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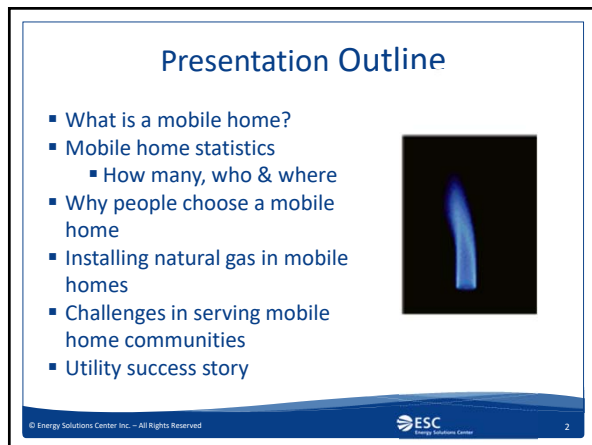
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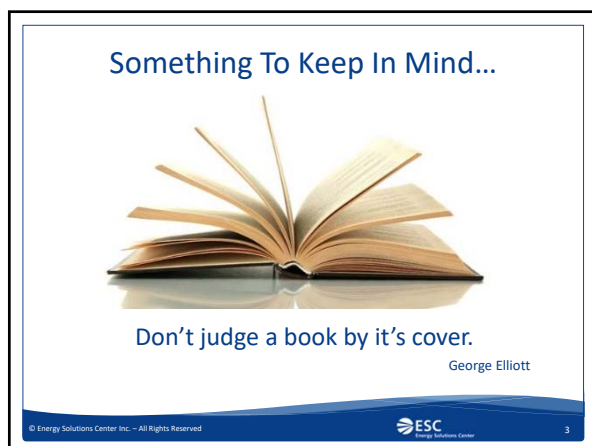
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### What Is a Mobile Home?



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### Definitions

**Modular Home:** any home factory-built to a local state code. In some cases, a state may have adopted one of the uniform construction codes (i.e. UBC, IRC, etc.).

**Manufactured Home:** any home factory-built in the U.S. to the HUD construction standards (commonly known as 'the HUD-code').

**Mobile Home:** A mobile home is a factory-built home that is

- 1) built before June 15, 1976, and
- 2) not built to a uniform construction code.

NADA Guidelines

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### What Does This Really Mean?

- Technically speaking, the only true mobile homes are the relics from the mid-70's or earlier
- All factory-built homes constructed after June 1976 are built according to the HUD code and are therefore a manufactured home
- But, the term mobile home remains in our vocabulary and is interchangeable with the term manufactured home



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### Mobile Home Statistics

- Mobile homes account for 6.3% of the US housing sector
- There are almost 8,510,000 mobile homes and approximately 22,000,000 people live in them
- 57% of household heads are employed full-time while 23% are retired
- Household income is 43% less than those living on traditional real estate
- Sales of new manufactured homes dropped from nearly 400,000 a year in the late 1990's down to 92,891 in 2017

Source: U.S. Census, Manufactured Housing Institute

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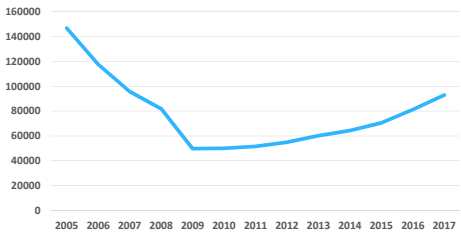
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### Mobile Home Shipments


**Manufactured Housing Shipments**



Year	Shipments (Approximate)
2005	140,000
2006	110,000
2007	90,000
2008	80,000
2009	50,000
2010	50,000
2011	55,000
2012	60,000
2013	65,000
2014	70,000
2015	75,000
2016	85,000
2017	92,891

Source: Manufactured Housing Institute / Institute for Building Technology and Safety (IBTS)

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### Occupants of Mobile Homes

“Not everyone who lives in a trailer park is poor. There are parts of the country, like Michigan, where living in a mobile home community doesn't have the stigma it does in the south. You also have retirement communities in Florida where people aren't poor at all”

Charles Becker, Professor of Economics, Duke University



Paradise Cove in Malibu is a trailer park inhabited by actors Pamela Anderson, Minnie Driver and Matthew McConaughey, where homes can cost up to \$2.5million and come with marble floors

BBC Magazine

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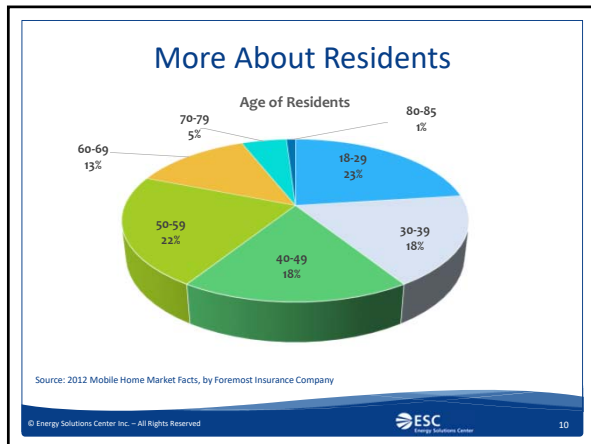
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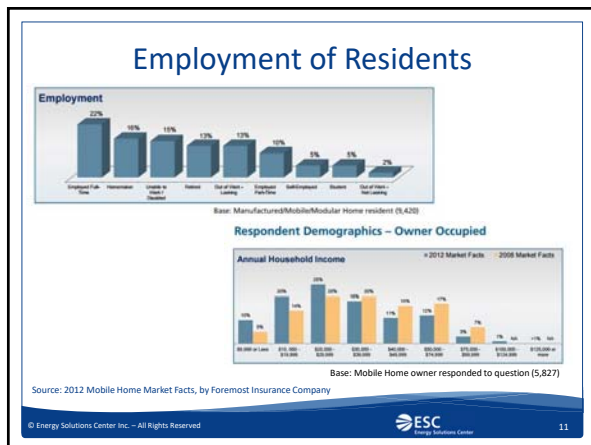
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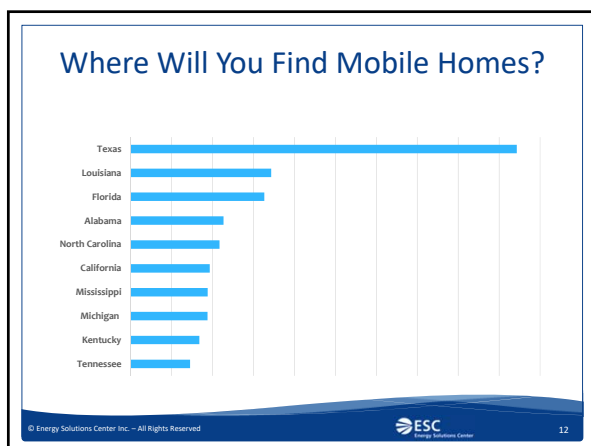
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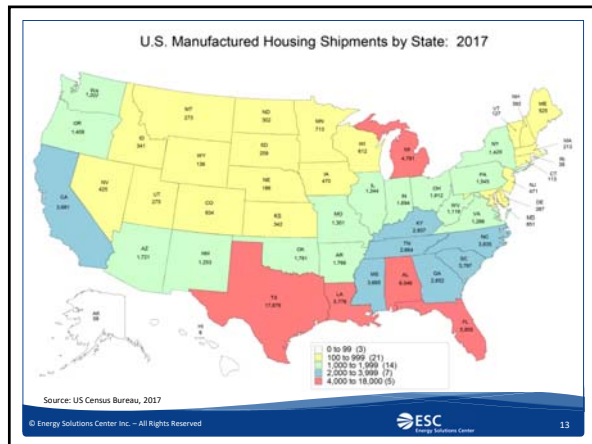
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Why Choose a Mobile Home?

- Great for empty-nesters ready to downsize
- Inexpensive vacation home
- Less expensive primary housing



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Mobile Home Advantages  
for Primary Housing

- Construction costs can average 10% - 20% less than stick built
- Manufactured homes can appreciate in value



Manufactured Housing Institute

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### Advantages of Being Factory Built

- No weather delays during construction
- Better inventory control
- Volume purchases of materials and appliances result in savings passed on to buyers
- Continual inspections by a professionally trained third party



Manufactured Housing Institute

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### Still Room for Customization

Some amenities to choose from:

- Vaulted ceilings
- Working fireplaces
- State-of-the-art kitchens and bathrooms
- Two-story models
- Upgraded insulation
- More efficient heating and cooling options



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### Home Comparisons

- The median U.S. price for an existing single-family home for 2018 was \$264,800<sup>1</sup>
- The average price for a manufactured home<sup>2</sup> as of 2018 was:
  - Single wide: \$52,400
  - Double wide: \$99,500

<sup>1</sup>According to National Association of Realtors  
<sup>2</sup>According to US Census Bureau

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### Average Sale Price of New Manufactured Home Placed

Region	Total	Single	Double
United States	\$78,500	\$52,400	\$99,500
Northeast	\$80,100	\$54,300	\$101,600
Midwest	\$72,100	\$53,600	\$96,900
South	\$75,700	\$51,500	\$96,700
West	\$99,000	\$57,200	\$111,800

Source: These data are produced by the U.S. Commerce Department's Census Bureau  
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### Home Comparisons (cont'd)

- Rent across the nation continues to rise, increasing by over 3% in the past year
- During the first half of 2018, the national average monthly rent was \$1,588
- The monthly cost of an average-priced mobile home purchased with a mortgage is under \$1,200



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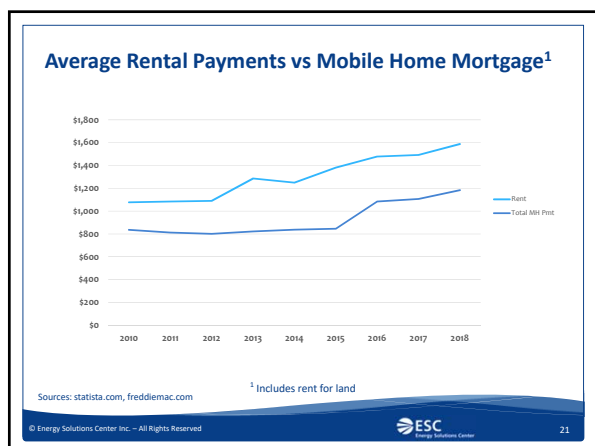
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### Economics of Mobile Home Parks

- Strong demand for low-cost housing is proving a boon for companies that operate mobile-home parks.
- While there are fewer new communities being built, the larger companies are buying up the smaller companies.
- Strong demand by families for park space has allowed landlords to raise their rents.

Source: Wall Street Journal, April 2015

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### Mobile Home Facts



- 96,500 new mobile homes were shipped in 2018
- Shipments have been on the rise since 2010

Source: US Census

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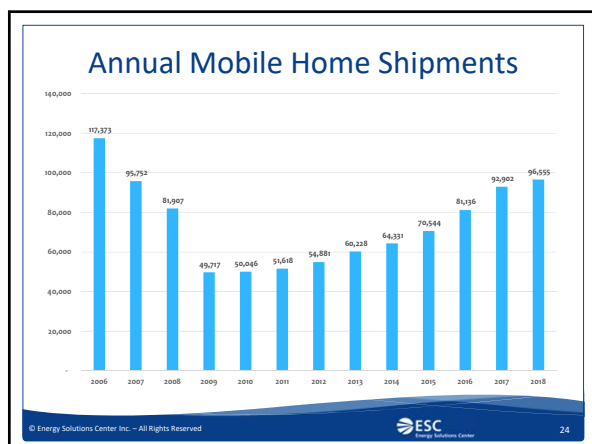
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### Installing Natural Gas in Mobile Homes

- The gas piping supply system will deliver no less than 7" wc and no more than 14"wc
- Each manufactured home that uses fuel gas for any purpose will have a natural gas piping system that is acceptable for LP gas as well



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### Installing Natural Gas in Mobile Homes (cont'd)

- Minimum standards for gas appliances must adhere to ANSI Z21
- Fuel-burning heat-producing appliances and refrigeration appliances, except ranges and ovens, shall be of the vented type and vented to the outside



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### Natural Gas Furnaces for Mobile Homes

- In all newer mobile homes as well as replacement furnaces the heaters must be sealed combustion furnaces.
- Outside combustion air is ducted directly into the furnace either through the flue assembly or a separate duct.
- Older open combustion models could lead to flame roll-out, back drafting and high levels of carbon monoxide.

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### Natural Gas Furnaces (cont'd)

- The majority of mobile homes utilize downdraft furnaces
- Heated air is sent through the under-the-floor ductwork



New Sealed Combustion Furnace

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### Natural Gas Furnaces (cont'd)

- Many of the manufacturers that make furnaces for site-built homes also make a unit for manufactured homes. Some of the more common brands are Amana, American Standard, Bryant, Carrier, Goodman, Heil, Lennox, Rheem, Trane, York
- Thermo Products is one of only a few manufacturers that produces a 95% efficient condensing gas mobile home furnace.
-  Caution: these units are not interchangeable. Furnaces for mobile home use must be approved for use in a mobile home and be HUD approved.

Furnacecompare.com

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### Summary: What Makes a Mobile Home Furnace Different?

- Duct work in a mobile home is smaller and more restrictive than in a site-built home. The furnace blower must be designed to compensate for the greater resistance to airflow.
- A mobile home furnace uses a sealed combustion venting design.
- A mobile home furnace does not use return ducting, return air is drawn through a louvered grill on the front of the furnace.

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### Natural Gas Water Heaters for Mobile Homes

- Like mobile home furnaces, all newer and replacement gas hot water heaters have to be approved for mobile homes and be sealed combustion.
- Open combustion water heaters can lead to back draft situations.
- A sealed combustion hot water heater will have a double concentric flue through the roof.



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### Summary: What Makes a Mobile Home Water Heater Different?

- Mobile home water heaters have interchangeable gas and propane orifices so the water heater can be converted from natural gas to propane. This is the main reason for the increased cost.
- Mobile home water heaters have the cold water inlet connection on the side and the hot water outlet connection on top. Residential water heaters have all connections on the top of the tank.
- Mobile home water heater comes with a securing strap kit

[www.justwaterheaters.com](http://www.justwaterheaters.com)

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### Other Natural Gas Appliances

- The installation of each appliance must conform to the terms of its listing and the manufacturer's instructions. The manufacturer's instructions must be attached to the appliance
- Ranges must have a vertical clearance above the cooking top of at least 24 inches
- A fuel-burning fireplace cannot serve as a heating unit, must be vented and cannot be installed in a bedroom

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### Natural Gas Clothes Dryers

- Gas clothes dryers must exhaust to the outside by a moisture-lint exhaust duct and termination fitting
- The exhaust duct cannot be terminated beneath the manufactured home
- Moisture-lint exhaust ducts cannot be connected with sheet metal screws or other fastening devices which extend into the interior of the duct



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### Challenges of Serving Mobile Home Communities

1. Same lot, new home but the new home is a different size than the old one
2. The owner of the home is not necessarily the owner of the land. In most cases, the home owner does NOT own the land the home sits on
3. You will need to find out who the property owner is or, in some cases, who the community manager is



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### Getting Around the Challenges

- If the prospective customer who requested service doesn't know who the land owner is, ask the neighbors
- Check public records for property owner
- Research the community name, it might be owned by a Real Estate Investment Trust (REIT)
- Sell the property owner on the benefits and safety of having natural gas installed in their community

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### Real Estate Investment Trust (REIT)

- A REIT, or Real Estate Investment Trust, is a company that owns or finances income-producing real estate. It generates income by collecting rent or selling property.
- There are 3 main REIT's that own manufactured home communities.
  - **Equity LifeStyle Properties Inc.:** controlling interest in over 400 communities and resorts in 32 states and British Columbia; 145,000 sites
  - **Sun Communities Inc:** an interest in 389 communities in 32 states and Ontario; 134,000 sites
  - **UMH Properties:** operates 122 communities in 8 states; 23,000 sites

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### Benefits of Serving Mobile Home Communities

- Homes are delivered with all appliances installed
- Communities are being developed by builders
- There have been mobile home parks in Maine, Massachusetts and New York that have recently converted the entire park from oil heat to natural gas.<sup>1</sup>
- Can make expansion into new territories easier



<sup>1</sup> Thermo Products

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### Utility Success Story

#### SoCalGas, California

- In March 2014, the California Public Utilities Commission (CPUC) approved a three-year, voluntary, statewide pilot program for MHP communities
- The Program offers mobile home park (MHP) owners the opportunity to replace their privately owned gas and electric systems with new utility installed, owned and maintained systems
- The goal of the program is to enhance safety and reliability at MHPs

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### Utility Success Story

SoCalGas (cont'd)

- Mobile home park residents would become direct customers of the utility instead of sub-metered through the MHP
- The program will pay to convert 10% of the mobile homes within a utility's service territory (for SCG this is about 12,800 mobile homes)
- The CPUC Safety and Enforcement Division (SED) selects the MHPs that will be converted from those that have applied for the program

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### Program Benefits

For Mobile Home Park Owners:

- **Enhanced Safety and Reliability:** System will be professionally installed and maintained by the utility.
- **Saves Time and Less Hassle:** MHP owners will no longer need to read utility meters, bill tenants and respond to their utility service questions. This will be handled by SoCalGas.



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### Program Benefits

- **Peace of Mind:** MHP owners will no longer have the concerns of maintaining their own sub-metered gas systems.
- **Little or No Cost Upgrade to MHP:** The costs for installing utility service “to the meter” is covered by the program.



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### Program Benefits

For Mobile Home Park Residents:

- Enhanced Safety and Reliability: System will be professionally installed and maintained by the utility.
- Better Access to Utility Programs: Energy efficiency, low income and special needs Programs
- Enhanced Customer Service: MHP residents will have direct access to SoCalGas customer service, advanced meters and online services and individual energy usage information.
- Low or no Cost to Convert: Upon transfer to direct utility service, SoCalGas will waive service deposits.



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# Thank you ...

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