can more easily allow more voices to be heard and lead to a more equitable process and environments.

### **T36. Unleash the Power of Your People Through Decision Making**

- Recognize the importance of people feeling empowered to drive improved retention, engagement, customer satisfaction, and productivity.
- Learning Objective 2:  
Discover the untapped potential of your people and how to minimize the bottleneck that slows down your team and minimizes the opportunity for your team to excel.
- Learning Objective 3:  
Apply specific, actionable decision-making frameworks used to empower everyone in your organization to make decisions, ranging from simple to more complex.
- Learning Objective 4:  
Explain how to transition the role of the leader from gatekeeper and bottleneck to an enabler who unleashes the power of their people.

### **T39. Juxtaposition Arts New Art Center**

- Identify examples of Art-Integration in the architecture.
- From an urban design perspective, examine how to activate the street front with activity.
- Discover how to string disparate buildings together in a harmonious way.
- Identify examples of Art-Integration in the landscape design.

#### **T40. Establishing the Business Case for Women in Architecture – 10 Years Later**

- Describe how trends of women in architecture school and practice have changed over the last 10 years.
- Discuss how the root causes of what can either hold women back from leadership positions, or cause them to leave the profession have changed and evolved recently.
- Establish the business case for women in architecture.
- Define concrete measures firms can take that will directly support and retain women in our profession.

#### **T41. Forest Hills Golf Course: a stormwater harvesting & water re-use project**

- Explain how various site approaches can impact water quality.
- Examine the environmental impacts of phosphorus and groundwater use.
- Discover how stacked green infrastructure practices within a site can lead to significant environmental benefits.
- Recognize the public health benefits of water quality, eco-restoration, and the reduction of water use.

#### **T42. Current Business Conditions in Minnesota, and the Role of the Labor Force in Future Growth**

- Understand current economic conditions impacting architecture in the region.
- Identify the important impacts of labor force fluctuations on the construction economy in Minnesota.
- Develop potential strategies for business planning based on regional economic data.
- Recognize important practice management opportunities to respond to the current and future economic pictures in Minnesota.

#### **T43. Fostering a Sustainability Focused Culture from the Inside Out**

- Recognize the mindset of a firm's leadership and take actionable steps and communicate in a way to foster a successful culture shift to a sustainability-focused culture.
- Identify the tangible benefits to projects when the firm's culture is sustainability-focused.
- Identify how a paradigm shift within the firm will empower younger staff to lead and help drive the firm forward toward improving the built environment.
- Explain how creating a culture shift to a sustainability-focused firm can improve their recruiting pipeline and draw in top candidates, a win-win for both the firm and the planet.

#### **T44. Affordable Housing and Designing for the Right to Home**

- Examine the history of affordable and supportive housing typologies in Minnesota.
- Identify challenges facing affordable housing development – from cost to mental health.
- Identify diverse ways of meaning-making in the home.
- Describe the role of community engagement in the design process and the ways architects can contribute to making this happen.

#### **W47. Cold Weather Construction**



- Explain elements of building design in a cold climate that prevent accidental injury or death and fosters positive physical and emotional responses for users of the building.
- Examine the exterior design of the building to prevent water intrusion, thereby preventing mold and mildew and providing a building with a healthy indoor air quality.
- Examine the thermal transfer and vapor transmission through building systems and be able to explain ways to increase the comfort, welfare, and safety of the building user, as well as control energy consumption.
- Review the preparation of construction documents (drawings, specifications), and specification of materials and methods (construction systems, products) for cold weather construction.

#### **W48. Empowering the Next Generation of Professionals**

- Identify different types of firm policies that cater towards emerging professionals.
- Explain the current benefits market for emerging professionals.
- Identify a variety of ways different size firms support emerging professionals.
- Discover ways that firm policies can positively impact the health of EP employees, create access to adequate support both in and out of the office, and how to enhance the overall mental welfare necessary for modern practice today.

#### **W49. The Modern Kitchen**

- Comprehend the history and evolution of the modern domestic kitchen and it's relation to health, safety, technological, and societal change.
- Understand the breadth of kitchen designs in diverse housing types, and the role of code regulations in those typologies.
- Analyze the cultural meaning of kitchen patterns.
- Synthesize basic kitchen attributes into new kitchen forms, identifying the programmatic priorities that can design a kitchen that contributes to the family well-being?

#### **W50. Decarbonization Project Success, Challenges, Process and Techniques: A Multidisciplinary Charette**

- Identify the key stakeholders in a decarbonization project and provide them with the information they need to make data-driven decisions.
- Learning Objective 2:  
Identify the key elements of a decarbonization commitment and how to help clients define these elements to create a practical plan.
- Learning Objective 3:  
Explore how to work with estimators to achieve accurate pricing early on in a decarbonization project.
- Learning Objective 4:  
Acquire strategies to quantify scope 3 emissions and make good decisions about construction activities and building materials.

#### **W51. Realizing Design Excellence Through the Common App**

- Examine how the Framework for Design Excellence sets the standard for sustainable, resilient, and inclusive design.
- Discover how the 2023 AIA Honor Award Design Commendation winning firms used the Common App to capture sustainability data for their project submission and lessons learned through its use.

- Examine how firms with a range of familiarity are using the Framework for Design Excellence and Common App as references for integrating sustainability into their project processes.
- Explain how integrated project design can promote economy and healthy occupants.

#### **W53. Honor Award Jurors Show Their Work**

- Compare and contrast the work of three award-winning firms with national and international influence.
- Identify the design details that make their projects unique.
- Assess how the design processes and practice philosophies are similar or different from your own.
- Compare the ways in which the three represented firms have been able to address/integrate AIA Framework for Design Excellence measures across their projects.

#### **W54. Is it a Fire Wall? IBC Chapter 7**

- Examine the requirements for fire resistance rated construction.
- Explain the difference between the various types of fire-resistant assemblies.
- Describe how openings and penetrations are protected.
- Recognize where these fire resistive rated assemblies are used.

#### **W55. The Case Against Pro Bono Architectural Services**

- Identify challenges associated with pro bono architectural services.
- Consider examples and hypotheticals where pro bono services have had/could have negative impacts on underserved communities.
- Examine the AIA Code of Ethics in the context of pro bono services and ethical obligations to clients and community members.
- Formulate alternative solutions for supporting underserved communities and questions to guide rigorous ethical deliberation related to whether and when to offer pro bono services or volunteer time.

#### **W56. Forced Labor in the Building Material Supply Chain: Developing a Mitigation Framework**

- Gain insight into forced labor within the building materials supply chain including the importance of the topic, forced labor definitions, means of coercion, materials supply chain, and resources for further education.
- Acquire knowledge on identifying high risk materials and countries, understanding the information available from manufacturers' documentation regarding human rights, and initiating conversations with manufacturers using the proposed framework.
- Review the lesson learned from research case studies on rubber flooring manufacturers and MSR Design's project implementation.
- Examine the limitations of legislation concerning the global supply chain and explore actionable steps that can be taken.

#### **W57. Align Your Marketing Strategy & Story**

- Reflect and define their target market based on their own priorities: project type, people served, profit strategy, design process, or purpose/mission.
- Explore the details and barriers of their Target Market through workshop reflection questions and small group discussion to tell the story of their Target Market's journey.
- Produce value statements to effectively communicate how their services respond to their Target Market's needs, wants, and desires for change.

- Think through bird analogies to creatively illustrate their marketing strategy.

#### **W60. 2+2: Design for Discovery**

- Explore how the design process can promote a long-term relationship between designers, users, and operators to ensure design intent is achieved while also improving building performance over time.
- Examine how user experiences and performance data can be shared to better understand how well the built environment aligns with the stated vision.
- Utilize lessons learned and knowledge sharing to improve the next generation of work through mentorship.
- Discover strategies that help promote a sense of discovery and delight in projects.

#### **W61. Leadership Transition**

- Examine the future of the profession and impact on design leadership.
- Define the qualities of successful leaders.
- Apply best practices and lessons learned for successful leadership transition.
- Produce the foundation of a strategy to develop leaders within your organization to meet your business objectives.

#### **W62. Authentic Partnerships: Engaging with BIPOC Firms**

- Examine what an authentic partnership looks like for BIPOC firms.
- Describe how local BIPOC firms partner with non-BIPOC and BIPOC-owned firms.
- Recognize that each partnership is different and rich and worth learning from.
- Review the work firms from the panel has contributed to real projects.