

2023 Strategic Council's End of the Year Report

Table of Contents

Strategic Council Moderator Report	3
Strategic Council Members	4
Strategic Council Committees	10
Study Groups	11
The Carbon Group	11
The Equity Group	17
The Design Group	20
The Economy Group	24
The Wellbeing Group	27
Additional Efforts	31
Knowledge Leadership Assembly (KLA)	31
National Definition of a Zero Emissions Building	32

Strategic Council Moderator Report

2023 has been a banner year for the Strategic Council. We have covered many topics, had engaging discussions, and found our way to some fascinating conclusions. We have been focused on the integration of the AIA's strategic priorities across the institute through the Framework for Design Excellence (F4DE) and the Strategic Plan.

We started off at Governance week in December of 2022. At the big think, we engaged the Council on 5 specific topics that explored an innovative theme within F4DE. Our topic areas were Carbon, Design, Economy, Equity and Wellbeing. The council rotated through the 5 topics, providing feedback on a mural board. At the end of the session, we asked the councilors to choose a topic to focus on for the year. The councilors divided up and chose leadership within their topic groups.

We all headed home, and we charged the groups to write a proposal for what they were going to do for the year. These proposals were reviewed by Tate, Muza and I, and we also asked for feedback from Emily Grandstaff Rice. We came up with a plan and a schedule and we were off to the races.

The Carbon Group studied **What does climate positive architectural practice look like?** They presented to the council on May 19, 2023, and their report has been submitted to the Board of Directors.

The Equity Group studied *Bias-Free Architecture by 2050*. They reported to the Council on August 9, 2023, and they have submitted their final report to the Board of Directors.

The Design Group studied How is the Artificial Intelligence future going to affect the Architectural Profession? They presented it to the Council on September 20, 2023.

The Economy group studied the topic *the Value of Architecture* with a focus on Member prosperity and Member engagement. They presented their findings to the council on October 11, 2023.

The Wellbeing group conducted a year-long study on *Architecture and Wellbeing* leveraging the significant existing published evidence regarding how architecture affects health and well-being. They presented it to the full council on October 26, 2023.

We are also excited about our work with KLA this year. Strategic Councilors in both the Design and Carbon groups worked with AIA staff to develop the programming for day 1 of the KLA conference creating new connections and alignment between Knowledge Communities and council members. The first portion was on AI and Phil Bernstein from Yale School of Architecture presented a Keynote on How AI affects Process, Relationships and Results, followed by discussion guided by Karen Lu, our Design Lead. Then Heather Clark, the Director for Building Emissions for the White House Office of Domestic Climate Policy presented a keynote on White House goals for zero emissions followed by a discussion led by Tim Lock, our Carbon lead.

And lastly, we are excited to be finalizing our work with the White House Office of Domestic Climate Policy. Our Carbon group initially reached out to Heather Clark during their Carbon Positive sprint and that work led to a deeper discussion, and connection on the White House's current efforts. They announced a definition of zero-emissions on September 28th at an invite-only working group session at Greenbuild. And on the keynote stage on the same day Ali Zaidi, the new White House National Climate Advisor cited AIA's leadership by name and the expertise of IOOK architects as key to success in mobilizing impact in achieving zero emissions.

It has been a great year with many accomplishments. I am thankful for the stunning group of skilled practitioners who worked tirelessly to cover all of these topics relentlessly. Please see the following pages for additional information about all of these efforts.

Strategic Council Members



Guilherme Almeida, AIA

Washington DC Representative 2021-2023

galmeida@mac.com



Neal J. Angrisano, AIA

Missouri Representative 2021-2023

nangrisano@treanorhl.com



David H. Barkin, FAIA

Connecticut Representative 2022-2023

david.barkin@ct.gov



Leah Bayer

California Representative 2023-2025

leah@architects-team.m8r.co



Bradley Benjamin, AIA

South Carolina Representative 2022-2024

brad@radiumarchitecture.com



Kristine E. Bjerke, AIA

South Dakota Representative 2022-2024

krisbjerke@architectureinc.com



Patricia A. Boyle, AIA

Michigan Representative 2023-2025

patty.boyle@smithgroup.com



Colt Brock, Assoc. AIA

Student Representative AIAS 2023

coltbrock@gmail.com



Yanitza Brongers-Marrero, FAIA

Ohio Representative 2021-2023

ybrongers@moodynolan.com



Andre L. Brumfield, Assoc. AIA

At-Large Representative 2023-2025

andre_brumfield@gensler.com



Rex Cabaniss, AIA

Louisiana Representative 2023-2025

rex@whlcarchitecture.com



Victoria Carpenter, AIA

Texas Representative 2021-2023

victoria.scott.carpenter@ gmail.com



Jean Carroon, FAIA

Massachusetts Representative 2023-2025

jean.carroon@goodyclancy.com



Craig Chamberlain, AIA

At-Large Representative 2022-2023

craig.chamberlain02@gmail.com



Tannia X. Chavez, Intl. Assoc. AIA

Associate 2023

txchavez@gmail.com



Graciela Carrillo Cifuentes, AIA

New York Representative 2022-2024

gracielacarrillo@gmail.com



Scott J. Compton, AIA

Pennsylvania Representative 2021-2023

scott@comptoninsights.com



Michael A. Daly, AIA

Maryland Representative 2023-2025

mad5427@gmail.com



David R. Davies, AIA

Idaho Representative 2022-2024

dave.davies@cshqa.com



Jason J. DeMarco, AIA

Hawaii Representative 2023-2025

jason@polyline.design



Brett P. Dougherty, AIA

California Representative 2022-2024

arktctr22@gmail.com



Kimberly Dowdell, AIA

2023 First Vice President

kimberly.dowdell@gmail.com



Robert L. Easter, FAIA

Virginia Representative 2023-2025

reaster@keiarchitects.com



Joshua Flowers, FAIA

Tennessee Representative 2022-2024

joshflowers230@gmail.com



Mary Follenweider, FAIA

California Representative 2021-2023

mjfollenweider@gmail.com



Verity L. Frizzell, FAIA

New Jersey Representative 2023-2025

verity@feltzandfrizzell architects.com



Gwendolyn Fuertes, AIA

At-Large Representative 2023-2025

gfuertes@lmsarch.com



Greg Galbreath, AIA

Nebraska Representative 2023-2024

ggalbreath@rdgusa.com



Brien Graham, AIA

Texas Representative 2023-2025

bgraham@lpadesignstudios.com



Victor K. Han, AIA

New York Representative 2021-2023

vkhpera@msn.com



Kathy Hancox, AIA

Arizona Representative 2023-2025

kathy@hkassociates.net



Anne Hicks Harney, FAIA

At-Large Representative 2022-2023

annehicksharney@gmail.com



Janeen A. Harrell, AIA

Illinois Representative 2021-2023

janeen.harrell@gmail.com



Daniel S. Hart, FAIA, PE

2023 Former President dhart@parkhill.com

2022-2024



Ashley Hartshorn, AIA

New Mexico Representative

ahartshorn88@gmail.com



William Hercules, FAIA

Florida Representative 2021-2023

bill@wjh-health.com



Bruce Herrington, AIA

Alabama Representative 2022-2025

bruce@linescaleform.com



Jeffrey E. Huber, FAIA

Florida Representative 2022-2024

huber@brooksscarpa.com



Matthew Hutchins, AIA

Washington Representative 2023-2025

matt@castarchitecture.com



Toomas R. Idnurm, Assoc. AIA

Delaware Representative 2022-2024

toomasi@mac.com



Mary Kell, AIA

Oklahoma Representative 2023-2025

mkell@cityoftulsa.org



Lester Korzilius, FAIA

International Representative 2022-2024

lk@lesterkorzilius.com



Diantha S. Korzun, AIA

Vermont Representative 2022-2024

dkorzun@gbarchitecture.com



Adam R. Krason, AIA

West Virginia Representative 2022-2023

ark@zmm.com



Timothy Lock, AIA

Maine Representative 2022-2024

tim@opalarch.us



Amber Lombardo

CACE Representative

alombardo@aiamemphis.org



Karen A. Lu, AIA

Minnesota Representative 2022-2024

karen@snowkreilich.com



Ryan N. Morse, AIA

Alaska Representative 2022-2025

ryan.n.morse@gmail.com



Alyssa M. Murphy, AIA

New Hampshire Representative 2022-2024

alyssa@placework.studio



Garfield L. Peart, AIA

Georgia Representative 2023-2025

garfield.peart@gmail.com



Katherine Peele, FAIA

North Carolina Representative 2022-2023

katherinepeele@ls3p.com



Richard J. Polk, AIA

Kentucky Representative 2022-2025

rpolk@eopa.com



Robert G. Proctor Jr., AIA

Indiana Representative 2022-2024

rproctor@ratioarchitects.com



Tony Rangel, AIA

Kansas Representative 2022-2026

trangel1333@gmail.com



Mark A. Ryan, Esq., AIA

Nevada Representative 2021-2023

mark@adhoccr.com



Lori A. Yazwinski Santa-Rita, AIA

Arkansas Representative 2021-2023

lori@jenningssantarita.com



Linda J. Alfson Schemmel, AIA

Iowa Representative 2022-2024

linda.schemmel@ wdm.iowa.gov



Mark D. Schneider, AIA

North Dakota Representative 2022-2023

marks@ci.williston.nd.us



Melissa M. Schulteis, Assoc. AIA

Wisconsin Representative 2023-2025

melissa.schulteis@ miron-construction.com



Jeffrey S. Seabold, AIA

Mississippi Representative 2023-2025

jeff@seabold-studio.com



Utah Representative 2022-2024

Corey R. Solum, AIA

csolum@thinkaec.com



Sophia A. Sparklin, AIA

Montana Representative 2021-2023

sophia@spark-architecture.com



Daniel R. Stalker, AIA

Wyoming Representative 2022-2025

dstalker@mac.com



Zachary Taylor, AIA

Colorado Representative 2022-2023

zachary@taylor-ad.com



Jonathan Matthew Taylor, AIA

Rhode Island Representative 2022-2024

jmtayloraia@hotmail.com



Tate Walker, AIA

At-Large Representative 2022-2023

twalker@opnarchitects.com



Peter R. Wehner, AIA

New York Representative 2023-2025

pwehner@passero.com



Curtis Wilson, AIA

Oregon Representative 2022-2024

curt@wilson-architecture.com



Lakisha A. Woods, CAE

EVP/CEO

lwoods@aia.org

Strategic Council Committees

2023 Study Areas

- Carbon
- Equity
- Design
- Economy
- Wellbeing

Best Practices

- Yanitza Brongers, FAIA (Chair: Best Practices)
- Neal Angrisano, AIA (Chair: Elections Sub-Committee)
- Brad Benjamin, AIA (Chair: Communications Sub-Committee)
- Alyssa M. Murphy, AIA (Friday Recap Coordinator)
- Josh Flowers, FAIA
- Richard Polk, AIA
- Mary Follenweider, FAIA
- David Davies, AIA
- Corey Solum, AIA
- Bruce Herrington, AIA
- Rex Cabaniss, AIA

Study Groups

The Carbon Group

The Carbon Group studied **What does climate positive architectural practice look like?** They presented to the council on May 19, 2023, and their report has been submitted to the Board of Directors.

Links:

Final Presentation: <u>Carbon-Presentation 0510-2023</u> Final Report: <u>Climate-Positive-Practice-Sprint-Report</u>

Co-chairs:

- Tim Lock, ATA
- Jean Carroon, FAIA

Active Members:

- Alyssa Manypenny Murphy, AIA
- Colt Brock, Assoc. AIA
- Diantha Korzun, AIA
- Gwen Fuertes, AIA
- Mark Schneider, AIA
- Matt Hutchins, AIA
- Richard Polk, AIA
- Tannia Chavez, Intl. AIA
- Zachary Taylor, AIA

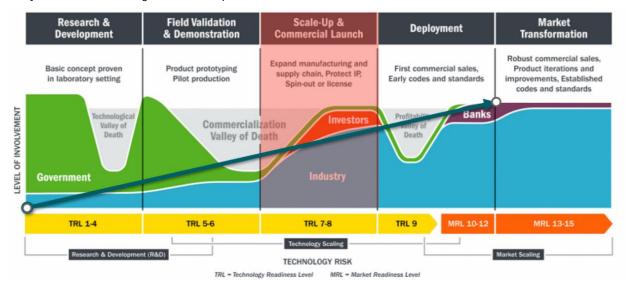
The Climate-Positive Practice Sprint was the result of conversations within the Strategic Council Carbon Working Group, seeking to identify impediments and opportunities in a rapidly changing world for practices to reach beyond current reduced or net-zero carbon goals to become climate-positive and holistically improve the human ecological condition through project implementation, practice, and advocacy. They asked the question "What does a climate positive practice look like?"

The Group established a working definition of "climate-positive practice" in order to frame the scope of inquiry. "A climate-positive architectural practice holistically improves the human ecological condition through project implementation, practice, and advocacy."

They framed their conversation within three categories:

- Practice, Governance & Accountability
- Project Implementation
- Research, Education & Advocacy

They tracked this through various steps:



They talked to informed parties both within and external to our discipline including:

External	Internal
The White House	Archimania
Rocky Mountain Institute	Gensler
Shift Zero	Goody Clancy
EcoAct	Leddy Maytum Stacy Architects
WoodWorks	LMN Architects
American Concrete Institute	Lord Aeck Sargent
SE2050	MASS Design Group
MEP2040	OPAL
NYSERDA	OPN Architects
	Placework
	СОМ
	Fentress Architects

Climate Positive Design Trends

- Synthesis of good design with climate-positive strategies remains the single most effective
 motivator to our stakeholders adopting behavioral changes and is what is expected of us COOL
 FACTOR!
- Leading climate-positive practices are establishing new practice paradigms and mindsets that go well beyond code requirements and certification standards (raising the ceiling), while offering peer-to-peer knowledge sharing (raising the floor)
- Many of these practices are also expanding the umbrella of architectural practice to include many diverse offerings, including internal R&D and education, internal benchmarking, aggressive climate-

focused mission statements, integration with manufacturers, builders, and owners, full internal building performance frameworks, whole-community design strategies, broad sustainability consulting.

• Some practices are creating additional revenue streams around these expanded services.

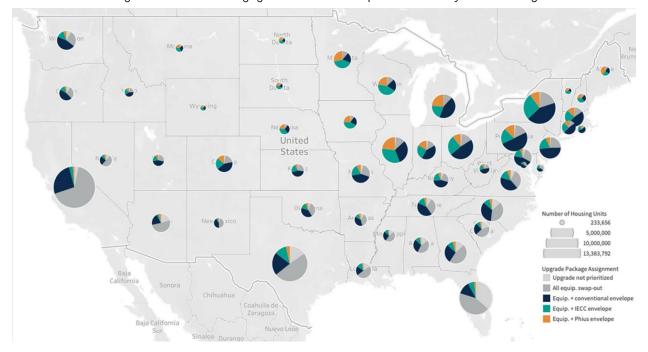
Climate Positive Design Across Scales

- Large Practices:
 - o Have a greater impact due to scale of market share, and thus a huge opportunity.
 - Employ a greater percentage of the workforce, and thus average practice of architecture more broadly.
 - Have greater success at deploying internal research and external research and advocacy due to availability of resources and staff.
 - o Appear to have lesser success at achieving emissions reduction in completed work based on accumulated data.
 - o Have a difficult time being nimble and entrepreneurial.

Small Practices:

- o Positive practice is not "business as usual."
- o Struggle to dedicate time to climate-positive design.
- o Struggle to stay on-pace with research and education, and thus could benefit from mentorship.
- o Practices dedicated to climate-positive design at this scale are able to attract already-aligned clients.
- o Are able to nimbly shift "on-the-fly" and adopt entrepreneurial services which can lead to additional revenue streams.
- Remain divided between "early-adopter" mentality and risk mitigation due to scale and lack of experience (fear factor).

Climate Positive Regional Variation – engagement with this topic varies widely based on regions:



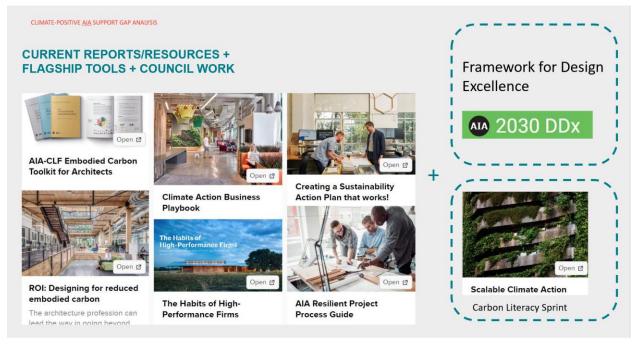
Lessons Learned:

- Regions of the country have not adopted climate-positive strategies uniformly for various reasons (climate, cultural hurdles, material resource economies) and as such universal strategies may not apply or be effective.
- o Climate-positive design and practice is being conducted in ALL regions, but the pathways vary.
- The level of education is not consistent across membership in all regions.
- Opportunities exist for interdisciplinary efforts that bolster regional and circular resources in all regions.

Priorities:

- o Develop 360 scaler mentorship at the regional level important that different scales of practice learn from each other!
- Improve cross-regional communication to offer open-source lessons learned, including establishment of COTE Committees
- Strengthen connections and overlaps between designer/manufacturer/builder roles in all regions.
- The group discovered that the most effective change agent is likely to be social comparison, examples set by firms defining what climate-positive practice is within the opportunities and constraints of a specific region. There is an increased focus on regionality as a critical component of climate-positive practice. In summation, climate-positive practices are consistently working with and for the region in which they work rather than attempting to globally change the culture of their region.

The Team highlighted some current resources and flagship tools:



Since their presentation to the full council a lot has happened. This topic is developing quickly:

- Release of Care Tool:
 - Carbon Avoided: Retrofit Estimator Tool is used for calculating and comparing the embodied, operating and avoided carbon impacts and benefits of reusing and upgrading existing buildings or replacing them with new construction.

- Announcement of LEED v5.
- Announcement of ASHRAE 227 Passive Buildings:
 - o This standard provides requirements for the design of buildings that have exceptionally low energy usage and that are durable, resilient, comfortable, and healthy.
- Announcement of federal "Zero Emission Buildings" definition.
- Announcement of the ECHO tool:
 - o **Embodied Carbon Harmonization and Optimization (ECHO) Project** to tackle the challenge to rapidly reduce embodied carbon in built environments by ensuring that all embodied carbon reporting at the whole building and whole project scale (including landscapes and infrastructure) in the US follow the same clear definitions and scopes of included impacts.
- Numerous performance-based code improvements across the nation.

Conclusions

Architects have a significant role to play in spearheading design projects and, due to buildings climate demands, reaching national carbon goals. They also have a professional obligation to ensure their buildings do not negatively impact human communities and the environment. Architects hold a unique contractual position in building projects, enabling them to act as a central coordinator of integrative design practice and whole systems thinking across disciplines to achieve the best possible design outcome. As key stakeholders articulating overarching design vision, architects can guide projects toward the most environmentally sustainable solutions. And Architects are critical for advocacy work because of their technical expertise.

Guidelines for Future Action

AIA has the power to actively support a profession-wide transition to climate-positive practice. Legal:

- Could AIA Contract Documents consider including whole-life carbon-emissions assessment (WLCA) as a basic service?
- o Could contracts better integrate construction, manufacturing, and design teams, centering the Architect as facilitator?
- Can the language of the Code of Ethics Rule 6.501 "Members shall consider with their clients the environmental effects of their project decisions" be strengthened to be enforceable to create a framework for accountability?
- Education: Could the AIA consider a Strategic Council area of study on Circular Economies prioritizing the development of an educational track around the implications and lessons around designing for whole-building reuse, disassembly, material reuse, recycling, and first-best-use?
- Tools Could AIA DDx be made searchable and transparent to stay consistent with our peer disciplines, foster open–source knowledge sharing, and incentivize social comparison between practices while still maintaining client anonymity (when necessary)?
- Partnerships: How might the AIA benefit from closer relationships and knowledge sharing of other industry organizations, such as ILFI, CLF, RMI, that are funding climate-positive projects of which our discipline is the beneficiary of?
- Circular Economies: Could the AIA consider partnering with organizations within the construction industry (Associated Builders and Contractors (ABC), Construction Specifications Institute (CSI), National Association of Home Builders (NAHB), etc.) to encourage building material reuse?

Resources:

 Can AIA National support the development of regionally specific climate-positive practice implementation tools?

- o Can AIA National foster 360 scaler mentorship at the regional level prioritizing the importance of practices at different scales learning from each other?
- Can additional support and toolkits be provided to assist with State and Local Government Advocacy Network?
- o Can the "Habits of High-Performance Firms" from 2016 be update to be current with firms exhibiting aspects of holistic climate-positive practice?
- Award: Can a full and deliberate transition to the use of the Framework for Design Excellence in award assessment be made at both the National and Component levels?

The Equity Group

Bias-Free Architecture by 2050 was the Equity group study for 2023. They reviewed current resources available (both within the AIA and beyond) and efforts by other member organizations. Then they reviewed the regional findings that they discovered from conducting over 100 surveys nationwide and internationally. They reported to the Council on August 9, 2023.

Links:

Final Presentation: Equity-Presentation 08-09-23

Co-chairs:

- Graciela Carrillo, AIA
- Garfield Peart, AIA

Active Members:

- Andre Brumfield, Assoc. AIA
- Adam Krason, AIA
- Brien Graham, AIA
- Craig Chamberlain, AIA
- Janeen Harrell, AIA
- Jonathan Taylor, AIA
- Kris Bjerke, AIA
- Leah Bayer, AIA
- Lester Korzilius, FAIA
- Linda Schemmel, AIA
- Michael Daly, AIA
- Mary Kell, AIA
- Robert Easter, FAIA
- Ryan Morse, AIA
- Amber Lombardo
- Melissa Schulteis, Assoc, AIA
- Mary Follenweider, FAIA
- Tannia Chavez, Intl. Assoc. AIA

The pursuit of an equitable and bias-free profession by 2050 is the central focus of the Equity sprint this year. Bias in architecture emerges from a confluence of historical, cultural, social, and economic factors that shape design decisions and the built environment. As architects strive to create spaces that cater to diverse populations, it is crucial to comprehend the roots of bias within the discipline. By acknowledging the existence of biases and their consequences, we can embark on a journey toward greater inclusivity and equity, reshaping our built environment.

We explored fundamental questions, analyzed resources, facilitated discussions, conducted surveys, and identified key themes and barriers within the architecture industry. Our study's findings underscore the significance of equity and bias-free practices in the architectural profession. Through collaboration, research, and ongoing efforts, we seek to address barriers, leverage opportunities, and create an inclusive industry that thrives on diversity.

This effort was a multi-step process. The Equity Group began their efforts with brainstorming sessions. They included their own group, the Equity and the Future of Architecture (EQFA) Board Committee, Workforce, and Equity Diversity and Inclusion (EDI) Strategies staff. They were able to identify their initiatives and goals regarding EDI programs to avoid duplicate research, and information when working on this study. In addition to compiling EDI programs and initiatives that AIA has launched, they were able to identify EDI initiatives

promoted by other organizations within the AE industry, such as the American Society of Civil Engineers, National Council of Structural Engineer Associations, IIDA Equity Council, and American Council of Engineering Companies.



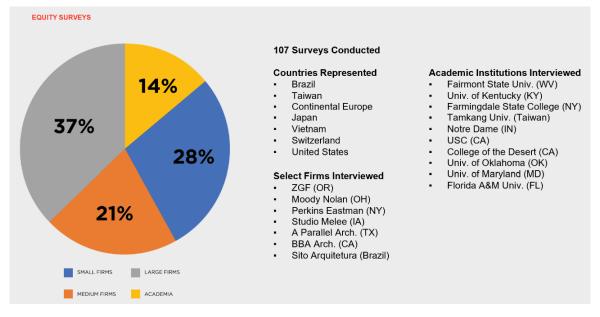
Following that they had a roundtable discussion at the A'23 conference, and this served as their initial moment to collect data and information from other members. Roundtable discussions delved into bias behaviors, obstacles, and policy reforms across five key areas: access to the profession, licensure, workplace culture, professional development, and the business of architecture.



Following these preliminary engagements, they launched their equity survey, which included firms from all the regions across the US and countries from South America, Europe, and Asia. With 107 diverse participants from various firm sizes, small, medium, and large sizes, academia, and international firms, we gained valuable insights into industry-wide perspectives.

Although given the small sample size, survey responses highlighted consistent issues across firm sizes and education institutions. Key barriers identified included inadequate outreach to the K-12 pipeline, lack of alternate paths to licensure, high education costs affecting access for marginalized groups, lack of diverse firm leadership, deficient bias education training, and work-life balance issues leading to burnout.

Additionally, less common yet significant barriers were discussed, including licensure reciprocity challenges for immigrants, ageism, and transparency issues within the business of architecture. Finally, the study revealed that a portion of our industry still perceives that there is no bias or equity issues within our industry.



Some gaps were evident in survey responses, such as untapped industry best practices and ability to leverage partnerships with existing industry organizations promoting JEDI. These areas present opportunities for growth and collaboration. The survey and analysis served as an initial steppingstone for our ongoing conversation. As the next steps, we recommend a broader survey of the membership to delve deeper into these initial findings coupled with expert analysis to prepare a more specific roadmap for the board. Our commitment to this cause continues with the Strategic Council in 2024 and sustained collaboration with the EQFA group. This ensures alignment and a path towards realizing our vision of a bias-free profession by 2050.

The survey and analysis served as an initial steppingstone for ongoing conversation. As the next steps, the Equity Group recommend a broader survey of the membership to delve deeper into these initial findings coupled with expert analysis to prepare a more specific roadmap for the board. The broader survey may explore the following questions which could provide additional insight:

- 1. The AIA has made diversity a key focus. How important is diversity to our members?
- 2. What, if anything, are firms, large, medium, and small, doing to increase diversity in their firm hiring?
- 3. What do firms see as the downside of diversity?
- 4. How are firms positioning their diverse workforce to take on leadership roles within the firms?
- 5. How do firms see the changing climate in school enrollments (impacted by the recent Supreme Court cases) impacting their recruitment efforts?

Commitment to this cause will continue with the Strategic Council in 2024 and sustained collaboration with the EQFA group. This ensures alignment and a path towards realizing our vision of a bias-free profession by 2050.

The Design Group

The Design Group studied How is the Artificial Intelligence future going to affect the Architectural

Profession? They worked with a variety of online programs to incredible success. Programs include ChatGPT, Discordapp.com, Midjourney, Murf.ai, and d-id.com, and they created a captivating video answering the question "What Should AIA do with AI?" which had the tag line "if Design is our superpower, AI is our cape!" They presented it to the Council on September 20, 2023.

Links:

AI Presentation Deck: AI-Design-Presentation Final

AI Presentation Video: <u>AI ChatGPT video</u> Council Members (and their Avatars)

Co-chairs:



Karen Lu, AIA



Dan Stalker, AIA

Active Members:



Patty Boyle, AIA



Kathy Hancox, AIA



Dan Hart, FAIA



Bruce Herrington, AIA



Jeff Huber, FAIA



Tom Idnurm, AIA



Mel Ngami (YAF rep)



Josh Flowers Jeff Seabold

The rapid development of artificial intelligence (AI) requires a comprehensive approach to addressing its impact on the architecture profession. The Strategic Council Design Working Group focused on "future thinking" and outcomes that could strongly influence members and firms. In addition, they considered the strengths of the AIA and its existing structure when evaluating the following recommendations, which are categorized in terms of immediate action, longer-term action and study, and questions to be taken on by a future Strategic Council or similar visionary body.

Their recommendations are organized into 3 buckets:

Recommendations for Immediate Action

Member Training:

- Develop and offer <u>continuing education courses</u> covering the basics of AI and AI platforms and their applications in architectural practice.
 - Why: AIA Members need to understand AI technology and tools to minimize anxiety and promote adoption and fluency in AI technology and tools to effectively deploy them in solving complex challenges in architecture.
 - o Who: AIA Knowledge Communities
 - o Note: Every AIA Knowledge Community should develop an AI strategy in 2024.

Practice Guidelines:

- Develop guidelines and a <u>model/template firm policy</u> for the ethical and responsible use of AI in the architecture profession.
- Develop white paper guidelines for addressing the use of AI in practice in <u>professional service</u> contracts.
 - Why: There are risks associated with using AI in practice (e.g., bias, copyright, professional responsibility).
 - Who: AIA Staff, AIA Documents Committee

Board Advisory Panel:

- Form an AI Advisory Panel that includes <u>multidisciplinary AI experts</u> (technology specialists, academics, practitioners, early adopters, etc.) to provide ongoing guidance to the AIA Board.
 - Why: AI technology and the issues around AI are constantly and rapidly evolving. AIA's actions related to AI should be timely and informed by experts in the AI field.
 - o Who: AIA Board

Recommendations for Longer-Term Action and Study

Architectural Education:

- <u>Collaborate with NAAB</u> for better alignment with their current position and criteria related to the role of technology in architectural education.
- Continue efforts to <u>align architectural education and practice</u> for a future that includes the use of AI.
 - o Why: Successful adoption of AI will require alignment between academia and practice.
 - Who: AIA Board

Code of Ethics:

- Consider the <u>impact of the use of AI on professional responsibility</u> and consider updates to the AIA Code of Ethics and Professional Conduct.
 - Why: AI has the potential to complete tasks related to Health, Safety, and Welfare, blurring the lines of professional responsibility.
 - Who: AIA National Ethics Council (NEC)

Legislative Advocacy:

- Advocate for legislative policies that address AI's ethical, legal, and professional implications in architecture.
 - o Why: There are efforts underway now to develop legislative policies related to AI the architecture profession needs to be represented in these efforts.
 - o Who: AIA Government Advocacy Committee (GAC)

Member Impact:

• Engage in a study of the impact of AI on AIA members.

- Consider the <u>holistic impact of AI</u> on members that encompasses member prosperity, well-being, career path, future opportunities, and other factors.
 - Why: AI has the potential to do the work of current architecture professionals, dramatically changing current jobs, compensation models, and scope of practice.
 - o Who: AIA AI Board Advisory Panel (when formed), Knowledge Communities, Components

Recommended Questions for Future Strategic Council Study

How can AIA's actions related to AI be informed by our partners for joint prosperity and benefit to society?

• Proposition: Form an <u>AI Industry Consortium</u> to collaborate with allied organizations (contractors, engineers, owners) focused on leveraging AI to advance the industry and benefit people and the planet.

How can AIA members harness the benefits of AI (curated, verified data relevant to architecture) in practice? How can the AIA facilitate achieving the complex goal of climate action for human and ecological health using AI for data-driven, performance-based decision-making?

• Proposition: An Institute effort to lead and fund the development and ongoing curation and maintenance of a <u>Data Repository</u> that provides architecture data taxonomy and an exchange platform. Note: Optimized if developed in conjunction with partners and allied organizations.

How should practice models of compensation be evaluated, given the potential of AI to save considerable time automating tasks and analyzing data?

• Proposition: Develop <u>alternative compensation models</u> for outcome- and performance-based services instead of time-based.

How can architecture professionals leverage AI to advance progress on the strategic goals of climate action and advancing equity?

- How can architecture professionals evolve the value they bring to address the changing needs of society?
- Proposition: A <u>recalibrated definition of "Health, Safety, and Welfare"</u> to address the future of the architecture profession as the use of AI expands.

Design Working Group Resources

- Invited Guests and Firms:
 - o Phil Bernstein, FAIA, NOMA, LEED AP, Associate Dean and Professor Adjunct, School of Architecture, Yale University.
 - o Brooks + Scarpa.
 - o Daniel Bolojan, Assistant Professor, School of Architecture, Florida Atlantic University.
 - Simone Lapenta and Bob Frederick. RIOS.
 - o Terry Ona, General Counsel, The American Institute of Architects.
- Select Webinars, Knowledge Communities, Components:
 - o AIA Florida 2022 Strategic Council. Challenges, Changes and Relevance, Draft Summary Report. Nov. 2022.
 - o AIA Technology in Architectural Practice Knowledge Community
 - o Bernstein, Phil. Machine Intelligence, Design Practice: Dangers and Opportunities for the Profession. AIA Knowledge Leadership Assembly, 29 Aug. 2023. Webinar.
 - o Calisti, Lee (Moderator). Artificial Intelligence and the Small Firm. AIA SFxPA, 13 Jun. 2023, Webinar.
 - o del Campo, Matias. Artificial Intelligence & Architecture. AIA Detroit Technology in Architectural Practice Committee, Computational Design Detroit (co.de.D), 16 Feb. 2023. Webinar.

- o Ivey, David. Is Artificial Intelligence (AI) going to take my job? (Probably not). Chicago Technology in Architecture Practice Knowledge Community, 18 Apr. 2023. Webinar.
- o Leverett, Damon. Artificial Intelligence (AI) in Architecture. AIA Arizona, 1 Jun. 2023. Webinar.
- Lynch, Jack. Small Firms, Big AI: How Architects Can Leverage AI for Success. AIA DC Small Firm Exchange, 25 Sep. 2023. Webinar
- o Van Schendel, Jeronimo (Moderator). Panel Discussion: AI and the Future of Design in Architecture. IE University, 23 Feb. 2023. Webinar.

• Select Readings:

- o AIA (Commissioned by the AIA Manufacturers Council). *Technology, Culture, & the Future of the Architectural Firm.* Oct. 2021.
- o AIA. Technology Impacting Practice. May 2022.
- o Bernstein, Phil. *Machine Learning: Architecture in the Age of Artificial Intelligence*. RIBA Publishing, May 2022.
- o Leach, Neil. *Architecture in the Age of Artificial Intelligence: An Introduction to AI for Architects.* Bloomsbury Visual Arts, Dec. 2021.
- o National Artificial Intelligence Initiative Act, 15 U.S.C. § 9411 (2020). https://uscode.house.gov/view.xhtml?path=/prelim@title15/chapter119&edition=prelim
- o The Office of Science and Technology Policy. *Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People.* Oct. 2022. https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf
- o RIOS. AI-Generated Content Use Policy. 8 Sep. 2023.
- o Schwab, Klaus. The Fourth Industrial Revolution. Crown Currency, Jan. 2017.
- o Susskind, Richard, and Daniel Susskind. *The Future of the Professions: How Technology Will Transform the Work of Human Experts* (Updated ed.). OUP Oxford, Mar. 2022.

AI Software used included:

- o Bard.
- o Canva
- o ChatGPT
- o DALL-E
- o D-ID
- Discord
- MidJourney
- o Murf.ai
- Stable Diffusion

The Economy Group

The Economy group studied the topic *the Value of Architecture* with a focus on Member prosperity and Member engagement. They presented their findings to the council on October 11, 2023.

Links:

Final Presentation: Value of Architecture

Co-chairs:

- Sophia Sparklin, AIA
- Jason DeMarco, AIA

Active Members:

- Guilherme Almeida, AIA
- Neal Angrisano, AIA
- David Barkin, FAIA
- Brad Benjamin, AIA
- Josh Flowers, FAIA
- Verity Frizzell, FAIA
- Victor Han, AIA
- Ashley Hartshorn, AIA
- Rob Proctor, AIA
- Peter R. Wehner
- Curtis Wilson, AIA

The Value of Architecture exploration began with a 2022 Council Sprint. The work of this Sprint was to examine the value of the architect and the architectural creation process as it is perceived by the public, and by actual and potential clients.

In 2023 they re-engaged in the study:

- A 14-question survey was created and presented to project owners.
- The questions explored various aspects of the architect-client relationship and design process.
- A number of interviews were conducted with owners, consultants, and academics.

The survey consisted of several questions – these are some examples.

- At the inception of a design/construction project, who do you reach out to first for project parameters?
- How valuable is an architect to a successful project?
- Do you believe an architect has a <u>unique role</u> or is part of a broader team?
- How would you rate an architect's ability to reduce risk in a project?
- In general, do you believe an architect provides all the <u>services</u> needed for a successful project?
- How important is <u>diversity</u> to your architect's team?
- What is the primary factor you use in selecting an architect?
- In a brief statement, what was your <u>best experience</u> with the architect of your project(s)?
- In a brief statement, what was your worst experience with the architect of your project(s)?

Some initial conclusions included:

Communication (with client, contractor, regulatory agencies, public. Collaborate. Communicate)

As expected, communication, collaboration, and/or relationships were identified on the vast majority of survey respondents. The comments stressed the important role of the architect to support projects to communicate and collaborate with all participants, including clients, stakeholders, consultants, contractors, regulators, and the public to name a few.

Coordination (Project Management. Clash detection.)

The role of the architect as the leader of the design team was reinforced by comments regarding our role in coordinating the design team. Project management was referenced many times, and detailed coordination areas, such as use of the design digital model for clash detection came up. The importance was reinforced by multiple references to the complexity of building and systems and the need for experienced design leaders to coordinate the various experts.

Cost Management (cost estimating, first vs LOP costs, life-cycle cost analysis (LCCA))

Additional services (presumably used as a reference for request for additional fees), gaps in scope, and change orders were referred to by most respondents, and most references made were not positive examples. Another reference to costs in multiple responses was life cycle cost analysis (LCCA) and specifically the lack of emphasis by architects.

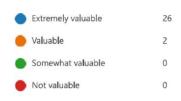
Risk Management (team player, ability to pivot, anticipate issues, offer options, change management, accurate documentation)

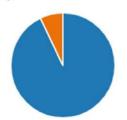
Many of the survey respondents view the architect's services through a risk management lens. The ability, or inability at times to anticipate future issues that will need to be addressed in later design phases or during construction was referenced multiple times. Many clients recognize that architects have the skills and experience to be forward thinking, although the level of consistency could be improved.

ECONOMY - Value of Architecture

SURVEY RESULTS

3. How valuable is an architect to a successful project?







ECONOMY - Value of Architecture

SURVEY RESULTS

4. (Optional) Please elaborate on the ways you feel an architect is or isn't valuable to a successful project.

<u>Valuable</u>

- Ensures Code Compliance
- Expert on Authorities Having Jurisdiction (AHJ)
- Third-Party expert
- · Translates client's objectives early on
- Good Communication
- · Leads the Design Consultants
- Educating Owners early on in their responsibilities
- Able to provide technical assistance
- Design within client's budget
- · Vision through design
- Continually looking for alternatives or solutions
- · Controlling cost by Design
- Building communities by design
- · Making lasting impressions through good design
- Experienced Architect

Not Valuable

- Owner focused on building life cycle architect
 conserved only up to occupancy.
- concerned only up to occupancy
- · Quality of drawings have been declining
- Not ready to deploy projects like an engineer, early on in career
- · Very few provide Life-Cycle Cost Analysis (LCCA)
- Only large firms seem to be conscious about sustainability and carbon reduction in their designs
- Architects most often are the cause for cost over-runs
- · Not as good in reducing costs as an engineer
- In-experienced Architect



Ongoing work

- We are continuing to analyze the breakout discussions from our October 11th presentation to Council.
- A final summary report is being prepared.
- We are advocating for more regular and ongoing interaction and dialog with owner groups.
- COAA is eager to continue collaborating with the AIA.
- Partially because of this work, the AIA-AGC Joint Committees is discussing how to include Owners within their work.

Key conclusions

- Clients want us in control of the process.
- Owners want to have this dialogue with us.

Recommended Actions

- More Robust Connections with Owner Organizations.
- Improved Advocacy for the Value of the Profession.
- Seek Additional Input.
- Develop Best Practices Recommendations through Knowledge Communities.
- Engage with Members to Improve the Consistency of Services.

The Wellbeing Group

The Wellbeing group conducted a year-long study *Architecture and Wellbeing* leveraging the significant existing published evidence regarding how architecture affects health and well-being. They presented it to the full council on October 26, 2023.

Links:

Final Presentation: Health and Wellbeing Presentation 1026 2023

Co-chairs:

- Bill Hercules, FAIA
- Rex Cabaniss, AIA

Active Members:

- Dave Davies, AIA
- Brett Dougherty, AIA
- Kimberly Dowdell, AIA
- Katherine Peele, FAIA
- Tony Rangel, AIA

Overview

The function of protecting and developing health must rank even above that of restoring health when it is impaired – Hippocrates.

Your zip code is a great predictor of your life span.

- "When it come to health, your zip code matters more than your genetic code." Dr Tony Iton.
- Scan this code to find your life expectancy based on your zip code.



Maybe Architects should be considered healthcare providers?

- They looked at the AIA Design and Health Group from way back:
 - o Andrew Dannenberg, MD, MPH Affiliate Professor, Dept of Environment and Occupational Health Sciences Department of Urban Design, University of Washington
 - Howard Frumkin, MD, DrPH, MPH, AB Senior VP, Trust for Public Land; Professor Emeritus at University of Washington
 - o Richard Jackson, MD, MPH, FAAP, ABPM Professor Emeritus, UCLA David Geffen School of Medicine

Rather than doing another study that tells us what we already know, we decided to aggregate data we already had, including reaching out to subject matter experts.

Experts that were consulted:

- Andrew Dannenberg, MD, MPH Affiliate Professor, Dept of Environment and Occupational Health Sciences Department of Urban Design, University of Washington
- Allen Weiss, MD Chief Medical Officer at Blue Zones Project, Medical practitioner and previous hospital system admin. Adjunct Assistant of Medicine, Mayo Clinic
- Ellen Taylor, PhD, AIA, MBA, EDAC Vice President for Research, The Center for Health Design, FGI
 Health Guidelines Committee, Board of AIA Academy of Architecture for Health, Editorial Advisory
 Board of HERD
- Fatima Cody Stanford, MD, MPH, MPA, MBA, FAAP, FAHA, FAMWA, FTOSMGH Weight Center, Massachusetts General Hospital
- Liz York, FAIA, Acting Director, Design Services and Support Centers for Disease Control and Prevention
- Mindy Fullilove, MD, Writer, Social Psychiatrist
- Ray Pentecost, FAIA, FACHA, LEED AP, Health Facilities Design Director, Center for Health Systems and Design, Professor of Practice, Texas A&M University School of Architecture

Questions that were asked:

- What development and building regulation adjustments are needed to further reduce health risks and aid in supporting healthy lifestyles?
 - o Provide development incentive for Environmental certifications like LEED or WELL
 - o Promote post-occupancy facility review metrics.
 - Advance research into building materials hazards to improve designers' knowledge and strengthen building regulation.
 - o Coordinate with state health departments to enhance building codes directly affecting health factors
- With the concept of co-locating healthcare and community services for a more integrated system of care in underserved communities, what is the most important issue that should be considered?
 - o Communication and outreach to market service offerings
 - o Data Gathering to understand the true needs of that community.
 - o Cost sharing or alternative funding sources for facilities
 - o Difficulty in the coordination of diverse service agencies.
- Based on existing available data, when projects begin with a "Health First" standard in mind, how would you prioritize (rank the order) of Physical, Social, and Mental Health?
 - o They rank them equally.
- What are the best methods architects can utilize to improve the environmental and social determinants of health?
- When integrating nature (i.e., urban greening/biophilic design/urban architecture) into built environment interventions, what aspects of health are impacted most?
- What effective current or historical strategies promote the value of health design choices?
 - Promote Physical Movement
 - o Full access to natural environments
 - Social Spaces
- Is designing for health an ethical imperative and, if so, how should the AIA Code of Ethics be adjusted to require the health effects to be considered?
 - All agreed Yes.

Where our Subject Matter Experts agree...

- · Physical Health should be the primary driver in a "heath first" design approach
- Designing for Health should be an ethical imperative for architects







Andrew Dannenberg, MD, MPH
Affiliate Professor, Dept of Environment and Occupational Health Sciences
Department of Urban Design, University of Washington



Ray Pentecost, FAIA, FACHA, LEED AP

Health Facilities Design Director, Center for Health Systems and Design, Professor of Practice, Texas A&M University School of Architecture



- · Design Impact: To improve health, we must better influence the built environment
- Integrate Public Health via Fitwel, WELL, or other criteria into architectural education
- · Likewise integrate design principles into Public Health education programs
- Coordinate Health Reviews into the Design Process, & post-occupancy assessments
- · Need clear metrics to better document & promote the benefits of healthy design
- · Transformed TAMU program from Design for Healthcare to Design for Health
- Ethics Issue: Architects must serve as Health Professionals
- · Leverage research as a value-added component of our profession
- Direct Correlation: Health research improves design <> Design impacts health
- Hippocrates: 'The function of protecting health and developing health must rank even above that of restoring it when it is impaired.'

Ellen Taylor, PhD, AIA, MBA, EDAC Vice President for Research, The Center for Health Design, FGI Health Guidelines Board of AIA Academy of Architecture for Health, Editorial Advisory Board of HERD



Allen Weiss, MD

Chief Medical Officer at Blue Zones Project Adjunct Assistant of Medicine, Mayo Clinic



- Correlate Scientific Method & Creative Method into architectural design
- Scientific Method: question > research > hypothesis > testing > testing > analysis > report
- Introduce Health-101 & Research-101 into architecture degree programs
- Partner with health fields to expand evidence-based input & deeper design solutions
- · Architects to see themselves as Public Health Workers & act accordingly
- Blue Zones: community-led, collective-impact program impacting health& wellbeing
- Lifestyle impacts on health, wellbeing, longevity, happiness, society, economy, etc.
- · Current healthcare model of 'repair shop' vs. proactive wellness programs
- · Design: social spaces, inviting stainways, daylighting, biophilia, bike/ped pathways
- · Built environment has more effect on your health than anything else

Liz York, FAIA

Acting Director, Design Services and Support Centers for Disease Control and Prevention



- Consulted on both Fitwel & WELL, addressing building design / health implications
- 950 certified projects globally as of 2021, about half in the U.S.
- Architects as Public Health Professionals applying principles, data, & evidence
- Produce AIA Guide on utilizing Public Health Data & Designing Healthy Buildings
- · Coordinate research outreach to AMA, APHA, CDC, NSF, OSHA, ULI

Recommendations

- Messaging
 - o Promote theme of Architects as Public Health Professionals
 - o Include Design for Wellbeing in AIA Awards Program
 - o Include Research for Wellbeing in AIA Awards Program
 - o Consider adjusting Health, Safety, & Welfare to Health, Safety, & Wellbeing
 - o Add imperative: Design for Wellbeing within The AIA Code of Ethics
- Education
 - o Promote Public Heath in all architecture degree programs.
 - o Promote Research Methods in all architecture degree programs.
 - o Promote Design Principles in all Public Health programs.
 - o Produce AIA Guide on Public Health Data Research
 - o Produce AIA Guide on Designing Healthy Buildings (OR expand on existing guide)
 - o https://www.aia.org/showcases/6082617-design-for-well-being
- Outreach to related organizations
 - o AMA American Medical Association
 - APHA American Public Health Association
 - CDC Centers for Disease Control
 - o NSF National Science Foundation
 - o OSHA Occupational Safety & Health Administration
 - ULI Urban Land Institute

Wellbeing Next Steps

- Health overlay on all topics for 2024
- Overarching question: How might we "Design for Life"?
- Outreach to U.S. Mayors regarding life expectancy disparities.
- Advocacy for the introduction of chief Architect for municipalities.
- Overarching message: Architects protect the health, safety, and welfare of the public and must be involved in civic decision making.
- AIA Communications team to develop 2024 health messaging strategy.

Additional Efforts

Knowledge Leadership Assembly (KLA)

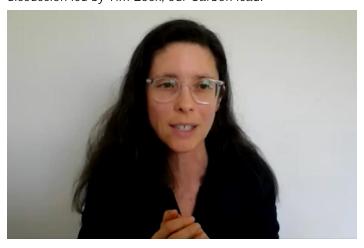
We are also excited about our work with KLA this year. Strategic Councilors in both the Design and Carbon groups worked with AIA staff to develop the programming for day 1 of the KLA conference creating new connections and alignment between Knowledge Communities.

The first portion was on AI and Phil Bernstein from Yale School of Architecture presented a Keynote on How AI affects Process, Relationships and Results, followed by discussion guided by Karen Lu, our Design Lead.

CONCLUSION >> THE PHILOSOPHER ARTHUR I. WILLER DEFINES CREATIVITY AS 'THE PRODUCTION OF NEW KNOWLEDGE FROM ALREADY EXISTING KNOWLEDGE AND ... ACCOMPLISHED BY PROBLEM SOLVING'.' IN THAT SINGLE SENTENCE, HE CAPTURES THE ESSENCE OF THE CHALLENGE FOR ARCHITECTS AS ARTIFICIAL INTELLIGENCE TECHNOLOGIES MATURE. <<

- 1. Guide the definition and creation of technologies that will frame future practice.
- 2. Expand the remit of design to include explicit performance.
- Create the data infrastructure that can serve as platforms for design.
- 4. Change the relationship between design, construction, and asset operation.
- 5. Shift the value propositions of design.

In the second portion, Heather Clark, the Director for Building Emissions for the White House Office of Domestic Climate Policy, presented a keynote on White House goals for zero emissions followed by a discussion led by Tim Lock, our Carbon lead.



National Definition of a Zero Emissions Building

The White House

Via the Carbon group, we made contact with Heather Clark, Director for Building Emissions for the White House Office of Domestic Climate Policy. Through our discussions we learned that her groups were working to create a definition of zero-emissions and were looking to partner with other organizations. She was looking for assistance.

We suggested that we set up a meeting at Greenbuild as it was to be held in Washington D.C. in September, and most people motivated on this topic would be in attendance. We worked together to get this scheduled and we introduced many like-minded organizations to get them included in the effort. On September 28th at an invite only working group session the definition was released and a discussion was held. Invitees of supporting organizations included the AIA, USGBC, ILFI, Passive Haus, and many others. The White House hosted this meeting along with participation from DOE and EPA.

And on the keynote stage on the same day Ali Zaidi, the new White House National Climate Advisor cited AIA's leadership by name and the expertise of 100K architects as key to success in mobilizing impact in achieving zero emissions.

On the following day, a smaller group was invited to a meeting at the White House where we discussed the definition and provided feedback to Heather's team.

- The White House was looking for two things:
 - o Support for the standard: The presser AIA Commends the Biden-Harris Administration on Zero Emission Goals for the Building Industry was released on September 29th.
 - Feedback and critique: We convened our groups and provided feedback on the standard in late
 October.
- The standard is basically creating a net-zero definition through EPA Portfolio Manager, and it will be released, along with guidance to meet the new definition. The larger goals are basically:
 - o Reduce emissions by 50% by 2030.
 - o Net zero by 2050
 - o 100% clean energy by 2035 (zero emissions)
- Here is the Definition as currently written:
 - o A zero-emissions building is one that has been verified to be:
 - Highly energy efficient,
 - Free of on-site emissions from energy use, and
 - Powered solely from renewable energy sources (directly or through market mechanisms).
- How do we pay for this?
 - o There are Billions of dollars in zero-energy code funding coming out.
 - IRA
 - 40% of IRA heads to underserved communities.
 - These are funding sources via IRA.
 - States to adopt recent standards this is zero code.
 - HUD's green retrofit programming.
 - Home energy rebates (\$8.8 billion)
 - 25C and 25D tax credits.
 - 179D tax deduction

We are continuing to work with the White house on this important effort.