



HOME ECONOMICS

How **Manufactured Housing** Could Help Solve the National Affordability Crisis



By Jon Gorey

DESPITE THE ENGAGING WARMTH IN HIS VOICE, Jim Bennett is not what you'd call a people person. "I'm basically asocial, even though I worked retail—or maybe *because* I worked retail for so long," he quips. It's late fall when we speak, so he's bracing for the chaotic social cyclone that is a big family Thanksgiving; his wife, Kathryn, is decidedly more enthusiastic about hosting everyone for dinner.

The couple certainly has room to entertain in the home they bought three years ago. The open kitchen and dining area is roughly 13 feet by 30 feet, and easily fits a pair of full-size tables. "We have 16 to 20 people over for Thanksgiving, and it's not crowded," Bennett says.

What's remarkable is that all that space—the big, blank canvas upon which the Bennetts plan to paint their golden years—was created on a factory floor, trucked up the highway, and now sits in a 55-and-over manufactured home community called Woodland Estates, about 50 miles northwest of Boston. With its open layout, spacious primary bedroom, office space, and two bathrooms, one with a roll-in shower, theirs is not the "mobile home" of yore.

Yet it was mobility, of a different sort, that inspired the couple to design and purchase the house. Bennett, 64, has been living with multiple sclerosis for over 20 years, and knows that he's likely to face increasing difficulty getting around. "We were living in a 100-year-old, two-story home," he says, and they needed a more practical setup.

Manufactured homes are perfectly suited to single-level living, almost by definition. And at Woodland Estates, the new homes are built with accessibility in mind. The Bennetts looked at some accessible apartments, but the rents were higher than the monthly installments they would end up paying on their home loan. "It just made so much sense in the long run with what I might have coming at me," Bennett says—and he acknowledges that he's even beginning to

enjoy the sense of community he and his wife have found in their new neighborhood.

Increasingly, the Bennetts have company—and not just of the social variety. Homebuyers, local officials, and even the White House are coming to the same conclusion they did: manufactured housing can make a lot of sense, for a lot of people, and in a lot of places.

When it comes to manufactured housing, people tend to dwell on the "manufactured" part. That modest modifier carries with it a lot of cultural cargo and historical stigma. But as the home affordability crisis worsens, spreading from coastal cities to middle America, proponents of the industry say we ought to be focused on the second half of the phrase—because manufactured housing is, well, *housing*.

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While outdated misperceptions of manufactured homes linger in the popular imagination—in the form of images of hurricane-battered mobile homes or poorly maintained trailer parks—the reality is that most modern manufactured homes, built to strict federal standards that supersede local building codes, are energy efficient, made of high-quality materials, and designed to be affordable. Although many are placed in dedicated communities like Woodland Estates, about half are on privately owned land, from rural areas to suburban subdivisions (MHI 2022).

"We see manufactured housing as an important component to addressing the larger U.S. affordable housing crisis," says Jim Gray, senior fellow at the Lincoln Institute of Land Policy.

That's one reason the Lincoln Institute now convenes the Innovations in Manufactured Homes (I'm HOME) Network, which for 20 years has been working with nonprofits, the private sector, and government agencies "to solve problems that are keeping manufactured housing from reaching its potential in the market," says Gray, who led the Duty to Serve program at the Federal Housing Finance Agency (FHFA) before joining the Lincoln Institute.

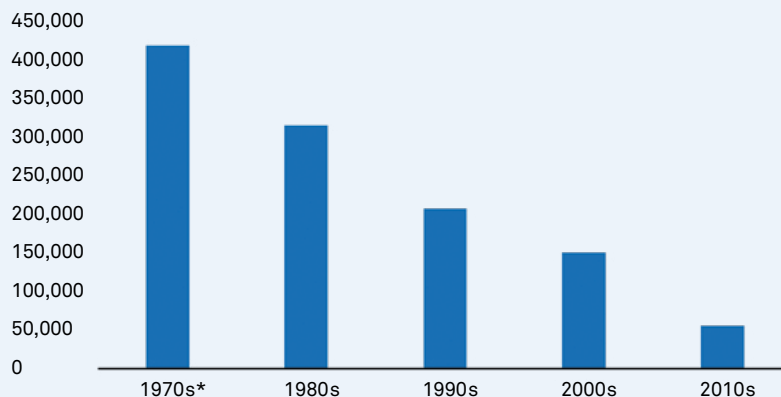
Some 22 million Americans, most of whom earn less than \$40,000 a year, already live in manufactured homes, making them the largest source of unsubsidized affordable housing in the country. The Housing Supply Action Plan released by the White House in May mentions manufactured housing several times, identifying it as one of a few housing types that "directly meet identified local needs [and are] not sufficiently provided by the market" (White House 2022). It's almost literally an off-the-shelf solution, one that can provide safe, sustainable housing for millions of Americans and help combat our affordable housing crisis.

An Urgent Need for Affordable Housing

The United States does not have enough affordable housing for everyone who needs it. That's partly due to "severe underbuilding" of smaller, entry-level homes, the kind that would appeal to downsizing retirees or first-time homebuyers. From 1976 to 1979, as baby boomers were entering their twenties and thirties, the country was building an average of 418,000 entry-level, single-family houses a year, representing more than a third of all new homes built, according to a report by government-sponsored mortgage entity Freddie Mac (Freddie Mac 2021). In the 2010s, as a similarly sized generational cohort of millennials entered their homebuying years, U.S. builders averaged just 55,000 starter homes per year, and their share of the new construction market fell to a 50-year low of around 7 percent.

That's a market need that manufactured housing is well positioned to fill. New site-built homes tend to be quite large, averaging over 2,400 square feet for the past decade, but the average

New Entry-Level Housing Supply at Five-Decade Low



*Due to data limitations, represents 1976 to 1979 only

Construction of entry-level, single-family homes dropped from an average of 418,000 per year in the late 1970s to 55,000 per year during the 2010s. This has contributed to a national shortage of affordable starter homes. Source: Freddie Mac.



Manufactured homes under construction in a factory in Athens, Alabama. Credit: Clayton Homes.

manufactured home is under 1,500 square feet, according to Census data (U.S. Department of Commerce 2022).

That smaller size, coupled with lower production costs, helps manufactured homes deliver a one-two punch on pricing, says Rachel Siegel, senior officer on the home financing research team at the Pew Charitable Trusts. “Manufactured housing is a lot less expensive per square foot than a site-built home,” Siegel says. “So you have two benefits there in terms of affordability.”

Stacey Epperson, founder and chief executive of Next Step—a nonprofit member of the I’m HOME Network that helps families purchase high-quality, Energy Star-rated manufactured homes—says its homes can cost 20 percent less to build, per square foot, than site-built counterparts. (Editor’s note: Lincoln Institute CEO George W. McCarthy is a member of the Next Step board.)

These homes are typically multi-section homes with a site-built look, Epperson says; when you factor in the array of sizes and styles available industrywide, the savings can be even

greater. According to the Manufactured Housing Institute, factory-built homes cost an average of \$72 per square foot, compared to \$143 per square foot for a site-built home (MHI 2022).

Some of the reasons for the savings are obvious—there are no weather delays inside a factory, for example, so labor, materials, and carrying costs are all more predictable. Efficiencies of scale bring down supply costs, too. “If I’m the largest manufacturer, building 25,000 to 30,000 homes a year,” Epperson says, “my purchasing power is far more than the guy in the pickup truck building 100 homes a year.”

And there are other savings when it comes to materials. Compared to the dumpster full of wood trimmings and drywall scraps left over from a typical site-built home, building a house in a factory generates almost no waste. Even conscientious homebuilders squander a staggering amount of resources during construction: a new 1,600-square-foot home can generate up to 6,720 pounds of construction waste and still earn green building credits toward LEED certification. Meanwhile, Epperson says, “the waste on a Next Step home can fit into a

single trash can.” That’s good for the environment and the homebuyer, who doesn’t have to pay for all those unused materials.

At a time when Americans need housing relief fast, manufactured homes also offer a speed advantage. Between the lack of weather disruptions, the ability to extend the workday through rotating shifts, and the streamlined designs and federal standards—which were put in place by the U.S. Department of Housing and Urban Development in 1976 and revised in the 1990s—homebuilding goes faster in a factory: once production is underway, a manufactured house can be completed in just three weeks. While a home is being assembled on the factory floor, on-site crews can do things like grade the lot for the house and lay utility connections, further hastening the overall pace of construction.

The manufactured housing industry built nearly 106,000 homes in 2021, a 15-year high (MHI 2022). Demand for the houses is growing, and Epperson says homebuilders are capable of producing far more. But for manufactured housing to truly take off, this sector and those advocating for it must address thorny challenges related to financing, land tenure, and zoning.

Using Auto Loans to Buy Houses

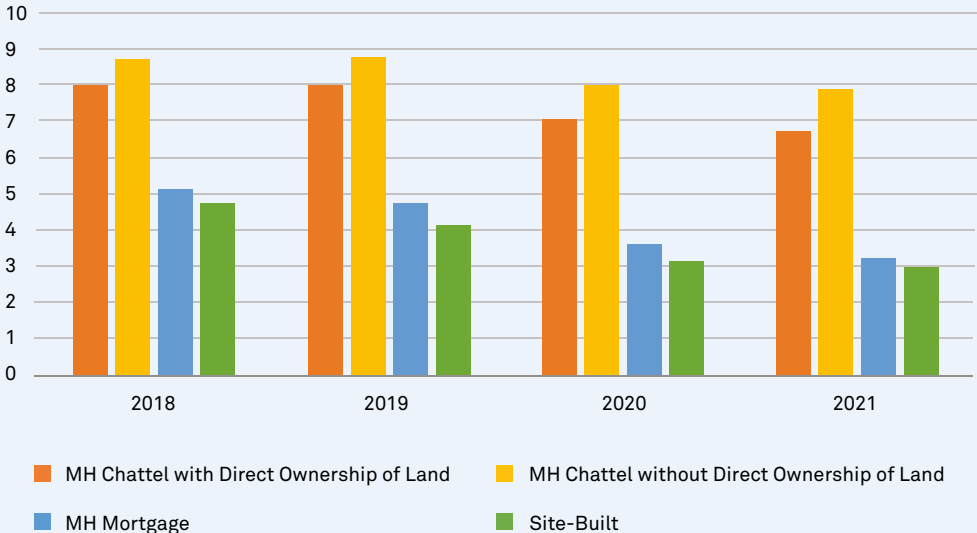
Despite the relative affordability of manufactured housing, financing can be a big hurdle for would-be homebuyers. About three-quarters of manufactured homes are titled as personal property, not real estate, and therefore aren’t eligible for a mortgage. That leaves buyers relying on personal property (or “chattel”) loans, which are more akin to auto loans than to mortgages, and tend to come with higher interest rates, shorter loan terms, and fewer consumer protections.

And even those loans can be surprisingly difficult to obtain.

“Our research has found that denial rates [on manufactured home loans] are astronomically high,” Siegel says. About 7 percent of completed mortgage applications for traditional site-built homes get denied, she says, but the rejection rate for manufactured home loans is nearly eight times that, at 54 percent. Even mortgages for manufactured homes classified as real property—meaning, in most states, that they’re

High Interest Rates, Low Protections

About three-quarters of manufactured homes are ineligible for mortgages, forcing buyers to rely on high-interest personal property (or “chattel”) loans. This comparison of interest rates illustrates the stark difference among chattel loans, manufactured housing mortgages, and mortgages for site-built homes. Credit: Lincoln Institute.



placed on a permanent foundation on owned land and titled as real estate—are denied 40 percent of the time.

That’s a big obstacle to getting people into a house, Siegel says. The average price of a new manufactured home, excluding land, transportation, and other setup costs, was \$124,900 in May 2022, according to the most recent Census data (U.S. Department of Commerce 2022). That’s less expensive than a typical house, but it’s not exactly pocket change.

So when buyers are denied adequate financing, they may be forced to continue renting, seek out riskier loans, or pay cash for an older, lower-quality mobile home (see sidebar).

Even for those who do qualify, personal property loans offer far less protection than mortgages. “When someone defaults on their loan in a real estate situation, there’s a pretty detailed foreclosure process that is designed to take some time so that residents have a chance to refinance or make other arrangements,” Gray explains. “But with personal property and chattel lending, there’s no foreclosure protection, and it’s often as easy as repossessing a car to take someone’s home away from them.”

The Lincoln Institute and other members of the I’m HOME Network have pushed for Freddie Mac and its fellow federal mortgage entity Fannie Mae to play a bigger role in the manufactured housing market, for both real estate and chattel loans. While Fannie Mae and Freddie Mac purchase some 62 percent of residential mortgages in the United States, they back less than a quarter of manufactured home mortgages. Such loans are still a tiny fraction of their business: they purchased 169,411 manufactured home mortgages in 2021, up 50 percent from 2017, according to mortgage data firm Recursion. But at \$20.2 billion, those loans represented less than 1 percent of their \$2.63 trillion in overall mortgage financing in 2021, according to the Urban Institute.

They are also virtually absent from the chattel loan market, leaving it anemic and uncompetitive. “Currently, neither Fannie Mae nor Freddie Mac is



A manufactured home at Woodland Estates in Massachusetts.
Credit: Woodland Estates.

Manufactured, Mobile, or Modular?

When it comes to factory-built housing, the term “mobile home” is commonly used and widely recognized. But in fact, it’s one of several industry-specific terms:

MOBILE HOME refers to manufactured houses built before the mid-1970s. These structures, also known as trailers, were designed to be portable and were frequently made of substandard materials. In 1976, the U.S. Department of Housing and Urban Development (HUD) adopted standards to improve the homes’ quality and durability, codifying factors including the materials used and their ability to withstand wind, rain, and snow.

MANUFACTURED HOUSING refers to structures built after 1976 that meet HUD’s strict federal standards, which were updated in the 1990s. Like mobile homes, today’s manufactured homes are fitted with a metal chassis that allows them to be transported to their ultimate destination, where they can be placed on a temporary or permanent foundation. Manufactured housing is exempt from local building codes.

MODULAR HOMES also begin in factories, but are not built on a chassis. Their components are assembled on-site and attached to a permanent foundation. Modular homes are built to state and local building codes, not federal standards.

actually doing anything with the personal property loan space,” Siegel says. “Even though they’re working on providing more mortgages in this market, they’re still not even dipping their toes into a pilot for personal property loans.”

Increasing their participation in both markets, Gray says, “will tend to create more national standards, and national standards will help drive competition and terms that are more favorable to consumers.” Siegel agrees, noting that manufactured home loans backed by the Federal Housing Administration (FHA) and Veterans Administration through federal financing entity Ginnie Mae are denied far less often than conventional loans. “This reinforces how important federally backed loan programs are as a source of financing for manufactured housing,” she says.

The FHA does have a personal property loan designed for manufactured homes, called Title I, but it’s woefully out of date. While the FHA’s Title II mortgage program for single-family homes is updated annually, the loan terms and other requirements for Title I haven’t been revised since 2008, rendering the loans uncompetitive, Siegel says. Ginnie Mae backed more than 2,500 Title I manufactured home loans in 2009, totaling nearly \$115 million, but only three such loans were issued in all of 2021, for a total of \$101,500, across the entire country.

To its credit, the FHA is making an effort to resurrect the nearly defunct Title I program; both the Pew Charitable Trusts and the I’m HOME Network submitted public comments suggesting improvements, such as better aligning Title I and Title II loans where sensible. “The current HUD leadership has really made a big priority of revising Title I and making it an effective program,” Gray says. “That’s definitely an important effort that is a complement to Fannie Mae and Freddie Mac getting into the market.”

Getting Grounded

Financing a manufactured home is the first challenge, but figuring out where to put it can be just as vexing. Roughly half of manufactured home owners also own the land on which their house sits, but millions more do not. Instead, in addition to purchasing their homes, they might lease a pad in a manufactured housing community, where monthly rent includes the use of the land beneath their house and basic services such as water, road maintenance, and trash pickup.

For decades, this has typically been a reliable, relatively affordable arrangement. But in recent years, corporate investors have discovered that such communities can be lucrative cash generators. “The number of investors looking for mobile home parks to purchase is unprecedented,” says Paul Bradley, president of New Hampshire-based ROC USA, a nonprofit member of the I’m HOME Network that helps communities form cooperatives to purchase the land beneath their homes. From 2010 to 2020, he notes, manufactured home parks represented “the highest returning of all real estate asset classes—offices, commercial, industrial, storage units, parking garages, you name it—with a 22 percent annual compounded return.”

Interior of a manufactured home. Credit: Clayton Homes.





ROC USA has helped 303 manufactured home communities in 21 states buy the land in their neighborhoods. Resident-owned communities can then elect their own boards and vote on everything from rent increases to community improvements.

The investor playbook is simple: purchase a park and then raise the rents. While annual lot rent increases averaged 4.2 percent nationwide in 2021, according to the Manufactured Housing Institute, residents from Michigan to California to Iowa have reported rent hikes of 10 to 15 percent, amounting to hundreds of dollars a month, after investors took over their parks.

The promise of that kind of profit has drawn a broad mix of investors to manufactured housing communities, from real estate investment trusts (REITs) to private equity firms to the sovereign wealth funds of foreign nations—like that of Singapore, which in 2017 invested nearly \$1.5 billion to gain a majority ownership stake in 178 such communities in the United States.

In a typical rental market, tenants have enough options to keep rent hikes somewhat in check. But a manufactured home community isn't a typical market. Despite the old moniker,

a mobile home isn't very "mobile"—it can cost upwards of \$10,000 to move one. That can leave captive park residents under new ownership facing an impossible choice: either pay the jacked-up rents, spend thousands of dollars to relocate, or abandon their investment and home altogether.

This makes residents living on leased land particularly vulnerable, but there are simple and effective ways to stabilize these situations, Gray says. "Of course, the best solution is when people can own the land under their unit," he says. In a manufactured home community, that takes some legwork, but it can be done. ROC USA has helped 303 communities in 21 states buy the land in their neighborhoods. Resident-owned communities can then elect their own boards and vote on everything from rent increases to community improvements.

The ROC USA model offers residents support in organizing a cooperative, as well as forgivable due diligence financing, so the newly formed co-op can hire a lawyer, engineer, and other professionals before making an informed offer. Their now tried-and-true approach creates a limited equity cooperative, which permanently preserves the community for affordable housing while allowing individual homeowners to build equity in their homes.

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“We’re essentially helping low-income homeowners compete with deep-pocketed investors,” says Bradley. Six states have legislation that gives residents of manufactured home communities the right of first refusal if their park’s owner decides to sell, Bradley says, allowing them time (albeit not a whole lot of it)

to organize a cooperative, make a counteroffer, and secure financing. Colorado was the most recent to pass such legislation, joining Oregon, Vermont, New Hampshire, Massachusetts, and Rhode Island.

States can help in other ways, too, such as by ensuring certain minimum site-lease protections for residents of manufactured home communities, Gray says. Manufactured home owners who rent space lack the full rights of a landowner, and they also enjoy fewer protections than a typical apartment tenant in most places. So under the FHFA’s Duty to Serve rule, enacted in 2016, anyone buying a manufactured housing community with Fannie Mae or Freddie Mac financing for the most part must offer some basic site-lease protections to its residents as a condition of the loan.

The protections include 30 days’ notice before a rent increase and the right to post a for-sale sign outside your unit—“things that most people would take for granted,” Gray says. But including them “has become maybe one of the biggest success stories of the Duty to Serve program thus far,” he says. States and localities need to expand upon those tenant protections, he adds, putting manufactured home owners on equal footing with other tenants.



Homeowners in Lakeville Village, a resident-owned community in Geneseo, New York, opted to install a solar array on 20 acres of their land, which they leased to a renewable energy company. Credit: ROC USA.



About the I'm HOME Network

The Innovations in Manufactured Homes (I'm HOME) Network was founded in 2005 to shift the public perception of manufactured housing, change public policy, and improve industry practices. The network, launched by Prosperity Now (formerly CFED), includes homeowners, advocates, academics, policy makers, lenders, manufacturers, developers, and others who, together, can effect change in the private sector and at all levels of government. In March 2022, the Lincoln Institute assumed stewardship of the I'm HOME Network. Convening the I'm HOME Network is an element of the Lincoln Institute's larger effort to address the housing affordability crisis as part of its goal to reduce poverty and spatial inequality.

To learn more about the I'm HOME Network and sign up for email news updates, visit www.lincolnst.edu/imhome.

A manufactured home in San Bernardino, California.
Credit: Next Step.

Zoning and Owning

Rather than site its homes on leased lots in parks, Next Step generally works with affordable housing developers who subdivide a parcel of land, install homes on permanent foundations, and sell the lots to individual buyers.

The organization's motto is "manufactured housing done right," and Epperson believes land ownership is a crucial piece of that puzzle. "We want to work in an ecosystem where there are realtors, lenders, housing counselors, and affordable housing developers, just as there are for site-built homes," she says.

There's a demonstrated appetite for that kind of housing. Next Step partnered with IKEA to conduct a survey of first-time homebuyers and

found that 45 percent of millennials would be open to buying a manufactured home. "That was more than we expected," Epperson says, speculating that the attraction to tiny houses in popular culture may be shifting attitudes.

However, that enlightened perspective isn't always shared by zoning officials, nor by the general population of residents they serve. "In most places, we find that the local zoning code prohibits new manufactured housing, and that's where we start from," Epperson says. Because of outdated perceptions of the industry, she says, "it takes a lot of education, and we've seen different results."



Homeowners at a resident-owned community in Maine. Credit: Flax Studios, courtesy of the Genesis Community Loan Fund.

Some municipalities will permit a one-time variance for manufactured housing construction, she says, while others open up their zoning rules to allow more going forward. City officials in Hagerstown, Maryland, approved a Next Step project in 2021, a 69-acre workforce housing development of 241 manufactured homes called Kilpatrick Woods. In 2022, Oakland, California, passed an ordinance allowing manufactured housing on any residential-zoned lot in the city.

In other places, it's been more difficult to break through: "We've seen some cities that just can't do it with the pressure they're getting from not-in-my-backyard opponents," Epperson says. Even in places like Oregon, which passed a statewide law in 2022 that puts manufactured housing on equal footing with site-built housing, she says, "you still have to do a lot of education with public officials to get everybody on the same page, even though it's the law."

The prominent inclusion of manufactured housing in the Housing Supply Action Plan released by the White House has added momentum to that effort, Epperson says. "We have more

traction to help make change than we've ever had before," she says, and cities are becoming more open to manufactured housing. The positive response is "still relatively small for the size of the problem, but it's better than I've seen in the last 15 years."

Missed Perceptions

In a way, all these challenges come back to people's perceptions—and misconceptions—of an industry that has evolved faster than public understanding. The fact is, many manufactured homes are nearly indistinguishable from their site-built brethren, and are constructed just as well or better. And research shows that when they are sited on owned land, these houses appreciate at roughly the same rate as site-built houses (Freddie Mac 2019).

"We say 'a home is a home,' so we're out to change the image of manufactured housing," Epperson says. That includes building Energy Star-rated homes that save homeowners at least 30 percent in utility costs compared to those of traditional homes.

"We want to make sure that families can not only get into their home, but stay in their home long term, and that means controlling maintenance and operating costs," Epperson says. "We have a vision that this could be the most sustainable and energy-efficient home in the marketplace, and the best way to deliver a zero-energy-ready home."

Gray says today's manufactured housing is also more durable than the poor-quality, pre-1976 mobile homes that tend to appear in the media after extreme weather events like hurricanes. "Contemporary manufactured housing is extremely strong and, I would argue, is even more resilient and better able to withstand storms than site-built housing."

Buyers seem to be increasingly recognizing those benefits, whether they've had their curiosity piqued by a tiny-house show on HGTV or they're weary of house hunting in a ruthlessly scarce and competitive real estate market.

Shipments of manufactured homes doubled between 2011 and 2021, increasing 12 percent between 2020 and 2021 alone (U.S. Department of Commerce 2022).

“There’s a huge demand for manufactured homes,” confirms JoAnne Hamberg, a real estate broker who sold her first mobile home to a local cable executive back in the 1980s and is now the owner and manager of Woodland Estates, the Boston-area community Jim and Kathryn Bennett call home.

Hamberg says her brokerage, which specializes in manufactured homes, has a waiting list of buyers. “We get single professionals, young married couples, retirees, snowbirds, empty nesters—you name it,” she says. And the reason, she says, is simple: “People are realizing that manufactured homes are a great housing option.” □

Jon Gorey is a staff writer for the Lincoln Institute of Land Policy.

Credit: Next Step.

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