Mega Trend

What is the large, macro-economic force we can observe?

When did this Mega Trend begin?

Technology Trends

What has changed with home building technology?

3d concrete printing

Environmental Concerns

What are the environmental concerns in manufactured housing?

Construction Process/Materials Site built vs Manufactured

The Environmental Impact of Conventional Construction vs. Prefabricated Homes

The health and environmental impact of residential buildings

Before digging into construction techniques themselves, it bears examining why it matters how we build buildings.

The structures in which we live, work, and play collectively account for 40% of energy use in the United States, according to the Department of Energy. Buildings also represent the largest single end-use of energy and emitter of greenhouse gasses (GHGs).

In addition to the energy involved in construction and during the use of buildings, to determine how environmentally friendly and healthy a building is, we need to think about the kinds of materials and chemicals used in its construction. Building materials can significantly affect the quality of the air we breathe indoors, so much so that toxic adhesives, polishes, stains, insulation foam spray, and fire retardants can cause respiratory difficulties in some occupants. In addition, poor building design can mean a leaky envelope, damp, and resulting mold and mildew. These can also cause serious acute and chronic health problems.

In a small residential space, such as a tiny home or microhome, flaws, oversights, and a lack of care over building design can quickly cause problems. However, prefabrication and modular home construction can sometimes support a tighter building envelope and the use of healthier materials because everything can be made in a climate-controlled factory rather than having materials being exposed to the weather for days, weeks, or even months at a construction site.

Life Cycle Assessments for conventional and prefabricated homes

To help us figure out what's what when it comes to construction, homes, and the environment, researchers use something called a Life Cycle Assessment (LCA). The LCA of a home will include energy used for heating, cooling, lighting, equipment, and appliances as well as for construction and the production of building materials.

Currently, the biggest impact a home has on the environment is during the time it is occupied, rather than its actual construction. As homes incorporate more renewable energy technology and become more energy efficient in general, however, construction will represent a growing proportion of a building's environmental impact.

In a 2010 study, Gustavsson and Joelsson estimated that improvements in design and the adoption of renewable technologies could mean that material production and construction account for 60% of a building's life cycle energy consumption. This recognition would then push developers to further reduce the impact of construction and material production.

Prefab eco-impact may be easier to estimate

In some ways, it is simpler to estimate the energy costs and environmental impact of prefabricated construction because more of the steps of building a prefabricated home are repeated across several home designs and in a controlled, systematic fashion. In a site-built, conventionally constructed home, costs are often less predictable and unique to the home design, building site, contractor, and laborers.

One comprehensive analysis looked at the environmental impact of a typical residential home using data from several modular construction companies and conventional homebuilders.

The authors found that the average impacts were far less for modular construction in every category, including material production and transport, off-site and on-site energy use, worker transport, and waste management.

That said, there was "significant variation among the individual projects and companies", suggesting that there are ways to reduce the environmental impact of both conventional site-built homes and modular homes (R).

Modular building is particularly good for reducing the environmental impact of construction. This prefabrication process can be used to build single-family homes, multifamily housing, hotels, dormitories, and commercial and retail structures.

In modular construction, discrete section of a building are created off site and are transported to site for assembly into the final building. In some cases, an entire modular home may be constructed for delivery to site, whereupon the only remaining tasks are to hook up the home to services (or not, if the home is to be off-grid).

In modular construction, most interior and exterior finishes are applied in the factory. Modules are typically 80-90% complete upon arrival at site. This means that the modules can be created while the site is being prepared, making for excellent efficiency within a project. In some cases, this may reduce construction times by 25-50% (R).

Problems of conventional construction

What are we talking about, then, when considering environmental problems of conventional construction techniques?

Well, some of the key environmental impacts come from:

Transportation

Construction equipment

Waste production

Water consumption

Heavy use of diesel construction equipment, the transportation of heavy materials, such as concrete, to a building site, and construction of a structural frame on site are some of the biggest contributors to energy consumption in conventional construction.

On-site heating costs are another factor affecting the environmental impact of construction. Building a house on-site in colder temperatures can increase energy usage quite significantly over prefab builds that have a shorter timeframe and are carried out in climate controlled factories that are energy efficient.

Research suggests that in the mid-Atlantic region, for example, heating is required on-site for at least half of a construction project. Sometimes, this heat will need to be continuous, i.e. not just when workers are on-site working, in order to protect interior finishes and other materials before the building envelope is sealed.

Advantages of prefabrication construction techniques

In off-site construction, less solid waste is produced, there's a lower need for transportation energy (less commuting and trips to suppliers for laborers, for instance), reduced material consumption, and fewer greenhouse gas emissions.

In one case study of two homes in Michigan (a 1,456 ft2 modular home and conventionally, site-built home), two and half times less solid waste was generated using modular construction off-site, compared to on-site construction (R).

The same study also noted that the "total life cycle energy consumption for modular home is 5% less than the conventional site home". And they found that the "total global warming potential for the modular home is 5% less than the conventional site built home".

In another study, a factory built home required more materials compared to a site-built home but performed better energy-wise and the energy and carbon debts associated with the extra materials were 'paid off' within six years (R).

Compared to conventional builds, a prefabricated design can also help reduce confusion on the construction site. With the design 'frozen' at an early stage of the project and many elements of the design having already been tested dozens, if not hundreds, of times, laborers are better positioned to do the work safely, quickly, and accurately. The result is a higher-quality building with greater integrity of design, form, and function.

Waste

Construction waste takes many forms. It can include building materials and waste created when preparing a site for construction. Examples of construction waste include:

Insulation materials

Nails

Electrical wiring

Shingle

Roofing

Tree stumps, branches, etc.

Rubble

Dredging materials

Bricks

Concrete

Wood

A large proportion of construction waste for on-site builds comprises materials that were damaged or unused during construction. Untreated wood delivered too early to a site may become infested, warped, or otherwise damaged, for instance, while cement and other materials may get wet and become hardened and unusable.

In a conventional build, an estimated 10-15% of materials are wasted, according to observational research, despite industry claiming a much lower percentage (2.5-5%) (R). Either way, these numbers suggest opportunities to reduce construction waste.

Construction waste materials may contain hazardous substances such as lead, asbestos, propellants, flame retardant chemicals, and other toxic chemicals. Plasterboard is especially hazardous as it breaks down in landfill to release the toxic gas hydrogen sulfide.

Because of the greater degree of control in prefabricated building projects, it is easier for companies to separate out waste materials ad divert these successfully from landfill. Wood off-cuts, for instance, can be reused in other areas of a build or in another project at the factory, with such use planned for in advance. This can also help lower the costs of multiple projects.

Building waste must be disposed of in accordance with local regulations. Because there are costs involved in the proper disposal of waste building materials, some construction companies choose not to follow these regulations and illegally dump materials. This can lead to pollution of waterways, soil, and air, cause fire hazards and other health and safety problems for humans and the environment.

Thankfully, close regulation and fines that can rise to tens of thousands of dollars for improper disposal of construction materials, especially those containing asbestos, have helped curb this practice in many places.

How to reduce construction waste

In prefabricated and modular building, waste can be reduced through the use of demountable and reusable framing systems. This helps reduce reliance on plywood and dimensional lumber for framing.

In all construction projects, improvements in design and manufacture can enable materials to be transported with minimal packaging. That packaging, as well as other materials, can be carefully sourced to ensure it is recycled, reusable, and recyclable.

With a prefabricated home, the design has typically been tweaked and refined to create a formula that results in much less material waste than in conventional construction. It is much easier to calculate how much material is needed in advance, and to make the best use of those materials so as to minimize waste.

Indeed, knowing the kinds of off-cuts you'll have means you can actively repurpose those materials for us in other areas of the design, rather than buying stock lumber and other materials new for each section.

During renovations, materials such as doors and windows can be donated, sold, or diverted to other projects.

In some ways, prefabrication can seem to be less efficient, materials wise, than on-site construction. For example, marriage walls are required in modular construction so that modules can be safely transported to site from the factory. These marriage walls (or ceilings), which join rooms together can add around 25% more wood mass to a building.

Despite possibly using more materials in the final building itself, prefabrication and modular building may use less material, including waste, throughout a building project and use this material more efficiently. This is because most modular building companies build several homes simultaneously, allowing them to order materials in a cost-efficient fashion. And, because off-site builds can make use of digital fabrication equipment, cutting is more accurate than on-site cuts, meaning fewer off-cuts and less waste.

Modular and prefab companies also tend to wait to begin construction until all materials are at the factory, which helps reduce over-ordering and keeps delivery and transportation energy use to a minimum.

In conventional construction, issues with storing materials on site (such as theft, spoilage, and vandalism) mean that homebuilders usually order materials in stages and for one building at a time. On-site builders also make more frequent forays to local building supply stores to acquire materials, further adding to energy use through transportation. This 'order as you go' approach isn't as efficient, energy wise or cost wise, and can greatly increase material waste and the timeframe of a project. Indeed, some researchers report that on-site builders have the habit of ordering a surplus of 5-15% to account for materials wasted during the build (R).

In some ways, however, an 'order as you go' approach may be the smartest option for some site builds. That's because scheduling delays are common with on-site construction, and these delays could mean that materials ordered too soon end up being wasted.

Transport

Scheduling delays can also contribute to increased transport costs associated with a conventional site-built home. Indeed, some researchers suggest adding 50% to estimated worker miles for on-site builds because of such delays and for repetitive transportation during construction (such as multiple trips by site inspectors).

In a prefabricated build, the mileage and costs of transporting modular or prefab pieces to the site is likely higher than the initial cost estimates for a conventional build, but cost estimates are more likely to be accurate for an off-site build and can take advantage of certain efficiencies.

In a conventional build, workers need to commute to site, as do individual contractors, and inefficiencies in construction mean multiple trips to hardware and supply stores may be necessary throughout the project.

Toxic air emissions and greenhouse gasses

Construction is a huge contributor to toxic air emissions and often involves the use of toxic materials. In one study, construction accounted for 57% of toxic air emissions and 51% of hazardous waste generated in a building's life cycle (R). Conversely, the construction phase of a building's life cycle only accounts for around 2% of energy consumption and 1% of greenhouse gas emissions (R). The contribution to emissions of carbon monoxide (7%), nitrogen oxides (8%) and particulate matter (8%) are, however, higher for construction.

In an analysis of three modular and five on-site construction companies, on average, greenhouse gas emissions from conventional construction were about 40% higher than for modular construction (R). This figure may be even higher across the industry, however, given that one of the modular companies in this analysis had significantly higher emissions than all other companies (site builds included) because of its rural location and increased daily commute for workers and because they heated their factory with fuel oil.

In terms of absolute differences in greenhouse gas emissions for these companies, on-site construction produced nearly six metric tons more carbon dioxide equivalents (CO_2-eq) per 2,000 sq ft home compared to modular construction. Reducing unnecessary worker trips, implementing a 'no idling' policy for machinery, and using efficient methods of temporary heating can all help lower the environmental impact of on-site construction.

Prefab, Modular, and Industrialized Building Systems

In Malaysia, government and industry are working together to reduce the environmental impact of construction. One of the major tools they are using is IBS, or Industrialized Building Systems. IBS is a construction process that use techniques, products, components or building systems which involve prefabricated components and on-site installation.

Some examples of IBS include assembling precast elements such as floor slabs, in-filled walls, bathrooms and staircases in the factory, thereby reducing labor on-site and increasing productivity. Putting these pieces in place on site involves three separate trades (steel bending, formwork fabrication and concreting) and is both labor intensive and inefficient, while also increasing energy use, greenhouse gas emissions, and transport costs.

IBS can also reduce waste production. In one study, total waste generated by a conventional building project was 54.6 tons 100 m-2 compared to just 1.5 tons 100 m-2 for a similar prefabricated/IBS project. In addition, 94% of waste generated at the IBS site was reused and recycled, compared to 73% at the conventional build site (R).

Durability

Durability is another factor to consider when assessing the environmental impact of a home. As with all products, the more durable your home, the more eco-friendly it typically is, because you don't have to rebuild or renovate and sink yet more materials and energy into maintaining your home.

Prefabricated homes, especially modular homes, tend to be more durable than conventionally built homes because they incorporate things such as marriage walls and are built to endure transportation to site. Prefabricated and modular homes are also often durable in another way: they can be designed with flexible living arrangements in mind.

For example, FabCab, a prefabrication design company, typically designs flexibility into a home, meaning that its layout can be modified easily to fit whatever changes in your life. This might mean adding or removing room divisions as your family grows or as children leave home. Or, it may mean building all on one level so that you can age in place and not need to go through costly renovations or a complete rebuild or relocation.

The bottom line

In summary, a home built using prefabrication techniques, and that is well designed and energy efficient, is arguably the most eco-friendly housing option in the long-run. In most cases, prefabrication is much less wasteful than conventional construction, but you still have to be careful to choose a company that uses green-building techniques and avoids the use of toxic chemicals and materials that contribute to global warming.

MANY "GREEN" BENEFITS INHERENT IN THE MANUFACTURED HOME BUILDING PROCESS

Source: Manufactured Homes

"The whole concept of green building is to reduce the demand which enables you to use fewer resources to satisfy the demand." – Mark Nuzzolo

"Green" building has become more and more popular throughout most of the world, and that includes manufactured housing as well. Perhaps surprising to many, there are multiple choices and affordable options available to potential manufactured home buyers that are beautiful, high quality, and "green."

When a manufactured home is built for a homebuyer, sustainable decisions are made throughout the entire process that ensures a minimal environmental impact. Green manufactured homes offer an overall better use of energy, materials, and natural resources.

The inherent manufactured home construction process boosts numerous green benefits in every home produced. The efficient use and less waste of materials, along with the environmentally controlled indoor atmosphere of the building facility result in more durable homes than many competing site-built homes of similar styles. In addition, buyers of today's modern manufactured housing have green choices when ordering homes based upon their specific likes and needs.

HOW DO HOMEBUYERS BENEFIT?

In addition to environmental factors, here are a few of the benefits homebuyers can enjoy with their new quality "green" manufactured home.

Comfort: The construction of a manufactured home or modular home lends itself to less drafts and more humidity control.

Cost-Effectiveness: The energy efficiencies of the manufacturing process found in a green manufactured home translates to lower utility costs. Greater flexibility in the construction process also allows for customization to meet homeowner lifestyle and needs, including ENERGY STAR – labeled manufactured and modular homes for additional savings in owning and operating a home.

Environmental Quality: Indoor construction environments are healthier, using products containing fewer chemicals. Other benefits include moisture control and air filtration.

Low Maintenance: The entire manufactured home is constructed with materials of the highest quality in order to reduce the need for replacement repairs.

WHAT OTHER FEATURES SHOULD A BUYER LOOK FOR WHEN BUYING GREEN?

How "green" a manufactured home depends on the aforementioned features involved in the home's construction and the way in which the home is used every day. Homebuyers should look for quality energy savings seals on appliances, such as ENERGY STAR, which is offered by most retailers of manufactured housing.

Customers should inquire of the retailer as to what other green options or materials are available as an upgrade. Determine what renewable energy options are available. Post-production solar panels may be installed on a manufactured home for extra savings, the same as a site-built home.

BET YOU DIDN'T KNOW: A new modern high quality manufactured home with all the "green" features noted above will have a cost 50% less than a comparable site-built home and will be equal, and often superior, in every respect, including quality of construction, safety, amenities, design appearance, and value retention.

Insulation Values (R Value); EnergyStar

Recommended Home Insulation R Values

Insulation level are specified by R-Value. R-Value is a measure of insulation’s ability to resist heat traveling through it. The higher the R-Value the better the thermal performance of the insulation.

Recommended insulation levels for retrofitting existing wood-framed buildings

Are Manufactured Homes Energy Efficient?

In times past, having a manufactured home would mean just as high or higher electric and gas bills as regular homes; it seemed like manufactured home builders were having a hard time making sure their homes were well-insulated and energy efficient.

But with changes in technology and manufacturing processes, the energy-efficiency of manufactured homes has changed. Are manufactured homes today energy efficient? The short answer is yes; below we explain how.

The Way We Were

Manufactured housing of the past was a quick, easy way to enter into the world of homeownership. That didn’t mean it was energy-efficient. Think back to the early 1970s, when the manufactured home industry was running behind traditional, site-built homes in energy efficiency and noise reduction.

Nevertheless, manufactured homes retained their appeal, while, at the same time, pushing builders for higher quality, better energy efficiency and more noise reduction.

Changes Were Needed

In 1976, the National Manufactured Housing Construction and Safety Standards Act of 1974 went into law, mandating that mobile homes be built to stricter building standards and that any mobile home constructed thereafter be referred to as manufactured homes.

The HUD Code, as it's called, regulates "home design and construction, strength and durability, fire resistance, and energy efficiency." The Code was revised in the early 1990s to increase energy efficiency and ventilation standards, as well as improving wind-resistance standards for areas that are prone to hurricane-force winds. No manufactured home can ship from the factory unless it is in line with the HUD Code and carries a certification label from an independent, third-party inspector.

According to the American Council for Energy-Efficient Economy (ACEEE), those who owned a manufactured home "spent more money on their energy bills than on home loans" and spent twice as much on energy costs per square foot than those who owned a traditional single-family home.

The ACEEE goes on to explain how the Department of Energy made recommendations in 2016 to enhance the energy efficiency of manufactured homes. The changes are expected to make manufactured homes 27 percent more energy efficient than previous manufactured homes.

So, what kind of changes can make a difference? By adapting, upgrading and changing energy efficient standard, the industry can produce homes that are comfortable and affordable for homeowners. Here are some changes that improve a manufactured home's energy efficiency:

Higher levels of insulation added underneath each unit;

Increased caulking and insulation around ductwork, electrical outlets, lighting and other openings in each unit;

Increased, higher-quality insulation added to the walls;

Addition of insulated skirting and a belly wrap;

Adding modern, on-demand water heaters and

Replacing older-style windows and doors with more modern, up-to-date, energy-efficient versions.

In general, the amounts and types of insulation were increased, resulting in lower noise levels, higher energy-efficiency and less drain on the heating and cooling units.

Energy Efficiency is Built In

Today's manufactured homes are now on par with traditional, site-built homes, in terms of quality as well as energy efficiency, making them a good option for homeowners.

There are even Energy Star Certified Manufactured Homes. These homes are:

Less expensive. Compared to standard, site-built homes, Energy Star-rated manufactured homes use less energy, resulting in lower utility bills;

More consistently comfortable. Energy Star Certified Manufactured Homes allow for more temperature consistency between rooms, instead of some rooms being draftier than others; and

Backed by the government. As mentioned, Energy Start Certified Manufactured Homes must meet strict EPA and HUD standards, unlike site-built homes, which are only subject to local government oversight.

When considering a manufactured home for your dream home, as your builder about the plan's energy-efficient features. These features will ensure that your manufactured home saves you money throughout its lifetime.

DOE Updates Mobile Home Efficiency Standards to Lower Household Energy Bills

New Initiative Will Save Owners and Renters $10 Billion on Utility Bills, Reduce Carbon Pollution, Ensure More Access to Affordable Mobile Homes

WASHINGTON, D.C. — The U.S. Department of Energy (DOE) today adopted new energy standards for manufactured housing — commonly referred to as single-section and multi-section mobile homes — that will help consumers save hundreds of dollars on their annual utility bills and slash carbon emissions by 80 million metric tons, which is equivalent to the energy use of over 10 million homes in one year.

Once implemented, the new efficiency standards, which include updates to insulation and sealing requirements, will help bring the country closer to reaching President Biden's goal of net-zero emissions by 2050.

"DOE's new energy efficiency rules will help save the 17 million Americans residing in mobile homes up to $475 per year on average on their utility bills," said U.S. Secretary of Energy Jennifer M. Granholm. "The rules will hold manufacturers of these U.S. homes to cost-saving efficiency standards, giving residents more comfortable living environments and a much-needed break on their annual utility costs, while delivering cleaner air for their communities."

The new efficiency rules will require all new manufactured homes to meet standards for size and climate-dependent energy conservation measures based on the insulation and sealing requirements in the most recent version of the International Energy Conservation Code (IECC 2021). Compliance is required for new manufactured homes produced beginning one year after the rule is published in the Federal Register, approximately late May 2023. DOE was under a court order to update these standards by May 16, 2022.

According to DOE estimates from the final rule, individuals can expect to save on average $177 per year in single-section homes and $475 per year in multi-section homes on their utility bills. Cumulatively, consumers will save $551 million on utility bills each year and a total of $10 billion over the next 30 years. In the same 30-year window, DOE projects a reduction in carbon and methane emissions equivalent to the annual emissions of 11.7 million homes.

Purchasers of both single- and multi-section manufactured homes are expected to save more on their utility bills than the additional money that is added to their monthly mortgage, with single-section purchasers recouping the additional money purchasers put down up front to secure the loan (approximately $70) within 10 months. DOE adopted a tiered approach, with different standards for single- and multi-section manufactured homes, in order to balance the important objectives of energy efficiency, cost savings, upfront affordability, and housing supply challenges.

Additional Efficiency and Affordability Measures for Manufactured Homes

In addition to the new efficiency rules, DOE is supporting the establishment of credit-enhancement mechanisms, such as loan-loss reserves, to drive down the cost of financing for manufactured housing and increase access to affordable housing.

DOE will provide technical assistance and guidance, facilitate outreach to lenders and agencies, and work with state partners to develop replicable state models that ensure access to affordable, efficient manufactured homes.

DOE, in collaboration with the National Association of State Energy Officials, is also launching the Manufactured Home Energy Efficiency and Affordability Initiative to work with states and other partners in improving access to energy efficient manufactured homes across the United States, including tribal lands. The California Energy Commission, Colorado Energy Office, Kentucky Office of Energy Policy, Maine Governor’s Energy Office, Minnesota Department of Commerce Energy Division, Montana Energy Office, New York State Energy Research and Development Authority, North Carolina Department of Environmental Quality Energy Office, South Carolina Energy Office – Office of Regulatory Staff, and West Virginia Department of Economic Development's Office of Energy have already signed on to participate.

To increase transparency, DOE has created a consumer-focused website with information on energy efficient manufactured homes and financing options, including content on incentives, grants, and loan programs available through federal agencies, states, and others. The site includes links to resources for manufactured homebuyers who own or lease their land as well as those living in manufactured home communities, including resident owned cooperatives.

This action follows the release earlier this week of the Administration's Housing Supply Action Plan, which includes legislative and administrative policies to boost supply and reduce costs for a number of housing types, such as manufactured housing.

DOE adopted a tiered approach, with different standards for single and multi-section manufactured homes, in order to balance the important objectives of energy efficiency, cost savings, upfront affordability, and housing supply challenges.

DOE's Building Technologies Office implements minimum energy conservation standards for more than 60 categories of appliances and equipment.

DOE's Role in Manufactured Housing

DOE prioritizes access to energy-efficient and affordable housing for all Americans, including the more than 20 million Americans who live in manufactured homes. DOE funds research, demonstration, and field validation of energy-efficient construction methods; supports adoption of energy-efficient technologies and construction practices by manufacturers; and is collaborating with other federal agencies, states and utilities to support initiatives that make energy-efficient manufactured homes affordable for homebuyers.

DOE is launching the Manufactured Housing Energy Efficiency and Affordability Initiative to assist states and other partners in improving access to energy-efficient manufactured homes across the United States by creating lower cost financing options for chattel loans.

The National Association of State Energy Officials (NASEO), along with the following state energy offices, are participating in this initiative:

California Energy Commission

Colorado Energy Office

Kentucky Office of Energy Policy

Maine Governor's Energy Office

Minnesota Department of Commerce Energy Division

Montana Energy Office

North Carolina Department of Environmental Quality Energy Office

New York State Energy Research and Development Authority

South Carolina Energy Office - Office of Regulatory Staff

West Virginia Department of Economic Development's Office of Energy

DOE and NASEO will collaborate with the participating states to share best practices and develop strategies and mechanisms for making financing and ownership of energy-efficient manufactured homes more affordable and accessible.

For example, states can use their State Energy Program funds from the Bipartisan Infrastructure Law (BIL) to establish mechanisms, such as loan loss reserves, to improve access and affordability for borrowers seeking to purchase a manufactured home.

State and local housing agencies, CDFIs, credit unions, and other financial institutions can tap into these funds to reduce risks they face in financing manufactured homes. Residents and nonprofit organizations can also work with states to finance resident-owned community models, which enable a pathway to home ownership for residents in manufactured home communities.

More specifically, the Manufactured Home Energy Efficiency and Affordability Initiative will work to:

Address the high cost of heating and cooling manufactured homes, especially for residents in underserved communities and households facing high energy burdens and energy insecurity.

Create lower-cost, public-private financing options for energy-efficient manufactured home purchases, such as low-interest loan programs, down payment assistance, loan loss reserves and other forms of credit enhancement to make manufactured home loans more accessible and affordable.

Improve and expand manufactured homebuyer education materials for home purchase, financing and energy-efficiency options.

Create opportunities for manufactured homeowners to replace their homes with more energy-efficient ones, or to improve their existing homes’ energy efficiency to lower energy costs.

Improve the availability of affordable, energy-efficient housing options and promote workforce development opportunities in local communities where manufactured homes are constructed and installed.

DOE, working in collaboration with NASEO, will engage state energy offices and other partners, provide technical assistance and guidance, facilitate outreach to lenders and other federal agencies, coordinate engagement of external stakeholders, and develop replicable state policy and program models to ensure access to affordable, efficient, manufactured homes nationwide.

State energy offices interested in participating in this effort should contact Maddie Koewler, senior program manager, Buildings at NASEO, at mkoewler@naseo.org.

Research

Through the Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) program, DOE’s Office of Energy Efficiency and Renewable Energy (EERE) is funding an effort to develop and demonstrate designs that meet new efficiency requirements while optimizing production processes and reducing manufacturing costs.

DOE and the National Renewable Energy Laboratory (NREL) just published Energy in Modular Methods [EMOD]: A Guide to Design for Energy Efficiency in Industrialized Construction of Factory Built Buildings. The guide is intended to introduce builders to process improvements that can save time and money while making homes more efficient, affordable, and resilient.

The guide is applicable to any factory-built construction approach including modular and manufactured homes. The guide applies Design for Energy Efficiency in Industrialized Construction – an approach that leverages design for manufacturing and assembly principles to streamline workflows of integrated product design and productivity modeling, from design to prototyping to manufacturing stages.

In 2016, DOE EERE published a report, Field Evaluation of Advances in Energy-Efficiency Practices for Manufactured Homes, which detailed a study that examined three side-by-side manufactured homes built to different specifications: ENERGY STAR, DOE Zero Energy Ready Home, and minimum code.

The side-by-side approach allowed researchers to compare innovative technologies such as ductless mini-splits to more conventional HVAC systems to examine energy savings, cost savings, and other process improvements.

Loan Loss Reserve Funds and Other Credit Enhancements

Loan loss reserves (LLRs), interest rate buy-downs (IRBs), and other types of credit enhancements can support clean energy finance mechanisms including on-bill financing, bond issues, property-assessed clean energy financing, revolving loans funds, and more.

A credit enhancement is anything that improves the chances that financing will be repaid.

If a state or local government's goal is to improve the financing options available to the private sector, putting funds toward credit enhancements can be a good option because they:

Encourage private lenders and investors to put money into unfamiliar markets or products (such as residential energy efficiency lending).

Can absorb risk of loss and, as a result, be used as a negotiating tool to convince lenders to reduce interest rates or provide longer loan terms.

Can be used as negotiating leverage to convince lenders to relax their underwriting criteria in order to lend to individuals or businesses with lower than typical credit profiles.

LOAN LOSS RESERVES

LLRs are a credit enhancement approach commonly used by state and local governments to provide partial risk coverage to lenders—meaning that the reserve will cover a prespecified amount of loan losses. For example, an LLR might cover a lender's losses up to 10% of the total principal of a loan portfolio.

The financial institution working with each state or local government can draw on the LLR to cover losses on defaulted loans according to the terms of the loan loss agreement between the lender and the state and local government.

LLRs and other credit enhancements can be used in any market, from residential to commercial lending to multifamily housing lending to nonprofit lending.

Learn more about the:

Rationale and goals for LLRs

Primary characteristics of LLRs

LLR risk-sharing formula

Loan terms

Underwriting guidelines for residential loan programs

Steps for developing a clean energy financing program with an LLR.

For more detailed discussion, download the Clean Energy Finance Guide to Residential and Commercial Building Improvements' chapter on Basic Concepts for Clean Energy Unsecured Lending and Loan Loss Reserve Funds.

INTEREST RATE BUY-DOWN

Another option for state and local entities is to use public funds to lower the interest rate that property owners will have to pay to such a point that financing becomes an attractive option. In order to lower the rate, state and local entries buy it down by making an upfront payment to the lender.

This upfront payment is based on the difference between: the sum of all principal and interest payments that a lender would be projected to receive at the market-based interest rate, and the sum of payments that the lender would receive from the target (incentivized) interest rate, adjusted for the time value of money. IRBs can be a way to gain more attention for the financing program, reward early participants in a newly launched program, and build market demand.

Major Economic Trends (The Real Economy)

Supply chain issues. A labor shortage. An increasingly competitive market: Can modular construction provide the relief developers seek?

Source: RE Journals

Developers face plenty of challenges today: It's difficult to find experienced labor. Material costs keep rising. And supply chain disruptions mean that it can be difficult to get everything from insulation to concrete and steel to construction sites on time.

That's why it's not surprising to many commercial real estate professionals that developers are slowly, but steadily, turning to modular construction when building restaurants, hotels, apartment projects and healthcare facilities.

Modular construction in the commercial development industry works much the same as it does with residential projects: Anywhere from 60% to 90% of a building — whether it be an apartment development, fast-food restaurant, hotel or school building — is built offsite in a factory or manufacturing facility.

These pieces, known as modules, are then shipped to the building site where they are put together to form a completed project.

The benefit here is that modular buildings can be developed in less time. They also require less experienced construction crews. That helps developers who are struggling with supply chain disruptions and a lack of skilled labor.

Modular construction, then, has the potential to play a far bigger role in the commercial construction industry than it has in the past.

This is one reason why REjournals is focusing heavily on modular construction during its Midwest Construction Double-Header event being held Sept. 8 at the Hyatt Regency O'Hare Chicago in Rosemont, Illinois. The second half of this event will focus on the ways in which modular construction can change the development industry. To sign up for the event, click here.

A growing demand for modular?

Dean Dovolis, principal, chief executive officer and founder of DJR Architecture in Minneapolis, said that the reasons for the increased demand for modular construction are many and complicated.

First, there are the societal reasons. As Dovolis says, many workers who are 55 and older have walked away from the workforce and retired. This has happened in the construction industry, too.

That has left a shortage of experienced labor in the construction industry, making it more difficult for construction companies to find the people they need to complete projects efficiently. Many of these companies are looking for a new way of building, and modular construction offers them a choice, Dovolis said.

“There is pressure to change our methods of construction,” Dovolis said. “We can’t build them like we used to. So much of the experienced workforce is gone now, your plumbers, carpenters, electricians, people in all areas of the construction industry. We have to change the method of construction we use, otherwise the pace of construction becomes slow and inefficient.”

New workers aren’t filling the void left by the departing experienced construction workers, Dovolis said. This means that the labor shortage we are seeing today is far from a temporary one.

“There are no replacement workers coming,” Dovolis said. “This is a permanent fact in the labor market.”

It takes less people to build multifamily buildings, schools, hotels and fast-food restaurants when developers rely at least in part on modular construction. Workers with less experience can get the job done.

“These societal issues aren’t going away,” Dovolis said. “They are going to keep intensifying. There are less people performing the work. We have to do more with less people. There is not a throng of young people ready to fill the ranks. It’s now about creating higher productivity per person. Modular construction is one method that allows that to happen.”

Jeffrey Schoeneck, principal and executive director in the Minneapolis office of design firm Cuningham, agreed that the number of experienced construction professionals leaving the industry makes it more important for developers to seek alternative means of construction, including modular.

“We are losing people in the trades to retirement on a pretty steady basis,” Schoeneck said. “That has led to several challenges for all parties involved. It’s a weaker link in the overall construction process to have more junior staff and less experienced senior veterans in the field. That creates hiccups in the entire construction process.”

But it’s more than just veteran professionals leaving the business. Finding any labor, even construction professionals with fewer years of experience, is a challenge today, Schoeneck said. And again, that makes modular construction a viable alternative for construction firms looking to do more with less.

At the same time, the technology behind modular construction is improving, Schoeneck said. That gives developers more confidence that they can turn to modular construction and receive quality products.

“The growth in modular construction is being fueled by tech dollars, not by construction dollars,” Schoeneck said. “There has been an influx of investment in construction techniques outside of what would typically be considered the real estate industry.”

Speed matters

Speed is a major factor in the growth of modular construction, too, Schoeneck said. By relying on modular technology, developers can bring their projects to the market faster.

That is a key benefit in the competitive world of commercial construction, Schoeneck said.

“This industry has never been as competitive as it is now,” Schoeneck said. “Every day that you are waiting for a building to be built, you are not earning that rent or making that sale. Speed to market is so important today. Clients and end users want faster delivery. Owners and investors want their return on investment to come faster.”

Dovolis said that modular construction doesn’t typically bring big cost savings up front. But the reduction in construction time adds up to big savings, he said.

“Time is money,” Dovolis said. “That has become a critical factor with interest rate issues and the cost of money today. Speed to market is so important. You can cut construction time in half with modular construction. That is a big deal when interest rates are double what they once were. If you can reduce your carrying costs and cut them in half, that makes a project go from infeasible to feasible.”

Modular construction works particularly well for multifamily housing, with many developers already relying on his approach to build new apartment buildings.

The United States needs more multifamily housing to meet demand. And the shortage isn’t a small one: The National Multifamily Housing Council has said that the country needs more than 4 million new apartment units to meet the current demand for them.

Modular construction, in which apartment buildings can be built more quickly, can help developers provide more multifamily housing in less time.

“I don’t see modular construction as an optional thing. I see it as inevitable,” Schoeneck said. “It might not be tomorrow that this industry truly converts to modular. But it is an inevitable necessity. We continue to have a huge demand for multifamily housing in the world. That demand won’t get met through a construction industry that is losing senior, experienced professionals. Modular will become a staple as we need to build more housing to meet the ever-growing demand.”

Fighting a bad reputation

Dovolis said that the modular construction industry is still saddled with a bad reputation. Much of this is because people often think of trailer parks when they picture modular construction.

“When you think of manufactured homes, do you get a good feeling?” Dovolis asks. “Probably not. That’s something that we have to overcome.”

This means educating the public about how modular construction technology has changed. Modular projects today, or developments that rely on some modular construction, don’t look boxy or cheap. They look little different, in fact, from any other form of commercial construction.

Dovolis said that developers and the public will accept modular construction over time. They’ll do this after seeing a steady stream of successful, and aesthetically pleasing, modular projects pop up across the country, Dovolis said.

“Buildings are being built this way,” he said. “They are successfully being built. People can touch and feel them. Seeing these examples will make a difference.”

Developers can turn to modular construction for a wide variety of building types. It’s a natural fit for multifamily, of course, but this construction technique works well for hotels, office buildings, educational facilities, healthcare properties and restaurants.

In fact, modular construction can work for just about any type of commercial project.

“The easiest low-hanging fruit is housing,” Dovolis said. “But major hotel chains do modular, too. Marriott is building modular now. You are beginning to see modular with educational facilities. Franchises are starting to use modular construction, starting to experiment with this technology.”

An example of a current modular project taking place in the Midwest is the Pentagon Village Apartments, a six-story, 202-unit apartment project planned for the Twin Cities suburb of Edina, Minnesota. Rise Modular, based in Minneapolis, is the co-developer, general contractor and module manufacturer on the project. Partners are Solomon Real Estate Group and Cuningham.

The apartments will be part of the master-planned Pentagon Village development. The apartment building will be constructed with five stories of RISE-manufactured modules over a one-story concrete podium. Units will be a mix of studio, alcove, one- and two-bedroom units. A 142-stall parking garage will be attached to the development.

“Are more developers embracing modular construction? That might be too strong,” Schoeneck said. “It does have everyone’s attention today, though. Modular is very evident in the conversation. Developers might not be ready to move forward yet, but they do want to learn about it. I have had very few conversations with developers in which they don’t have one eye on this technology coming down the pipe.”

The Housing Shortage Is the Root of All America’s Problems

The US hasn't built enough homes in recent decades.

The shortage is among the reasons homes are unaffordable for many Americans.

It could also be contributing to other problems — like inequality, low birth rates, and climate change.

The US housing shortage isn't just fueling an affordability crisis. It could be contributing to several of the major problems the country is facing.

Imagine you're a city-dweller living paycheck-to-paycheck. You're trying to save so you can afford a down payment on a home someday, but there's not much left to stash away after paying rent.

A few years later, you buy a home that's probably a little more expensive than you can afford. You used to walk to work, but given you now live an hour away from your job in the city, you begin spending much more time in a car. You make plans to start a family over the next year, but given the cost of the home, the extra years it took to finally obtain it, and its modest size, you decide to aim for a fewer number of children than you had previously envisioned.

This is the gist of the "housing theory of everything," coined in 2021 by economists Sam Bowman and Ben Southwood and housing advocate John Myers. They wrote in the Stripe-owned online magazine Works In Progress that the substantial shortage of homes in the US is a key driver of more than just falling housing affordability in recent decades.

"Western housing shortages do not just prevent many from ever affording their own home. They also drive inequality, climate change, low productivity growth, obesity, and even falling fertility rates," they said.

While roughly two-thirds of US households are owner-occupied, the country is short between 1.5 million and 6 million homes, according to various analyses.

The housing market's crash during the Great Recession led the industry to pull back on construction for many years, and materials and labor shortages during the height of the pandemic fueled another slowdown.

Some have pointed to complex rules and regulations — many of them related to environmental concerns — that have made it more difficult to build homes.

With the US homeowner vacancy rate — the percent of units available for occupancy — near record lows, the lack of supply has contributed to soaring prices. As of last June, the combination of elevated prices and interest rates made the housing market "more unaffordable than at the peak of the runoff in 2005," Mark Palim, Deputy Chief Economist for Fannie Mae, told Insider.

The housing theory of everything, however, suggests that this lack of affordability is far from the only American problem the housing shortage is contributing to.

Homeowners benefit way more from a good economy and suffer less in a bad one

The authors pointed to a 2021 paper by two University Of Michigan researchers, which concluded that the primary driver of US wealth inequality is not income inequality — but housing inequality. When housing shortages drive up home prices, it's the existing homeowners — who tend to be more well off — that benefit, the authors argued, at the expense of new homebuyers.

"A fixed supply of housing means improvements in people's aggregate incomes often partially go to landowners, since people bid up the price of housing with some of their increased income," they said.

And when homeownership — a driver of wealth for many families — is out of reach for Americans, this can contribute to persisting inequality. Roughly 90% of US households in the top 20% income bracket own their own homes, according to a 2021 Cleveland Fed report, compared to less than half of households in the bottom 20%.

Even for households that are content as renters, a shortage of homes pushes more people to rent, which ultimately drives up rental rates.

22 Million Renters and Owners of Manufactured Homes Are Mostly Left Out of Pandemic Assistance

In analyses of COVID-19's effects on the housing market, the manufactured housing sector is largely overlooked. Nearly 22 million people, or 7 percent of US households, live in manufactured housing. Manufactured homes make up about 3 percent of housing in urban areas and 15 percent in rural areas, and 71 percent of these units are owner occupied.

These 22 million renters and owners tend to have lower incomes and work in industries that are vulnerable to the pandemic, yet these households mostly fall outside the protections offered by the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

As policymakers negotiate the next round of coronavirus relief, will they support these families?

Occupants of manufactured homes work in industries and occupations that are most vulnerable to COVID-19

Owners and renters of manufactured homes are more likely than residents of other housing types to work in industries that have suffered significant job losses during the pandemic. For example, 35 percent of owners of manufactured homes work in the five industries that have lost the most jobs during the crisis (food and accommodation, retail, construction, entertainment, and other services), compared with 24 percent of owners of single-family homes.

Additionally, 43 percent of renters in manufactured homes work in the five most vulnerable industries, compared with 27 to 35 percent of renters in other types of rental units. In fact, the owners of manufactured homes are slightly more vulnerable on this measure than renters in other types of housing.

Source: Urban Institute

We see similar results among occupations: 13.5 percent of owner-occupants of manufactured homes are service workers, versus 8.2 percent of owner-occupants of single-family homes. The same is true for 20 percent of renters of manufactured homes, higher than for any other property type except that of renters in two-to-four-unit buildings, another group that is particularly vulnerable during this pandemic.

Occupants of manufactured homes have lower incomes and pay less for housing

The median income of manufactured homeowners ($38,087) is well below the $79,800 for single-family owner-occupants. In fact, the median income of manufactured home owners is comparable with that of renters in other housing types. The median income of manufactured home renters is lower than for any other group.

Source: Urban Institute

It is important to note that the cost of living in manufactured housing is well below the cost of living in other housing types. The monthly housing payment in manufactured homes is $505 for owners (which includes loan payments, lot rental payments, utilities, insurance, and property taxes) and $670 for renters (which includes rent and utilities), versus $1,168 for single-family owner-occupants and $1,079 for single-family renters.

Source: Urban Institute

Occupants of manufactured housing have received little government support to weather the pandemic

Despite their greater vulnerability, most owners of manufactured homes do not qualify for CARES Act forbearance relief, because 77 percent of all new manufactured homes are titled as “personal property” rather than “real estate.”

Of the homes titled as personal property, only Federal Housing Administration (FHA) Title 1 loans (which allow for the purchase of the structure alone and are a tiny subset of the market) qualify for CARES Act forbearance. To take out a mortgage, the manufactured home must be titled as real property.

In most states, this requires the borrower to own both the structure and the land it is sited on. Some mortgages on manufactured homes are federally backed, hence triggering CARES Act coverage, but others are not. Mortgages on manufactured home structures alone are called chattel loans, which are generally held in the portfolio of the originating institution and serviced by this institution. It is therefore up to each mortgage servicer to determine whether it wants to offer forbearance and on what terms.

Most chattel lenders are offering forbearance, but some are requiring quicker payback periods than the standard terms afforded to FHA and government-sponsored enterprise borrowers. And in many cases, the forborne amount must be repaid with interest. In short, manufactured home borrowers, who often have low incomes, generally receive forbearance on less favorable terms than wealthier borrowers with federally backed mortgages.

The Health and Economic Recovery Omnibus Emergency Solutions (HEROES) Act, if passed, would extend the benefits of federal forbearance programs to households without federally backed mortgages and applies similar forbearance and repayment programs for personal debt, which would include chattel loans on manufactured homes.

Renters also did not receive immediate relief. The CARES Act eviction moratorium, which expired July 24, did not apply to most renters in manufactured homes, with two exceptions: the manufactured home parks financed with federally backed mortgages (2,400 out of 45,000) and the few investor-owned properties with federal loans. Eviction moratoriums that some cities and states imposed are also expiring. And though many manufactured home renters received the weekly $600 federal unemployment benefits, those expired on July 31, and the status of a replacement payment is unclear at the time of this writing.

The only hope for struggling renters is either an extension of unemployment benefits or passage of the HEROES Act. The latter includes eviction protections and rental assistance programs for those who cannot make their rental payments, regardless of whether the landlord has a federally backed loan.

In developing policies to keep people safely housed during the COVID-19 pandemic, it is important to identify the most vulnerable groups and the sources of their vulnerability. The 22 million renters and owners living in manufactured homes are particularly vulnerable during the pandemic because of their service-industry-focused jobs and their low incomes. They also need support during the next round of funding.

Manufactured Housing Landscape 2020

As the housing affordability crisis has deepened, manufactured housing is garnering more interest as an important source of affordable housing, particularly among rural and low-income households. In addition, it costs significantly less and takes less time to build a new manufactured home than to build a new site-built home of comparable size. As a result, manufactured housing has the potential to be an important tool in adding new homes to housing supply despite the likely slowdown in the shipments of new homes due to recent elevated levels of job loss.

Factory Built Homes Subject to HUD Code

Manufactured housing refers to housing built in a factory after June 15, 1976 and constructed in accordance with the U.S. Department of Housing and Urban Development's Manufactured Home Construction and Safety Standards code (HUD Code), which sets minimum standards for size and quality of construction. Factory-built manufactured homes that meet these standards post a HUD label and are subject to federal regulations that supersede local building regulations. Homes built before this date are considered mobile homes and are typically of a lesser quality construction.

It is important to note that recreational vehicles, park trailers, and park model homes are built to different standards and are not considered manufactured homes. In addition, although modular homes are often built in the same facilities as manufactured homes, they are not considered manufactured housing under the formal definition because they are built to local standards in the state where the home will ultimately be located, rather than to HUD standards.

Many Manufactured Homes Located in Rural Areas

Manufactured housing represents 6.3% of the nation's housing stock but is a higher share of housing stock in rural areas. While site-built single-family homes represent about 80% of housing stock in rural areas, manufactured housing represents about 14% of stock. Apartments trail a distant third, representing only about 6% of the stock in rural areas.

Occupied Units Declining

An estimated 18 million Americans live in manufactured homes. While most manufactured homes are owned, with 4.8 million homes occupied by owner households, there are also 1.9 million units occupied by renter households. In 2018, there were another 680,000 homes classified for seasonal or recreational use and another 860,000 units which were vacant.

The number of occupied manufactured homes fell slightly over the past six years, by about 140,000 households. This is concerning because there is a dearth of affordable housing in the U.S. today, and manufactured homes tend to be occupied by lower-income households.

Source: Fannie Mae

Manufactured Homes Occupied by Lower Income Residents

The median annual household income of manufactured home residents who own their homes is about $35,000, half of the median annual income of site-built homeowners. Over one-quarter of manufactured home owners earn less than $20,000 annually and two-thirds earn less than $50,000 annually. By contrast, about a third of site-built homeowners earn less than $50,000 annually.

While the distribution of renter household incomes skews lower in all types of housing, manufactured home rentals are particularly important to lower-income renters. Over one-third of renters of manufactured homes earn less than $20,000 per year and over three-quarters earn less than $50,000 per year.

Source: Fannie Mae

Source: Fannie Mae

More Affordable All-In Housing Costs

The median monthly all-in cost to own or rent a manufactured home is lower than for a site-built home. The median all- in monthly housing cost of $925 per month for manufactured home owners was $675 per month less than that paid by owners of site-built homes. The all-in cost was $350 per month less for renters of manufactured homes.

Source: Fannie Mae

Source: Fannie Mae

New Manufactured Homes More Affordable than Site-Built Homes

One solution to addressing the nation’s housing supply shortage is to build more homes. New factory-built manufactured homes, which can be built as single- or multiple-section homes, appear to be significantly more affordable than site-built homes.

The average sales price of a new manufactured home built and shipped in 2018 was less than half of the sales price of a new site-built home: $79,000 for the average new manufactured home compared to almost $300,000 for the average new site built-home, excluding land costs.

This translates to $55 per square foot for a manufactured home compared to $114 per square foot for a site-built home.

The cost for a single-section manufactured home was even lower, at just $49 per square foot compared to $125 per square foot for a similarly sized site-built home.

Source: Fannie Mae

Of 139,647,020 housing units in US 2017-2021 Census estimates, 5.9% or 8,239,174.18 were mobile homes.

Mobile Homes Could Be a Boon for Affordable Housing

Source: Green Building Advisor

When you hear the words “trailer park” or “mobile home park,” what comes to mind? Crime? Poverty? Vulnerability to natural disasters? These negative images reflect the stigma, reinforced by popular culture, that many U.S. residents assign to manufactured home parks—the official name for these dwellings under federal standards adopted in 1976.

Over 20 million Americans live in manufactured housing—more than in public housing and federally subsidized rental housing combined. Yet many people, including urban planners and affordable housing researchers, see manufactured housing parks as problems. In contrast, we see them as part of the solution to housing crises.

We are urban planning scholars who study climate vulnerability, community economic development, and equity in urban land use. Our research suggests that misguided stereotypes blind scholars and policymakers to the possibility that mobile homes can help address the affordable housing crisis and climate change. Here are some misperceptions about this widespread form of housing.

Stereotype 1: Manufactured housing is shoddy

Many people think manufactured homes are poorly built, even though these structures, unlike site-built houses, have had to meet federal safety standards since 1976. These safety standards have been periodically updated, often in response to disasters. Today, new, well-installed factory-built homes are comparable to site-built homes when it comes to standing up to wind, fire, and other disaster threats.

Compared to homes built on-site, manufactured housing costs half as much per square foot—partly because it's easier, more predictable, and cheaper to build homes in factories. Many quality problems associated with manufactured housing arise from home installation, park maintenance, and infrastructure issues. No matter how well-built homes are, residents can suffer if they are installed on unstable foundations, or if park owners allow water, sewer, or power utility infrastructure to crumble.

Stereotype 2: Housing parks are always exploitative

While many manufactured housing residents own their homes, they may not own the land the homes sit on. This can leave them at the mercy of predatory park owners and investors. Moving manufactured homes is difficult and expensive, despite the "mobile" label, so residents of manufactured home parks can't easily relocate when park owners allow conditions to deteriorate, raise rents, or evict residents.

But there are alternatives. Residents at more than 1000 manufactured housing parks in the U.S. have jointly bought their land, creating Resident Owned Communities.

This cooperative model gives residents control over their homes and neighborhoods. Resident-owned parks preserve affordability and help residents address their own problems, including vulnerability to climate-driven disasters.

Stereotype 3: Housing parks aren't urban or dense

Manufactured home parks are often dismissed as rural and low-density, and therefore irrelevant to urban housing needs. However, 61% of all manufactured housing is located in a metro area, and 8% is in urban centers.

The density of these communities, typically eight to 15 homes per acre, is often greater than nearby neighborhoods. In Houston, for example, many manufactured housing parks are located in suburban areas close to the central business district. If anything, local zoning in many cities limits the density of manufactured housing parks.

Stereotype 4: Housing parks are uniquely disconnected

Critics often assert that manufactured housing parks are disconnected from surrounding neighborhoods. In reality, this pattern applies to most U.S. residential neighborhoods built since World War II, including gated communities and cul-de-sacs. Residents of these communities value the privacy, safety, and neighborhood cohesion their street patterns provide.

Biased local zoning regulations also frequently reinforce manufactured housing parks' isolation by requiring them to be separated and hidden behind tall privacy fencing. Where fragmented street networks create problems for residents, like reduced walkability, they can be retrofitted by reconnecting streets.

The real challenges

While these stereotypes often don't reflect reality, manufactured housing communities face real challenges.

Local governments and park owners often are eager to convert parks to what they describe as "higher and better uses," which frequently means evicting residents for commercial development or more expensive housing. Private equity investors, pension funds, and sovereign wealth funds are buying up manufactured housing parks, which they view as reliably profitable investments. When owners redevelop parks, they can evict residents with little recourse.

Residents of manufactured home parks are also increasingly vulnerable to climate change impacts. Biased zoning rules have forced many of these communities to locate on less desirable land, including flood-prone sites, industrial areas and highway fringes. In a 2021 review, we found that 22% of manufactured housing parks across nine states were located within current 100-year floodplains—zones with a 1% chance of flooding every year.

Manufactured housing is especially common in hurricane-prone regions like Florida, Louisiana, and Texas. While updated building standards have substantially improved safety, increasingly ferocious storms still pose a real threat.

Angel Flores checks the condition of friends' manufactured homes on Sept. 17, 2018, in Kinston, North Carolina, three days after Hurricane Florence made landfall in the state. Chip Somodevilla/Getty Images

Source: Green Building Advisor

Aging manufactured home park infrastructure, including sewer, water, and electricity systems, is highly vulnerable to extreme heat, wind, drought, flooding, and wildfires. And since residents typically have lower incomes, they have fewer resources to respond when extreme events strike.

Manufactured housing, resilience, and justice

With economic, political, and technical support, evidence shows that manufactured housing can overcome these challenges.

To date, 20 states have adopted laws that help residents purchase the manufactured home parks where they live. These policies have helped ROC USA, a nonprofit social venture, create a network of over 280 cooperatively owned, limited-equity, resident-owned communities that are home to over 18,000 households.

ROC USA provides low-cost loans to resident cooperatives to buy land and make needed capital improvements such as upgrading water, sewer, and electric systems. Their network of regional housing experts then works with communities for at least a decade to develop and sustain their ability to manage their parks.

Over three decades, no ROC USA community has ever defaulted on a loan or sold their park. A growing number have adopted climate-responsive measures, such as building storm shelters and community centers, upgrading drainage infrastructure, and providing emergency post-storm tree clearance and other forms of mutual aid. Other resident-owned communities are investing in renewable energy and energy efficiency, reducing greenhouse gas emissions and energy costs for their residents.

Rustic Pines in North Attleborough, Mass., is a limited-equity resident-owned community for those over 55. Established in 2015, it is run by a democratically elected board. ROC USA, CC BY-ND

Source: Green Building Advisor

Policymakers are paying attention. The Biden administration’s 2022 housing plan includes extensive support for manufactured housing parks.

California Gov. Gavin Newsom has called for increasing state funding to preserve manufactured housing parks as affordable housing. The U.S. Department of Energy recently adopted more ambitious efficiency standards to reduce energy costs for residents of manufactured housing.

In our view, these efforts should be coupled with legislation that protects manufactured housing park tenants and expands the limited-equity ROC model. Governments could enact laws that offer tenants opportunities to purchase their rental units and provide subsidized loans and grants to resident cooperatives. Decades of experience shows that resident ownership can transform manufactured home parks from sites of stigma and vulnerability into stable and resilient communities.

Manufactured Home Costs 2022

Why Manufactured Home?

There always has been a need for quality, affordable housing. And the prefabricated housing industry has come up with a solution for people who want a new home with all of the features that a site-built home would offer but at a fraction of the price - manufactured homes. Depending on the size, area, and other features the cost of mobile homes can vary vastly. This article explores average prices for the different kinds of manufactured homes as well as the cost of land.

First, let’s review what a manufactured home is and why it is more affordable than a site-built home.

A Manufactured Home is a home built entirely in the factory under a federal building code administered by the U.S. Department of Housing and Urban Development (HUD). Manufactured homes may be single- or multi-section and are transported to your home site and installed. Manufactured homes setup costs strongly depend on the complexity of the site and distance traveled. But in any case, manufactured homes on average are less expensive than site-built homes.

Manufactured homes are less expensive because:

The factory uses an assembly line to build these homes. The process becomes more efficient;

It is built inside so there are no weather delays;

Manufacturing is not disrupted by theft of both workers and hooligans;

Due to the scale of production, a manufacturer buys large quantities of materials at less cost;

The property taxes on manufactured homes are lower than on-site homes;

Mortgages on manufactured homes are easier to obtain.

Analyzing manufactured homes and their average cost, it is clear that for many people mobile home costs are more affordable than site-built homes which are directly built at the location where it is going to be inhabited.

Another fact indeed is that mobile homes can make homeownership easier to achieve. And since mobile homes cost less per square foot than a stick-built home, you can get more space for your money.

The Affordable Housing Crisis in 2023 - Where Do We Stand and What Are The Solutions?

The affordable housing crisis in the United States has plagued Americans across the country since the Great Recession—and is only getting worse. 2022 estimates indicate that the U.S. needs some four to five million more homes on the market than it has right now.

Housing costs have become increasingly untenable for renters and buyers alike; over 40% of renters are cost-burdened (meaning they spend more than 30% of their income on housing costs), and housing prices are rising faster than wage growth in 80% of U.S. markets.

Moreover, the situation has been exacerbated by the work-from-home boom and supply chain shortages that resulted from the COVID-19 pandemic. Demand increased as Americans moved to the suburbs; at the same time, supply decreased due to shortages of labor and building materials.

We talk to Andra Ghent, Professor of Finance at the University of Utah's David Eccles School of Business, to discuss the problem of housing affordability, as well as what solutions might be possible for the public and private sectors.

How has the work-from-home boom changed housing affordability and migration patterns since the pandemic?

People need more space to be able to work remotely. We know this from pre-pandemic data showing that people that worked remotely spent a larger fraction of their income on housing and had more rooms in their home (see graph below from Stanton and Tiwari, 2021).

Importantly, it's not just dedicated home office space that people want more of when they work remotely. They also use the other parts of their home more intensively (bathrooms, kitchens, basement gyms) since they're more likely to do all the ancillary activities they did at the office at home now. The increase in work-from-home thus lead to a big increase in housing demand that increased housing prices.

Working from home makes living in the suburbs less costly, since people only need to commute 2-3 days per week instead of 4-5. Subsequently, it shifted housing demand towards the suburbs, particularly in cities where people face long commutes, where suburban space is relatively cheap, and with high shares of white-collar workers.

In the long run, the increase in house prices will moderate a bit as home builders are able to add more space where people want to live. That said, municipalities have enacted increasingly onerous land use regulations that are making it harder for home builders to add supply—even in the long run—so some of the increase in home prices is permanent.

Stanton, Christopher, and Pratyush Tiwari. "Housing Consumption and the Cost of Remote Work." NBER Working Paper Series, No. 28483, February 2021.

Source: Kenan Institute

How are higher interest rates affecting renters as opposed to homeowners?

Unfortunately, any fall in home prices from the increase in interest rates is not due to either a short-run or long-run improvement in affordability for either renters or buyers. Home prices are just the capitalized value of the future expected stream of rents, and the rate at which they are being capitalized has risen.

This is part of why you are seeing some moderation in home prices or even outright declines in some places. Mostly, the rise in rates means that some people who previously could have qualified for a mortgage can't right now. As a result, there are fewer buyers bidding on any homes on the market.

The rise in interest rates also means that many would-be home sellers are effectively locked into their current home, since they can't take their current mortgage rate with them if they buy a new house. This means the market for existing homes is especially thin.

Rents are not falling significantly, so it would be a mistake to think that affordability has improved because of the increase in interest rates. Nothing has improved for renters; in fact, new construction of housing is declining because homebuilders are having a harder time getting deals to pencil with the increase in interest rates. That means that the rise in rates will decrease affordability in the medium-term.

What solutions are most viable from the public and private sectors? Are there examples of successful policies that have increased the supply of affordable housing?

We need states to step in and preempt municipalities from enacting and enforcing land use restrictions that raise housing costs. Land use control is a police power that is constitutionally guaranteed to states, not cities. While states often delegate the power to municipalities, they can take it back when cities don't use it for the public benefit. Because housing markets are regional, any individual city does not bear the full cost of making it hard to build.

The best chance we have to improve housing affordability in the long term is to reduce construction costs through automation of construction processes. There is a lot of innovation going on in housing construction – "modular" housing, 3D printing, and so forth – but right now there are problems getting these processes to scale and become affordable.

We've seen little to no productivity growth in housing construction in 50 years, unlike what we've seen in the rest of the manufacturing sector, because we haven't seen scale in manufactured housing.

So, we need manufactured housing built at scale. To make this possible, we need harmonization of land use law to make it possible to build the same type of housing in many cities and know it adheres to code.

HUD can change its manufactured housing definition to allow home builders to remove the chassis and still have it count as manufactured housing. This needs to be accompanied by laws at the state level mandating that manufactured housing is a permitted housing type in any zoning code that allows single-family housing. Otherwise, manufactured housing will get relegated to parks.

Average Sales Price of New Manufactured Homes: Double Homes in the United States

Source: Archival Economic Data, St. Louis Fed

Source: Federal Reserve Economic Data

Single and Double Wide Manufactured Home Prices

Source: Federal Reserve Blog

FRED has just added data from the U.S. Census Bureau for an additional type of real estate: manufactured homes. This market is separate from and smaller than the more popular and widely watched single-family homes market, but the price data for manufactured homes have several interesting characteristics.

First, manufactured homes are more uniform than other homes. For example, single-family homes come in a variety of sizes, they have tended to become larger over time, and the size composition of single-family home sales may vary from one period to another. Manufactured homes come in two standard sizes, single and double, and separate statistics are collected for each.

Second, the price of manufactured homes includes only the house—that is, the land is not part of it. This should make the price more informative. However, the market for manufactured homes is thinner, which makes measurements less precise and thus more volatile.

The graph above compares the prices of manufactured homes (single and double) with two popular single-family home price indexes. It's striking that their trends are quite similar, despite the differences noted above. It's a coincidence, though, that the levels of the single-family home price indexes line up with the manufactured home series. (In the graph, the value 100 could be any year.) It's also clear, as noted above, that the price of manufactured homes is more volatile, as the market is likely too thin.

Average Sales Price of New Manufactured Homes: Single Homes in South Census Region

Source: St Louis Federal Reserve

Total Shipments of New Manufactured Homes: Total Homes in the United States

Source: St Louis Fed

Major Financial Trends (The Financial Markets)

Section 8

Workforce Housing

“Trailer Parks”

Manufactured Housing Communities

Sr. Living

In the past, mobile homes had wheels.

Therefore, you couldn’t get financing – only a vehicle loan.

President Biden Announces New Actions to Ease the Burden of Housing Costs

Supporting production and availability of manufactured housing. The majority of people buying new manufactured homes rely on personal property financing (chattel lending) rather than conventional mortgages. This type of financing typically costs more than traditional mortgage financing due to higher interest rates and shorter loan terms.

Freddie Mac has announced that it will complete a feasibility assessment for the requirements and processes necessary to support loan purchases of personal property manufactured housing loans. If FHFA approval is obtained, Freddie Mac will purchase these kinds of loans to assist with product design and support future loan purchase capabilities.

Beyond personal property financing, both Fannie Mae and Freddie Mac (the Enterprises), in their Duty to Serve Plans, also released revised purchase targets for manufactured housing loans, which will have the effect of fostering greater liquidity for manufactured housing and increasing delivery of manufactured homes.

Finally, recognizing the cost and development time savings provided by manufactured housing, HUD is making it easier to finance new units and helping manufacturers update their designs to meet changing consumer demands. This includes working to increase the usability of FHA's Title I loan program for Manufactured Housing, supporting greater securitization of Title I loans through Ginnie Mae's platform, updating the HUD Code to allow manufacturers to modernize and expand their production lines, and helping manufacturers respond to supply chain issues.

Green Street Commercial Property Price Index

Property Prices Correct 14%, But Bottom Near

Newport Beach, CA, February 6, 2023 — The Green Street Commercial Property Price Index® decreased by 0.6% in January. This all-property index has fallen 14% from its March '22 peak, while the index tracking properties in core sectors is down 17%.

"Commercial property prices are down about 15% from their peak," said Peter Rothemund, CoHead of Strategic Research at Green Street. "Most investors would probably agree with that, even if the yearly appraisal of their properties might suggest otherwise. So, while appraisals are likely headed lower, the real-time picture of property pricing shows a market where we've either reached bottom or are very close to it."

About the Green Street Commercial Property Price Index® Green Street's Commercial Property Price Index® is a time series of unleveraged U.S. commercial property values that captures the prices at which commercial real estate transactions are currently being negotiated and contracted. Features that differentiate this index are its timeliness, its emphasis on high-quality properties, and its ability to capture changes in the aggregate value of the commercial property sector.

About Green Street Founded in 1985, Green Street is the preeminent independent research and advisory firm concentrating on the commercial real estate industry in North America and Europe. The company is a leading provider of real estate analytics, research, and data on both the listed and private markets. Additional information on Green Street is available at www.greenstreet.com.

Source: Green Street

Source: Green Street

Major Policies & Political Actions (Geopolitics)

Legal & Regulatory Events

Tax code and incentives for manufactured homes

Investing In Manufactured Housing

Investing in Manufactured Housing

Historically, the popularity of manufactured housing began to rise as Americans sought more affordable housing options. However, negative associations become correlated with these communities since their presence was generally focused in lower-income areas. While this trend has been present for decades, a shift in investor demand is occurring due to the current national affordable housing crisis, and now, manufactured housing has again become a solution to one of America’s ongoing economic challenges. In this article, we will review why investors are seeking investment opportunities in manufactured housing and outline how this industry has the potential to grow.

Why Consider Investing in Manufactured Housing?

Traditionally Cost Effective

Manufactured housing has become a viable solution to the current housing crisis as it offers a cost-effective option to build and supply homes for those unable to financially meet the high rents we are experiencing in today’s market.

According to Inland Venture Partners, a commercial real estate and finance group headquartered in Oak Brook, Illinois, the cost to build homes versus manufactured housing is 108 percent higher – recent data revealed that the cost to build a manufactured home equaled $57 PSF versus $119 PSF for site-built homes.

Contributing to this affordability results from how manufactured homes are built. Unlike traditional housing, which requires extensive on-site labor and generally higher construction costs, manufactured homes are constructed indoors via a streamlined process. As a result, these homes are built at lower costs and with higher efficiency.

Historical Low Vacancy

There are roughly 4.3 million manufactured home sites across 43,000 manufactured home communities in the United States. Inland Venture Partners says the average occupancy rate across these communities is 94 percent, and demand is rising. However, construction and supply are not meeting the needs of current demands.

It is reported that a third of the country's communities were constructed between the 1950s through 1990s, with few new communities currently being constructed. As a result, competition has remained, and owners have had minimal challenges filling vacancies.

Generally Limited Maintenance

When investing in real estate, it is imperative to consider maintenance requirements for a property. Generally, when operating commercial spaces, this is determined by the lease structure negotiated with each tenant. However, for manufactured communities, landlords have minimal responsibility. Rather than leasing out the homes, tenants purchase their homes and lease the land from the manufactured community. As a result, landlords have minimal maintenance responsibility, generally only responsible for the communities' grounds.

Historically Recession Resistant

Manufactured homes have also proven recession-resistant for investors, meaning that even during economic volatility, these assets have historically continued to provide investors with stable, positive cash flow.

Green Street Advisors, a global real estate research firm, reported that between 2004 and 2018, operating income from mobile home parks rose by 87 percent. Through that period, income never declined, even during the Great Recession of 2008.

Contributing to this trend is the cost of moving a mobile home. Moving these homes is expensive, deterring residents from evacuating their houses, especially during economically challenging times. As a result, these high costs of moving from a manufactured home contribute to its historical recession-resistant status and low vacancy.

MH Insider - the nation's premier online marketplace for buying and selling manufactured homes – reported, "A recent study reveals 90 percent of people are satisfied with their mobile or manufactured home. Seventy-one percent of residents cite affordability as the key driver for choosing manufactured housing. About 62 percent of manufactured and mobile home residents anticipate living in their home for another 10 years, and 38 percent don't ever anticipate selling their home."

Potential Tax Advantages

Real estate investing comes with multiple targeted benefits, such as earning income, building equity, and investing in an asset often considered a hedge against inflation. Furthermore, real estate offers various possible tax breaks, including deductions, depreciation, and 1031 exchanges.

Manufactured housing offers a tax advantage that most commercial investments do not provide – accelerated depreciation. Per the Internal Revenue Service (IRS), commercial properties can be depreciated over 39 years, while residential rental properties can depreciate over 27.5 years. Land, however, cannot be depreciated since the land has an indefinite useful life.

Manufactured housing falls outside these categories since it only includes land improvements, such as roads, underground pipes, and electrical lines.

Per the IRS, land improvements can be depreciated over 15 years since they generally have a shorter useful life. As a result, investments in manufactured housing can be depreciated over 15 years versus zero or 39 years.

Proposed Improved Finance Options

Most recently, the White House proposed a new plan to finance manufactured homes. Currently, financing manufactured homes can be difficult. Unlike traditional homes, manufactured homes rely on personal property financing or chattel lending. However, these loans generally include higher interest rates and shorter-term structures than a conventional or FHA loan. The new plan proposed three changes that will significantly impact buyers.

Freddie Mac will "will complete a feasibility assessment for the requirements and processes necessary to support loan purchases of personal property manufactured housing loans. If FHFA approval is obtained, Freddie Mac will purchase these kinds of loans to assist with product design and support future loan purchase capabilities."

Fannie Mae and Freddie Mac both "released revised purchase targets for manufactured housing loans, which will have the effect of fostering greater liquidity for manufactured housing and increasing delivery of manufactured homes."

HUD has recognized "the cost and development time savings provided by manufactured housing. Therefore, "HUD is making it easier to finance new units and [help] manufacturers update their designs to meet changing consumer demands."

Changes to available financing may improve availability and increase demand for manufactured housing.

Consideration for RV Communities

Many of today's manufactured housing funds also include recreation vehicle (RV) communities – and therefore, let's review whether investors should consider these investments for their portfolios.

A Recreational Vehicle (RV) Park is defined as a "parcel of land upon which two or more recreational vehicles are occupied for dwelling or sleeping purposes for no more than 60 days during 120 day period." Simply put, they are campsites for RVs.

Throughout the last decade, RV vacations and camping have increased in popularity, and funds are taking advantage of this growing trend to grow and further diversify their portfolio offerings. Inland Venture Partners reports that American travel patterns are contributing to these new trends: more than 11 million families own an RV, with most owners aged between 35 to 54. Of these 11 million families, 90 percent will take at least 3 RV trips annually.

From the investor's perspective, these investments offer different benefits. First, it taps into the hospitality sector, adding more diversity to one's portfolios. Secondly, with the average cost at an RV park equaling $45 per night, this lodging option is more viable for Americans who want to travel during economic downturns.

A Growing Asset Class

Demand for manufactured housing is rising, and US developers are taking action to add more inventory to help meet rising needs. According to MH Insider, "Thirty-three U.S. manufactured home builders operating from 141 plants … across the country produced 105,772 housing units during 2021. Shipment levels of new manufactured homes eclipsed the 100,000 mark for the first time in 16 years."

For investors, potential returns on manufactured housing are more attractive, especially compared to other asset classes. In a recent analysis shared by Inland Venture Partners, "Historically, manufactured housing returns have outperformed the returns offered by other core commercial real estate sectors. As of March 30, 2022, Green Street Advisors Commercial Property Return Index reported manufactured housing returns at nearly 391 percent, since March 2021, surpassing the next leading sector by 33 percent."

"Green Street predicts a 2022 capitalization rate of 4.0 percent and a positive four-year 4.9 percent growth rate in net operating income (NOI) for the manufactured housing sector from 2023-2026 forward.

Additionally, Greenstreet projects the manufactured housing sector to achieve a 3.45 percent growth in NOI over the long term (2027 and beyond), which is expected to lead other core real estate sectors in terms of long-term NOI growth by at least 0.3 percent."

Growth in the sector is believed to be inevitable, providing a solution to today's challenging housing crisis. Those willing to overcome the negative historical associations with manufactured housing have the potential to benefit from positive returns.

The Powerful Tax Advantage of Mobile Home Park Investments

Investors love mobile home parks (MHPs) because of their recession-resistant qualities and their ability to deliver stable cash flow. MHP investments also provide a lesser-known, yet equally compelling advantage: tax efficiency.

When evaluating an investment, investors typically focus on how much money they can make. However, it's important to not overlook another key element: an investment's tax efficiency, which impacts how much money investors get to keep.

Delving Into Depreciation

"Depreciation" is an accounting term that refers to the reduction in a property's value over time, particularly due to wear and tear. Essentially, depreciation assumes that everything has a limited useful life and that things tend to gradually wear out.

The U.S. tax code assigns a useful life to commercial real estate, generally 39 years. For tax purposes, a property is assumed to wear out, or depreciate, a little bit each year over that period of time. Depreciation is treated as an expense, so by expensing a portion of the property each year, investors reduce taxes on the income they earn, allowing them to keep more of what they make.

The faster a property can be depreciated, the greater the property's tax efficiency, and the greater tax advantage. The U.S. tax code allows some types of real estate to be depreciated faster than others. This is where mobile home parks gain such a significant advantage.

The Mobile Home Park Investment Advantage

For accounting purposes, when a property is purchased, the property's value is generally divided into three buckets, based on useful life expectancy.

Bucket #1: Land

Land has an indefinite useful life, so the portion of the property's value allocated to land is not depreciated.

Bucket #2: Building

Commercial buildings have a longer useful life and are depreciated at a slower pace, generally over a period of 39 years.

Bucket #3: Land improvement

Improvements like roads, underground pipes, electrical lines, pads, and pedestals have a shorter useful life and are depreciated at a faster pace, generally over a period of 15 years.

Unlike most other types of real estate, a large portion of a mobile home park's value often comes from land improvements, allowing depreciation at a much faster rate. Herein lies the powerful tax advantage of MHPs that investors love.

Source: LinkedIn

A Real-Life Example of Mobile Home Park Investment Tax Efficiency

Let's look at a simple example of a mobile home park compared to a commercial building. For comparison purposes, we'll assume both properties are in a similar neighborhood, with the same purchase price of $3 million and non-depreciable land value of $900,000, leaving $2.1 million that can be depreciated.

With the commercial building, most of the remaining $2.1 million would be allocated to the building bucket and depreciated over 39 years, meaning $53,846 could be expensed each year.

With the mobile home park, most of the remaining $2.1 million would be allocated to the land improvement bucket and depreciated over 15 years, meaning $140,000 could be expensed each year.

Source: LinkedIn

This is an extremely simplified example, but it demonstrates the enormous difference between the two real estate types in terms of tax efficiency. With more of the property expensed each year, mobile home park investors can dramatically reduce their taxes and keep more of what they make.

With the added power of bonus depreciation, the land improvement bucket of a mobile home park can be completely expensed in the first year of ownership. This can be extremely attractive for investors seeking tax losses to offset larger gains.

Note: Depreciation and bonus depreciation do not eliminate taxes. Rather, they delay the tax payments until the property is sold. In other words, investors pay less tax on the income while they're invested. In some cases, they pay no taxes at all.

Appreciation for Depreciation

The accelerated depreciation afforded to mobile home parks makes them one of the most tax-efficient types of real estate. Essentially, investors can enjoy tax-"free" income from a predictable strategy while they are invested, and defer the tax until the exit.

Mobile home parks are known for their recession resistance and ability to deliver consistent cash flow, but their tax efficiency makes them even more attractive.

Tax Advantages of Mobile Home Parks

I am a real estate investor who is always looking for ways to minimize taxes. And I, like many other investors, also have employment income that affects our tax rates on our investments. So how can we minimize our taxes? By investing in mobile home parks!

Why do these communities provide better tax advantages than other forms of real estate? Rapid depreciation.

Depreciation on residential properties takes place over a period of 27.5 years, or 3.64% per year. In commercial real estate, it is 39 years and 2.56% annually.

It is also important to understand that the land a building sits on does not depreciate over time. The main value of most depreciating real estate is attributed to the buildings, with a smaller portion assigned to the land.

This is not the case in mobile home parks. Instead, we rent land to homeowners. Imagine it as a big parking lot where the cars (mobile homes) almost never leave because of the high cost of transport. Nevertheless, since we rent the land to homeowners, we are also responsible for maintaining utilities such as water lines, sewer lines, roads, etc. Mobile home parks typically have only a few buildings, such as an office, a community center, and a maintenance shed. The majority of our depreciation is related to infrastructure. These include roads, water lines, sewage systems, parking lots, etc.

In the case of infrastructure, depreciation is calculated on a 15 year schedule, or 6.66 per year. 35% of the park's value can be written off as infrastructure depreciation. The raw land will represent about 30% of the asset value, and we can write off the remaining 35% as goodwill. There is also a 15-year straight line depreciation schedule for goodwill.

Thus, 70% of the value of a mobile home park can be written off with a 15-year straight-line depreciation schedule.

In a depreciation schedule over 15 years, 70% of an asset's value is equal to 4.66% per year (70% / 15). To determine a multiplier for tax purposes, you need to know the loan-to-value ratio of the property. In this example, assume we acquire the asset at 65% LTV.

This is how the math looks: 1/(1-.65) = 2.85.

By multiplying 4.66 by 2.85, we can calculate 13.28% annually.

So what's the point of all this boring math? If you are an investor in the mobile home park industry, you could end up with zero income on your K-1 for distributions of up to 13.28%.

With that said, I am not a tax professional so make sure to consult a qualified accountant or an attorney for proper advice.

Mobile home parks have many advantages over other forms of real estate, including better tax savings for investors.

The Value of Cost Segregation for Owners of Mobile Homes and RV Parks

Many commercial property owners are familiar with cost segregation as a tool to achieve faster depreciation of building components—all leading to valuable cost savings. Through cost segregation, which is the process of identifying and classifying subcomponents or units of property, investors and property owners can reduce tax liability and increase their bottom line. Cost segregation can apply to tangible property, land improvement, a building and its structural components, all of which includes mobile homes and RV parks.

According to the Urban Institute, the value of home prices have appreciated at a faster pace for mobile homes than they have for traditional properties. The affordability of mobile homes appeals to seniors wishing to downsize, young professionals needing more space than they can otherwise afford and those looking for inexpensive part-time property in the Sunbelt. As owners of RV parks retire in record numbers, investors have begun to buy mobile-home parks in earnest. At the same time, RV camping is increasing in popularity because of significant improvement of RV parks, including more amenities.

So, what does this have to do with cost segregation? There is a substantial opportunity for investors in these properties! Cost segregation identifies qualified real property that can be depreciated in as little as five, seven and 15 years.

Items such as utility tie-ins, gravel and asphalt driveways and lots, signage, landscape and pathways can all be accelerated for quick write-off under the existing tax rules. Additionally, some mobile homes, if movable, can also be depreciated in the first year. This means that the value of cost segregation on these properties is greater than ever.

For example:If you purchase a $2.4 million property with a land value of $500,000, your tax basis would be $1.9 million. Without cost segregation this would provide annual depreciation of about $49,000 per year. However, with cost segregation you could see first-year depreciation as high as $950,000 to $1.8 million, depending on the property.

Engineered Tax Services identifies land value based on tax-assessed value, which can be as low as 20% and as high as 80%, something that investors should consider in a property acquisition. Property owners should take into account mobile homes they own and other structures on site of the RV park, such as clubhouses, laundry facilities and management quarters. A good portion of mobile home parks can be allocated as 15-year depreciation.

Most of the improvements in these properties qualify for 100% bonus depreciation, which means that 60%-80% of a property can be depreciated in the first year.

The IRS recommends that property owners and investors have an engineering-based cost segregation study to determine which portions of the property can accelerate depreciation. The benefits of the study are based on when the property was placed into service and updates made to the building in that time period. Keep in mind that cost segregation studies can be conducted for a previous year without amending that year’s tax return. A qualified engineer will use blueprints and cost reports to determine whether property can be reclassified for tax benefits.

What You Should Know If You're Considering Investing In Mobile Home Parks

Mobile home parks (a.k.a. manufactured housing communities) have become a darling of private equity over the past few years, and rightfully so. The simple, powerful supply and demand imbalance provides a compelling investment thesis.

In mid-2018, Blackstone made its first bet on manufactured housing when it acquired 14 communities for about $172 million. And Blackstone isn't the first institutional investor to dive into the niche: Apollo Global Management owns a majority stake of Inspire Communities, and the Carlyle Group owns several thousand manufactured housing lots.

In 2016, GIC Pte. — the sovereign wealth fund of Singapore — was part of a group that paid $2 billion for YES! Communities.

So, why mobile home parks? As the co-founder and managing principal of a housing investment company that specializes in mobile home park investing, I've outlined 10 reasons I believe any investor could benefit from expanding their portfolio to include MHPs:

Strong And Increasing Demand: As middle- and lower-class families continue to be pressured financially, growing demand for inexpensive housing makes mobile home parks an attractive housing option for those who are unable to pay the costs of conventional homes.

Artificially Constrained Supply: Through my time in the field, I've found that due to increasingly burdensome zoning regulations, few mobile home parks are being built. These government regulations artificially constrain the supply of mobile home parks. In addition, profit margins for mobile home park developers are often inferior to those in the apartment industry.

More Control Of Rent Prices: The high and largely inelastic demand for affordable housing provides significant pricing power in the marketplace.

Outsized Same-Store Net Operating Income Growth: The fundamentals of mobile home parks remain strong and are expected to grow until at least 2021.

Stable Cash Flow: Acquiring positively cash-flowing mobile home parks with further upside provides buyers with a solid margin of safety. The stable cash flow generated by mobile home parks reduces investor risk.

Access To Exclusive Off-Market Deals: Through a private equity fund, investors can participate in purchasing at a steep discount to the prices one must pay to own mobile home parks through a publicly traded real estate investment trust. These deals are often purchased directly from owners who have not maximized the net operating income of their investment. Acquisitions are negotiated based on the current net operating income, which can often be increased shortly after closing on the property.

Higher Yields: I've found that mobile home parks typically trade at higher yields than most other commercial real estate assets. Further, many small operators have not maximized the value of their respective communities, so there might be value-add potential as well. The goal for a new private equity entrant should be to aggregate communities from smaller operators and implement professional business systems to increase both cash flow and equity, thus ultimately resulting in higher yields.

Low Tenant Turnover: Throughout my time investing in this space, I've also observed that in most cases, once a mobile home is moved into a park, that home will stay for many years. Often, if a resident wants to move, they resell the home, which gains you a new tenant.

Accelerated Depreciation Time Frame: Mobile home parks are tax-efficient. Much of the purchase price can be allocated to capital improvements (e.g., roads, underground utilities, etc.). These items are depreciated over an accelerated 15-year time frame versus the standard 27.5 years for residential real estate or 39 years for commercial real estate. Recent updates to the tax code further expedite the process through favorable language regarding bonus depreciation.

Recession-Resistant: Mobile home parks outperformed other real estate sectors during the most recent recession. Demand for the product (affordable housing) actually increases as the economy tightens. The unique, favorable economics of mobile home parks produce superior risk-adjusted returns for investors.

What are a few best practices for getting started?

Before you take the plunge, you need to clearly define your goals and your reasons for getting involved with mobile home parks. You should spend time thinking about how investing in the mobile home park business can assist you in achieving your personal goals and the goals you have for your family.

Once you clearly define your goals, you can focus your attention on narrowing the specific criteria you're seeking in a park. Crystallizing these criteria will help you focus on the properties that will make your goals a reality. The following is a list of questions to ask yourself once you’ve clearly defined your goals:

What size parks should I focus on?

What type of financing can I get?

What type of problems do I want to solve?

What type of problems do I want to avoid entirely?

What type of tenant base do I want to manage?

Am I comfortable with private utilities?

What is my threshold for certain property risks?

What is my risk tolerance?

Should I seek opportunistic, value-add, core-plus or core assets?

As you dive into the space, ensure you've done your due diligence on how to appropriately value a mobile home park asset. While the basic underwriting tenets are consistent across commercial real estate asset classes, each niche has its idiosyncracies. In mobile home parks, not all rental income should be treated equally.

For example, I've found that banks prefer land-lease income (generated from renting lots) rather than park-owned-home income (generated from renting mobile homes). Why? Mobile homes are considered depreciating assets that lose value over time.

As such, banks are unwilling to capitalize park-owned-home income, since that income stream might not be there in perpetuity.

All too often, new entrants into the space capitalize park-owned-home income and overpay at acquisition. Don't make the same mistake.

With large private equity firms now seeing the merits of mobile home park investing, is there still an opportunity for you to consider mobile home park investing? Absolutely. In time, I believe the more sophisticated investors will certainly jump into the space. The question is: Will you?

The Inflation Reduction Act

The Inflation Reduction Act: Impact on §45L Tax Credit

Internal Revenue Code Section 45L provides both single and multifamily homebuilders with a $2,000 tax credit for meeting certain energy saving requirements. However, the 45L tax credit expired at the end of 2021, leaving homebuilders waiting for its renewal.

The Inflation Reduction Act of 2022, H.R. 5376, signed by President Biden on August 16, 2022, extended the 45L credit for homes sold or leased during 2022 with little modification. Thus, residences sold or leased in 2022 would qualify for the 45L credit using the 2021 energy efficiency standards. However, from January 1, 2023 through December 31, 2032, the Act significantly changes the 45L Energy Efficient Home Credit with new provisions and requirements.

Beginning in 2023, the Act provides an increased 45L tax credit of $2,500 for single family and manufactured homes when constructed according to the standards set by the ENERGY STAR Residential New Construction Program or the Manufactured Homes Program.

Single-family homes must meet the ENERGY STAR Single Family New Homes Program, Version 3.1 for homes constructed before January 1, 2025 and Version 3.2 thereafter.

Manufactured homes must meet the latest ENERGY STAR Manufactured Home National Program requirements as in effect on the latter of January 1, 2023 or January 1 of two calendar years prior to the date the dwelling is acquired.

The Act also provides an even higher 45L tax credit of $5,000 for single family and manufactured homes when they are certified as a DOE Zero Energy Ready Home (ZERH).

The Infrastructure Act

Social & Cultural Trends

Affordable housing has always been a politically popular idea, unless it's placed next to rich people.

Stigma around living in “trailer parks” is changing.

Mobile Home Park Trends: Big Money And Improvements

Previously out of favor, the stigmatized asset class of mobile home parks is gaining steam. Investors are bringing much-needed capital to the asset class in the form of capital improvements after new acquisitions. New mobile home park investors are changing the image the properties once had. All the while, these improvements can create great returns for investors and better living conditions for mobile home community residents.

As a mobile home park investor, operator and researcher, I want to explain how recent increases in institutional capital are impacting this undervalued and supply-constrained asset class.

Greater Transaction Volumes

Mobile home park transaction volumes are up since 2013. JLL's capital markets group published a report stating transaction volume for manufactured housing communities in 2020 was around $4.2 billion, which has come a long way from the 2013 transaction volume of $1.2 billion.

As baby boomers continue to retire, in the amount of around 10,000 per day, a vast number of manufactured housing communities are starting to transact for the first time in decades. This is primarily due to the fact that many of the mobile home park properties are still owned by "mom-and-pop" solopreneurs who acquired these assets many years ago.

Change is not all bad. Big money is flooding into mobile home parks. Mobile home parks were a top-performing real estate asset class in 2020, and some of the world's largest investors are aiming to make big improvements to their newly acquired mobile home parks.

In my view, this is primarily due to a few factors: the asset class has performed well during recessionary times, and the supply of new mobile home parks has been limited due to zoning restrictions and the "not in my backyard" phenomenon (NIMBY).

Increased Capital Improvements

Many new owners are bringing much-needed capital improvements to these properties, which due to mismanagement have experienced years of deferred maintenance in some cases. Many "mom-and-pops" needed the income from these properties and didn't raise lot rents enough to keep up with inflation; this restricted them from being able to afford the upkeep needed to maintain these communities at a high level.

Much needed mobile home park capital improvements include:

Road repair and replacements

Utility infrastructure improvements

Tree trimming and overgrown landscaping

Repairs to existing playgrounds and common area amenities

New street signage and better lighting

Filling vacant lots with mobile homes

New Opportunities

Affordable housing is a very real problem in the United States, and manufactured housing has been proposed among the solutions. Approximately 22 million Americans currently live in manufactured homes. I think this number is vastly lower than what it could be based on the current vacancy in mobile home communities across the country.

Mismanaged communities can be notorious for holding vacant lots without mobile homes on them. This wasted space is bad for business and for affordable housing supply.

As new professional operators acquire mobile home communities and reinvest in them by filling vacant lots, the supply of affordable housing units increases for those in need.

The win-win scenario: When a mobile home community is improved, it can often qualify for outstanding financing terms available from government agency lenders such as Fannie Mae and Freddie Mac. These enticing financing terms can encourage investment and can give stakeholders the opportunity to generate a good return on those invested funds, and that's a win.

The residents also win because they are getting a safer and higher quality community experience when the mobile home community they live in is improved upon and well maintained.

Mobile home parks are finally starting to get the investment dollars needed to reduce the stigmatized "eye-sore" mentality they've had for years. These communities can fill a very important gap in our country's affordable housing supply and since there are barriers that restrict new development, we should embrace the positive changes to our country's existing supply.

Cost and Quality: Breaking Down the Stigma of Manufactured Housing

One of the biggest challenges to mainstreaming the use of manufactured housing may be, ironically, its cost. Long recognized as affordable when compared to site-built homes, manufactured housing's lower costs come at a price. That price is the ongoing stigma that many communities and residents hold against manufactured housing.

Questioning Quality

While house hunters, like most consumers, are price sensitive, price can also signal to potential buyers' concerns, playing off biases they may have about manufactured housing. It's likely that Americans' perceptions of manufactured housing are at least somewhat related to cost and general assumptions about lower-cost (and thereby, lower-income) housing. This is directly related to concerns about quality. To many, cheaper homes may mean lower quality, cheaper materials and building methods. This is largely, but not completely, unfounded.

How non-potential buyers see manufactured homes is also very important. A survey of Virginia residents from 2000, underscores this challenge. Respondents stated that they thought manufactured homes brought down nearby property values, for example, in part, perhaps, because the homes are likely to cost less than existing homes.

When such attitudes prevail, it is hard to convince localities to improve land use rules to accommodate manufactured housing. Indeed, these attitudes encourage the opposite, as some leaders wish to further restrict the siting of manufactured housing.

Source: Prosperity Now

The Problem of Perception

Manufactured housing is often conflated with mobile homes, which, although have not been build since 1976, are still relatively common across the United States. Public perceptions of manufactured homes are certainly influenced by the public's views of pre-1976 homes and older mobile home parks.

The 1976 HUD Code, mandated by Congress, improved and standardized manufactured housing. Prior to the code, purchasers could not be certain what they were purchasing. After the code's implementation, the problems with the homes didn't go away. Recent research shows that homes built after the code, but before its 1994 update, are more often than mobile homes to have physical problems such leaking exteriors and heating failures.

While such problems can be attributed to construction, maintenance or both, these conditions likely inform the public's opinion about the sector's overall quality, including that of newer homes. The 1994 HUD Code updates were needed to address the construction shortcomings; they also have helped public perception.

Revamping Manufactured Housing's Reputation

To better position manufactured housing as a good quality, lower cost housing option, advocates and industry leaders need to do a better job highlighting why the homes are less expensive and at the same time assuring potential buyers of their quality, and that they are one part of the larger housing ecosystem.

To get the public to no longer equate lower costs with lower quality, the sector needs to demonstrate that these are not always related. Much of the savings in manufactured housing comes from the standardization of the homes components and final product and building conditions that reduce waste and eliminate weather delays and encourage production.

That said, cheaper materials and processes are still common in the industry. For example, vinyl on gypsum wall panels are prevalent in the industry, especially in lower cost homes. These are almost nonexistent in site-built construction.

Too often consumers see brands of fixtures that are unknown to them and anyone outside the manufactured housing field. Making these less common would raise costs, but scale would help address that in part. It certainly would make the homes reach a wider buying public.

As with the 1976 HUD Code and its 1994 update, the manufactured housing industry won't do this on its own. Outside forces, such as financing, have started to move the needle. When Congress passed the Housing and Economic Recovery Act of 2008, it included a Duty to Serve provision requiring Fannie Mae and Freddie Mac better serve the manufactured home market. Both government-sponsored enterprises have launched new loan products to encourage lending and purchasing on new classes of homes.

Communities should adopt land use regulations that encourage all types of housing. This is fundamental to meet growing demand. Manufactured housing, even in its newest versions, is less expensive than alternatives has to be part of the solution.

Housing advocates can help, too. By joining our I'M HOME Network, you can add your voice and support to the thousands of Prosperity Now community members who are working to turn manufactured housing's undeserved bad rap around.

Overcoming Misconceptions About Manufactured Housing Communities

Prosperity Now's Doug Ryan shares possible solutions to the sector's most pressing issues—from its reputation to the shortage of new development.

The manufactured housing sector has no doubt experienced a boom since the onset of the pandemic. The ever-growing need for affordable housing and limited new development has attracted significant capital interested in a relatively risk-free asset type.

While investor interest is at an all-time high, the manufactured housing industry is still experiencing decades-old stigma. Doug Ryan, interim vice president of policy and applied research at Prosperity Now—a nonprofit dedicated to expanding economic opportunity for low-income families and communities—talked to Multi-Housing News about the many obstacles the industry still has to overcome: from NIMBYsm preventing new development to the misconception of poor build quality of individual homes.

How has the manufactured housing sector performed this year, considering all the challenges brought on by the pandemic?

Ryan: It has done well, by the measures we have. New manufactured home shipments in 2021 are on pace to exceed 2020 and may exceed 100,000 units for the first time since 2006. That's quite an improvement since bottom fell out for manufacturers in 2009.

Also, the sales prices are considerably higher than in previous years, though this reflects some of the same market conditions that the site-built sector faces. Labor, materials, shipping and other components are more expensive than in 2020, simply due to demand across the economy.

Do you think the recent influx of capital in the industry will have a positive impact? Why or why not?

Ryan: It's not, since much of it is largely unregulated and often chases deals in markets without significant consumer protections. While some money is supporting homebuyer lending, much of it is in the purchase of manufactured home communities, where competition for deals is pushing up MHC sales prices, which leads to higher lot rents, resident insecurity and, often, the risk of resident displacement.

This, of course, predates COVID-19. Some states are regulating this, but most have to enhance resident protections, including intentionally supporting resident and nonprofit ownership of communities.

What are the main roadblocks for the construction of new manufactured housing communities?

Ryan: Land use rules, mostly. Local communities often forced MHC developers into non-residential zones and have actively excluded new development. State housing financing agencies, Fannie Mae and Freddie Mac, have supported the industry, but the challenges to new MHC development are multifaceted. State legislatures could do more to incentivize all sorts of housing options in response to the housing crisis, including the siting of new MHCs.

Please talk about the stereotypes that you believe are the most harmful to the manufactured housing industry.

Ryan: Housing quality is the top one. This falsehood permeates the land use, lending, appraisal and other sectors. That fee-simple manufactured homes depreciate compared to site-built in the same market is another. Data simply does not support these ideas. New manufactured homes, for example, are much more energy efficient than other housing options in the same market at the same price.

Finally, there remains a stereotype about people who live in MHCs—derisively referred to as "trailer trash," and it seems unworthy of being our neighbors. This infects our policy discourse.

How can local authorities help improve manufactured housing sector's NIMBY issue among residents when it comes to new development?

Ryan: First, eliminate any restrictions on the siting of MH in new developments, infill lots and other opportunities. The quality and aesthetic of manufactured homes do not justify this type of discrimination. Use of factory-built housing could lead to affordable homeownership opportunities across the U.S.

Localities that have housing trust funds, first homebuyer assistance programs and other resources should explicitly permit the use of manufactured homes and encourage state housing finance agencies to do the same.

How has financing for manufactured housing investors and developers evolved in the past years? What will be the biggest challenges in the manufactured housing financing landscape in 2022?

Ryan: There are two main threads. One is the emergence of new Fannie Mae and Freddie Mac products and initiatives to support the sector due largely to the federal law from 2008. They can do more, a lot more, but the programs to support higher-end homes and mission-driven community purchases should grow in the coming years.

The second is private equity and related sources of community funding. The amount of cash that investors have sat on since the end of the Great Recession is immense and constantly searching out deals. The MHC market operates in markets with generally weak state regulation and captive market participants—homeowners who face high barriers to relocate. This has, as noted above, forced huge sales price increases and rapid rent increases in some markets.

What role do you expect the manufactured housing sector to play in the real estate industry in 2022 and beyond?

Ryan: It has to play a key role. The affordable housing crisis is on the verge of becoming intractable. Factory-built homes can serve a significant share of the market if localities, lenders, policymakers and others drop their irrational biases against the sector. We need townhomes, du-, tri- and four-plexes, multifamily and small detached homes to meet the demand. Manufactured homes are positioned to address the latter.

That said, states and the federal government must be more intentional to regulate the sector. In communities, states need to ensure that residents have basic tenant rights and fair opportunities to sell their homes. The federal government and states can improve lending options for these homes in communities, too, which are generally excluded from mainstream finance.

A Refreshing Perspective on Mobile Home Parks

Once considered a symbol of failure, manufactured homes are gaining ground as a viable homeownership option and mobile home parks are sought after communities. This renaissance is replacing the negative stigma and encompasses lifestyle choices and housing affordability. For the unfamiliar, this article offers a refreshing perspective on mobile home park ownership and management.

HISTORY OF THE MOBILE HOME INDUSTRY

From the Romani (or Vardo) wagons as early as the 1500s, to the covered wagons used in the Westward Expansion starting in the late 1700s, to the Gold Rush of the 1800s, living in a movable home is not a new concept.

The Roaring 20’s came with an increase in disposable income and a wander-lust for exploring the country which introduced the trailer coach, a manufactured recreational vehicle (RVs), to the masses. However, those recreational vehicles soon became permanent homes in the 40s to accommodate the Depression Era and WWII veteran housing needs.

As it became clear these temporary units were being used as more permanent dwellings, the industry began expanding the RV catalog to include more home-like features including bathrooms, full-sized appliances, and expanded sizes. This branch of manufacturing in the ’50s and 60’s exposed concerns in quality that were finally addressed by Congress in 1974 passing the Federal Mobile Home Construction and Safety Act (Title 42 U.S.C., Ch 70).

With a boom in manufacturing and given these ‘mobile’ homes were not moving, Congress approved a change in title from ‘mobile home’ to ‘manufactured home’ in the ’80s. The National Manufactured Housing Construction and Safety Standards are issued and enforced by the Housing Development Department (HUD), however, each State is responsible for mobile home park regulations.

After the dot-com crash and then the housing bubble burst of the early 2000s, people clamored for affordable housing and turned to manufactured homes in droves. The current climate does not seem to be driven by necessity but rather by choice. Some of those factors stem from the desire to spend less income on housing to be able to afford choices in lifestyle and leisure. Tiny homes, micro-homes, alternative housing, and even RV living fall into this alternative housing space but certain criteria need to be met for a home to be designated as a mobile home.

MOBILE HOMES EQUAL AFFORDABLE HOUSING

Access to Home Ownership

Today it is estimated that a single-family built home will cost an average of around $272,200 compared to a manufactured home average cost of $62,600. This difference in pricing not only allows more disposable income for lifestyle choices but offers a stepping stone to first-time home buyers. For more statistics on affordable housing, housing patterns, vacancies, construction, etc. check out the Census Bureau's housing data.

Maintaining a mobile home, from landscaping options to exterior lighting and paint, is more affordable and manageable than traditional housing.

Housing Security

As the cost of living increases faster than raises in income, downsizing to a mobile home can provide housing security regardless of the housing market fluctuations, especially for those with a low or fixed income.

BENEFITS OF MOBILE HOME PARK OWNERSHIP

High Demand and Low Turnover

Mobile home park living is attractive to baby-boomers, empty nesters, and retirees. The high demand for affordable housing continues as the population ages and as more people opt to spend less income on housing.

The 'mobile' home is not very mobile. It has that designation because of the chasse used to deliver the unit. The manufactured home is expensive and difficult to move and it is estimated that eighty percent of homes are still at the location they were first placed. This low turn over rate keeps occupancy high within a community.

Low Maintenance

The individual homeowner is responsible for the care of their lot and home. Park owners are responsible for the infrastructure and maintenance of the roads, common areas, amenities, and any utilities or services provided. This split responsibility in maintenance costs is a plus to park owners vs. say apartment complex ownership.

Potential Financial Rewards

As with any investment, there are risks but mobile home park investing may also provide additional financial benefits that may include:

Lower per unit cost

Depreciation at an accelerated schedule

Higher capitalization rates than multifamily properties.

More immediate cash flow per low vacancy rates

Lower operating expenses than apartments

Multiple Revenue Streams

On the flip side of expenditures are the opportunities for streams of revenue. If your state regulations allow, in addition to charging for lot fees, here are some potential revenue streams to consider:

Laundry facility revenue

Clubhouse rental

Home sales

Home rentals

Pet fees

Appliance rentals

Real estate investment trusts

Niche Markets Available

Once you are interested in park ownership, you may want to consider the different niche markets available. All-age parks and senior parks (also known as 55+) are the most common communities. Special use, special occupancy, mobile home park designations differ per state. Some states allow a percentage of younger owners to live in senior parks under certain conditions. Some states allow for mixed-use designation to allow RV's and/or tiny homes alongside mobile homeowners.

All-ages or senior living, the types of amenities offered and the condition of the infrastructure of the park are key to keeping costs and vacancies low. From there, consider upgrades to the infrastructure and additions to amenities to create a community and environment of your design.

Again, all investment comes with risk, and mobile home park ownership is no exception. This article addresses the potential benefits but do your research and due diligence regarding all aspects of ownership. If you decided to purchase a manufactured home community, successful ownership will require two important components: phenomenal onsite management and superior property management software.

UNIQUE PROPERTY MANAGEMENT OPPORTUNITIES

The benefits of mobile home park ownership aside, there are many rewards to managing a mobile home park property to discover. If you are considering a career in property management or looking to add to your resume with a new challenge you may want to give mobile home park management a try. There are some unique opportunities to consider.

Transferable Skills

As a manager in a manufactured home community, one will gain perspective into different types of property management.

Most mobile homes are owner-occupied. In addition to dealing with the residents as property owners, they are also tenants of the leased-land. The park may also own some of the homes as rentals or decide to sell the homes.

The skills learned managing a mobile home park can transfer to managing an apartment complex, working in an HOA or property management company, or even as a jump-off point to owning a property management company.

Community Building

Often mobile home park managers live onsite. As a member of the community, building and interacting with that community is often rewarding. On many streets in America, not often will you see neighbors joining in community activities. Yet, mobile home parks are opportunities to bring that back into fashion from BBQs to ice cream socials to community yard sales.

Opportunity to Serve

Mobile home park residents are the most vulnerable population in a disaster. Additionally, many retired and disabled choose manufactured home living for independence versus retirement or convalescent home living. Because of the community atmosphere, a manager has the opportunity to build relationships with the residents and become the point of contact in a disaster or emergency situation.

Other opportunities to serve could include providing assistance with a neighborhood watch program, coordinating safety and other educational seminars, and being a liaison to city, State, and National resource information.

SUMMARY

The negative stigma is slowly fading and climate is changing in regards to mobile homes and living in a mobile home community.

The lower cost to homeownership, continued demand for affordable housing, lower maintenance costs for both park and homeowners, the potential financial rewards of investing, and even the benefits to management are just some of the reasons we need to see mobile home parks in a new light.

Mass migration to different parts of the countries based largely on political, social, and economic values.

Summary

Market Dynamics

Market Size

How big is this specific market – If you want to get rich, sell products and services. If you want to become wealthy, create and control markets.

The US Manufactured Housing Market represents a $Xbn per whatever whatever

Manufactured Housing Industry Trends & Statistics (July 2022)

What is the cost per square foot comparison between manufactured and site-built homes?

The average cost per square foot of a site-built home is $139.20. The average cost per square foot for a manufactured home is $72.46.

How many manufactured homes are there, and how many go to communities?

There are an estimated 4.3 million manufactured home sites in the United States. Approximately 27 percent of new manufactured homes are placed in a community. The U.S. has approximately 43,000 manufactured home communities. A third of the country's communities were constructed in the 1950s through 1990s.

How Many People Live in Manufactured and Mobile Homes?

Manufactured housing industry trends and statistics show 22 million people in the U.S. live in a manufactured or mobile home. Manufactured homes make up 9 percent of annual new home starts. About 78 percent of new manufactured homes are titled as personal property (chattel).

How many manufactured homes were built during 2021?

Thirty-three U.S. manufactured home builders operating from 141 plants (growth of six plants compared with 2020) across the country produced 105,772 housing units during 2021. Shipment levels of new manufactured homes eclipsed the 100,000 mark for the first time in 16 years.

What are the top manufactured home builders by market share?

Clayton Homes — 47.94 percent

Skyline Champion — 17.36 percent

Cavco Industries — 11.98 percent

Legacy Homes — 2.27 percent

American Home Star — 2.34 percent

Hamilton Homebuilders — 2.71 percent

Jessup Housing — 1.74 percent

Adventure Homes — 1.57 percent

Elliott MH MFG — 1.93 percent

Commodore Corp. — 1.13 percent

What are the top markets for manufactured housing retail sales?

Lake Charles, La.

Chicago

Jacksonville, Fla.

Atlanta

Tucson, Ariz.

Greenville/Spartanburg, S.C.

Monroe, La.

Kingsport/Johnsonville, Tenn.

Bristol, Tenn./Va.

Columbia, S.C.

MANUFACTURED HOUSING PENETRATES CRE AS A HIGH-DEMAND SECTOR

What Is Manufactured Housing?

Manufactured housing (MH) can also be referred to as “modular homes” or homes separated into sections that are generally constructed in an off-site factory before being moved to where the property will be set. It is important to note that manufactured housing is personal property, not real property. This means that when someone purchases a manufactured home, the land on which the foundation is built is rented from the owner of the land. Commonly known manufactured homes include mobile homes, which have come a long way in terms of amenities and construction quality. Today, manufactured homes can be as small as 500 square feet and as large as 3,000 square feet.

The intended use behind mobile homes was they allowed people who required mobility to live flexibly. Initially, manufactured homes used to be eight feet or less in width. In the mid-1950’s however, a ten-foot model was introduced. Over time, the mobility of the units has decreased considerably due to larger models being created.

Manufactured Housing Market Outlook

Private investor groups have started acquiring manufactured homes and increasing land rent to match market rents and account for upgrades. Certain aspects of the micro and macroeconomy have given these investors opportunities and advantages in owning manufactured housing communities, namely the low nationwide housing supply and high-profit margin on ownership.

Furthermore, the COVID-19 pandemic not only impacted businesses and consumers in the manufactured housing market, but it introduced positive opportunities for investors to own or finance income-producing real estate across a range of multifamily, growing this booming industry.

Currently, the three U.S. listed MH real estate investment trusts (REITs) account for roughly $35B in market value and consist of:

Equity LifeStyle (NYSE: ELS)

Sun Communities (NYSE: SUI)

UMH Properties (UMH)

The manufactured housing industry produced 105,772 new homes in 2021, approximately 9% of new, single-family home starts. Affordability remains a major factor for resident satisfaction as well, the average sales price of a new manufactured home without land is $106,590. As development continues, the market value is expected to reach $21 million and grow at a rate of 3.3% by 2027.

Why the Sector is in High Demand

Manufactured housing investments are yielding average annual total returns of around 25%, which may be attributed to a decade-long period of underbuilding that intensified the affordable housing shortage throughout the U.S.

Despite high annual return rates, manufactured housing remains among the most interest-rate-sensitive property sector.

Investors don’t appear threatened by recent and planned Fed rate hikes, and increased lending costs are unlikely to impact manufactured housing buyer activity over the second half of this year.

Benefits of Manufactured Housing

Manufactured housing can create a higher yield for investors because turnover is minimal due to how costly relocation can be. Another benefit is the unlikeliness of defaults or evictions. MH communities are recession-resilient because demand for this type of housing increases during economic downturns, as other housing options become more expensive. Additionally, there are fewer operating costs for investors compared to apartment buildings.

MH communities are typically the most affordable non-subsidized housing option in most markets. Rents at manufactured home communities ranged from an average of $457 in the Midwest to an average of $840 in the West last year. With the recent highs in consumer prices, coupled with long-term demographic trends, increases in supply will permit and push more capital into the sector.

Key Market Trends

High occupancy rates and rising household expenses with exceeding inflation influence the MH sector and will continue to define the industry in 2022. Continued demand from new Florida residents migrating from other states, particularly the 55-and-older demographic, who discover MH communities as the most affordable option for housing.

Additionally, while manufactured-home communities are located throughout the country, nearly 60 percent of new manufactured homes were placed in southern states, including:

Texas

North Carolina

Florida

Origin

As an asset class and a market, it really began in the 1970's after vietnam when GI's came back

The Game Board (Market Participants)

Natural Resources

Building materials come from ????

Manufacturing

They are fabricated somewhere else…

The Rise and Fall of the Manufactured Home - Part I

However, one form of prefabrication is able to reliably produce housing substantially cheaper than site-built methods - the manufactured home (formerly the mobile home, also called trailer homes or HUD homes.)

Manufactured homes are a particular type of factory-built housing that isn't required to meet local building codes - instead, manufactured homes are built to the Manufactured Home Construction and Safety Standards, a federal standard administered by HUD. Manufactured homes have an average per-square-foot cost that's less than half the cost of the average site-built home

(via the Manufactured Housing Institute)

(This is a somewhat misleading statistic, as site-built homes will be higher-end than manufactured homes on average and thus more expensive for reasons unrelated to production efficiency. Comparing like for like, the cost-per-square-foot of a manufactured home is somewhere around 10-35% less than the cost of a site-built home.)

Despite their lower cost, manufactured homes today make up a relatively small portion of the housing market. In 2021 manufactured homes were just over 6% of new housing units, with just over 100,000 manufactured homes shipped compared to 1.6 million single family and multifamily housing starts.

But this wasn't always the case - at its peak in the early 1970s, the mobile home industry (they didn't "officially" become manufactured homes until 1980) was shipping 600,000 homes a year, and mobile homes were over 20% of new housing units.

Source: Construction Physics

(One statistic you sometimes see is that at one point mobile homes made up 60% of total new houses - this is incorrect. At one point mobile home units were around 50% of the number of single family homes built.)

Since lately there's been renewed interest in manufactured homes as a potential low-cost housing solution, it's useful to understand how the industry got to where it is. Why did manufactured homes explode in popularity only for the industry to collapse a few years later? Why aren't manufactured homes more widely used today? Let's take a look.

Origins of the manufactured home

The manufactured home can trace its origins to early 20th century camping trailers. In the 1910s and 1920s, car adoption was rapidly increasing - in 1910, there were around 500,000 cars in the US, which by 1925 had increased to 17.5 million cars. Car owners would often use their cars to go on camping trips, an activity which became known as "autocamping."

To avoid having to pack and unpack the campsite, and to get more comfort than a tent could provide, people began to build camping trailers that could be towed behind the car - by 1936 it was estimated that there were 300,000 camping trailers in the US. It's estimated that around 75% of those trailers were homemade, but over time commercially-built ones became more popular.

By 1936 most new trailers were purchased from commercial builders, and manufacturers were producing 55,000 trailers a year.

Source: Construction Physics

The Curtiss Aerocar camping trailer, which began production in the late 1920s

Early on, autocampers would park by the side of the road, or in a farmer's field, or any other available space. But as camping became more popular, this became less tenable - a small town on a main road "might expect to see fifty to sixty cars seeking sites each night" [1]. Municipalities began to build campgrounds to accommodate the campers - between 1920 and 1924, an estimated 3 to 6,000 municipal campgrounds were built. And as camping trailers became more popular, campgrounds designed exclusively for trailers began to appear. These became known as "trailer parks."

Almost as soon as trailers appeared, they began to be used for year-round living rather than camping trips, typically by traveling salesman or other itinerant workers. In the 1920s and 30s it was estimated that between 10 and 25% of trailers were used for year-round accommodation. And as unemployment soared and housing starts collapsed during the Great Depression, trailer living became more common. By 1937, it was estimated that 50% of new trailers were purchased as permanent shelter.

Then, as now, permanent trailer living was stigmatized. A 1937 article in Fortune described permanent trailer camps as “crooked rookeries of itinerant flophouses.” Many municipalities, such as Detroit and Toledo, placed maximum allowable times that trailers could be parked to try to prevent the appearance of “trailer shantytowns”. Lawsuits (such as People vs Gumarsol) were filed against trailer occupants who tried to occupy their trailers permanently.

The trailer industry had a delicate balance to strike - trailer living was becoming more common, which required favorable treatment by municipalities to allow trailer placement. But manufacturers also wanted to ensure that trailers remained classified as vehicles, rather than housing, to avoid having to comply with onerous building regulations and avoid conflict with building trade unions.

In 1936, trailer manufacturers formed the Trailer Coach Manufacturers Association (TCMA) to advocate for legislative priorities, encourage favorable regulation, and ensure that trailers continue to be treated by governments as vehicles, rather than housing.

Trailers during and after WWII

The on-set of WWII resulted in a mass-migration of people across the country, as huge numbers of workers moved into areas of defense production. Ypsilanti, Michigan saw its population double between 1941 and 1942 as workers were brought in to staff the largest factory in the world.

Orange, Texas saw its population grow from 7,400 to over 50,000 as ship production ramped up at the Port of Orange. The San Francisco Bay area’s population increased by 50% between 1940 and 1950.

Altogether, nearly 1 million people migrated to defense areas during the war.

This massive shift in population created a commensurate need for housing, much of which was fulfilled using trailers. 50,000 trailers were built for housing during the war, and altogether 120,000 trailers were used for housing in defense areas. In some cases (such as in Ypsilanti) up to 50% of new residents were housed in trailers.

However, the stigma associated with trailer living remained - trailer occupancy was considered another required sacrifice of wartime. One woman living in a trailer noted:

I have wondered how many times how many less employees would Willow Run Bomber Plant have if it were not for the men and women living in trailers - men and women who, like us, are praying and hoping for the day when they can go back home again, back to normal living.

Trailers were still largely considered to be substandard housing. The National Housing Agency (NHA), responsible for the supply of wartime housing, stated:

While Trailers are being used successfully as stop-gap war housing, they do not meet the standards of the National Housing Agency for duration housing for war workers. These wartime standard, moreover, have been cut to a minimum commensurate with providing adequate shelter for war workers and the NHA has no intention of going below them.

However, after the war the housing shortage remained, and full-time trailer living remained common. Large post-war government construction projects (such as dams and AEC facilities) continued to require the use of trailers to house workers.

In 1947 trailer manufacturers produced 60,000 units, which rose 86,000 units in 1948 (though sales would collapse the next year.)

By 1948 it was estimated that 7% of the US population was living in house trailers, and in 1950 it was estimated that 99% of new trailers were purchases as housing.

In 1954, the census estimated that there were 700,000 trailer dwellings in the US, most of them located in the more than 12,000 trailer parks across the country, most of them occupied by construction workers and military personnel.

Some time during this period, trailers began to be referred to as “mobile homes” - in 1952, Trailer Park Management magazine became “Mobile Home Park Management”, and in 1953 the Trailer Coach Manufacturing Association became the Mobile Home Manufacturing Association (MHMA).

Despite their increasing use as permanent housing, the stigma against trailers remained. Anthropological studies of trailer parks referred to them as “trailer slums”, and one municipal official was quoted in an article for Survey magazine:

A new kind of slum, the permanent trailer camp, offering all the bad features of the urban “blight area,”, none of the vacation adventures for which trailers were made.

Trailer camp slums are a very real, if as yet unrecognized, menace to our American way of life. They should be eradicated now, even in the face of an acute housing shortage, for the creation of even more slums is not the solution to the problem of housing shortage.

As part of their advocacy work, the Mobile Home Manufacturer’s Association put substantial effort towards overcoming prejudices and fostering the development of mobile home parks. Partly due to this advocacy, in 1956, Congress authorized the Federal Housing Authority (FHA) to insure loans to finance new mobile home parks, helping to legitimize them (prior to this, mobile home parks were considered unimproved land.)

Relaxing of size limitations

As mobile homes were increasingly used for permanent shelter, they were made larger and larger. Prior to WWII, few trailers were longer than 20 feet, but by 1952, 74% of new trailers were longer than 30 feet. But further trailer size increases were limited by the ability to transport them.

In 1954 “most states specified that house trailers could not be more than 12.5 ft high, 8 ft wide, and 35 ft long” - building within these dimensions limited a mobile home to just 280 square feet, a small fraction of what a typical site-built home (Levittown houses, for instance, were closer to 1000 square feet.) And these dimensional limitations meant that units weren’t wide enough for a corridor, meaning the only way to access the ends was through the middle rooms, limiting privacy.

Manufacturers tried to use clever expansion mechanisms to create extra space, but while these had some success, they added expense, and the joints between moving sections were a frequent source of leaks and mechanical problems.

Vertically expanding mobile home offered by Liberty in 1946

Source: Construction Physics

In 1954, Marshfield Homes debuted a mobile home that was 10 ft wide. The brainchild of Elmer Frey, the 10-wide was too wide to be used as a regular vehicle - it could only be transported by acquiring special permits of limited duration (the original 10-wide was permitted as a construction shack, rather than a trailer.) But the added width gave it additional space and provided enough room for a corridor. The 10-wide was an immediate success, and by 1961 98% of new mobile homes were 10-wides.

The introduction of the 10-wide meant that mobile homes were no longer especially mobile, and marked a major shift in the industry. While early mobile homes moved on average every 20 months, by 1970 they were moved only once every 5 years on average.

Manufacturers of mobile trailers used for camping or vacationing (which remained within the 8-ft width limit) split off, forming the Recreational Vehicles Association in 1963. And while previously occupants of mobile homes had largely been itinerant workers (who were somewhat more affluent than average), the larger, less mobile mobile homes increasingly appealed to those in need of low-cost housing (and were thus somewhat less affluent than average.) The industry transitioned from one that supplied movable housing, to one supplying low-cost housing.

With the need to move them regularly abandoned, the only thing restricting the size of mobile homes was state highway transportation limitations. In the early 1960s, thanks to industry lobbying efforts, most state regulations were relaxed to allow the transportation of 12-ft wide units, and by 1972 12-wides made up 85% of new mobile homes. The 12-wide was followed by the 14-wide, and the “doublewide” (a mobile home created by stitching two units together.) Length restrictions were eased as well, and by the 1970s the typical mobile home unit was 65 feet long.

As mobile homes got larger, the structure of their production changed. The industry had grown up as a largely centralized one, near car manufacturing plants in Indiana, Michigan, and Ohio (taking advantage of auto part suppliers, as well as the expertise of the auto manufacturing labor pool), with another center of production in California.

But as the size of units increased and transportation costs became a larger concern, production decentralized, with plants increasingly being built near where the homes would be placed. In 1952 Texas had 2 mobile home plants, and Florida had 1 - 20 years later, that had risen to 92 and 70 plants, respectively. By 1972 there were mobile home plants in 45 states.

Source: Construction Physics

Mobile home manufacturing locations in 1952

Industry expansion

The relaxation of highway regulations allowing transportation of larger units made mobile homes competitive as a low-cost housing option, and sales of them exploded. Mobile home sales increased from 90,000 in 1960 to nearly 600,000 in 1972, going from 8% to 22% of annual housing units produced.

By 1974 mobile homes were produced by over 300 firms in 800 plants across the country, and across the country 9 million people were living in nearly 4 million mobile homes. 41% of those mobile homes were in trailer parks, which now numbered over 24,000.

The largest mobile home manufacturer (Skyline) sold more than 50,000 mobile homes a year, more than any other homebuilder, and according to Forbes, the top 3 most profitable companies between 1968 and 1973 were mobile home manufacturers.

As part of its efforts to encourage the creation of mobile home parks, by the early 1970s the Mobile Home Manufacturer’s Association had become the world’s largest residential land developer.

This growth occurred largely in the South - between 1960 and 1974 the South added 1.6 million mobile homes, more than every other region of the country combined.

However, this growth didn’t reduce the stigma associated with mobile homes. In the early 1970s, 60% of communities excluded mobile homes from being sited on private lots, and a survey by the American Planners Association found that residents in 80% of communities wanted to exclude mobile homes.

Metro areas often tried to prevent the construction of new mobile home parks, with cities such as Des Moine and Miami putting a moratorium on new park construction. The state of Illinois approved just 1 mobile home park between 1955 and 1975.

Outside of parks, mobile homes were largely relegated to areas outside of cities where there were fewer zoning restrictions (75% of rural counties allowed mobile home placement on private lots, compared to just 31% within cities and 20% within surburbs.) Where mobile homes were allowed, they were often restricted from being located in residential areas - 15% of communities only allowed mobile homes in areas zoned for commercial or industrial.

Despite this stigma, mobile homes were gradually gaining acceptance (however reluctantly) as a legitimate housing option. In the 1960s mobile homes became eligible for FHA and VA mortgage financing, and in 1970 Richard Nixon (in an effort to show that housing construction goals had been met) included mobile homes in total number of new housing units built for the first time in his address to Congress.

Increasing scrutiny

As the number of mobile homes and the visibility of the industry grew, the mobile homes themselves were subject to increasing scrutiny. Because mobile homes weren't subject to local building codes, manufacturers could build them with whatever materials they deemed appropriate, which typically meant using lighter, cheaper materials than would be found in conventional homes. Mobile homes used thinner plywood, 2x2 or 2x3 wood studs instead of 2x4s, plastic instead of metal, and glues instead of nails or screws.

Beginning in the late 1950s the industry began to develop a minimum set of quality standards. Working with the American National Standards Institute (ANSI) and the National Fire Protection Association (NFPA), the industry developed ANSI/NFPA standards 119.1, which governed electrical, heating, and plumbing requirements. In 1969, structural requirements were added.

119.1 was a performance-based code - mobile home manufacturers could use any method of construction as long as certain performance parameters were met.

By 1975, 40 states had adopted some version of the 119.1 standard as state regulations for mobile homes.

However, these provisions were often lightly enforced, and quality problems with mobile homes often remained. A 1973 survey of Ohio mobile home owners found that 65% had problems with waterproofing the first year, and a survey of mobile homes on dealer and factory lots in California found that 94% failed to meet state requirements.

A manufacturer that tried to offer an extensive 1-year warranty found that they “nearly lost their shirts”, as their warranty servicing costs were 4x higher than the industry average.

Complaints documented by the Center for Automotive Safety included mobile homes that had one-inch of insulation instead of the advertised 3 inches, and aluminum wiring instead of copper.

Mobile homes often lost their value quickly compared to site-built homes.

Via “Mobile Homes: the low-cost housing hoax”:

A survey of the industry’s own “blue book” indicates that the average mobile home is worth 63% of its purchase price after 4.5 years and only 28% of its original price after 10.5 years. In 1971 the Whirlpool corporation funded a study of mobile home longevity based on census data, which indicates the average life of a mobile home is 16 years.

Mobile homes were also more susceptible to other kinds of damage. Early mobile homes were apparently often called “ten second trailers” because of how quickly they would burn in a fire, and insurance studies found that, while mobile homes were no more likely to be in a fire than conventional homes (and in some cases they were less likely), the average losses from fire damage were up to 50% higher in mobile homes than site-built homes (despite the fact that mobile homes were on average smaller and cheaper than conventional construction.)

And mobile homes were more than 30 times as likely to be destroyed in a windstorm as conventional homes (though the absolute number of homes affected remained low.)

In response to the perceived need for greater regulation, in 1974 Congress passed the Mobile Home Construction and Safety Standards Act. This gave HUD the power to create and regulate mobile home safety standards, marking another major industry change.

Why Manufactured Housing Is a Capital Magnet

A counter-cycle darling

While pandemic-related supply chain issues negatively impacted construction in other sectors in late 2021, manufactured housing was not as adversely affected because building takes place in factories.

“Because we’re in a factory-controlled environment, we can be nimbler, source alternative materials and overcome challenges,” Gooch said.

Manufactured homes are built to meet HUD specifications, which can mean using specific windows and doors during construction. Due to supply-chain issues, Gooch said manufacturers worked with HUD to obtain variances to use alternate materials or products.

The investment community has also recognized the sector’s potential compared to other assets, such as office or retail. The Great Recession that ended in 2009 shed a lot of light on the opportunities that the niche provided, said Michael Glass, senior vice president, division manager & national director for Marcus & Millichap’s Manufactured Home Communities Division. The pandemic caused investment professionals to look back and see what performed well during a difficult market.

“Manufactured housing outperforms every other asset class, especially in troubled times,” he said. “The asset performs well even in a challenging market.”

What Is The Difference Between Manufactured Homes and Site Built Homes?

Short Answer

The biggest difference between a manufactured home and a site-built home is that the manufactured home is built in a factory while the stick-built home is built onsite in the neighborhood.

The materialsused to build either tend to be the same, but the methods used to build them differ significantly. Let’s take a more in-depth look!

What is A Site-Built Home?

Traditional Site-Built Home

Built Onsite – A site-built home is just that, it is built on-site in the neighborhood, right on the lot.

Wood Framing – Most site-built homes are built with wood framing; 2 x 4s for the exterior and interior walls with 2 x 4 truss work for the roof.

Local Building Codes – Site-built homes must conform to all of the local building codes including state, county, city and local codes.

Inspections – Site-built homes are inspected by local authorities at various points throughout the construction to make sure they conform to the local building codes.

Stick-Built – These homes are also referred to as “stick-built” homes because of their wood framing construction design. There are other building methods, but wood framing is bar far the most popular for newly built homes today

Value Over Time – A site-built home that is well cared for over the years generally will appreciate in value over the time. With real estate, we’ve all heard “location, location, location”. How much a home will go up in value over time has much to do with where it is located

What Is a Manufactured Home?

Manufactured homes – Are often referred to as mobile homes, or even a trailer. However, there is a big difference in quality and style of manufactured homes today and those of the distant past.

Factory Built – Manufactured homes are not built onsite. Instead, they are built in a controlled factory and then transported to the homesite and setup after completion.

HUD Standards – All manufactured homes built after June 15, 1976 must conform to a uniform building code rather than to state and local building codes where they will reside. These HUD standards are stringent and were put into place to ensure that all manufactured homes across the nation are built to a common quality standard and built to withstand the elements. For more information check out “HUD Laws And Mobile Homes”.

Steel Chassis – Manufactured homes must be moved to the homesite from the factory. They are built atop a non-removable robust steel chassis that allows them to be transported to a distant location over roadways.

Sections – Manufactured homes are built in sections. They may be a single wide home (one section) are can be three or four sections. After manufacturing at the factory, each section is transported to the final site on their own wheels.

Sections Joined Together – Once transported to the site from the factory, the different sections are moved into place and joined together.

Foundations – The different sections are not generally placed on a permanent foundation. They are usually on a pier type of foundation and attached to the ground with tie-downs. This can make them more difficult to re-finance.

Inspections – Since the actual construction of the homes are at a factory, all construction inspections are performed at the factory. There are local inspections performed for the utilities hook-ups as well as the foundation and tie-down systems, skirting etc.

Cost – Manufactured homes are generally less expensive than site-built homes or modular homes.

Value Over Time – While mobile homes have a reputation for decreasing in value, this is dependent on many factors.

Common Construction Methods – Foundations

Site Built

Source: Mobile Home Friend

Footing and Stem Wall Construction – Typically footings are about 12 inches wide and about 18 inches deep. This will depend on the soil of the site. Also, the height of the stem walls will depend on the slope of the homesite. A slab can be poured over the top of the foundation or a crawl space constructed.

Drilled Shaft Concrete Piers and Grade Beam – This type of foundation is mostly used for commercial and large industrial buildings. If the residential dwelling is large enough this might be considered for use but is not common.

Slab On Grade With Turned Down Edge – This is most often used in areas with little or no frost. This type of foundation is done in a monolithic pour (all at the same time). A post tension cable system works well with this type of foundation.

Permanent Wood Foundations – These types of foundations are rare, but when found are mostly in the northern climes. Basements are framed with pressure treated wood and sit atop a poured concrete slab. Crawl spaces are usually built onto a stem wall made of pressure treated wood

.Basement Foundation – Basements are generally constructed of cinder block walls or cast-in-place concrete walls. With either type, they must be water proofed to prevent water infiltration problems.

Manufactured (Mobile) Homes

Source: Mobile Home Friend

Steel Frame – Manufactured homes are built atop steel beams at the factory. These are girder beams with attached wheels and axles for transportation to the final home site.

Permanent Foundations – A permanent foundation is the way to go if you own the land and do not plan on ever moving the home. With a permanent foundation the home can be considered “real estate”. The benefit is that financing is far easier to acquire. These types of foundation vary from region to region as far as materials. They are significantly more costly than non-permanent foundations. There are generally two types:

Basement Foundations – These would be the most expensive types of foundations placed under a mobile home. There are advantages in that the home will be considered real estate, and additional square footage is added to the dwelling. A basement foundation is built the same as it would be for a site-built home. It is subject to all of the local building codes and material requirements.

Pit Foundations – This is very similar to a basement foundation in that the earth is removed from beneath the home. However, the space is far more shallow. Care must be taken that the stem walls built are in the exact location to support the manufactured home using concrete piers in the proper places. Manufactured homes with this type of foundation is generally considered “real estate” which makes financing easier and more available. These foundations also keep the home lower to the ground which give the home the appearance of a traditional stick-built structure.

Non-Permanent Foundations – This type of foundation makes the home more easily moved if desired. These are the foundations often used in a mobile home park. In many cases, the axels remain attached to the home.

Slab Foundation – A single slab of concrete is poured on the ground. It doesn’t need to be as precise to the size as permanent foundations. The home will sit atop piers that rest on the concrete slab. Skirting is then used between the bottom of the home to the ground. This type of foundation is not protected against the freezing and thawing of the ground. The foundation may not be able to qualify the home as “real estate” depending upon the area local codes.

Runner Foundation – With this type of foundation, narrow strips of concrete are laid underneath the support areas of the home. There may be runners going in both directions under the home to make sure all of the contact areas for the home have support underneath them. Piers are then used. These sit atop the concrete runners and support the home. Tie-downs are then used to attach the home to the ground. This type of foundation can be less expensive than any other type. Whether or not the home can qualify as “real estate” with this type of foundation is dependent upon the local building codes.

Pier Foundations – This is a very common foundation type that has been used for ages. The ground is leveled and compacted on the home-site. The piers may be steel or concrete generally in a pyramid shape. The piers are strategically placed on the ground under the I-beams and locations of support for the home. Shims are used to level the home. Tie-downs are then used to keep the home anchored to the ground. This type of foundation is generally the least expensive type of foundation for a manufactured home and often will not qualify for “real estate” status.

Common Construction Methods – Framing

Site Built Homes

Source: Mobile Home Friend

Platform or Stick Framing – This is the method most commonly used in today’s homes. This type of framing method uses studs, generally 2×4 or 2×6 that are the vertical members that form the outer walls. The studs are generally placed 16 inches on center and in most regions have plywood sheathing on the outside to add shear strength to the outer walls.

Interior Walls – These generally use 2×4 studs that are placed either 16” on center or 24” on center; depending upon whether or not the interior wall is a load-bearing wall.

Trusses – Are generally used for framing the roof structure of most houses. Trusses are pre-fabricated, triangulated wooden structures used to support the roof. They are generally pre-built offsite from 2×4 wooden members. Trusses are strong, lightweight and are able to span long distances. They transfer the weight of the roof to the two outer walls which means that in most cases, interior walls can all be non-load bearing walls.

Manufactured Home Framing

Source: Mobile Home Friend

In almost all cases, the framing methods for outer walls, interior walls and roofing systems are identical to the methods described above for site-built homes. Since June 15, 1976 when the HUD constructions standards became mandatory, there is little, if any, difference between the construction framing methods between manufactured homes and traditional site-built homes.

Common Construction Methods – Plumbing

Site Built Homes

Source: Mobile Home Friend

Galvanized Steel Pipe

This type of pipe is made of heavy steel coated with zinc. The zinc coating helps keep the steel pipe from rusting. Although this type of piping is no longer used in construction, if your home was built from the 1930s through the 1980s, there is a good chance that it has galvanized pipe.

Galvanized steel piping is heavy and difficult to work with.

This piping as a limited life span. Over time, the zinc coating will wear off the pipe and the pipes will begin corroding and rusting from the inside.

Copper Pipe

Copper pipes started to appear in homes around the 1930s. Though they are most commonly found in homes built from the 1960s to present. The copper pipes used are thin walled. These pipes do not corrode and degrade the way galvanized steel pipes do.

Over the years copper has become very expensive and are often cost prohibitive.

Because copper pipes are lightweight and thin walled, there are occasions where a pinhole might develop in the pipe causing a leak.

PVC Pipe

Polyvinyl Chloride (PVC) are found in homes built from the 1950s to present. These pipes are long lasting and do not corrode. However, they are not suitable as a water supply line. As such, the use of PVC tends to be for drain lines for sinks and plumbing fixtures throughout the home.

Pex Pipe

Cross-linked Polyethylene, commonly known as PEX piping is the most common type of piping used in residential construction today. It has many advantages in that it does not corrode, rust or degrade over time. It is flexible and easy to work with. PEX piping has become the mainstay in construction since the 1990s forward.

PEX Piping is usually red in color for hot water supply lines and blue for cold water.

The only disadvantages for PEX piping isthat it must be kept out of direct sunlight. Also, some of the fittings can be expensive.

Unlike PVC pipes, PEX is never used for drain lines.

Source: Mobile Home Friend

Manufactured (Mobile) Home

Source: Mobile Home Friend

Just as with the discussion of framing earlier, the plumbing used in manufactured home construction generally mirrors that of traditional home plumbing. The major difference is that the piping system in a mobile home tends to be in the location of the pipes and a simplification of the design.

Manufactured homes are built differently, which is the reason for the location differences. Also, older mobile homes tended not to have drain clean-outs and cut-off vales. Generally, newer manufactured housing is incorporating these designs into the plumbing.

In a site-built home, the water supply lines are built inside of the walls. In a manufactured home, they run underneath the home and rise through the floor in the location of the plumbing fixture. This makes repairs to mobile home plumbing systems far less expensive and easier than for a site-built home.

Common Construction Methods – Electrical

Site-Built Home Wiring and Electrical

There is little, if any, real difference in the electrical systems and construction methods between site-built homes vs. manufactured factory built homes. Mobile Home electrical systems are designed to the same code and use the same parts as a site Copper wiring covered in a plastic coating

Meet code requirements for thickness depending on the amperage for the particular circuit. Electric ranges and electric dryers use a heavier gauge wiring and circuitry than do circuits that serve standards plugs throughout the dwelling.

Use electrical panels that receive the electricity from outside the home and then distribute the power to the different circuits throughout the home.

Both homes run the wiring through the inside of the walls and in the attic space above.

Common Construction Methods – Windows

Site Built Homes

Windows for homes come in many shapes, sizes, and types.

Cost is certainly a factor with anything, and it is no different for windows. Window frames are generally found in:

Aluminum

Vinyl

Wood

Aluminum framed windows are usually the least expensive while wood framed windows usually cost the most. Then we find different types of glass:

Single pane

Double pane

Low E Argon Gas Filled

Single pane is the least expensive while argon gas-filled cost significantly more. Heat and cold rejection for thermal efficiency is the reason for opting for the more expensive windows.

What is common builder grade windows in many newer homes are aluminum or vinyl framed windows that are double pane. Many builders also offer low-e argon gas filled windows.

Manufactured (Mobile) Home

Most newer mobile homes have windows that are identical to site-built homes. The manufactured home builders generally have options for buyers in differing price ranges.

Older mobile homes generally were built with inexpensive single pane aluminum framed windows. There were limited sizes and most manufactures used the same sizes. Because of this, it is usually a less expensive proposition to easily replace older mobile home windows with more efficient newer ones.

Common Construction Methods – Roofing

Site-Built Home With Metal Roof

Source: Mobile Home Friend

As with most things in construction there is a material and price for every budget. The most common types of roofing materials used in site-built homes are:

Built-Up Roofing – This type of roofing is often used for flat roofs. It consists of built-up layers of asphalt, tar or adhesive and is often topped with an aggregate. This type of roof is prone to leaking unless it is well designed and executed with plenty of drainage. You can expect a lifespan for this type of roof at around 20 years.

Asphalt Shingles – These tend to be the least expensive roofing option and are found on the majority of existing site-built homes. There are varying price ranges with this type of shingle from flat 3-panel tabs on the low end to built-up multi-layered architectural styles on the high side. You can expect to replace asphalt shingles after 20 to 30 years.

Metal Roofing – This type of roofing material has become much more popular in the last 20 years. This type of roof can be expected to last about 60 years. The steel sheets are lightweight and can be installed over existing roofing. The installed price will be from about $5 to $12 per square foot. Which is more than asphalt shingle, but less than concrete or clay tile. One item of note is that a metal roof can be noisy during rainstorms and can also dent from hail.

Clay and Concrete Tiles – Roofing structures may need to be reinforced for this type of roofing material. These tiles are extremely durable and can withstand all types of weather. They are most commonly found in the dryer climes of the southwest and western areas of the country. There is a felt underlayment that over time deteriorates and must be replaced after about 20 to 30 years. The tiles can be removed and then reinstalled after the felt underlayment is replaced.

Stone-Coated Steel – These are lightweight steel tiles that are sprayed with coatings that mimic slate or clay tiles. These tiles are very durable and are an effective choice for wet and windy areas. Some stone-coated steel roofs are warranted for the lifetime of the home.

Slate – These are natural stone tiles that can last 100 years or more. They won't burn, are waterproof and resist mold and fungus. However, they are very expensive and may be easily broken when Manufactured Home Roof

Manufactured (Mobile) Homes

Source: Mobile Home Friend

Asphalt Shingle – Just as above with site-built homes, the vast majority of mobile homes built since the 1980s have this type of roof.

Rolled Steel – Most older mobile homes were built with rolled-steel roofing. It is not uncommon to experience leaks where the metal panels meet the outer walls, or where the metal panels are joined together. These roofs should be coated with a roof coating every few years to keep them water tight.

Metal Roofing – This is the same type of material as found in site-built homes above. Metal roofing sheets are often used for re-roofing mobile homes for the same reason it is on traditional homes. It is lightweight, can be used over an existing roofing material and is very long lasting.

Rubber Membrane – If you plan on living in your manufactured home for years to come and it is time to replace your roof, this might be a good choice. Although it is expensive, it works will on low-pitched roofs and lasts for decades. It may be difficult to find experienced contractors who are able to properly install the roofing material.

Common Construction Methods – Siding

Site Built Homes

Brick and faux stone siding:

Source: Mobile Home Friend

Brick Siding – This is a common upscale look used in many neighborhoods; especially in the south. It is durable, low maintenance and comes in a variety of styles and colors that does not require repainting or refinishing. The principal drawback of brick siding is that it can be very expensive.

Engineered Wood – This siding comes in a variety of style choices that can mimic everything from wood to brick and stucco. The principal advantage of engineered wood siding is that it is and more durable than many other types of siding. Also, it is easily installed.

Fiber Cement Siding – This is often compared to vinyl or aluminum siding in that it is man-made and mimics the look of other materials such as wood. The major benefits is that it is cheaper and more durable that actual wood siding while also requiring far less maintenance. It is also fireproof, waterproof and insect proof. It is a very heavy material which can increase installation costs.

Metal Siding – We will lump aluminum siding in with this category. This is a durable, low maintenance siding alternative. It is also very efficient when it comes to keeping a home cool as it reflects sunlight. However, it does not retain heat, thereby increasing heating costs.

Stone Siding – This comes in both natural and man-made products. It gives the home an upscale appearance. Stone is a durable material resistant to weather and other things like insects. Natural stone siding is ver expensive and time consuming to install. A good alternative is man-made stone siding which is easier to work with, lighter and cheaper to install while giving the appearance of natural stone.

Stucco – This is heavily used throughout many parts of the country. Especially the west and southwest areas. Stucco is made from cement, lime, sand, water and often epoxy. Stucco is typically solid, durable and very low maintenance. Paint on stucco can last many times longer than paint on wood. It is also less expensive than many other types of siding such as natural wood, brick or stone.

Vinyl Siding – This is a durable siding material made of plastic and really started to take hold in the 1950s. It is resistant to dings and dents like aluminum or metal siding is subject to. Vinyl siding can mimic several different textures, such as wood. It is lightweight and simple to install. Over time, vinyl siding will fade and become chalky from oxidation from the sun. It can be painted, but often it is difficult to get paint to properly adhere to the vinyl; causing peeling and chipping.

Wood Siding – Wood siding is versatile and durable. It can be painted or stained to any color desired. The major disadvantage is that wood siding needs to be treated or painted very few years. It is also susceptible to insects.

Mobile (Manufactured) Homes

Source: Mobile Home Friend

Manufactured homes have many of the same siding options as site-built homes. They include:

Vinyl Siding – This is the most popular siding for most mobile homes. It is lightweight, inexpensive and looks good on any manufactured home. It isn't without drawbacks. Much of it is made very thin and some from cheap recycled plastics. It often warps and fades very quickly. It isn't watertight and water has been known to seep in and rot the wood and insulation underneath.

Wood Siding – This can be an excellent choice for manufactured homes as long as you keep in mind the issues with wood in general. Namely, rot, water damage, upkeep, and insects. There are so many choices when it comes to wood siding. Some of the choices include T1-11 plywood sheet siding, cedar planks, cedar shingles, and log planks. Wood siding can be heavy, expensive and hard to install on older mobile homes. The weight is especially an issue if the mobile home is every to be moved.

Faux Stone Siding – This is an excellent choice for beauty and resistance to rot, water damage, insects and fire. It is expensive! Faux stone siding can give a manufactured home the appearance of a permanent structure. Because of the cost, faux stone siding is often used as accents, such as corners, areas of the entry and skirting.

Fiber Cement Siding – This comes in many types of siding styles that can mimic just about any other type of siding. It is available in varying styles of boards and thickness. It is also rot and insect resistant along with low maintenance. It is made of silica, cement, wood fiber and water. Because it is approximately 90% silica (sand) it is very fire resistant and withstands heat very well. The greatest drawback is weight. Fiber cement siding weighs about 300 lbs for 100 square feet. This can be a real issue if you ever need to move the home. This is higher in cost when compared to vinyl siding, but still less than wood siding or faux stone siding.

Aluminum Siding – This siding has been used for decades. It is light weight, inexpensive, easy to install, and resistant to most everything from insects to fire. Problems? Certainly, it dents very easily. Often, trying to find like panels of aluminum siding to repair damage panels on a home can be difficult. It the home already has siding and you're looking for a way to update the look, try painting. Also, it is possible to use other types of siding listed above as accents, such as skirting, or part of the entry area or front.

Older mobile home being prepped for new siding:

Source: Mobile Home Frien

President Biden Announces New Actions to Ease the Burden of Housing Costs

Promoting modular, panelized, and manufactured housing – and construction R&D. Innovations in homebuilding, including manufactured, modular, panelized, precut, and additive construction, hold promise for increasing housing productivity and thus housing supply. HUD will highlight these and other technologies that can benefit affordable housing construction during the Innovative Housing Showcase on the National Mall in June 2022.

HUD is also working to assess hurdles to modular and panelized housing posed by inconsistent state and local inspection requirements and standards, which limit economies of scale and potential cost savings.

The Department of Energy also recently awarded $32 million in funding to support 30 next-generation building retrofit projects that will dramatically improve affordable housing technologies. These technologies include prefabricated, super-insulated wall retrofit panel blocks and 3D-printed modular overclad panels.

Transportation

They are trucked out on big things…

Wholesalers

Dealerships and builders…

Retailers

Service Providers

End Markets

Low income and Senior Living

Regulators

Someone regulate this market. Who is it?

HUD Manufactured Housing Construction and Safety Standards

Introduction

In 1974, Congress passed the National Manufactured Housing Construction and Safety Standards Act which authorized the Department of Housing and Urban Development to establish construction standards for manufactured homes. In 2000, Congress updated the 1974 Act.

In passing the two laws, Congress, intended to protect the quality, durability, safety and affordability of manufactured homes; to facilitate the availability of affordable manufactured homes and increase homeownership for all Americans; to provide for the establishment of uniform and performance-based construction standards for manufactured homes; and to encourage cost-effective and innovative construction techniques for manufactured homes.

Congress also authorized the establishment of a Manufactured Housing Consensus Committee (MHCSS) to assist HUD in the development, revision and interpretation of the MHCSS.

In addition, it authorized HUD to establish minimum manufactured home installation standards that could be adopted by states to provide for the initial installation of new manufactured homes and a program to provide for the resolution of disputes between consumers, retailers and manufacturers.

Background

In 1976, HUD established the Manufactured Home Construction and Safety Standards (MHCSS), commonly known as the HUD code. These federal standards regulate all aspects of construction, including design and construction strength, durability, transportability, fire resistance, and energy efficiency.

The HUD-Code is periodically updated based on recommendations of the Manufactured Housing Consensus Committee, comprised of a balanced group of users, producers, general interest and public officials who meet on a regular basis to work on recommendations for revisions to the MHCSS.

Manufactured Homes: Most Regulated and Inspected Housing in the United States

Manufactured homes are the only form of single family housing in the country subject to a federal construction code. Every aspect of the manufacturing process is controlled and inspected to be in compliance with this U.S. Congressional mandate. You might ask, why are manufactured homes singled out from other types of housing?

In the 1950s, 60s, and 70s, the mobile home burst upon the housing scene as a form of housing that most anyone could afford. The incredible demand resulted in dozens of manufacturing plants building low priced mobile homes throughout the country, in states where regulations governing construction and health and safety were virtually non-existent.

Mobile home builders produced homes as quickly and as cheaply as possible to sell these homes at a price to be competitive with other builders with little regard to the integrity of the product or the welfare of the purchaser. Most buyers of mobile homes were placed in rural areas where land was inexpensive and not subject to zoning jurisdictions.

In the meantime, there were manufacturers on the west coast that were producing quality mobile homes for homebuyers to be placed on expensive land or in modern mobile home communities. For example, the state of California regulated factory built homes to a standard that would eventually be a template for the federal regulations that were to follow.

With the support of the responsible members of the mobile home industry, the U.S. Congress passed legislation in 1976 to establish a federal building code for mobile homes.

This legislation is the Federal Manufactured Home Construction and Safety Standards Act, which went into effect June 15, 1976. The federal code is administered by the U.S. Department of Housing and Community Development (commonly known as the HUD CODE).

The federal standards regulate manufactured housing design and construction, strength and durability, transportability, fire resistance, energy efficiency and quality. The HUD CODE also sets standards for the heating, plumbing, air conditioning, thermal, and electrical systems.

It can be generally acknowledged that a building code is only as good as the enforcement system that accompanies it. The manufactured home enforcement program required by the U.S. HUD CODE is a thorough and efficient system designed specifically for the factory production environment.

Because the factory pace differs from that of the construction site, the manufactured home enforcement system is different too.

The goal in both cases are the same: to ensure the highest degree of safety in the design and construction of the home. Ideally, a building code should be backed up by uniform and consistent enforcement.

The HUD enforcement system relies on a cooperative federal/state program to ensure compliance with the Federal Manufactured Home Construction and Safety Standards(the HUD CODE). HUD enforces the HUD CODE through its agent, the National Conference of States on Building Codes and Standards (NCSBCS).

Editors Note: Please refer to part 2 of this series regarding the inspection process that absolutely assures home buyers of a safe and quality constructed manufactured home.

Manufactured Homes: Regulation and Federal Inspection Assures Quality and Safety

Today's manufactured home is the most quality consistent housing choice in the United States. It is the only form of construction that is subject to a Congressional Federal Construction Code administered by the U.S. Department of Housing and Community Development (commonly known as the HUD CODE). The HUD CODE went into effect June 15, 1976

Almost 40 years after the implementation of this rigid federal code became effective, the manufactured housing industry sometimes still carries the stigma of the shoddy conceptions of the mobile home industry of the 1950s, 60s, and 70s. In fact, there is zero resemblance to the mobile homes of that era and the manufactured home of today. The federal enforcement and inspection system, along with technologies developed and advanced by manufactured housing producers, has resulted in a manufactured home that is equal or better built than a comparable site-built home and is 20-30% more affordable.

Enforcement and Inspection

Uniformity and consistency can be maintained in the federal government enforcement system because of two key factors. First, the inspections take place in the factory, during each phase of construction, and follow behind the manufacturer's own in-plant inspection and quality assurance teams. This allows for more thoroughness since time is spent inspecting homes rather than travelling to inspection sites. Efficiency is increased because travel time is limited and necessary paperwork is minimized. Second, consistency is maintained because fewer people inspect more homes. The enforcement procedure is much less susceptible to individual interpretations, as would be the case with on-site inspections in every jurisdiction across the country.

Inspection Starts Before Production Begins

The federal government enforcement system begins under the watchful eye of the Design Approval Primary Inspection Agency (DAPIA). The DAPIA (a third-party inspection agency) must approve the engineering design of each home to be built, approve the manufacturer's quality assurance manual for its plant and coordinate the other third party inspection agency, known as the Inspection Primary Inspection Agency (IPIA). The IPIA has the responsibility of making sure the production facility programs and procedures are in accordance with the DAPIA-approved quality assurance manual and it conducts inspections of homes produced in the factory to assure conformance with the approved design.

Certification Assures the Home Buyer

Before leaving the factory, each manufactured home must have a numbered certification label affixed to the exterior of each section of the home. This HUD label certifies to the home buyer that the home has been inspected in accordance with the federal government enforcement procedures, and it complies with the national building and safety code administered by the Department of Housing and Urban Development.

Only when all inspection parties are satisfied that the home complies with the code, will the certification label be affixed to the home. A consumer seeing the home for the first time will have the assurance that the home has been thoroughly tested and inspected from the design stage through final construction and found to be built according to the approved design.

Editors note: Please refer to part 3 of this three part series that details the home buyer advantages of the enforcement and related inspection system of the federal HUD code.

Manufactured Homes: Home Buyers Benefit From Federal Regulations

I have summarized the enforcement and inspections of the manufactured home construction process. This enforcement and scrutiny of the manufactured home construction process is, by far, the most thorough regulation of any other form of building construction.

As reported in part one of this series, the “mobile home” (as it was called prior to being changed by legislation to “manufactured home” in 1980) was not even similar to the manufactured home of today.

Shoddy inconsistent construction techniques that existed 40 years ago were a result of the lack of state and federal oversight of the construction and in particular the health and safety aspects of a booming mobile home market.

In fairness to the states, they didn’t know how to regulate the mobile home phenomenon. Most of these states classified the mobile home as being an adjunct to the automobile business with motor vehicle regulations being applied to mobile homes. After all, the word “mobile” was used to describe this product.

In 1976 Congress passed historic legislation that changed the manufactured housing industry forever — in a good way. This legislation is the Federal Home Construction and Safety Standards which was effective on June 15, 1976. This federal code is administered by the U.S. Department of Housing and Community Development (commonly known as the HUD CODE).

The HUD regulates every aspect of the building and installation process through state agencies contracted to HUD. The in-plant inspection process is thorough and relentless as the home proceeds to built one step at a time. The inspection process actually begins before the home construction commences. Every floor plan and design is required to be engineered in compliance with HUD regulations and approved for production by a 3rd party design agency approved by HUD.

So you might ask, “How do these government regulations and enforcements affect me and my choice of housing?” Excellent question! All the things a homeowner would find important in a home are a result of these construction standards and the technological advancements and expertise of the manufacturers of today’s manufactured homes.

The HUD code sets standards in the following areas:

Manufactured housing design and construction - All homes must be pre-approved and certified to meet federal construction guidelines before construction commences.

Strength and durability- Each home must be manufactured with quality building materials and applications to assure that home will stand the test of time.

Transportability - Yes, this is strictly enforced, even though the only time a manufactured home is usually transported is the original transport from the factory to the home site. A manufactured home is built on a steel frame that assures the structural integrity of the home on site as well as during transport.

Fire Resistance - A manufactured home is built to a standard exceeding the flame spread retardation recommended for site built homes.

Energy efficiency- The air-tight construction aspect of the manufacturing process along with insulation completely wrapping the perimeter of the home results in lower utility costs than other types of single family housing. Combined with HUD Code requirements that manufactured homes be equipped with energy efficient heating and air conditioning increases the savings appreciably. An additional savings of 20 to 30% can be achieved by upgrading to ENERGY STAR appliances and products that are available through most manufactured home builders/retailers.

Storm Safety- The HUD Code was amended in 1994 with requirements that manufactured homes meet building and installation standards to provide wind safety safeguards in pre-designated storm regions of the country. Manufactured homes produced since 1994 have been proven to be equal and, in many respects, safer than site-built homes during tornadoes and hurricanes.

It is safe to say that you cannot purchase a poorly constructed manufactured home. Yes, there are differences in prices. However, the difference is in things that you can see, such as, amenities, equipment, decor, appliances, tape and textured drywall, vaulted ceilings, etc.

OFFICE OF MANUFACTURED HOUSING PROGRAMS

OMHP MISSION: The mission of the Office of Manufactured Housing Programs is to execute responsible regulation and solutions-oriented oversight and monitoring to protect consumers and preserve and promote the affordability, quality, durability, and safety of manufactured homes nationwide.

The Office of Manufactured Housing Programs (OMHP) administers the National Manufactured Housing Construction and Safety Standards Act of 1974 (the Act) which authorizes HUD to establish federal standards for the design and construction of manufactured homes to assure quality, durability, safety, and affordability. HUD standards may preempt state and local laws that do not conform to the HUD standards. OMHP enforces standards directly or through state agencies that have partnered with HUD, inspects factories and retailer lots, regulates installation standards for the homes, administers a dispute resolution program for defects, establishes and collects a fee for each home built, authorizes a certification label to be placed on each section of a home that meet the HUD standards, and pursues a civil or criminal action for violations of the Act.

OMHP also oversees a Manufactured Housing Consensus Committee (a federal advisory committee, composed of twenty-one producers, users, general interest and public officials to advise HUD), hires contractors to assist in program administration, and cooperates with other federal agencies such as DOE and EPA on crosscutting issues. It also provides technical assistance to the Federal Housing Administration (FHA) for the Minimum Property Standards and the Technical Suitability of Products programs administered by the Office of Single Family Housing.

HUD's Manufactured Housing Program is a national program established to protect the health and safety of those that own and occupy manufactured homes through the enforcement of the federal manufactured home construction and safety standards and administration of dispute resolution.

ALSO SEE, HUD Fact Sheet from July 2022:

Proposed Updates to HUD Manufactured Home Construction and Safety Standards

Manufactured Home Construction and Safety Standards

AGENCY:

Office of the Assistant Secretary for Housing—Federal Housing Commissioner, HUD.

ACTION:

Final rule.

SUMMARY:

This final rule amends the Federal Manufactured Home Construction and Safety Standards (the Construction and Safety Standards) by adopting recommendations made to HUD by the Manufactured Housing Consensus Committee (MHCC), as modified by HUD. The National Manufactured Housing Construction and Safety Standards Act of 1974 (the Act) requires HUD to publish in the proposed revised Construction and Safety Standards submitted by the MHCC. The MHCC prepared and submitted to HUD its third group of recommendations to improve various aspects of the Construction and Safety Standards. HUD reviewed those recommendations and adopted some of them after making editorial revisions and some additions. This final rule further revises the Construction and Safety Standards based on HUD's review and incorporation of certain public comments.

DATES:

Effective Date: March 15, 2021. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of March 15, 2021. The incorporation by reference of certain other publications listed in the rule was approved by the Director of the Federal Register as of August 11, 1987.

I. Background

The National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. 5401-5426) (the Act) authorizes HUD to establish and amend the Federal Manufactured Home Construction and Safety Standards (the Construction and Safety Standards) codified in 24 CFR part 3280. The Act was amended in 2000 by the Manufactured Housing Improvement Act of 2000 (Pub. L. 106-569, approved December 27, 2000) which established the Manufactured Housing Consensus Committee (MHCC), a consensus committee responsible for providing HUD recommendations to adopt, revise and interpret the Construction and Safety Standards. HUD's Construction and Safety Standards apply to the design, construction, and installation of new homes. Changes to the collective standards are not retroactively enforced by HUD as applicable to previously designed, built, and installed homes.

As amended, the purposes of the Act (enumerated at 42 U.S.C. 5401) are: “

(To protect the quality, durability, safety, and affordability of manufactured homes;

to facilitate the availability of affordable manufactured homes and to increase homeownership for all Americans;

to provide for the establishment of practical, uniform, and, to the extent possible, performance-based Federal construction standards for manufactured homes;

to encourage innovative and cost-effective construction techniques for manufactured homes;

to protect residents of manufactured homes with respect to personal injuries and the amount of insurance costs and property damages in manufactured housing consistent with the other purposes of this section;

to establish a balanced consensus process for the development, revision, and interpretation of Construction and Safety standards for manufactured homes and related regulations for the enforcement of such standards;

to ensure uniform and effective enforcement of Construction and Safety standards for manufactured homes; and to ensure that the public interest in, and need for, affordable manufactured housing is duly considered in all determinations relating to the Federal standards and their enforcement.”

In addition, the amended Act generally requires HUD to establish Construction and Safety Standards that are reasonable and practical, meet high standards of protection, are performance-based, and are objectively stated.

Congress specifically established the MHCC to develop proposed revisions to the Construction and Safety Standards. The Act provides specific procedures (42 U.S.C. 5403) for the MHCC process.

The MHCC held its first meeting in August 2002 and began work on reviewing possible revisions to the Construction and Safety Standards. As the MHCC proceeded, proposed revisions to the Construction and Safety Standards were divided into sets.

The first set of revisions proposed by the MHCC was published as a final rule in the Federal Register on November 30, 2005 (70 FR 72024). The second set of revisions proposed by the MHCC was published as a final rule published in the Federal Register on December 9, 2013 (78 FR 73965).

This final rule is based in part on the third set of MHCC proposals to revise the Construction and Safety Standards published as a proposed rule in the Federal Register on January 31, 2020 (85 FR 5589). The proposed rule included a MHCC proposal to revise the Construction and Safety Standards to reduce the regulatory burden by eliminating the need for manufacturers to obtain special approvals from HUD for certain construction features and options.

HUD reviewed the MHCC's proposals and made editorial revisions prior to publishing the January 31, 2020, proposed rule. HUD also added proposals that complement the MHCC's recommendations.

As explained in the January 31, 2020, proposed rule, HUD decided not to include certain MHCC recommendations due to pending regulations for improving energy efficiency in manufactured homes being prepared by the U.S. Department of Energy (DOE) under the Energy Independence and Security Act (Pub. L. 110-140, approved December 19, 2007) (EISA). DOE published a Notice of Proposed Rulemaking on June 17, 2016 (81 FR 39756) and, more recently, a Notice of Data Availability, Request for Information on August 3, 2018 (83 FR 38073) regarding energy conservation standards for manufactured housing.

Given this DOE rulemaking, HUD decided to postpone action on MHCC-proposed revisions to §§ 3280.502 and 3280.506(b), except for the mating wall of attached manufactured homes at § 3280.506(b)—an option that is needed to avoid a more burdensome alternative approval process (24 CFR 3282.14—Alternative construction of manufactured homes). HUD also decided not to move forward with a new proposal to add requirements for draftstopping to the Construction and Safety Standards. HUD will not include or move forward with these recommendations in this final rule.

II. Changes Made at the Final Rule Stage

In consideration of the public comments and HUD's experience implementing the program, HUD has made certain editorial revisions to HUD's proposals made in the January 31, 2020, proposed rule.

In general, the revisions adopt changes to the codified regulations that reinforce the Act's purposes, namely providing benefits to consumers, homeowners, and the broader community; promoting and improving consumer and home safety; reducing regulatory barriers and expanding consumer options; and allowing use of some for the latest building technologies and materials while creating more consistency with State-adopted residential building codes.

HUD declined to adopt some standards or commenters' suggested changes in some instances based on considerations of the statutorily prescribed MHCC process, the lack of authority under the Act for HUD to regulate design and construction of certain types of housing, and consumer safety.

The final rule will revise certain sections of the Construction and Safety Standards, as well as the incorporated reference standards where indicated. The revisions described below are based on HUD's review and consideration of the public comments on the proposed rule, HUD's experience with the program, the existent Construction and Standards, and the issues raised in the proposed rule. The final rule also makes minor technical edits to the Construction and Standards.

§ 3280.5 Data Plate

HUD revised § 3280.5 by revising paragraph (d), pursuant to public comments, to streamline data entry. Paragraph (d) now reads, “(d) This manufactured home IS designed to accommodate the additional loads imposed by the attachment of an attached accessory building or structure in accordance with the manufacturer installation instructions.

The additional loads are in accordance with the design load(s) identified on this Data Plate; or This manufactured home IS NOT designed to accommodate the additional loads imposed by the attachment of an attached accessory building or structure in accordance with the manufacturer installation instructions.”

The appropriate designation may be made while still setting forth information that may be used by state and local authorities that have enforcement authority for site-built structures that are not integral to the manufactured home produced and shipped by the manufactured home manufacturer. HUD seeks to preclude a home from being taken out of compliance when an attached accessory building or structure is built and added on at the home site.

§ 3280.108 Interior Passage

HUD revised paragraph (c) in this section in accordance with the public comments by creating an exception to the requirement for doors to closets, pantries, and doors to toilet compartments in single-section homes. Single-section manufactured homes have a smaller living space when compared with a multi-section manufactured home or a typical site-built home and, thus, closet and pantry doors should not be subject to the same clear opening requirements as a multi-section manufactured home or a typical site-built home.

§ 3280.114 Stairways

HUD adjusted the rise and run dimensions based on public comment. The changes recommended by public commenters on the proposed rule will give manufacturers more flexibility when trying to balance the smaller form-factor of most homes with consumer demand for multiple stories. The edits clarify that the standards do not apply to exterior stairways that are built at the home site or stairways to basement areas that are not designed and built as part of the manufactured home.

§ 3280.209 Smoke Alarm Requirements

While HUD did not revise this section in the proposed rule, a public commenter recommended that combination smoke and carbon monoxide alarms be added as acceptable devices to parallel the International Residential Code (IRC). Furthermore, the changes to this section are intended to work in conjunction with the changes to § 3280.211.

§ 3280.211 Carbon Monoxide Detectors

“Alarms” and “detectors” are different items that serve different purposes. HUD changed references from “detector” to “alarm” in response to public comment. HUD also revised this section to include specific locations where such items must be installed rather than just referencing the more general standards, such as the National Fire Protection Association Standard 720.

§ 3280.212 Factory Constructed or Site-Built Attached Garages

Public commenters suggested that the distinction between attached and self-supported structures be emphasized in this section. HUD clarified that paragraph (a) applies only to garages which are not self-supported and revised the fire separation requirements in paragraph (c), including that the garage must be separated from the home with appropriate gypsum wallboard or equivalent. HUD also added paragraph (h) as suggested by public comment to include that a site-built, self-supported garage is considered an add-on subject to § 3282.8(j)(1) and state and local authorities.

§ 3280.213 Factory Constructed or Site-Built Attached Carports

Similar to the previous section, public commenters also suggested that the distinction between attached and self-supported structures be emphasized in this section. HUD made several changes to this section based on public comment, including adding a provision in paragraph (b) that the manufacturer may provide the maximum live and dead loads, and the applied loading locations that the home is designed to resist from the carport, and other design limitations or restrictions.

§ 3280.504 Condensation Control and Installation of Vapor Retarders

Based on public comment, HUD clarified the distinction between mating walls and fire separation walls in paragraph (b), stating that the fire separation wall between each attached manufactured home must be considered to be an exterior wall pursuant to subpart K.

§ 3280.609 Water Distribution Systems

In order to better protect residents, HUD added relief pipe turndown requirements to this section based on public comment, stating that exterior relief drains shall be directed down and shall terminate between 6″ and 24″ above finished grade. This is high enough to prevent backflow, but low enough to reduce the risk of injury or accident.

§ 3280.705 Gas Piping Systems

HUD eliminated “hard pipe” in paragraph (l)(8)(iii), to account for a flex gas connector rather than a quick-disconnect.

§ 3280.710 Venting, Ventilation, and Combustion Air

HUD clarified that the placement restrictions apply to exhausts of fuel burning appliances and used the defined term “habitable rooms” in this section. This provides consistency across the regulation.

§ 3280.904 Specific Requirements for Designing the Transportations System

In addition to some language and grammatical changes, HUD added a requirement to check weights with the home in a level position ready for transport in paragraph (b)(4)(ii), an explicit reference to the Department of Transportation's regulations at 49 CFR 393.52(d) in paragraph (b)(9)(ii) regarding stopping distance, and textual changes to paragraph (b)(9)(iii) regarding electrical brake wiring.

When we left off, over a few short years mobile home manufacturing had grown into a massive industry, and was supplying an increasingly large fraction of the US's housing. In 1973, 580,000 mobile homes were shipped, just over 50% of the number of single family home starts that year (1.1 million), and 22% of total housing units produced that year (including single family, multifamily, and mobile homes.) The Department of Commerce predicted that mobile home shipments would be between 750,000 and 850,000 by 1980.

The HUD Code

As a result of the increasing size and importance of the mobile home industry, and growing concern about mobile home safety [0], in 1974 Congress passed the Mobile Home Safety Standards Act, which placed mobile home regulation under the purview of HUD. HUD then began the process of developing a set of safety standards for mobile homes.

The industry hoped that HUD would simply adopt the ANSI A119.1 standard, which by then had been in use for over a decade and had been adopted in some form by over 40 states. Of the 1000+ responses received by HUD regarding new standards, over 800 of them were requests that ANSI A119.1 be adopted.

HUD opted not to do this - the explanation given was that they were reluctant to effectively hand regulation authority over to a third party. The HUD Code was ultimately based on A119.1, but it was modified based on the results of several studies of mobile home performance (for instance, HUD analyzed the problems encountered on 4000 mobile homes that they had purchased as emergency housing for Hurricane Agnes relief, and the National Bureau of Standards (now NIST) performed several studies on mobile home fire performance.)

The HUD Code went into effect in 1976. HUD estimated that the new, stricter regulations added approximately $380 to the cost of a mobile home, while the average dealer estimate was closer to $500 (or about 4% of the cost of a typical single wide at the time.) Much of this increased cost seems to have been due to increased administrative requirements, rather than physical changes.

The stricter HUD code seems to have had its intended effects. The rate of fire death in mobile homes, for instance, had been 3 times higher than in conventional homes prior to the HUD code, a difference that was eliminated after the HUD provisions took effect:

Source: Construction Physics

Collapse and decline

1974 also saw the collapse of the US housing market, following the energy crisis-induced recession. Total housing starts (including mobile home shipments) fell by over 50%, from 2.9 million in 1972 to 1.3 million in 1975.

Source: Construction Physics

The mobile home industry was hit especially hard. While single family and multifamily housing starts declined by approximately 50%, mobile home shipments declined by 63% (from 580,000 in 1973 to 213,000 in 1975.)

40% of mobile home manufacturers went out of business. And while the conventional housing industry bounced back (to some extent - 1972 would ultimately be the peak of conventional housing construction as well as mobile home construction), the mobile home industry never quite did.

Conventional single family and multifamily starts had recovered to 85% of their previous high by 1979, but mobile home shipments were only 45% of their previous high.

Rather than exceeding 800,000 units per year as predicted, mobile home shipments have never since exceeded 400,000 units per year and, outside a six-year window in the early 1990s, have never passed 300,000 units per year.

In 2021 manufactured home shipments (they officially changed from “mobile homes” to “manufactured homes” in 1980) were just 106,000 units, approximately 6% of total housing units built that year.

Why didn’t the mobile home industry bounce back? What stopped it from continuing to take a larger share of the housing market in a Clay Christensen-style low end disruption? Why aren’t we all living in mobile homes?

The HUD Code theory of industry decline

Blame for the industry’s troubles often centers on the HUD Code, which was stricter in both requirements and enforcement than previous mobile home regulations. Arthur Bernhardt gestures towards this in “Building Tomorrow”, a long-term study of the mobile home industry published in 1980:

The dramatic shakeout of the 1973-1975 recession resulted in an industry where the “surviving” firms are financially sophisticated. Increasing government intervention has forced these “survivors” to develop new staff and expertise in dealing with the new regulatory red tape.

…The irony seems to be that consumerism and government have raised entry barriers to the point that new competition is discouraged from entry and production costs are significantly higher.

And Allan Wallis makes similar claims in “Wheel Estate”, a history of the mobile home industry published in 1991:

In previous recessions, small manufacturers would go out of business and larger manufacturers would close some of their branch plants until the economy turned around. Coming out of this recession, however, small manufacturers were faced with a new set of regulations and a complicated design approval and inspection system.

Instead of spot-checking units, every unit being manufactured now had to be inspected in the plant.

For a small firm turning out just a few units a week, the cost of filing drawings for approval and paying an inspector to come for a factory visit might mean the difference between being competitive or out of the market.

He also states that “whether the benefits of institutionalization will outweigh its costs is yet to be determined.”

But the strongest proponent of this theory is James Schmitz. In his paper “Solving the Housing Crisis Will Require Fighting Monopolies in Construction”, Schmitz claims that the failure of mobile homes to displace site-built construction was the result of sabotage by HUD and NAHB (organizations that he confusingly calls “monopolies”), on behalf of conventional builders, of which the HUD Code was one particular instance of:

the key monopolies involved in blocking small modular homes are the Department of Housing and Urban Development (HUD) and the National Association of Home Builders (NAHB). They have successfully squashed the emergence of these factory houses.

…In particular, HUD was able to introduce a national building code (Nat-BC) for factory-built homes, in particular, manufactured homes. This Nat-BC was sold as a benefit to the manufactured housing industry, though it was a mechanism to destroy it.

…The first reason the Nat-BC was devastating, then, is because in the areas where producers of manufactured homes actually competed with stick builders, typically small towns and rural areas, there were often no local building codes, or not severe ones. With the Nat-BC, factory builders had to meet a strict code; stick builders faced no code. This feature of the regulations by itself meant great sabotage.

The added burden of the HUD Code, according to Schmitz, made mobile homes less competitive compared to site-built homes, particularly in what had previously been their most important areas - places with little to no building code enforcement.

Schmitz places particular blame on the HUD requirement that mobile homes, even ones that will be permanently attached to a foundation, have a steel chassis that allows them to (theoretically) be moved. Not only does the chassis add cost, but it provides a mechanism for jurisdictions to discriminate against mobile homes:

Another feature of the code is the requirement that the homes have a permanent chassis. Before this requirement, these homes would be transported to their site on a chassis, as this is the most cost effective means of transport. The chassis would then be removed, and most would be put on a foundation.

…The permanent chassis requirement has a significant negative impact on the industry. First, by requiring a chassis, the regulation endeavors to make the small modular home resemble a trailer, linking the prejudices of trailers with small-modular homes.

Second, since the house has a chassis, local zoning laws can often be applied to block it from the local area.

Third, since it has a chassis, it's argued that it can be moved (though they aren't moved), so that the houses are financed as cars (with personal loans) and not real estate.

Fourth, the regulation increases the cost of manufacturing the house.

And indeed, manufactured home manufacturers have argued (unsuccessfully) that the chassis requirement needlessly adds cost to mobile homes and should be removed:

I can assure you that when a homebuyer buys a home from me and wants to finance it for 30 years and have it installed on a permanent foundation, the homebuyer prefers to have the chassis removed. In many cases homebuyers prefer to have their manufactured homes placed over basements.

Because of the presence of a chassis, we must dig the basements deeper and erect more costly and unsightly piers.

I could save my homebuyer significant costs, both in factory costs and installation costs, if I could order a home designed to have the chassis removed.

(It's worth noting that it's somewhat disingenuous to use a 30-year mortgage example here, as the majority of manufactured homes are financed with shorter, personal property loans.)

Problems with the HUD Code theory of industry decline

The problem with the HUD Code theory of industry decline is that it doesn't fit the evidence especially well.

For one, the HUD code didn't regulate what was previously unregulated - nearly all states required mobile homes to meet their own local code requirements, largely based on A119.1 (the same standard that the HUD code was ultimately based on.)

Manufacturers had in fact advocated for a uniform nationwide mobile home code (though not necessarily a federal code, they weren't necessarily thrilled with HUD oversight) to specifically prevent the problems that were occurring with multiple jurisdictional requirements. From "Building Tomorrow":

…Although the codes were based on ANSI A119.1, they were not all the same. Some states adopted the ANSI code in whole, others, in part, and still others, with modifications and amendments.

These state by state variations prevented full interstate reciprocity and uniformity…multiple inspections of the same unit in-state, out-of-state, and on-site raised costs and damaged interstate marketing…individual inspectors interpreted and enforced the same code with different levels of strictness…Differing state requirements forced manufacturers to produce the same model under various structural and mechanical standards or else overdesign to the toughest specifications.

Either alternative increased the cost of mobile homes. State-by-state approval of new materials and processes also raised costs and discouraged innovation.

It's also hard to find evidence that the HUD Code caused any substantial cost increase. Dealers' own estimates were that the HUD provisions only added on average about 4% to the cost per square foot for a typical singlewide (and this ignores any potential savings from the reduced insurance cost due to improved fire safety, or from reduced energy consumption.)

If we look at average mobile home cost per square foot over time, it does rise, but a) it was rising prior to the introduction of the HUD code and b) it rose less than the cost of new site-built construction (and after 1978, rose less than inflation.) As a fraction of the cost of conventional construction, mobile homes got cheaper following the HUD Code, not more expensive:

Source: Construction Physics

Via Manufactured Housing Institute data

And mobile homes continued to take an increasing share of the low-end home market:

Source: Construction Physics

Via "Building Tomorrow”

Source: Construction Physics

Via link

Regarding the chassis requirement as a mechanism to discriminate against mobile homes, this also doesn’t fit the data. As we’ve seen, mobile homes were subject to restrictive zoning practices long before the HUD Code (and its chassis requirement) was enacted:

In the early 1970s, 60% of communities excluded mobile homes from being sited on private lots, and a survey by the American Planners Association found that residents in 80% of communities wanted to exclude mobile homes.

Metro areas often tried to prevent the construction of new mobile home parks, with cities such as Des Moine and Miami putting a moratorium on new park construction.

The state of Illinois approved just 1 mobile home park between 1955 and 1975. Outside of parks, mobile homes were largely relegated to areas outside of cities where there were fewer zoning restrictions (75% of rural counties allowed mobile home placement on private lots, compared to just 31% within cities and 20% within suburbs.)

Where mobile homes were allowed, they were often restricted from being located in residential areas - 15% of communities only allowed mobile homes in areas zoned for commercial or industrial.

In fact, the passage of the HUD Code was followed by a significant decrease in restrictive zoning practices against mobile homes. Via Regulating Manufactured Housing:

In 1970, only 38% of communities surveyed by the American Planning Association permitted mobile homes on individual lots outside of parks. By 1985 that had risen to 60%.

In 1970, less than 1% of surveyed communities permitted mobile homes “by right” in residential districts (“by right” is when development can proceed without special review.) By 1985, that had risen to 52%.

By 1989, 22 states had passed mobile home antidiscrimination laws. Today, over half of states require localities to allow manufactured homes somewhere in their jurisdiction.

There also doesn’t seem to be much of a dropoff in the creation of new mobile home parks. The number of mobile home parks increased from 24,000 in the early 1970s to over 50,000 by the late 1990s [1].

At least some sources credit this relaxation of zoning stringency to the increased quality and safety that resulted from the HUD code:

The more durable and safer manufactured home built in compliance with the HUD code is enjoying greater public acceptance and has prompted local officials to relax certain restrictions on manufactured housing.

And at least some favorable zoning court rulings for mobile homes were the result of the HUD Code having comparable stringency to local building codes.

Regarding cost, the steel chassis adds approximately 12% to the cost of a manufactured home, per “Building Tomorrow” - a significant burden for sure, but not an overwhelmingly large one (and, empirically, one that hasn’t impacted how much cheaper manufactured homes are than conventional homes.)

(Schmitz’ paper also has several other incorrect claims [2].)

Better explanations

Can we find a better explanation for the industry’s decline? One that doesn’t work via the mechanisms of manufactured homes getting more expensive compared to site-built, or zoning getting more restrictive (since neither of those seems to have occurred)?

One possible explanation is that mobile home manufacturers were more severely affected by the housing downturn because it was harder for them to scale down their operations due to high fixed plant costs.

When the housing market turned, producers went out of business and production capacity was removed, making it hard for the industry to bounce back - recovery comes slowly, if at all.

This sort of vulnerability is mentioned as a factor in “Building Tomorrow:”

Unlike the labor intensive traditional housing system, the capital intensive mobile home production system is more vulnerable to changes in demand.

A sudden demand drop can drastically reduce the capacity utilization rate; correspondingly, the fixed cost per unit of output increases…

When even minimal profits were eliminated in the recession, many mobile home producers filed for bankruptcy. The traditional on-site builder, on the other hand, not having to absorb the fixed costs of maintaining a factory…can adapt to sudden demand drops more easily than a mobile home manufacturer.

If capital overhead-induced failures were responsible for prolonged capacity reduction, we would expect to see something similar happen with “normal” prefabricated building (factory-built housing that meets local building code requirements, rather than the HUD Code.) We see a similar sort of decline in 2008, where prefabricated housing units drop and then never recover:

Source: Construction Physics

(via Eye on Housing)

However, it doesn’t seem as if this happened in the 1970s. By 1970 prefabricated housing units had reached over 250,000 per year:

Source: Construction Physics

Via Industrialized Building Systems for Housing.

“Manufactured homes” here refer to factory-built homes that meet local building codes, and "mobile homes” are what today would be called manufactured homes. Yes the terminology is confusing.)

This did drop in 1974, but unlike mobile homes, quickly recovered. By 1976 prefab builders (which doesn’t include mobile homes) were shipping over 250,000 housing units a year:

Source: Construction Physics

(via US Industrial Outlook)

So the 1973 decline didn’t seem to result in a prolonged capacity reduction for “normal” prefab. Prefabricated construction did ultimately decline (by 1992 it was down to just 60,000 single family housing units a year), but not until the 1980s.

Another possible explanation is the mobile home industry was uniquely impacted by their typical customer: lower-income buyers buying lower-cost homes. This factor is also mentioned in “"Building Tomorrow:”

In 1974, the effect of recessionary conditions of tight money and increased unemployment had a severe impact on the mobile home industry. Blue-collar workers, the major occupants of mobile homes, were most affected by the high rate of unemployment and many did not have the income to purchase or to maintain loan payments on homes.

Once piece of evidence is that the decline in sales largely came from the smallest, cheapest units - larger homes were less affected:

Source: Construction Physics

(via US Industrial Outlook)

We also see that total sales volume increased faster than units shipped, indicating a shift towards larger, more expensive models:

Source: Construction Physics

Via link.

Numbers are not inflation adjusted, but the average cost-per-unit increased even after adjusting for inflation.

And we also see that unemployment rate is generally substantially higher for lower income brackets:

Source: Construction Physics

(via BLS)

However, at other times manufactured home demand seems to be countercyclical, with manufactured homes, being more affordable, becoming more popular during a downturn. In the early 1980s recession, for instance, manufactured homes shipments declined much less than site-built housing starts, and manufactured homes as a % of total housing units went from under 12% in 1977 to over 18% in 1982.

The lax lending theory of industry decline

But there's other ways that sales to low-income buyers might have been the culprit. One possible way is that the huge run-up mobile home sales in the early 1970s was driven by lax lending standards. When the downturn came, this created a brutal industry dynamic - demand for new housing drops, lending standards tighten (narrowing the potential market), lenders exit (lowering competition) and repossessed units flood the market.

This seems to have occurred in the 1973 recession. Here's one lender's congressional testimony:

Our experience in mobile home lending has been very similar to that of other savings and loan associations.

In the early 1970s, fostered to a great extent by our own greed, we invested heavily in mobile home loans…

Because of the apparent high rate of return on these loans, competition for them from various lenders was stiff…and in some cases it was necessary to neglect some of the basic underwriting principles.

Almost all of the loans were bonded or insured, but the fine print in the bonds and the lack of ultimate financial responsibility of many of the bonding companies made the bonds almost worthless.

Most of the service companies…vanished into the woodwork. The result was that in 1974 we became to experience an increasing number of mobile home repossessions.

In the first half of 1975, mobile home repossessions were averaging 10,000-20,000 per month (the annual equivalent of ~180,000 per year, or close to half the number of new shipments for that year.)

This dynamic is specifically blamed for the industry's downturn in a report to the Federal Trade Commission:

A major reason for the recession in the mobile home industry was the tightening of credit policies by lending institutions.

During the period of rapid growth in the early 1970s, many people who were poor financial risks obtained mobile home installment loans and thousands of repossessions resulted.

As a result, lenders were more cautious in extending credit to new mobile home purchasers and older repossessed units flooded the market.

(Interestingly, this report specifically discounts the introduction of the HUD Code as a cause for industry decline.)

Another strong piece of evidence for the lax lending theory is that the same dynamic, with the same result, reoccurred 20 years later. During the mid 1990s, manufactured home sales were booming, and actually approached their previous high in terms of fraction of total housing shipments [3].

Source: Construction Physics

But this boom was also driven by a relaxation of lending standards, with predictable results:

Comparatively few lenders specialize in home loans for manufactured homes. Still, their numbers more than doubled (from 11 to 24) between 1993 and 1998, according to government figures. Subprime loans were also a popular financing option for manufactured homes, and such lenders grew sixfold from 1993 to 1998, to more than 250 firms.

As competition for loans rose, loan standards were relaxed. Average length of loans increased, and 30-year loans—unheard of in earlier days—became more common. Down-payment requirements were lowered, and lenders started buying down interest rates with points.

…In short, the lending sector wasn't pricing loans appropriately for the underlying risk. By 1999, delinquencies and repossessions began to creep up, though by how much is tough to say. "We do know [repossessions] were extremely high," Stinebert said. But no hard figures are available because lenders had no uniformity regarding the definition of repossession, in part because many "were trying to hide" the fact that their portfolios were loaded with bad-performing loans for manufactured housing, he said.

Estimates from several industry sources put annual repossession at between 80,000 and 100,000 for several years during this decline. A 2005 report by Lehman Brothers said repossessed inventory went from $300 million in January 1999 to $1.3 billion by the end of 2002, with recovery rates (the percentage of loan value recovered by sale of repossessed collateral) dropping "as low as 25 percent during the period."

…The pain has been spread through dealers, lenders and manufacturers. The number of active plants nationwide dropped from 330 in 1998 to just 210 last year. Production of manufactured homes in Wisconsin grew 40 percent from 1990 to 1995 to about 4,500 units and then steadily hemorrhaged to just 1,100 units last year, well below preboom levels, according to MHI data.

Lenders played a game of follow-the-leader into and out of the manufactured home industry. Fitch Ratings reported that as of January 2003, "an overwhelming majority" of lenders that had entered during the boom were no longer in the business.

An article in Manufactured Home Merchandiser (a trade publication with a series of increasingly bleak covers starting in the early 2000s) stated in 2003 that “For the immediate future, zoning, financing limitations, and a glut of repossessions will flatten sales”.

The early 2000s downturn would have been especially brutal, as it was followed by the larger housing market and financial collapse of 2008.

So, my current working theory is that manufactured home industry recessions have largely been driven by the relaxation, then contraction, of lending standards.

[0] - The statement of purpose in the act is to “reduce the number of personal injuries and deaths and the amount of insurance costs and property damage resulting from mobile home accidents and to improve the quality and durability of mobile homes.”

[1] - Also, it seems as if in practice the requirements for a steel chassis weren’t clarified until 1986, far after the annual sales had declined. Via “Wheel Estate”

In August 1986, HUD issued a letter instructing its agencies charged with design review to prohibit manufactured homes in which an all-wood floor frame was substituted fro the typical metal frame chassis. By rejecting the wood frame, the Department was rejecting the idea of a removable chassis. In fact, the practice of building units with removable chassis had been going on for years, but a HUD sanction had never been requested.

Wallis goes on to claim that removal of this chassis “would have obliterated the technical distinction between manufactured and modular housing”, but I think this is incorrect. It’s perfectly possible for jurisdictions to treat manufactured and non-manufactured homes differently even if there’s no difference other than what’s tracked on the paperwork, the same way that governments treat citizens and non-citizens differently.

[2] - In particular, Schmitz spends a great deal of time claiming that one avenue of sabotage was for HUD to call mobile homes “manufactured homes” instead of modular homes, to ensure they could be discriminated against:

In 1976, HUD introduced another name for these small-modular homes, namely, manufactured home. But this only applies to small-modular homes produced after 1976. Those built before 1976 are now officially called mobile homes by HUD. So, these small-modular homes are called trailers, mobile homes and manufactured homes. Nowhere will you see them called what they are: modular homes.

Monopolies, like HUD and NAHB, reserve the term “modular home” for large-modular homes. This is no accident. To describe small-modular homes as “modular” would lend them credibility. In this essay we’ll sometimes call them manufactured homes, though we realize this usage must change, that monopoly language that confuses must be fought against.

Putting aside for the moment the dubiousness of the idea that “manufactured” has obvious negative connotations while “modular” doesn’t, this wrong in numerous ways:

The change from mobile homes to manufactured homes was officially made in 1980, not 1976.

The change was the result of lobbying by the mobile home industry, not dictated by HUD.

“Manufactured home” was deliberately chosen because it would be associated with other forms of factory-built construction. At the time “manufactured home” was a catchall term for all factory-built housing. In the US Industrial Outlook, for instance, both mobile homes and prefabricated construction were categorized under “Manufactured Housing”. And in Bernhardt’s late 60s report “manufactured homes” are used to refer to factory-built homes other than mobile homes (this data, in turn, was supplied by the National Association of Home Manufacturers, who represented prefab builders.)

This use of “manufactured home” continued into the 1980s. For instance, here’s a definition given in the report “Manufactured Homes: Making Sense of a Housing Opportunity”:

Manufactured housing is a generic term describing housing produced in a factory rather than at the actual site.

…There are two types of manufactured housing. The first type is built to state-adopted building codes that, in turn, are based on national or regional model codes, such as the Uniform Building Code (UBC). Included in this first type are precut or shell homes, components, panelized homes, modular or sectional homes, and so on.

…The second type of manufactured housing is built to a single national standard embodied in the federal Manufactured Home Construction ans Safety Standards…known as the HUD Code.

[3] - In fact, we see total occupied manufactured homes peak in 2001 - since then they’ve been on the decline:

Source: Construction Physics

Freddie Mac Multifamily Requires Tenant Protections on All Future Manufactured Housing Community Transactions

Tenant protections go above and beyond state and local requirements, protecting residents who own their home but lease an MHC pad

MCLEAN, Va., Sept. 13, 2021 (GLOBE NEWSWIRE) -- Freddie Mac (OTCQB: FMCC) Multifamily today announced that effective immediately all future Manufactured Housing Community (MHC) transactions will include a series of tenant protections, as defined by the Federal Housing Finance Agency's (FHFA) Duty to Serve regulation, that go above and beyond current state and local requirements.

The protections, which include renewable lease terms, written notice of rent increases, grace periods for late rental payments, and rights governing the sale of a manufactured home at an MHC, are intended to support those who own their home but lease the pad on which it sits.

"Manufactured housing communities often represent the most affordable multifamily housing option available in many areas, particularly rural areas," said Debby Jenkins, executive vice president of Freddie Mac Multifamily. "We have been ramping up our tenant protections offering since 2018, and today we're making these protections a requirement for all future transactions."

Given their unique structure, MHCs represent a category of housing that often lacks protections afforded to a typical homeowner or typical renter. Freddie Mac examined the patchwork of state laws that govern MHCs in a 2019 white paper and determined that no state offered the comprehensive slate of tenant protections identified by FHFA in its Duty to Serve regulation.

After issuing its white paper, Freddie Mac began incentivizing borrowers to voluntarily adopt protections through its pricing structure. Prior to today's announcement, more than half of the company's new MHC business this year had already adopted the protections. Freddie Mac expects to finance over 75 MHCs with tenant protections this year for over $700 million and anticipates doing even more next year.

Freddie Mac is requiring the following tenant protections in future MHC transactions:

One-year renewable lease term, unless there is good cause for non-renewal

30-day written notice of rent increases

Five-day grace period for rent payments and the right to cure defaults on rent payments

Right to sell the manufactured home to a buyer that qualifies as a new tenant in the community, without having to first relocate it out of the community

Right to sell the manufactured home in place within 30 days after eviction by the community owner

Right to sublease, or assign the pad site lease, for the unexpired term to the new buyer of the tenant's manufactured home without any unreasonable restraint, so long as the new buyer or sublessee qualifies as a new tenant within the community

Right to post "For Sale" signs that comply with community rules and regulations

Right to receive at least 60-days’ notice of planned sale or closure of the community

Freddie Mac will also continue to purchase loans for resident-owned manufactured housing communities (MHROCs) where residents manage their community collectively through a cooperative, corporation or other similar legal framework. Given their self-governance structure, these loans are likely to already have meaningful tenant pad lease protections. Freddie Mac launched its MHROC offering in 2019.

Freddie Mac Multifamily is the nation's multifamily housing finance leader. Historically, more than 90% of the eligible rental units we fund are affordable to families with low-to-moderate incomes earning up to 120% of area median income.   More than 90% of the mortgages purchased support rental units for households earning 120% of area median income or below. Freddie Mac securitizes about 90% of the multifamily loans it purchases, thus transferring the majority of the expected credit risk from taxpayers to private investors.

FHFA Announces Fannie Mae's and Freddie Mac's Duty to Serve Underserved Markets Plans for 2022-2024

Total Value Chain (TVC)

What does a fully integrated market look like?

In recent years, however, business strategy has shifted from focusing on the company as an autonomous unit to interpreting its performance as part of a larger ecosystem.

Nowhere has this shift been more pronounced than in high-tech business strategy, where creating new markets is inherently a cooperative enterprise.

These cooperatives are sometimes termed value chains because they involve the linking up of numerous entities to fulfill a specific value proposition to a target customer.

Like all other human institutions, value chains need clear and stable power structures to sustain themselves going forward.

The companies that gain ascendancy within these value chains, however, not only have power over the chain, they have the power of the chain.

That is, they can compete using the chain itself as a weapon, not just their own company's offers.

Gorillas are the preeminent value-chain leaders.

Tornadoes occur when—and only when—a new value chain comes into existence.

The key questions to ask, then, are:

Can this value chain develop into a tornado mass market?

If so, what conditions are currently holding it back?

Are these constraining conditions likely to be removed?

If so, when is the last remaining constraint likely to be removed, and by whom?

When the last remaining constraint goes, assuming there is a genuine mass market value proposition that has never before been tapped, then the tornado begins.

Key Events / Regulations

Market Sectors (Demand)

What is currently driving demand in the market?

Affordable, Attracts Senior Living, Gen Z

Biden’s New Housing Plan: Fire Up the House Factories

The White House blueprint for boosting affordable housing calls for reviving production of mobile homes, backyard flats and other manufactured units.

California is enjoying a backyard revolution. Permits for casitas, granny flats, additions and other accessory dwelling units (or ADUs) shot up ten fold after state lawmakers passed bills in 2016 and 2017 legalizing them across the state. Oregon, Connecticut and several cities have similar laws on the books.

The upshot of the state laws is that local governments can’t forbid property owners from building an ADU. As a result, companies in California have emerged to offer factory-built secondary apartments, a low-cost option to add another home to a property. For a state facing a severe shortage of new housing, it’s a start.

It’s also something of a revival. Manufactured homes briefly dominated the U.S. housing market during the 1960s. By 1972, these homes — not just mobile homes but small-scale modular houses — accounted for some 60% of all new single-family homes produced nationwide, according to census data. That number has diminished so much that the role of factories in building affordable housing has gone all but forgotten.

The Biden administration wants to put America’s house factories — those used to be a thing, really — back to work. A new housing plan by the White House offers a set of actions designed to close the nation’s massive affordability gap. Among its proposals are steps that would lower costs for manufactured homes by expanding financing options. It would also ease barriers around approvals and construction.

One notorious regulation that could go up for review is a longstanding rule that manufactured homes must be delivered with a chassis still attached, even if the homes are built in place permanently. It’s an under-the-radar regulatory tweak that could make a big difference for those most in need.

“Just removing regulations like that, so that the manufactured homes can be their best selves, is the easiest, smallest thing to do. It’s not going to be revolutionary. It’s going to shave maybe a couple of thousand [dollars] at most off the price of a new manufactured home,” says Salim Furth, senior research fellow at the Mercatus Center at George Mason University. “But given that that is the entry-level ownership product in the American market, when you’re moving that bottom rung even a couple inches down, it means a lot more people can get on the ladder.”

Factory Records

At their peak, manufactured homes accounted for 60% of new single-family houses in the U.S.

Source: Bloomberg

One issue the Biden plan addresses involves financing. Most buyers looking to finance a manufactured home must rely on personal property loans known as chattel loans. The ostensible thinking here was clear enough: Manufactured homes placed on rented land are more like property than real estate, even if they never move. But these chattel loans have worse interest rates and shorter repayment terms for borrowers than traditional mortgages do, making them more expensive.

The White House announced that Freddie Mac will consider the feasibility of purchasing these loans, with the hopes of supporting more market activity and bringing down interest rates. Both Fannie Mae and Freddie Mac are looking at more creative financing solutions to give low-income buyers and renters access to manufactured housing communities.

Investment firms such as Blackstone Group and Apollo Global Management have also taken notice of mobile home parks in particular. From a landlord's perspective, these communities are an ideal form of passive income, since for the most part landlords merely need to maintain the land and utility connections.

Accordingly, acquisitions by these groups are often followed by lot rent hikes. Local tenant protections rarely apply to low-income mobile home owners, because technically, they aren't renters.

Backing by Fannie and Freddie could make these properties even more attractive to investors. Fannie Mae is already in the awkward position of trying to secure tenant site lease protections for mobile home residents by offering incentives to lot investors to agree to fairly standard regulations for landlords.

A borrower such as an investment firm that buys a manufactured home community could get pricing incentives if the company agrees to one-year leases for lots, 30-day notices for lot rent increases and other basic protections that most traditional renters enjoy.

Even as the White House is trying to make it easier to build manufactured homes, it is trying to ensure that they remain an affordable option. That Fannie Mae has emerged as a guarantor of fundamental tenant rights is a sign of just how precarious the situation is for manufactured housing communities, a critical source of unsubsidized low-income housing for veterans, seniors and disabled people.

Another component of the White House plan involves easing barriers to construction and sales. Regulation was what curbed manufactured housing in the 1970s, according to James Schmitz, an adjunct professor at the University of Minnesota.

It has to do with building codes:

In the 1960s, only about 25% of localities across the U.S. had formal building codes. Factories producing small modular homes competed with traditional "stick-built" homebuilders to produce housing in areas that often didn't have restrictions. At the time the factories were winning out: In 1973, manufacturers shipped 580,000 units, nearly four times their volume of single-family homes from a decade earlier.

Facing pressure from the stick-builders — and to some extent from housing manufacturers too — Congress passed a law in 1974 that required the U.S. Department of Housing and Urban Development to come up with a national code for manufactured homes. This made at least some sense to the manufacturers, since more and more cities were adopting building codes. Navigating all these local codes would be impossible for a factory building and shipping homes nationally or even regionally. To this day, manufactured homes are approved and stamped by HUD, not local inspectors.

But this national HUD code didn't work out in the manufacturers' favor. It included the rule that manufactured homes must come with a chassis still attached. The agency also created a separate category for factory-built housing: small-scale modular homes that were manufactured then assembled on-site versus mobile homes that were assembled then delivered whole. This was a double-whammy for the once broad and thriving housing factory sector. Manufactured housing (mobile homes) had to abide by a new, stricter national code; modular housing (factory-built homes) had to abide by local codes, dooming manufacturers trying to build housing at scale.

In a 2020 paper for the Federal Reserve Bank of Minneapolis, Schmitz argues that HUD was captured by the National Association of Home Builders, the interest group for the stick-builders, and as a result the lower-cost manufactured homes were suppressed by regulations while traditional single-family homes got subsidies. "That's one of the reasons why production went to hell," he says.

The Reagan administration acknowledged in a 1982 report that federal policies made manufactured homes unnecessarily costly. By 1981, manufactured homes accounted for a sizable but shrinking share of new single-family construction: 29%. Most still sold for under $50,000. "The construction code legislated by Congress in 1974 has ensured standards of safety and durability in these units," the HUD report reads. "But the true long-term cost of such manufactured homes has been much higher than necessary, because of inequitable treatment by governments and financial institutions."

Schmitz says that lawmakers and regulators at all levels exploited bias against mobile homes as a way to legally restrict manufactured homes. Manufacturers themselves came up with the widely used term "mobile homes" as an answer to "trailer parks."

Unlike the trailers used by people as they searched for work during the Great Depression, mobile homes were simply permanent homes that were delivered by truck. With the HUD code rule that even permanent homes had to have a chassis, the stigma of the trailer park stuck.

Local governments, in the suburbs especially, zoned manufactured housing into the least desirable locations. In 2019, only 94,600 new manufactured homes shipped in the U.S.

"Most suburbs have pretty effectively eliminated the possibility of putting down a significant number of manufactured homes," Furth says.

With the housing plan, the Biden administration is laying the groundwork for a rise in “gentle density,” meaning the kinds of homes that add to the supply of low-cost housing without triggering opposition from neighbors. For example, the Urban Institute estimates that an increase in the share of U.S. homes with ADUs from 1.6% to 3% over the next five years would deliver nearly 1.2 million new housing units. That would go a long way toward building the 7 million rental units needed to close the affordable housing gap.

But these efforts will come to nothing if localities are able to block affordable housing in the places where it’s most needed.

Biden’s latest housing plan also touts subsidies for affordable housing as well as policies to incentivize relaxed zoning rules. But some of these efforts will need to be enacted by Congress to become a reality. Other White House housing pledges, including universal housing vouchers and major funding for public housing, have hit a wall in Congress.

Unlike those proposals, lubricating the mechanisms to finance and construct manufactured homes is fully within the president’s power. That makes this a modest but achievable win.

“If the administration does everything that they talked about, well, then the manufactured housing stuff would be small,” Furth says. “But a lot of that requires Congress — which, you know, can’t rename a post office at this point.”

Why Manufactured Housing Is a Capital Magnet

Growing magnetism

Jorge Figueiredo, vice president of acquisitions and asset management with Capital Square 1031, said that, from an operational perspective, the sector has performed extremely well in the past few years. Occupancy and rent growth have improved due to consumer demand.

“People are seeing manufactured housing for what it is—the most affordable type of living there is in this country,” he concluded.

Figueiredo said the class was not well known a decade ago and there were only a few institutions investing. He noted that his company is a prime example of that dynamic evolving. The firm began investing in the niche only a few years ago, completing its first acquisition in June 2020.

“National institutions are realizing that the fundamentals in the sector create a stable environment, particularly in high-quality properties,” he said. Manufactured housing communities are sought-after investments due to shortage of available product and the sector’s historic stability and low operating costs.

Four Leaf Properties' Callaghan said there might not be enough stock available to support current investor appetite. Many newer buyers are looking at communities that would not be considered institutional-grade investments, such as an 80-home property in a secondary market. "Around 80 percent of the activity in manufactured housing fits that category," he said. "That's the product the big guys don't want."

Gooch believes new investors can have a positive impact, particularly when it comes to overcoming zoning barriers that many municipalities have put in place to limit new communities.

Midway Estates, Vero Beach, Fla. Image Courtesy of Capital Square 1031

"These are mini-cities, so it is important to have the capital needed to make sure a community is viable," she said. "Institutional investors are much more able to do that."

Callaghan wondered if the industry needed to experience the consolidation the sector is undergoing. "We need to get people to realize there are no more 300- to 400-home communities out there, we need to build them from scratch," he said.

Glass has been seeing many more prospective buyers than there were actual sellers. "There is a tremendous amount of capital chasing a limited amount of product," he said.

The most desirable subsector, for investors, is senior living communities. Demand is so great that buyers are now looking at smaller properties. "The darling of the manufactured housing space is senior living," said Glass. "When we list one of those assets, the demand is through the roof."

Demand Drivers

Could trailers be the new face of affordable housing?

Source: Virginia Mercury

Tacky trailers or the new face of affordable housing? That’s the debate policy-makers and advocates are having across Virginia as they work to figure out what role manufactured units should play in addressing the commonwealth’s affordable housing crisis.

So far the biggest challenge has been that no one knows exactly how many mobile homes exist in the state, where they are and what condition they are in. However, that uncertainty could come to an end if an obscure budget amendment survives the 2021 session of the General Assembly.

Counting them all

“I couldn’t tell you how many mobile home parks are in Virginia,” said Jonathan Knopf, executive director of the Manufactured Home Community Coalition of Virginia. “There is no record. We know how many units exist, but we don’t know if they are in parks or on single lots. They’re the largest source of unsubsidized affordable housing in the country, but it’s the one that we know the least about.”

To unravel the ambiguity surrounding mobile homes in the commonwealth, Del. Paul Krizek, D-Fairfax introduced a budget amendment to establish the Virginia Manufactured Home Park Registry. If it passes, the Department of Housing and Community Development will collect a registration and an annual $100 database maintenance fee from each mobile home park in the state by the end of the year. The $153,474 set aside in the amendment would pay for one full-time employee to manage the registry as well as the IT costs to set it up.

In a state where not a single locality even does trailer park licensing, a database with basic details could prove transformational. “Without this registry, it would take hundreds of hours of work to identify all of these parks and units via in-person visits and satellite imagery,” said Knopf. “This will help us to know which parks are at risk so we can prepare the advocacy community to step in should they come up for sale and need rescue.”

That risk isn’t hypothetical. Knopf first got involved with mobile homes in 2015 when hundreds of residents of Rudd’s Trailer Park on Richmond’s Southside faced eviction as a result of owners who allowed code violations to pile up until much of the park was condemned as a fire hazard.

“There were a lot of low-income, mostly Hispanic households that were left homeless with few resources to help them,” said Knopf. “We had no gameplan for helping these folks even though mobile homes are a fairly important piece of the affordable housing puzzle, especially in places like Northern Virginia and Richmond where prices are already high or rapidly increasing.”

Under pressure

Across the state, many larger trailer parks hide in plain sight behind the fast food chains and strip malls that characterize Virginia's neglected arterial roads and inner suburbs. That proximity to main corridors and plentiful amenities, however, is increasingly proving many mobile home parks' downfall.

"The biggest problem is that the land is so valuable," Krizek said. "These parks are a gold mine for someone who wants to come in and build a 20-story apartment complex. I understand the need for density, but it's sad when one of these communities goes away because they have been there for 20-30 years."

To try and protect two trailer parks on the chopping block in Fairfax, a group of housing advocates and community organizers has come together under the banner of the South County Task Force. Since the county's affordable housing strategic plan excludes mobile homes, they have had to lobby the district supervisors, the planning commission, and the developers themselves to try and preserve the parks or at least secure a one-to-one replacement guarantee for residents.

"This is another form of displacement driving people of color out of their communities so developers can make a lot of money," said Mary Paden — chair of the Fairfax NAACP's Fair & Affordable Housing Committee. "There's no place else for people to go in Fairfax. They'd have to move to another county and lose all the schools, clinics, access to transit and community services they have built relationships with."

Repair, replace, rezone?

Around Virginia's capital, affordable housing providers have taken a different tack. To preserve Bermuda Estates, project:HOMES recently purchased the 52-unit mobile home park in Chesterfield County. Through a combination of replacing decrepit trailers and making improvements to existing units' foundations, skirting and waterproofing, the Richmond-based housing nonprofit hopes to undo the stigma manufactured housing faces.

"Our vision is to keep all of our current residents in the park while improving the quality of their housing and keeping their costs relatively the same," said Zack Miller, project:HOMES' manager of housing innovation. "If done right, manufactured homes are a great place to live and not much different than the quality you can find in stick-build housing. We'd love to find some space to not just preserve these older communities but also to create some new parks over the coming years."

Building new mobile home parks, however, can be a near-impossible task under some local zoning laws, many of which have been rewritten over the last few decades to include lower densities, larger setbacks and street circulation requirements that make new parks cost-prohibitive.

To get around the new rules and develop a classic layout mobile home park necessitates a special-use permit — an onerous process involving a public review, the local planning commission and city council or the board of supervisors, none of which tend to be keen on new trailer parks.

Existing parks have been grandfathered in, but the updated zoning ordinances bar them from adding new homes lest the entire park be brought up to the new code.

“Localities don’t have to explicitly ban trailer parks,” Knopf said, “they can do that by omission. In Virginia, there aren’t any proactive zoning or land use codes to help preserve mobile home parks, let alone encourage the creation of new ones.”

Draft plans for a zoning update in Henrico don’t include a manufactured housing designation at all, increasing the odds the county’s last remaining park will get rezoned to make it much easier for the owner to redevelop the tract into apartments by-right.

Even the MH-1 designation that enabled the establishment of Bermuda Estates no longer exists in Chesterfield. A new M3 category in the county permits manufactured housing, but the willingness of local leaders to authorize additional trailer parks has so far gone untested.

Discrimination against mobile homes isn’t unique to Virginia according to Nolan Gray — a city planner and affiliated scholar with George Mason University’s Mercatus Center: “Historically we hate any low-income housing in America. Many places banned apartments, and most cities across America have no zoning that allows manufactured housing and if they do, they likely require some type of complex zoning waiver.”

In praise of trailer parks

The stigma surrounding manufactured housing began in the 1960s, when mobile homes were unregulated. The Department of Housing and Urban Development only released federal standards for manufactured housing in 1978, and many of the stereotypes around trailers result from the era before their enforcement.

Since then, both units' quality and safety have increased tremendously even if perceptions and nomenclature haven't caught up. "These homes haven't been mobile since the 1970s and only get moved from the factory to the plot," said Paden. "The reality is these homes don't even have wheels anymore."

While trailer parks may not get much love in popular culture, they offer many of suburbia's pluses without its often prohibitive price tags. "In many of these communities everyone has their own home, their own little yard, driveway and sometimes a community center or a pool," Krizek said. "They have all the amenities they need and it's affordable."

Today one of the drawbacks of living in a trailer park is that residents often don't own the land beneath their homes, but even that can be overcome with the right governance structures according to Paden. "If you subdivide the land and let residents own it, then they can get mortgages and build equity," she said. "If we solve that problem then we have a whole new layer of affordable housing in which mobile homes can serve as a stepping stone to home ownership for a lot of folks."

'There's a ton of demand for this housing'

In recent years the merits of mobile homes have not gone unnoticed, especially since the pandemic placed a premium on private living space. "Just in the time that we've been doing this over the last year or two the market for manufactured housing has exploded," Miller said. "The wait time on new units has gone from two months to six or eight months; material costs have gone up too."

The boom in the mobile home market is a sign that the lack of MH zoning is holding the market back, according to Gray with the Mercatus Center. "If you look at the fads of tiny homes or people living in shipping containers, they're all evidence there is an appetite for smaller houses and smaller living," he said. "There's a ton of demand for this housing that we have effectively made illegal."

The idea that manufactured housing could become a large scale solution to America's affordable housing crisis is not just a fantasy, it's an approach Gray first advanced in an essay entitled "Reclaiming 'Redneck' Urbanism: What Urban Planners can Learn from Trailer Parks." Their minimal setbacks, limited parking requirements, and tiny lot sizes allow mobile home parks to use less land than the suburbs and still achieve densities as high as the average block of apartments.

Incremental improvements

To expand the impact of manufactured housing in Virginia, advocates have a laundry list of technical tweaks and policy changes the General Assembly could advance. “We need to think of these parks in a nuanced way that gives residents more control, agency and security, but there are a lot of things that need to be done to make that happen,” Knopf said.

A first step came last year in the form of HB 334 — a bill Krizek introduced which guarantees trailer park residents 180 days’ notice if their park is going to be redeveloped as well as some money to help cover relocation expenses. Most trailers cost five to ten thousand dollars to move, but $3,000 for Northern Virginia residents and $2,000 for those in the rest of the state is still better than the nothing those forced to relocate would have received prior to the bill’s passage.

Within the next few years Knopf hopes to bring a resident ownership cooperative model to Virginia which would allow trailer park tenants to band together, purchase, and manage their communities themselves. Currently organizing tenants and financing the deals can prove huge hurdles, but that may not always be the case if Krizek gets his way.

“I would love to dedicate 10-20 percent of the state’s affordable housing trust fund toward mobile home parks,” he said. “The role of the state in this is to leverage some resources. We’re not talking about developing new mobile home parks, but we should be.”

For now, affordable housing advocates like Miller are focused on making sure Krizek’s budget amendment to establish a mobile home park registry makes it out of the General Assembly in one piece: “We have seen really exciting examples of nonprofits being able to step in to offer support or buy parks outright to preserve them here in Virginia, but we can’t do that if we don’t know where the parks are and which are under threat.”

Administrative Plan for Housing Choice Voucher Program, Fairfax County Virginia Redevelopment and Housing Authority

PART VI: MANUFACTURED HOMES [24 CFR 982.620 through 982.624] 15-VI.A.

OVERVIEW

A manufactured home is a manufactured structure that is: transportable in one or more parts, built on a permanent chassis, and designed for use as a principal place of residence. HCV assisted families may occupy manufactured homes in two different ways.

(1) A family can choose to rent a manufactured home already installed on a space and the FCRHA must permit it. In this instance program rules are the same as when a family rents any Housing Choice Voucher Administrative Plan Chapter 15. Special Housing Types 15-11 Department of Housing and Community Development, Fairfax County, Virginia other residential housing, except that there are special HQS requirements as provided in 15-VI.D below.

(2) HUD also permits an otherwise eligible family that owns a manufactured home to rent a space for the manufactured home and receive HCV assistance with the rent for the space. The FCRHA may, but is not required to, provide assistance for such families.

Chapter 15

15-VII.D. ELIGIBLE UNITS [24 CFR 982.628]

In order for a unit to be eligible, the FCRHA must determine that the unit satisfies all of the following requirements:

The unit must meet HUD's "eligible housing" requirements. The unit may not be any of the following:

A public housing or Indian housing unit

A unit receiving Section 8 project-based assistance;

A nursing home, board and care home, or facility providing continual psychiatric, medical or nursing services;

A college or other school dormitory;

On the grounds of penal, reformatory, medical, mental, or similar public or private institutions.

The unit must be under construction or already exist at the time the family enters into the contract of sale.

The unit must be a one-unit property or a single dwelling unit in a cooperative or condominium.

The unit must have been inspected by the FCRHA and by an independent inspector designated by the family.

The unit must meet Housing Quality Standards

For a unit where the family will not own fee title to the real property (such as a manufactured home), the home must have a permanent foundation and the family must have the right to occupy the site for at least 40 years.

For FCRHA-owned units all of the following conditions must be satisfied:

The FCRHA informs the family, both orally and in writing, that the family has the right to purchase any eligible unit and a FCRHA-owned unit is freely selected by the family without FCRHA pressure or steering;

The unit is not ineligible housing;

The FCRHA obtains the services of an independent agency to inspect the unit for compliance with HQS, review the independent inspection report, review the contract of sale, determine the reasonableness of the sales price and any FCRHA provided financing.

All of these actions must be completed in accordance with program requirements. The FCRHA must not approve the unit if the FCRHA has been informed that the seller is debarred, suspended, or subject to a limited denial of participation.

Mobile home community residents demand more rights and protections

Mobile home residents and advocates speak out for more support at a Nov. 15 press event.

Source: OnTheMove.com

Residents from Ray's Mobile Home Colony and Engleside Trailer Park on Richmond Highway gathered at a Nov. 15 press event to express concern about their adjacent properties' new ownership by an out-of-state real estate investment firm.

Pacific Current Partners, a California-based owner and operator of manufactured housing and RV communities, officially acquired the mobile home parks Tuesday after paying $24.2 million to Ahora Company LC and Rapido Company LC — both owned by Alexandria-based attorney James Turner. Residents had been informed about the sale of the parks in mid-September and had a 60-day window of time to make a counteroffer; however, despite their success in joining with advocacy group Tenants and Workers United (TWU) to secure Habitat for Humanity as a potential buyer, they were unable to get the necessary financing from Fairfax County.

Now, residents are worried that the mobile home parks' new owner will raise rents and make it financially impossible for them to stay there. They also are left wondering if the new owner's long-term plans include selling the parks to developers.

One 14-year resident of the community, speaking in his native Spanish, said he's enjoyed living there with his family and proudly considers it home. "Just to know that in this property, there could be an increase in our rent … it's a place where we wouldn't want that to happen," he said.

A mobile home resident shares his pride at living in the community for the past 14 years.

Source: OnTheMove.com

Another resident by the name of Hector explained how he and his fellow homeowners were taken by surprise at Turner's decision to sell the parks and not consider a resident-led counteroffer.

Hector also expressed frustration at the county for an alleged lack of transparency, making decisions "behind closed doors" and leaving families "out of the process."

"Fairfax County had offered that they were going to support this community; they even came to this community, but at the end of the day, they said that they weren't able to raise the funds," said Hector. "Therefore, they couldn't help us, and to know that they haven't been transparent with the process … that's something we're disappointed [about] with Fairfax County."

According to Marianela Reynado, a community organizer with TWU, residents of the mobile home community met Oct. 5 with Mount Vernon District Supervisor Dan Storck and Tom Fleetwood, director of the Fairfax County Department of Housing and Community Development, to discuss the impending sale and potential counteroffer. However, following a closed session of the Fairfax County Board of Supervisors (BOS), the residents were told that nothing could be done.

In a Nov. 16 call, Storck said he and county staff had spoken or met multiple times with TWU and other stakeholders over the past months and did everything in their power to protect homeowners' interests; however, he had also made it clear to residents that it would be very difficult to prevent the property's sale to Pacific Current Partners given the organization's "top-dollar" cash offer to Turner, current limitations in state law, and Turner's declining to consider other offers.

Storck explained that the BOS met in closed session about the matter because business-related discussions about property assessments and potential county purchases can't be discussed in public.

Credit: Tenants and Workers United

Source: OnTheMove.com

"We made a good faith effort to put together financing … but in the end, two things made this incredibly difficult to do – one was the big-dollar amount and the other was having less than 60 days to do it," said Storck, noting it took several weeks to start pulling the necessary information together.

He added that county staff spoke or met with Pacific Current Partners on several occasions and received assurances from them that they are a "buy and hold operator" with no interest in flipping the homes or redevelopment. The new owner told both county staff and mobile home community residents that they would make upgrades and investments in the property. While they wouldn't commit to limiting future rent increases, they did indicate that any increases would be on a comparable level to the previous owner and wouldn't take place until at least next year.

"We understand the importance of Ray's-Engleside as an affordable, supportive housing community," wrote Storck in a recent update on the sale. "Fairfax County and I are determined to continue to work with and support the residents of Ray's-Engleside both during this ownership transition and for years to come."

Advocates for the mobile home community are hoping to secure more legal protections for homeowners at the state level. According to Delegate Paul Krizek's office, Krizek has sponsored or supported several policy changes benefiting mobile homeowners. This past session, he passed HB 1065, which created a stakeholder workgroup to develop a sample manufactured home park model lease. The workgroup has convened twice so far, and Krizek plans to introduce a bill next session based on the workgroup's recommendation, his staff said. Also in 2022, he passed budget language for the creation of the model lease by the Department of Housing and Community Development and ensured that it would be available in at least two languages: English and Spanish.

Two years ago, Krizek passed HB 334, which requires prior notice to residents in advance of the sale of their mobile home parks to a developer and $3,500 in moving expenses from the seller for residents in planning district 8, and $2,500 in the rest of the Commonwealth.

Affordable housing advocates view the challenges facing mobile home communities as a racial justice issue since most tenants are low-income Latino immigrants.

“Because Fairfax County has only eight mobile home parks, every sale threatens what is already very little affordable housing opportunities for low-income residents,” said Larisa Zehr, an attorney from Legal Aid Justice Center.

Marianela Reynado, a community organizer with TWU, discusses the mobile home community's concerns.

Source: OnTheMove.com

Zehr said that state and local policies give mobile home residents little recourse for preventing park land from being sold from under their feet. When competing with out-of-state investment companies with significant resources, the short window of time (60 days) under state law in which owners are required to give notice to residents about an offer, the fact that owners aren’t required to accept a tenant counteroffer and that residents don’t have right of first refusal, all make it difficult for residents to make an acceptable offer, she said.

This situation could be rectified if Fairfax County dedicated funding for purchasing a mobile home park prior to it being put up for sale or to buy a park before it’s offered to an investor, said Zehr.

Mary Paden, chair of the South County Task Force — which together with Good Shepherd Catholic Church’s Hispanic Ministry has played an active role in supporting affordable housing and local mobile home residents — agreed that the county should take proactive steps to preserve the remaining mobile home parks, including by purchasing them in advance. However, she acknowledged that the large cash offer made by Pacific Current Partners — reportedly nearly double the amount at which the park lands had been assessed by Fairfax County — would have made it challenging for county leaders to put up the necessary funds.

Nearly a year ago, the county agreed to finance a much smaller counteroffer made by TWU and CFH for the Harmony Place Trailer Park in Hybla Valley; however, in the end, the owner also opted to sell to a private buyer, according to Paden.

Now, Paden is keeping a watchful eye on the county’s Site-Specific Plan Amendment (SSPA) process. In January 2021, the Board of Supervisors put on hold a plan amendment from a developer who had proposed consolidating the property from Ray’s and Engleside mobile home parks with land from Bestway, the former Holly, Woods and Vines, and some adjacent commercial properties. The plan amendment was deferred for consideration until the county’s Manufactured Housing Task Force could finish making recommendations to the Board on how to protect manufactured homes — the county’s new term for homes that are owned by occupants on land rented from a separate entity.

Now that the task force has presented its recommendations to the BOS, community engagement on a countywide manufactured housing policy amendment is expected to begin in early 2023, according to Fairfax County's Department of Planning and Development. Any resulting changes in county policy on manufactured housing will need to be considered when assessing the deferred plan amendment affecting Ray's and Engleside, said Planning Division Director Leanna O'Donnell.

Richmond Highway will be closer to the mobile homes following the highway expansion project.

Source: OnTheMove.com

Another factor impacting the Ray's and Engleside communities is the impending Richmond Highway expansion. According to the Virginia Department of Transportation's plans, the new roadway and cycle track/sidewalk will be located 54 feet closer to residents' homes than at present, and 14 structures will need to be removed.

For now, residents of Ray's and Engleside hope to meet with their new landlord to find out what is in store for their community. They also plan to keep pressuring county and state lawmakers for more rights and protections, including more than just 60 days advance notice of an offer to purchase park land and more processes to better protect homeowners.

“The people united won't ever be defeated,” chanted homeowners at the end of the Nov. 15 event.

As affordable housing crisis endures, manufactured homes could be part of the solution

In rural Florida, a new development could offer one solution to the nation's affordable housing crisis: a built-to-rent community populated with manufactured homes.

ERC Communities, led by Jerry Ellenburg, is about to begin horizontal construction on a 60-unit manufactured housing project in Zephryhills, the small city 30 miles northeast of Tampa best known for its eponymous bottled water. Ellenburg's model is a twist on traditional manufactured housing developments; typically, occupants of those developments own their homes but pay rent to the landlord on a ground lease. (And don't call it a trailer park; the terms "trailer" and "mobile home" haven't been used to describe manufactured housing since the mid-1970s, when federal standards for construction of the homes were established.)

"These people are going to be paying in the mid-$1,700s [per month] for a three-bedroom, two-bathroom home that's just short of 1,400 square feet," Ellenburg told The Business Journals. "Compare that to a home or garden-style apartment — that would be way into the $2,000s."

Source: The Business Journals

Rising interest rates have made home ownership less attainable, flooding the rental market with tenants who want more space but can't afford to purchase a single-family home. The median sale price of a home in the U.S. was $428,006 in June — up 11% from the previous June, according to Redfin.

At the same time, rents have never been higher: the median monthly asking rent in the U.S. surpassed $2,000 for the first time in May, according to Redfin. By comparison, the average sales price of a manufactured home was $128,000 in February, according to U.S. Census data released in early July.

But even with rents and homeownership costs skyrocketing, manufactured housing has "fallen outside of the consumer's radar" in some markets, said Norm Sangalang, senior vice president with CBRE Group Inc.'s national manufactured housing and RV resorts specialty practice.

"This is probably one of the more natural, organic types of attainable housing," said Sangalang, who is based in San Diego.

There are few people who are as familiar with the traditional model of manufactured housing developments as Ellenburg, who collected lot rent from 26,000 households at the peak of his park ownership from 1992 to 1997. He created ERC Communities specifically for built-to-rent single-family communities — and nearly walked away from the Zephyrhills property when he learned it was zoned for manufactured housing.

"I said, 'We can't buy the land,' and that 'Why not?' prompted this complete transition to this model," he said.

Now, with housing and rental prices on the rise, he sees an opportunity for up to 5,000 units in the next five years. The Zephyrhills development has doubled in size before beginning construction, as he bought an adjacent property to allow for an additional 58 units.He and his partners are targeting properties on the periphery of growing metros, particularly in the Southeast, with newfound affordability challenges. ERC estimates its rents will be 25% to 35% lower than apartments or other rental homes.

Source: The Business Journals

"The land has to be affordable, and it has to be free of entitlement resistance," he said. "Otherwise, we’re not going to mess around with it."

Sangalang, the CBRE executive, points out that manufactured homes are limited to communities. In New Mexico and Texas, he said, the units are commonly placed on single-family lots. He sees the homes, particularly in traditional lot-lease models, as a sweet spot between home ownership and renting.

"It’s an in-between," he said, "and a good value for what you're getting."

It's also a good value, Ellenburg says, for investors. ERC recently kicked off a Regulation A capital raise that allows investors to participate with as little as $750.

"I'm a yield guy," he said. "That's where I live."

The Role of Manufactured Housing in Increasing the Supply of Affordable Housing

The Role of Manufactured Housing

The US housing market is facing a shortage of millions of homes, an outcome that has pushed homes out of reach for most low- and middle-income households. The housing supply shortage encompasses single-family homes and multifamily properties and owner-occupied and rental housing. There is no single reason new housing production remains low. Broadly speaking, the supply shortage has five main causes: local and state zoning restrictions that favor detached single-family construction1; stringent building codes that increase construction costs; chronic labor shortages in the construction sector; the high costs of building materials; and financing difficulties for affordable options, such as manufactured homes, accessory dwelling units, and home preservation. These issues are deeply structural and multipronged, making it difficult to identify and develop centralized solutions that apply nationwide (Kaul, Goodman, and Neal 2021).

Because manufactured housing is inherently low-cost housing, it could be a part of the solution to the affordability crisis. Manufactured homes cost significantly less than site-built housing, and the quality and appeal of manufactured homes built to US Department of Housing and Urban Development (HUD) standards has improved drastically. Yet, annual shipments of manufactured homes remain low by historical standards. In this report, we discuss the role of manufactured housing in prior decades, describe its current state, and outline the role it can play in alleviating the supply shortage. We begin by quantifying the nationwide supply crisis and discuss some of the actions taken so far. We then explain key reasons manufactured housing can be a part of the solution, specifically discussing product quality improvements, shifts in consumer attitudes toward and rising demand for manufactured housing, increased production capacity, and better affordability relative to site-built homes.

Financing difficulty for affordable options such as manufactured homes, preservation, and accessory dwelling units is well documented, but financing's role in exacerbating the supply crisis is often underappreciated (Goodman, Kaul, and Neal 2022). In this report, we discuss financing barriers that adversely affect credit availability for manufactured homes and provide recommendations to improve access to credit, especially for chattel lending. We propose that the government-sponsored enterprises (GSEs) explore pilot programs to acquire chattel loans and lay off credit risk to private investors. We also offer suggestions to improve existing GSE and Federal Housing Administration (FHA) manufactured home lending programs by streamlining the process and reducing costs. Toward the end of the report, we provide a high-level estimate of how many additional units of manufactured housing could be added to the housing stock in the coming years, quantifying the role it can play in easing the supply crisis.

Quantifying the Housing Supply Shortage

Several studies have quantified the housing supply shortage. Khater, Kiefer, and Yanamandra (2021) estimate the supply shortage by assuming every household needs a place to live and some level of vacancy is necessary in a well-functioning housing market. They construct a target number of households and a target vacancy rate and estimate that it would take 3.8 million additional housing units to meet current demand. The National Association of Realtors estimates that a slower annual pace of residential completions from 2001 to 2020 relative to the annual pace from 1968 to 2000 has resulted in at least 5.5 million fewer units being built from 2001 to 2020 (Rosen et al. 2021).

A third way to quantify the shortage is to look at population-adjusted housing construction: singlefamily units plus multifamily units plus manufactured housing built per 1,000 people. In 2021, population-adjusted housing construction stood at 5.1 units per 1,000 people (1.69 million units produced, 331 million estimated population) (figure 1). Although this number is up from the level just after the financial crisis, it is considerably lower than the 7.8 units, on average, from 1959 to 2006. Figure 1 also shows that single-family units (one-to-four-family units) and manufactured home shipments are recovering slowly and running well below historical levels. Multifamily units, though lower than in the 1960s, 1970s, and early 1980s, are close to their highest level since the passage of the 1986 Tax Act, which eliminated some of the favorable tax breaks for investment properties.

Source: Urban Institute

The obvious solution to the supply crisis is to build more single-family, multifamily, and manufactured housing. More multifamily construction would be the most efficient way to alleviate shortages in urban areas close to employment and transit centers, where land is scarce and the affordability crisis particularly acute. But more multifamily construction needs to be accompanied by increasing the density of new single-family units and pivoting to lower-cost alternatives to site-built housing, such as manufactured homes. This is likely to work better in suburban areas and towns with more buildable land. During the COVID-19 pandemic, even smaller cities, towns, and rural areas have experienced rapid home price increases and dwindling inventory levels because of out-migration from large cities.

Manufactured homes can also mitigate the impact of the aging housing stock. More than half the US housing stock of 140 million units is more than 42 years old, and more than a quarter is more than 62 years old. Although home preservation plays a crucial role in extending useful life, manufactured homes could be a viable solution for very old or unsafe homes that are uneconomical to repair. Jurisdictions with a large stock of such homes could improve housing quality for their residents through zoning reforms that permit manufactured housing.

Steps have been taken to address some of these issues, such as restrictive zoning regulations.2 Other issues, such as the high costs of materials and the construction labor shortage, are rooted in the structure of the economy and are dictated by market forces. The Biden administration has unveiled plans that the White House estimates would create or preserve 100,000 units over the next three years3 and help close the housing supply shortfall in five years.4 Among other actions, these plans call for supporting the permitting, production, and financing of manufactured housing.

Manufactured Housing Can Be Part of the Solution to the Supply Problem

Figure 2 shows that between 1977 and 1993, the number of manufactured housing units shipped fluctuated between 200,000 and 300,000, averaging 240,000 units per year. From 1994 to 2000, the number of manufactured housing units increased to more than 300,000 per year, an unsustainable level caused by overproduction and loosening financing standards, which resulted in credit being extended to borrowers who could not afford the homes.

Source: Urban Institute

As foreclosures and repossessions increased in 1999, new and used manufactured housing units flooded the market. Tighter credit standards for new borrowers further decreased demand, and production crashed, decreasing to an average of 170,000 units per year from 2000 to 2005. The decline in shipments was followed by the nationwide housing bubble and the Great Recession. Shipments continued to decline, reaching a low of about 50,000 units per year from 2009 to 2012, followed by a gradual recovery. In 2021, nearly 106,000 units shipped, double the 2009–12 level. And 2022 has started off strong: January to April shipments are 12 percent higher compared with same period in 2021. Despite these increases, manufactured home shipments as a share of new single-family production remains low. This share ranged from 15 percent to 27 percent between 1977 and 1995 but has averaged only about 9 percent in the past decade.

The number of manufactured homes being shipped remains low because of zoning and financing constraints. Zoning constraints affect manufactured homes that are in communities and those on privately owned land (often owned by the person who owns the manufactured home or a family member). In many jurisdictions, zoning regulations outright ban manufactured housing, whether in manufactured housing communities or on privately owned lots. According to a recent Freddie Mac report, more than a million people living in jurisdictions with stringent manufactured housing zoning regulations are mortgage ready and would be able to achieve homeownership if zoning were less stringent (Aw, Brown, and Yea, n.d.). Even when permitted, manufactured homes often face additional restrictions, such as minimum lot sizes in excess of what is required for site-built homes or special permitting, adding costs and delays and effectively prohibiting their use. As a result, it has become difficult to build new manufactured housing communities (few have been built since 2000) or, in many localities, even install a new manufactured housing unit on a privately owned lot.

Consumer Demand for Manufactured Housing Is Rising

The steady increase in the number of manufactured housing units shipped since 2010 indicates that demand for manufactured housing remains healthy. Further, as prices for site-built homes rise beyond what middle-income families can afford, manufactured housing could play an increasingly larger role in the market. As discussed later, the quality of newly built manufactured homes has improved substantially, owing to HUD code updates and the industry’s focus on improving quality.

The 106,000 units shipped in 2021 represented a 12 percent increase from 2020 (94,000 units). Per filings of publicly traded manufactured home builders, the industry experienced strong demand growth in 2021 but could not keep production up (table 1). As a result, the industry had a substantial order backlog at the end of 2021. From these public filings, we estimate that the total industry-wide backlog was 47,400 units at the end of 2021.

Source: Urban Institute

To keep up with rising demand, builders have added new capacity. In 2011, 122 plants produced manufactured homes; as of January 2022, the number had increased to 140 plants, according to data from the Manufactured Housing Institute (figure 3). More factories are coming online in the coming months as builders try to work through backlog and cater to higher demand.

Source: Urban Institute

The Quality of Manufactured Housing Has Improved Substantially

In the past, manufactured housing was more susceptible to damage from natural disasters. Over time, the HUD Code has mandated changes that make modern manufactured homes significantly more resilient to fire and natural disasters than pre-HUD-Code housing. Before 1977, manufactured housing was unregulated at the federal level. HUD implemented the first federal construction standards for all manufactured homes produced after June 15, 1976, as mandated by the 1974 Manufactured Housing Construction and Safety Standards Act (1974 Act). The act granted HUD the authority to establish a single federal construction standard that preempts state and local codes.6 These requirements regulate energy efficiency, durability, fire safety, transportability, and material and construction quality. Establishing a uniform code and standards ensured a minimum level of quality and allowed for more standardization, decreasing manufacturing costs.

The improved standards after 1976 also helped distinguish between the terms “mobile homes” and “manufactured homes,” which were often used interchangeably before the HUD Code. The Housing Act of 1980 mandated the term “manufactured” be used in place of “mobile” in all federal laws and literature that referenced homes built after 1976. The term “mobile home” often carried stigma surrounding product quality, as homes built in 1976 or earlier often resembled campers or trailers that could be easily moved if needed. In contrast, “manufactured homes” built after 1976 saw major improvements in design, quality of material, and construction standards inside climate-controlled building facilities. These upgraded standards allowed the sizes of these homes to expand significantly as homebuyers were given the option to choose between single-section, double-section, and triple-section designs, with larger homes more likely to be placed on a permanent foundation similar to their site-built counterparts.

The damage caused by natural disasters, including Hurricane Hugo in 1989, Hurricane Andrew in 1992, and the Northridge earthquake in 1994, prompted HUD to collect more data on how disasters affect manufactured housing. After conducting additional studies on wind safety, construction methods, anchoring systems, condensation control, and energy conservation, HUD updated its code in 1994 to improve disaster resiliency. The Manufactured Housing Improvement Act of 2000 resulted in further quality improvements (Committee on Banking 2000). The act gave HUD the authority to establish installation standards that would become nationwide minimum standards.7 These standards apply to work performed on site, such as foundation, anchorage, close-up work, and postplacement connections of appliances and utility systems. These standards complemented the construction and safety standards established by the 1974 Act that must be met before the home is shipped from the production facility. Manufacturers are required to self-certify that their manufactured homes conform with the federal Manufactured Home Construction and Safety Standards established by the 1974 Act.

Damage assessments of homes affected by Hurricane Charley in 2004 concluded that manufactured homes built to the 1994 standards performed significantly better than homes built before 1994 (Goswami 2005). Research also shows that when anchored properly, manufactured homes built after 1994 were at least as safe as site-built homes during tornadoes and hurricanes. Quality improvements in construction and installation practices have increased durability so that the life expectancy of factory-built housing is increasingly comparable with that of site-built housing.8

American Housing Survey (AHS) data provide strong empirical evidence that manufactured housing quality has improved. Manufactured homes built after the 1974 and 1994 code updates were built to increasingly higher standards compared with homes built in previous periods. Table 2 shows the share of manufactured and site-built homes built in a given period that were classified “inadequate” in the next decade. This allows us to control for home age. The homes’ conditions are defined by the AHS physical adequacy rating, which considers more than 14 criteria, including plumbing and water facilities, electric and heating equipment, and structural conditions. The inadequacy share is the ratio of the number of homes classified inadequate to the number homes built in the period.

Of the manufactured homes built between 1970 and 1979, 9.3 percent were classified inadequate by the American Housing Survey in 1989. This share dropped substantially to 4.2 percent for homes built between 1980 and 1989 and surveyed in 1999, likely reflecting the full impact of the 1976 code improvements. The subsequent two periods show continued quality improvement, with the inadequacy ratio falling to 2.4 percent for homes built between 1990 and 1999 and to 2.2 percent for homes built between 2000 and 2004 and surveyed in 2013.9 While the inadequacy share for site-built homes has also come down, the gap between the two has narrowed significantly.

Source: Urban Institute

In terms of energy efficiency, around 25.6 percent of manufactured homes shipped in 2021 were Energy Star certified, according to Manufactured Housing Institute data. Energy Star–certified manufactured homes are designed, manufactured, and installed to meet energy efficiency requirements set by the US Environmental Protection Agency.10 The energy-efficient features of these homes help lower utility bills. Only 7.9 percent of single-family site-built homes completed in 2020 were Energy Star certified. A major reason manufactured homes consume less energy than site-built homes is because they are smaller. Recently finalized changes to federal energy efficiency standards could make manufactured homes even more energy efficient. In May 2022, the US Department of Energy adopted11 a new tiered approach where lower-cost homes would be subject to less stringent efficiency standards to keep prices relatively affordable.

Manufactured Housing Is More Affordable Than Site-Built Housing

Manufactured housing is one of the most affordable types of housing available (table 3). The average sales price for manufactured homes in 2021 was $108,100, excluding land, according to the US Census Bureau's Survey of Construction and its Manufactured Housing Survey. As of January 2022, the average sales price had increased to $122,500, reflecting strong consumer demand, high inflation, and continued labor shortages. In comparison, the average price of new site-built homes in 2021, excluding land, was $365,900. 12 In 2021, the average size of newly constructed site-built homes was 2,544 square feet compared with 1,497 square feet for newly built manufactured homes.

Controlling for size, prices of manufactured homes are half the prices of their site-built counterparts, on average. In 2021, the average price, excluding land, per square foot for site-built homes was $144 compared with only $72 for manufactured homes. The difference can be attributed largely to factory-built construction, which is less labor intensive and more automated. Factory-built construction is also less prone to weather-related delays and waste, which speeds up the process and reduces costs.

The affordability advantage of manufactured housing creates opportunities for households with low incomes to become homeowners. In 2021, the median income for manufactured home buyers stood at $57,000 compared with $93,000 for site-built borrowers, according to Home Mortgage Disclosure Act data. More than 70 percent of manufactured home borrowers had annual incomes under $75,000 in 2021 compared with only 36 percent of borrowers who purchased site-built homes in 2021.

Source: Urban Institute

The share of newly built site-built homes that is affordable has declined sharply since 2014 (table 4). The share of new site-built homes priced under $250,000 (excluding land value) stood at 58.0 percent in 2014. By 2021, this share had fallen to 25.3 percent. The market for new site-built homes priced below $125,000 was nonexistent in 2021, while the market for homes priced between $125,000 and $249,000 has shrunk considerably since 2014. For low-income households looking to buy homes priced under $250,000, the site-built market offers limited opportunity.

Source: Urban Institute

Source: Urban Institute

The manufactured housing market has also seen significant price increases, given rising labor and materials costs, as well as strong demand and high inflation during the pandemic. Despite this, the share of new manufactured homes priced below $125,000 was 67.3 percent of new units shipped in 2021 (table 5). Note that the share of manufactured homes priced between $125,000 and $249,999 has jumped from 4.0 percent in 2014 to 32.1 percent in 2021. This suggests that manufactured housing has the potential to serve the needs of households priced out of site-built housing. As affordability pressures intensify further, we would expect the share of new manufactured homes priced between $125,000 and $250,000 to keep rising.

Manufactured Housing Is Becoming More Appealing to Younger Households

Better affordability makes manufactured housing especially attractive to younger households, firsttime homebuyers, and millennials struggling to navigate a tight market. Compared with site-built home buyers, manufactured housing buyers have historically skewed older. Although this is still true, data show that the gap has narrowed (table 6). The share of manufactured home borrowers younger than 45 increased 3.6 percentage points from 52.1 percent in 2018 to 55.7 percent in 2021. The same share for site-built housing increased by 1.3 percentage points from 62.4 percent to 63.7 percent over the same period. With site-built housing becoming more expensive and out of reach for middle-class families, more younger households may be opting for manufactured housing. This could also be a sign that historical negative perceptions13 surrounding manufactured housing may be changing.

Source: Urban Institute

Manufactured homes can be built in various sizes, from single-section units to multisection units. A single-section home can typically range from 700 to 1,400 square feet and is easily transported to the construction site. Multisection units are essentially single-section units that are joined on site but transported separately because of size constraints. Demand for multisection manufactured homes has increased since 2011. In 2011, 26,327 multisection manufactured homes were shipped, or 51.0 percent of total shipments. In 2021, this number rose to 61,017 units and accounted for 57.7 percent of all units shipped. This is consistent with the data presented earlier—that is, a decreasing median manufactured home buyer age, increasing square footage, 14 and a rising share of homes priced between $125,000 and $250,000. These findings suggest that younger households and families looking for space are showing greater willingness to buy manufactured housing than was the case historically.

Source: Urban Institute

Recession Proof

Five Reasons Why Mobile Home Park Investing Is Recession And Inflation Resistant

Concerns of an upcoming recession have sparked a renewed interest in commercial real estate investing as a viable alternative to the uncertainties of the stock market and other traditional investment vehicles. However, all real estate investments are not created equal. In fact, mobile home parks have historically delivered outsized returns, even in the worst of economic times. Here are five reasons why investing in mobile home parks is recession and inflation resistant.

1. Mobile home parks generally perform well in both strong and weak economic environments.

According to Green Street Advisors, a global real estate research firm, between 2004 and 2018, operating income from mobile home parks rose by 87%. This income never declined, even during the Great Recession of 2008.

According to Apartment Guide's annual rent report, rent prices for a one-bedroom apartment now top $1,600 per month. Contrast that with mobile home park lot rents, that average near $300 per month, and mobile home living becomes a uniquely affordable housing option.

In a strong economy, increases in housing prices, like those we've seen over the past two years, make it even harder for low-wage workers to afford housing. In a weak economy, job loss and wage reduction mean that more people need access to affordable housing. Thus, mobile home parks can do well no matter which way the economic wind is blowing.

2. The demand for affordable housing is unprecedented.

Think about the watchwords we've seen in the real estate press over the last several years and how mobile home parks can help to eliminate their effects.

• Affordability: Affordable housing has become a primary concern for municipal, state and national governments. Mobile homes can be built for less than half the price of site-built housing.

• Low inventory: Unlike single-family homes and apartment complexes, mobile homes can be manufactured in a fraction of the time of fixed construction, allowing them to keep better pace with demand.

• Construction and material shortages: While low home inventory is driven in part by overwhelming demand, it is also affected by a shortage of skilled workers and supply chain interruptions that keep building projects from being completed. These can be circumvented through the faster, more efficient processes associated with mobile home manufacturing. When building a manufactured home, the waste created is typically small enough to fit into one trash can.

3. Mobile home park residents tend to stay put longer.

When mobile home park residents own their own homes, they tend to stay put longer. Over 90% of mobile homes are never moved after they are first installed. This is primarily due to the costs associated with moving the home (approximately $6,000). Also, around one-third of mobile home park residents are retired and not inclined to move as frequently as younger residents. These retired residents add to the economic stability of mobile home park investments with their fixed incomes (Social Security, pensions or SSI), and they typically do not experience disruptions in their income that could cause them to vacate their home.

4. Mobile home parks can operate with higher profit margins.

Because mobile home parks typically operate on high margins (expense ratios around 30%-40%), there is more room to recover in the event of an economic downturn.

As rents rise to keep up with inflation, the principal balance on loans stay the same or are reduced. This means that the lower-valued dollar makes the debt less valuable, at the same time the mobile home park asset itself increases in value.

5. Mobile home parks can be acquired for higher capitalization rates.

Given the highly fragmented nature of the asset class (less competition) and the stigma associated, mobile home parks can generally be acquired for higher capitalization rates (net income/purchase price) on the income they produce. Higher cap rates mean better returns for investors.

Is mobile home park investing right for you?

Investing in mobile home parks can be naturally illiquid, so pulling out cash after making an investment is not easy like selling a stock. Also, mobile home parks can be management-intensive; it is important to ensure that you have the right operator behind the scenes with experience managing this type of commercial real estate.

Conclusion

These are the five reasons why I believe mobile home park investing is recession and inflation resistant. Top these with the fact that strict zoning laws make mobile home parks nearly impossible to build today and the asset class starts to shine in comparison to other investment options. Mobile home parks can offer more consistent upside, better long-term profit potential and most importantly: good downside protection. With greater stability, higher margins and lower expenses, mobile home parks offer a uniquely recession- and inflation-resistant investment alternative.

Are Manufactured Homes a Good Investment in 2023?

Experts take a deep dive into the historically stable assets class, and offer their predictions

The manufactured housing industry has been on an upward trajectory in the past decade. Drawn by the strong and stable income manufactured homes communities, an increasing number of institutional investors and owner-operators have been diving into the segment. And during periods of economic uncertainty, this asset type is very resilient because it provides a much-needed affordable housing option.

“Mobile home parks are historically a recession-proof asset due to the shortage of affordable housing across the country,” Kevan Enger, partner & manufactured housing director at Capstone Cos., told Multi-Housing News. “It does well in good times and even better in bad times when there is more demand for cheaper housing options.”

And, when times get rough, affordability is key to success, according to HARRI5 Founder & Principal Derek Harris. The national commercial real estate brokerage company specializes in manufactured housing communities and has facilitated more than $1.8 billion in mobile home and RV communities since 2015. Last year, the company brokered $600 million in MHC sales and escrows involving 30 properties across the country and 7,200 sites.

In 2022, investors compressed cap rates to levels that would have been deemed “laughable” 12-to-18 months earlier, according to Don Vedeen, vice president for national manufactured housing investment sales with Northmarq. But rapidly increasing interest rates threw a wrench into investment volume in the second half of the year.

“Many investors put a full stop on acquisitions, which has slowed the market down,” Vedeen said.

Trends in the MHC industry

The first half of the year will be challenging for investors because of the lack of alignment between buyers and sellers, Harris believes. The bid-ask spread is still wide, with many investors adopting a wait-and-see mode.

“Buyers are looking at the higher interest rates as an opportunity to buy properties at a higher cap rate or lower valuation,” said Vedeen. “The problem is that owners have grown accustomed to having brokers ‘wow’ them with inflated values and that isn’t happening right now. Buyers are looking for a deal, while sellers are holding onto hope of a large sale price… I see this as a waiting game to see who gives in first—buyers or sellers,” he added.

One trend that is emerging as a result of the volatile debt market is owners looking to develop and infill their existing parks vs. closing new deals. Havenpark Communities, an operator and developer of manufactured home communities, for example, added 870 affordable homes across its portfolio last year, and intends to install another 800 in 2023.

“(Havenpark) is committed to being part of the solution to America’s acute housing affordability challenge by continuing to bring new housing supply to the communities we serve,” said Havenpark Communities CEO & Co-Founder Robbie Pratt, in a prepared statement.

In November, 65 new lots were added to Havenpark’s West Branch Village Community in Iowa City, Iowa. The new homes included two- and three-bedroom layouts, with prices starting at $79,900.

U.S. Census Bureau data shows that, as of May 2022, more than 50,000 manufactured homes were shipped across the country, marking a 31 percent year-over-year increase.

“Prefabricated construction, which includes modular, manufactured, and mobile homes, has for years been used in lower-budget housing development,” said Doug Ressler, manager of business intelligence, Yardi Matrix. “But with rising interest rates and higher prices for materials such as lumber, the process is starting to get more of a toehold in the mainstream apartment market,.” he continued.

As demand climb, so do prices. Census data also shows that the average sale price of a manufactured home in the U.S. in May 2022 was $124,900—up from $85,900 in May 2020. Despite the price increase, manufactured homes still remain a significantly more affordable option than owning an apartment or a single-family home. That spread is constantly fueling demand for the asset type.

Some city officials are looking at more of these projects as a way to mitigate the U.S.'s housing shortage as financing traditional housing development becomes increasingly difficult, Ressler noted.

"There needs to be more regulation allowing manufactured housing to increase its supply," Vedeen also pointed out.

Northmarq has been involved in several manufactured housing developments over the past few years, but they noticed that compared to traditional apartment developments, new manufactured housing communities are almost nonexistent. In Texas alone, for example, the brokerage estimated that some 20,000 MHC units were at some stage of development at the beginning of this year, but the need for affordable housing in the state is incomparably higher.

"Just Googling affordable housing need in Texas shows a need for over 600,000 rentable units right now," Vedeen said. "Manufactured housing could help that but the red tape to get the communities built is exhausting."

Manufactured homes investment in 2023

As costs for traditional multifamily development remain high and economic volatility persists, demand for manufactured homes is anticipated to keep climbing this year. Competition will likely be very fierce among institutional owners and operators as the number of for-sale properties on the market is expected to be limited.

HARRI5 sourced 17 MHC off-market sales last year and intends to continue to expand into new markets going forward. The states that are growing the fastest are among the most coveted areas for manufactured homes investment. There's high demand for MHC assets across the Sun Belt and the Southeast, with the Gulf Coast seen as an emerging market by Capstone Cos. HARRI5 expects to see increased transaction activity in North Carolina and Washington, while Northmarq believes investors will mostly continue to search for deals in Florida because of its large senior citizen population.

"Investors need to plan for the long term," Vedeen said. "I envision the market to continue to cool down in the first and the second quarter, but I think at some point a domino will fall and investors will begin buying again and compressing cap rates despite the interest rates," he added.

Engers also expects debt markets to stabilize sometime in the first half of the year, ramping up both transaction and development velocity. Meanwhile, Harris remains more cautious, and looks at 2023 with less enthusiasm when comes to MHC investment sales.

“We will remember 2023 as a blip on the radar,” he concluded.

Which Real Estate Niches Performed Well During the Last Recession?

There’s an old saying that claims “those who do not learn history are doomed to repeat it.” While many use this adage as a warning to learn from our mistakes lest we make those mistakes again, it also means we can look to the past to gain insight into the future. You may not have thought that real estate investing involved paying attention to history, but taking note of the past will only help improve your investment future.

Many investors are looking at the present and worrying about a potential upcoming recession. With the current state of things (global inflation, supply-line delays, political unrest, and the continued global pandemic), a recession is a very real possibility.

Instead of pretending that you can guess the future, now is the time to ask, “what kind of real estate niches performed well during the last recession?”

What Exactly Is a Recession?

Recessions aren’t some abnormal economic crisis, even if they feel that way. Recessions are part of a regular and healthy economy. Of course, major recessions can cause a number of negative impacts.

Recessions can occur for several reasons. It might be easy to blame current events, which can certainly affect a recession’s onset; most of these economic events have been in the making for a long time. In 2019, just months before the first case of COVID-19 wreaked havoc on the world, the U.S. was enjoying a massive economic expansion.

In fact, the 120 months of growth tied for the longest expansion period in U.S. history. Unfortunately, what goes up in an economy will eventually come down.

Some of the most common causes of expansion include:

Economic overheating: Rising inflation and unemployment numbers below the natural rate

Asset bubbles: The rapid growth and subsequent bursting of asset bubbles, like the 2001 “dot.com” stock bubble and 2007-09 housing bubble

Economic shocks: Unexpected external events that shock the economy, like the oil shocks of the 1980s

If any of these situations sound familiar, then you’ve been paying attention to recent news. That’s why many economists and investors are trying to prepare for a recession.

What About a Housing Recession?

A full economic recession and a housing recession are similar events but impact different parts of the economy. Housing recessions typically come from something called “speculations.” Speculation is a term that refers to when investors buy houses in hopes of turning a major profit in the future. They are “speculating” that the home values will go up.

Flipping houses has been a powerful tool for investors for ages and can’t bring on a housing recession by itself. However, sometimes more and more speculators get involved and buy most of the available housing. This creates a high demand from both investors joining the party and regular home shoppers looking for a place to live. This high demand and limited inventory lead to soaring prices.

The result of a recession has the potential to impact investors in a number of ways. The Great Recession provides a glimpse of what to expect.

Depreciated Real Estate Prices

As demand for housing increases and inventory doesn’t increase at the same rate, prices will rise. Prices can reach a point where no one can afford them. For home sellers to unload their houses, the prices have to come down.

This might seem like a major positive for those looking to purchase a home, but there can still be a disparity between home values and income, which can prolong or worsen the recession.

Increased Demand for Rentals

Recessions make people nervous. No one wants to purchase a home only to have its value drop significantly overnight. They also don’t want to risk having a higher mortgage during a period of potential income flux. This uncertainty pushes people towards rental properties until the market settles.

Landlords can often use the higher demand for rental properties to raise rents and take their pick of quality tenants. In some parts of the country, large cities have laws that regulate how rent increases work.

In San Francisco, the max a landlord can raise the rent is controlled by the S.F. Rent Board. In 2020, the rate was set at 1.8%. In Florida, there are currently no laws that regulate rental prices or increases. There was, however, a bill introduced in the Florida senate to implement some kind of rent control, although it’s nowhere near in effect or even expected to pass into law.

Real Estate Is Still a Great Investment During a Recession

It would be easy to look at the economic trends and become a little apprehensive about your investment properties and growth potential. It’s critical to remember that real estate is one of the most stable investments.

Housing will always be a basic need. While interest rates will rise and fall, people's buying power will change, and prices will fluctuate, people still need a place to live. You can hold off on updating to the newest iPhone, but it's much harder to go without housing.

Just because part of the economy is heading for trouble doesn't mean everyone is going to suffer. For example, when the dot-com bubble burst, the stock market was turned all over on itself, but real estate investors didn't suffer. Most small-scale real estate investments are affected as stocks become more volatile.

Which Niches Are Historically Reliable During a Recession?

While real estate as a whole won't tank during a recession, there are some niches that historically perform better during those hard times. Two of the most recession-proof investments in real estate are self-storage units and mobile home parks.

Mobile Homes

Mobile homes and mobile home parks may not be the most glamorous investments, but they have some unique selling points that help them survive a recession. For starters, these homes are steady in all economic cycles. When housing prices hit unreachable levels, mobile homes offer affordable options.

Since mobile home parks don't come off as sexy as other investments, there's often much less competition. You'll also deal with lower maintenance and capital expenses overall.

According to Green Street Advisors, a real estate research firm, operating income from mobile home parks rose by 87% between 2004 and 2018. The other significant benefit is that mobile home owners tend to stay put. Unlike tenants of a traditional rental property who may move every few years, mobile home park residents tend to stay put (90% retention rate). That means you don't have to deal with turning over properties, advertising for new renters, etc.

During the last recession, mobile home parks proved their recession-proof abilities. According to Douglas Danny, a Marcus & Millichap broker with expertise in manufactured housing, mobile homes are one of the safest assets during a recession. He said, “from 2008 to 2012, there was no effect whatsoever on manufactured housing.”

Self-Storage Units

If you've ever wondered why cities like Tampa and Ft. Lauderdale seem to have self-storage units pop up everywhere, it's because they are great investments. Regardless of whether the economy is growing or in a recession, these units tend to do wonderfully. These facilities are adaptable and can be extremely easy to manage. Over the past two decades, the net operating income for self-storage units has outgrown and out-performed many other investment niches.

During the 2008 recession, self-storage units were able to deliver a consistent 5.1% return. During that same time, real estate investment trusts (REIT) showed nearly a 38% loss. It's also not uncommon for rental rates to increase by as much as 6% without deterring tenants.

Of course, residential housing is always a solid investment as people need a place to live. COVID-19 has taught many companies that they don't necessarily need an office or storefront to conduct business. If the economy takes a dive into a recession, commercial real estate is often the first to see dips. Residential housing won't disappear, even if the way it looks and operates takes on a different look.

What to Keep in Mind During These Times

Just like any other investment, real estate is often considered a long-term game. While there are certain niches of house flippers who count on quick turnarounds to earn a profit, home values tend to increase over time more often than they plunge.

Surviving a potential recession may not require more than keeping at what you're already doing, even if things slow down for a little while. You might find it necessary to be a little more cautious with your cash flow or expectations, but the need for housing isn't going anywhere, and supply is still shadowed by demand.

If you're looking to build your portfolio during a recession, there are plenty of opportunities, depending on your capital. Whether you decide to jump in on a mobile home park, self-storage unit, or stick with real estate, there's still potential for growth, even during hard times.

Of course, there's no guarantee that a recession is coming just yet or that one that comes will have devastating impacts. History shows us that real estate, while not completely bulletproof during a recession, is still one of the best places to put your money.

Private equity firms are pouring billions into mobile home communities — here's why they're banking on manufactured housing as a 'recession-proof' industry

Once considered a housing option for the poor, manufactured homes have become a billion-dollar industry.

Private equity giants — like Brookfield Asset Management, Blackstone Group, Apollo Global Management, and the Carlyle Group — have been investing heavily in mobile home sites over the last few years.

Brokers who specialize in manufactured housing told The Real Deal that mobile home developments are among the safest assets to own in the event of a recession.

Mobile homes are no longer just a necessity for the poor. They've increasingly become a must-have for some of the world's richest private equity players.

A 2016 investor pitch from manufactured housing owner and operator RHP Properties boasted that its portfolio of 33,000 lots — stretching across seven states — had "low cash flow volatility and steady year-over-year rent increases" as well as minimal capital expenditures.

The pitch apparently worked on Brookfield Asset Management, which has poured billions of dollars into trailer park sites in the past few years.

The Canadian private equity giant bought a portfolio of manufactured home sites in 13 states from Colony NorthStar for $2 billion that May. The deal included the acquisition of a joint venture backing RHP's sites, a Brookfield spokesperson confirmed to The Real Deal.

Brookfield, which has more than $350 billion in assets, now owns 130-plus mobile home communities, making it one of the largest manufactured housing investors in the U.S. RHP declined to comment for this story.

The immobility of so many mobile and manufactured homes has caught the attention of private equity firms in a big way. With most low-income renters unable to quickly up and move their properties, institutional real estate investors increasingly see that as a surefire bet — especially in a major downturn.

Douglas Danny, a Marcus & Millichap broker who specializes in manufactured housing sites, called them one of the safest assets in a recession. "From 2008 to 2012, there was no effect whatsoever on manufactured housing," he said. "Now the new buyer coming into the space is the institutional buyer."

And a who's who of global investment giants have poured more than $4 billion into the market in the past four years: Brookfield, Blackstone Group, Apollo Global Management and the Carlyle Group have all snapped up, or flipped, trailer parks in that time.

Janet Sallander, a commercial real estate appraiser at Cushman & Wakefield, said mobile homes have become the "default working-class housing."

"It simply produces better returns compared to other asset classes," Sallander said.

Mobile home economics

Due to zoning restrictions and the high cost of land in many areas, there are just 6,250 mobile home parks in the U.S., according to a 2019 Cushman & Wakefield report.

Individual plots are rented out to tenants who purchase their own homes. And unlike aging apartment buildings in more heavily regulated housing markets, owners of these lots only need to provide utilities, while residents are responsible for the maintenance and upkeep of their homes.

Blackstone made its first bet on manufactured housing last year when it bought a $172 million portfolio of 5,200 lots from Ontario-based Tricon Capital Group. Other major players — including the Carlyle Group and Sam Zell's Equity LifeStyle Properties — are snapping up manufactured home communities, with one analyst calling it "the most recession-proof housing stock in existence," as TRD previously reported.

"A lot of investors are buying big complexes, if they can find them," said PJ Mikolajewski, president of Ideal Manufactured Homes and a California Manufactured Housing Institute board member. "And as soon as they buy them, they jack the rents up."

For Alberto Calvillo, a lifelong construction worker who recently moved his family to a site owned by RHP in Bohemia, New York, it was the most affordable option after he was priced out of another mobile home park in nearby Commack.

Calvillo said he now pays $1,000 a month to rent the land where his 900-square-foot house sits. His extended family gathered at the single-wide home, decked out with custom-fitted green and orange panels, on a Sunday afternoon in September.

"This isn't a mobile home," Calvillo said with a laugh as he pointed out the obvious lack of wheels, the custom wraparound deck he built and the new concrete foundation. "I'm going to stay here until I die."

The average cost of moving such a home is $5,000 if the home has wheels to begin with, according to a 2019 report from the national community group MHAction. So when owners of manufactured homes are priced out, they often need to sell their homes at a loss and are replaced by new homeowner-tenants without any big losses for the site's owner. The result is a low turnover rate and extremely stable revenues.

"If you have the right underwriting, you can increase rent 5 percent each year," said Marcus & Millichap's Danny. "Within three to five years, you've gone from a 3 or 4 to a 6 [percent] and the park has gone up in value."

Documents from Florida-based Sunrise Capital Investment — which cite "superior risk-adjusted returns for investors" — give an inside look at the upsides for those in the business.

Manufactured housing is a "recession-resistant" asset class with low turnover that allows for "consistent rent increases," the pitch to investors reviewed by TRD notes.

"Demand for our product actually increases as the economy tightens."

Bullish bets

Carlyle, one of the country's largest private equity firms, made a splash in 2015 when it bought a manufactured home community in Silicon Valley for $152 million.

Tenants in the area soon complained of exorbitant rent hikes and a deterioration in management responsiveness — sparking new calls for statewide rent control in California. The D.C.-based investment group recently flipped the complex, selling it to Chicago-based Hometown America for $237.4 million this August, according to California property records.

Carlyle did not respond to requests for comment.

The rush of private equity into manufactured homes has also attracted the ire of U.S. senator and presidential candidate Elizabeth Warren, who in May wrote stern letters to Brookfield's Bruce Flatt, Blackstone's Stephen Schwarzman, Apollo's Leon Black and Carlyle's co-CEOs.

"Unable to afford moving, and unable to sell their manufactured homes, some residents report that they are forced to choose between 'paying for increase[ed] housing costs … or abandoning their homes,'" her letter reads.

One publication called it a Dodd-Frank moment for manufactured home communities, but Blackstone was unfazed. Wayne Berman, the firm's head of global government affairs, said in his response to Warren that Blackstone hoped to "raise the bar for customer service within an industry that has not always historically provided a high-quality resident experience."

"Although we're a tiny part of the overall market, [we're] dedicated to professional management, capital investment and resident service," Matthew Anderson, a Blackstone spokesperson, said in a statement to TRD.

Brookfield is "highly attuned" to the fact that the asset class can include lower-income populations, according to the company, which outlined steps the firm has taken to ensure affordability.

In other cases, though, bullish investment strategies have quickly backfired. At one manufactured housing complex in Akron, New York, which Sunrise Capital purchased for under $4 million in 2017, the firm raised rents to $525 from $280 and cut the 122-lot site's employee payroll by $30,000, sparking an outcry from tenants.

After the residents organized an eight-month rent strike against their new landlord, the complex was placed into a receivership and the investment firm ceded control to the tenants. Representatives for Sunrise Capital declined to comment.

But those bad bets have yet to deter aggressive investors on the whole, industry sources say.

"It could cost [up to] $10,000 to move a home, depending on how big it is," Rob Ybarra, a debt and equity broker at CBRE based in Las Vegas, noted. "But if you raise rents 25 or 50 bucks — are you going to pick up and go somewhere else? Probably not.

"That's one of the really big reasons that people like this property type," Ybarra added. "It's a captured audience."

Seniors

Profiles of older adults living in mobile homes

In February 2022, approximately 3.2 million adults ages 60 and older lived in mobile homes, according to the Census Bureau's Household Pulse Survey.1 Using data from the Pulse Survey, this spotlight examines the characteristics and experiences of older adults living in mobile homes. The spotlight shows that a vast majority of older adults living in mobile homes own their homes outright, without any mortgage debt. Yet despite this fact, many older adults living in mobile homes are equally burdened by housing costs as compared to their counterparts living in other housing settings and frequently struggle to afford regular living expenses.

3.2 million older adults live in mobile home

As of February 2022, approximately 3.2 million adults ages 60 and older reported living in mobile homes.2 This number represents nearly one-third (31 percent) of the total 10.5 million adults ages 18 and older living in mobile homes.3

Source: Consumer Finance.gov

Why Manufactured Housing Is Growing on the 55+ Age Group

Manufactured housing is gaining interest from the 55-and-older age group as a viable alternative to traditional senior living options, with the shortage of affordable housing cited as a key attraction. In addition, this segment of the population is expected to double in size by 2029, when it is estimated that more than half of middle-income seniors will not have the finances to afford traditional senior living options.

The shortage of affordable housing is one of the largest unresolved issues in commercial real estate and in our society today. The growing demand for affordable housing presents an opportunity for unconventional solutions and the manufactured housing industry is well-positioned to reap the benefits of the pent-up demand.

According to JLL Research, the strength of the national housing market pushed home values up some 15 percent year-over-year as days on market decline. With home equity values being a major determinant of senior housing residents' ability to move into and afford senior housing rents, manufactured housing is gaining attention.

Due to its attractiveness, the past 12 months witnessed a flurry of institutional investment activity resulting in increased demand as investors sought to place capital in more recession-resilient sectors.

Valuations for manufactured communities reached an all-time high of nearly $47,000 per pad in the second quarter of 2021. The strongest price appreciation occurred in Southern and Midwestern markets with year-over-year increases of 44 and 52 percent, respectively.

Despite growing investor demand, however, limited investment opportunities weighted on capital deployment, with portfolio activity falling to the lowest level since the onset of the pandemic. As a result, transaction activity stabilized in the first half of 2021, with second quarter dipping slightly to $4.3 billion. Early indications for the third quarter 2021 show the highest level of transaction activity on a trailing four-quarter basis, at $4.5 billion.

Beyond the affordability component, advancements in various technologies and the utilization of recycled materials are a few of the other ways manufacturers are reducing energy consumption and waste.

With environmental, social, and governance pushing to the forefront of investment strategies, the construction of manufactured homes continues to take advantage of advancements in various technologies to reduce energy and waste associated with the production of manufactured homes. Manufacturers are also focused on implementing more efficient cooling systems and better insulation to lower utility costs and carbon footprints.

Owners also have a role to play in ESG by implementing the use of renewable energy sources within their communities. For example, installing solar panels and retrofitting community light fixtures to convert to more energy efficient options cuts down on the carbon footprint of the communities, in addition to increasing cash flow.

Looking Forward

The shortage of affordable housing is a considerable national topic. According to Zillow, median home values grew by 17.7 percent over the past year, with projections of another 11.7 percent increase over the next 12 months.

Viewed as a major part of the solution to the nation's shortage of affordable housing, manufactured housing offers a relatively economical option to those seeking home ownership.

Investor sentiment remains optimistic in the manufactured housing sector and is expected to continue throughout 2022, with focus on value and risk shaping behavior. As asset prices continue to climb to new highs, investors will adjust their approach to deploy capital in a recessionary environment, with manufactured housing proving to be on the more reliable performers.

Deployment challenges in several of the major commercial real estate sectors will continue to boost liquidity and capital inflows in the manufactured housing space. Seasoned groups will continue to raise capital, benefitting from an influx of new frustrated investors.

The need for affordable living options within the aging millennial along with America's 55-plus populations are expected to continue to drive mid- and long-term demand for manufactured housing and promote innovation within the sector.

2023 Seniors Housing & Care Investor Survey and Trends Outlook

Occupancy recovery fueled by healthy demand and delayed inventory growth for Seniors Housing

Our investor survey indicated that 44% of respondents might increase exposure to seniors housing in the next twelve months and an additional 44% would not change their current exposure, indicating optimism or at least believe in the stability of the sector. Capital markets and interest rates are a major concern over the next 12 months (as indicated by 60% of respondents), and while this uncertainty will lower sales volumes in the short-term the expected revenue growth of the seniors housing sector and anticipated 44% growth of the 75+ population in the next 10 years bodes well for its long-term stability.

The Benefits of Aging in Manufactured Housing Communities

As large numbers of baby boomers reach retirement age, their interest in aging in place has grown. According to a 2010 study by AARP, nearly 90 percent of Americans over age 65 want to remain in their own homes as long as they can, and 80 percent believe that they will always live in their current residence.

However widespread the desire, questions remain about who will be able to achieve it. Is aging in place a luxury to be enjoyed primarily by a privileged few, or is it within the means of many? Are there models that work for those with limited incomes?

One option hiding in plain sight for older adults heading into retirement with modest financial resources is the manufactured housing community. These are investor-owned neighborhoods where residents generally own their own factory-built homes and rent the land (sometimes called pads) on which their homes are placed. As part of my research in this area, I spoke with many of these residents, many of whom are quoted throughout this article.

A homeowner in a community in Oregon describes her living experience this way: “We live very comfortably here, like if we were a community, better than any house and any apartment.”

Some of these homeowners have worked all their lives in blue or pink collar jobs, raised a family in a traditional home, and then retired without a pension and with limited savings. As relatively “young” seniors, they cashed in their homes, tucked the savings away to supplement Social Security payments, and bought a manufactured home in a community with the intention of staying there for the rest of their lives. For some, it is the first and only home they have been able to afford to purchase.

“I want to be here forever. I mean, [if I] have to go, I want to take my home with me. And that can’t be done, so I am here to stay,” one homeowner commented.

Contrary to stereotype, not all older adults who live in manufactured housing communities have low incomes; some choose it for the lifestyle. While many are modest, some manufactured housing communities feature indoor swimming pools, lakes, and elegant clubhouses that rival the amenities of country clubs. They are a way of maximizing quality of life while staying within one’s means.

“Whatever we make in the month is enough to live well here,” a resident said.

The Costs of Living in a Manufactured Housing Community

A manufactured home costs a fraction of a traditionally constructed, “site-built” home. According to the industry-funded Manufactured Housing Institute, the cost per square foot for a manufactured home is 10 to 35 percent lower than that of a comparable site-built home, excluding the cost of land.

Besides home financing costs, manufactured housing community members also pay monthly rent for their space. Ishbel Dickens, executive director of the National Manufactured Home Owners Association (NMHOA), says, “In general, pad rent is less expensive than renting an apartment, but the costs become more comparable if someone is still paying off the home as well as paying pad rent.”

CFED, a national asset-building advocacy organization, compared housing costs for three housing types in nine metropolitan areas in 2012–2013. It found, for example, in the 28-county Atlanta Metropolitan Statistical Area, the average housing cost for manufactured housing is just over $500 per month, compared to just under $1,000 per month for rentals, and $1,500 for site-built homes. This puts 55 percent of the area’s manufactured homes within the affordable range (costing no more than 30 percent of household income) for households earning 50 percent of area median income. In the Denver Metropolitan Statistical Area, comparable housing costs are around $700 for manufactured housing, $900 for rentals, and $1,500 for site-built homes. Approximately 60 percent of Denver-area manufactured housing is affordable to low-income households, compared to 27 percent of other housing types.

Designed for Aging in Community

Regardless of how swanky they are, most manufactured housing communities share common features that support healthy aging in place: a safe setting, a physical and social environment that encourages an active and engaged lifestyle, and a network of neighbors who keep a helpful eye out for each other.

Top on the list of benefits is the feeling of safety that homeowners feel. One commented, “I’ve lived in a [traditional site-built] home for 45 years in a very nice neighborhood. Would I have sat in the living room with my front door and my back door open and unlocked? Not a bit, but I do it here.”

Ironically, some of the physical design features that make manufactured housing communities feel like alien territory to outsiders are the same features that make them feel safe to residents: limited entrances and exits, an internal network of narrow roads that don't connect to public streets, and perimeter fences or screening. Some have called them "gated communities for the working class."

Community residents generally know the faces and vehicles of other residents and frequent visitors. Outsiders are not unwelcome, but they are likely to be observed. Narrow, safe streets mean that residents get out and walk—to the community mailbox, to the clubhouse for events, or just to get exercise. Along the way, they are likely to chat with neighbors working in their gardens or sitting on their front porches.

"I can walk my dog after dark, and I wouldn't do that if I was in a stick-built," a homeowner said.

Often the clubhouse serves as a hub, with the resident association scheduling a range of activities. Movie nights, bingo, potlucks, coffees, holiday celebrations, and clubs for everything from knitting to poker are common. It's a busy lifestyle with many social connections, which is what gerontologists recommend for healthy aging.

One woman said, "We sold our home and we looked into an apartment and decided that he [her husband] wouldn't have anything to do besides watch TV, and he needed something to do."

Neighbors who know each other are quicker to help each other routinely, and in times of need. One homeowner said, "Everybody knows your business. If you usually do something at 8 o'clock, but you don't want to do it at 8 o'clock today, somebody is calling you." She continued. "You know certain people in the community you live in, and, God forbid, you get sick or hurt, or something happens. . ." Her friend jumped in to finish her sentence, "Then they're there if you need somebody."

Stretching the Limits

While a helping hand can accomplish a lot, there are limits to what community members can do to support each other on a voluntary basis. Sometimes residents need more intensive care than can be provided by neighbors, or they need assistance on an ongoing basis. Taking care of a pet during a hospital stay or helping a neighbor put in eye drops daily may be manageable; providing help with ongoing bathing needs is another matter. But even then, there are ways that manufactured housing communities can help.

A number of communities have organized to get information on available services and invited outside agencies to speak to residents at monthly programs. Some communities have organized "aging in place" fairs in their clubhouses, at which agencies and businesses come and talk to residents about their services.

A more aggressive approach could involve borrowing a page from the “village” model, in which members join a formal network of other older adults and volunteers who live in the same general area to help each other out. This is similar to the way neighbors in manufactured housing communities often already assist one another, but the village model goes a step further. Members can get assistance with their more advanced or ongoing needs from vetted, outside vendors who provide services at reduced prices negotiated by the village. These additional services are paid for only by those who use them. Manufactured housing communities, with such a head start on these kinds of interactions organically, would be an ideal place to deploy the village model.

Other strategies could include using a portion of the clubhouse for licensed adult day care a few days per week to provide predictable and affordable respite for care-giving family members, or converting an existing manufactured home into an adult foster care facility, with a licensed service provider/homeowner, enabling residents to stay in the community even if they can’t remain in their own home (and providing others with additional income). Some states pay for Medicaid-eligible residents who would otherwise qualify for nursing homes to live in adult foster care, so this option may be feasible even in lower income communities. These strategies would require the cooperation of landowners, but they may well be amenable to options that keep spaces rented and people in the community.

Preserving the Option

Ultimately, the greatest challenges to aging in place in manufactured housing communities are the threat of community closure and the risk of what Dickens calls “economic eviction”—rents rising beyond what homeowners can afford. “Root shock” is a term that has been used to describe the experience of suddenly losing one’s whole way of life due to displacement, and the consequences can be dire. At the November 2014 NMHOA annual meeting, one attendee recalled the story of her neighbor who was forced to move because the space rent rose beyond what he could afford on Social Security income. He died within six months.

A few states, such as California, permit local jurisdictions to adopt rent control ordinances that limit rent increases. It is then up to cities or counties to develop and adopt local laws, but not all do. Other states, such as Oregon, have preemptive prohibitions that prevent local jurisdictions from adopting local rent control laws, leaving homeowners subject to whatever their individual leases stipulate regarding the frequency and amount of rent and fee increases.

During the real estate boom of the early 2000s, hundreds of manufactured housing communities were closed by landowners to make way for more remunerative uses, such as high-end condos or shopping malls. This sent shock waves through manufactured housing communities nationwide, and the memory of these closures is still fresh in the minds of community residents. As the real estate market recovers, the gnawing uncertainty caused by the threat of losing one’s home and community is slowly rising again.

Community residents and advocates are working on strategies to make manufactured housing communities a less risky housing option. The most permanent are those that take the land out of the speculative real estate market.

Resident Owned Communities USA (ROC USA) and its nonprofit affiliates help residents purchase their communities from willing sellers and take over management themselves as a cooperative. In some places, nonprofits, land trusts, and housing authorities have stepped up and purchased manufactured housing communities to preserve them.

Twenty-eight states have adopted laws that require landowners to provide notice to residents before closing. While most states require 9 to 18 months notice, a few require just 6 months, and one, Massachusetts, requires two years. Fifteen states provide some relocation assistance either from the state, the property owner, or a combination of both. In Oregon, property owners are required to provide a year's notice and pay displaced homeowners between $3,000 and $9,000 based on the size of their home, and the state provides a $5,000 refundable tax credit to displaced lower income homeowners. However helpful, these payments do not begin to cover actual home moving costs. In many cases, the home cannot be moved, and in other cases, no spaces can be found to move the home onto. Former homeowners can find themselves without shelter, without community, and without what had been their largest financial asset—root shock, indeed. An additional strategy being pursued by NMHOA is zoning. In the state of Washington, NMHOA has helped localities develop zoning ordinances that preserve manufactured housing communities.

Lessons Learned

For agencies and businesses seeking to help older adults age in place, manufactured housing communities with high concentrations of older residents provide an opportunity to deliver services efficiently, yet few currently seize this opportunity. In sparsely populated areas, manufactured housing communities can be excellent venues for providing flu shots, meal programs, health education information, and a host of other services.

Manufactured housing communities can provide a cost-effective way for people with limited resources to prolong the period of time they can comfortably and independently remain in their communities. The strength of this option comes from an environment that enables residents to use their own human assets to help themselves and each other. Its stability can be strengthened by resident, nonprofit, and public agency purchases of communities, and government protections from unwarranted rent increases and closures. Quality can be improved by partnerships with community-minded service partners.

TOP 5 REASONS WHY SENIORS AND “BABY BOOMERS” PREFER MANUFACTURED HOMES

Baby Boomers – Born 1946 – 1964 and Seniors, also known as the Silent Generation – born before 1945. The National Association of Realtors confirmed in an extensive study of prospective homebuyers that seniors and baby boomers are looking to downsize to homes less than 1900 square feet.

The baby boomers of today are retiring in record numbers, and as active as they are, many are challenging a number of popular stereotypes about retirement and aging. According to the U.S.Census Bureau by 2034 nearly a quarter of the U.S population will be over the age of 65, and many are seeing the benefits of their activity and their social network reflected in their health.

Manufactured homes continue to remain the number one housing option for seniors leaving the workforce. In fact, the greatest portion of households that live in manufactured homes are headed by a retiree (32%) than site-built homes (24%) as per the CFPB Analysis of Consumer Finances Survey.

There are many reasons that manufactured housing remains the housing choice for senior retirees. Many healthy retirement age, low and middle-income workers are living longer, and in many instances are delaying retirement plans, as a result of a lack of funds available to maintain a comfortable retirement for an extended period of life. Recent studies have found that 40% of Americans risk going broke during retirement, and compounding the matter, about one-half have less than $1,000 in savings.

For a retired individual, health costs are not going to be the most expensive cost after retirement. That title goes toward housing. For a growing number of seniors, the remedy will be found with today's modern well-built manufactured housing.

Today, many seniors are living in larger site-built homes that have or will continue to be a strain on their financial capabilities, a result of upkeep, taxes, utility costs, etc. In a real estate market that has seen the values of existing real estate at historical levels, senior homeowners are selling their homes and using the equity realized to purchase a new manufactured home and set aside money to enjoy a comfortable, less worrisome retirement.

The following are our Top 5 of the many reasons that seniors choose to purchase a new high quality affordable manufactured home.

Acquisition cost will be up to 50% less, (not including land), than a new site-built home with quality construction features, stringent fire, and wind requirements, state-of-the-art amenities, and features at least equal, and often superior to a newly constructed home built on site.

Reduced utility costs: An energy-efficient manufactured home means smaller energy consumption.

Lower maintenance costs: New manufactured homes are warranted by the manufacturer against defects and materials for a minimum of one year. Manufactured homes are the only single-family housing in the United States subject to a federal building code (HUD), which also mandates warranty provisions.

Reduced or no property taxes: A manufactured home not permanently attached to real property will be taxed, in most states, as personal property. Manufactured home purchasers also have the option of placing and attaching the home onto owned private property, thus qualifying for financing under the same conditions as a site-built home. In other words, a manufactured home attached to real property is considered real estate in every respect.

Manufactured homes can be customized to meet the requirements, wants, and needs of the home purchaser: including upgraded energy-saving appliances, cathedral ceilings, fully integrated covered porches, luxury baths, and much more. Some manufacturers can customize manufactured homes for those with mobility issues.

Millenials are making mobile homes a new symbol of the American Dream

Trailer parks, tiny houses, and RV sites are booming in Austin, Bloomberg reported.

The pandemic has accelerated a shift to living in mobile homes, a globalization expert told Insider.

Younger generations are leading the way, he said, and it's opening up paths to economic and social mobility.

Millennials

Fifteen miles east of downtown Austin, Texas, a community known as Oak Ranch is growing.

But it's not an Austin suburb. It's a trailer park, and the incoming residents fueling its growth happen to be Tesla workers.

So reported Bloomberg's Michael Smith and Shelly Hagan in an article detailing Elon Musk's influence in the Austin housing market. The city has been a magnet for Americans seeking more space, fewer taxes, and warmer weather during the pandemic, with a particularly strong pull towards those in Silicon Valley. The Tesla CEO is no exception, as he famously decamped from California to Texas during the pandemic.

But when the world's richest man moves to town to build a new Tesla Gigafactory, it's no surprise that an affordability crisis follows. Tesla promised 5,000 to 10,000 "middle-skill" jobs paying a little under $50,000 a year at its factory, but that doesn't go far in a city where the median house listed is $525,000. Austinites are making lemonade with the latest economic lemons they've been given, by turning to trailer parks like Oak Ranch, tiny houses, and RVs.

As globalization expert Parag Khanna wrote in his new book, "Move: The Forces Uprooting Us," the trailer home "is the ultimate symbol of the new American mobility." He told Insider that this type of small home is bigger than ever during the pandemic, and it's thanks to younger generations.

The trailer home is becoming cool

Khanna's book explores how the youth are shaping the future with a mobile lifestyle. The trailer home is a key part of that, he wrote, emerging as a "trendy, cost-effective, and sustainable alternative to traditional homeownership."

To be clear, a trailer home is typically used to refer to a prefabricated house, such as a mobile or manufactured home. There are differences between all of these, and they are not the same as a tiny house or a camper van, both of which fall more into the RV category.

All of these alternative lifestyles have something in common that Khanna is referring to: they enable owners to live a more nomadic lifestyle and present a more affordable solution to aspiring homeowners in a time when housing prices are sky high.

That's exactly what many millennials were seeking in the 2010s, causing mobile and minimalist living like the tiny house movement and #vanlife to to take off.

Now facing their generation's second housing crisis, and freed from the office in an era of remote work, they've been even more inclined to turn to a life on wheels since the pandemic began. Millennials in Austin are one cohort exemplifying this trend, real estate broker Matt Menard told Bloomberg.

"Their instinct is, 'I'm not going to be stuck in place. I'm not going to take on more debt. I don't need to own that home,'" Khanna said.

Since the pandemic began, makers of camper vans, RVs, and travel trailers have been updating on existing builds or creating new floor plans to accommodate the growing market. Tiny house builders saw sales fly last year, and the number of Americans who would consider living in one increased from 53% in 2018 to 56% in 2020, according to two separate studies.

Khanna argues that the increase in trailer living is a good thing because physical mobility opens up paths to economic and social mobility. He said it's even creating a new version of the American Dream. The new version of the "picket fence," he said, is having a tiny home that's mobile enough to give you a view of Boise, one week, and Tahoe the next.

"When people move, their circumstances improve," he told Insider, likening it to a mouse in the wheel who stays inside their cage to run faster. The solution, he said, is to move to a different cage.

Millennials Search for Affordable Housing in Manufactured Homes

According to new research, about 62% of millennials are cost burdened. Because the high cost of living prevents many young people and families from saving enough money for a hefty down payment on a conventional home, buying such a home has become increasingly difficult these days. As a result, the demand for housing alternatives, which can better fit the needs and wants of younger generations, has increased over the last few years.

Top Reasons Why Young Adults Prefer Manufactured Homes

Young adults should be able to finance the purchase of a home without financial assistance from their parents. However, a survey has recently revealed that about 77% of millennials and Gen Zers are reaching out to parents for financial help when buying their first home.

While it's fairly common for parents to help their children buy a home, many of them are feeling the financial strain. Affected by rising housing and living costs, parents can no longer afford to help as much as they once could. Therefore, many young adults and families have started to look for more affordable housing options, like manufactured homes. In a nutshell, manufactured homes can help people bring their homeownership dreams to life without having to take excessive risk or becoming housing cost burdened. And so we've just discovered the first and most important reason why young people prefer manufactured housing to conventional homes: affordability.

Because the rental rates and sales prices of conventional homes are rising continuously, most millennials and Gen Zers have realized that it's actually wiser to put their hard-earned money into beautiful, durable, and affordable housing alternatives than to make sky-high mortgage payments every month or put large sums of money in someone else's pocket for something that will never be theirs.

Compared to site-built homes, manufactured homes cost 10 to 30% less per square foot to build. Additionally, manufactured homes tend to be more energy efficient than many conventional homes, which could result in significant cost savings over time.

Besides being equipped with energy-efficient appliances, newly manufactured homes often include upgraded insulation, programmable thermostats, and low-E windows.

Customizable design is another reason why millennials and Gen Zers turn to manufactured housing. Most manufactured home builders make available a series of customization options, from floor plans to finishes, so specific home models can be modified to meet different requirements. Although young adults seem to prefer minimalist interiors, a manufactured homebuyer could choose different customizations that can fit any lifestyle, from minimalist to luxury and everything in between, when ordering a manufactured home.

Manufactured homes also use eco-friendly materials, which is an important consideration for millennials and Gen Zers, who tend to be more environmentally conscious than older generations. Because they're built in factories, manufactured homes also have a smaller carbon footprint compared to conventional construction. Using advanced technologies, manufactured home builders are able to not only reduce their carbon footprint compared to the conventional home building process, but also to reuse or recycle most of the waste they produce.

Manufactured homes also feature a high level of quality. Poor construction and material quality was a long-standing argument against manufactured homes. However, modern manufactured homes exceed the limitations put upon by old mobile homes and trailers. In fact, today's manufactured homes have very little in common with the old mobile homes and trailers, following the steps of their true predecessors instead: Sears homes. Although the modern manufactured homes have come a long way—particularly in terms of structural and floor plan design, size options, and add-ons—since Sears developed the first prefabricated “kit” homes, they reflect the same construction quality, further improved by the advanced technologies that manufacturers use nowadays. Thanks to these technologies, manufactured home builders are able to get down to a level of detail that conventional home builders don't normally go into.

The durability of manufactured homes is another important consideration by millennials. Built to the same building standards as site-built homes ,manufactured homes are structurally equipped to withstand almost anything the weather throws at them, including heavy snowfall, strong winds, and earthquakes.

One interesting aspect about the manufactured housing industry is that it can do what conventional construction can't. Basically, manufactured housing technologies and standardized manufacturing processes can increase the production of affordable housing while bringing construction costs down. As a result, manufactured housing offers the only high-quality and safe housing alternative that young adults and families can comfortably afford.

What's more, manufactured home financing options are becoming available from a higher number of financial institutions. This means that manufactured home financing will be easier to come by in the near future.

As Housing Prices Soar, More Millennials are Looking to Mobile Homes to Check ‘Home Buyer’ Off Their List

Buying a home is definitely not as easy as it once was. Bidding wars. Skyrocketing prices. Historically low inventory. In fact, many homebuyers are contending with houses being sold before they ever are listed publicly as for sale. Combine all these challenges, and it’s clear why many Millennial first-time homebuyers are considering something they may not have before: buying a mobile home.

Mobile homes have often gotten a bad rap, but now they are getting a new look as a much more affordable option during a red hot real estate market. Beyond affordability, mobile homes can offer appeal due to potentially more green space around them—as well as the ability to move the home if desired. In fact, in some cases, mobile home values are rising faster than single-family homes, according to a recent report from Lending Tree. It is important to note that the reason for this headline-grabbing statement is because mobile homes have a dramatically lower starting price point, which makes a percentage-driven increase look very high when compared to traditional housing, which has a significantly more expensive starting price point.

“Millennials are definitely getting priced out of the current real estate market.”

With mobile home prices coming in at about $190,000 less than single-family homes—and the current bidding wars and seller scarcity in today’s market—they are starting to make a lot of sense for many Millennials who are eager to get into a home and move out of the cycle of renting.

“We’re seeing a lot of pressure on Millennials to come up with even larger down payments as well as the higher monthly mortgage and holding costs.”

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"We're seeing a lot of pressure on Millennials to come up with even larger down payments as well as the higher monthly mortgage and holding costs."

Because price points on mobile homes are significantly lower, Millennials are better able to make a downpayment that will create a manageable mortgage payment where they can still put money away for the future—as opposed to becoming homeowners but also "house poor." The mortgage payment on a mobile home can even be less than renting a nice apartment or single-family home!

"Millennials are taking a new interest in mobile homes because it fits their remote or hybrid work lifestyle as well as potentially giving them more options for green space and flexibility of geography."

At the same time that mobile homes are more appealing financially, mobile home parks are often becoming more amenity-driven. Add to this the growth of remote work, and there is a clear overlap between being able to have a lifestyle they enjoy and a price point that also is extremely attractive. At The Center for Generational Kinetics, we expect Millennial interest in mobile homes to continue as long as traditional single-family home prices stay elevated and hybrid or remote work continues to be an option—and we will be watching.

Into The Future: Manufactured Housing Opportunities

The U.S. is experiencing a housing crisis

Home prices have become unaffordable for many Americans.

Inventory is low and there is a severe deficit in entry-level homes.

Inflation is at historic highs, mortgage rates are increasing, and there is growing concern of a recession.

The Covid-19 pandemic exacerbated pre-existing inequities in access to affordable housing.

Increasing demand for WFH spaces.

Driving competition among homebuyers.

Rapid increase in home prices.

Younger consumers in particular find themselves priced out of the housing market and are often delaying homebuying.

Millennials, and younger consumers more broadly, are increasingly open to manufactured homes as a housing option.

o This openness is driven by a shift in attitudes about MH in general and a desire for affordable home ownership.

o Similarly, younger consumers are increasingly attracted to rural areas where cost of living is lower than urban centers.

Housing Affordability and Accessibility

Homeownership is becoming an increasingly expensive, and for many consumers unattainable, pursuit.

The average cost of a new, site-built home was $464,200 in 2021.

Moody's home price index shows a 32% rise in prices nationally over the past two years. 1

As of the first week of September 2022, the 30-year fixed-rate mortgage averaged 5.66%. 2

Compared to the 2.87% rate in September 2021, this increase is equivalent to roughly $500 more per monthly payment on a median priced home.

Redfin reported that in May 2022, the median monthly asking rent in the U.S. was $2,002, a 15% year-over-year increase. In the most expensive markets, year-over-year rent increases ranged from 24.4% to 48.4%. 3

Current estimates suggest that the U.S. has a current housing supply deficit of 3.8 million units. 4

1. Arnold, C. 2022. Home prices could fall in some U.S. cities. Here's where and why. 2. Bahney, A. 2022. Mortgage rates rise again after Fed says it will take 'forceful' steps to curb inflation. 3. Ellis, T. 2022. Rental Market Tracker: Typical U.S. Asking Rent Surpassed $2,000 for First Time in May. 4. Freddie Mac. 2021. Housing Supply: A Growing Deficit.

Millennial Consumers, Next Generation Home Buyers

Millennial Americans aged 26-41, are the largest living demographic in the U.S. at 72.1 million individuals.

Gen Z was born between 1997-2012, Millennials between 1981-1996, Gen X between 1965-1980.

As housing prices have continued to increase, nearly 20% year-over-year as of early 2022, Millennials have increasingly been priced out of housing markets, particularly in urban areas.

Millennials lag other generations in homeownership. Just under half of Millennials (48.5%) are homeowners; for Gen X-ers homeownership is closer to 70%, Boomers are near 80%. 1

Millennial consumers are experiencing the effects of inflation differently.

Millennial consumers who signed a new rental lease in July 2022 experienced an 11.6% YoY increase in the cost of goods and services compared to 8.5% for the overall population. 2

As a consumer group, Millennials express broadly positive attitudes toward manufactured housing, while two thirds of Millennials surveyed report that they are likely to consider purchasing a manufactured home in the future. 3

1. Anderson, D., T. Velentzas, and S. Bokhari. 2022. Millennial and Gen Z Renters Have Personal Inflation Rates Above 11%, Compared with 8.5% For the Typical American. September 1, 2022. 2. ibid. 3. Freddie Mac. Manufactured Housing 2022: An Untapped Affordable Housing Solution.

Migration and Rural America

Rural areas and smaller cities and towns have experienced growing levels of in-migration over the past few years.

The Covid-19 pandemic spurred a dramatic increase in home prices, as well as constrained levels of inventory, in small towns and rural areas as a result of out-migration from larger cities and metropolitan areas. 1

Research from the Federal Reserve Bank of Cleveland found that migration into smaller towns and rural areas doubled from 2020 to 2021.

There were less than 10,000 monthly migrants leaving high-cost areas for more rural environments at the beginning of 2020; monthly in-migration increased to more than 20,000 in 2021. 2

In 2019, 40% of non-metropolitan counties, represented by largely rural areas, experienced net in-migration; by 2021 the share of non-metropolitan counties experiencing in-migration had increased to 66%.3

In a survey of older Millennial consumers living in large cities, 37% report that they want to relocate to a smaller town, primarily as a means of cutting down on costs. 4

Similarly, 36% of parents and consumers saving for a down payment report that they are interested in moving to smaller towns.

1. Urban Institute. 2022. The Role of Manufactured Housing in Increasing the Supply of Affordable Housing. 2. Whitaker, Stephan D. 2021. Migrants from High-Cost, Large Metro Areas during the COVID-19 Pandemic, Their Destinations, and How Many Could Follow. Federal Reserve Bank of Cleveland.) 3. Frost, R. 2022. Domestic Migration Drove State and Local Population Change in 2021. 4. Carter, S. 2022. Why nearly half of city-dwelling millennials want to buy a home in a small town.

Manufactured Homes Provide Affordable Home Ownership

Manufactured homes offer a high-quality, affordable alternative to site-built homes.

The manufactured housing industry produced 105,772 new homes in 2021, approximately 9% of new, single family home starts. 1

In 2021, the average sale price for a site-built home without land in the U.S. was $365,904; the average sale price for a new manufactured home was $108,100. 2

The average cost of a site-built home was 109% higher than a manufactured home.

On average, manufactured homes are half the price of site-built homes per square foot, as manufactured homes average $72 per square foot while site-built homes cost an average of $144 per square foot. 3

As of 2021, manufactured homes cost 66% less per square foot than site-built homes.

1. MHI. 2022. 2022 Manufactured Housing Facts Industry Overview. 2. US Census Bureau, Manufactured Housing Survey. 3. Ibid.

Comparative Costs of Site-Built and Manufactured Homes

Millennials Like Manufactured Housing

Recent research by Freddie Mac has found shifting perceptions of manufactured housing, particularly among younger consumers. 1

A majority (72%) of surveyed consumers said that manufactured housing was a “great option” for first-time homebuyers. Two-thirds (66%) of consumers also believe that manufactured homes are “affordable without compromising on quality.”

The research found that among Millennials, positive sentiment was even higher, with 78% reporting a positive view of manufactured homes; Gen Z was close by at 76%. 3

A fifth (20%) of Millennials report an “extremely positive” perception of manufactured housing.

A majority of Millennials (68%) and Gen Z (61%) indicated that they were likely to consider purchasing a manufactured home in the future.

1. Freddie Mac. 2022. Manufactured Housing 2022:An Untapped Affordable Housing Solution.
2. ibid. 3. Ibid.

Source: Freddie Mac Rural Research Symposium

Source: Freddie Mac Rural Research Symposium

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Here’s How To Help The Next Generation Become Homeowners

Despite what many believe, Gen Z and Millennials do want to become homeowners and they're excited by the prospect. However, they face different obstacles than their parents and grandparents did. These challenges include lack of mortgage education, lack of suitable housing supply, and an unprecedented amount of debt that limits buying power and makes them fearful of taking on more. Any long-term effects on the attitudes and intentions due to COVID-19 are still unknown, but we have yet to see indications of major changes in sentiment.

Source: Housingwire

In a 2019 Fannie Mae survey of homebuyers aged 18-34, 88% said they are confident they will achieve homeownership someday. But contrary to previous generations, their desire to be homeowners is more emotionally driven than financial. 80% say homeownership is the best way to make it on their own, and less than 50% say they want to use their home as an asset.

As for what they desire in a home, 69% say they are open to a smaller home as long as it meets their needs. According to the Joint Center for Housing Studies, between 2018 and 2023, there is expected to be a 7% rise in homebuyers who are single and a 6% increase in those who are married with no children, which may signal the need for smaller homes. Smaller homes, however, are in short supply, in comparison to the larger homes that previous generations sought. 63% also say that they are open to fixer-uppers but, despite their flexibility, only 31% believe they would be able to find a home in their price range.

Source: Housingwire

Among their biggest struggles is the high amount of debt that plagues these generations, in part, due to the rising costs of higher education. According to Northwestern Mutual's 2019 Planning and Progress Study, U.S. adults aged 18+ report having an average of $29,800 in personal debt, exclusive of mortgages. This could be one of the many reasons that 55% of those surveyed believe homeownership is out of reach financially.

Source: Housingwire

There is also a considerable lack of education preventing younger homebuyers from taking the next step. For instance, 73% were unaware of affordable down payment mortgage options, as low as 3%. Fannie Mae findings also indicate a low awareness of affordable housing solutions that go beyond traditional site-built models. Only 39% of respondents were aware of manufactured homes as a more affordable option. And when shown what the newest generation of manufactured homes looks like, the number of respondents who were interested increased by 31%.

Source: Housingwire

The silver lining, however, is that housing professionals have an opportunity to help reach these generations simply by understanding their needs. 64% said that they expect lenders to educate them about the mortgage process, and many future homebuyers can benefit from housing counseling from a HUD-approved nonprofit housing counseling agency. As an industry, if we are willing to step into that advisory role, we can be more successful in helping prospective homebuyers become homeowners.

Unmet Demand

Is there a structural change in demand?

Key Assumptions?

Demand Thesis

Supply Side Challenges & Opportunities

Business Models

How does the Supply Side make money?

Most critically, the business model of manufactured homes has some moral hazard to it.

That’s why modern day GP/Property managers are seeking new business models that do XYZ…

Materials

What are the critical materials required?

The materials being used in prefab homes have changed dramatically…

How materials costs have changed

Supply Chain

What issues are currently happening in the supply chain?

Oil prices

Labor

What issues are happening with labor pool?

This is a true manufacturing process. It’s an assembly line vs stick built.

Capital

What is the current state of available capital assets & financing?

How have financing options for buyers changed?

How have financing options for sellers changed?

Conventional Financing for New Manufactured Homes

In July, we launched our CHOICEHomeSM pilot, specifically tailored to a new type of high-quality manufactured home. These homes have features such as garages, permanent foundations, built-in porches and a 5/12 roof incline. Many of these homes also come with energy-saving features like double-pane windows and additional insulation.

An important part of our mission at Freddie Mac is increasing access to mortgage credit across the country for affordable housing. For manufactured homes, the CHOICEHomeSM pilot does just that.

The nation is facing a shortage of affordable housing stock that has reached crisis levels, affecting millions of U.S. households. Safe and affordable housing is increasingly hard to find across large swaths of the nation. This shortage particularly affects millennials and baby boomers – the two largest generations in number – who want to find their first or their retirement home, respectively.

According to the U.S. Census Bureau, there will be 71 million young adults age 20 to 34 in the United States in 2019. Many of these young adults will be first-time homebuyers. All of them will drive the demand for housing, particularly affordable housing, for years to come.

In addition, baby boomers will number an additional 72 million, many of whom are “empty nesters” and will be looking for an affordable home.

Simply put, the demand for affordable housing isn’t going away any time soon. And manufactured homes will have a crucial role to play.

The Need for Affordable Housing

Millions of America’s families rely on manufactured housing, especially in rural areas. Today, more than 22 million Americans live in manufactured housing and the need is only expected to grow. According to the U.S. Census Bureau, 321,000 new manufactured homes were shipped by manufacturers in the first quarter of 2018.

Freddie Mac has looked for innovative ways to increase liquidity in the manufactured housing space. Through the CHOICEHomeSM pilot, we hope to provide a scalable opportunity that brings together multiple industry players who support manufactured housing as high-quality, affordable housing stock.

These pilot participants — lenders, manufacturers, retailers, mortgage insurers and appraisers — are all integral parts of the lending process.

During this pilot, Freddie Mac will treat the loans it purchases on manufactured homes titled as real property in the same manner as single-family site-built homes. Access to conventional financing that eliminates many of the traditional manufactured housing requirements is a true win-win for lenders and borrowers. Both will benefit from a more streamlined mortgage experience that is faster and, more importantly, less expensive over the long term.

The primary objectives around the CHOICEHomeSM pilot include:

Obtaining data that documents trends in loan value and overall performance so we can see how these homes retain their appraised value and how they perform generally;

Working with the industry to support the development of a standard product to finance manufactured homes for the long term. Through this pilot, we're seeking feedback – and trying to see what works and what doesn't work.

Increasing the purchases of factory-built housing loans characterized as real property;

Improving consumer perception by promoting well-made, factory built homes as a quality, modern, viable, affordable housing option; and

Leveraging the Freddie Mac Home Possible® product to expand access to credit for low-to-moderate income borrowers.

Key Assumptions?

Supply Side Thesis

Market Transformation

What are the “big ideas” for the future of communities?

Value add services to communities – shared commons, grocery, work at home.

New Value Chain

Key Assumptions

Thesis

Enabling Technologies

Mass Manufactured Homes

Building 3D-Printed + Mass Manufactured Homes Is 50% Faster, Produces 99% Less Waste, And Can Be 80% Automated

The world needs two billion new homes in the next 80 years, the World Economic Forum said in 2018. The United States needs 3.8 million additional new homes just to meet existing consumer demand, Realtor.com estimated in 2020. And yet, with perhaps 600,000 people homeless in the U.S. and 40 million people living in poverty in the richest country on Earth, it isn't just about quantity.

It's also about price.

And, price to the planet. Construction is already the source of 40% of our carbon footprint globally. How do we house people effectively, efficiently, cost-effectively, and in a planet-friendly way?

According to innovative housing startup Mighty Buildings CTO Dmitry Starodubtsev, the answer is to reinvent construction with a mix of pre-fabrication, 3D printing, automation, plus a heft dose of ZNE, or Zero Net Energy: homes that generate all the power they need to consume.

"We're trying to automate the construction process, increase quality, and increase factory throughput in order basically to unlock productivity in the regions with high housing demand," Starodubtsev told me on a recent TechFirst podcast. "The entire system works to eliminate as much labor hours on site as possible in order to reduce pricing and make it more affordable for different generations of people, not only millennials."

Essentially: 3D print custom components, mass-produce standard building blocks, design holistically, and automate as much as possible. All 3D printing can actually be slower for large components, while all pre-fab limits creativity and customization.

If it works, goodbye six month construction timelines for a single home. Think life-size Lego for homebuilding.

“We produce highly completed ... sets of components which already implement ... exterior finishes, interior finishes, as well as connectors to assemble the entire system faster,” he says. “We put it on site as Lego blocks ... and then we can easily assemble those pieces within like hours instead of months of typical construction time.”

The promise is 2X faster construction time while generating 99% less waste. Cost reductions are not quite as impressive, however.

Currently, Starodubtsev says Mighty Buildings homes, which he defines as “semi-premium,” are about 20% less expensive than comparable traditionally-built homes. Prefab Review estimates single-family house costs at $435,900 to $512,400 for a 1,440 square foot home in California, which isn’t exactly going to solve the affordability crisis.

However, as the company scales — Mighty Buildings recently pivoted from consumer sales to large-scale B2B sales — Starodubtsev says costs will come down significantly.

“The larger adoption of technology is possible only when we are working with the developers as B2B customers,” he says. “Scaling the processes is one of the goals of the company ... in order to achieve a certain point when technology will get this necessary adoption to become really affordable for the entire market.”

The B2C market in which anyone can go to the company’s website, order up a home, design it, pay for it, and set up shipping to their building lot is still coming, he says. But for now the company is focused on community-scale projects.

Those community-scale projects include ZNE homes: pre-fab homes with solar panels that can share energy around the community as needed. The company is currently working with a developer to build exactly that kind of community right now in Southern California: a 20-home hilltop development with 1,200 square-foot homes. Might Buildings is also working on projects in the Middle East and in a cold-weather region of South Korea.

Ironically, emerging from COVID has actually slowed the company down somewhat as digitized processes revert to physical:

“When COVID came, so we changed the way how we do onsite inspections with the authorities and by leveraging new digital tools, just simply providing videos etc., and it was enough,” Starodubtsev says. “But once COVID like stopped, they switched back to their previous model.”

The company will have some competition. According to Crunchbase, there are currently 984 construction startups that have raised a collective $10.5 billion to reinvent how we build homes and other structures.

Technology Focus

Geography Focus / Sector Focus

Homes tend to concentrate in the American South / South West

Why? Because this is where retired people go to.

Market Structure

Market Type

Key Laws & Regulations

Regulatory Approval Process

Key Assumptions

Thesis

Market Opportunities

Cost/Benefit Dynamics

Valuations Rise

Mobile home values rose 34% in the last 5 years

For homebuyers looking to buy single-family properties, alternatives to traditional houses can be a more affordable option. Jacob Channel, senior economist for LendingTree, says mobile homes, condos or townhouses are still cheaper than single-family homes, even as values rise for these alternatives.

A new LendingTree study found that mobile homes are cheaper and their values appreciated almost as quickly as single-family homes over five years, from 2016 to 2021.

Key findings of the study show:

On a national scale, the median value of a mobile home is $61,400 to $220,000 less than that of a single-family home, although median mobile home values increased by an average of 34.58% from 2016 to 2021. On the other hand, median single-family home values increased by almost a similar average of 35.44% for the same time period.

Mobile homes in Kansas, Ohio and Iowa are the cheapest, with a median value of $29,000 or less. Meanwhile, single-family homes in these states cost $174,000 or more.

Mobile homes in Washington, Nevada, Oregon and California are the most expensive, with a median value of $146,500, $114,000, $113,500 and $110,200, respectively. Only in these states are median mobile home values more than $100,000.

Mobile and single-family homes in California, Colorado and Massachusetts have the highest difference in median price. Median-priced mobile homes cost $537,900, $404,000 and $390,300 less in these states than median-priced single-family homes. The differences in median prices in West Virginia, Oklahoma and Mississippi are less than $105,000.

The states with the highest increase in the median value for mobile homes from 2016 to 2021 are Rhode Island, Nebraska and Idaho. Values have increased by 110.82% in these years, which is more than double the value before 2016. On the other hand, median single-family home values in these states appreciated by an average of 57.95% during this period.

The states with the least increase in the median value for mobile homes are Vermont, Alaska, North Dakota and New Jersey. The value increased by 2.28%, 4.13%, 7.33% and 9.11% respectively, making them the only four states where values increased by less than 10%.

While Channel suggests buying mobile homes for their relatively low prices, he also lists some drawbacks associated with this choice. Based on his observations, the value of mobile homes appreciate over time but owners often find it difficult to resell them.

Market Segments

Of all affordable housing market segments, the Sr Living – retirement downsizing segment offers the largest opportunity for value add.

2022 Manufactured Housing Facts

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Production:

• The manufactured housing industry produced 105,772 new homes in 2021, approximately 9% of new, single family home starts.

• The average sales price of a new manufactured home without land is $108,100.

• 49% of new manufactured homes are placed on private property and 51% are placed in manufactured home communities.

• All aspects of construction are continually inspected by professionally trained third-party inspectors.

• Manufactured homes are constructed to adhere to the federal HUD Code since 1976. The HUD Code, regulates home design and construction, strength and durability, fire resistance and energy efficiency. HUD revised the building code in the early 1990's to enhance energy efficiency and ventilation standards and to improve the wind resistance of manufactured homes in areas prone to hurricane-force winds.

Amenities:

• Floor plans are available that range from basic to elaborate – vaulted or tray ceilings, fully-equipped kitchens, walk-in closets and luxurious bathrooms.

• A variety of exterior siding is available – metallic, vinyl, wood or hardboard and stucco.

• Our industry has also launched a new class of homes known as CrossMod® that are indistinguishable from site-built homes, with pitched roofs with shingles and gabled ends, porches, garages, permanent foundations, and more.

Safety:

• The building materials in today's manufactured homes are the same as those in site-built homes.

• The homes are engineered for wind safety and energy efficiency. • Manufactured homes are among the safest housing choices available today due to federal laws requiring smoke detectors, escape windows and limited combustible materials around furnaces, water heaters and kitchen ranges.

Financing:

• Manufactured homes can be financed as personal property. Even when the home and land are financed together, the home can be secured as personal property and the land as real property. Traditional manufactured home personal property lenders offer land-and-home financing.

• Homebuyers may also finance their home and land together as real property using conventional mortgage financing obtained through a traditional mortgage lender.

• Financing programs are available through Fannie Mae and Freddie Mac for CrossMod® homes that provide borrowers with traditional financing options, lower interest rates, and allow for site-built comparisons in the appraisal process.

Industry Overview

The need for quality, affordable housing has never been greater. Today's manufactured homes can deliver outstanding quality and performance at prices that are up to 50 percent less per square foot than conventional site-built homes. These savings allow more and more Americans to own their own home, even in the face of an ever-widening housing affordability gap.

The affordability of manufactured housing is due to the efficiencies of the factory-building process. Manufactured homes are constructed with standard building materials, and are built almost entirely off-site in a factory. The controlled construction environment and assembly line techniques remove many of the problems encountered during traditional home construction, such as weather, theft, vandalism, damage to building products and materials, and unskilled labor. Factory employees are trained and managed more effectively and efficiently than the system of contracted labor employed by the site-built home construction industry.

Much like other assembly line operations, manufactured homes benefit from the economies of scale resulting from purchasing large quantities of materials, products and appliances. Manufactured home builders can negotiate substantial savings on many components used in building a home, with these savings passed on directly to the homebuyer.

Today's manufactured homes have experienced an evolution in the types and quality of homes available to buyers. Technological advances allow manufactured home builders to offer a variety of architectural styles and exterior finishes that will suit most any buyer's dreams while allowing the home to blend in seamlessly into most any neighborhood. Two-story and single-family attached homes are but two of the new styles generated by factory-built innovation.

At the same time, greater flexibility in the construction process allows for customization of each home to meet a buyer's lifestyle and needs. Interior features include vaulted ceilings, working fireplaces, state-of-the-art kitchens and baths, and porches, giving the homebuyer all the features found in traditional, site-built homes. Enhanced energy efficiency in manufactured homes, achieved with upgraded levels of insulation and more efficient heating and cooling systems, provide another source of savings for homeowners, especially in this era of rising energy costs. Smart buyers also are turning to EnergyStar-labeled manufactured homes for substantial savings in many aspects of owning and operating home.

Technological advances, evolutionary designs, and a focus on delivering quality homes that families can afford are the driving forces within the manufactured housing industry. That's why more people are turning to manufactured housing to deliver homes that fit their needs and wants, at prices they can afford.

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Source: Manufactured Housing.org

Source: MH Village.com

Manufactured Home Sales Are Skyrocketing - Here's Why

The last few years of ultra-competitive, low-inventory housing markets have pushed more Americans to buy small—and have spurred an uptick in the popularity of manufactured homes. In fact, manufactured housing hasn't been this popular since 2006.

A manufactured home is a compact house small enough to be made in a factory. They can range from 500-2,000 square feet and tend to include all the typical home amenities found in a single-family home.

Americans lost interest in this more compact form of housing in the early 2000s when lenders were hyping subprime mortgages to single-family home buyers—a practice that ultimately triggered a housing market collapse. Through much of the 2010s, sales of manufactured homes remained low; however, in 2018, Bloomberg declared that manufactured housing was making a comeback.

Stacker examined data from the U.S. Census' Manufactured Housing Survey to see how manufactured home prices and shipments have changed over the last eight years. In just five years since Bloomberg's declaration, these types of homes have increased in price faster than single-family homes, as more and more Americans seek affordable housing options.

Manufactured homes are the country's largest source of affordable, unsubsidized housing; however, rising prices and increasing investor activity are pricing many buyers out. It is also more difficult and costly to get a mortgage for a manufactured home than for a single-family home, according to research by the Consumer Financial Protection Bureau.

After a boom in popularity during the 1960s and 1970s, the U.S. passed laws regulating how mobile homes were built and also bestowed the home type with its new name, which carried with it less of a connection to Hollywood depictions of trailer parks. The regulated industry of manufactured housing was born.

The standards for building a manufactured home today are comparable to those for building single-family homes. Some even argue these homes are built for more wear and tear than their single-family counterparts, given that they have to be sturdy enough to transport on highways either in pieces or in their entirety. They are generally 8 feet or more in width and 40 feet or more in length while in transit.

Source: Stacker.com

Manufactured homes are growing more popular

At the turn of the 21st century, Americans were buying fewer and fewer manufactured homes—until around 2013. That's when annual shipments began ticking upward again, according to the U.S. Census Bureau. Shipments of manufactured homes represent how many individual homes are built and delivered to buyers.

Although they decreased in 2020, likely due to the pandemic, shipments of manufactured homes bounced back with gusto in 2021 and 2022. In fact, 2022 saw the most shipments of manufactured homes since around 2006.

Source: Stacker.com

Prices of new, manufactured homes have spiked since 2014

As interest in manufactured homes has increased, so too has the cost of purchasing a manufactured home. That said, the average price of a new manufactured home is still much more affordable than the typical single-family home.

In 2021, the average price of a new manufactured home was $108,100, up 19.5% from the year before, according to U.S. Census data. The average single-family home in 2021 sold for nearly $454,000.

Source: Stacker.com

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Stacker

New manufactured home prices are outpacing new single-family home prices

Manufactured housing is becoming more expensive at a faster rate than single-family homes. This was especially true from 2020-2021. Some of the spike in costs during this period can be attributed to supply chain hiccups amid the COVID-19 pandemic and higher costs for materials like lumber. But manufactured home prices had been increasing faster than single-family home prices even before the pandemic began—and at least as far back as 2017.

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Stacker

States where manufactured home prices have grown the most

The cost of purchasing a manufactured home in the U.S. jumped the most in North Dakota and Minnesota, which respectively saw a 49% and 46% rise in prices.

North Dakota Manufactured Housing Association Director Kent French said the trend of Americans moving to more rural regions of the country as employers embrace remote work has been a boon for the industry.

"To get a carpenter to go out and build your house is almost non-existent in the rural areas," French said. But anyone can plop down a pre-built manufactured home on a remote plot of land—if they can afford it.

Consolidation among businesses that produce manufactured housing means that prices can swing more dramatically from month to month compared with single-family homes. That's according to French, who told Stacker that prices have been coming down in his state in recent months as lumber and other goods become cheaper.

The average sales price of these homes decreased from 2020-2021 in three states: Maryland, Massachusetts, and Rhode Island.

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Greg Kelton // Shutterstock

Lot rent prices are shooting up across the country

It's not just manufactured home prices that are going up—the cost of renting the lot a manufactured home sits on has been increasing as well. Midwestern states saw the largest increases in manufactured housing tenant occupancy, according to data from Northmarq. The average rent for a lot increased 4.4% nationwide in 2021.

But corporate landlords have also been expanding their manufactured housing portfolios recently, pushing up rents and displacing some residents. The largest operator of manufactured home communities in the U.S. is Equity LifeStyle Properties, a real estate investment trust (REIT) that owns around 140,000 lots across 446 properties.

Combined, these factors push up the total rent cost for Americans seeking affordable housing options.

Manufactured Housing Industry Trends & Statistics

What Is The State of the Manufactured Housing Industry? Updated Industry Facts and Figures

This post highlights some of the top-line trends in the manufactured housing industry. Manufactured homes continue to be a crucial solution to the affordable housing crisis. Judging by the numbers from our 2022 “State of the Industry” report on manufactured housing industry trends and statistics section, manufactured housing continues to meet the need for for affordable housing in the U.S., and there continues to be positive signs for growth.

Competitive Advantage

What is the cost per square foot comparison between manufactured and site-built homes?

The average cost per square foot of a site-built home is $139.20. The average cost per square foot for a manufactured home is $72.46.

Community Living

How many manufactured homes are there, and how many go to communities?

There are an estimated 4.3 million manufactured home sites in the United States. Approximately 27 percent of new manufactured homes are placed in a community. The U.S. has approximately 43,000 manufactured home communities. A third of the country's communities were constructed in the 1950s through 1990s.

How Many People Live in Manufactured and Mobile Homes?

Manufactured housing industry trends and statistics show 22 million people in the U.S. live in a manufactured or mobile home. Manufactured homes make up 9 percent of annual new home starts. About 78 percent of new manufactured homes are titled as personal property (chattel).

Resident Satisfaction

How much do residents and owners of manufactured homes appreciate their purchasing decision?

A recent study reveals 90 percent of people are satisfied with their mobile or manufactured home. Seventy-one percent of residents cite affordability as the key driver for choosing manufactured housing. About 62 percent of manufactured and mobile home residents anticipate living in their home for another 10 years, and 38 percent don't ever anticipate selling their home.

Manufactured Housing Production

How many manufactured homes were built during 2021?

Thirty-three U.S. manufactured home builders operating from 141 plants (growth of six plants compared with 2020) across the country produced 105,772 housing units during 2021. Shipment levels of new manufactured homes eclipsed the 100,000 mark for the first time in 16 years.

Key Assumptions

Market Thesis

Key Assumptions

What could the new Value Chain look like?

Outthinking the market is not as hard as it might sound, for the market does not think—it does not have ideas.

Investors do have ideas, of course, and over time, as an idea becomes prevalent among large numbers of investors, it becomes priced into the market's valuations.

But that takes time. In the case of high tech, the market currently has a very weak idea of the tornado, one that is still distorted by ideas that are pertinent to other types of markets but not to high tech.

As a result, the market has an inadequate mechanism for pricing the net present value of future tornado events into stock valuations.

Investors with a clearer idea of the tornado should be able to outthink, and thus outreact, the market provided they are armed with:

Decision models that show what patterns to look for in an emerging technology-based marketplace and how to respond to them.

Research practices that show how to extract these patterns from the current publicly available information on a day-to-day basis, such that they can routinely track down tornadoes before the rest of the market gets there.

Market Thesis

To take on these questions in a logical sequence, this chapter will proceed as follows:

When should I buy?

What should I buy?

What should I hold and for how long?

What should I sell and when?

What should I do with all the information I get in the meantime?

Mechanism (Creating & Capturing Shareholder Value)

Scoreboard - how are companies valued?

What makes this market unique?

For investors interested in this asset class, there's a few things you really need to understand how work…

The Buyers Formula

You can either invest directly in to Real Assets – the physical property itself.

Or, you can invest into the management company who oversees and operates the properties.

How are companies valued?

Understanding Manufactured Home Valuation Methodologies

When it comes to the appraisal of manufactured homes for sale in communities or where land is not part of the transaction (chattel), there are two predominant valuation methodologies in widespread use today.

One is the cost-based approach, which essentially takes what manufacturers typically charge retailers for their homes, applies a retail mark-up, and then an increase or decrease to that value over time based on broad appreciation and depreciation trends nationwide. This is also commonly known as a “book value”, after the printed guide books for manufactured housing values originated by organizations such as the National Automobile Dealers Association or Kelley Blue Book®.

The second is the market-based approach for manufactured housing, which is based on the actual sales of comparable homes in the market area surrounding the subject property. This is the same approach used in the valuation of conventional, site-built real estate, including manufactured homes where the land is part of the transaction.

In our 35 years of performing manufactured home appraisals, we have had the opportunity to utilize both valuation methodologies through multiple market cycles, depending on the individual needs of the client and subject property.

While both methodologies have specific advantages and compromises, it has been our experience that an appraisal that market-based approach provides the most consistent, reliable values in volatile markets.

In a rapidly depreciating market experienced by our industry several decades ago, the market-based valuation approach was relied on by lenders to avoid overfinancing homes and limiting their rate and severity of loss. The market-based approach provides the same safeguards today in a rapidly appreciating market where buyers’ enthusiasm and emotion may be outpacing value trends in their market.

The Advantages of a Market-Based Approach in Volatile Markets

1. The market-based approach considers the specific qualities of each market in determining value.

All housing markets are not created equal. This is true not only of the region and state, but also for the local housing market. It's like asking, "How much is a three-bedroom home in a nice neighborhood in Ohio worth?" That's a very difficult question to answer because there are so many variables. Location is everything, and we know that there can be vast differences in housing values from one housing market to another even within the same state, even with identical homes.

2. The market approach does not reply upon assumptions about manufacturer, model, or series.

Listing activity or title data alone is often insufficient because it does not always contain complete information. Title data, for example, often shows only the manufacturer of the home, making it impossible to determine the model or the series. Guessing at the model and or the series can result in the value being seriously over or understated.

3. The market approach is not subject to broad appreciation/depreciation trends.

The millions of manufactured homes in this country consist of thousands of combinations of year, make, model, features and amenities. Each resides in a distinct market or submarket throughout the country. Additionally, many are located in one of the more than 43,000 land-lease communities nationwide, also with their own combination of attributes and amenities that contribute to the value of that location. Is it reasonable to assume that a broad approximation of depreciation and value trends could responsively and accurately reflect the individual market factors of hundreds of MSAs and CBSAs throughout the country?

4. Market-based values tend to have a more consistent relationship to actual selling prices.

When we compare manufactured home values to actual selling prices that are used in a market-based appraisal, it is apparent that there is a very consistent relationship between the two. This is the relationship we would expect since both value and selling price reflect market value most of the time, even under short-term variability. Historically when Datacomp has compared other valuation methods and market-based comparable appraised values to the actual sales price of the home, we noticed a much tighter correlation between the comparable appraised value and the sales price. Other valuation methodologies tended to produce results that differed from the sale price more erratically and to a larger degree.

5. Market-based values accurately reflect the marketplace.

In the late 1990s, Datacomp considered cost-based manufactured home values to be too high. We felt that the high values afforded lenders little protection against loans on homes that were overpriced. Also, the high and inconsistent values created the potential for over-advancing on refi's. Today the opposite market dynamics are at work, but the market-based valuation methodology continues to be the best tool for understanding the true value of a home.

Why do investors like them?

Unique Problems

The Pitfall and Promise of Park-Owned Homes

As relative newcomers to the industry, we notice a wide gulf separating large park owners from those operating on a more modest scale of say, 200 lots or fewer. There are noticeable attributes that characterizes smaller community owners. One of those is a tendency to incorporate the promise of park-owned homes into their business model as a strategic choice to generate higher annual income.

However, difficulty may arise when the time comes for these owners to sell. Those park-owned homes may represent a challenge for attracting quality buyers. The severity of that challenge will depend on the choices the park owner has made.

Pitfall #1: Purchase Arrangements with Long Terms

A buyer of your park likely will want some degree of flexibility when it comes to park-owned homes.

Regarding flexibility, a common pitfall we see small owners fall into is entering into lease-to-own or lease-option-to-purchase arrangements with residents that have very long terms. In general, these arrangements can be positive in the eyes of a buyer who is sensitive to park-owned homes. They put the residents on a path toward home ownership. And achieve the goal of generating steady lot rental income.

However, in order to retain flexibility, park owners must resist any urge to lock themselves into arrangements with 15 or even 10 year terms. It is preferable the term be shorter. Ideal is between five and seven years or less. This is true even if it means earning less on the potential promise of park-owned homes.

Indeed, avoid encumbering a home with a purchase arrangement for that long term. It is even preferable that the home simply remain a pure rental.

Some small owners are apparently of the view that, if the term of the purchase arrangement is long, the resident will have a greater chance of defaulting and the owner will get to start over again with a new tenant. Such a view is both inconsistent with the values at the heart of the manufactured housing industry and short-sighted. It impinges upon the flexibility that buyers seek in a new property acquisition. Not to mention the tenant is ill-served.

Thesis

Players (Market Map)

Direct Competitors

Berkshire

Zell

Blackstone Group

A Precise Approach To Passive Mobile Home Park Investing

Owners of mobile-home parks have trounced the broader market thanks to soaring house prices & nimbyism. One of the best-performing investments since last decade's housing crash, mobile home parks.

Wall Street Journal

Trailer parks are the best real estate investment that has ever existed. They have a decent yield, high barriers to entry, solid demographics, a tenant base that remains with you for life, and tiny cap-ex requirements.

Billionaire Sam Zell

The Future of Mobile Home Park Investing: Three Big Names

If you're considering large-scale commercial real estate investment options, you may initially think of apartment complexes or modern mixed-use developments. However, for some private and public companies, as well as legendary individual investors, mobile home parks offer exceptional upside opportunities along with some downside protection. In this article you will learn where I think the future of mobile home park investing is headed and who some of the biggest players in the space are.

Warren Buffet

Among the Oracle of Omaha's game-changing investment strategies have been big bets on mobile homes. In 2003, Berkshire Hathaway purchased Clayton Homes, currently the largest builder of manufactured housing in the United States. Clayton subsidiaries include 21st Mortgage (the country's largest lender for manufactured and mobile homes) and HomeFirst, an insurance agency offering coverage to mobile home owners. In 2003, Berkshire Hathaway acquired Clayton Homes for $1.7 billion; 17 years later, in 2020, the pre-tax earnings of Clayton Homes reached $1.25 billion. It's easy to see that Warren Buffet's bet on mobile homes is paying off.

Sam Zell

As the iconic founder of Equity Group Investments, Sam Zell has decades of experience in a range of commercial real estate strategies. As Chairman of the Board of Equity LifeStyle Properties, Inc. (ELS), the country's largest owner of mobile home parks, Zell sees tremendous growth potential in both manufactured housing communities (another name for mobile home parks) and RV resort properties. ELS is continuing to make strong moves in this space, recently acquiring RVC Outdoor Destinations, MHVillage and Datacomp in December 2021 for a total of $147 million.

Blackstone

Recently, private equity money has begun flooding into mobile home parks. Blackstone Group, with $881 billion AUM, has made some major mobile home park acquisitions over the last few years, and it seems they're not slowing down. Blackstone isn't the only private equity company competing in this space; Carlyle Group and Apollo Global Management, among others, also include mobile home parks in their real estate portfolios.

Investing Insights

Why has mobile home park investing attracted some of the top investors across the country? I think a primary reason is the unprecedented demand for affordable housing. Also, mobile home parks can typically be purchased for higher cap rates, providing investors more income per dollar invested. The majority of mobile home parks are owned by "mom-and-pop" Baby Boomer generation operators who are starting to retire. For these reasons, I see the mobile home park asset class continuing to consolidate over the next five to ten years.

Large operators are building investment portfolios full of mobile home parks and I think this is good for the asset class, stimulating capital improvements to older properties that are known for deferred maintenance. Through 2022, I suggest you keep an eye out for this alternative investment option. I predict that we will start to hear of even more big names joining the movement.

Are Mobile Home Parks an Undervalued Asset Class

Jonathan Tuttle has been in the mobile home park space since 2007. He served as a mobile home broker for 10 years and now serves as a fund manager at Midwest Park Capital, a private real estate investment firm focused on the mobile home park vertical. In this episode, Jonathan shares how the mobile home park space has changed over the last few years, what he sees in store for the future, and why despite everything, he still views mobile home parks as an undervalued asset class.

Changes in the MHP Space

Major hedge funds and Wall Street players have entered the mobile home park space over the last few years, buying up parks and compressing cap rates, Jonathan explains. Additionally, it's become difficult to add mobile home park inventory to develop new parks now based on legislation, local governance, and tax issues, creating a situation where so much inventory has been transacted recently by organizations with defined hold periods of 10+ years that it could be quite a while before many parks are back on the market.

Jonathan's Next Move

While Jonathan is receiving absurdly high offers on his properties based on the state of the space, he's holding his ground because he believes the value will continue to increase over the next few years. He is projecting rent growth and increasing appreciating values for mobile home parks moving forward.

Why Mobile Home Parks Are Still Undervalued

Jonathan points to supply and demand economics to explain why, despite everything, mobile home parks are still undervalued as an asset class. He says there are 10,000 baby boomers retiring each day, and when the major expected increase in the senior population hits within the next 10 years, more baby boomers will be selling off their assets and moving into mobile home parks, where senior citizens already make up 50% of the clientele. "These major trends and major indicators all benefit mobile home parks," Jonathan says. "That's why it's so unique and so valuable."

Do Manufactured Homes Stand To Benefit As The Housing Market Weathers A Recession?

The housing industry has officially entered a recession. To be clear, the single-family, site-built housing market has entered a recession. Niches of the industry, such as multifamily homes, appear to be in a very different situation. The same may be true for a low-end segment of the market known as modular or manufactured homes.

The stocks of manufactured homebuilders rallied from mid-June to mid-August, along with other industries banking on a short rate tightening cycle from the Federal Reserve. Charts for stocks including Cavco Industries (CVCO), Skyline Champion (SKY) and LCI Industries (LCII) shaped valid bases.

Then, hawkish signals from the Fed sent anything investors considered a rate-sensitive industry into retreat. Caught up in that selling, Cavco, Skyline, LCI and others saw their chart patterns collapse below key levels of technical support.

Those charts reflected a number of industry data points. Builders confidence swooned in August. Sales of both new and existing homes dropped in July vs. June and year-ago levels. Single family housing starts dropped 10% in August, vs. July.

Multifamily Demand Steady

Multifamily homes, meanwhile, were a different story. The number of buildings with five or more units under construction is up almost 25% over year-ago levels, according to the National Association of Home Builders. Shipments of new manufactured homes during the second quarter swung more than 37% above the year-ago period, with 11,400 units delivered.

In July, Pew Research reported a nationwide shortage of 3.8 million housing units. Much of that need is among low income or poverty-level consumers. But existing housing stock is increasingly under pressure from real estate investors, which accounted for 24% of all the single family homes purchased in 2021. That leaves supply tight and pickings pricey for fixed-income retirees looking to downsize and cut costs, or first-time homebuyers struggling to save up a down payment.

As rising interest rates place increased pressure on those already stressed home shoppers, analysts and investors are watching to see whether much-lower-priced manufactured homes garner more attention.

Economic Trends That Make Manufactured Home Stocks Shine

The industry got its start building mobile homes, the kind with wheels that packed into trailer park communities — most of them low income settings — across the U.S.

But trailer parks have come a long way since Sammy Kershaw hit the top 10 of the Billboard charts with his 1993 country hit "Queen of My Double Wide Trailer." And maybe even since Toby Keith's "Trailerhood" hit in 2010. Trailer parks are no longer seen as lower-income havens. Sure, some trailer parks still are, but increasingly there has been a shift to more upscale park model modular homes.

The difference between manufactured homes and modular homes is slight. The main difference is that manufactured homes are built to the national HUD code, while modular homes are built to applicable state and local building codes. But they essentially look the same. although modular homes can be more easily transportable.

Source: Investors Business Daily

Allied Market Research estimates the size of the manufactured homes industry will grow from $31 billion today to $39 billion by 2027, at an annual rate of 6.5%. Some 22 million people in the United States live in manufactured or modular homes.

Buffett's Heavyweight: Clayton Homes

A big piece of that market is the turf of Clayton Homes, a division of Warren Buffett's Berkshire Hathaway (BRKA) and America's largest manufactured homebuilder. Clayton has reportedly done well as demand for manufactured homes escalates.

But a number of economic trends suggest makers of manufactured homes are broadly poised to benefit. Those trends include:

The ongoing downsizing trend as baby boomers enter retirement age and look to cut costs.

Rebranding the names from "trailer parks" and "mobile homes" to park sites that allow "modular homes."

People, both young and old, who have been forced out of the housing market by sky-high property values.

Millennials who see manufactured and modular homes as the next wave of the housing market, where you can take your home with you.

Growth In Revenue Expected to Climb

"Revenue for the manufactured home wholesaling industry is expected to be sustained over the five years to 2027 in light of expected increases in construction activity," a recent IBIS report stated. "However, projected increases in interest rates, as the economy recovers from the Covid-19 (coronavirus) pandemic, may limit industry growth. Continued downstream demand from construction will likely underpin revenue for the wholesaling of industry products. Despite the cost of raw materials rising."

Mobile-manufactured homes and recreational vehicles are combined into a single industry group. The group currently ranks No. 134 out of 197 industry groups that IBD tracks.

RVs experienced a record-setting sales rush as pandemic shutdowns launched the vanlife and glamping crazes in 2020. Thor Industries (THO) and Winnebago (WGO) both shot up in 2020. Then the RV industry underwent a downturn, due to supply chain issues and to a lack of demand once the pandemic subsided.

The manufactured homes group has been more consistent, tracking the housing market's longer-term cycles.

Skyline Champion Builds On Earnings

"Our growth and improved profitability levels continue to be driven by the demand for our homes and our team's ability to increase production levels," said Skyline CEO Mark Yost in announcing quarterly earnings on Aug. 2. "The ongoing efforts to deliver better homes faster through streamlining product offerings and investments in capacity and people are paying off as we sequentially reduced our backlog and improved delivery times to our customers."

Skyline Champion offers a wide variety of homes, with prices averaging around $65,000.

Skyline logged six quarters of triple-digit earnings growth through the June quarter. Revenue growth during that period averaged 54%. Skyline earned $2.03 per share on sales of $726 million in the June quarter, easily beating Wall Street estimates on both earnings and revenue.

RBC, Barclays and Craig-Hallum all raised their price targets on the stock and held their ratings at outperform, overweight and buy, respectively, following the earnings report. The target average was 74 — about 35% above where shares traded on Thursday.

Analysts see a 104% EPS gain in the company's fiscal second quarter, ended in September, according to FactSet. The revenue growth target is 32%. Beyond that, earnings forecasts are flat to lower. Projections for revenue are for declines starting in the fourth quarter. But company management remains optimistic.

"We expect awareness of our housing solutions to continue to increase given the tighter economic environment and challenges within the traditional site-built home market," Yost said.

Cavco Tries To Build Base

Phoenix-based Cavco sells manufactured and modular homes, park model RVs and even cabins and commercial structures. Three-bedroom homes range roughly from $30,000 to $150,000.

After a brief spike on Aug. 5, the day it easily beat quarterly earnings and sales estimates, Cavco's stock chart quickly unraveled.

Cavco has booked triple-digit earnings gains in five of the past six quarters. Revenue growth has accelerated for seven quarters, rising 78% in its fiscal first quarter, ended in June.

FactSet analysts expect Cavco to report earnings of $5.88 a share, up 44.8%, in the September quarter, on a 54% sales gain, to $555 million. Further out, quarterly earnings and revenue growth projections jerk up and down — but annual gains continue.

LCII Leverages Strength In Manufactured Homes And RVs

LCI Industries splits its sales between two industries: manufactured homes and RVs. The Elkhart, Ind.-based outfit makes components, furniture, trailer hitches and other items for the RV, boating, manufactured and modular homes industries. LCI's brands include Taylor Made boat parts and Thomas Payne furniture.

As RV sales and prices shot up in 2020, LCI shifted its focus onto RVs. In the latest quarter, supplies for trailers and fifth-wheel RV sales shot up 49% over the previous year. For 2021, Thor Industries represented 23% of total LCI sales. Berkshire Hathaway's Forest River and Clayton Homes accounted for a total 20% of sales.

While acknowledging the downturn of demand from RV makers recently, CEO Jason Lippert says he's confident the company will increase its market share both within the RV industry and in the manufactured homes industry.

"The widespread availability of peer-to-peer rentals, along with increasing costs of airfare and hotel lodging, have made camping, boating, and RVing attractive options for vacationing," Lippert said. "We believe our diverse portfolio has positioned us for long-term growth as we capture tailwinds related to the ongoing popularity of the outdoor lifestyle."

LCI earnings sputtered in last year's third quarter. The numbers quickly picked back up, while sales growth continued at a healthy clip.

FactSet analysts project another Q3 blip this year, due to the lack of demand from RV makers and seasonal trends. They expect earnings of $2.55 a share vs. $6.06 for Q2, but still up from $2.50 a share in the year-ago quarter. The only recent analyst action on the stock was a downgrade, to neutral, by DA Davidson in early August.

Manufactured Home Stocks Are Not The Only Way To Invest

In addition to the builders and suppliers of manufactured/modular homes, investors can also buy real estate investment trusts (REITs). These REITs hold preplanned communities designed to house modular homes. They include Equity Lifestyle Properties (ELS), Sun Communities (SUI) and UMH Properties (UMH).

A quick look at MarketSmith charts tell us that none of these REITs is positioned to create a buying opportunity. And most REITs have followed the real estate market as it enters a recession.

Mobile Home Park Trends: Big Money And Improvements

Previously out of favor, the stigmatized asset class of mobile home parks is gaining steam. Investors are bringing much-needed capital to the asset class in the form of capital improvements after new acquisitions. New mobile home park investors are changing the image the properties once had. All the while, these improvements can create great returns for investors and better living conditions for mobile home community residents. As a mobile home park investor, operator and researcher, I want to explain how recent increases in institutional capital are impacting this undervalued and supply-constrained asset class.

Greater Transaction Volumes

Mobile home park transaction volumes are up since 2013. JLL’s capital markets group published a report stating transaction volume for manufactured housing communities in 2020 was around $4.2 billion, which has come a long way from the 2013 transaction volume of $1.2 billion. As baby boomers continue to retire, in the amount of around 10,000 per day, a vast number of manufactured housing communities are starting to transact for the first time in decades. This is primarily due to the fact that many of the mobile home park properties are still owned by “mom-and-pop” solopreneurs who acquired these assets many years ago.

Change is not all bad. Big money is flooding into mobile home parks. Mobile home parks were a top-performing real estate asset class in 2020, and some of the world’s largest investors are aiming to make big improvements to their newly acquired mobile home parks. In my view, this is primarily due to a few factors: the asset class has performed well during recessionary times, and the supply of new mobile home parks has been limited due to zoning restrictions and the "not in my backyard" phenomenon (NIMBY).

Increased Capital Improvements

Many new owners are bringing much-needed capital improvements to these properties, which due to mismanagement have experienced years of deferred maintenance in some cases. Many "mom-and-pops" needed the income from these properties and didn’t raise lot rents enough to keep up with inflation; this restricted them from being able to afford the upkeep needed to maintain these communities at a high level.

Much needed mobile home park capital improvements include:

• Road repair and replacements

• Utility infrastructure improvements

• Tree trimming and overgrown landscaping

• Repairs to existing playgrounds and common area amenities

• New street signage and better lighting

• Filling vacant lots with mobile homes

New Opportunities

Affordable housing is a very real problem in the United States, and manufactured housing has been proposed among the solutions. Approximately 22 million Americans currently live in manufactured homes. I think this number is vastly lower than what it could be based on the current vacancy in mobile home communities across the country. Mismanaged communities can be notorious for holding vacant lots without mobile homes on them. This wasted space is bad for business and for affordable housing supply. As new professional operators acquire mobile home communities and reinvest in them by filling vacant lots, the supply of affordable housing units increases for those in need.

The win-win scenario: When a mobile home community is improved, it can often qualify for outstanding financing terms available from government agency lenders such as Fannie Mae and Freddie Mac. These enticing financing terms can encourage investment and can give stakeholders the opportunity to generate a good return on those invested funds, and that's a win. The residents also win because they are getting a safer and higher quality community experience when the mobile home community they live in is improved upon and well maintained.

Mobile home parks are finally starting to get the investment dollars needed to reduce the stigmatized "eye-sore" mentality they've had for years. These communities can fill a very important gap in our country's affordable housing supply and since there are barriers that restrict new development, we should embrace the positive changes to our country's existing supply.

Wall Street ends 2022 with biggest annual drop since 2008

U.S. stocks closed out 2022 lower on Friday, capping a year of sharp losses driven by aggressive interest rate hikes to curb inflation, recession fears, the Russia-Ukraine war and rising concerns over COVID cases in China.

Wall Street's three main indexes booked their first yearly drop since 2018 as an era of loose monetary policy ended with the Federal Reserve's fastest pace of rate hikes since the 1980s.

The benchmark S&P 500 (.SPX) has shed 19.4% this year, marking a roughly $8 trillion decline in market cap. The tech-heavy Nasdaq (.IXIC) is down 33.1%, while the Dow Jones Industrial Average (.DJI) has fallen 8.9%.

The annual percentage declines for all three indexes were the biggest since the 2008 financial crisis, largely driven by a rout in growth shares as concerns over Fed's rapid interest rate hikes boost U.S. Treasury yields.

"The primary macro reasons ... came from a combination of events: the ongoing supply chain disruption that started in 2020, the spike in inflation, the tardiness of the Fed beginning its rate tightening program in the attempt to corral the inflation," said Sam Stovall, chief investment strategist at CFRA Research.

He also cited economic indicators pointing to recession, geopolitical tensions including the Ukraine war, and China's surging COVID cases and uncertainties over Taiwan.

Growth stocks have been under pressure from rising yields for much of 2022 and have underperformed their economically linked value peers, reversing a trend that had lasted for much of the past decade.

Apple Inc (AAPL.O), Alphabet Inc (GOOGL.O), Microsoft Corp (MSFT.O), Nvidia Corp (NVDA.O), Amazon.com Inc (AMZN.O), Tesla Inc (TSLA.O) are among the worst drags on the S&P 500 growth index (.IGX), down between 28% and 66% in 2022.

The S&P 500 growth index has fallen about 30.1% this year, while the value index (.IVX) is down 7.4%, with investors preferring high dividend-yielding sectors with steady earnings such as energy.

Energy (.SPNY) has recorded stellar annual gains of 59% as oil prices surged.

Ten of the 11 S&P (.SPX) sector indexes dropped on Friday, led by real estate and utilities.

"The housing market has really slowed down and the values of people's homes have declined off of the highs earlier this year," said J. Bryant Evans, investment advisor and portfolio manager at Cozad Asset Management in Champaign, Illinois.

"That affects people's mind frame and actually affects their spending a little bit."

The focus has shifted to the 2023 corporate earnings outlook, with growing concerns about the likelihood of a recession.

Still, signs of U.S. economic resilience have fueled worries that rates could remain higher, though easing inflationary pressures have raised hopes of dialed-down rate hikes.

Money market participants see 65% odds of a 25-basis-point hike in the Fed's February meeting, with rates expected to peak at 4.97% by mid-2023.

The Dow Jones Industrial Average (.DJI) fell 73.55 points, or 0.22%, to 33,147.25; the S&P 500 (.SPX) lost 9.78 points, or 0.25%, at 3,839.50; and the Nasdaq Composite (.IXIC) dropped 11.61 points, or 0.11%, to 10,466.48.

Volume on U.S. exchanges was 8.50 billion shares, compared with the 10.79 billion average for the full session over the last 20 trading days.

Declining issues outnumbered advancers on the NYSE by a 1.50-to-1 ratio; on Nasdaq, a 1.03-to-1 ratio favored decliners.

The S&P 500 posted no new 52-week highs and no new lows; the Nasdaq Composite recorded 85 new highs and 134 new lows.

Source: CNBC

Investing in Manufactured Homes on the Public Markets

The Traditional U.S. Housing Market - A Trifecta of High Prices and Low Inventories Amidst High Interest Rates

Before we dive into a review of publicly held manufactured home communities themselves, we take a quick look at the fundamentals of the U.S. housing market, the move toward manufactured housing communities, and why so many investors have turned to the real estate investment trusts (REITs) that own them.

Over the last few years, home prices have skyrocketed across the nation.

Late last year the Federal Reserve noted that the median sales price of homes neared a whopping $500,000, and making record highs.

Source: St Louis Federal Reserve

The shortage of new construction starts in traditional, site-built homes certainly hasn't calmed high home prices.

As 2022 drew to close, new housing starts reached their lowest levels in over two years, plunging 21% from their April peak.

That prompted industry experts to estimate that new construction recovery this year is unlikely.

Worse, this new construction shortfall could lead to yet another housing shortage.

Chief economist Ian Shepherdson at leading market intelligence firm, Pantheon Macroeconomics, said that although “the bulk of the drop is over, recovery is a long way off,” and construction may not pick up until late this year.

Further fanning those flames, last fall, mortgage rates climbed to a 20-year high of 7.08%. As a result, overall home listings fell off. Total housing inventory remained near “historic lows,” as noted by Lawrence Yun, the chief economist for the National Association of Realtors.

In September, Pew Research not only agreed with those assessments, but reported that it could take “nearly a decade to erase the nation’s housing shortage (of several million units), which has driven up home prices and rents, pricing out many lower- and middle-income families.”

When one considers all these forces converging…

It’s no wonder that so many Americans can’t afford a traditional home, and that includes not only middle income buyers, but certainly first-time, low income families, or even most senior buyers.

In fact, 60% of Americans can’t afford a traditional home.

Here’s why…

Lenders usually require that annual mortgage payments be no more than 30% of annual income.

According to real estate brokerage Redfin, early last year, the average annual mortgage was $26,800.

That means the average mortgage requires an annual income of $89,300, effectively removing 60% of the population, according to data from the Census Bureau.

This was visualized in a May 2022 Skyline Champion Corp investor presentation.

1: US Census Bureau, 3: 2022 Redfin analysis of average annual mortgage payments of $26,800. Based on recommended housing less than 30% of income, household income required is $89,300

Source: Skyline Champion Corp May 2022 Investor Presentation

Manufactured Homes - An Affordable Answer Grows In Popularity

Especially relative to site-built homes, manufactured housing is much more affordable. Typically speaking, these homes are the most affordable and non-subsidized housing option across most markets.

The St Louis Federal Reserve stated that as of September 2022, the average sales price of manufactured homes ranges from $95,800 to $159,400 - a far cry from average site-built homes.

And the manufactured homes sold by some of the leading REITs run less than the averages that the Fed quotes, as we'll see below.

However, we bear in mind that many manufactured home dwellers live in communities where they own their home, and rent the land or “site” upon which the home sits.

Even though the rents on those home sites have been, and continue to be fairly low… Like most everything in this inflationary age, rents across manufactured housing communities have been rising.

About half of residents in these communities receive social security benefits.

Yet, beginning in January this year, social security benefits are set to receive their highest cost-of-living-adjustments in four decades - an increase of 8.7%.

That increase will allow tenants leeway in their budgets, while also allowing the related communities, most of which are held by REITs, room to meaningfully push rent growth due to their own higher costs - a win-win.

Source: Seeking Alpha

Long Term Tenants

The resident or tenant base in manufactured home communities is notably long term. That’s supported by the fact that most dwellers reside in the same community for 14 years, which is nearly five times that of average rental units, such as apartments.

Plus, these homes are factory built, and thus, faster to build than standard site-built homes.

In trying to get a fair estimate on the time to build a manufactured home, we looked at a variety of manufactured home builders.

We settled on figures from the largest U.S. builder, Clayton, which says that most of their facilities can complete a home in about six to seven days. Although, some facilities can churn out a home in about two days.

However, amidst supply and labor shortages across industries, we also consider that the actual order to move-in time will be longer.

In answer, FDIC-insured bank SoFi (Social Finance, Inc) states that from placing an order to move in time, it ranges from about two to four months.

Conversely, a site-built home averages about seven to nine months.

Following the pandemic slump, in 2021, the manufactured home industry produced 105,772 homes, or about 9% of all new single family homes.

Sales of new manufactured housing units strongly accelerated in 2021, up 11%. That was a building boom, and the first time in 14 years that the industry was building over 100,000 units in a 12-month period.

Notably, this was driven by site expansions in existing parks, especially those owned by REITs - again, most of which are publicly traded.

Source: Seeking Alpha

Arguably, the COVID pandemic has served to further boost the wave toward manufactured home community living. Folks want to live in less crowded cities or urban areas, and we see many if not most manufactured home communities in more rural settings.

All in all, we see strong fundamentals favoring manufactured housing orders. And though backlogs appeared to be slowing somewhat as 2022 wound down, that's likely not as much as in site-built home construction.

Added to that, in the communities in which most of these homes are placed, we're also seeing strong demand.

Investors are taking advantage of this trend in the publicly held makers of manufactured homes, as well as in the related manufactured home community REITs.

Here, we take a look at both vehicles, and through the lens of six leading companies.

Real Estate Investment Trusts (REITs)

Real estate investment trusts or REITs own, operate, and finance income-producing properties.

In 1960, President Eisenhower signed this investment vehicle into law. And that followed the REIT Act, which was created by Congress in order to provide all investors, not just the ultra wealthy, a way to invest in large and well-diversified portfolios. After all, most of us don't have the bucks to lay out several million dollars for one large-scale property, let alone several.

Properties included in REIT portfolios can range from apartment complexes and single family home developments to offices, healthcare and storage facilities, and even extensive infrastructure properties such as cell towers.

REITs are extremely popular investments. That's proven when we consider that 64% of the world's top 25 largest institutional investors use REITs in their investment portfolios.

And as of the fourth quarter 2022, about 150 million Americans, or roughly 45% of the entire population, lived in households which held REIT investments.

Source: Nareit on REIT.com

U.S. REITs own almost $4.5 trillion of gross real estate assets, and the publicly held share of that larger group held REITs assets totalling $3 trillion.

All told, U.S. public REITs held an equity market capitalization of more than $1.3 trillion as of the fourth quarter 2022.

Generally speaking, REITs focus on income production, via rental payments on the properties they own, and rather than only capital appreciation, as we see across most equities.

Today, most REITs are publicly traded, affording investors a high degree of liquidity.

The structure of REIT rental contracts can vary quite a bit. But almost all allow for some variability in rental rates, and thus allow for adjustments in tune with inflationary and other market conditions.

In very short term leases, such as hotels or vacation homes, rates may vary on an almost weekly or even daily basis. And longer term leases usually contain some sort of rental escalation clause, allowing for rates to increase periodically, and thus, holding inflationary protection for the REIT and its investors.

So, in overview, REITs can provide investors with an inflation hedge due to their ability to generate steady cash flows via their rental income streams.

As well, in paying consistent dividends, REITs can offer great dividend yields. Case in point, over the last 10 years, REIT dividend growth averaged 4.5%, which handily beat the annual inflation average of 2.6% in the same period.

Lastly, but far from least, in order for REITs to maintain their growth in revenues as well as profitability, they're in a pretty consistent state of investing in new properties and developing, or even redeveloping them. Here, we take a look at the manufactured home community REITs, and their recent performance…

Manufactured Home Community REITs

There are three manufactured home community (MHC) REITs listed in the U.S. They are UMH Properties (UMH), Sun Communities (SUI), and Equity Lifestyle Properties (ELS). Together, they reflect 137 years of operation.

Their current combined market capitalization is nearly $30 billion.

Spread across the U.S., Canada, and one also holding U.K. properties, these three REITs represent a wealth of manufactured home, recreational vehicle (RV), and related marina properties. But, in all three, their holdings are concentrated in manufactured home communities.

In fact, combined, these companies hold approximately 1,250 communities, and a staggering 376,365 home sites.

Over the last five tumultuous years, leading up to the COVID pandemic and since, total returns on these three manufactured home (MH) REITs, have performed quite well. That includes outperforming U.S. equity REITs, as we see here, and using the Schwab U.S. REIT exchange traded fund (ETF) as proxy:

MH REITs 5 Year Total Returns:

Equity Lifestyle (ELS): 72.22%

Sun Communities (SUN):	69.91%
UMH Properties (UMH):	39.80%
Schwab US REIT (SCHH):	13.95%

Of course, this outperformance takes into consideration the fairly steep declines suffered last year, as both inflation and interest rates soared, and when the broader Real Estate sector finished ninth of the 11 broad sectors, and investor returns declined 29%.

Added to that, two of these MH REITs, SUI and ELS, were buffeted somewhat by Hurricane Ian-related business disruptions in Florida. Although, the damage reported was in greater part related to RV properties, and both companies have since reported resolution or near-resolution no later than mid-year this year.

All said, when one considers the headwinds these MH REITs faced, their resiliency arguably stands strong. And while that overview speaks of past outperformance, we also pause to consider the forward look for MH REITs.

On March 14, the leaders at Baron Real Estate Income Fund, investors in the two largest MH REITs, Sun Communities and Equity Lifestyle

commented positively as to what it expects for the future of these investments and why:

We are bullish regarding the long-term prospects for the Fund's investments in manufactured housing REITs, Sun Communities, Inc. and Equity LifeStyle Properties, Inc. (NYSE:ELS).

Sun Communities and Equity Lifestyle Properties are part of a niche real estate category that we expect to continue to benefit from favorable demand and supply dynamics. Both companies are the beneficiaries of strong demand from budget-conscious home buyers such as retirees and millennials, and negligible new inventory due to high development barriers. Demand for affordable outdoor vacations (recreational vehicles) also remains strong.

Sun Communities and Equity Lifestyle Properties have strong long-term cash-flow growth prospects and low capital expenditure needs. If the macroeconomic environment worsens, we expect business results to be resilient due to each company's focus on affordable housing and affordable outdoor vacations."

As we'll see by looking a bit closer at not only SUI and ELS, but UMH, it's not only the Baron Real Estate Income Fund that looks favorably upon, and holds these MH REITs, but a wealth of other institutions. And it's long been said that smart money follows these huge investors.

Sun Communities, Inc

Sun Communities, Inc (NYSE: SUI), was established in 1975, and became publicly traded in 1993.

The company's enterprise value stood at $24.15 billion at year end December 2022. And again, its market cap stood at nearly $16.6 billion in mid-March 2023.

At its calendar and fiscal year, December 31, 2022, SUI owned, operated, or had an interest in approximately 627 developed properties. It's key to note that those included not only manufactured homes, but RV, and marina properties, as well.

The properties are spread about 39 U.S. states and in Canada, As well, SUI holds 42 properties in the U.K. Nevertheless, SUI reports that it holds the largest publicly traded portfolio of MH land-lease communities in North America.

In November last year, the company counted a total of 352 MH communities, with roughly 144,000 revenue producing sites and around 9,000 more slated for expansion and greenfield development.

In order to gain a little insight as to the breadth of SUI's property investment activities, we find that over the past 12 years, it acquired $11.7 billion of properties. And in the last 10 years, SUI's shareholders saw 397% in returns.

Source: Sun Communities

Across its MH portfolio, SUI reported occupancy rates of 96.2%, and about 70% of its communities stood at 98% or higher.

And as a testament to the company's uninterrupted rental income stream, SUI found the average resident tenure was 14 years before units were sold in place.

Across the 2012-2022 10-year period, SUI's MH communities achieved a 3.4% historical average rental rate of growth.

Source: Sun Communities Investor Presentation, 11/22

And yet compared to rentals in single family, multi-family and two-bedroom duplexes, SUI's MH rentals were priced about 54% less per square foot - or nearly 74% less than total comparative rents.

Source: Sun Communities Investor Presentation, 11/22

For the year end December 31, 2022, SUI's total revenue was $1,902.2 million compared to $1,598.2 million for the prior year, an increase of 19%.

Its net income for the same period was $242 million, a year-over-year decline of 36.35%

For the year ending December 2022, SUI's gross margins were 48.85%, dropping 4.57% from the prior year ending December 2021.

Yet, SUI's FFO for the year ending December 2022 was $912.14 million, up 12.9% from 2021.

The company's net debt to EBITDA ratio was only 6.0x.

SUI's forward dividend yield stands at 2.48%.

Source: Seeking Alpha

In the year ended December 31, 2022, Sun Communities acquired 61 MH and RV communities and eight marinas, with 24,347 sites, wet slips and dry storage spaces and 2,655 development sites.

SUI shares are 93.31% institutionally owned, with nearly 3.5x more shares bought than sold over the last 12 months.

Source: MarketBeat

Equity Lifestyle Properties, Inc

In 1968, Sam Zell, the gentleman Forbes hails as the forefather of modern REITs, started Equity Group Investments.

The next year, Zell went on to form Equity Lifestyle Properties, Inc, a manufactured home REIT.

He had this to say about MH community investments:

Trailer parks are the best real estate investment that has ever existed. They have a decent yield, high barriers to entry, solid demographics, a tenant base that remains with you for life, and tiny cap-ex requirements.

In 1993, Equity Lifestyle launched its initial public offering (IPO). Today the company trades on the NYSE (ELS), and supports a market capitalization of just over $12 billion, with its enterprise value at about $15.62 billion.

From its IPO through the end of 2021, ELS has reported a total return of 8,474%.

Source: ELS Storybook 2021

In the chart above, we can see that that rate of return beat the S&P 500 by over 370%, and the broad-based Dow Jones Equity REIT by nearly 340%.

Headquartered in Chicago, ELS owns or holds an interest in 448 properties, with nearly 171,000 MH, RV, and marina sites across 35 U.S. states and British Columbia, Canada, as of January 30, 2023.

According to the company's February 2023 Investor Presentation, ELS holds 202 MH communities, which consist of 74,700 individual homesites.

In its 2022 year end conference call, the company stated that 95% of its MHs were occupied, and 96% of those were occupied by homeowners. The company also recorded an all-time high in its new home sales in 2022, while also raising home sales prices by an average of 22%.

To provide a little insight there, management stated that in its Florida homes, price increased 28%. The average home price in that market was still only $106,000, still "significantly lower than other housing options in the immediate vicinity of our community."

Among the reasons ELS cites for its successful MH communities, is a straightforward supply and demand equation.

As an asset class, over the past 20 years, there's been very little development in manufactured housing. Yet, demand is growing against comparatively little supply.

Source: ELS Investor Presentation 2/23

ELS notes that today, there's a shortage of 3.8 million single family homes in the U.S.

The average price of a single family home stands at $526,025, as of January 31, 2023. But the comparable MH home was at $123,867 - a 76% drop.

Source: ELS Investor Presentation 2/23, (3) per FRED's most recent economic report, January 31, 2023

That surely points to MHs being much more affordable than their site-built cousins.

In 2022, ELS raised rents for about 67% of its residents. Its core community-based MH rental income increased 5.8% over 2021, of which 5.4% was due to rate increases. The company said it expects 6% to 7% growth in 2023.

For its year ending December 31, 2022, ELS reported that despite the ailing U.S. economy, its top line growth was up 9.9% from 2021 ($1,447.1 million versus $1,316.4 million in the prior year period).

Net income for the same year-over-year period was $284.6 million versus $262.5 million for the year ending 2021 - an increase of 8.4%.

In review of its year ending December 31, 2022, we find ELS's gross margins at 49.53%, only a 0.94% drop from the prior year period.

ELS's FFO for the year ending December 31, 2022 was $531.6 million, up 8.7% from the prior year period of $489 million.

ELS holds a very solid balance sheet, with its debt to EBITDA ratio at only 5.33x as of its fourth quarter ending December 2022.

ELS's dividend yield stands at 2.67%.

Source: Seeking Alpha

In the company's fourth quarter and full year 2022 financial report, ELS noted that the board approved an increase of 9.1% for its 2023 annual dividend rate, from $1.64/share in 2022 to $1.79/share.

Among management discussion and analysis In ELS's 10K filing dated December 31, 2022, we found the following to be of keen interest:

We believe the demand from baby boomers for MH and RV communities will continue to be strong over the long term. It is estimated that approximately 10,000 baby boomers are turning 65 daily through 2030. In addition, the population aged 55 and older is expected to grow 17% within the next 15 years.

We also believe the Millennial and Generation Z demographic will contribute to our future long-term customer pipeline.

We believe the demand from baby boomers and these younger generations will continue to outpace supply for MH and RV communities.

Demand for our homes and communities remains strong as evidenced by factors including our high occupancy levels. During 2022, we continued to experience an all-time high for new home sales with 1,176 new home sales during the year ended December 31, 2022, compared to 1,163 new home sales during the year ended December 31, 2021. The increase in new home sales was primarily due to favorable housing trends and timing of the availability of home inventory ready for sale.

In its acquisitions for the year ending December 2022, ELS listed only RV and marina-based properties. However, the company maintains its weighting in favor of MHs, representing about 60% of its total holdings.

Looking at ownership of ELS across the markets, we find that today, the REIT is just over 90% held by institutional investors. Over the last 12 months, these investors bought nearly 2.17x more ELS shares than they sold - a bullish indication by most any account.

Source: MarketBeat

Finally, we take a closer look at UMH Properties.

UMH Properties, Inc

Headquartered in Freehold, New Jersey, UMH Properties, Inc (NYSE: UMH), was founded in 1968, and went public in 1985.

Unlike its Sun Communities and Equity Lifestyle peers, UMH strictly focuses on manufactured home communities (rather than adding RVs or tiny homes). The company owns and operates 134 such communities, with approximately 25,600 developed homesites.

Its MH communities are spread across 10 states, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Indiana, Michigan, Maryland, Alabama and South Carolina.

Although, through its joint venture with Nuveen Real Estate, UMH also holds an interest in and operates two Florida communities, which feature 363 sites. As well, the company owns about 2,100 acres of land earmarked for development into new manufactured home sites.

And according to the company's December 2022 10K filing, UMH has quadrupled the number of its developed homesites by purchasing 106 communities containing approximately 18,700 homesites over the past 10 years.

It's key to note that UMH not only owns the land for its MH home sites, but most of the homes themselves, leasing them to its residents. The company also sells and finances the sale of manufactured homes.

According to the company's March 2023 Investor Presentation, it maintains an 84.2% occupancy rate across its properties.

Of the three REIT's we're reviewing, UMH is the smallest by enterprise value, $1.74 billion (as of year end December 2022), and market capitalization, which, as above referenced, stands at nearly $840 million as of March 20.

Over the past six years (2017-2022), UMH reported its total revenue grew by 65%, and its community net operating income (NOI) saw nearly a 76% hike.

Source: UMH Investor Presentation March 2023

Looking at December 31, 2022 year-end results, and as we can see above, total revenues for UMH were $202.7 million, up 4% from the prior year.

The company's total 2022 income was $195.8 million compared to $186.1 million for the prior year, an increase of 5%.

Yet UMH suffered a loss in net income of -$36.3 million compared to $21.2 million in the prior year.

In review of its year ending December 31, 2022, we find UMH's gross margins were 52.38%, down only 0.51% from 2021.

But looking at a REIT's cash flow, we turn to funds from operations (FFO). UMH's 2022 FFO was $46.8 million. That was a 13.8% increase in the same period 2021 year-over-year comparison.

UMH has a forward dividend yield of 5.03%.

Source: Seeking Alpha

Notably, UMH, and as we'll see, also Sun Communities, carry fairly heavy debt loads. Where the average equity REIT debt to EBITDA ratio stands at about 4.6x as of early 2023, UMH's debt to EBITDA ratio was 7.93x as of year end 2022. Even though the company appears to be undergoing quite some portfolio growth, that's still a bit on the high side.

Viewing 2023 growth prospects for UMH, we turn to the company's outlook as offered in its February 28 press release announcing fourth quarter and year-end 2022 financial results.

There, CEO Samuel A. Landy noted that the company's backlogs from its (home) manufacturers are "now back to pre-pandemic levels, and we have over 1,000 homes being set up and ready for occupancy."

He went on to say that "as these homes come online, we anticipate revenue growth in the 8-9% range which will more than offset the expense growth resulting in high single or low double digit NOI growth."

In the company's 10K dated December 31, 2022, UMH management noted that the company increased its rental home portfolio by 392 homes from year end 2021, an increase of about 5%. It also acquired seven communities containing 1,486 homesites.

UMH also commented that manufactured homes are:

Accepted by the public as a viable and economically attractive alternative to conventional site-built single-family housing. The affordability of the modern manufactured home makes it a very attractive housing alternative.

Depending on the region of the country, prices per square foot for a new manufactured home average up to 50 percent less than a comparable site-built home, excluding the cost of land.

This is due to a number of factors, including volume purchase discounts, inventory control of construction materials and control of all aspects of the construction process, which is generally a more efficient and streamlined process as compared to a site-built home.

Like its peers, UMH shares are held in majority by institutional investors. Holding 71.25% of UMH today, these huge accounts bought nearly 2.92x the shares than they've sold over the past 12 months.

Source: MarketBeat

MH REITs In Review

In review of the three publicly held MH REITs, we find the following:

The business of manufactured home communities is exceedingly well-established, with communities among these REITs reaching back to the 1960s.

It's also a huge money maker, with some total investor returns since IPOs that reach well into the four figure percentiles. That's supported by the fact that…

Residents among the MHCs tend to be long term, and certainly above average multi family units (apartments), producing stable revenue streams. Plus…

The demand for manufactured homes and the communities in which most are situated is not only returning to pre-pandemic levels, but breaking record levels, and still growing.

Among the reasons these homes are rising in popularity, we find that affordability stands out, and that's not just for seniors, but for families, and

Even though the cost of MHs are rising, they're still much more affordable than site-built homes.

Among higher demand in these MHCs, the REITs are raising rents at higher levels than in previous years, whilst also improving their margins, and thus, investor returns, yet

These rents are still 50% to 75% that of site-built single family homes (apartments, condos). Plus,

For social security recipients, nearly half of MHC residents, the rental increases are not as high as the recent cost of living increase, which was the highest of any since 1982.

Despite inflation and rising interest rates, these MHC REITs still reported strong cash flows (funds from operations) in 2022. Plus,

Despite utilizing debt to grow their portfolios, by tens of billions of dollars in acquisitions, these REITs have maintained strong balance sheets.

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Indirect Competitors

Other homebuilders

Mom and pop trailer parks

The Makers of Manufactured Homes

We’re also taking a look at three of the leading and publicly held U.S. manufactured home builders… The suppliers that make manufactured housing communities possible.

These companies are: Legacy Housing (Nasdaq: LEGH), Cavco Industries (Nasdaq: CVCO), and Skyline Champion Corp. (NYSE: SKY)

As you can see in the chart below, their combined market capitalization is $6.98 billion.

Below, we dive into each company, including a few recent stats and key highlights from their operations, as well as their 2022 year-end results.

But first, we look at how these manufacturers’ total returns have performed over the last three years, rather than the five year review, as LEGH only came public in late 2018.

And we also compared them to site-built homes, using the SPDR S&P Homebuilders ETF (XHB) as our proxy.

While the results aren't as clear cut here as we saw with the MH community REITs, the two older MH builders handily outperformed the proxy.

In that time, we find that the MH REITs outperformed the REIT sector average:

SKY: 368.7% (5 Year: 195.9%)

CVCO: 149.4% (5 Year: 68.72%)

LEGH: 102.7%

XHB: 163.1% (5 Year 67.42%)

Cavco Industries outperformed all, at 288.46%, followed by Skyline Champion at 152.23%.

The Homebuilders ETF (in black) followed at 77.95%.

And perhaps unsurprisingly, as still an emerging company, coming to the markets in late 2018, Legacy Housing followed at 22.33%.

Still, we see that the well-established manufactured home builders, Skyline Champion and Cavco Industries, have outperformed the site-built proxy by far - as much as 270%.

Moving on to look at each of the three manufacturers…

Legacy Housing Corp

Texas-based Legacy Housing Corp (Nasdaq: LEGH) is the newest of the three manufacturers. It was formed in 2005, and went public 13 years later.

Legacy is the fourth largest producer of manufactured homes in the U.S.

With its operations focused on the shore-to-shore southern U.S. markets, Legacy not only makes manufactured homes, but also tiny homes. It defines the tiny homes as having between 320 and 399 square feet in size, and ranging from one to three bedrooms. Conversely, its full-sized homes range up to 2,667 square feet.

Among the three manufacturers we're reviewing, Legacy is the smallest, and is still an emerging company. As of mid March, the company's enterprise value stood at nearly $483.8 million, and its market capitalization at about $419 million.

Nevertheless, the company reports it's the sixth largest producer of manufactured homes in the U.S. as ranked by the Manufactured Housing Institute.

Across the past five years, Legacy's top and bottom line growth has risen.

Below, we can see that reflected from 2018 through 2021.

Source: Yahoo Finance

In making a review of Legacy's press releases over the past year, the company has undergone some difficulties with auditors, dismissing one and announcing it had retained a new firm in early August last year. As well, the company underwent some shifts in senior management. These factors caused a delay in the company's timely filing of financial reports.

Nevertheless, the company has performed fairly well over the past four quarters, only missing earnings estimates in its third quarter 2022 by $0.02. That miss is not entirely surprising, though, as we rarely see smooth quarter-over-quarter earnings curves in emerging companies.

Source: Yahoo Finance

And in that third quarter, as released on November 8, we find that the company's net revenue, of $57.3 million, increased 1.5% from its same period, prior year. However, notably, its net income increased 13.4% in the year-over-year quarter, reaching $14.7 million.

Commenting on the business's resiliency, Duncan Bates, President, and Chief Executive Officer, noted that despite slowed down shipments and thus, production in one of its plants, its margins and earnings remain strong, as does its backlog.

On a balance sheet basis, and as of March 8, Legacy had yet to report on its fourth quarter and full year ending December 2022.

In Legacy's most recent filing, a 10Q for the quarter ending September 2022, management noted that its two Texas manufacturing facilities are "operating at near peak capacity, with limited ability to increase the volume of homes produced at those plants."

Its Georgia manufacturing facility, management stated it "has unutilized square footage available and with additional investment can add capacity to increase the number of homes that can be manufactured." The team went on to note that the company was responding to "increasing orders from new markets in Florida and the Carolinas.

This increased demand appears to be contrary to Cavco and Skyline Champion, as we lay out below.

Cavco Industries, Inc

Phoenix-based Cavco Industries, Inc (Nasdaq: CVCO), was founded in 1965, merged with Centex Corp in 1996, and was later spun off in 2003.

Cavco is the third largest builder of manufactured and modular homes in the nation, with a 12% share of the market as of late May 2022. It also produces commercial buildings, park model RVs, and vacation cabins. The company also offers insurance and financing for its homes.

As of mid-March, Cavco's enterprise value stood at $2.15 billion and its market capitalization was at $2.57 billion.

Among one of the leading suppliers of affordable homes, the company recently pointed out that since the Great Recession (2009-10), manufactured home shipments have grown 112%.

In turn, Cavco's revenues and profits have consistently grown over the past 12 years.

The company also has been growing by acquisition, and doing that without outside financing or shareholder dilution, but rather, via its own positive cash flow.

Since July 2021, Cavco has made three acquisitions. Those included The Commodore Corporation, the largest independent builder of manufactured and modular homes in the U.S., with six manufacturing facilities and two wholly-owned retail locations. The purchase price was $153 million, and the acquisition closed in October.

Cavco also acquired a 184,000 square-foot North Carolina-based producer of multi-family and office units, Volumetric Building Companies, which it closed upon in late April 2022, from cash on hand, though under undisclosed specifics.

And in October 2022, Cavco announced its planned acquisition of Oklahoma-based Solitaire Homes, Inc, which closed in January 2023. This acquisition includes four manufacturing facilities and 22 retail locations. The acquisition totaled around $93 million. Solitaire had pro-forma earnings of $16.5 million for the calendar year ending December 2021. Cavco finalized this acquisition with over $200 million cash on hand, retaining ample cash for other potential acquisitions and/or expansion programs.

For the six months ended December 31, 2022, the company's total net revenues increased about 48.5% from the six month period ending January 1, 2022.

In the same period, the company's total net income attributable to shareholders improved just over 34%, from $144,075 to $193,242.

Cavco not only consistently beat analyst earnings estimates over the past four quarters, but soundly so.

Source: Yahoo Finance

As well, as of December 31, 2022, the company reported a very solid balance sheet, with $333 million in cash and zero corporate debt.

Although Cavco has continuously grown its revenues and income since 2019, last year saw huge growth, likely as a result of the company's aggressive acquisition program.

Source: Cavo Investor Presentation January 2023

In its February 10Q for the quarter ending December 31, 2022, Cavco management noted that the Manufactured Housing Institute stated that industry home shipments through November 2022 were 106,454, an increase of 8.9% compared to 97,745 shipments in the same period last year.

Yet, the company's backlog had decreased 34.4% from the previous quarter. It also decreased 61.4% from January 1, 2022.

Management stated this was "largely due to lower home order rates net of cancellations. Order rates are down from the extreme highs we saw during the summer of 2020 to the summer of 2021."

Much like its competitors, Cavco's two largest MH consumers are young adults and those who are age 55 and older, and both are both growing.

Management also noted that "first-time" and "move-up" buyers of affordable homes are historically among the largest segments of new manufactured home purchasers. Included in this group are lower-income households that are particularly affected by periods of low employment rates and underemployment. Consumer confidence is especially important among manufactured home buyers interested in our products for seasonal or retirement living.

Skyline Champion Corp

Skyline Champion Corp (NYSE: SKY), is one of the largest MH builders in the U.S. and western Canada. Based in Michigan, the original company, Skyline Coach, was founded in 1951 in Elkhart Indiana. As Skyline Corp, the company went public in 1960.

From its humble beginnings of Julius Decio making "house trailers" in a friend's welding garage, to today's relatively gigantic iteration, this company has come a very long way indeed. In fact, following intensive research and development, the company has markedly increased its automation technology, which reduces its labor requirement and material waste.

And by 2018, after Skyline Corp and Champion Enterprises Holdings had merged to become Skyline Champion, the company became the largest publicly traded MH builder (at that time), moving to the NYSE.

The company's current enterprise value stands at about $3.2 billion, and its market cap is nearly $3.9 billion.

Today, employing 8,400 across 42 manufacturing facilities, 21 retail locations, and its own trucking company, SKY has sold over three million homes.

Source: Skyline Champion

Among all those, Skyline counts a wide variety of manufactured and modular homes, accessory dwelling units, park-model RVs, and modular buildings for the single-family, multi-family, hospitality, senior, and workforce housing sectors to its credit.

Source: SKY Investor Presentation

Interestingly, in taking a look at the company's May 2022 investor presentation, we find that Skyline's biggest customers are MH community REITs, two of which we talked about earlier - Equity Lifestyle and Sun Communities.

Source: Skyline Champion May 2022 Investor Presentation

Across Skyline's most recent fiscal years ending March 31, 2022, its revenues grew about 107% - producing a compound annual growth rate of 15.7%.

Source: Skyline Champion May 2022 Investor Presentation

Looking at the company's bottom line earnings across that same five year period, we see a bit of a bumpy road… But, this is where the proverbial devil is in the details.

In its fiscal 2019, Skyline suffered a non-cash, equity-based compensation expense as well as other cash expenses related to its merger with Champion Enterprise Holdings. Otherwise, the company's adjusted EBITDA for the period increased 50%, year-over-year.

Earnings per share (EPS) from 2020 were $1.02, 2021 were $1.49, up 46%. But most notably, in the year-over-year period of 2021 through 2022, EPS were up over 190%, reaching $4.33.

Throughout 2022, the company exceeded analyst's earnings estimates.

Source: Yahoo Finance

In the fiscal year ending April 2, 2022, Skyline's balance sheet was healthy, carrying about $435 million cash and only about $12 million in long term debt in the form of an industrial revenue bond that matures in 2029. Otherwise, the company recorded no drawdowns on its $200 million revolver.

In its 10Q filing for the quarter ending December 31, 2022, Skyline noted a pretty serious reduction in backlog over one year period starting January 2022. That reduction was about 64.5%, from $1.5 billion to $532 million.

The company believes the reduction in orders, including some cancellations, was due to interest rate increases. Most of the canceled orders came from Skyline's independent retail customers. However, cancellations from end-consumer orders were minimal.

Regardless, reduction in backorders can be a sign of weakness to come, making this a key stat for investors to watch.

All in all, the one thing we definitely see with these manufactured home builders is that they've been performing well, and they're still stronger than their site-built counterparts.

Financing & Exit Activity

Fundraising

Notable Financing Rounds

M&A

Notable Mergers & Acquisitions

IPO/SPACs

Notable Public Offerings

Transactions

Investor demand driving alternatives into the spotlight

JLL Capital Markets finds alternative real estate assets have earned their place alongside traditional assets as investors seek yield

In a turbulent year with overall U.S. commercial real estate volume decline, increased activity in some alternative property sectors was a bright spot for the industry. Alternatives like self-storage, life sciences, manufactured housing communities, medical office and data center assets were collectively responsible for more than $47.9 billion in transaction volume in 2020, bringing these non-traditional real estate assets more into focus as investors sought yield.

“Prior to the pandemic, investors were already expanding their focus and allocation to alternative assets, with the alternatives sectors’ share of overall transaction volume rising to nine percent between 2017 and 2019 versus six percent from 2005 to 2007,” said Matthew Lawton, JLL Capital Markets Co-Head of Investment Sales Advisory Group. “Underpinned by secular and cyclical drivers, many of the alternative asset classes are expected to generate among the highest risk-adjusted returns on a long-term basis of all property types.”

While some of this demand is accelerated due to the pandemic, there is evidence that it is more than a passing phase. Alternatives, which also include student housing, cold storage and single-family rental, are benefiting from increased investment demand now for a variety of reasons. In the past when the industry faced challenges, investors shifted to the alternatives, but this time might be different. Large institutional investors are increasing allocations, causing more liquidity across the space. Additionally, more established operators are entering the space.

When you look at the size of the alternatives individually, the different asset classes are smaller in transaction volume scale than their traditional counterparts; however, they are growing rapidly. They also offer investors an opportunity to diversify their portfolios along with opening the door to investors looking to enter commercial real estate ownership.

Each sub-class within alternatives showed varying levels of resilience throughout 2020 but they all share positive outlooks for continued growth.

“We are seeing a big uptick with core investors educating themselves and moving capital into the alternatives space as they evolve their portfolio allocation strategy,” said Coleman Benedict, Co-Head of JLL’s Investment Sales Advisory Group. “At the same time, what is tempering their ability to make big strides is the fact that many of these sectors are still quite small in terms of investable stock, yet demonstrating significant rent growth and occupancy demand drivers as disruptive market forces play out.”

Source: JLL Research

Manufactured Housing Communities

Transaction volume for manufactured housing communities increased 32.2 percent, from $3.2 billion in 2019 to $4.2 billion in 2020. Valuations are also trending upward. As the supply of manufactured homes has been slowly declining due to zoning restrictions and core development expansion, the increased need for affordability is expected to push net demand upward. Additionally, institutional investment is expected to increase driven by the sector’s resilient performance.

Seniors Housing

The seniors housing market, which was relatively healthy prior to COVID-19, was one of the property sectors most impacted by the pandemic. As more people are vaccinated, occupancy levels that dipped in 2020 should increase. The seniors housing market is poised to recover relatively quickly and to deliver strong long-term returns. This is largely due to the demographic tailwinds created by the aging U.S. population; the first of the Baby Boomers will turn 75 in 2021 and then hit 80 in 2026, with the number of persons 75 and over doubling between 2020 and 2045. This growth, coupled with loosening of the labor market, signals seniors housing is an investment with solid long-term fundamentals and the ability to deliver strong returns for decades to come.

The Company

Introduction

Origin Story

Change in the World

Raise the Stakes

The Prize

The Gameboard

Problem Today

Why it’s hard

Generic Solutions

Our Solution

What it is

How it works

Why it’s different

Value Prop

Examples

Team

Locations

As of November 2022 Company Slide Deck in Data Room

FG Communities at Clyde, 11 Shepard Park, Clyde, NC 28721

FG Communities at Conover, 6338 Havenwood Lane, Conover, NC 28613

FG Communities at Leicester, 11 Cheryl Lane, Leicester, NC 28748

Midwood Estate, 104 Tinsley Heights Drive, Spartansburg, SC 29303

Centerwood Estates, 105 Tommy Stocks Road, Spartansburg, NC 29303

Asheville Peaks, 82 Piney Ridge Lane, Leicester, NC 28748

Sugarloaf Estates, 125 Sugarloaf Parkway, Hendersonville, NC 28792

Hickory Estates, 39 17th Street SE, Hickory, NC 28602

Taylorsville Estates, 75 Wier Circle, Taylorsville, NC 28681

Clover Estates, 1402 Burrell Road, Clover, NC 29710

Eden, 138 Joyce Court, Eden, NC 27288

Sunny Knoll, 5 Sunny Knoll, Candler, NC 28715

Coddle Creek, 7171 Untz Road, Concord, NC 28027

Reedy Creek, 9000 Faires Road, Charlotte, NC 28215

South Main, 129 Sides Meadow Road, Winston Salem, NC 27107

Hidden Lakes, 1020 Twin Lakes Road, King, NC 27021

Coachcrest, 201 Adams Hill Road, Asheville, NC 28806

Altamont, 676 N. Louisiana Avenue, Asheville, NC 28806

Track Record

Our Opportunity

The Path Forward