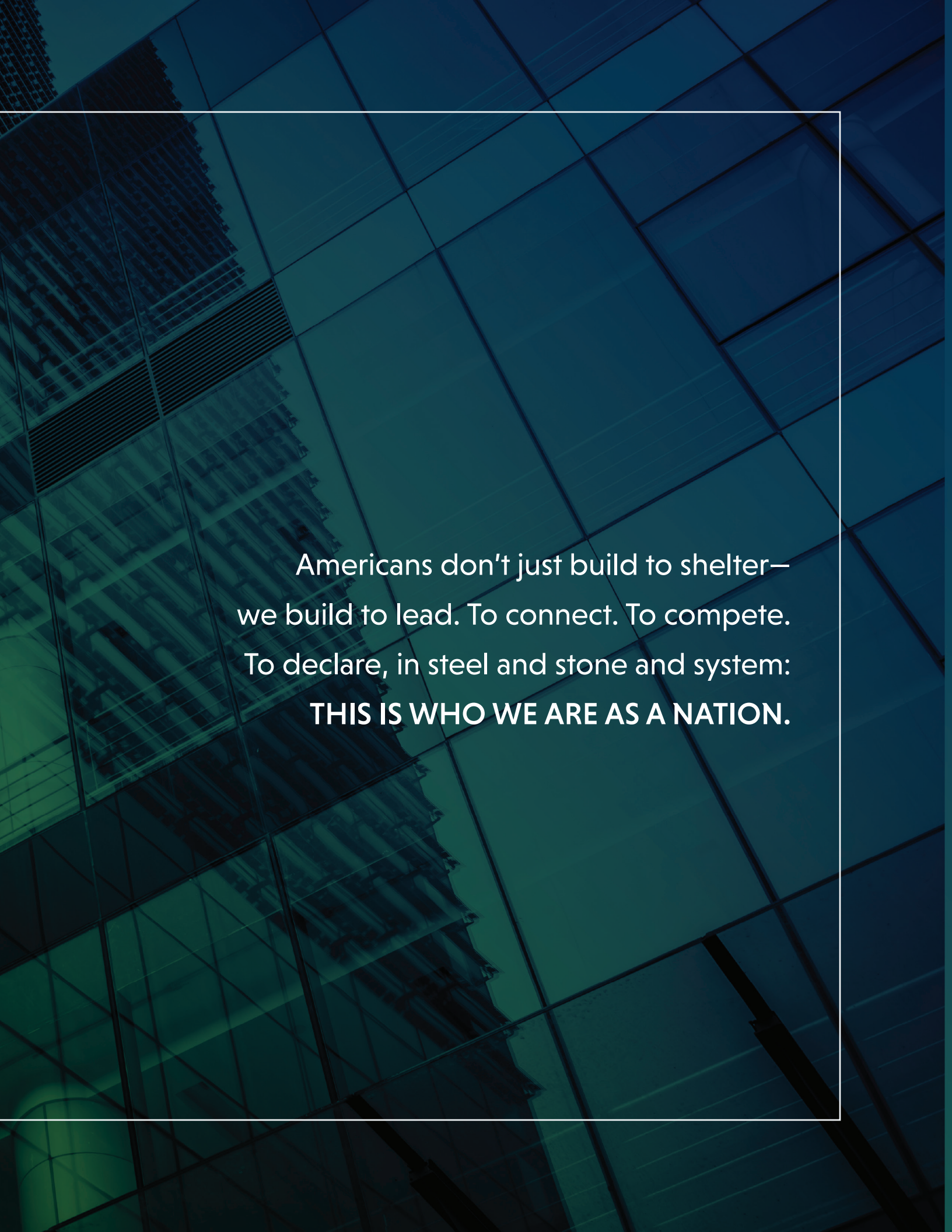


Building Innovation is American Innovation



2024 **ANNUAL REPORT**
to the President of the United States





Americans don't just build to shelter—
we build to lead. To connect. To compete.
To declare, in steel and stone and system:
THIS IS WHO WE ARE AS A NATION.



Dear Mr. President,

The National Institute of Building Sciences (NIBS) is honored to submit this Annual Report to the President of the United States reflecting our work in our golden anniversary year and the strategic priorities launching our next 50 years of service.

Congress established NIBS through the Housing and Community Development Act of 1974 (Public Law 93-383), as the authoritative source of findings and recommendations in the public interest for the built environment. We serve as a bridge between the public and private sectors of the economy across all facets of the built environment.

Our mission brings together federal, state, and local agencies, industry leaders, academia, and subject matter experts to advance building innovation and address our nation's pressing challenges through building science and technology. This past milestone year marked an inflection point as we renewed our dedication to our public interest mandate and boldly reimagined ourselves with greater ambition and alignment. Our work is led by a robust board and dedicated staff. We also have seven technical councils supported by partners and volunteers:

- The Building Enclosure Technology and Environment Council (BETEC) accelerates adoption of advances in building envelope performance and energy efficiency.
- The Building Seismic Safety Council continues to steward the NEHRP Recommended Seismic Provisions, strengthening seismic safety, resilience, and continuity of operations in new and existing construction.
- The Consultative Council convenes executives and thought leaders across the nation to serve as the nation's advisory panel for the built environment.
- The Digital Technology Council advances digital transformation and augmentation for the architecture, engineering, construction, and operations (AECO) professions and communities.
- The Facility Management and Operations Council improves facility quality, efficiency, and performance through enhanced operations, maintenance, and asset management.
- The Off-Site Construction Council promotes research and education on innovative off-site and modular building practices.
- The Multi-Hazard Mitigation Council supports policies and strategies to improve community resilience and disaster preparedness and response.

Together, we work to advance America's built environment and create communities that reflect the highest standards of safety, performance, and innovation.

In 2024, we expanded this impact through two initiatives. First, we established the Lifeline Infrastructure Hub—a public-private partnership to address and further remedies and interventions that will solve for the needs of our aging infrastructure while also streamlining the collection, dissemination, and adoption of leading practices and advancements. Recent catastrophic events, including wildfires in California and floods in North Carolina, underscore how fragile and essential our infrastructure lifelines—communications, electricity, transportation, water, and fuel—truly are. This hub represents a bold step forward in creating and coordinating the modern foundations and transformative innovations that support high performing and resilient infrastructure at the national, state, and local levels.

Second, we launched our renewed focus on emerging technologies beginning with a focus on digital twin technologies. These innovations are redefining how we design, build, and manage infrastructure, enabling real-time simulation, asset management, and decision-making to reduce risks and improve performance—from individual buildings to entire lifeline systems.

As we launch forward into our next 50 years, we are committed to:

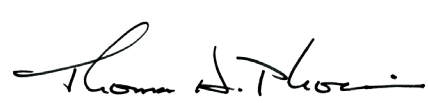

- Expanding our impact across our nation's lifeline infrastructure while applying the same ambitions and rigor that allowed NIBS to be a force across all building asset types and uses.
- Leading and partnering across all sectors and segments across our nation and our economy to forward positive actions that address the urgent issues related to our built environment that have or threaten to rise to the level of national security.
- Accelerating and supporting the streamlined adoption of emerging technologies and applied advances in research that improve public safety and resilience.

Mr. President, the trust placed in us by Congress 50 years ago remains our guiding azimuth. NIBS accepts our mission with resolve and clarity. We believe building innovation is the foundation of American innovation and American innovation continues to be the center of our national strength, safety, and growth.

Sincerely,



George Guszcza
President & CEO
National Institute of Building Sciences



Thomas H. Phoenix, Sr.
Chair
National Institute of Building Sciences

Building Innovation Is American Innovation



Innovation in the built environment isn't just about buildings—it's about prosperity, preparedness, and progress. From energy-efficient schools to disaster-resilient hospitals and digitally integrated infrastructure, what we build determines how America lives, works, competes, and recovers. The built environment is the physical platform for American innovation—and the National Institute of Building Sciences is the strategic force accelerating its advancement.

What You'll Discover in This Report

- Breakthroughs in resilience, sustainability, and workforce advancement led by NIBS councils.
- New partnerships translating research into real-world standards and practices.
- NIBS-led convenings that drove national conversations and industry-wide consensus.
- Tangible economic benefits from high-performance buildings and hazard mitigation efforts.

The NIBS Impact: Why It Matters

NIBS is where innovation meets implementation. As a trusted convener and national accelerator, we bridge the gap between research and real-world results. Our work saves lives, strengthens communities, and multiplies return on public and private investment. If it affects the health, safety, efficiency, or resilience of the built environment—NIBS is involved.

Contents

Executive Overview

Advancing Building Science. Strengthening America.....	2
2024 Key Performance Highlights	4

Our Impact

Advancing Innovation That Serves the Public Good	9
The NIBS Innovation Cycle	9
50 Years of Service to the U.S. Built Environment	10
Our Enabling Legislation	12
Our Legislative Agenda	13
Mission in Action	14
Success Stories.....	16
Key Initiatives	18
Events	23

The Next 50 Years

A Stronger America—Built by Design	28
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A Bridge to Industry

Board of Directors	36
Strategic Plan	38
Supporting Organizations	39
Awards & Recognition.....	40

Financials

A Strategic Investment in American Innovation.....	44
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Appendices

2025 Moving Forward Report	48
50 Years of Service to the U.S. Built Environment	50
Volunteer Councils.....	54



Executive Overview

Leading with purpose, NIBS drives innovation from research to real-world resilience, performance, and national prosperity.



Advancing Building Science. Strengthening America.

The National Institute of Building Sciences (NIBS) is an independent 501(c)(3) nonprofit, non-governmental organization uniquely chartered by the United States Congress to serve the public interest by advancing building science and innovation across the American built environment. Established through the United States Housing and Community Development Act of 1974, NIBS was created to be a trusted national resource—bridging the gap between research and practice, standards and policy, resilience and real-world impact. It exists for all who plan, design, construct, own, operate, regulate, and rely upon buildings and infrastructure—from federal agencies to local governments, from engineers and architects to everyday citizens who live, learn, heal, and work in the places shaped by those decisions. For 50 years, NIBS has stood as America’s only congressionally mandated, science-based institution with a mission to accelerate innovation across the entire building lifecycle.



That mission was born of necessity. In the early 1970s, policymakers, engineers, and civic leaders recognized that fragmented building codes, outdated standards, and slow technology adoption were undermining public safety, increasing costs, and stifling progress. Congressional leaders—advised by the National Academies and a diverse coalition of building professionals—envisioned a new kind of institution: one grounded in technical excellence, independent of politics, and capable of uniting the entire building community around standards that protect the public, reduce risk, and unlock innovation. From that vision, NIBS emerged—not as a regulator or special interest, but as a force for national coordination. Over the decades, NIBS has helped shape everything from seismic codes to energy standards, from digital infrastructure to resilience strategies—transforming scientific breakthroughs into real-world improvements that have saved lives, reduced costs, and advanced American competitiveness.

Today, NIBS continues to play an essential role at a pivotal moment in our nation’s future. America’s built environment—its schools, hospitals, factories, roads, power grids, and homes—faces urgent challenges: aging infrastructure, natural hazards, workforce shortages, and technological disruption. Yet within these challenges lies extraordinary opportunity. Building innovation is no longer just a construction concern—it is the foundation of American innovation itself. Every breakthrough in energy, defense, health, logistics, and digital technology depends on a physical platform that is strong, adaptable, and future-ready. NIBS serves as the catalyst that brings those platforms into being—translating research into standards, convening diverse stakeholders into consensus, and ensuring that investments in innovation deliver measurable, lasting value for the public.





In a divided and distracted world, NIBS remains a unifying force: technically rigorous, purpose-driven, and proudly nonpartisan. It helps policymakers make smarter decisions with better data. It empowers the building industry to lead with confidence. It ensures that taxpayer dollars spent on infrastructure generate returns in resilience, safety, and economic growth. And above all, it delivers results that every American can see and feel—in the buildings that shelter our families, the systems that keep our communities running, and the future we’re building together. For those who believe America should lead the world not only in ideas, but in how we bring them to life—NIBS is the institution making that leadership real.

2024 Key Performance Highlights

In 2024, the National Institute of Building Sciences celebrated its 50th anniversary with remarkable impact across the built environment. Facing intensifying challenges from natural hazard adaptation, aging infrastructure, and workforce shortages, NIBS delivered innovative solutions through initiatives like the Lifeline Infrastructure Hub and Digital Twin technology integration. Our strategic partnerships with federal agencies, private industry, and academia helped shape legislation, develop critical standards, and strengthen community resilience nationwide. These highlights showcase how NIBS continues to fulfill its congressional mandate to advance building science and technology for the benefit of all Americans.



Resilience and Mitigation Achievements

- Supported the successful passage of the National Earthquake Hazards Reduction Program (NEHRP) reauthorization bill through the U.S. Senate
- Launched the Lifeline Infrastructure Hub, a public-private partnership focused on community resilience and disaster recovery
- Established the Lifeline Advisory Panel, bringing together 35+ organizations from government, private sector, and academia
- Provided critical input for the Earthquake Resilience Act (HR 9375), supporting lifeline infrastructure resilience guidelines



Building Technology Advancements

- Published version 4 of the National BIM Standard – United States (NBIMS-US™) with new modules for project requirements, BIM use definitions, and execution planning
- Released a groundbreaking position paper on integrating building information modeling (BIM) with digital twin technology
- Launched the Building Innovation: Emerging Technologies Series featuring Digital Twins 2024
- Began development of United States National CAD Standard® (NCS) version 7
- Supported GSA's efforts to make the federal building portfolio more efficient and cost effective



Workforce Development Initiatives

- Created Elevate 2025, addressing the workforce crisis in America's built environment
- Highlighted the role of women in solving the labor shortage through the Women Executives in Building Symposium
- Established an action plan to increase participation across the built environment workforce
- Launched public/private collaboration to improve project management within the Federal Built Environment



Strategic Partnerships and Collaborations

- Continued multi-year partnerships with buildingSMART USA and buildingSMART International
- Collaborated with Federal Highway Administration to create a central BIM transportation library
- Assisted Naval Facilities Engineering Systems Command (NAVFAC) in exploring AI applications for DoD criteria
- Partnered with Millennium Challenge Corporation to produce reports on resilience and building design
- Conducted post-occupancy evaluations (POEs) on six GSA-owned buildings to improve federal building stock



Major Events and Milestones

- Celebrated 50th anniversary at Building Innovation 2024 conference
- Hosted BEST6 conference, convening 300+ building enclosure professionals from around the world. Followed the successful event with a quarterly webinar series to continue momentum
- Held a inaugural Emerging Technology Series event, showcasing Digital Twins and advanced building technology applications
- Coordinated a Congressional briefing on NEHRP and NWIRP to highlight lifeline infrastructure priorities



Infrastructure Modernization

- Began major overhaul of the Whole Building Design Guide, which served 2 million annual visitors
- Advanced ProjNet.org™ Version 2 modernization and cloud migration (anticipated completion 2026)
- Developed strategies to help GSA minimize carbon expenditures in federal buildings



Our Impact

NIBS turns building science into results—improving lives, strengthening communities, and advancing America's competitive edge.





Advancing Innovation That Serves the Public Good

Our mission is simple but profound: To accelerate the transfer of innovation into built environment practice for the benefit of every American. From building codes and industry standards to workforce strategies and resilience planning, NIBS ensures that innovation is not siloed in labs or papers—but built into the foundations of daily life. In recent years:

Our resilience studies have demonstrated 11:1 return on hazard mitigation investment.

NIBS forums have aligned federal, academic, and industry leaders on digital twin adoption.

Our workforce initiatives have elevated underrepresented talent pipelines into critical AEC roles.

The NIBS Innovation Cycle

NIBS INFORMS

Setting the Foundation for Standards

We collect, synthesize, and publish the evidence base for high-performance building solutions—providing the data and insights that standards development organizations use to define what “best practice” truly means.

NIBS GUIDES

Accelerating Industry Adoption

We provide authoritative guidance, convene expert councils, and run national programs that help the design and construction industry implement advanced methods—faster, smarter, and at scale.

NIBS DELIVERS

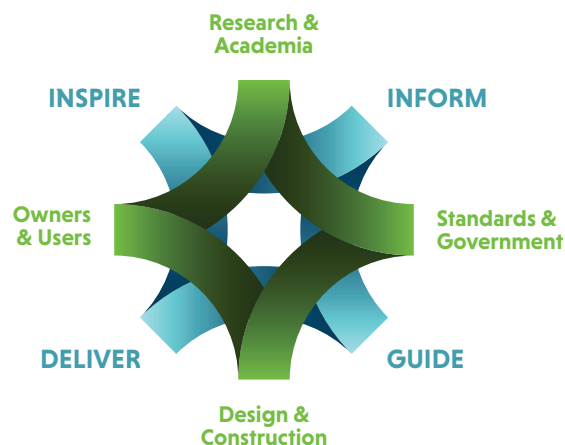
Turning Innovation into Everyday Impact

We work with building owners, local governments, and code officials to ensure that the benefits of innovation—safety, efficiency, durability, affordability—are realized in buildings across the country.

NIBS INSPIRES

Advancing the Frontiers of Discovery

Through collaboration with universities, national labs, and research centers, we chart the next frontier of building science—and ensure that it moves beyond academic theory into practical application.



50 Years of Service to the U.S. Built Environment



President Lyndon Johnson launches a 'War on Poverty,' forming the National Commission on Urban Problems. The goal: research housing and building development in the U.S., including model codes, standards, zoning, and taxes. The need for a national resource is identified.



Laying the Foundation for National Standards

In its founding decade, NIBS began aligning federal building criteria and catalyzing national resilience efforts. It supported NAVFAC and HUD, launched task forces on insulation and seismic safety, and helped create the Building Seismic Safety Council. NIBS' early work informed the 1977 Earthquake Hazards Reduction Act, marking its emergence as a critical intermediary between federal innovation, building code development, and public safety.

Codifying Innovation and Building Interoperability

NIBS solidified its role as the country's standards integrator in the 1990s. It launched the Construction Metrication Council and developed guidance on lead hazards, seismic rehab, and earthquake loss modeling. NIBS supported the first International Building Code with seismic requirements, released the National CAD Standard®, and helped develop ProjNet. These tools advanced national code consistency, digital design integration, and disaster mitigation, making NIBS a central driver of modernization in building systems.

1967

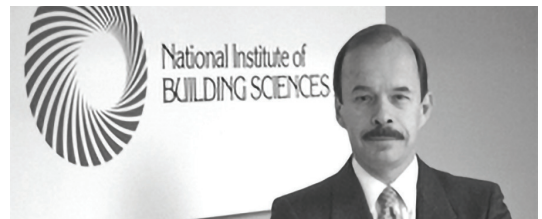
1974



NIBS is created by the United States Congress in the Housing and Community Development Act, Public Law 93-383. Among our charges: to serve the public interest as a national source to make findings and advise the public and private sectors regarding the use of building science and technology and support federal agencies having responsibility for buildings or construction through technical research funded by request authorizations and appropriations for grants.

1970s

1980s



Expanding Scientific Leadership and Public Trust

The 1980s saw NIBS deepen its technical leadership across housing, energy, and safety. It advised multiple federal agencies, led national conversations on asbestos and lead paint hazards, and launched the Construction Criteria Base—the first digital library of federal building guidance. With new studies on fire toxicity, seismic safety, and rehabilitation, NIBS transformed data into actionable standards, helping federal, state, and local leaders better protect health, reduce costs, and manage risk.

1990s



Scaling Resilience, Energy Efficiency, and BIM Standards

NIBS accelerated its work on resilience, digital transformation, and federal collaboration. It expanded FEMA partnerships, launched the Building Research Information Knowledgebase, and developed BIM guidelines for owners and infrastructure. Major reports on zero-energy buildings, high-performance schools, and sports venues demonstrated NIBS' ability to scale science-backed innovation across sectors. Its updated NEHRP seismic provisions and workforce development guidelines became national reference points for safety, sustainability, and performance.

2000s



Digital Tools, Whole Building Thinking, and National Resilience

This decade marked the debut of transformative NIBS platforms. The Whole Building Design Guide became the sole design portal for federal agencies. NIBS launched national BIM and COBie standards, created the Building Enclosure Councils, and contributed to post-9/11 building safety reforms. Early editions of the landmark Natural Hazard Mitigation Saves report laid the groundwork for policies proving that every dollar in mitigation returns many more in avoided losses and stronger communities.

2010s

2020s

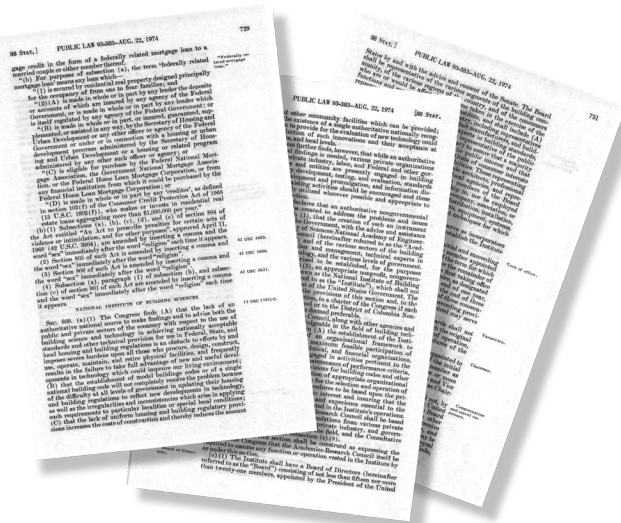


Infrastructure Innovation and Digital Transformation Leadership

In the current decade, NIBS continues to lead on resilience, equity, and future-ready infrastructure. It launched national initiatives on industrialized housing, digital twins, and incentive-based resilience funding. The Lifeline Infrastructure Hub and NBIMS v4 position NIBS as the definitive voice on interoperable standards and post-disaster recovery. Through HUD partnerships, CFIRE leadership, and cutting-edge BIM advancement, NIBS is not just responding to the moment—we are shaping the built environment of tomorrow.

Our Enabling Legislation

Congress established the National Institute of Building Sciences (NIBS) through the Housing and Community Development Act of 1974 to serve as an authoritative national source for building science and technology. The legislation recognized that the lack of uniform building standards and regulations increased construction costs and hindered the adoption of new technologies.



As an independent, non-governmental organization, NIBS was designed to bridge the gap between government and industry. The legislation mandated a Board of Directors appointed by the President and confirmed by the Senate, representing various segments of the building community including construction, labor, product manufacturers, builders, and public interest representatives.

The law outlined four key functions for NIBS: developing performance criteria and standards for building regulations; evaluating new building technologies; conducting necessary investigations; and disseminating technical information. Congress specifically authorized NIBS to accept contracts and grants from government agencies and private organizations, establish fees for services, and maintain financial self-sustainability through these means after initial government funding.

The legislation emphasized NIBS's unique role in encouraging cooperation between public and private sectors, promoting the acceptance of technical findings, and working with state and local governments to improve building regulations. This mandate positions NIBS as the authoritative voice for building science and technology in the United States.



See the full text of our enabling legislation at <https://nibs.org/enablinglegislation>

Our Legislative Agenda

Through collaboration with policymakers and industry leaders, we advocate for science-backed solutions that protect our communities, address workforce shortages, and accelerate the adoption of transformative technologies. The following priorities guide our legislative outreach and policy recommendations:



Safeguarding lifeline infrastructure and accelerating functional recovery.

Natural and manmade disasters, from storm events to wildfires, have become more frequent and devastating. Safeguarding lifeline services and accelerating functional recovery of impacted lifeline infrastructure is critical. These systems include water, wastewater, electricity, natural gas, liquid fuels, communications, and transportation like highways, roads, rails, airports, ports, and harbors. Investments must be made to ensure these lifelines continue to operate through and post-disaster.



Addressing the workforce crisis.

Over the last decade, the U.S. has reached a crisis point with ensuring a “full pipeline” of skilled workers is available to meet of our rapidly and dynamically expanding built environment. America does not have enough people to build and maintain our bridges, hospitals, data centers, utilities, and other critical infrastructure, making the workforce shortage more than just an industry challenge but rather a national security issue.



Streamlining the adoption of emerging technology.

The U.S. construction sector is valued at approximately \$2.3 trillion but it faces increased material costs, labor shortages, and operational efficiency challenges. Streamlined adoption of emerging technology can help alleviate these strains and improve output. For example, modular construction, which involves building components at an offsite manufacturing facility and assembling these components on-site, has proven to shorten construction schedules and improve building performance. Yet, modular construction remains less than 6% of the commercial construction market in the United States and Canada.



Mission in Action



Resilience and Mitigation

NIBS made significant strides in advancing infrastructure resilience and natural hazard mitigation throughout 2024. The organization played a pivotal role in supporting the National Earthquake Hazards Reduction Program (NEHRP) reauthorization bill.



In March 2024, NIBS collaborated with the House Committee on Science, Space, and Technology to host a Congressional briefing on NEHRP and the National Windstorm Impact Reduction Program (NWIRP), emphasizing the critical importance of lifeline infrastructure protection. This effort laid the groundwork for the spring launch of the Lifeline Infrastructure Hub, a groundbreaking public-private partnership focused on community resilience and disaster recovery.

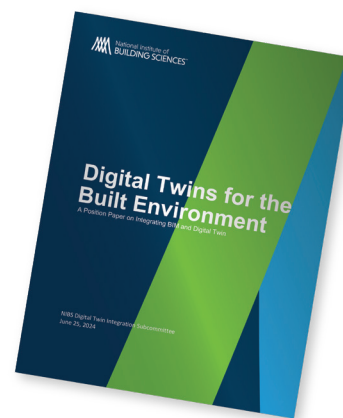
The Hub's Lifeline Advisory Panel quickly emerged as a powerful coalition, bringing together more than 35 organizations including The White House, Congress, federal agencies, lifeline companies, engineering experts, business leaders, and academia. The panel's influence expanded through high-profile presentations, including the Building Industry Association of Southern California's Future Housing & Sustainability Conference in August and a briefing to the National Infrastructure Advisory Council in the fall.

Building Technology

NIBS made significant advances in digital building technology throughout 2024, highlighted by several key milestones. In June, the Digital Technology Council's Digital Twin Integration Subcommittee released a groundbreaking position paper that outlined the transformative potential of integrating building information modeling (BIM) with digital twin technology. This integration promises to revolutionize the architecture, engineering, construction, and operations (AECO) industry by enhancing sustainability, operational performance, and collaboration.

Building on this momentum, NIBS published version 4 of the National BIM Standard – United States (NBIMS-US™). This updated standard introduced crucial new modules covering Project BIM Requirements, BIM Use Definitions, BIM Execution Planning, and the Construction to Operations Building Information Exchange (COBie), establishing a comprehensive digital format for project information handover.

The year culminated with the launch of the Building Innovation: Emerging Technologies Series conference, featuring Digital Twins 2024. This inaugural event showcased how digital twin technology is transforming project and lifecycle asset management, from enhancing resilience and recovery efforts to providing architects, engineers, and contractors with advanced collaborative platforms for design visualization and conflict resolution.



Industry Development



In 2024, NIBS tackled two critical industry challenges: standards development and workforce shortages. Serving as the Administrating Organization of the U.S. Celebration of World Standards Day on November 14, NIBS played a central role in recognizing the vital contributions of the standards and conformity assessment community. This annual celebration, co-chaired by the American National Standards Institute and National Institute of Standards and Technology, brought together key representatives from across the standards community.

Success Stories

Throughout 2024, while marking its 50th anniversary, the National Institute of Building Sciences advanced its mission through transformative projects, expanded stakeholder partnerships, and groundbreaking technical initiatives. Our work was strengthened by the collective expertise of our esteemed Board of Directors, members, volunteers, and councils who continued to shape standards, develop critical resources, and drive innovation across the built environment. This milestone year demonstrated both our legacy of service and our ongoing commitment to addressing the nation's most pressing building challenges.



Federal Highway Administration

NIBS is working with the Federal Highway Administration to create a central BIM transportation library. This library would allow for state departments of transportation to collaborate on common information they could share and use. The library also would help the DOTs avoid duplications, make things more efficient, get lessons learned, and facilitate their move to using BIM for asset management.

Naval Facilities Engineering Systems Command

NIBS began support of the Naval Facilities Engineering Systems Command (NAVFAC) and U.S. Department of Defense to update federal facility criteria, starting in the 1970s. The contract: provide multi-discipline architect-engineer services in support of DoD criteria management throughout the NAVFAC area of responsibility and worldwide. Today, NIBS is assisting NAVFAC with closely looking at how artificial intelligence (AI) would apply to content like DoD criteria housed on the NIBS Whole Building Design Guide. NAVFAC is looking at synergies related to big data sets, large language models, and AI to achieve things like net zero goals and energy independence.



U.S. Department of Defense

Working with the Corps of Engineers and other Federal partners, NIBS continued work on the ProjNet.org™ Version 2 modernization effort and migration of ProjNet.org™ to the Microsoft Azure Government cloud as a FedRAMP moderate certified application. ProjNet Version 2 is nearing completion and anticipated to be available in 2026. The NIBS Board of Directors approved the modernization of ProjNet as a strategic initiative in September 2023.

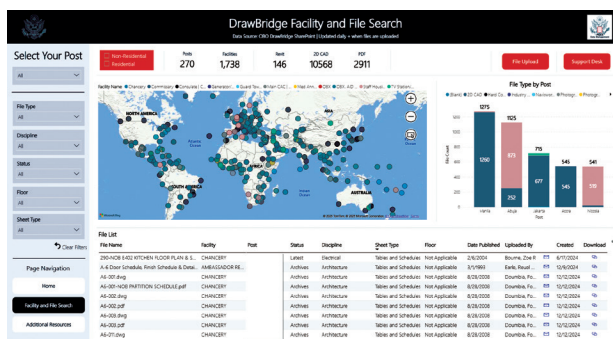
FedBIM

BIM underlies the movement to digital twins and artificial intelligence. NIBS routinely hosts a BIM focus group called FedBIM where a consistent group of federal agencies share lessons learned, opportunities, and challenges. While digital twins and AI are part of these conversations, without a foundation in BIM, organizations are hitting roadblocks in attempting to deploy AI for infrastructure management.

U.S. Department of State: Bureau of Overseas Buildings Operations (OBO)

DOS OBO

The NIBS Digital Technology Team enabled OBO in achieving a major milestone. The first large scale import of facility asset data directly from a new facility project saved thousands of labor hours for the bureau and expedited move in timelines. This marks the first of hundreds of facilities that will benefit from the multi-year stewardship by NIBS of OBO's BIM Program.



buildingSMART USA and buildingSMART International



NIBS continued with our multi-year memorandums of understanding (MOU) with buildingSMART USA (bSUSA) and buildingSMART International (bSI) to support the use of open standards and help improve efficiency in the construction industry. The MOUs cover three-year agreements that were signed in June 2023. The goal: To advise and educate groups on the benefits of adopting open data and national standards.

BEST6

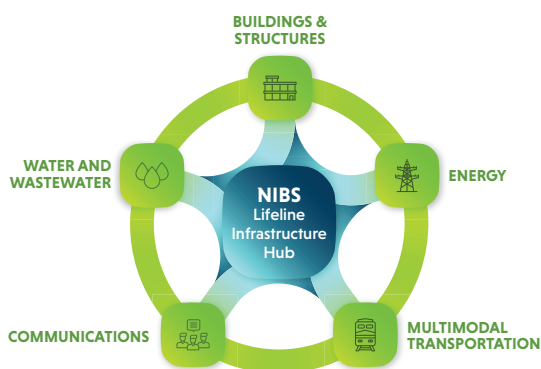
In March 2024, NIBS gathered more than 200 global experts at the BEST6 Conference in Austin to explore the future of building enclosure technology. From AI-driven diagnostics and drone inspections to advanced moisture and temperature monitoring, the event showcased cutting-edge innovations designed to improve building performance and resilience in the face of extreme conditions.

These efforts reflect NIBS' commitment to advancing science into practice—ensuring that the next generation of buildings is not only smarter and stronger, but capable of meeting the urgent demands of our changing world.



Key Initiatives

Protecting the Nation's Critical Lifelines



The Lifeline Infrastructure Hub is a public-private partnership to assist communities with resilience and functional recovery after natural disasters. The hub aims to protect and support essential lifelines, including communications, fuel, water and wastewater, power and electricity, and multi-modal transportation—highways and roads, rail, airports, ports and harbors.

Today, there's an urgent need to improve aging and unreliable lifeline systems. Particularly as disasters grow more frequent and destructive, lifeline services are critical to protect our communities and essential for disaster recovery.

Partnerships with government, the private sector, and various stakeholders to advance this effort are crucial for our safety and security.

Providing leadership and guidance to this endeavor is the Lifeline Advisory Panel (LAP). The LAP is comprised of representatives from four key stakeholder groups, including industry professionals, technical experts, public policy professionals, and stakeholders. Its role is crucial with informing the direction of Lifeline Hub by advancing objectives involving policy development, expanding advocacy, and highlighting the importance of lifeline infrastructure in disaster resilience.

In 2025, LAP priorities include organizing a lifeline workshop, possibly combined with a White House summit on lifeline resilience, and a lifeline webinar series.

Serving the Public Interest Through Mitigation Grant Assistance

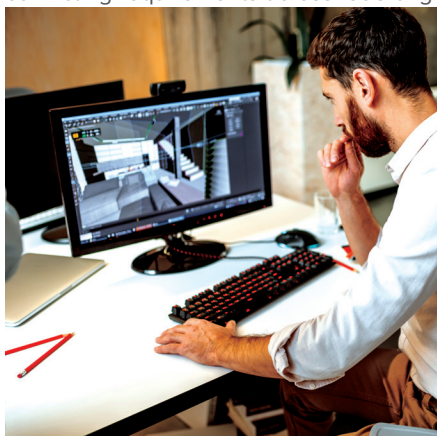
TurboGrants™ is a resilience one-stop shop that leverages technology to simplify the grant identification process, matches applicants with resources that fit their needs, and provides enhanced technical assistance. It's intended for anyone interested in applying for mitigation grants and funding. This may include state, local, tribal, and territorial (SLTT) governments, private nonprofits, businesses, academia, and individual homeowners.

TurboGrants™ objectives include matching SLTTs with funding opportunities across all hazards and grants available across federal agencies, supporting Justice 40, Community Disaster Resilience Zones and other equity initiatives, and simplifying and integrating with existing mitigation tools. The initiative also aims to build capacity, training, and 24/7 technical support.



The need for TurboGrants™ first was identified through a national survey by the NIBS Multi-Hazard Mitigation Council (MMC) in 2021.

MMC asked more than 400 emergency managers, state agency representatives, and other stakeholders about the difficulties they encounter when searching for federal funding resources. Respondents identified the following top challenges: They don't know where to begin; there are too many places to search; they have limited time and trained staff; they have trouble navigating technical challenges, such as meeting benefit-cost analysis requirements; and there are conflicting requirements across federal grants.



The Next Version of the U.S. National CAD Standard®

NIBS is readying for publication the United States National CAD Standard® (NCS) version 7.

For decades, NIBS has been on the forefront of innovation, transformative building technology, and standards.

The NCS effort began with a memorandum of understanding between NIBS, the Construction Specifications Institute, American Institute of Architects, Sheet Metal and Air Conditioning Contractors' National Association, United States Army Corps of Engineers, U.S. Coast Guard, and

General Services Administration.

Today, NCS coordinates the efforts of the building design and construction industry by classifying electronic building design data consistently, allowing streamlined communication among owners and design and construction project teams. It is the only comprehensive standard for facility planning, design, construction, and operation drawings.

High Performance Standards for GSA

Many of the projects NIBS worked on for the General Services Administration in 2024 centered on developing and using tools and strategies to help GSA meet high performance standards in its new and existing buildings.

A cornerstone of this collaboration was the Net Zero Study, which investigated the technical feasibility, lifecycle costs, and regional considerations required to fully electrify GSA's federally-owned building portfolio and make recommendations for selecting and prioritizing investments to minimize operational greenhouse gas (GHG) emissions and reach net-zero energy throughout the portfolio.



Evaluating Federal Buildings for GSA



The General Services Administration POE Program for 2024 conducted inspections and evaluations on six GSA-owned buildings to enable GSA to improve design, construction, and operations for the Federal building stock, existing and future.

Using a multidisciplinary team of subject matter experts, the POE team evaluates in-use buildings and their surrounding sites in terms of structural, mechanical, architectural, interior, and lighting and energy performance, including the use of innovative practices and technologies.

In these evaluations, the team collects firsthand data through direct observations and on-site interviews to determine how an existing GSA facility actually is functioning.

In 2024, the team, per GSA's request, concentrated on U.S. courthouses in Hato Rey, Puerto Rico; Greenville, South Carolina; San Antonio, Texas; and Pensacola, Florida. The team also evaluated the FBI Records Keeping Center in Winchester, Virginia, and the Land Port of Entry in Alexandria Bay, New York.

Total Revamp of the Whole Building Design Guide

The Whole Building Design Guide is undergoing a major site overhaul. WBDG is being reformatted and made easier for use by the general public and federal agencies who rely on the site for the creation of new criteria as well as the update of existing design criteria for tri-service buildings, serving NAVFAC, the Air Force, and Army.

The revamp of thousands of pages is currently underway. In 2024, WBDG housed a federal facility criteria library and collection of more than 5,000 federal criteria, manuals, specifications, standards, and more. It received 2 million annual visitors, 6.4 million page views, and 1.4 million document views.

NIBS launched the Whole Building Design Guide in 2001, as a massive resource to thousands of building professionals on design recommendations (design objectives, building types, and design disciplines), operations and maintenance project management (project planning, delivery, and controls and building commissioning), federal facility criteria, and continuing education. By 2013, WBDG broke the 7 million mark in documents downloaded monthly.



Advancing the National BIM Standard – United States



Last year, NIBS officially published the National BIM Standard – United States version 4.

The NBIMS-US™ planning committee and our workgroups created modules for Project BIM Requirements, BIM Use Definitions, BIM Execution Planning, and version 3 of the Construction to Operations Building Information Exchange (COBie), a digital format for project information handover. Website enhancements continued into 2024.

In addition to our workgroup subject matter experts and countless hardworking volunteers, NIBS is especially grateful to our incredible sponsors of the former Building Information Management Council, Digital Technology Council, and the massive NBIMS-US™ effort. These sponsors include LeapThought, United States Army Corps of Engineers, U.S. General

Services Administration, NBBJ, Autodesk, Bentley Systems, U.S. Department of State, U.S. Department of Veterans Affairs, DPR Construction, and Bluebeam.

Improving the Built Environment Toolkit Through Collaboration and Teamwork

In early 2024, NIBS fulfilled a mandate from our enabling legislation with the creation of the Collaboration Academy.

The academy was launched to assist project management within the built environment – collaboration knowledge on real projects and teaching project managers and teams how to collaboratively solve problems. It is governed by a Board of Regents – thought leaders who serve the public in a tangible way by building and operating Federal projects.

These high-powered Federal Agency representatives, organization leaders, and representatives from associations and private industry meet quarterly to foster data analytics and behavioral science that heighten team collaboration through what is being called “data-driven partnering.”



Legislation (NEHRP, NWIRP reauthorization)

Reauthorization of the National Earthquake Hazards Reduction Program (NEHRP) and National Windstorm Impact Reduction Program (NWIRP)

In March 2024, NIBS, in coordination with the United States House Committee on Science, Space, and Technology (SST), held a Congressional briefing at the Rayburn Congressional Office Building around NEHRP and NWIRP to highlight lifeline infrastructure priority.



Nearly half of Americans live and work in high seismic and severe wind regions. Commitment to NEHRP and NWIRP is critical to protecting lives and businesses from harm.

At the briefing, NIBS met with policymakers, inviting partners from across several industries, including engineering, insurance, standard and code development, homes and businesses, and emergency management to support reauthorization of these important programs.

Since its authorization in 1978, NEHRP has made great strides to reduce earthquake risk throughout the United States. It has been crucial to the development of source material for the nation's model building code for seismic design. NEHRP's 2018 reauthorization expired September 2023. NWIRP expired in 2018.

Development of 2026 NEHRP Recommended Seismic Provisions and Earthquake Resilience Support

Throughout 2024, NIBS advanced national earthquake resilience through a series of strategic engagements and technical initiatives. The year began with a pivotal presentation at the Earthquake Engineering Research Institute's annual meeting in Seattle, where teams presented proposals from the NEHRP Provision Update Committee and Functional Recovery Task Committee, shaping future seismic model building codes.

The momentum continued in July with a comprehensive webinar introducing the 2024 Edition of the IRC/IBC Seismic Design Category Maps and FEMA's strategy for national building code adoption. In September, the team shared further developments at the Structural Engineers Associations of California Convention in Portland, focusing on Issue Team proposals and Functional Recovery updates.



A highlight of the year was NIBS's full-day workshop at the National Council of Structural Engineering Associations' Summit in Las Vegas in November. This intensive session introduced the 2023 National Seismic Hazard Map and Risk Targeted Ground Motions, while the Functional Recovery Task Committee detailed its Recovery Categories and technical framework for performance-based design.

Events

Building Innovation 2024: NIBS 50th Anniversary Takes Center Stage

Just before Memorial Day, NIBS held the Building Innovation 2024 conference in Washington.

Hundreds of built environment professionals descended upon the Capital Hilton to attend educational sessions and network. NIBS' 50th anniversary celebration was highlighted throughout the conference.

NIBS opened the meeting May 22, with the 50th Anniversary General Session. We sat down with many NIBS members and agency partners about our collaboration to advance building sciences in the U.S.

The panels included Dominic Sims, former CEO, International Code Council; Solomon Greene, Principal Deputy Assistant Secretary, Policy Development and Research, U.S. Department of Housing and Urban Development; Mike Sebold, VP/GM Tremco CPG/Schul International; Sherri McMillion, Engineering Criteria and Programs Director, Naval Facilities Engineering Systems Command (NAVFAC); Tim Judge, Senior Vice President, Head of Modeling & Chief Climate Officer, Fannie Mae; Charles Hardy, Chief Architect, Public Buildings Service, General Services Administration; and Thom Kurmel, President, TDK Consulting.



“When you combine innovation and evidence, you can really impact communities,” said HUD’s Greene, about NIBS research and work within the built environment.



Hardy, with GSA, offered his congratulations to NIBS on serving the nation for 50 years.

“What the government does well is its power to convene,” Hardy said.

“NIBS has got it nailed down ... bringing the industry together in a meaningful way. The tools and analysis they bring from an outsider’s look – it’s super powerful.”

ICC’s Sims said if it weren’t for NIBS, some of the built environment’s most unique problems would not be solved.

“NIBS is the bridge to the industry,” he said. “I like to think of it as glue. NIBS has helped the industry solve the biggest problems ... most of the problems NIBS works on are the hard ones. They’re not the easy ones, and the public is safer because of NIBS.”

Women Executives in Building: Knowledge is Power



When it comes to barriers to women in construction, they generally include stereotyping and social barriers, lack of education and training, and conditions in the workplace.

This and other workforce trends were covered during a Women Executives in Building Symposium held in Washington.

Tracy Thomas, Managing Director for Construction, Facility & Security Management (retired) with the U.S. Department of State Bureau of Overseas Buildings Operations (OBO), said aggressive recruiting, support from leadership, and a positive work environment keep women around in the workplace.

Thomas mentioned two key initiatives at OBO, including pointing to the benefits of collaborative partnerships in construction projects and the mutual objectives and shared values.

So is the built environment actually changing for women?

Part of our responsibility as women is to put our own biases aside, as this can hinder our own growth, said a panel of experts, including Vicki Worden, President & CEO, Green Building Initiative; Indra Gutierrez, President, Gutier; Laura Dwyer, Business Development Leader, DuPont Performance Building Solutions; and Jennifer Dewees, President, Maryland Center for Construction Education and Innovation.

And while industry workforce has changed in the past five to 10 years, a shortage remains with only 14 percent of women in the construction industry. There is a massive deficit in opportunity vs. number of actual women working in the industry.

"Knowledge is power, and confidence is built over time," Gutierrez said. "[You need to] find a supporter who wants to see you succeed and figure out who your allies are."



Highlights from Digital Twins 2024

In December, NIBS hosted the inaugural Building Innovation: Emerging Technologies Series event, focusing on digital twin technology. The conference took place at the Gaylord National Resort & Convention Center in National Harbor, Maryland.

Digital Twins 2024 attendees learned about how digital twins are revolutionizing the built environment, including how we approach resilience and recovery from individual buildings to entire asset portfolios and lifeline infrastructure.

By leveraging the same simulation capabilities used in the defense and facilities sectors—including military-grade data analysis and satellite imagery—digital twins are transforming project and lifecycle asset management, tracking progress and workflows and improving efficiency.

In planning and design, this technology provides a collaborative platform for architects, engineers, and contractors to visualize design and identify conflicts. And for facility managers, digital twins have proven to greatly enhance building performance and maintenance.



DT2024: Articulating Value of Digital Twins – AECO Viewpoints

In one dynamic panel discussion, experts representing each core sector—architecture, engineering, construction, and owners from the built environment—shared insights on their digital journeys.

The session provided a front line look at the latest advancements from NIBS and explored how these initiatives are driving innovation in digital twins and beyond. Each panelist offered a unique perspective on implementing digital technologies, discussing the real-world challenges they face, solutions they've embraced, and opportunities they see on the horizon.

At Dallas Fort Worth International Airport, for example, Robert L. Brown, Sr., Project Control Systems Manager in the Infrastructure and Development Division of the Controls and Analytics Department, covered the current massive and complex technological undertaking at DFW.



“As we got further into digital twins, we knew we needed to first align our field data,” he said. “[We’re now] in our fourth standards iteration. It’s changed a lot. We had to do a complete overhaul of programs.”



The Next 50 Years

Tomorrow's strength depends on action today—NIBS guides bold innovation to build America's resilient future.



A Stronger America—Built by Design

If we meet the moment, the next 50 years will usher in a built environment that is safer, smarter, and more resilient than ever. We will see reduced disaster losses, energy independence through performance-based design, and the emergence of a highly skilled, technologically fluent workforce. If we fail, America risks higher recovery costs, greater vulnerability to hazards, and falling behind in global competitiveness.

Future Challenges

- Rising exposure to natural and man-made hazards
- Rapid technological disruption without standardization
- A workforce gap in critical trades and engineering roles
- Aging infrastructure that no longer supports national goals

The Cost of Inaction

Failure to act will erode our ability to provide safe housing, modern education, resilient healthcare, and reliable infrastructure. America's global leadership depends on the integrity and innovation of what we build.

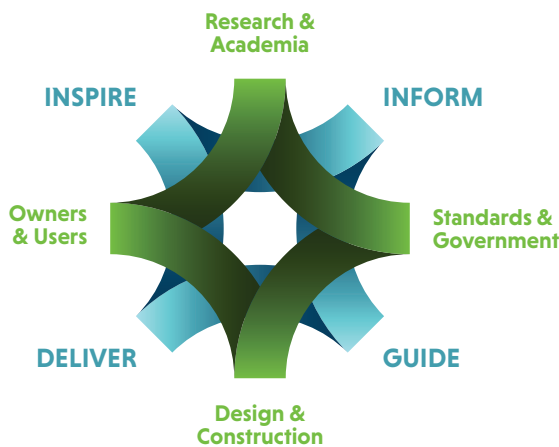
The Power of Success

Success means thriving communities, efficient public spending, energy-secure infrastructure, and global leadership in construction science. It means a built environment that works for the American people.



NIBS as the Innovation Engine

Only NIBS brings together government, science, and industry with the singular mission of activating innovation across the built environment. We're not waiting for the future—we're building it.



Building Innovation 2024 launched with a powerful exploration of the built environment's transformation over the past 50 years and its trajectory for the future. The stark contrast between 1974—when 60 percent of new single-family homes were single-story and high-rise residential structures took just 15 months to complete—and today's sophisticated building landscape set the stage for a compelling discussion about industry evolution.

Modern construction now demands unprecedented levels of sophistication, sustainability, and resilience, driven by natural risk factors, evolving occupant expectations, and revolutionary advances in technology and materials. To address these challenges, NIBS assembled an expert panel representing diverse perspectives across the industry.

Industry leaders Christi Powell of 84 Lumber Company, Doug Parsons of America Adapts Media, Amy Marks of Symetri, and NIBS Board Member Mónica Serrano of Turner Construction tackled pressing issues including climate adaptation, transformational technologies, workforce diversification, and social equity. Powell, drawing from her 26-year career, highlighted the untapped potential of women in construction: "No one ever gave me the option of construction [as a career] and when I found it, I fell in love with it." Parsons emphasized the comprehensive nature of climate adaptation, asserting that "It needs to be embedded into every layer of society."

This forward-looking session underscored NIBS's commitment to shaping a built environment that meets tomorrow's challenges while creating opportunities for to attract new talent into the built environment.

Unlocking Innovation Through Digital Twins



The December 2024 Digital Twins event highlighted how federal agencies and industry leaders—including GSA, the Department of Defense, Smithsonian Institution, Department of Veterans Affairs, and others—are advancing the use of digital twin (DT) technology to optimize operations, improve lifecycle performance, and enhance resilience. While many organizations are deeply engaged in DT for facilities management, others are still transitioning into foundational tools like building information modeling (BIM).

To bridge this gap and accelerate innovation, the NIBS Digital Technology Council's Digital Twin Integration Subcommittee released a position paper in June 2024 advocating for the integration of BIM and DT technologies. This integration creates a foundation for improved efficiency, sustainability, and collaboration—paving the way for a future where data-rich BIM models evolve into dynamic, intelligent digital twins.

BIM captures the “why” and “how” behind building design—critical knowledge that powers digital twins. Without this foundation, organizations face major barriers to implementing AI-driven infrastructure systems. Digital twins offer the platform on which those smart, responsive systems can operate.

Transportation is a clear example. Accurate digital representations are essential for managing infrastructure, roads, and autonomous systems. But BIM must come first to ensure data consistency and interoperability.

The future of DT lies in a “system of systems,” as demonstrated in the Brains & Bytes BIMStorm session. This is an integrated, interconnected network of platforms and tools working together across the asset lifecycle. Moving beyond isolated software solutions, this model supports tailored frameworks, long-term governance, and real-time decision-making.

For owners and operators, this transformation means greater insight, adaptability, and impact. With NIBS guiding this evolution, digital twins are no longer just a concept—they are a strategic infrastructure tool driving smarter building, stronger communities, and American innovation.



TRENDS – EMERGING TECHNOLOGIES



Tracking Building Information Management and Digital Twins

NIBS promotes transformational building sciences, research, and technologies.

Building Information Modeling (BIM) and Digital Twins are digital frameworks that represent physical spaces in real time. They impact design, construction, operations, and emergency response.



Magnitude of Impact

These tools are revolutionizing lifecycle building performance, predictive maintenance, and situational awareness during disasters.



Benefit

- Better decision-making
- Lower operating costs
- Enhanced facility resilience



How NIBS Is Driving It

- Hosting the National BIM Program.
- Convening federal agencies and SDOs to align data standards.
- Developing guidance for implementation at scale.



Risks of Inaction

Falling behind global competitors; increasing lifecycle costs; inadequate disaster response.

TRENDS – WORKFORCE DEVELOPMENT



Elevating the Built Environment Workforce

NIBS encourages collaboration across the public and private sectors to increase workforce training and development.

A national imperative to reskill, upskill, and diversify the construction and building sciences workforce.



Magnitude of Impact

Workforce shortages threaten timelines, budgets, and building quality across the country.



Benefit

- Economic mobility
- Industry continuity
- Innovation adoption



How NIBS Is Driving It

- Championing workforce equity and inclusion strategies
- Partnering with educational institutions
- Producing workforce intelligence reports



Risks of Inaction

- Labor bottlenecks, safety risks, and a decline in building performance.

TRENDS – RESILIENCE & HAZARD MITIGATION



Building a Stronger American Infrastructure

NIBS remains committed to building alliances with public and private sector organizations to develop and deploy innovative solutions in the effort to create and thriving, resilient communities.

Designing buildings and infrastructure to reduce damage and accelerate recovery from natural and man-made disasters.



Magnitude of Impact

Every \$1 spent on mitigation saves up to \$11 in disaster recovery.



Benefit

- Lives saved
- Faster recovery
- Lower public and private costs



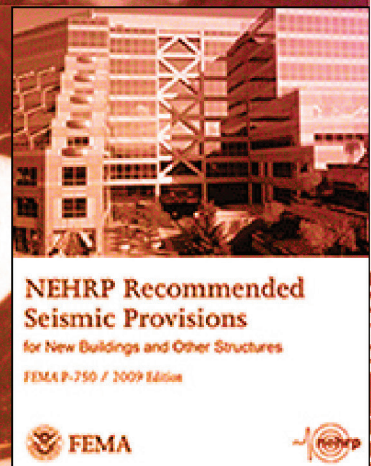
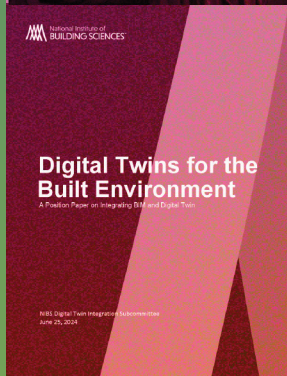
How NIBS Is Driving It

- Publishing landmark benefit-cost studies
- Informing federal and local policy
- Hosting resilience summits and standards development forums



Risks of Inaction

- Higher casualty rates, prolonged disruption, and escalating disaster response budgets.



A Bridge to Industry

Visionary leaders steward NIBS's mission—uniting public trust, technical excellence, and transformative industry collaboration.



National Institute of
BUILDING SCIENCES

2024 Moving Forward Report: Housing Affordability

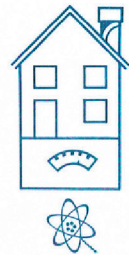
Prepared by the NIBS
Consultative Council



RADON GAS: PRACTICAL RESPONSES

Workshop Proceedings
May 22, 1986
Washington, D.C.

Sponsored by the Indoor Air Quality Committee



April 1, 1987



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GUIDE SPECIFICATIONS FOR REDUCING LEAD-BASED PAINT HAZARDS

May 1995



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Compass Datacenters, Fairfax, VA



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Natural Hazards Center and
Department of Sociology,
University of Colorado Boulder,
Boulder, CO



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Past Chair, Ex Officio
Anne Ellis, LLC, Potomac, MD

Strategic Plan

The National Institute of Building Sciences 2025/2026 Strategic Plan includes four major goal themes, each with specific strategies.



HAZARD ADAPTATION, MITIGATION & RESILIENCY

Hazard resilience demands innovative solutions and their widespread adoption in the built environment. NIBS leads this effort by forging strategic alliances between public and private sector organizations to inform and deploy these advances. Through interdisciplinary collaboration, NIBS drives the development of policies, codes, and standards that promote resilient and adaptive communities.



TRANSFORMATIONAL BUILDING SCIENCES & TECHNOLOGIES

NIBS advances transformational technologies through convergent research and innovation. By fostering creativity and removing adoption barriers, NIBS accelerates the awareness, acceptance, and implementation of breakthrough technology solutions in the built environment.



INDUSTRY DEVELOPMENT

With a critical labor shortage in the built environment threatening national security, NIBS strengthens our nation's building workforce through public-private collaboration and community development and. By advancing industry understanding of building science's role in community growth and stability, NIBS champions initiatives that enhance workforce recruitment and development to meet the nation's evolving needs and protect our critical infrastructure.



VISIBILITY AND RECOGNITION

As a congressionally-authorized voice in the built environment, NIBS serves as the nation's trusted authority and primary resource to federal agencies through its sole source authority. Through increased brand visibility and strategic engagement, NIBS expands its impact by fostering partnerships across government, industry, and the private sector.

Supporting Organizations

Premier Organizations

Premier Organizations receive unlimited access for their employees to participate in NIBS communities.

American Institute of Architects	DPR Construction	Rockefeller Group
Armstrong World Industries, Inc.	FM Global	U.S. Department of State
Autodesk, Inc.	National Institutes of Health	U.S. Department of Veterans Affairs
Michael Baker International	NAVFAC	U.S. General Services Administration
Bentley Systems	NBBJ	Xendee

Supporting Organizations

Supporting Organizations receive access, at an organizational or individual level, to weigh in on member projects that shape the future of the place people live, work, learn, and play. Organizational members often have multiple individuals, representing a variety of job roles, participating in NIBS councils.

AABC Commissioning Group (ACG)	Dell Technologies	New Horizons Foundation
Airwavz Solutions, Inc.	DELTA	NCSEA
American Institute of Steel Construction	Design-Build Institute of America	NOAA
American Iron & Steel Institute	DOE: Better Climate Challenge	Onuma, Inc.
Architect of the Capitol	ESRI	Pew Charitable Trusts
Armatherm	Fishbeck	Precast/Prestressed Concrete Institute
ASCE	Green Building Initiative	Procore Technologies, Inc.
ASHRAE	IIBEC	Professional Roof Consultants, Inc.
Barge Design Solutions	Insurance Institute for Business & Home Safety	RML Steel
Black & Veatch	International Association of Plumbing and Mechanical Officials	Salas O' Brien
Build Block	International Code Council, Inc.	Simpson Gumpertz & Heger
BOMA International	Larson Design Group	STV Inc.
BSI Group America, Inc.	McCarthy Building Companies, Inc.	The National Terrazzo and Mosaic Association
Charles Pankow Foundation	MOD X	U.S. Army Corps of Engineers
Coda	Modular Building Institute	U.S. Navy
Compass Datacenters	National Fire Protection Association	USL Technology
COSUR	National Ready Mixed Concrete Association	VIATechnik
Connex	National Building Museum	WBE Contractor
Construction Specifications Institute		

Awards & Recognition

In May, the National Institute of Building Sciences recognized building industry leaders and scholarship recipients, during an awards luncheon at Building Innovation 2024.

2024 Award Recipients



NIBS DISTINGUISHED SERVICE

Jim Cagley,
Principal,
Cagley & Associate



EXCEPTIONAL WOMAN IN BUILDING

Amy Marks,
Executive Vice President,
Global Strategy, Symetri



FUTURE LEADERS

Emi Lafountain,
Sustainability Integration
Manager,
Turner Construction Company



NIBS INNOVATOR

Green Canopy NODE



THE BEYOND GREEN™ HIGH-PERFORMANCE BUILDING AND COMMUNITY AWARD

Watershed

Awards Won by NIBS



2024 GOLD WINNER

Hermes Creative Awards for
the 2022 Annual Report to the
President of the United States



GOLD

NIBS' Building Innovation Branding
The Horizon Interactive Awards



SILVER

NIBS 50th Anniversary Branding
The Horizon Interactive Awards



BRONZE

NIBS Quarterly Connection
Newsletter
The Horizon Interactive Awards

Betty and Mort Marshall Memorial Scholarship

NIBS also named two recipients of the Betty and Mort Marshall Memorial Scholarship, which was established to promote participation in the building sciences and benefit students pursuing a career in architecture and engineering at a historically Black college or university.



The scholarship was started in 2020, in memory of the Marshalls. Mort was the first member of the National Institute of Building Sciences. The 2024 scholarship recipients were **Christin Williams**, an architecture student with Florida A&M University, and **Damario Berry**, a civil and environmental engineering student with Howard University. Each student received \$5,000 toward their tuition.

Awards Won by NIBS (con't)



BRONZE

NIBS 50th Anniversary Video
The Horizon Interactive Awards



2024 SILVER AWARD

NIBS Congressional Briefing
around the NEHRP Reauthorization
ASAE Power of Associations
Awards



2024 SILVER AWARD

NIBS 50th Anniversary Campaign
Tw3 Awards



Financials

Every dollar invested in NIBS multiplies—accelerating innovation, reducing risk, and delivering enduring public benefit.



A Strategic Investment in American Innovation

The financials presented in this report reflect more than a balance sheet—they represent America’s strategic investment in building innovation that delivers measurable returns in safety, resilience, and national competitiveness. As a nonprofit chartered by Congress, the National Institute of Building Sciences (NIBS) exists to ensure that science-backed innovation does not remain locked in labs or policy white papers, but reaches the streets, schools, hospitals, and infrastructure that support every American life.



In 2024, 96% of NIBS’ expenditures went directly to programmatic activity—evidence of a high-impact model where investment translates efficiently into public benefit. From our leadership in seismic code development to our launch of the Lifeline Infrastructure Hub and advancement of the National BIM Standard, every dollar invested in NIBS multiplied through outcomes that reduce risk, lower long-term costs, and strengthen communities.

The value is not theoretical. According to the Natural Hazard Mitigation Saves study, hazard mitigation measures—such as those enabled by NIBS guidance and tools—can save up to \$13 for every \$1 invested, including lives saved, property preserved, and economic disruption minimized (NIBS, 2019). These are not abstract benefits—they are realized in the rapid recovery of disaster-struck communities, in the resilience of critical infrastructure, and in the cost-efficiency of new federal construction.



See the full, Natural Hazard Mitigation Saves report at <https://nibs.org/mitigationsaves>

At a time when the nation is under pressure to do more with less, NIBS stands as a trusted integrator that turns federal investment into long-term value. Our financial structure—diversified, designated, and independently audited—ensures sustainability and readiness to meet growing demands.

NIBS does not simply spend wisely. It stewards innovation from research to reality, delivering a return that transcends dollars: a built environment that enables America’s prosperity, protects its people, and secures its future.

Financial Summary: Fiscal Year Ending September 30, 2024

Building Innovation That Multiplies Public Value

The National Institute of Building Sciences operates as a financially independent 501(c)(3) nonprofit. Our work is made possible through a combination of government contracts, private sector partnerships, and mission-driven initiatives that support a stronger, safer, and more resilient built environment.

Statement of Financial Position

- **Total Assets:** \$20.1 million
- **Net Assets (Unrestricted):** \$13.4 million
- **Board-Designated Reserves:** \$5.3 million
- **Total Liabilities:** \$6.7 million

Revenue

- **Total Revenue:** \$24.0 million
 - Federal & Commercial Contracts: \$22.2M
 - Investment Income: \$968K
 - Events & Other: \$776K

Expenses

- **Total Expenses:** \$25.1 million
 - Program Services: \$24.1M
 - Supporting Services: \$947K
- **Change in Net Assets:** –\$1.1 million
- **Program Efficiency Ratio:** 96%

Every \$1 invested in NIBS programs advances innovation with measurable return through standards, resilience, and national competitiveness.

Federal Support

- 92% of NIBS revenue is derived from federal agencies—evidence of strong mission alignment and trusted execution.

Auditor's Opinion

The 2024 independent audit issued a clean opinion with no material weaknesses or findings.



Appendices

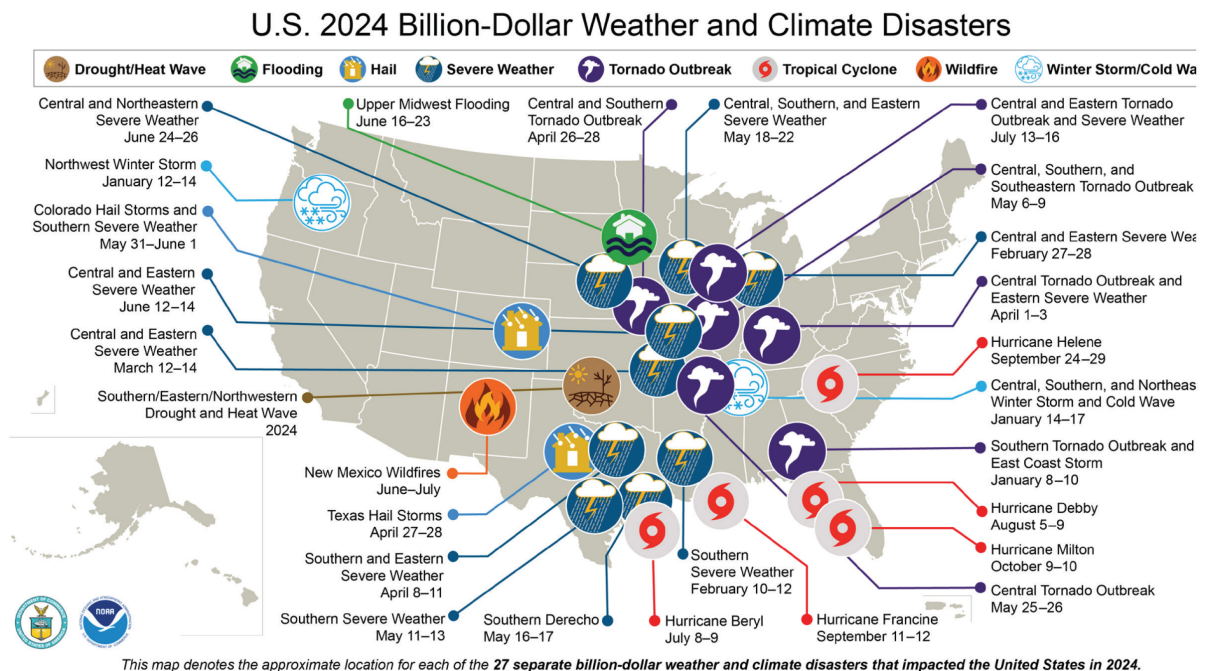


2025 Moving Forward Report

Recommendations Summary

The National Institute of Building Sciences (NIBS) acts as an impartial platform for addressing shared challenges and discovering opportunities within the building sector. The NIBS Consultative Council consists of top-level building industry leaders who collaborate to give recommendations directly to policymakers to improve our nation's buildings and infrastructure.

Each year, the Consultative Council releases the Moving Forward Report to examine key challenges in the building industry and provide recommendations to both industry leaders and policymakers to address those issues. The 2025 edition emphasizes Retrofitting for Resilience and ways to prepare buildings and infrastructure to better withstand disasters.



The imperative to proactively prepare for extreme weather is clear in the wake of destructive hurricanes, wildfires, earthquakes, tornadoes, droughts, hailstorms, and floods. While the cost to retrofit buildings and infrastructure to mitigate the financial, physical, and emotional toll of these disasters varies widely, the benefits are clear. The 2019 NIBS Mitigation Saves Study found that every \$1 invested in resilience measures can save up to \$13, with a national average ranging from \$4 to \$11 in avoided future losses. For every building type, commercial business owners, homeowners, communities, and government agencies can take steps to increase resilience. These actions will result in less economic disruption and ultimately save lives and money.

Placing the full financial burden of retrofitting buildings and infrastructure solely on property owners and individual communities is not financially feasible. That burden is also disproportionate, because there are numerous beneficiaries of money spent on measures to improve resilience. Beyond property owners, many stakeholders benefit from retrofitting for resilience, including insurance companies, the mortgage industry that may lower post-disaster mortgage delinquency spikes, affordable housing providers, small business and large corporations that do not lose access to commercial structures or workers searching for new housing, and the federal, state, and local government agencies that often bear the brunt of post-disaster reconstruction spending. State and local governments also face the potential loss of revenue from property and income taxes, while the federal government faces a potential loss of income tax revenue from communities devastated by disaster.

In this report, we offer several recommendations from the NIBS Consultative Council, including:

- Tax incentives, either on property, income taxes, or sales taxes, should be offered at the federal, state, or local level to offset the cost to property owners of retrofitting for resilience.
- Federal, state, or local governments should provide targeted grants supporting resilience upgrades to 5 National Institute of Building Sciences Moving Forward Report communities and households at extreme risk of damage from natural hazards, saving money for those agencies in the long run.
- Trade associations, nonprofit organizations, and government agencies should offer education and certification programs for additional training in specific retrofits to encourage proactive preparation to mitigate the damage from natural hazards.
- Federal agencies such as the Department of Energy Building Technologies Office, and the National Institute of Standards and Technology, should be funded through their R&D programs to support the development of new building technologies, such as off-site construction or stronger building materials that address some of the critical needs of building resilience. These agencies should be encouraged to work in public private partnerships with NIST to push new innovations into the market, to speed up the adoption of new technologies in private sector construction, and renovation.
- State and local governments should implement tax-advantaged catastrophe savings accounts for property owners to self-fund retrofits or post-disaster repairs.
- Private sector beneficiaries of resilient retrofits, including the property insurance industry, mortgage industry, lenders, local business owners, real estate agents, and others, should identify ways to incentivize such investments by property owners. To date, only the insurance industry contributes to such incentives, via consideration of insurability and, where appropriate, pricing.



See the full, Moving Forward report at <https://nibs.org/movingforward25>

50 Years of Service to the U.S. Built Environment

President Lyndon Johnson launches a 'War on Poverty,' forming the National Commission on Urban Problems. The goal: research housing and building development in the U.S., including model codes, standards, zoning, and taxes. The need for a national resource is identified.

NIBS is created by the United States Congress in the Housing and Community Development Act, Public Law 93-383. Among our charges: to serve the public interest as a national source to make findings and advise the public and private sectors regarding the use of building science and technology and support federal agencies having responsibility for buildings or construction through technical research funded by request authorizations and appropriations for grants.

NIBS analyzes mobile home standards for the U.S. Department of Housing and Urban Development.

NIBS publishes rehabilitation guidelines for the U.S. Department of Housing and Urban Development.

NIBS assists President Ronald Reagan's transition team with advice on housing and building regulatory matters.

HUD contracts with **NIBS** to create a national agenda for housing research.

The U.S. Department of Veterans Affairs contracts with **NIBS** to review building start-up and operations procedures.

FEMA funds **NIBS'** project on civil defense shelter and fire safety building design criteria.

NIBS creates the Asbestos Task Force to combat asbestos attributing to declining indoor air quality issues. **NIBS** produces the Model Guide Specifications for Asbestos Abatement.

1967

1970s

NIBS begins support of the Naval Facilities Engineering Systems Command (NAVFAC) and U.S. Department of Defense to update federal facility criteria.

1974

1977

Congress passes the Earthquake Hazards Reduction Act to protect the lives of building occupants, during an earthquake and mitigate the impact of such disasters on the national economy. The law establishes the National Earthquake Hazards Reduction Program (NEHRP).

1978

NIBS forms the Insulation Task Force and publishes its first report: The Insulation Situation.

1979

1979

The Building Seismic Safety Council is created. Under a contract with the Federal Emergency Management Agency, BSSC develops and maintains the NEHRP Recommended Seismic Provisions for New Buildings and Other Structures.

1980

1980

NIBS forms the Committee for Home Energy Conservation (CHEC), developing the Home Energy Saving Checklist for the U.S. Department of Energy. President James Carter awards the CHEC program with the National Energy Efficiency Award.

1981

1982

1982

NIBS forms the Toxicity Task Force, addressing the controversial issue of smoke toxicity resulting from building fires. As a result of a 1986-1989 study, Toxicity Effects in Building Fires, **NIBS** produces a test apparatus and method to assess the toxic potency of a range of building materials and furnishings.

1982

1982

1984

NIBS' rehabilitation guidelines for HUD are adopted as the model by three code organizations.

1982

1984

Actor Gregory Peck teams with **NIBS** and the Alliance to Save Energy on a national TV campaign to Keep America Energy Conscious.



50 Years of Service to the U.S. Built Environment





NIBS is poised to unlock a new era of building innovation that multiplies public value and national resilience. By accelerating the adoption of advanced technologies, guiding standards for challenge-ready infrastructure, and empowering a future-ready workforce, NIBS will help deliver safer schools, more efficient hospitals, and infrastructure that recovers faster and lasts longer. As the trusted integrator of science, policy, and practice, NIBS ensures that America builds not just with strength—but with foresight, equity, and purpose. The result: a built environment worthy of our ambitions.

Volunteer Councils

The National Institute of Building Sciences (NIBS) Councils are where national progress in the built environment takes shape. Each Council focuses on a unique and critical aspect of building science—ranging from hazard mitigation to digital transformation—creating specialized forums where innovation becomes implementation. These Councils are more than discussion groups; they are engines of progress, uniting the nation's top experts from government, industry, and academia to confront pressing challenges, build consensus, and drive change.



Building Enclosure Technology and Environment Council

The Building Enclosure Technology and Environment Council (BETEC) fosters a better understanding of how building components interact with each other and with the environment in order to optimize energy use and minimize carbon expended.

In spring 2024, BETEC hosted the Building Enclosure Science and Technology (BEST6) conference in Austin, Texas.

Chair: Dudley McFarquhar, PhD, PE, Owner, McFarquhar Group Inc., and Vice President, Engineering and Partner, Structural Engineer and Consultant, Stone Building Solutions

Vice Chair: Keith Simon, FAIA, Vice President, Design Phase Services, Salas O'Brien

Secretary: Brian Stroik, FABAA, CABS, Performance Excellence/Quality Consultant, American Contractors Insurance Group

Member-at-Large: Theresa Weston, President, The Holt Weston Consultancy, LLC

AIA Liaison: Will Babbington, Principal, Facade Design Director, Studio NYL



The Building Enclosure Councils (BECs), created in 2004 as a joint venture between The American Institute of Architects and NIBS under the aegis of BETEC, have grown from seven to 34 local chapters that carry out BETEC's mission and support some 4,000 members.

Chair: Janna Alampi, AIA, NCARB, BECxP, CxA-BE, CABS, CPHC, *Principal Architect and Owner, EPICx Studio*

Vice Chair: John Posenecker, PE, *Senior Principal Consultant, Terracon*



The Building Seismic Safety Council (BSSC) manages complex technical, regulatory, social and economic issues involved in developing and promulgating building earthquake risk mitigation provisions that form the source material for the nation's model building codes.

The council convenes the top seismic experts from across the United States as well as relevant public and private interests to resolve issues related to the seismic safety of the built environment through authoritative guidance and assistance backed by a broad consensus. It enhances public safety by providing a national forum that fosters improved seismic planning, design, construction and regulation in the building community.

BSSC was established in 1979, as one of the important initiatives under the National Earthquake Hazards Reduction Program (NEHRP).

Chair: Kent Yu, PhD, SE, *Principal, SEFT Consulting Group*

Vice Chair: Joann Browning, PhD, PE, *Dean, College of Engineering, University of Texas, San Antonio*

Secretary: Iris Tien, PhD, *Williams Family Associate Professor, Georgia Tech*

Member-at-Large: Roberto Leon, PE, PhD, *Professor, Via Department of Civil and Environmental Engineering, Virginia Tech*

Member-at-Large: Bill Earl, S.E., PE, *National Structural Engineering Program Manager, GSA*

Past Chair: Charles J. Carter, SE, PE, PhD, *President, American Institute of Steel Construction*



The Consultative Council assembles high-level building community representatives to make recommendations directly to the executive and legislative branches of government to improve our nation's buildings and infrastructure.

Each year, the Consultative Council publishes the Moving Forward Report to investigate key issues, offering solutions to overcoming these challenges. The 2024 Moving Forward Report covers Retrofitting for Resilience.

Chair: Brian Pallasch, CEO & Executive Vice President, IIBEC

Vice Chair: Thomas W. Smith, III, ENV SP, CAE, F.ASCE, *Executive Director, American Society of Civil Engineers*



The Digital Technology Council builds on the work and foundation of building information management and modeling and reflects the rapid expansion of digital technology in the built environment.

Chair: Rachel Riopel, More Group, Inc.

Vice Chair: Alex Belkofer, CM-BIM, Senior Director, Virtual Design & Construction, McCarthy Building Companies, Inc.

Secretary: Zahra Gorbani, Penn State University



The Facility Management & Operations Council (FMOC) is focused on the use of technology for existing buildings and aims to be an authoritative resource for integrated life-cycle maintenance and operations information.

In 2024, the FMOC published several whitepapers and tools to address training opportunities for Facilities Management Career Development, Gaps in the Labor Pool and Defining Where Education is Needed, Artificial Intelligence for Facilities Management, and Total Cost of Ownership.

Chair: Keith Bryan, Director, Federal Advisory – Sustainability, Environmental, & Climate, KPMG LLP

Vice Chair: Brandon Meinert, U.S. Army Engineering Research & Development Center



In 2013, the National Institute of Building Sciences established the Off-Site Construction Council (OSCC) to serve as a research, education and outreach center for relevant and current information on off-site design and construction for commercial, institutional, and multifamily facilities.

Chair: Ryan Colker, Vice President, Innovation, ICC

Vice Chair: Marc Bielas, Founder and CEO, Quilt Group

Member-at-Large: Ryan Smith, Founding Member, MOD X



The Multi-Hazard Mitigation Council (MMC) brings together a body of experts in a multitude of related fields that address the challenges associated with identifying and implementing effective mitigation and community resilience practices.

The work of the MMC has informed thousands of mitigation decisions that led to effective public policy on many levels. Its goal is simple: promoting disaster resilience, while becoming a focal point of credible information and whole-building strategies that strengthen individual buildings, businesses, communities and the nation.

Chair: Dr. Anne Cope, *Chief Engineer, IBHS*

Vice Chair: Russ Strickland, *Secretary, Maryland Department of Emergency Department*

Secretary: Natalie F. Enclade, PhD, *Executive Director, BuildStrong America*

Member-at-Large: Alice Yates, *Director of Government Affairs, ASHRAE*

Past Chair: Sara Yerkes, *International Code Council (retired)*

Committee on Finance, Insurance, and Real Estate (CFIRE)

Multi-Hazard Mitigation Council - Committee on Finance, Insurance, and Real Estate (CFIRE) examines the intersection of finance, insurance, investment and design, construction, and ownership to encourage the development and assist in the affordability of high-performance buildings.

Banks, insurance companies, appraisers and real estate firms all play a significant role in how buildings are procured, designed, and constructed. How these segments evaluate the risk associated with particular projects, technologies and practices can have an enormous impact on whether an idea gets the funding and insurance needed to move forward to fruition.

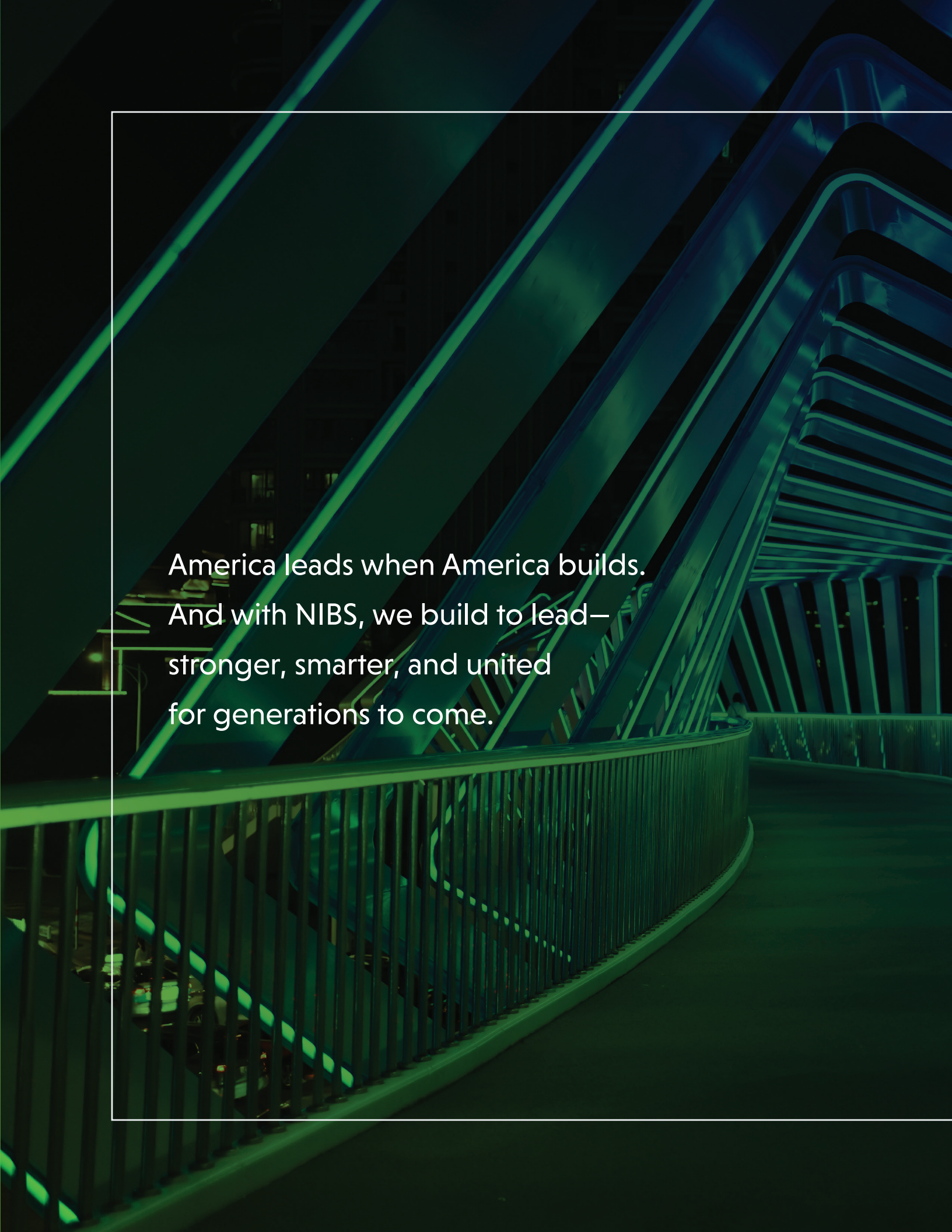
However, banks, insurance companies, appraisers and real estate firms often lack the necessary data to support building industry efforts to go beyond “business as usual.”

CFIRE works to address these challenges by promoting a cooperative process and open dialogue among the different parties to support the achievement of cost-effective high-performance buildings.

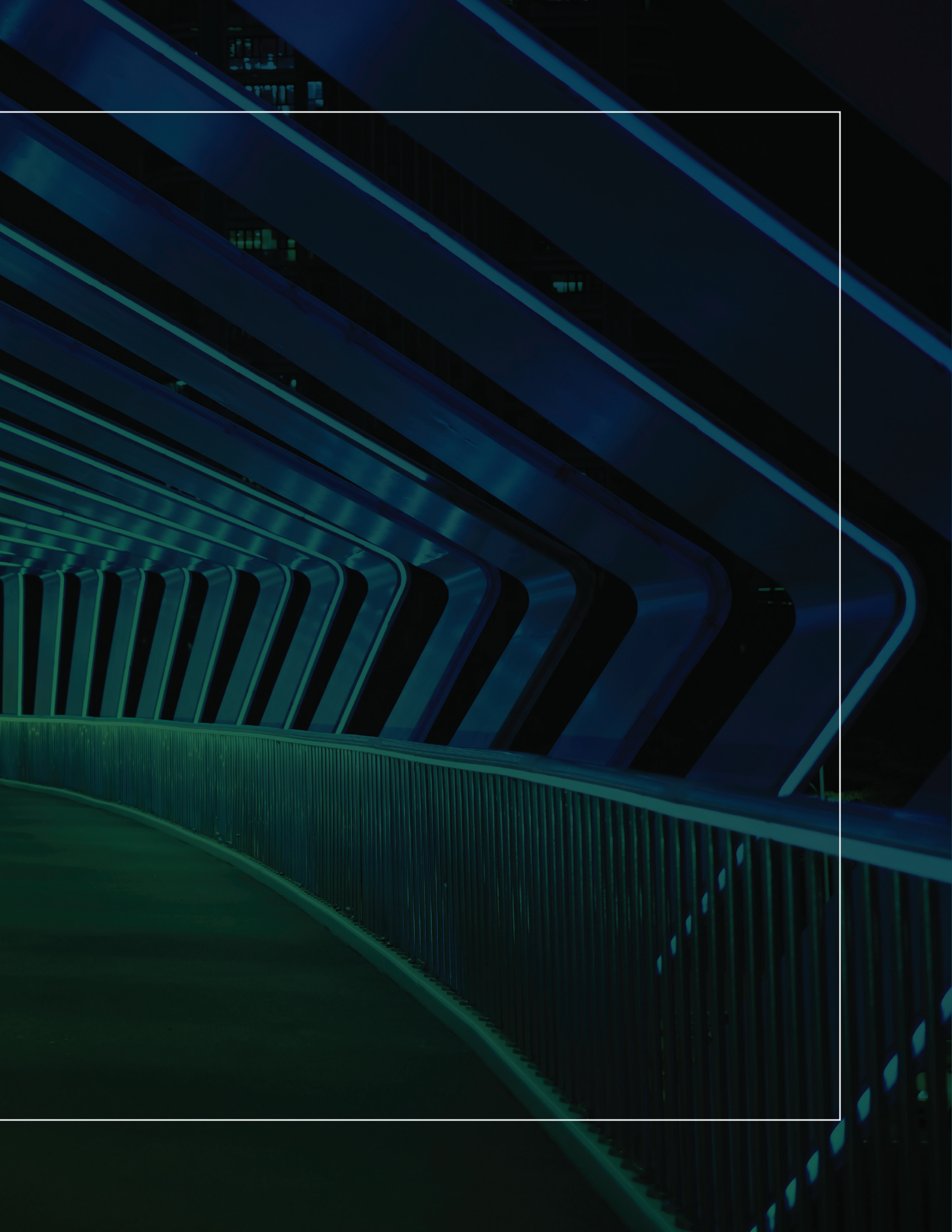
Chair: Daniel Kaniewski, PhD, *Managing Director, Public Sector, Marsh McLennan*

CFIRE Steering Committee:

- Timothy Judge, *SVP, Chief Climate Officer, Fannie Mae*
- Michael Newman, *Senior Director, Law and Public Policy, IBHS*
- Bill Garber, *Director, Government and External Relations, Appraisal Institute*
- Cassandra Skidanov, *Affordable Lending Manager, Housing Insights and Solutions, Freddie Mac*
- Natalie Enclade, *Executive Director, BuildStrong Coalition*
- Jamie Woodwell, *Vice President, Research & Economics, Mortgage Bankers Association*



America leads when America builds.
And with NIBS, we build to lead—
stronger, smarter, and united
for generations to come.





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