



Mitigation Framework Leadership Group Progress Report: *National Initiative to Advance Building Codes*

December 2023



Table of Contents

Introduction	4
Background	4
Building Codes Task Force Key Priorities	4
Federal Agency Activities.....	5
Federal Emergency Management Agency	6
Department of Housing and Urban Development	9
General Services Administration.....	12
National Institute of Standards and Technology.....	12
National Oceanic and Atmospheric Administration	13
U.S. Army Corps of Engineers.....	14
U.S. Environmental Protection Agency	15
U.S. Department of Agriculture	17
U.S. Department of Energy	19
U.S. Department of Health and Human Services.....	20
U.S. Department of Labor.....	21
U.S. Small Business Administration.....	23
Building Codes Task Force Accomplishments.....	24
Inaugural NIABC Strategic Planning Offsite.....	24
Best Practices for Climate Resilient Codes and Standards	25
Building Codes Task Force Subgroups	25
Engagements With Federal and External Partners	27
External Partner Engagements	27
Looking Forward	29
2024 NIABC Goals and Priorities.....	29
NIABC Themes.....	29
NIABC Workstreams.....	31
Next Steps	32
Appendix A: Acronyms.....	33

To the President's National Climate Task Force:

It is our privilege to present the Calendar Year (CY) 2023 National Initiative to Advance Building Codes (NIABC) Progress Report, a testament to the Mitigation Framework Leadership Group's (MitFLG) dedication to continually progress the work of the initiative. Our commitment to advance the use of the latest consensus building and energy codes and standards remains at the forefront of our mission.

We are thrilled to share that this year's Building Codes Task Force's (BCTF) accomplishments extend beyond expectations. Notably the BCTF played a pivotal role in developing *Best Practices for Incorporating and Incentivizing Climate-Resistant Codes and Standards in Federal Assistance Programs and Non-Federal Buildings*. These best practices are not just theoretical; they are being incorporated into programs at the Department of Housing and Urban Development (HUD) and the Department of Health and Human Services (HHS).

Our recognition in guidance and national documents like the [National Climate Resilience Framework](#) and the [Climate-Smart Infrastructure and Implementation Guidance for the Disaster Resiliency Planning Act Office of Management and Budget memo](#), is a testament to the BCTF's unwavering commitment to setting the precedent for codes and standards as the backbone of a more resilient and sustainable future. This recognition speaks volumes about the important role we play in shaping the nation's perspective on building and energy codes and standards.

This year's report is a continuation of our journey since the December 2022 Progress Report. It demonstrates progress made towards achieving the NIABC goals and provides actionable steps for the year ahead. Your engagement and feedback are essential as we continue to enhance and refine our contributions to the Initiative.

Signed,

Eric Letvin, FEMA and Trey Reffett, HUD
MitFLG Co-Chairs
Mitigation Framework Leadership Group



Introduction

Background

In 2022, the White House tasked the Mitigation Framework Leadership Group (MitFLG) with coordinating interagency representation from agencies and departments across the government to support the National Initiative to Advance Building Codes (NIABC) and subsequently, implement Recommendation 3.1 of the [National Mitigation Investment Strategy](#): to encourage communities to adopt and enforce up-to-date building codes.

The Building Codes Task Force (BCTF) was charged with coordinating NIABC interagency efforts. This report serves as a supplement to the [2022 White House Progress Report](#), outlining the efforts of the task force and its relevant agencies in CY 2023.

Building Codes Task Force Key Priorities

During the inaugural *NIABC Strategic Planning Offsite* on August 9, 2023, the BCTF re-validated the five key NIABC priorities. The BCTF is using these priorities to identify objectives for the coming year and developing workstreams based on these objectives. These priorities drive BCTF efforts to advance the Initiative and engage industry partners, federal agencies, and state, local, tribal, and territorial (SLTT) communities in adopting and using the latest consensus codes and standards. Details on the workstreams can be found on page 26 of this report.

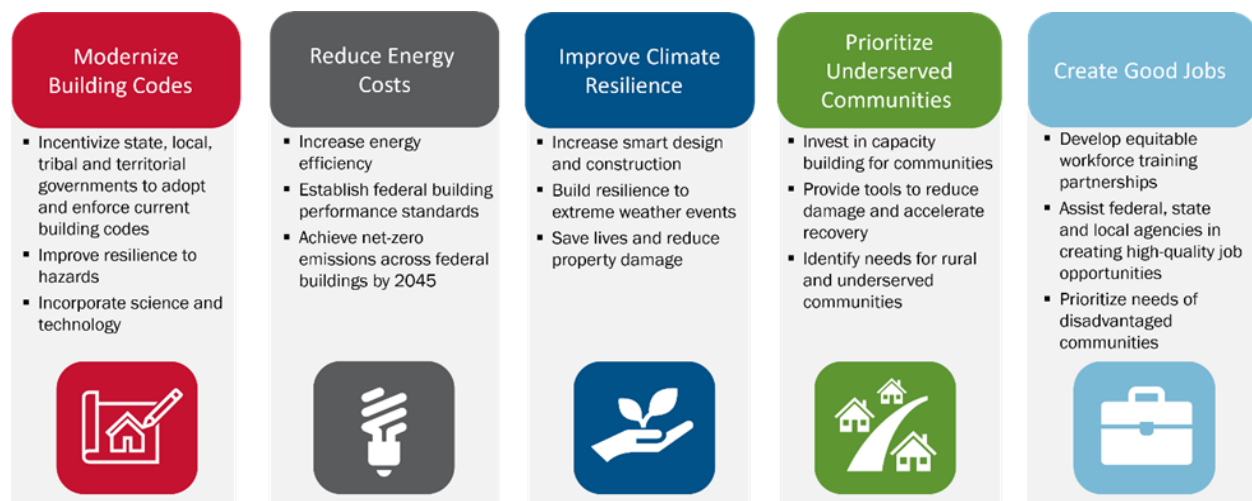


Figure 1. NIABC Key Priorities

Federal Agency Activities

Since January 2023, the MitFLG has expanded its membership to include the Federal Housing Finance Agency, the Consumer Financial Protection Bureau, and the National Park Service. All three organizations participate in the BCTF which brings the total number of federal agencies and SLTT organizations represented to 20.

Throughout the year, the BCTF has finalized Federal Implementation Plans for 10 agencies across the MitFLG and collaborated on activities supporting the advancement of resilient building codes and standards. The following pages outline a few agency highlights and accomplishments in 2023. The icons highlighted in **Figure 2** are used to illustrate where agency activities advance NIABC priorities throughout this section.



Figure 2. NIABC Priorities

BCTF Federal Agencies	
Consumer Financial Protection Bureau (CFPB)	U.S. Army Corps of Engineers (USACE)
Cybersecurity and Infrastructure Security Agency (CISA)	U.S. Department of Agriculture (USDA)
Department of Homeland Security HQ (DHS)	U.S. Department of Energy (DOE)
Federal Emergency Management Agency (FEMA)	U.S. Department of Health and Human Services (HHS)
Federal Housing Finance Agency (FHFA)	U.S. Department of Housing and Urban Development (HUD)
General Services Administration (GSA)	U.S. Department of Labor (DOL)
National Institute of Standards and Technology (NIST)	U.S. Department of the Interior (DOI)
National Oceanic and Atmospheric Administration (NOAA)	U.S. Department of Transportation (DOT)
Small Business Administration (SBA)	U.S. Environmental Protection Agency (EPA)
National Park Service (NPS)	

Federal Emergency Management Agency

In 2023, FEMA made significant progress in growing and enhancing the Resilience organization, guided by priority focus areas to (1) Accelerate all-hazards resilience in our nation's most at-risk and disadvantaged communities and (2) Establish FEMA's leadership role in building national, community, and individual resilience. These focus areas benefitted directly from the building codes accomplishments described below. NIABC efforts amplified the FEMA Resilience Vision of *A resilient Nation where communities are prepared for today's risks and emerge stronger for tomorrow*. Administrator Criswell declared 2024 to be FEMA's Year of Resilience, which can help amplify the value and importance of building codes to continue driving resilience and advancing FEMA's mission.



Programs, Policy, and Guidance Updates

Building Resilience Infrastructure and Communities (BRIC): The [BRIC program](#) continues to advance building codes and standards by requiring that building construction projects adhere to current model building codes and standards. In BRIC's Fiscal Year 2023 Notice of Funding Opportunity, FEMA made funding available for building code adoption and enforcement under the Capability and Capacity-Building set aside and the new State, Territory and Tribal Building Code Plus-Up within BRIC. The Building Codes Plus-Up provides an additional \$2 million per state and territory and \$25 million for Tribal Nations to advance building codes. BRIC is also increasing the direct technical assistance available to communities and Tribal Nations to provide holistic hazard mitigation planning and project support.

Community Disaster Resilience Zones (CDRZ): [CDRZ](#) builds disaster resilience across the Nation by driving federal, public and private resources to the most at-risk and in-need jurisdictions. FEMA announced the first 483 Community Disaster Resilience Zones in all 50 states and the District of Columbia. A map and list of designated census tracts are available on the [Community Disaster Resilience Zones platform](#). FEMA will announce additional designations that include tribal lands and territories in Fall 2024. Building codes are a consideration in the resources for these Zones. A coordinated effort is required to further explore building codes and standards opportunities.

Hazard Mitigation Assistance (HMA) Planning Program Policy and Guidance updates: The [Hazard Mitigation Planning Program Policy and Guidance](#) updated March 2023, encourages the participation of building code officials in the planning process, consideration of the effects of old or weakened building codes in risk assessments, and adoption of modern, hazard-resistant statewide building codes for Enhanced Mitigation Plans. States, Tribes, and communities have begun updating their plans using the new guidance.

Hazard Mitigation Grant Program (HMGP) 5% Codes and Standards Set-Aside: The updated HMA Program and Policy Guide establishes a new 5% Codes and Standards Set-Aside specifically for building codes and standards activities funded by the HMGP.

Building Code Language in Notice of Funding Opportunities: In 2023, FEMA developed building code-specific language for its Notice of Funding Opportunity (NOFO) template to assist grant programs that fund construction and technical assistance. More information on the evaluation criteria can be found on page 40 of the BRIC Notice of Funding Opportunity.

The Future of Flood Risk Data (FFRD): The [FFRD](#) initiative is working to include probabilistic maps and data needed for the new risk-based American Society of Civil Engineers (ASCE) 7 Flood Standards. ASCE 7 applies to most buildings in the 500-year floodplain and includes elevation, velocity and sea level rise for multiple return periods for the different risk categories of buildings.

FEMA Public Assistance (PA): Updates are currently being made to [FP-109-009-11](#) Consensus-Based Codes, Specifications and Standards for Public Assistance with a revised list of the latest published editions of hazard-resistant consensus-based codes, standards and specifications. PA is also working on a Mitigation [Cost Share](#) Incentives Policy that increases the minimum federal cost share from 75% to 85% for measures that increase readiness for and resilience from a major disaster, including consideration of a provision to incentivize building codes adoption and enforcement.

The [implementation](#) of the Inflation Reduction Act (IRA) Section 70006 (1) for FEMA PA, HMGP, and BRIC is underway. This authority exists through September 2026. Section 70006 of the IRA authorizes FEMA to provide financial assistance for (1) costs associated with low-carbon materials; and (2) incentives that encourage low-carbon and net-zero energy projects.

FEMA Net-Zero Energy Projects

On January 30, 2024, [FEMA released a policy for Net-Zero Energy Projects](#) outlining renewable generation requirements from the 2021 International Energy Conservation Code (IECC), Zero Energy Appendix and the International Green Construction Code (IgCC). FEMA encourages applicants to adopt Energy Conservation and Green Construction codes and to incorporate Net-Zero Energy into post-disaster rebuilding and construction for hazard mitigation purposes. Additionally, FEMA is providing 30 additional application points to applicants who submit projects, including methods to reduce carbon emissions in their Building Resilience Infrastructure and Communities grant applications. More information on the evaluation criteria can be found on page 40 of the [BRIC Notice of Funding Opportunity](#).



Research & Analysis

Fire Codes Study and Building Code Adoption Tracking (BCAT): In 2023, FEMA's United States Fire Administration (USFA) initiated a [Building Codes Save: Fire Hazards Pilot Study](#), to evaluate data and methods for calculating the losses avoided by adopting structure fire-resistant building codes and the International Wildland-Urban Interface Code (IWUIC). The pilot study will lead to a nationwide analysis, and the results will help encourage the adoption of structure fire- and wildland fire-resistant building codes and standards. Other work examining hazards includes

collecting data on the adoption of the IWUIC in communities at risk of wildfires to incorporate this metric into the Agency's [Building Code Adoption Tracking](#) portal in 2024.

Wildland Urban Interface Fire Hazard Awareness Tool: In 2023 the USFA completed a prototype of its web application mapping tool allowing fire service and public stakeholders to visualize where wildland-urban interface communities are located throughout the U.S. based on relative proximities to vegetative fuels and human development. The tool is intended to increase awareness of wildfire hazards and direct users to resources for community risk reduction, outreach, and mitigation. Planned iterations of the tool will incorporate additional data sources and capabilities.

Support for the Climate Mapping for Resilience and Adaptation Assessment Tool (CMRA): [CMRA](#) incorporates building code information and filters which is sourced from FEMA's BCAT tool, and tracks building codes resistant to natural hazards, including floods, hurricanes, and seismic events.

Wildfire Home Safety App: The US Fire Administration working collaboratively with the Department of Homeland Security Science and Technology Directorate (DHS S&T) has developed and deployed an augmented reality wildfire home safety app, free and available in the [App](#) and [Google Play](#) stores, allows users to scan a property with their mobile device and instantly be made aware of tips to improve home survival in the event of a wildfire. While scanning, it identifies components of the home at ignition risk during a wildfire event and gives the user steps to take to mitigate any fire risks.

Mitigation Assessment Team (MAT) Report on 2021 Marshall Fire: A newly released [FEMA MAT report on the 2021 Marshall Fire](#) is the first FEMA publication to evaluate building performance and share observations in the aftermath of a wildfire. FEMA studied this fire because the weather conditions and impacts on the built environment in the nontraditional wildland urban interface highlight risks that need to be better understood by planners, developers, government officials and the public at large both locally in Colorado and nationwide. The [report and accompanying documents](#) can be used by planners, fire departments and community leaders, to help create better wildfire planning documents, as well as develop and implement more effective wildfire mitigation projects using the most current codes to make improvements to structures and landscapes.



Code Development and External Engagements

FEMA regularly engages with consensus-based building codes and standards development organizations to integrate lessons learned from post-disaster building performance evaluations and related research into the Nation's most widely used building codes and standards. Some recent engagements include:

1. **Engagement with the American Society of Civil Engineers (ASCE):**

- a. ASCE 7-28, Minimum Design Loads and Associated Criteria for Buildings and Other Structures: FEMA is participating on ASCE 7 update committees to develop the next edition of the Standard expected to be published in 2028. The next edition will also include FEMA's participation in the first ever Future Conditions chapter that will apply climate-informed higher standards to the environmental loads calculated for flood, snow, rain, ice, and wind.
 - b. ASCE 24-24, Flood Resistant Design and Construction: FEMA is participating on an ASCE 24 update committee to develop the next edition of the Standard expected to increase climate resilience and be published in 2024.
 - c. ASCE 7-22 Minimum Design Loads and Associated Criteria for Buildings and Other Structures: In 2023 FEMA developed webinars, presentations, and reference materials to help designers implement the newly established tornado design provisions in the latest version of ASCE 7. FEMA also provided extensive outreach on the groundbreaking [flood supplement](#) to ASCE 7, directing designers for the first time to design for risk-based higher mean recurrence intervals from 500-year to 1000 year for flood loads, expanded flood hazard area including 500 year and incorporate sea level rise projections into building design.
2. **I-Code Updates:**
- a. **2024 I-Code implementation Support:** In 2023 FEMA began development of materials to help NFIP communities and other authorities having jurisdiction with the implementation of the hazard-resistant provisions in the 2024 edition of the I-Codes. These materials will be published and publicly available shortly after the 2024 I-Codes are released.
 - b. **2027 I-Code Development Process:** FEMA is engaged in the consensus-based development process, evaluating, and developing code change proposals to increase resistance of the built environment to flood, wind, seismic, and fire hazards for the 2027 edition of the I Codes.
3. **American Society for Testing and Materials (ASTM) Flood Damage Resistant Material Standard Updates:** FEMA continues to work with the ASTM International standards development organization to establish a new Standard for the evaluation of flood-resistant building materials and assemblies to help the market develop and implement more damage-resistant, building code and NFIP-compliant, materials and assemblies for use in flood hazard areas.

Department of Housing and Urban Development

As outlined in its Climate Action Plan and Strategic Plan, HUD made a significant commitment in 2023 to updating and strengthening minimum codes or standards for several of its programs, by offering incentives or complying with statutory requirements for energy efficient and resilient upgrades of existing HUD-assisted buildings, or new construction of HUD-financed affordable housing. Guiding this work has been HUD's NIABC Implementation Plan that was completed in 2023 and called for several actions:

- **Action 1:** Implement minimum statutory energy code requirements and Federal Flood Risk Management Standards (FFRMS) for HUD programs.
- **Action 2:** Assess regulatory and statutory barriers to adoption of the current International Building Code (IBC) and International Residential Code (IRC) standards.
- **Action 3:** Partner with industry to better understand the resilience features of the latest IBC and IRC standards, their costs and benefits, crosswalk with HUD’s green building standards, and implementation issues.
- **Action 4:** Seek opportunities to encourage or incentivize adoption of the latest IRC and IBC codes or related resilience standards through the FY 2023 and 2024 NOFO process, including the new \$1 billion Inflation Reduction Act-funded Green Retrofit and Resilience Program (GRRP).
- **Action 5:** Make available training materials to local communities and HUD stakeholders and partners on resilient building construction and resilient building codes.
- **Action 6:** Consider above-code or stretch energy or resilient building codes or standards where feasible, appropriate, and affordable.

HUD has made significant progress on Actions 1, 4, and 6 and is working to finalize two rulemaking efforts this spring – an update to HUD’s minimum energy code requirements for new construction and FFRMS requirements. Additionally, multiple HUD programs have adopted or now incentivize above-code standards.



Programs, Policy, and Guidance Updates

Green and Resilient Retrofit Program (GRRP): In 2023, HUD launched the \$837.5 million [GRRP](#) and awarded \$370.6 million across three cohorts - Elements, Leading Edge, and Comprehensive, for energy and resilience upgrades of existing HUD-assisted affordable multifamily housing. The first Leading Edge grant awards went to 26 multifamily projects with 3,253 units that committed to adopting one of several specified above-code zero energy green building standards with renewable energy sufficient to offset annual energy consumption or emissions. Applicable above-code zero energy green building standards include Enterprise Green Communities, Plus 2020, with Criterion 5.4 Achieving Zero Energy; National Green Building Standard: Gold + Net Zero designation; Passive House Plus+ ZERO Revive; and Leadership in Energy and Environmental Design (LEED) v.4 Gold with LEED Zero Carbon or Zero Energy designation. In addition, Elements awards have gone to 39 properties and impacted 5,100 affordable rental housing units, and Comprehensive awards have gone to 19 properties and impacted 2,103 homes.

Strengthened Incentives for [Section 202 Housing for the Elderly](#): The FY 2022 Section 202 Notice of Funds Availability (NOFO) required all awarded properties to, at a minimum, meet the 2021 IECC or ASHRAE 90.1-2019 energy standards. The NOFO also provided bonus points to properties that achieved higher energy standards including net zero standards such as LEED v4.1 Zero Energy or Zero Carbon, Passive House Zero, National Green Building Standard Silver + net zero energy badge. HUD awarded \$160 million in grants to 25 projects with 1,800 mixed income units;

all 25 projects received points for achieving higher resource efficiency and climate resilience standards beyond the minimum required standards.

Community Development Block Grant–Disaster Recovery (CDBG-DR): HUD published a Request for Information (RFI) on its [CDBG-DR program](#), including a request for comments on updating its minimum green building standards as well as the IRC and IBC codes being considered by the NIABC. An updated Universal CDBG-DR Notice will be published in 2024.

New Requirements for Choice Neighborhood Grants: HUD awarded \$370 million in [Choice Neighborhood Grants](#) for 5,200 new affordable housing units in eight communities. All projects will meet the program’s requirements for above-code green building and energy efficiency standards, including 562 units built to the FORTIFIED Multifamily Gold certification in Lake Charles, Louisiana – the first affordable housing certification in the region. Other projects will be built to the Enterprise Green Communities standard.

Implementing the Federal Flood Risk Management Standard (FFRMS) (Executive Order 13690): HUD published a [proposed rule](#) of its FFRMS requirements, which proposed using the [Climate-Informed Science Approach](#) (CISA) to identify flood elevation and floodplain management requirements for HUD-financed properties in FFRMS floodplains, as well as proposed elevation standards (2 feet above BFE) for newly constructed FHA-insured single-family homes. A Final Rule is expected to be published in April 2024.



Research & Analysis

Build for the Future Funding Navigator: The [Build for the Future Funding Navigator](#) tool provides information on funding opportunities made available under the IRA and Bipartisan Infrastructure Law (BIL). The tool allows users to easily identify funding, tax credits, grants, and rebates available to support climate resilience, energy efficiency or renewable energy projects quickly and easily.



Code Development and External Engagements

Implement minimum statutory energy code requirements: HUD collaborated with USDA to publish a [Federal Register Notice](#) in May 2023 that provided a Preliminary Determination on updating its minimum energy standards for new HUD-financed and USDA-insured housing. This Determination requested public comments on the agencies' analysis of the 2021 IECC and American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE 90.1-2019)–the latest energy codes at the time of publication–showing that overall, these codes would not negatively impact the availability and affordability of an estimated 170,000 affordable housing units covered by the Notice. Comments were received both opposing and supporting this proposal; a Final Determination will be published in 2024.

General Services Administration



Programs, Policy, and Guidance Updates

The Facilities Standards for the Public Buildings Service (P100): GSA oversees owned, leased, and rental government real property for thousands of buildings and other structures across the States and territories of the United States. GSA modernizes building codes through P100: [The Facilities Standards for the Public Buildings Service \(P100\)](#). P100 is mandatory for all GSA construction. It establishes design standards and contains both performance-based standards and prescriptive requirements to be used in the programming, design, and documentation of GSA buildings. To develop P100, GSA engaged industry organizations (e.g., ASHRAE), United States Green Building Council (USGBC), design and construction firms, manufacturers, internal offices, and other interested parties via email. Revisions are made to P100 every three years, and the current updates will be released in May 2024.

National Institute of Standards and Technology



Code Development and External Engagements

Model Building Codes for Tornado Loads: NIST led an [Economic Analysis](#) of the tornado load provisions. The building code requirements for consideration of tornado loads in the design of conventional structures were published in the 2024 IBC ([Section 1609.5](#)). This paradigm shift in engineering design for wind hazards was the result of a decade of tornado research and development at NIST, as well as collaboration with the American Society of Civil Engineers to incorporate tornado loads into the ASCE 7-22 Standard, Minimum Design Loads and Associated Criteria for Buildings and Other Structures. The ASCE 7 tornado load requirements have also been incorporated in the 2024 National Fire Protection Association (NFPA) 5000 Building Construction and Safety Code.

NIST also collaborated with FEMA to publish a [Design Guide](#) on the ASCE 7-22 tornado load procedures, as well as a [Fact Sheet](#) on improving windstorm and tornado resilience of houses.

Evaluating Climate Impacts: NIST contributed to several chapters in the [Fifth National Climate Assessment \(NCA5\)](#), which evaluates global climate change impacts to the United States. The NIST authors and technical contributors focused on climate impacts on the built environment, understanding compound risks, and community adaptation efforts. The need for transformational adaptation and resilience actions, centered on equity was emphasized.

National Oceanic and Atmospheric Administration



Programs, Policy, and Guidance Updates

Coastal Zone Management (CZM) Programs: The CZM programs address the Nation's coastal issues through voluntary partnerships between the federal government and coastal and Great Lakes states and territories. CZM programs work closely with local communities to raise awareness of coastal hazards and provide technical assistance to increase community resilience. Many of these programs also have regulatory functions along the coast and can designate certain areas as critical areas or special management areas, within which enhanced codes and standards may be required. In 2023, the CZM program incorporated building codes and standards language into management plan, acquisition, and construction guidelines. Examples of CZM programs incorporating building codes and standards include:

- **Oregon CZM:** In a 2021 legislative session, [HB 2605](#) was passed to establish tsunami building code standards for certain types of buildings.
- **Florida CZM:** The Florida CZM Resilient Florida program is supporting several vulnerability analyses of critical infrastructure and adoption of building. Projects included in the FY23 award: Nassau County Vulnerability Assessment; Seminole County Comprehensive Flood Vulnerability Assessment; Leon County Vulnerability Assessment; and City of Starke Vulnerability Assessment.
- **Hawai'i CZM:** The CZM program developed probabilistic Tsunami Design Zone maps compatible with ASCE 7-16 for the State to help strengthen Hawai'i's critical infrastructure by providing more accurate mapping. The outcome proposed draft amendments for each county's building codes to adopt the maps and model data for use in their building codes and the ASCE Tsunami Design Geodatabase.
- **New Hampshire CZM:** In April and June 2023, the Town of Hampton Coastal Resilience Coordinator (CRC) worked with the Town Planner, the New Hampshire Department of Environmental Services Coastal Program, the Rockingham Planning Commission, and a steering committee of Town Staff and Boards to propose an update to the Floodplain Management Ordinance that will include three standards that go above the NFIP's minimum requirements. These include Sea Level Rise Design Flood Elevation building requirements that consider the useful life of buildings in 2050 and 2070 when adding freeboard to a structure. In addition, the proposed amendment will include elevating utilities and mechanicals to the lowest floor and creating requirements for critical facilities being built, substantially improved, or substantially repaired in the SFHA.

NOAA National Sea Grant College Program: The [National Sea Grant Office](#) funds 34 state Sea Grant programs; many of them work with state and local decision-makers, community leaders and members, insurance representatives, and researchers on codes and standards related to hurricane and coastal hazards. This includes developing and sharing educational resources for

residents facing coastal hazards and conducting research on and supporting planning and implementation for resilience measures to protect homes and businesses from coastal hazards. Many of the state Sea Grant programs conduct constituent engagement and technical assistance to increase input, adoption, and updates of codes and standards related to infrastructure.



Code Development and External Engagements

Partnership with ASCE: In 2023, NOAA and ASCE established a [Memorandum of Understanding \(MOU\)](#) to help ensure that NOAA climate science, information and services are available and used when developing and updating ASCE codes and standards. The ASCE-NOAA Task Force is progressing on developing a list of specific climate change data that ASCE codes, standards, and manuals of practice need. They are utilizing a practice-to-practice of approach, including NOAA participating in the existing ASCE subcommittee process. NOAA and other Federal partners are weighing options to determine what research gaps exist, and weather new climate change data will need to be developed. NOAA leadership participated in the [ASCE INSPIRE 2023](#) conference in sessions focused on the ASCE-NOAA partnership and advancing climate resilience through natural infrastructure.

FFRMS Decision Support Tool: To support FFRMS implementation, NOAA used FEMA data to develop a user-friendly, geospatial web-based interactive decision support tool that is applied to new flood mapping layers. This tool will be available in early 2024, and it will become the primary mechanism to assist agencies and their non-federal partners and funding recipients in successfully implementing the FFRMS into program decisions for actions in or affecting floodplains, including project siting, design, construction, and repair or rehabilitation.

U.S. Army Corps of Engineers

USACE continues to evaluate programs and opportunities to incorporate or support the use of building and energy codes and standards. Military and civil works construction criteria incorporate modern building codes. USACE is continually evaluating military and civil works requirements to determine new criteria updates. Budgets and staff are evaluated annually to address standards and criteria program needs.



Programs, Policy, and Guidance Updates

Continued program development: USACE has a wide variety of programs and authorities, some of which are focused on construction of buildings, while others focus more on engagement with communities and sharing of knowledge. Programs are being reviewed to evaluate potential opportunities to share information about and provide support for use of building and energy codes.

Military Construction: Within the construction-focused programs, USACE, in a cost-sharing partnership with the Navy and Air Force, has a continuous process to evaluate the use of building and energy codes within existing authorities. As a result, new military construction consistently applies updated building and energy codes, including ICC, ANSI, ASHRAE, ASCE, ASME, IEEE, NFPA, and many other consensus codes and standards. For example, in fiscal year 2024, the program funded projects to adopt the 2024 IBC and ASCE 7-22.

The Department of Defense maintains 180 Unified Facilities Criteria (UFC) that align these codes with Federal law, Executive Orders, policy, military-unique mission requirements, environmental protection, historical preservation, and extensive experience with maintenance, life-cycle cost, quality of life, and safety. The UFC directly reference industry codes and provide specific additions, deletions, supplements, and replacements. UFCs are used for military construction and for applicable Civil Works building construction. The Army Corps increased funding for the criteria program in the last several years to support military installation resilience, sustainable design, cybersecurity, and emerging technologies. Additional subject matter experts (SMEs) are being hired to support criteria updates; four were hired in the last year to support Army Corps military criteria.

U.S. Environmental Protection Agency

EPA continues to advance the priorities of the NIABC while meeting the goals in the Agency's [Strategic Plan for Fiscal Years 2022-2026](#). This includes tackling the climate crisis and taking decisive action towards environmental justice and civil rights. EPA's efforts to implement the NIABC fall into three pillars: (1) Engagement in Consensus-Based Model Codes and Standards, (2) Grants, Tools, and Technical Assistance, and (3) EPA Measurements and Targets. EPA has made advancements on all three of these pillars.



Programs, Policy, and Guidance Updates

Environmental Product Declarations Notice of Funding Opportunity (NOFO)

EPA's [Sept. 28, 2023 NOFO](#) offers construction product manufacturers financial and technical support to develop Environmental Product Declarations (EPDs) that future iterations of building codes and standards will require for compliance with embodied carbon and reporting policies, often referred to as "Buy Clean." Among other merit evaluation criteria, EPA intends to prioritize funding construction material categories and material types that represent significant embodied carbon contributions, are used in large quantities, and/or have the potential to promote a circular economy (e.g., through salvage and reuse). EPA anticipates awarding up to \$100 million in EPD assistance grants and cooperative agreements in fiscal year 2024 and will augment this with direct trainings and resources as needed to support a broader range of businesses.

Low Embodied Carbon Labeling Program

EPA's Feb. 15, 2024 [Draft Label Program Approach](#) outlines the Agency's plan for implementing a \$100 million program to help purchasers identify construction materials and products with significantly lower embodied carbon, which accounts for 11% of annual global greenhouse gas emissions. As part of the Federal Buy Clean Initiative, the Label Program Approach proposes to standardize and improve the data that manufacturers use in developing EPDs, to set thresholds for the amount of embodied carbon a product can have to qualify for label, and to establish third-party certification for materials and products. As part of its data quality improvement efforts, EPA subsequently issued [Draft Product Category Rule Criteria](#) for public comment on March 5, 2024. The Agency expects to release the final Label Program Approach, including Product Category Rule (PCR)Error! Bookmark not defined. Criteria, in summer 2024 following its review of public comments.

ENERGY STAR Next Gen

EPA's [ENERGY STAR NextGen™ Certified Homes and Apartments](#) program is designed to inspire both home builders and home buyers and demonstrate that it's possible to build the homes that we need for tomorrow, today. The new certification builds on the 25-year foundation of the ENERGY STAR Residential New Construction program, through which more than 2.3 million energy-efficient new homes and apartments have been certified to date. All homes and apartments that earn ENERGY STAR NextGen certification must be independently verified to include these key features:

1. Highly energy-efficient construction that meets ENERGY STAR's most rigorous requirements.
2. A multi-speed ENERGY STAR certified connected heat pump.
3. An ENERGY STAR certified connected heat pump water heater.
4. An electric cooktop and oven.
5. Electric vehicle charging capability.

Incorporating Codes in Existing Programs

[EPA's WaterSense Program](#) is working to develop specifications for water-efficient irrigation spray sprinkler nozzles and point-of-use reverse osmosis water treatment units. To add to the growing list of irrigation products that can earn the WaterSense® label, EPA has developed a draft WaterSense specification for spray sprinkle nozzles. A spray nozzle is a component of a sprinkler system that combines with a sprinkler body to distribute water on a landscape. WaterSense intends to use the label to identify spray sprinkler nozzles that are independently certified to deliver water more efficiently than standard spray nozzles. In addition, while reverse osmosis systems can improve water quality, these systems can also generate a significant amount of water waste to operate. For example, a typical point-of-use reverse osmosis system will generate five gallons or more of reject water for every gallon of permeate produced. EPA released a draft specification for WaterSense labeled point-of-use reverse osmosis systems on Dec. 1, 2022.



Advancing Energy Codes: EPA, along with DOE, participated in updating the [International Code Council \(ICC\) International Energy Conservation Code](#) (IECC). Pending any appeals, the 2024 IECC is scheduled to be released during the first or second quarter of 2024.

Incorporating Salvaged Lumber into Building Codes: EPA is engaged in an effort that would propose an amendment to the ICC IRC to specifically address the use of salvaged lumber and when it can be used for structural applications.

Leadership in Energy and Environmental Design (LEED) Revisions: In 2023, the U.S. Green Building Council (USGBC) launched a comprehensive revision to the Leadership in Energy and Environmental Design (LEED) green building standard. LEED Version 5 is expected to be released in 2024. EPA is participating in this revision, which “will be a step in the process that supports the built environment’s alignment with the targets outlined in the Paris Agreement and addresses critical imperatives including equity, health, biodiversity, and resilience.” Specifically, EPA is participating in the Materials and Resources Technical Advisory Group (MR TAG) and promoting language that would align with [EPA’s Recommendations of Specifications, Standards, and Ecolabels](#), advance salvage and reuse of building materials, reduce construction and demolition waste, and reduce embodied carbon in buildings.

ASHRAE Engagement to Lower Carbon Emissions: EPA continues to work collaboratively with ASHRAE Standards Committees on supporting the inclusion of lower embodied carbon construction materials as part of the latest edition of the [ASHRAE 189.1](#) Standard for the Design of High-Performance Green Buildings. The proposal pathways include EPDs and Whole Building Life Cycle Analysis. The Standard serves as the technical basis for the International Green Construction Code (IgCC) as part of the suite of building codes developed by the ICC. EPA is also engaged in ASHRAE/ICC Standard 240P Quantification of Life Cycle Greenhouse Gas Emissions of Buildings.

Participating in Product Category Rule (PCR) Standards: EPA and other federal agencies are participating in [PCR standards and related initiatives](#) in support of EPA’s [Low Embodied Carbon Construction Materials/Environmentally Preferable Purchasing program](#). PCRs guide Environmental Product Declarations (EPDs) which are critical to improving standardization and transparency of product-level environmental impacts, including greenhouse gas emissions from production.

U.S. Department of Agriculture

USDA remains an active partner in the NIABC. USDA’s breadth of mission areas includes the support for construction of federally owned or financed housing and buildings. Since Rural Development (RD) is the primary mission area at USDA that supports the design, renovation, and construction of federally financed housing, and other buildings that are governed by the industry standard building codes of IBC and IRC, RD is the logical home for this important initiative within USDA. USDA serves

the most economically vulnerable populations with 86% of persistent poverty counties being in rural America. USDA understands that housing affordability and resilience to natural hazards, over the long-term, requires building better quality housing and community facilities. USDA has been successful in building housing that meets much higher energy performance levels and is focused on ensuring that the move towards adopting stronger energy and building codes helps bring equality to the quality of housing across the Nation, including our rural communities.



Programs, Policy, and Guidance Updates

Rural Development Tribal Housing Investment: USDA invested \$200,000 for Washington State to rehabilitate 15-20 low-income owner-occupied housing units, and bring them up to the [Swinomish Tribal Housing Code](#) by the end of the two-year project period, with a focus on elderly and disabled households. The Tribe’s long-term goal is for all members to have access to safe, affordable, healthy, and physically accessible homes on the reservation, which has the added benefit of contributing to climate resiliency in the community.

Community Wildfire Defense Grant program (CWDG): Forest Service (FS) began accepting a second round of applications for the CWDG. The number of projects selected will be determined by available funding, which is up to \$250 million. CDWG is funded by President Biden’s historic BIL, and is designed to assist at-risk communities, including Tribal communities, non-profit organizations, state forestry agencies and Alaska Native Corporations with planning for and mitigating wildfire risks. In support of the NIABC, communities who develop and adopt modern NFPA, ICC, or similar building codes will receive access to funding reserved for communities with code requirements for any future CWDG applications. In addition, communities that request funding for mitigation projects or the development/update of a Community Wildfire Protection Plan must verify if they currently have in place a code, ordinance, or regulation pertaining to wildfire exposure protection that requires that roofs for new building construction as well as the reroofing or replacement of a roof on existing buildings adheres to standards that are similar to, or more stringent than the roof construction standards established by the National Fire Protection Association or applicable model building code established by the ICC.



Research & Analysis

Development of the Built Environment Resilience Coordination Group: USDA created and held the first meetings of its Built Environment Resilience Coordination Group. This group is focused on strengthening the awareness of the NIABC and USDA’s implementation plan among USDA agencies such as the FS and SMEs throughout the department that engage with activities involving the built environment.



Code Development and External Engagements

USDA and HUD Collaboration: USDA and HUD published in the Federal Register a notice of preliminary determination entitled “[Adoption of Energy Efficiency Standards for New Construction of HUD- and USDA-Financed Housing: Preliminary Determination and of Comment](#),” announcing the two agencies' joint preliminary determination, that adoption of the 2021 IECC and ASHRAE 90.1-2019 code standards will not negatively affect the affordability and availability of housing for new construction of HUD and USDA housing covered by Energy Independence and Security Act (EISA) and seeking public comment on the preliminary determination. The preliminary determination is the first step to ultimately requiring compliance with these standards in HUD and USDA housing covered by EISA.

U.S. Department of Energy

In 2023, DOE made significant progress in supporting key energy code activities and administering funding to support updated energy codes.



Programs, Policy, and Guidance Updates

Leveraging IRA Funding: DOE launched two programs in support of IRA building energy code provisions: [\\$400 million in formula funding](#) to support states and territories in adopting and implementing the latest model codes and zero energy codes, and [\\$530 million in competitive funding](#) to support states, territories, and local governments with the authority to adopt building energy codes in adopting and implementing the latest model codes, zero energy codes, and innovative codes such as building performance standards that deliver equivalent or greater energy savings. Key activities include capacity building, quantitative analysis and technical drafting, stakeholder engagement, workforce development and training, and other critical activities that support the adoption and equitable implementation of the qualified code.

Leveraging BIL Funding: In July, DOE announced \$90 million in Resilient and Efficient Codes Implementation (RECI) competitive funding awards to support 27 projects across 26 states and the District of Columbia. These awards encompassed several key activities supporting energy code updates and implementation, including workforce development; community engagement; research and data collection; energy, equity and environmental justice; and increased support for compliance. This represented the first installment of the \$225 million in BIL energy code funding, and future installments are expected to follow in 2024 and 2025.



Research & Analysis

Technical Assistance: In 2023, DOE provided technical assistance on over 50 separate requests regarding building energy codes and building performance standards. DOE provides robust 1:1 technical assistance in support of both BIL and IRA funding for building energy codes and innovative approaches, including building performance standards. DOE shared information on energy codes at key forums, including the National Energy Codes Conference. The agency continues to provide quarterly updates to its state energy code adoption maps. DOE also released a landmark study—[Efficiency for Building Resilience](#)—in 2023 that provided a methodology to value the resilience benefits of energy codes.

U.S. Department of Health and Human Services

As outlined in [HHS' Climate Action Plan](#), HHS recognizes the importance of increasing resilience to climate-related threats in both its physical infrastructure and its mission-oriented program activities to advance the health of the American people. Ensuring that federally owned and funded real property through federal financial assistance is designed, constructed, and renovated to the latest building codes and standards is a foundational step toward mitigating climate hazard risks. Equally, ensuring all people living in the United States – and especially populations most vulnerable to health disparities including communities of color, older adults, children, pregnant persons, and people with lower incomes - are aware of risks and able to manage them is essential. HHS is committed to protecting the health and well-being of all Americans by integrating climate-sensitive and environmental justice considerations into its work to ensure enhanced national health and long-term well-being in the face of the climate crisis.



Programs, Policy, and Guidance Updates

Revision of HHS Procedures: HHS published the [Revision of HHS National Environmental Policy Act Compliance Procedures To Incorporate Federal Flood Risk Management Standard Procedures](#) on the Federal Register for a 30-day public comment period. The public comment period has ended, and HHS has addressed comments. HHS plans to publish its final procedures in the Spring 2024.

Leveraging IRA Funding: HHS is leading a [catalytic program](#) in early 2024 to help safety-net healthcare organizations take advantage of transformative tax credits and grant programs created by the Inflation Reduction Act and invest in resilience and sustainability. Information can be found in the [Readout of the White House Roundtable](#) on Leveraging the Inflation Reduction Act for Safety-Net Health Organizations.

Lowering Home Energy Costs for Underserved Communities: HHS is supporting individuals, families, and communities as they manage the challenge presented by climate change, including \$3.7 billion in [Low Income Home Energy Assistance Program](#) (LIHEAP) funds [announced](#) in October.

Technical Assistance: HHS has launched the Office of Climate Change and Health Equity (OCCHE) [Health Sector Resource Hub](#), a one-stop web destination to support organizations working on climate resilience and sustainability with tools including a referral guide for providers, a compendium of federal funding resources for work in this area and the IRA “Quickfinder” (a digest of opportunities created by that legislation that can help healthcare organizations to make investments in clean energy, building efficiency and infrastructure resilience).

Tools to Prioritize Underserved Communities: HHS launched an [Environmental Justice Index](#) (EJI), which ranks the cumulative impacts of environmental injustice on health for every census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. The EJI ranks each tract on 36 environmental, social, and health factors and groups them into three overarching modules and ten domains.

Tools to Forecast Climate-Related Threats: HHS has launched the following tools:

- [OCCHE Climate and Health Outlook Portal](#) forecasts and documents climate-related health threats in different regions of the country
- [Emergency Medical Services Heat Tracker](#) maps local emergency responses to heat-related illness.
- Center for Disease Control and Prevention (CDC) [Heat & Health Tracker](#) provides real-time, local heat and health information so communities can better prepare for and respond to extreme heat events. With the latest update, the annual rate of work-related injuries, illnesses, and deaths due to heat per 10,000 full-time workers by state can be tracked.

Protecting At-Risk Communities from Climate Impacts: HHS is broadening research on climate health through the National Institutes of Health Climate Change and Health Initiative Strategic Framework and providing support to states and cities to protect at-risk populations from climate impacts through initiatives like the Centers for Disease Control and Prevention Climate-Ready States and Cities Initiative.

U.S. Department of Labor

DOL provided supplemental resources and stands ready to provide technical assistance to NIABC agencies in embedding job quality, equitable workforce development strategies, and worker empowerment into federal funds. DOL looks forward to continuing to support NIABC agencies with embedding language to recruit, train and retain workers in federal projects and in the private sector and use DOL funds to fortify workforce development.

Partnerships between DOL and federal agencies can be formalized via Memoranda of Understanding (MOU) or Memoranda of Agreement (MOA) to leverage federal funding to support equitable workforce development pathways into good jobs. Agencies benefit from DOL’s technical assistance and tailored recommendations.



Programs, Policy, and Guidance Updates

Workforce Development: DOL has made significant investments into supporting and expanding the workforce to meet expanding federal projects, of note:

1. [Building Pathways to Infrastructure Jobs Grant](#): \$94 million in grants to support 34 public-private partnerships nationwide to develop, implement, and scale worker-centered sector strategy training programs that prepare the skilled workforce needed to meet the demands of infrastructure investments made possible via the BIL.
2. [Critical Sectors Job Quality Grant](#): \$16 million in grants to support organizations in 12 states as they pilot strategies to improve job quality and increase the availability of good jobs in the care, climate resiliency and hospitality sectors.
3. [Quality Jobs, Equity, Strategy and Training \(QUEST\) Disaster Recovery Dislocated Worker Grants](#): \$57 million in grants to support projects in 12 states that support unemployed and underemployed people to access, return to, or advance in high-quality jobs in infrastructure, environment and climate, the care economy, and other critical and growing industries.
4. [Workforce Opportunities for Rural Communities \(WORC\) Initiative](#): \$50 million in grants to support career training and supportive services to help workers in Appalachia, the lower Mississippi Delta, and Northern Border regions secure good jobs in stable, high-demand occupations.
5. [YouthBuild](#): \$90 million in grants to prepare young workers for good quality jobs and strengthen the Nation's workforce to meet industry demands, the awards went to 68 organizations in 32 states to provide training and employment services.
6. [Women in Apprenticeship and Nontraditional Occupations \(WANTO\) Grants](#): \$5 million to seven community-based organizations to increase women's participation in apprenticeship programs and nontraditional occupations.



Research & Analysis

Expanding Technical Assistance: DOL is also working on increased resources and capacity for technical assistance to NIABC-funded agencies. This includes a revamp of the Worker Organizing Resources and Knowledge Center and updated [Good Jobs Tools: Best Practices and Examples for Funding Opportunities](#).



Code Development and External Engagements

Engagement in key partnerships:

1. DOL is working with USDA to create communication content to distribute USDA's Rural Extension Service, with a focus on labor.
2. DOL is working with the National Association of Home Builders (NAHB) to identify resources and strategies to address talent pipeline challenges in the construction sector, create good quality jobs, and fill those positions with skilled workers.

U.S. Small Business Administration

SBA continues to look for opportunities to support NIABC efforts on building codes and energy codes. SBA is a cabinet-level federal agency dedicated to small businesses and provides counseling, capital, and contracting expertise so small businesses can confidently start, grow, expand, or recover. SBA disaster loans may be available to homeowners, renters, businesses of all sizes and private non-profits in areas covered by a disaster declaration.



504 Loan Programs, Policy, and Guidance Updates

Low Interest Loans: SBA provides long-term fixed rate low-interest 504 loans to help businesses finance fixed assets including land, building and equipment. Terms for land, building and equipment are 20 years or 25 years. Terms for equipment loans are 10, 20 or 25 years. Funds may be used for building acquisitions, new constructions, energy retrofits, sustainable design, and conforming buildings for an alternative fuel source. Small business applicants may apply for up to \$5 million per project for general projects. Multiple-phase projects involving manufacturing facilities or energy public policy may apply for up to \$5.5 million per phase.



Disaster Loan Programs, Policy, and Guidance Updates

Low Interest Loans: SBA provides low-interest disaster loans to help businesses, most non-profit organizations, and homeowners recover from declared disasters. Repairs must conform to current local building codes but may not otherwise include improvements unless additional mitigation funding is approved. Mitigation funding is available for up to 20% above the verified loss for improvements that reduce the risk of future property damage, including improvements that exceed local building codes. For disasters declared after July 31, 2023, homeowners may apply for up to \$500,000 to repair or replace a primary residence; businesses may apply for up to \$2,000,000.

Building Codes Task Force Accomplishments

In addition to the agency activities listed in the previous section, the BCTF has continued to progress the NIABC since December 2022 through several notable accomplishments. This section highlights key milestones reached by the Task Force.

Inaugural NIABC Strategic Planning Offsite

On August 9, 2023, representatives from BCTF met with the White House Council on Environmental Quality (CEQ) and Climate Policy Office (CPO) to discuss operationalizing their NIABC Implementation Plans. The discussion included strategies for execution and resources to support efforts; updating Notices of Funding Opportunities (NOFOs), grants, loans, loan guarantees, programs, and guidance; how to measure success; and establishing year two goals for the NIABC.



Figure 3: Inaugural NIABC Strategic Planning Offsite

The event was held in-person at the Eisenhower Executive Office Building and featured remarks from the Deputy National Climate Advisor, White House, and the MitFLG Co-Chair. Outcomes of the offsite included identifying target activities for Year 2 and defining performance measures for the NIABC. Please refer to the **Looking Forward** section on page 26 for further details.

Best Practices for Climate Resilient Codes and Standards

In September 2023, the BCTF released the *Best Practices for Climate Resilient Codes and Standards: Federal Assistance Programs for Non-Federal Buildings* guidance document, in conjunction with the White House, at the Sept. 28 *White House Summit on Building Climate Resilient Communities*. The BCTF is also completing a supplemental primer to provide federal agencies with a background on codes and standards. To achieve the goals of NIABC, federal agencies are strongly encouraged to incorporate the latest consensus-based codes and high-performance standards for climate resilience, energy, and emissions reductions into federal assistance programs for building construction and rehabilitation. The guidance first recommends base requirements for building codes and energy codes and then expands on energy emissions and hazard resilience. The guidance also provides pathways that demonstrate the best, current, and leading-edge consensus codes and standards to use and integrate into more than 100 federal assistance programs that fund or finance construction, pre- and post-disaster, across the Nation. At the time of this report’s publication, this Guidance is limited to use by Federal agencies.

This summit also announced the release of the [National Climate Resilience Framework \(NCRF\)](#), which emphasizes NIABC and the advancement of climate- and energy-resilient consensus codes and standards. The NCRF identifies key values, priorities, and objectives to help expand and accelerate nationally comprehensive, locally tailored, and community-driven resilience strategies. It is inclusive of the whole of government, environmental leaders, public and private sectors, elected officials and philanthropy groups working together to advance climate resilience.

Building Codes Task Force Subgroups

In 2022, the BCTF formed four subgroups: (1) Workforce Development & Job Quality, (2) Energy Efficiency, (3) Financing & Life Cycle Costing, and (4) Building Codes Community of Practice to ensure subject matter expertise informed the implementation of the NIABC priorities. In 2023, three subgroups submitted recommendations to the BCTF to incorporate and align with the Year 2 priorities. The fourth, the Community of Practice Subgroup, continued its work throughout 2023.

Subgroup	Recommendations
<p>Workforce Development and Job Quality Subgroup</p>	<ul style="list-style-type: none"> • Use the Job Quality Check list as a tool to update funding opportunities and other relevant programs, guidance, policies, where applicable. • Use the Job Quality and Equity NOFO language checklist to inform updates to funding opportunities where applicable. • Determine feasibility of Agency-specific MOUs with DOL to further long-term technical assistance and address workforce quality and job development. • Support for workforce development and compliance activities.

<p>Energy Efficiency Subgroup</p>	<ul style="list-style-type: none"> • Update to the latest suite of codes, including energy codes, and discourage weakening amendments. • Support workforce development activities. • Support compliance activities. • Evaluate beyond or stretch code measures. • Align new construction (codes) and existing building (building performance standard) policies. • Implement zero carbon construction policies and practices for new federal buildings.
<p>Financing and Lifecycle Costing Subgroup</p>	<ul style="list-style-type: none"> • Use BCA or LCCA consistent with industry consensus standards and federal statute. • Provide guidance on benefits and costs and include all relevant benefits and costs in BCA or LCCA. • Leverage housing-related financing programs (e.g., direct loans, guaranteed loans). • Capture associating Federal financing of construction with modernization of building codes.
<p>Building Codes Community of Practice Subgroup</p>	<ul style="list-style-type: none"> • Develop recommendations to use consensus model building and energy codes and standards. • Finalize an inventory of codes and standards and update the NIABC Evaluation Tool. • Support the review and development of the Best Practices and Primer documents. • Improve coordination among federal agencies to address priorities of the NIABC and modernize building codes through code development.

Engagements With Federal and External Partners

Throughout 2023, the BCTF has engaged in several presentations on the importance of improved building codes and standards. These engagements spanned from presentations to components of the Executive Office of the President (EOP), to serving on panels and speaking at various conferences like the National Disaster Resilience Conference (NDRC).

Spotlight: Collaboration with Industry Groups

FEMA, DOL, and the National Association of Home Builders (NAHB) are currently in the process of exploring collaboration activities focused on the construction workforce shortage and creating good jobs, funding opportunities for NAHB members, and building consensus on the use of current codes and standards. Potential activities include:

- **Addressing** the U.S. residential construction workforce shortage by increasing partnerships with other federal agencies; state, local, tribal, and territorial governments; and private sector entities to increase awareness of and access to workforce development opportunities.
- **Building** awareness and understanding of federal funding opportunities related to construction projects and providing homebuilders guidance on the funding eligibility and application process.
- **Promoting** the latest building, fire and energy codes to NAHB members and stakeholders by socializing the benefits of current codes and standards, including improved resilience, return on investments, and energy efficiency.

External Partner Engagements

The BCTF has also been engaged with multiple external partners to continue strengthening collaboration and coordination. Some examples include:

- **American Society of Civil Engineers:** Significant advancements in safety and resiliency have been achieved in the nationally recognized [ASCE 7](#), Minimum Design Loads and Associated Criteria for Buildings and Other Structures consensus standard that increases hazard-resistance to floods, earthquakes, wind, tsunami, winter weather and climate change. As described in the [ASCE Pathways to Resilient Communities](#) toolkit, NIABC contributes technical expertise and analysis to develop these minimum standards including representatives from FEMA, NIST, NOAA, USACE, USGS, NASA and others. [ASCE and NOAA are collaborating](#) to leverage NOAA research to make the next edition of ASCE 7 in 2028 climate resilient through the [ASCE-NOAA Task Force](#). Together the partnerships and collaboration resulted in the first [ASCE INSPIRE Conference](#) in November

2023 that focused on infrastructure innovation and adaptation for a sustainable and resilient world. Furthermore, the work of federal agencies to engage, partner with and provide data to consensus based-engineering standards is a key opportunity for action reflected in the [NCRE Objective 2](#): Increase Resilience of the Built Environment.

- **Government-Sponsored Enterprise (GSE) Climate Risk Forum:** In October 2023, BCTF leadership attended the *Joint GSE Climate Risk Forum* at Fannie Mae DC. Several main takeaways for that event included a consensus for updated building codes, recognition of the need for greater opportunities for information sharing, and a consideration of what is a reasonable speed for an action plan to getting resiliency into US housing at the level needed. The forum also highlighted there would be a need to identify what obstacles are expected, and what communities might be left behind in these advancements.
- **Q3 MitFLG Meeting at the Institute for Business & Home Safety (IBHS):** The MitFLG held its third quarterly meeting of 2023 in July at IBHS Headquarters in South Carolina. MitFLG Principals and Action Officers had the opportunity to participate in demonstration activities and presentations centered around IBHS's commitment to advancing building codes and standards.
- **Federal Housing Finance Agency (FHFA) Insurance Symposium:** In November 2023, FHFA hosted an Insurance Symposium that brought together stakeholders to discuss the threats to the housing finance sector stemming from climate risk, particularly as they affect the coverage and cost of insurance for single-family homeowners. The event featured a panel on Building Codes and Standards that highlighted potential benefits and costs of updated building codes to the homebuyer, the impacts that building codes can have on climate risk and insurance costs, and the role that builders play in code adoption.

Looking Forward

2024 NIABC Goals and Priorities

In 2024, BCTF member agencies have set a goal of updating or amending federal programs requirements to incentivize, specifically reference, and require the latest building codes, energy codes, and high-performance standards to align with the NIABC Best Practices. A significant amount of federal funding is used to construct or renovate buildings. Although code revisions can add up-front costs to construction, revised codes are known to save greater amounts in cost reductions over time.

To meet the goal of updating federal programs, the BCTF will serve as a vehicle for agencies to provide progress on their code adoption advancements and as an interagency collaboration space. Agencies have been provided with information to input their federal assistance programs into trackers and are expected to provide monthly reporting on any progress made towards aligning the programs to the NIABC Best Practices.

Resources that will assist agencies in updating building and energy codes and standards are the *NIABC Best Practices* and the accompanying Primer. The *Best Practices for Climate Resilient Codes and Standards: Federal Assistance Programs for Non-Federal Buildings* guidance document is in the process of being updated in 2024 as well as a companion Primer document to help agencies implement the recommendations of the *Best Practices*. Currently, these guidance documents are internal to the federal government.

NIABC Themes

Based on the outcomes of the August 2023 NIABC offsite meeting and on-going discussions with federal agencies and the White House, the BCTF has organized NIABC activities into three themes, (1) Partnership and Collaboration, (2) Community Support & Incentivization, and (3) Communication and Outreach (See **Figure 4** below). These themes highlight actionable items that will continue to advance NIABC efforts in 2024. Timelines and objectives are being developed to measure progress and support NIABC priorities. This will continue to shift based on guidance from the White House National Climate Taskforce and the White House EOP.



Partnerships &
Collaboration



Community Support &
Incentivization



Communications
& Outreach

Figure 4: NIABC Themes

Theme 1: Partnerships and Collaboration

Federal Interagency Collaboration

- Federal SME Cadre to provide building and energy codes and standards expertise.
- Advance MOU/MOAs across the interagency (targeted and government-wide).
- Leverage [National Climate Resilient Framework](#) and [OMB Memo](#) 24-03 on advancing climate resilience.

State, Local, Tribal, and Territorial Partnerships

- SLTT adoption tracking and engagement.
- SLTT partnerships to advance building and energy codes and standards adoption and implementation.
- Leveraging CDRZ communities and agency assistance programs.

Industry & Other Partnerships

- Partnerships with codes and standards bodies, industry partners, NGOs, non-profits linked to the advancement of building and energy codes & standards.
- Identify and advance NIABC-NAHB collaboration and other public-private partnerships (new and existing).
- Explore workforce training and development opportunities, e.g., training partnerships ranging from support and training for building code officials and communities.

Theme 2: Community Support and Incentivization

Federal Incentives & Support

- NIABC Best Practices and Primer for programs, policy, and guidance updates.
- NIABC Landscape Analysis/Infographics for federal assistance program updates.
- Increase the number of programs and funding aligned with the latest consensus codes and standards.

Address Affordability & Insurance Gaps

- Learn from existing federal examples and NGO cost studies.
- Examine certifications, implementation guidance and non-financial incentives.
- Explore insurance linkages with building codes.

Advance Equity & Environmental Justice

- Prioritize underserved & rural communities and understand their needs.
- Support Justice40 requirements (e.g., CDRZ, CDBG-DR, SCEP, BRIC).

Technological Advancements

- Understand impact of artificial intelligence on code adoption, technology solutions for code administration and adapt to the shifts.

Theme 3: Communications and Outreach

Research and Analysis

- Develop business case to illustrate return on investment and cost-benefit of codes and standards.
- Support additional data analysis and research to support community outreach and public action.

Establish communication cadre to advance community and interagency outreach

- Create a NIABC Communications Strategy and build communication channels with federal interagency, industry, and SLTT partners to drive code & standards adoption.

- Advance public education and outreach including place-based, consumer outreach and training.

Learn from interagency efforts and success stories to better support communities

NIABC Workstreams

To support the implementation of these themes and make progress towards the NIABC objectives and activities, the BCTF will be standing up workstreams to drive forward action. The initial workstreams are as follows:



Federal SMEs



Communications



Equity & Environmental Justice

Figure 5: NIABC Workstreams

1. **Federal SME Cadre:** Leverage federal Subject Matter Experts across the interagency to support inquiries on building and energy codes and standards, updates to programs, policies and guidance, development of technical documents and additional support as required.
2. **Communications workstream:** Develop communication channels to support coordination and collaboration amongst industry partners, federal agencies and SLTT partners by creating a strategic plan to establish consistent communication around codes and standards.
3. **Equity and Environmental Justice workstream:** Prioritize underserved and rural communities by understanding their existing needs, including needs related to building and energy codes and standards, disaster resilience, and affordability of mitigation measures, to better support these communities. Further integrate MitFLG SLTT members and BCTF member agency SLTT connections into NIABC efforts.

Considerations for Federally Recognized Tribal Nations

As an on-going priority for CY2024, Federal agencies will support Tribal communities to adopt and enforce current building codes and standards with flexibility for operational constraints, mission requirements, technical feasibility, individual limitations, or tribal, cultural, or traditional structures. Considerations for historical injustice around treaties and relocation, and best practices in Tribal nations' building code adoption as it relates to sovereignty, will continue to be explored in consultations with federally recognized Tribal nations.

2023 saw an increase of FEMA BRIC Building Codes Capability and Capacity grants for Tribal communities to (13) eligible projects so far under the BRIC program. Tribes in (5) States were selected for projects ranging from first time adoption of building codes to updates of existing

older codes to comprehensive training and certification of inspectors on the latest codes and the development of mutual aid agreements to provide for pre- and post-disaster building code capacity, implementation, assessment and enforcement.

Next Steps

As the BCTF makes progress towards addressing NIABC priorities, engagements with White House CEQ and CPO will continue to inform the iterative approach towards advancing the use of the latest building and energy codes and standards. The BCTF has made tremendous progress in 2023. The milestones achieved and the work accomplished by the BCTF continues to build resilience to impacts of climate change, lowers utility bills for homes and businesses, prioritizes underserved communities, and creates good paying jobs. Looking to the future, BCTF members will provide expertise and experience while engaging with SLTT and external partners and employ interdisciplinary approaches to examine areas such as energy, labor, environment, and equity to advance NIABC priorities. By working collaboratively with support and guidance from the CEQ, CPO, and the White House National Climate Task Force, the MitFLG BCTF is looking forward to continuing to drive action forward to support more resilient communities.

Appendix A: Acronyms

Acronym	Definition
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
BCAT	Building Code Adoption Tracking
BCTF	Building Codes Task Force
BIL	Bipartisan Infrastructure Law
BRIC	Building Resilience Infrastructure and Communities
CDBG-DR	Community Development Block Grant-Disaster Recovery
CDC	Center for Disease Control and Prevention
CDRZ	Community Disaster Resilience Zones
CEQ	Council on Environmental Quality
CFPB	Consumer Financial Protection Bureau
CISA	Climate-Informed Science Approach
CISA	Cybersecurity and Infrastructure Security Agency
CMRA	Climate Mapping for Resilience and Adaptation Assessment Tool
CPO	Climate Policy Office
CRC	Coastal Resilience Coordinator
CWDG	Community Wildfire Defense Grant program
CY	Calendar Year
CZM	Coastal Zone Management
DHS	Department of Homeland Security HQ
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
EJI	Environmental Justice Index
EOP	Executive Office of the President
EPA	U.S. Environmental Protection Agency
EPDs	Environmental Product Declarations
FEMA	Federal Emergency Management Agency
FFRD	Future of Flood Risk Data
FFRMS	Federal Flood Risk Management Standards
FHFA	Federal Housing Finance Agency
FS	Forest Service
GRRP	Green Retrofit and Resilience Program
GSA	General Services Administration
GSE	Government-Sponsored Enterprise
HHS	U.S. Department of Health and Human Services

HMA	Hazard Mitigation Assistance
HMGP	Hazard Mitigation Grant Program
HUD	Department of Housing and Urban Development
IBC	International Building Code
IBHS	Institute for Business & Home Safety
ICC	International Code Council's
IECC	International Energy Conservation Code
IRA	Inflation Reduction Act
IRC	International Residential Code
IWUIC	International Wildland-Urban Interface Code
LIHEAP	Low Income Home Energy Assistance Program
MitFLG	Mitigation Framework Leadership Group
MOA	Memoranda of Agreement
MOU	Memorandum of Understanding
NAHB	National Association of Home Builders
NCA5	Fifth National Climate Assessment
NCRF	<i>National Climate Resilience Framework</i>
NDRC	National Disaster Resilience Conference
NFPA	National Fire Protection Association
NIABC	National Initiative to Advance Building Codes
NIST	National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NOFO	Notice of Funding Opportunity
OCCHE	Office of Climate Change and Health Equity
P100	Facilities Standards for the Public Buildings Service
PA	Public Assistance
PCR	Product Category Rule
PDM	Pre-Disaster Mitigation
QUEST	Quality Jobs, Equity, Strategy and Training
RD	Rural Development
RECI	Resilient and Efficient Codes Implementation
RFI	Request for Information
SBA	Small Business Administration
SLTT	state, local, tribal, and territorial
SMEs	subject matter experts
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGBC	United States Green Building Council
WANTO	Women in Apprenticeship and Nontraditional Occupations

WORC	Workforce Opportunities for Rural Communities
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