

One Door: HUD's Off-Site Roadmap and Action Plan Route Only to oneICC



The American people are not choosing a path. They are walking predetermined routes. HUD funded the map. NIBS and MOD X drew it. Every corridor is a loop. There is only one lighted door. They already named it oneICC.

HUD has recently published and promoted two federally funded publications—*Offsite Construction for Housing: Research Roadmap* and *HUD's Past, Present, and Future Role in Accelerating U.S. Offsite Construction for Housing: A Comparative Study and Action Plan*—as broad research into improving housing production, innovation, and affordability.

For the first document, **Offsite Construction for Housing: Research Roadmap**, the narrative states:

“Offsite construction of housing, which includes manufactured housing, modular homes, and prefabricated structural components, offers potential for production efficiencies, improved quality, and lower costs. Key knowledge gaps and research needs to be addressed to overcome the barriers and challenges of offsite construction. A literature review and industry consultation informed development of this research roadmap and recommended research priorities for the Department of Housing and Urban Development and broader public-private collaborations to

advance offsite construction for housing. Research priorities are identified for six topical areas: Regulatory Framework; Standards and System Performance; Capital, Finance, and Insurance; Project Delivery and Contracts; Labor and Workforce Training and Management; and Business Models and Economic Performance.”

For the second document, **HUD’s Past, Present, and Future Role in Accelerating U.S. Offsite Construction for Housing: A Comparative Study and Action Plan**, the narrative states:

“This report examines how HUD has historically influenced offsite construction and identifies pathways to support innovation in housing delivery today. Through a comparative analysis of peer efforts in Japan, Sweden, and the United Kingdom, the research explores how government action, particularly around regulation, demand aggregation, and systems certification, can support the development of a high-performance, technologically advanced housing sector in the United States.”

What Is Really In The HUD Off-Site Construction “Research Roadmap?”

1. **HUD Code** — Investigate the relative merits of the HUD Code versus ICC codes for potential regulation of manufactured housing.
2. **New Products** — Research obstacles in the current ICC-Evaluation Service (ES) process to develop mechanisms fostering new product development in offsite construction for housing.
3. **ICC Model Codes** — The Roadmap repeatedly references the International Residential Code (IRC) and International Building Code (IBC) as the model-code framework for offsite construction.
4. **ICC Performance Code** — The Roadmap discusses the ICC performance-based code pathway and its potential use for offsite construction.
5. **ICC/MBI 1200** — The Roadmap identifies the ICC/MBI 1200 standard for planning, design, fabrication, construction, and assembly of offsite projects and raises research questions about its effectiveness and implementation.
6. **ICC/MBI 1205** — The Roadmap identifies ICC/MBI 1205 for inspection and regulatory compliance of offsite construction, including third-party inspection and approval functions.
7. **ICC/MBI 1210** — The Roadmap identifies ICC/MBI 1210 among the ICC/MBI standards being developed for offsite construction.
8. **ICC Guideline G5-2019** — The Roadmap identifies ICC G5-2019 among the ICC standards and guidance documents applicable to offsite construction.
9. **ICC-ES Evaluation Reports** — The Roadmap discusses ICC-ES reports as the preferred resource used by code officials to verify compliance of new and innovative products, while examining the cost, time, and market-entry barriers associated with the ICC-ES process.
10. **ICC Third-Party Inspection** — The Roadmap specifically references ICC’s third-party inspection process for offsite construction.

11. **ICC NTA Remote Virtual Inspection** — The Roadmap specifically cites ICC NTA's remote virtual inspection process and related inspection practices.
12. **ICC/MBI Project Delivery Process** — The Roadmap identifies ICC/MBI 1200 as a project-delivery guide and raises research questions about using that ICC/MBI framework to address traditional contracting and delivery challenges.

The HUD Roadmap Goes Further

The Roadmap goes further. It prominently quotes **Cindy Davis, then President of the International Code Council**, advocating that HUD adopt the ICC/MBI standards for all offsite construction and rely on accredited third-party inspection and labeling organizations:

“With the ANSI industry consensus standard by ICC and MBI now available, it seems that HUD could streamline the manufactured home industry, remove unnecessary regulatory barriers, and increase consumer confidence by adopting these standards for all offsite construction. States could ease their workload with reliance on accredited third-party inspection and labeling organizations.”

The HUD Plan Then Introduces the Housing System Certification

The “Housing System Certification” is a proposed regulatory framework that shifts building compliance away from the traditional, local **project-by-project inspection** model to a centralized, national **product-level approval** model.

Under this scheme, a manufacturing company's entire integrated delivery system—including its design logic, assembly line processes, quality controls, and supply chain—is reviewed and certified **just once** by a central expert body. Once the overarching system achieves certification, all future individual housing projects built using that system automatically inherit the approval, severely limiting the oversight role of local code authorities.

The authors of the HUD reports use successful international frameworks, such as Japan's 50-year-old system, and manufacturing sectors, such as aerospace and automotive, to sell the concept as an efficiency breakthrough. However, because the underlying NIBS statute, 12 U.S.C. § 1701j–2, contains **no legal authorization for certification**, critics and independent trade groups track this program as an un-legislated administrative pipeline designed to enforce a vertical monopoly over the American modular housing market.

Conflicts of Interest and Overlapping Leadership

ICC-employed or ICC-connected individuals have served in NIBS governance, NIBS councils, Roadmap stakeholder roles, Project Technical Committee roles, and later peer-review roles of the HUD publications and partners on the pilot programs. The same MOD X principals authored both the 2023 Roadmap and the 2026 Action Plan, while NIBS managed both efforts. These overlapping roles raise direct conflict-of-interest and self-review concerns because

organizations helping shape the federal research agenda are also positioned to benefit from its implementation.

Vertical Integration and Antitrust Concerns

ICC writes widely adopted model codes and standards, and its subsidiaries provide product evaluation, inspection, certification, and accreditation services tied to those same codes, standards, evaluation reports, and more. Federal research, grants, preferences, and implementation that steer toward that same network raise serious antitrust concerns because they can entrench one vertically integrated private system at the expense of smaller competitors, independent third parties, and alternative standards systems.

OMB Circular A-119 Concerns

OMB Circular A-119 requires federal agencies to consider antitrust, conflicts of interest, small-business impact, competition, innovation, economic effects, and available alternatives. It expressly warns that improper use of standards can suppress free and fair competition and exclude safer or less expensive products. A federal research program that repeatedly points toward one private standards and conformity-assessment system while alternatives are absent raises a serious compliance concern under that Circular.

Moving From Research Into Implementation

HUD-funded regional pilots are now developing models intended to be replicated nationally through the forthcoming HUD Breakthrough Pilot Handbook. That makes review especially important before these recommendations are embedded into a federal technical-assistance model and disseminated nationwide.

Significant Omissions

The 2023 Research Roadmap omits the existing federal history and competing compliance-assurance framework developed through **Operation Breakthrough, Project LEAP, the Coordinated Evaluation System (CES), and ASTM E541**. ASTM E541 remains referenced in multiple states and continues to appear in HUD's own third-party personnel requirements. By omitting that framework, the Roadmap deprives the reader of a fair comparison between the ICC-centered pathway being advanced and an existing independent framework that grew out of prior federal work.

The NIBS Statute

On May 21, 2026, Dr. Ivan Rupnik testified in writing before the House Select Committee on Small Business, at the hearing *"Building the Future: How Small Home Builders are Closing America's Housing Gap."*

He is a founding partner of MOD X and a professor at Northeastern University. With Ryan E. Smith and Tyler Schmetterer he co-authored HUD's 2026 Action Plan — the same MOD X team that, with NIBS, produced the 2023 *Offsite Construction for Housing: Research Roadmap*. He told the Committee that MOD X has “directly supported HUD’s offsite construction research since 2022.”

His ask was not abstract. He asked that Committee to support NIBS in starting a housing-system certification framework “without new appropriations or new authority,” and to “direct NIBS to develop the certification framework Congress already authorized.” He said the 1968 Act let HUD pilot system certification; Operation Breakthrough validated it; the 1974 Act created NIBS “mandated to continue the work Operation Breakthrough had started”; the mandate “has never been exercised, but it has also never been rescinded”; and “[n]o housing system certification framework currently exists in the United States.”

That testimony is now the public sales pitch for the two HUD reports — to Congress, to HUD, to state partners, and to anyone told this is unused law already on the books. The question is whether 12 U.S.C. § 1701j–2 actually says what he said it says.

The statute

NIBS exists under one section: 12 U.S.C. § 1701j–2, enacted as section 809 of the Housing and Community Development Act of 1974, Public Law 93–383. Later amendments changed the board, added a two-year match, created an Advanced Building Technology Council, and ended regular annual appropriations. None of them created a housing-system certification program.

What Congress found

§ 1701j–2(a)(1)(B):

the establishment of model buildings codes or of a single national building code will not completely resolve the problem because of the difficulty at all levels of government in updating their housing and building regulations to reflect new developments in technology, as well as the irregularities and inconsistencies which arise in applying such requirements to particular localities or special local conditions.

§ 1701j–2(a)(1)(D) speaks to “the evaluation of new technology,” not to a single national certifier.

The sentence that governs this file

§ 1701j–2(a)(2):

The Congress further finds, however, that while an authoritative source of technical findings is needed, various private organizations and institutions, private industry, labor, and Federal and other governmental agencies and entities are presently

engaged in building research, technology development, testing, and evaluation, standards and model code development and promulgation, and information dissemination. These existing activities should be encouraged and these capabilities effectively utilized wherever possible and appropriate to the purposes of this section.

Existing testing and evaluation were not a vacuum. They were to be used.

What NIBS is — and is not

§ 1701j–2(b)(1): the Institute is “an appropriate nonprofit, nongovernmental instrument” which “shall not be an agency or establishment of the United States Government.”

After the startup years, § 1701j–2(i) states that “thereafter the Institute shall be financially self-sustaining through the means described in subsection (f)” — contracts, grants, donations, and fees. Congress ended regular annual appropriations after 1984. A 1984 trust fund was a temporary bridge; the principal reverted to the Treasury in 1989.

The Advanced Building Technology Council HUD appointed and never funded

In 1990, section 952 of the Cranston-Gonzalez National Affordable Housing Act (Pub. L. 101–625) inserted subsection (h): **the Advanced Building Technology Council inside NIBS.**

The Secretary of HUD appoints six to eleven members — (h)(3). The Council was to identify and evaluate technologies, develop use criteria, run economic analysis, advise on federal buildings, monitor performance for a year, and disseminate data — (h)(2). It was to report annually through NIBS to Congress — (h)(5).

HUD’s own “Powers of the Secretary” page states that the Secretary made those appointments and that **“the Council was never funded.”** The only nearby money — \$512,000 for FY 1991 and \$534,000 for FY 1992, each requiring a one-to-one non-federal match — was for the Institute generally, not a named Council account. Those authorizations were not renewed. Authorization is not appropriation.

The one later statutory body that most resembles a technology-evaluation program was seated by HUD and left without money. It is not a hidden certification mandate. It is a council that never ran.

The Board and consumer substitutes

§ 1701j–2(c)(1) requires a public-interest majority. Those members:

shall hold no financial interest or membership in, nor be employed by, or receive other compensation from, any company, association, or other group associated with the manufacture, distribution, installation, or maintenance of specialized building

products, equipment, systems, subsystems, or other construction materials and techniques for which there are available substitutes.

Congress assumed substitutes. § 1701j-2(c)(8) requires a Consultative Council open to “private and public standards, code, and testing bodies.”

Four functions — the entire grant

§ 1701j-2(e)(1):

The Institute shall exercise its functions and responsibilities in four general areas, relating to building regulations, as follows:

(A) Development, promulgation, and maintenance of nationally recognized performance criteria, standards, and other technical provisions for maintenance of life, safety, health, and public welfare suitable for adoption by building regulating jurisdictions and agencies, including test methods and other evaluative techniques relating to building systems, subsystems, components, products, and materials with due regard for consumer problems.

(B) Evaluation and prequalification of existing and new building technology in accordance with subparagraph (A).

(C) Conduct of needed investigations in direct support of subparagraphs (A) and (B).

(D) Assembly, storage, and dissemination of technical data and other information directly related to subparagraphs (A), (B), and (C).

(A) is criteria a jurisdiction may *adopt*. (B) is evaluation of *technology* against those criteria. (C) is supporting study. (D) is the record.

There is no fifth paragraph authorizing NIBS to certify a company’s entire housing system certification system that vertically integrates a private trade associations proprietary framework. delivery system so later.

Delegate — and consult Justice

§ 1701j-2(e)(2):

The Institute in exercising its functions and responsibilities described in paragraph (1) shall assign and delegate, to the maximum extent possible, responsibility for conducting each of the needed activities described in paragraph (1) to one or more of the private organizations, institutions, agencies, and Federal and other governmental entities with a capacity to exercise or contribute to the exercise of such responsibility...

§ 1701j-2(e)(3)(C):

consult with the Department of Justice and other agencies of government to the extent necessary to insure that the national interest is protected and promoted in the exercise of its functions and responsibilities.

§ 1701j-2(g) encourages federal agencies to *accept* applicable NIBS findings. Encouraged acceptance is not exclusive use of one private stack.

What the testimony claimed versus what the section contains

Rupnik asked the Small Business Committee — and, through that testimony, HUD, NIBS, and the states — to treat 1974 as an unused housing-system certification mandate.

The enacted section authorizes four functions, mandatory delegation, use of existing testing and evaluation, consumer regard for substitutes, and Justice consultation. The only later council HUD appointed was never funded.

The testing-and-evaluation work (a)(2) said to utilize is Project LEAP, the Coordinated Evaluation System, and ASTM E541. Transferring LEAP into ASTM in 1975 is (e)(2) as written. A Roadmap that omits E541 and promotes 1205, then an Action Plan that asks NIBS to build a different inherited-approval product, cannot rest on “authority already on the books.” For the Committee, for HUD, and for anyone else handed that testimony, the books say otherwise.

Closing — The Pilots, the Handbook, and What HUD Is Now Implementing

HUD is no longer only publishing research. It is turning these two reports into a national model.

Under the FY23 Offsite Construction and Land Use Reform awards, NIBS received \$499,878 to partner with six HUD regions, design pilots, and produce a handbook. MOD X is leading that work. The Breakthrough Regional Pilots cover Greater Boston, Virginia, the Twin Cities, the Wasatch Front, California, and Washington State. Strategic partners include ICC/NTA. Phases 1–3 are done. The in-person Offsite Pilot Summit is underway. Phase 5 is the HUD Breakthrough Pilot Handbook, scheduled July–September 2026, to be published by HUD and sent out nationwide as the replicable template.

That handbook is the point of no return. Once HUD issues it as technical assistance, the Roadmap’s ICC-centered menu and the Action Plan’s housing-system certification are no longer papers. They are the federal how-to.

Watch what is being locked in — as separate products, stacked for the same network.

ICC already writes the model codes. With MBI it wrote 1200 (plant process) and 1205 (third-party certification, testing, inspection, and accreditation). It sells ICC-ES evaluation reports. It bought NTA. ICC NTA inspects and is already in the DAPIA/IPIA world. IAS accredits.

The Roadmap puts that stack on the page and leaves ASTM E541 off it — the LEAP consensus standard referenced in 11 states and in HUD's own DAPIA/IPIA personnel rules.

Manufactured homes are not the modular patchwork. They have a preemptive HUD Code and a federal third-party program which includes ASTM E541. The ICC/MBI standards' own foreword excludes manufactured homes. The Davis quote in the Roadmap still asks HUD to adopt those standards for all Off-Site construction to "streamline the manufactured home industry." The Roadmap also asks whether the HUD Code should give way to ICC codes. Chassis removal is how that line gets easier to cross.

Beside that stack, the Action Plan adds a different product: NIBS housing-system certification — one approval of a company's entire delivery system; later projects inherit it. Rupnik asked the House Small Business Committee to treat that as unused 1974 authority. Section 1701j-2 does not say that. It says use existing testing and evaluation, delegate to the maximum extent possible, regard substitutes, and consult Justice. HUD appointed the only later NIBS technology council and never funded it.

OMB Circular A-119 tells federal agencies not to use private standards and conformity assessment in a way that suppresses competition. A HUD handbook that teaches regions to rely on ICC/MBI 1205 instead of ASTM E541, ICC-ES and ICC NTA instead of independent third parties, and a NIBS certification beside them, is how one vertically integrated private system becomes the default — codes, administrative standards, evaluation, inspection, accreditation, and a new inherited-approval service — paid for and distributed by the United States.

Americans are told they are in a market. They are in a maze. HUD and NIBS fund the map. MOD X writes it. MBI co-brands the administrative standards. ICC already named the exit **oneICC** — members, chapters, codes, standards, product evaluation, training, certification, accreditation, and more. The paths look like many. The open door is only **oneICC**.

That is not what Congress built NIBS to do. Section 1701j-2(c)(1) requires a **public-interest majority** on the NIBS Board: architects, professional engineers, officials of federal, state, and local agencies, and representatives of consumer organizations. Those members may hold no financial interest in, membership in, employment by, or compensation from any company, association, or group associated with specialized building products, systems, or techniques **for which there are available substitutes**. Public interest here is the whole community, not one shop. The substitutes the statute assumed are the rest of the field — ASTM, IAPMO, UL, ASME, ASHRAE, independent third parties, E541. A program that leaves those off the page and walks every pilot toward 1205, ICC-ES, ICC NTA, and a new NIBS certification is the closed loop that majority was written to prevent.

The 2026 Breakthrough handbook is how the maze gets issued as federal technical assistance.

HUD can support offsite construction without finishing that design. It should not publish the handbook until it states, in writing, that ASTM E541 remains available, that ICC/MBI 1205 does not replace it, that ICC/MBI standards do not apply to preempted HUD Code homes, that

housing-system certification is not hidden in § 1701j-2, and that ICC-ES, 1200, 1205, ICCNTA, and any NIBS certification stay optional, competing services, and that there are many alternatives to ICC-ES evaluation reports.

Until then, the pilots are not a study of housing supply. They are taxpayer assistance to the closed loop.

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