



Testimony of

Ms. Mary Tingerthal

Founder

Construction Revolution

Saint Paul, Minnesota

Before the

Senate Subcommittee on Housing, Transportation and Community Development

Hearing entitled:

Innovation in U.S. Housing: Solutions and Policies for America's Future

October 21, 2025

Ms. Mary Tingerthal
Founder, Construction Revolution
Saint Paul, Minnesota

*Written Testimony before the
Senate Subcommittee on Housing, Transportation and Community Development
Hearing on “Innovation in U.S. Housing: Solutions and Policies for America’s Future”
October 21, 2025*

Thank you Chair Britt, Ranking Member Smith and members of the subcommittee for giving me the opportunity to testify today about Innovation in U.S. Housing with a focus on solutions and policies that can move us forward to increase the supply of housing.

My name is Mary Tingerthal and I am the founder of Construction Revolution, a cross-sector collaboration in Minnesota formed in 2019 to reduce the cost of housing by creating an innovation hub for the effective use of offsite construction.

I’m here today to talk about why it is important to encourage housing developers to embrace modular construction as one way to help with the important national goal of increasing housing supply.

As you have reflected in the ROAD to Housing Act, it will take innovation in all parts of the residential development and financing process to accomplish that goal of producing more housing that is more affordable to more people in more places across the country.

My comments will focus on why modular or offsite construction should figure prominently among the innovations on the list of solutions that should be encouraged by federal, state and local officials and the homebuilding industry.

I spent my entire full-time career in the field of housing finance, working in the for-profit, non-profit and government sectors to finance housing in the U.S. In the final 8 years, I led the Minnesota Housing Finance Agency, a \$4 billion entity that works with private sector lenders and developers to finance homes for first time homebuyers and affordable rental apartments. During that time, I was frustrated by the fact that the cost of housing was rising faster than the incomes of the families we were serving. That’s what led me to form Construction Revolution and begin a serious look at whether increasing the use of off-site or modular construction could help to produce housing faster and more cost-effectively.

The Use of Modular Construction is Expanding and Important Lessons are being Learned

Over the past five years, entrepreneurs have stepped up across the country to invest in new factories to produce modules for the construction of housing, with much of that new capacity

focused on multifamily housing. In that time, we have learned that modular construction can deliver benefits in three key parts of the housing production process:

- Shorter Construction Times
- Lower Construction Costs
- More effective use of skilled labor

In its 2025 US Permanent Modular Construction Industry Report¹, the Modular Building Institute indicated that the key reason for choosing modular construction is because it can dramatically reduce the amount of time it takes to get from the groundbreaking to the first move-in. Estimates of time savings consistently range from 20% to 50%. This is possible because 60 to 70% of the construction work can be performed offsite in a factory **at the same time** that work begins on site excavation, foundation and utility work at the project site. This means that larger multifamily rental properties can start generating rent as much as one year sooner than is possible with traditional construction. This also reduces the time that expensive construction loans need to be outstanding.

The second most important driver for the choice of modular is cost efficiency. In addition to the financing efficiencies already mentioned, hard construction costs have been shown to be 10% to 20% lower on the portion of the construction that is completed in the factory. The Modular Building Institute cites a 2023 study showing that overall total costs of projects using modular construction are 4% lower than comparable projects using traditional construction. This is attributable to more efficient work processes, less construction waste and more effective use of skilled labor as a result of standardized construction processes. Even larger savings are possible if standardized designs are used for multiple projects.

The shrinking availability of skilled labor is the third most important driver of the choice of modular. Standardized design and processes mean that skilled tradespeople can oversee the work of lower-skilled workers who can be effectively trained to do repeatable tasks. The fact that the work is done in a factory setting means it is possible to attract non-traditional workers to residential construction who would not otherwise consider construction jobs. This is especially critical in harsh climates where heat or cold can make on-site construction work challenging. Quality control and consistency of construction are also improved in a factory setting.

¹ Modular Building Institute. 2025. United States Permanent Modular Construction Industry Report <https://www.modular.org/industry-analysis/>

Barriers to the Broader Adoption of Modular Construction by Housing Developers

With all of these advantages, why has modular construction not been more broadly adopted by the housing development sector?

Some progress has been made over the past 5 years. The Modular Building Institute estimates that, in 2024, 7% of multifamily buildings in the U.S. used either modular or panelized construction, with the National Association of Homebuilders estimating that 5% of multifamily construction was modular. This is an important increase in just the last three years from an estimated 2% of buildings in 2022.

On the single-family side of the picture, the Manufactured Housing Institute estimated that approximately 9% of new single-family homes in 2024 were manufactured housing under the HUD code, and BusinessWire² reports that in 2024 3-4% of single-family homes used modular construction.

These statistics show that demand is increasing for housing built using off-site construction, but many barriers to a broader embrace by the residential development and construction industry still exist.

First – developers are reluctant to undertake a modular project if they are unable to use the most effective financing tools available. For example, the popular FHA 221(d)4 construction-to-permanent loan program has administrative measures that don't allow construction draws for materials and work that is completed offsite in a factory.

Second – because most building codes in the US are written for traditional construction, the permitting and inspection processes for modular buildings can be complicated, confusing and time-consuming. This is especially true for modules constructed in one state and installed in another state.

Third – another obstacle to the adoption of modular is a persistent negative perception about the quality and durability of the construction.

Fourth – one of the most commonly observed barriers to modular adoption is the construction industry's lack of familiarity of modular construction. Many stakeholders simply are unaware of the workflows, cadence and requirements that are unique to modular construction.

² <https://www.businesswire.com/news/home/20250818964836/en/United-States-Prefabricated-Construction-Market-Report-2025-Modular-Homes-Gain-Ground-Amid-Housing-Shortages-and-Climate-Challenges-in-the-U.S.-ResearchAndMarkets.com>

Potential Solutions to Overcome these Barriers have been Identified

In the ROAD to Housing Act, three sections begin to address these barriers.

Section 302(b) of the Modular Housing Production Act section of ROAD instructs HUD to look at the administrative measures authorized for FHA construction financing programs under section 525 of the National Housing Act and identify how they can be modified to support modular construction.

Section 302(c) of the Act authorizes HUD to do a study on the design and feasibility of a uniform commercial code for modular housing. Fortunately, this study can build on work completed over the last several years in a collaboration between HUD, the National Institute for Building Sciences and a network of national and international experts.

Section 303(b) of the Act instructs HUD to conduct a study on the cost-effectiveness, quality and durability of modular housing. The findings of this study could go a long way towards reversing the negative perceptions about quality and durability of modular construction.

To address the lack of familiarity with modular construction by industry stakeholders as well as other technical issues, HUD has worked with the National Institute for Building Sciences (NIBS) and a technical organization called MODX, which taps the expertise of a national and international network of experts in offsite construction. The first published work from this collaboration is “Offsite Construction for Housing: Research Roadmap”³. The roadmap identifies research topics to overcome obstacles that prevent scalable growth and market penetration for offsite construction. Topics include: Regulatory Frameworks; Standards and Systems Performance; Capital, Finance and Insurance; Project Delivery and Contracts; Labor and Workforce Training and Management; and Business Models and Economic Performance.

The work of this group has continued this year with an initiative that focuses specifically on stakeholders in six regions of the country to develop regional action plans for stimulating the adoption of offsite construction in each region. The publication of these plans in the “HUD Breakthrough Pilot Handbook: Growing Offsite Construction for Housing through Regional Pilot Projects” is scheduled for 2026.

Finally, the partners of Construction Revolution have learned that education of stakeholders is most likely to occur when stakeholders have access to real-time information on actual projects. In 2021, Construction Revolution worked in partnership with MODX to develop an Offsite Accelerator course that provided detailed instruction about offsite construction to 24

³ Ryan E. Smith, Ivan Rupnik, Tyler Schmetterer, Kyle Barry. 2023 Offsite Construction for Housing: Research Roadmap. Prepared for Department of Housing and Urban Development, office of Policy Development and Research <https://www.huduser.gov/portal/publications/Offsite-Construction-for-Housing-Research-Roadmap.html>

practitioners in a mixed class including developers, architects, construction contractors and lenders. The course included two workshop sessions where participants were able to bring housing development projects they were working on to get real-time feedback on how they could effectively use modular construction to achieve their goals. One of the projects that the group analyzed – the Minneapolis Public Housing Authority Family Housing Expansion Project – was completed in 2024 and was featured at the 2024 HUD Innovative Housing Showcase. The project was also a finalist in the Urban Land Institute 2024 Award of the Americas⁴. This project now serves as an example of the innovative and effective use of modular construction for developers and communities across the country.

The project was developed by the Minneapolis Public Housing Authority to provide housing located in low-density neighborhoods for 84 low-income families. Financed as a single project, the development was constructed on 16 separate sites located in 11 different neighborhoods throughout Minneapolis that were selected for characteristics like proximity to high quality schools. Each building was either a fourplex comprised of 6 modules or a six-plex comprised of 9 modules, all fabricated by RISE Modular located in Owatonna, Minnesota. Research by the Minneapolis PHA had demonstrated that families who live in scattered site housing have better outcomes (such as employment, buying a home and school achievement) than those families who live in higher density congregate settings, so they designed a project that would use medium-sized buildings in low density neighborhoods to increase the overall number of families they could serve with the program. Today, 84 families live in two and three-bedroom homes they can afford in buildings like the one shown in the photo below.



⁴ <https://americas.uli.org/family-housing-expansion-project-uli-americas-awards-for-excellence-finalist/>

Conclusion

Modular construction is a technology innovation that can bring time savings, cost savings and better utilization of skilled labor to increase the production of housing. Encouragement from federal, state and local governments and the homebuilding industry through supporting innovation programs, such as those anticipated in Sections 209 – Innovation Fund and 210 – Accelerating Home Building Act of the ROAD to Housing Act, can help developers and industry stakeholders to gain confidence in this new approach. The two administrative measures in Section 303 – Modular Housing Production Act can provide more effective financing and address issues in the permitting and inspections process for modular construction.

Thank you for your leadership in advancing the ROAD to Housing Act and for the opportunity to talk with you about the critical importance of modular construction in achieving increased housing production.