

## Valuation

 OfManufactured
Homes

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## Section 1 - USPAP Review

Although this is not a course on appraisal standards, there should be some discussion on USPAP. The outline below shows the topics of discussion and how they apply to our appraisal practice.
I. What is USPAP and what does the acronym stand for?
A. USPAP stands for the Uniform Standards of Professional Appraisal Practice.
B. The standards were developed for appraisers and users of appraisal services. It will also assist to maintain a high level of public trust in professional appraisal practice.
II. Why USPAP was developed.
A. USPAP was developed as a result of unethical appraisal and loan practices in conjunction with a large number of savings and loan closures or bail-outs.
III. The Appraisal Foundation (TAF)
A. Consists of three separate boards.
B. The Board of Trustees is the administrative body of the Appraisal Foundation.
C. Appraisal Standards Board (ASB) develops, publishes, interprets and amends the USPAP.
D. Appraisal Qualifications Board (AQB) sets the requirements for education and experience in order to be qualified as a certified appraiser.
IV. Who must comply with USPAP?
A. All certified appraisers and any member of an appraisal organization that is part of The Appraisal Foundation when bound by law, regulation, or agreement
V. Rules
A. Ethics is divided into three sections.

1. Conduct - Assignments must be performed ethically with impartiality, objectivity and independence.
2. Management - Cannot have undisclosed fees or commissions.
3. Confidentiality - An appraiser must protect the appraiser-client relationship.
B. Record keeping - Work file must be kept for at least five (5) years or at least two (2) years after final disposition of any judicial proceeding and also file retrieval agreements.
C. Competency - No assignment should be accepted if you do not have the knowledge and experience to complete the appraisal competently.
D. Scope of Work:
4. Identify the problem to be solved
5. Determine and perform the scope of work necessary to develop credible assignment results, and

## 3. Disclose the scope of work in the report

E. Jurisdictional Exceptions - Public law or policy will take precedence over USPAP.
VII. Ten Standards
A. Standard 1 - Real Property Appraisal, Development.
B. Standard 2 - Real Property Appraisal, Reporting.
C. Standard 3 - Appraisal Review, Development
D. Standard 4 - Appraisal Review, Reporting
E. Standard 5 - Mass Appraisal, Development
F. Standard 6 - Mass Appraisal, Reporting
G. Standard 7 - Personal Property Appraisal, Development.
H. Standard 8 - Personal Property Appraisal, Reporting.
I. Standard 9 - Business Appraisal, Development.
J. Standard 10 - Business Appraisal, Reporting.
VIII. Statements on Appraisal Standards - The ASB retired all Statements, and transferred valuable guidance from each Statement into new Advisory Opinions:
IX. Advisory Opinions - These do not establish new standards or interpret existing standards. The Opinions illustrate the applicability of appraisal standards in specific situations and offer advice. Some of the Advisory Opinions of particular interested to Assessors are:
A. Advisory Opinion 32 (AO-32) - This advisory opinion looks at ad valorem property tax appraisal and mass appraisal assignments. The advisory opinion talks about the reporting function which is addressed in Standard Rules 6-8 and 6-9. The mass appraisal report must clearly communicate the elements, results, opinions, and value conclusions of the mass appraisal. In mass appraisals for ad valorem taxation, local statutes may prescribe additional reporting requirements and procedures for the delivery of the assignment results ${ }^{1}$
The Advisory Opinion also states "An appraiser may be asked to communicate the assignment results for a single property that was appraised as part of a mass appraisal assignment. USPAP does not address this specific circumstance. The reporting requirements of Standard 2 apply to appraisal assignments developed under Standard 1 and do not apply to mass appraisal assignments prepared under Standard 6. However, the second sentence of the Preamble states: It is essential that appraisers develop and communicated their analyses, opinions and conclusions to intended users of their services in a manner that is

[^0]meaningful and not misleading. Additionally, the Ethics Rule states: An appraiser must not communicate assignment results in a misleading or fraudulent manner. Therefore, if an appraiser communicates mass appraisal results for a single property, the communication must be meaningful and must not be misleading."2
B. The Advisory Opinion also offered these illustrations in this Opinion:

1. An appraiser is in the process of developing appraisals for the next year's tax roll. The residential properties, condominiums and general commercial and major commercial properties will be valued with a mass appraisal model. Which development standards apply?

Because the subject of the appraisal is a universe of properties, and because they are being appraised with a mass appraisal model, STANDARD 6 applies.
2. An appraiser has completed a mass appraisal for ad valorum taxation using a mass appraisal model. There is a special use property for which it has been determined that the mass appraisal model is not appropriate. The property will be appraised as an individual property. Which standard applies to the appraisal of the special use property?
Even though the special use property is being appraised for ad valorem taxation, STANDARD 1 would apply because the subject property is an individual property, not a universe of properties.
3. An assessment appeal is in process and an appraisal of an individual property is being conducted as part of that appeal. Which development standards apply?
STANDARD 1 and Standard 2 would apply because an individual property is being appraised rather than a universe of properties.
4. An appraiser is conducting a mass appraisal for ad valorem taxation. A property record card is produced for each property. Is each property record card considered a report under Standard 6?
No. The property record card is not the mass appraisal report; it is only a portion of the information and analysis supporting the mass appraisal.

- ADVISORY OPINION 33, Discounted Cash Flow Analysis
- ADVISORY OPINION 34, Retrospective and Prospective Value Opinions
- ADVISORY OPINION 35, Reasonable Exposure Time in Real and Personal Property Opinions of Value
- ADVISORY OPINION 36, Identification and Disclosure of Client, Intended Use, and Intended Users
- ADVISORY OPINION 7, Marketing Time Opinions, The ASB also revised
- ADVISORY OPINION 37, Computer Assisted Valuation Tools. If we use process which uses Computer Assisted Tools then we must understand the

2 lbid. page $\mathrm{A}-111$.
definitions, process and output of these tools. Otherwise we may misinform our client.
X. Frequently Asked Questions (FAQ)

The FAQ section is a form of guidance issued by the ASB in response to questions raised by users of USPAP and the public to illustrate the applicability of USPAP in particular situations and to offer advice from the ASB for the resolution of specific appraisal issues and problems. The advice presented may not represent the only possible solution to the issues discussed and the advice provided may not be applied equally to seemingly similar situations. USPAP FAQ does not establish new standards or interpret existing standards. USPAP FAQ is not part of USPAP and is approved by the ASB without public exposure and comment.

## Section 2 - Manufactured Homes

## A. Manufactured Homes:

The first manufactured homes were very small trailers built in the 1920's for use on vacations. They were used as a place to sleep around campsites. During World War II, they were used as temporary living quarters. This form of housing goes back to the early years of automobiles and motorized highway travel. It was derived from the travel trailer, a small unit with permanently attached wheels often used for camping. The original focus of this form of housing was its mobility. Units were initially marketed primarily to people whose lifestyle required mobility. With a shortage of housing after the war, the industry started building larger models but retained the ability to move from place to place.

1930's Camping Trailer


However, beginning in the 1950's, mobile homes began to be marketed primarily as an inexpensive form of housing designed to be set up and left in a location for long periods of time, or even permanently installed with a masonry foundation. Previously, units had been eight feet or less in width, but in 1956, the introduction of the 10-foot wide mobile home was made. This helped solidify the line between mobile homes and house/travel trailers, since the smaller units could be moved simply with an automobile, but the larger, wider units required the services of a professional trucking company. In the 1960s and '70s, mobile homes became even longer and wider, making the mobility of the units more difficult.

## Single-Wide:

BUILT IN 1950


BUILT IN 1963


BUILT IN 1973


BUILT IN 1981


BUILT IN 1992


New Single-Wide Manufactured Home


## Double-Wide:

BUILT IN 1971


BUILT IN 1986


BUILT IN 1998


2007 Champion Home


## Interior



## Interior



A big change in the industry started in 1974 when Congress passed the National Mobile Home Construction and Safety Standards Act. This is referred to as the HUD Code and became effective in 1976. HUD is a department of the federal government and stands for Housing and Urban Development. These homes were now subject to federal building codes. In 1980, the Housing Act changed the name from trailers to manufactured housing. No longer were the terms of trailer, house trailer or mobile home in use. Some of the newer terms in the market place are sectionals, single-section, and multiple-sections, modular, panelized and pre-cut.

Because of the HUD Act, manufactured homes have a degree of quality control in the construction that stick-built homes do not. Some of the construction strengths are:

1. Built in a plant, a controlled environment, so the materials are not exposed to adverse weather conditions.
2. Homes are constructed with standard features and then are modified based upon the plan or model selected by the purchaser. Exterior walls are 2" $\times 6^{\prime \prime}$ boards as compared to $\mathbf{2 " ~}^{\prime \prime} \times 4$ " boards for stick-built homes.
3. Once a home is decided on, from completing the financing arrangements to move in is from 3-6 months as compared to 9-12 months on a stick-built home.

The HUD label can identify manufactured homes. This label is a 2 " $\times 4$ " aluminum tag with white or silver lettering with the following statement.

The manufacturer certifies to the best of the their knowledge and belief that this manufactured home has been inspected in accordance with the requirements of the Department of Housing and Urban Development and is constructed in conformance with the federal manufactured home construction and safety standards in effect on the date of manufacture.


The label shall be located at the tail-light end of each transportable section of the manufactured home approximately one foot up from the floor and one foot in from the road side, or as near that location on a permanent part of the exterior of the manufactured home unit as practical. The road side is the right side of the manufactured home when one views the manufactured home from the tow bar end of the manufactured home. Generally, a certificate or sheet of manufacture that includes the make, model, year, size and other details for identification purposes will also be shown where the water heater is located, in a bedroom closet (normally the master bedroom) and in some situations inside of a kitchen cabinet. If access is gained to the steel beams supporting the home, often the details are stamped on one of the beams.

Sometimes labels have been removed or covered up. The following information is from the web site of $h$ htp://www.hud.gov/offices $/ \mathrm{hsg} / \mathrm{sfh} / \mathrm{mhs} / \mathrm{mhslabels} . c f m$.

HUD does not reissue tags for manufactured homes. However, the Department can issue a letter of label (tag) verification for units for which it can locate the necessary historical information. The label numbers can be found on a data plate inside the home in one of three locations: on or near the main electrical panel, in a kitchen cabinet, in a bedroom closet. The data plate has a map of the United States to let the consumer know the Wind Zone and Snow Load for which their home was built.

Effective January 2007 you may request letters of label verification from the Institute for Building Technology and Safety (IBTS), by visiting IBTS' website at http://www.ibts.org/label_req.htm or via fax at: 703-437-6894. The processing time is expected to be 3-5 business days and costs $\$ 50$.

Frequently Asked Questions
Question: Both the label (tags) and data plate have been removed from my home. I can't sell/refinance my home without the HUD label. Where can I get this information?

Answer: If the information cannot be located on or within the home, the requester should obtain previous financing paperwork for the home where this information may have been previously required and documented by a lending institution.

Question: I'm assisting a homeowner/homebuyer with selling/purchasing a manufactured home and have submitted a request to HUD. How long does it take before I receive a response?

Answer: All questions regarding expediting label verification requests should be addressed to IBTS.

Question: My data plate is missing. How do I get a replacement copy?
Answer: You may be able to obtain the data plate by contacting the In-Plant Primary Inspection Agency (IPIA) and the manufacturer. The IPIA is a third party inspection agency that works in conjunction with the Department to inspect manufactured homes during the manufacturing process to ensure that the manufacturer meets the Federal Manufactured Home Construction and Safety Standards. To obtain a list of inspection agencies, visit here: http://www.hud.gov/offices/hsg/sfh/mhs/mhsid.cfm

Question: I was told I need the Serial or VIN number in order to sell or refinance my home. Where can I find this information?

Answer: In some states, the Serial number and VIN number may be one in the same. Section 3280.6 of the Manufactured Home Construction and Safety Standards states, "(a) A manufactured home serial number which will identify the manufacturer and the state in which the manufactured home is manufactured, must be stamped into the foremost cross member. Letters and numbers must be $3 / 8$-inch minimum in height. Numbers must not be stamped into hitch assembly or drawbar."

If the home is a multi-wide unit (double or triple wide), the serial number will contain the letters $A / B$ or $A / B / C$.

Question: I was told that the HUD Tag (Label) numbers have to be in sequential order. Is that true?

Answer: No. The Certification labels (HUD tags) can be in sequential order but they may not be. The HUD labels are identified by a three-letter prefix followed by six numbers (i.e. RAD 000001).

For additional assistance, contact HUD's Office of Manufactured Housing Programs at (202) 708-6423.

Another method of identification is the chassis. Manufactured homes have a permanent chassis that is load bearing with a tie down system. Most states require these homes to be titled like a car. The length of a manufactured home on the title will include the tow bar that generally is $3^{\prime}$ to $4^{\prime}$.

Manufactured home floor framing is on $24^{\prime \prime}$ centers versus a modular home that has $16^{\prime \prime}$ centers. The manufactured home can be a wider spacing as the steel frame is left under the manufactured home. Some manufacturers build all their homes on 16 " so then the home can be completed as a manufactured or modular home. If placed on a foundation, the foundation walls can be poured higher, such as 9 ' and then a special type of framing can be built under the home so the steel frame sits down into cuts made in the poured concrete wall. This will allow for a full ceiling height in a finished basement.

Manufactured Home Framing



## HUD/FHA Manufactured Home Foundation Requirements

Requirements as of 2018
The following improvements beyond the minimum manufactured home installation regulations are necessary to meet the more stringent requirements of the Permanent Foundations Guide for Manufactured Housing, HUD Publication HUD-7584, which must be met for a home to qualify for FHA financing.

- The foundation piers must bear upon reinforced poured concrete footings that are constructed below the frost line.
- Foundation piers must be constructed of "solid materials", such as reinforced concrete, masonry, steel, or treated wood. Dry-stacked block piers, which are commonly used in manufactured home foundations, can be upgraded to meet this requirement by applying an adequate coating of fiber-reinforced surface bonding cement.
- A permanent well supported perimeter wall (skirting) must enclose the foundation to keep out vermin and water. This wall must be self-supporting and must rest on a concrete footing. An access opening must be constructed in this skirting wall. Most often these walls are constructed of block or brick masonry. However, treated wood walls can qualify if properly constructed.
- The home must have adequate tie downs anchored to the footings to resist horizontal overturning, transverse and longitudinal loads. HUD-7584 specifically prohibits dependence on screw-in tie-down anchors commonly used in manufactured home anchorage systems. There are several anchorage systems that can be installed to satisfy this requirement. Two examples are illustrated below:

- The tongue, axles, and wheels must be removed.
- An adequate number of screened vents must be installed around the entire perimeter of the building to provide air circulation in the crawl space ( 1 sq . ft . of net free area per 150 sq . ft crawl space floor area).
- The perimeter walls must extend at least 8 inches above grade.
- The exterior grade must taper away from the home for drainage.
- The dirt floor of the crawl space must be covered with 6-mil polyethylene plastic vapor barrier.
- Utilities must be permanently installed.

As you can see, the requirements are more stringent than those required by most building codes.

The manufactured home industry has seen great changes to their market appeal in the last several years. New transportation technologies increased ceiling height and roof pitches up to 12:12 helped the homes lose that "mobile home" look and feel. Singlewide manufactured homes have also increased in width over the last several years. Some states allow the largest homes which are 18' in width.

Maybe the biggest advancement was the development of the two-story home. Most of the one and one-half and two story homes are modular, panelized or kit homes. Manufacturers have several models that come with base items for floor covering, kitchen appliances, etc.

There have been several studies related to manufactured home owners' satisfaction. A few of these are shown.

## Manufactured Housing Institute (MHI)

The data is the most current of all sources and is updated annually. Some key items from the website are shown. https://bit.ly/2wVodOy

- 22 million people live in manufactured homes
- $9 \%$ of new home starts
- \$30,000 median household income
- $80 \%$ of new home purchases are tilted as personal property
- 93,000 homes produced in 2017 - almost 18,000 to Texas
- 121 plants in the U.S. - 19 in Texas
- \$70,600 average new home price
- \$49 average square foot price
- \$107 average site built square foot price


## Southwest Research

According to a study by Southeast Research, a Professional Researcher Certified operation, 97 percent of the owners of new manufactured homes described their home as attractive. And 45 percent of those buyers could have purchased a conventional, site-built house, but decided to buy a manufactured home instead.

In a survey of hundreds of manufactured home owners who had purchased their home in the previous 3 years, here is what Southeast Research, of Montgomery, AL discovered.

- Eight out of ten manufactured homeowners in Alabama are satisfied with their home.
- 84 percent of manufactured homeowners have a high degree of pride with the ownership of their homes.
- Two-thirds of homeowners contacted for this study owned a home prior to purchasing their manufactured home.
- One-third of the purchasers of manufactured homes in Alabama were paying rent prior to making their recent housing acquisition.


## The study concluded the following:

- 99 percent of manufactured homeowners use the home as their primary residence.
- 97 percent of manufactured homeowners in Alabama described their home as being attractive.
- 92 percent of manufactured homeowners in Alabama described their home as a safe place to live.
- 94 percent of manufactured homeowners in Alabama described their home as suitable for their housing needs.
- 45 percent of recent purchasers of manufactured homes in Alabama indicted that when they purchased their current manufactured home they could have afforded a conventional site-built home, but chose a manufactured home.

The overall conclusion from the Southeast Research study is that customers purchasing manufactured homes are satisfied with the home they purchased.

They also have "a great deal of pride" with respect to the purchase of their home. That survey dovetails with other national reports, such as the study linked from the graphic that follows.


While duration of residency tends to varies by age, 'the average American' lives in the same dwelling for about 7 years. So when the data from the Foremost report - linked here - is understood, it means that people plan to live in their manufactured homes longer than those living in conventional housing options. https://bit.ly/2M9rFup

## Foremost Insurance Company

Foremost Insurance Company has sponsored corporate studies of the manufactured home market since 1979. In recent years, their report is updated every 4 years. The 16 page report attached began by collecting information on October 2 through October 18, 2012. Their survey includes responses from 10,002 respondents who are owners or residents of a manufactured home or a pre-HUD code 'mobile home.' This makes the Foremost attached report on manufactured home owners' satisfaction and market facts one of the most important documents of its kind.

The complete report can be found at https://bit.ly/2MWaYrQ with some information included in this workshop.

## Quality, Affordable Living Facts

- $40 \%$ of manufactured home owners don't anticipate ever selling or moving from their current home
- $54 \%$ had a degree or some college education
- $55 \%$ of manufactured home owners who responded had an annual household income of less than $\$ 30,000$
- $27 \%$ of all manufactured home households (owner-occupied) own one or more specialty product, which includes Boat, Motorcycle, Motor Home, Travel Trailer, Sailboat, Personal Watercraft, ATV and Snowmobile

Net Worth



Owner Occupied


## Manufactured Home Description

For consistency, how do you describe or characterize your Mobile/Manufactured or Modular Home when someone asks what type of residence it is?

|  | $\underline{1999}$ | $\underline{2002}$ | $\underline{2005}$ | $\underline{2008}$ | $\underline{2012}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Mobile Home | $65 \%$ | $63 \%$ | $57 \%$ | $61 \%$ | $52 \%$ |
| Trailer | $16 \%$ | $14 \%$ | $15 \%$ | $14 \%$ | $18 \%$ |
| Double Wide* | $1 \%$ | $1 \%$ | $2 \%$ | $1 \%$ | $18 \%$ |
| Manufactured Home | $11 \%$ | $13 \%$ | $17 \%$ | $16 \%$ | $8 \%$ |
| House | $4 \%$ | $5 \%$ | $6 \%$ | $5 \%$ | $3 \%$ |
| Modular Home | $3 \%$ | $3 \%$ | $3 \%$ | $2 \%$ | $1 \%$ |
| Travel Trailer | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $1 \%$ |
| Base: | 17,536 | 17,107 | 16,047 | 10,595 | 10,002 |

According to the U.S. Census in 2005, over 66 percent of manufactured homes were placed on private property, while the remaining 34 percent were sited in residential landlease communities. The percentage of manufactured homes placed on private property has been growing over the last decade, and this trend is expected to continue as more and more residential land is zoned appropriately to allow for manufactured housing.

## Liberty Manufacture Home Plant





## B. Modular Homes:

Modular homes are the fastest-growing segment of the home building industry. A modular home is simply a home built to local building codes in a controlled, environmentally protected building center using precise and efficient construction technology. Efficiency and quality control are two strong points for the modular home over the site built home. The materials stay dry, which reduces the opportunity for mold growth and indoor-air quality problems. And wastes are minimized because scrap lumber can be used for sills, ledges and other miscellaneous needs. A typical total waste-disposal costs average $\$ 178$ a house for a modular home. That's roughly
equivalent to the hauling and dump charge for a ton of waste. The typical residential project produces three to four times that amount.

A modular home is built to the same codes as a site built home. And because they must be transported to the home site, modular homes are much stronger than site built homes and take days to weeks to finish onsite versus months for a site built home. The construction of modular homes is really an off-shoot of the manufactured home construction process, just built to different codes. Although the purchaser now has several choices of interior products and quality in manufactured homes, the choices are larger in modular homes. By use of computer assisted design (CAD) programs, purchasers have more options in the modular design than for manufactured homes or can bring their own design and have that home built.

Modular components are typically constructed within a large indoor facility. Such facilities use an assembly line track to move the modules from one workstation to the next. Typically, modular dwellings in the U.S. are built to local code and not to the HUD Code, so dwellings built in a given manufacturing facility may have differing construction standards depending on the final destination of the modules. Modular homes have a perimeter base support and are normally set on a slab or foundation. The heating and cooling system is installed after the home is set.

Such dwellings are often priced substantially lower than their site-built counterparts and are typically more cost-effective to builders and consumers. These new homes can be constructed in a fraction of the time it takes to build a home "on-site" and they're built to higher standards as well. Manufacturers cite the following reasons for the typically lower cost/price of these dwellings:

- Low waste. With the same plans being constantly built, the manufacturer has records of exactly what the quantity of materials are needed for a given job. While waste from a site-built dwelling may typically fill several large dumpsters, waste from a modular dwelling generates much less waste.
- Indoor construction. Assembly is independent of weather which often leads to cost overruns on site-built dwellings.
- Favorable pricing from suppliers. Large-scale manufacturers can effectively bargain with suppliers for discounts on materials.

Off-frame modular dwellings differ from mobile homes largely in their absence of axles or a frame, meaning that they are typically transported to their site by means of flat-bed trucks; however, some modular dwellings are built on a steel frame (on-frame modular), which can be used for transportation to the home-site. Many modular homes are of multi-level design, and are often set in place using a crane.

Modular homebuilding has always relied on some degree of site work. Much of the siding is installed after the units are delivered, and steep roofs are tilted up at the site and supported with panelized gable ends. But most modular housing is limited by the dimensions of delivery trailers, which most efficiently accommodate a rectangular box of
$16^{\prime}$ wide, $66^{\prime}$ long, and $13^{\prime}-6^{\prime \prime}$ high. In addition, the units must be able to withstand the dynamic stresses during transport of braking, acceleration, and turning.

Zoning codes often treat modular homes in the same manner as site-built but manufactured homes are often more restricted by zoning because of the history and perception of the economic life, fast depreciation and the transient type ownership often associated with manufactured homes.

BUILT IN 1980


BUILT IN 1991


BUILT IN 1997


BUILT IN 2000


## New Modular



Modular Factory


27 TEAM Consulting, LLC


Modular Set


## Modular Exterior



Modular Interior


## Select Homes - North Carolina



Google Will Buy Modular Homes to Address Housing Crunch
Silicon Valley giant aims to buy 300 apartment units amid stiff Bay Area market, a Factory OS construction project for Holliday Development in San Francisco, which was completed in 2016.


Photo: Brett Garling/Cut Canvas Creative

VALLEJO, Calif.-Soaring home prices and apartment rents in Silicon Valley have become a growing headache for technology titans. Google owner Alphabet Inc. is taking a step toward addressing the issue.

The Mountain View, Calif., company is finalizing an order to buy 300 apartment units from Factory OS, a modular-home startup, in a building likely to serve as short-term housing for Google employees, according to executives from both companies.
The expected value of the deal is $\$ 25$ million to $\$ 30$ million, according to Rick Holliday, founder and chief executive of Factory OS. It would be the first order for the company.

Modular-building technology, essentially factory-built homes that are pieced together onsite, could help reduce the cost of construction in the Bay Area by $20 \%$ to $50 \%$, experts said.
"Anything that can help us to move forward with a greater knowledge of how we can produce housing more effectively is something we're interested in," said John Igoe, director of design and construction at Google. "We absolutely are confident that it will work. Hopefully it doesn't become false bravado."

To be sure, modular-building companies in places like California and New York have failed over the years, and the approval process can be just as difficult if not more so, because the technology is still developing. And so far, the cost savings haven't been as big as developers have hoped, though experts predict costs will come down sharply as the industry evolves.

As Silicon Valley battles its severe housing shortage, tech companies are becoming more active in trying to help solve the problem. Facebook Inc. has pledged to plan and design 1,500 units in Menlo Park, of which 15\% will be classified as affordable housing. The project is still in the early planning phase. A spokesman said the company is considering modular housing and is supportive of Mr. Holliday's project and "anything that has the potential to accelerate building housing in the Bay Area."

In modular construction, also known as prefab, builders construct entire homes, apartment units or individual rooms in a factory and truck them to home sites, fitting them together like puzzle pieces. The process is quicker and usually cheaper than onsite construction, because companies can work through bad weather and bring more order to a job site.
"We won't have much of a housing market if we don't figure this out," Mr. Holliday said. A previous project that Mr. Holliday built using modular technology saved tenants $\$ 700$ a month in rent because of reduced construction costs, he said.

Experts said one of the few ways to reduce housing costs would be to build apartment towers in factories. San Francisco rents have jumped by almost $50 \%$ since 2010, while home prices have increased 98\% since the bottom of the market in 2009.
"We've reached a tipping point where costs are just so high that people are desperate to figure out a solution," said Carol Galante, faculty director of the Terner Center for Housing Innovation and a former federal housing commissioner.

Mr. Holliday, who also is the owner of Holliday Development, a builder of affordable and market-rate housing in the Bay Area, said he became enamored of the idea after years of dealing with labor shortages, chaotic construction sites and difficulty finding workers. The Factory OS facility in Vallejo, a port city northeast of San Francisco, is two to three times as big as most modular-construction facilities, spanning nearly 260,000 square feet, with a central corridor that is three football fields long and a central atrium that is eight stories tall. Mr. Holliday expects to begin production of Google's order in the fall, and to employ some 300 people.

Mr. Holliday has several advantages over his predecessors, housing experts and his investors said. As a developer, he can fill holes in the pipeline with his own projects, which amount to 1,200 units, he said. He is funded mostly by foundations, not venture capitalists, putting less pressure on him to maximize profits from the outset.

Mr. Holliday was introduced to modular construction when he pulled off the highway near Sacramento one day to tour the factory owned by a company named Zeta. "This is way more efficient and way better," he recalls thinking.

Zeta, which was founded at beginning of the housing crisis in 2008, generated buzz in the Bay Area with a handful of successful pilots, when it installed the modules for a fourstory building in four days-although it took about five months in total from the start of the project to finish. It would have taken at least nine months using normal construction methods, according to Co-Founder and Chief Executive Naomi Porat.

But Ms. Porat acknowledged the company faced numerous challenges, including venture-capital backers who expected a quick return and difficulty establishing a steady pipeline of work.
"You have to come out first and break through. The pioneers are not always going to be the last standing," she said. "I believe that offsite construction is the method of the future."

## C. Panelized Homes:

Panelized homes are factory-built homes in which panels-a whole wall with windows, doors; electrical wiring and outside siding-are transported to the site and assembled. The homes must meet state or local building codes where they are sited. These are not subject to the HUD Code but to local building codes like modular homes. Panelized systems take many forms. The most widely used panels are made from an Expanded Polystyrene (EPS) core, adhered to Oriented Strand Board (OSB) or plywood skins. The foam alone has little strength, but when bonded to the plywood, acts as a bridge, or web, to augment structural capacity and resist buckling. These are structural insulated
panel (SIP) exterior walls and are now typical for panelized homes and used with modular construction as a manufacturer achieves a durable, low-cost, energy-efficient product. This replaces the interior-side sheathing with a high-strength gypsum board.

Insulation capacity is an advantage of panel systems as the insulated panels provide better overall air tightness and thermal performance. Conventional wood framing creates a structure where a minor thermal bridge occurs at each vertical stud and gaps can exist between insulation batts and stud surfaces that allow air leaks. Panel systems offer a dense, uniform and continuous air barrier with few thermal bridges, and little opportunity for internal convection.

Panelized construction is highly efficient in terms of materials use and labor. One industry study found that construction of a 2,600 square foot home using panelized systems required 26 percent less lumber, wasted 76 percent less materials and needed just over a third of the man-hours that would be used in a comparable stick-built house.

A large amount of this was as the result of using SIP's (Structured Insulated Panels). "SIPs are most commonly made of OSB panels sandwiched around a foam core made of expanded polystyrene (EPS), extruded polystyrene (XPS) or rigid polyurethane foam. Other materials can be used in replacement of OSB, such as plywood, pressure-treated plywood for below-grade foundation walls, steel,[1] aluminum, cement board such as Hardiebacker, and even exotic materials like stainless steel, fiber-reinforced plastic, and magnesium oxide. Some SIPs use fiber-cement or plywood sheets for the panels, and agricultural fiber, such as wheat straw, for the core." www.wikipedia.org


The following photos show the process and timeline of constructing a panelized home.



## D. Pre-Cut Homes:

Pre-cut homes are often referred to as kit homes where the material is delivered on-site and instructions are provided for assembling the kit. More than "some assembly required" would be a good way to describe these homes. Most of these homes are built by the owner therefore the HUD Code does not apply, however, local building codes will. Although Sears Roebuck and Company often is credited with inventing the mailorder kit house, the Aladdin Company of Bay City.

Michigan began the practice in 1906 (Sears offered their first "official" kit home in 1916). Other companies that built homes prior to Sears were Montgomery Ward and Bennett Homes. Today, hundreds of companies still manufacture kit homes. Most of these kits fall into one of four categories: log homes, timber-frame homes, domes and panelized houses (some manufacturers offer hybrid combinations). As a general rule, a kit-home package will be roughly one-quarter to one-third the total cost of the finished home. Home kits usually only include the materials for the exterior shell of the house. In 2005, $\log$ homes constituted $7 \%$ of all new home exterior materials. Also in 2005, concrete panel walls had risen to $16 \%$ of the exterior wall material, up from only $3 \%$ in 1993.
"Most log companies offer a package that includes the shell: log walls, a roof system, doors, windows, porches, and dormers, which accounts for approximately one-third of the cost of the small log home and 15 to 20 percent of the cost of a larger custom log home. The foundation, interior walls, plumbing, wiring, lighting, fixtures, cabinetry, flooring, and other finish work are generally completed by contractors or the homeowner. Logs are generally treated before they are erected and then sealed afterward to repel water and protect against bugs." (Prefabulous, Sheri Koones)

One company in Idaho is becoming a leader in kit homes. The company name is Zipkithomes and the website is www.zipkithomes.com. This is a very informative website. Photos of two of their homes follow.



Wick Home - Built 1994


## Kit Log-Home



## E. Current Perceptions and Market Activity:

Cities and communities that once frowned on manufactured and modular homes are now starting to embrace them as one of the last affordable housing options for individuals and families. Modular homes are more acceptable as they are again built to local building codes. Although some are still somewhat 'boxy shaped' that is changing and they are very functional.

## Research Question Conclusion

The most current information is a research paper by Doctoral student Lisa Tyler at Walden University in 2015.

Research question Results
Does a statistically significant relationship exist between acceptance of manufactured housing and 12 variables representing respondents' perceptions of manufactured homes, respondents' characteristics, county characteristics, and manufactured home type?

1. The socioeconomic characteristic of housing value had a negative relationship with consumer perceptions and acceptance of manufactured homes. As the value of a house increases, the level of acceptance toward manufactured homes decreases.
2. The social behavior of manufactured home occupants' relationship with consumer perceptions and acceptance of manufactured homes. Favorable perceptions of manufactured home occupants' social behavior increased the acceptance level of manufactured homes.
3. Respondent household size and composition relationship with the acceptance of manufactured homes. As the size of the family increased, the acceptance level of manufactured homes increased.
4. Neighborhoods that included manufactured homes in the land-use mix improved the perception of manufactured homes and had a positive effect on manufactured homes acceptance.
5. When the perception of manufactured home occupants' education level included postsecondary education, the perception of manufactured homes was more favorable.
6. Population size had positive and negative effects on acceptance level of manufactured housing. As the population increased, the acceptance level decreased. Respondents in low to mid-population ranges held favorable perceptions of manufactured housing. In contrast, respondents in urban settings had low favorability towards manufactured homes.
7. Manufactured home type (single-section or double section) did not have a statistically significant relationship with manufactured home acceptance.

Many US courts have ruled that zoning restrictions applicable to mobile homes do not apply to modular homes. Additionally, in the US, the Uniform Standards of Professional Appraisal Practice allow site-built homes to be used as a comparable to modular homes in real estate appraisal; thus, modular homes are typically evaluated the same way as traditionally built dwellings of similar quality. These developments in equivalence between housing types are expected to increase the sales of modular homes greatly in the near future.

This combination of factors has led most jurisdictions to place zoning regulations on the areas in which manufactured homes are placed, and limitations on the number and density of manufactured homes permitted on any given site. Other restrictions, such as minimum size requirements, limitations on exterior colors and finishes, and foundation mandates have also been enacted. There are many jurisdictions that will not allow the placement of any additional manufactured homes. Others have strongly limited or forbidden all single-wide models, which tend to depreciate in value more rapidly than modern double-wide models. An example of these thoughts and concerns are shown in the article starting on the next page.

# Manufactured Home Community: 

## Tapping Into a Future Market

By Rick Stuart, CAE

This article was the 2003 IAAO Donehoo Essay Award Winner.
What do you do with a 105-acre tract of land on the edge of town that has been vacant for decades? You build a manufactured home community, of course. So went the thought process of developer Ray Thurlow.

A manufactured home community is a typical residential subdivision except the homes are all manufactured in a factory versus being stick-built on site. Advantages of using manufactured homes are:

1. Built in a plant, a controlled environment, so the materials are not exposed or subjected to adverse weather.
2. Homes are constructed with standard features and then are modified based upon the plan or model selected by the purchaser.
3. A considerably shorter time frame between home selection and actually moving in.

As Thurlow progressed in his plan, he asked Ted Neuburger to become his partner. Neuberger stated he wanted nothing to do with these homes, but by his own admission had not been in a manufactured home for 20 years. After walking through several units, he changed his mind. This perception or stigma would show up again during the proposed zoning change hearings.

Deciding how to effectively use the land started in the late 1980's. Over the last 25 years, the developers found a need for more affordable housing. Young families could not afford a typical site-built home and often purchased older homes with needed repairs. Thurlow believed the property's good access to the interstate and shopping made a good location for starter homes.

New manufactured homes provide a maintenance free exterior. All homes have vinyl siding, insulated thermal pane windows, steel insulated doors, zone three insulation (a cold climate package), and $2^{\prime \prime}$ by $6^{\prime \prime}$ framing. The new home relieves the homeowner of soon facing any necessary major repair cost. The homes are built at the factory according to the National HUD Code that became effective in 1976 and then are inspected by the City Building Inspectors. City inspectors visit each site several times to approve the concrete, foundation, wiring, and garage and then make a final inspection.

Having driven by this property for the last 16 years, the appraiser in me has often wondered why the land was not being utilized. Then the basic appraisal question: What would be the highest and best use?

Determining the highest and best use is one of the first steps in the appraisal process and can be the most challenging. Devin Sprecker of Robert Taggart and Associates
conducted the appraisal and shared the portion of the appraisal relative to the highest and best use and the analysis of the potential absorption rate. Portions of the appraisal are given below.
"The definition of highest and best use is that use which at the time of appraisal is most likely to produce the greatest net return to the land and buildings over a given period of time. The steps which help the appraiser reach the conclusion are as follows:

1. Legally permissible usage - We have concluded the potential for zoning of the subject is broad with adjoining properties zoned residential, industrial and commercial.
2. Physical characteristics and limitations - The size, topography, location, visibility and access lend themselves to related uses in conformance to those that exist on adjacent properties that have been developed to the above uses.
3. Off - site facilities available - All utilities and arterial street improvements serve the property.
4. Most profitable use of the site - The subject site has no unusual restrictions. The zoning, 'PUD' Residential, is not broad enough to permit flexibility in use. However based on the zoning of adjoining property and previous zoning of the subject it is our opinion a change of zoning to industrial or commercial could be obtained. The site size is large enough for most; if not all permitted uses. There is abundant industrial zoned land in the area with limited new development due to difficulties in attracting industry to Topeka".
"There are large mobile home parks in the immediate vicinity supporting a trend to average or below quality development and middle income residents. The subject development as proposed will market to middle income families with modular home improvements on crawl spaces or basements with attached garages. This is the type of development the area best supports"
"We have concluded the highest and best use of the land, as if vacant or as improved, would be for a single family subdivision of fair to average quality improvements, marketed to the lower middle income sector such as the proposed use".

The independent appraisal reviewed other single-family residential subdivisions to establish an absorption rate for the subject. An analysis of five (5) other subdivisions indicated an annual absorption rate from 12 to 50 lots per year. The higher absorption rate was a subdivision with lower improved property values. "The estimated property values as improved in the subject subdivision are to the low end of the range from all subdivisions considered". Based upon this analysis, the projected absorption rate for the subject property was 35 lots annually.

An option was taken on the land in the spring of 2000 with a contingency clause based upon successful re-zoning and the availability of financing. The purchase was completed in January 2001 and the plat of the land calls for 340 lots to be developed or approximately three (3) lots per acre. Raw land costs were $\$ 4,000$ per acre and
the developers chose to pay for the site improvements instead of having special assessments. Construction costs for the streets, curbs and all site improvements for the first 35 lots (Phase 1); their investment was at $\$ 15,000$ per lot. The standard lot size is 75 foot frontage and a depth of 125 feet. There is a 90 foot green-space between the city street and the first row of lots.

Phase 2, containing 22 lots, started in February 2002 and will be ready by mid-year.
Phase 3 will then start in the spring of 2003. The subdivision started sales in November of 2001 and in the first four (4) months had 16 sales. They had planned during the start-up period to sell two-three units per month and have a breakeven point of three (3) units per month. The developers believe they are ready to turn the corner and that sales will increase and that the project will sell out in five (5) years, or an absorption rate of 68 lots per year. This rate exceeds actual absorption by comparable subdivisions and almost doubles the fee appraiser's projection. Currently there are 10-12 couples per week visiting the sales office. The anticipated net return for the project is $4 \%$, which they state is the national rate for builders.

Typical for most subdivisions, there are restrictions on how the property can be used and what can be built on the lots. Each dwelling must be a minimum of 1,300 square feet and a minimum of 28 feet in width. The homes must be a Ranch style with all detached garages and outbuildings having the same exterior siding, colors and roof material as the residence. No used materials or buildings are allowed.

Finding a manufactured home builder that would work with them was difficult. All homes have a two-car attached garage and would require some modification by the homebuilder. Approximately $90 \%$ of all floor plans would not fit the building restrictions of the subdivision. It took several modifications, but a potential home purchaser has eight (8) options. These options can be seen on their website at www.grandoak.net. The homebuilder has now started to offer some of these modifications to dealers.

Original plans were for all the homes to have a crawl space. All purchasers want a full basement but only about $50 \%$ can qualify for the additional financing. Calculating the purchase price is very simple. Each of the eight (8) option sheets shows the price, monthly payments (principal, interest, taxes, property insurance and mortgage insurance) and the basement cost if chosen. Home buying made easy!

Financing of manufactured homes has changed in the last few years. Historically not all lending institutions would loan on this type of home and if so, the down payment was larger, the loan rate higher and the loan term shorter than stick-built homes. A large share of the loans was through the home dealer. The developers, working with a local lending institution, uses an FHA loan of 30 years with 3\% down and the same interest rate as given to stick-built homes.
Based upon market research, the anticipated target market was for young families. Although the young families are indeed buying, a large market is the semi-retired and the retired groups wanting to downsize.

Information provided by the Manufactured Housing Institute (MHI), states that 29\% of retirees reside in manufactured homes. The manufactured home industry believes with the future retirement of the "baby boomers", this percentage will increase. MHI statistics also state that $17 \%$ of all new homes built in 2000, were manufactured homes. This percentage is up from 11\% in 1996 and 13\% in 1997 and 1998.

Considering that a manufactured home community is not a typical land use, the request for a zoning change met with opposition. The 90 days projected for the zoning change turned into almost one (1) year. The East side the home community abutted up to a 15-20 year old subdivision with home values in the range of \$150,000-\$225,000.

Adjacent property owners were not receptive to having a "mobile home park" as their neighbor. The stigma of what a mobile home used to be versus what a manufactured home currently is, had to be overcome. Often adjacent property owners complain that manufactured homes close to their property create a loss of value. "Manufactured housing now appreciates in value when it is sited in a good location, is the beneficiary of routine maintenance and care, and is supported by a stable housing market. According to Dr. Carol Meeks of the University of Georgia, the life of a new, year-round lived-in manufactured home is close to 55.8 years".

Several of those who had opposed the re-zoning have since visited the home community and have been surprised at the quality of the homes and at the home community's appearance.

Land is purchased, zoning is in place, and a home manufacturer is on-board, now they need someone to sell the homes. Some real estate agents are hesitant to sell this type of home and still think about the homes being the "mobile homes" of the past. Real estate agents Stan and Brenda Zimmerman became the lead agents for the project. Also helping to sell the homes is Jeff Dietz who formerly was a salesperson for the home manufacturer.

The real estate agents have stated it is difficult for co-op brokers to be interested because of the stigma. It will take a few years of sales and for some of the properties to resell before these attitudes change. They are hoping that other agents realize that, "All houses are manufactured, just some of them are on-site and some at a plant".

The developers of this home community feel like they are pioneers as no one in the area has even considered this approach to housing. Their ability to deliver a high quality product at a low cost, the increasing number of manufactured homes being annually purchased and the market research that retirees and not just small families are finding these homes attractive and affordable, may indeed show they are tapping into a future market.

## F. Financing:

The most popular option is financing through the retailer. Retailers traditionally work closely with financial companies specializing in manufactured housing. These financial firms are often times arms of the nation's largest banking institutions and are able to offer very favorable financing. Retailers finance a large number of purchases and some are risky loans that end in foreclosure.

Typically, this financing features as little as 5-10\% down and from 15-30 year mortgages, depending on the credit profile, size of home and type of loan. Used homes can be financed with $5-10 \%$ down for up to 20 years. Government-backed financing is available under the Federal Housing Authority (FHA) Title 1 Manufactured Home Loan Program and the Title II FHA Combination Manufactured Home and Homesite Loan Program. Manufactured homes generally require a minimum of $5 \%$ down for a government loan and 3\% down for modular homes. Modular homes will have the same interest rate as a stick-built but manufactured homes will generally have at least 1\% point more for the rate versus a stick-built for homes on real estate and even a higher rate typically for those on leased land.

## Financing Manufactured (Mobile) Homes

Under the Title I program, FHA approved lenders make loans from their own funds to eligible borrowers to finance the purchase or refinance of a manufactured home and/or lot. FHA insures the lender against loss if the borrower defaults. Credit is granted based upon the applicant's credit history and ability to repay the loan in regular monthly installments.

FHA does not lend money; FHA insures loans in order to encourage mortgagees to lend. Title I manufactured home loans are not Federal Government loans or grants. The interest rate, which is negotiated between the borrower and the lender, is required to be fixed for the entire term of the loan, which is generally 20 years.

## Purpose of the Loan

A Title I loan may be used for the purchase or refinancing of a manufactured home, a developed lot on which to place a manufactured home, or a manufactured home and lot in combination. The home must be used as the principal residence of the borrower.

## Manufactured Homes Placed on a Leased Lot

For Title I insured loans, borrowers are not required to purchase or own the land on which their manufactured home is placed. Instead borrowers may lease a lot, such as a site lot within a manufactured home community or mobile home park. When the land/lot is leased, HUD requires the lessor to provide the manufactured homeowner with an initial lease term of 3 years. In addition, the lease must provide that the homeowner will receive advance written notice of at least 180 days, in the event the lease is to be terminated. These lease terms are designed to protect homeowners in case the lessors sell the land or close the park.

## Maximum Loan Amount

- Manufactured home only - \$69,678
- Manufactured home lot - \$23,226
- Manufactured home \& lot - \$92,904


## Maximum Loan Term

- 20 years for a loan on a manufactured home or on a single-section manufactured home and lot
- 15 years for a manufactured home lot loan
- 25 years for a loan on a multi-section manufactured home and lot


## Locating a Dealer

Manufactured homes are usually purchased through dealers or retailers that sell the homes. The names of lenders in your area which specialize in financing manufactured homes can be obtained from local retailers. These retailers are listed in the yellow pages of your telephone directory. They have the required application forms.

Manufactured homes must comply with the Model Manufactured Home Installation Standards, and all applicable state and local requirements governing the installation and construction of the manufactured home foundation system.

## Consumer Protection

HUD provides two types of consumer protection. The borrower must sign a HUD Placement Certificate agreeing that the home has been installed and set-up to their satisfaction by the retailer before the lender can give the loan proceeds to the retailer. After moving in, the borrower can call HUD at (800) 927-2891 to get assistance about the problems with construction of the home.

## Eligible Borrowers Must

- Have sufficient funds to make the minimum required down-payment.
- Be able to demonstrate that they have adequate income to make the payments on the loan and meet their other expenses.
- Intend to occupy the manufactured home as their principal residence.
- Have a suitable site on which to place the manufactured home. The home may be placed on a rental site in manufactured home park, provided the park and lease agreement meet FHA guidelines. The home may be situated on an individual homesite owned or leased by the borrower.


## An Eligible Manufactured Home Must

- Meet the Model Manufactured Home Installation Standards.
- Carry a one-year manufacturer's warranty if the unit is new.
- Be installed on a homesite that meets established local standards for site suitability and has adequate water supply and sewage disposal facilities available.

The proceeds of a Title I manufactured home loan may not be used to finance furniture (for example, beds, chairs, sofas, lamps, rugs, etc.). However, built-in appliances and equipment and wall-to-wall carpeting are eligible for financing.

Information about a FHA mortgage was found on the HUD web page. To be eligible for a FHA mortgage, a manufactured home must comply with the following:

1. Have a floor area of not less than 400 square feet.
2. Be constructed after June 15, 1976, in conformance with the Federal manufactured home construction and safety standards, as evidenced by an affixed certification label in accordance with 24 CFR Section 3280.8; (manufactured homes produced prior to that date are ineligible for insured financing).
3. Be classified and subject to taxation as real estate. This is an important aspect and explains why the property owner wants manufactured homes listed as real property.
4. The mortgage must cover both the manufactured unit and its site and shall have a term of not more than 30 years from the date amortization begins.
5. Built and remains on a permanent chassis.
6. Designed to be used as a dwelling with a permanent foundation built to FHA criteria.
7. The finished grade elevation beneath the manufactured home or, if a basement is used, the lowest finished exterior grade adjacent to the perimeter enclosure, shall be at or above the 100-year return frequency flood elevation.

Modular homes can be financed the same as site built homes. On the website of Apex Modular Homes was information from one of the lenders they work with to finance homes for their customers. The various types of loans are shown below.

Construction-to-permanent loans:
One loan, one closing and one set of fees! Get construction financing and permanent financing all in one loan.

Lot loans:
Looking to purchase a residential lot for future construction of your primary residence or vacation home? If so, our lot loan is the right loan for you. And when you are ready to build, we will help you with your construction-to-permanent loan.

Remodeler loans:
Designed for homeowners looking to improve a primary residence-new kitchen, bigger bathroom, room addition and more!

Bridge Financing:
Don't wait to sell your old home before building your dream home. You can access equity in your current home to use as a down payment on a construction-to-permanent loan.

The following article discusses market trends and financing. Please read.
A New Home for $\$ 90,000$ ? Manufactured Housing Is Making a Comeback
By Jeremy Hill August 16, 2018, 4:00 AM CDT
While others walked away from manufactured homes, Don Glisson Jr. stuck around.

He's seen the industry's ups and downs in his 36 years working at Triad Financial Services, the third-biggest lender to buyers of factory-made houses in the U.S. The rock-bottom was in the early 2000s, when rival firms were getting fat on subprime loans.
"I knew that would lead to disaster," said Glisson, chief executive officer of Jacksonville, Florida-based Triad. When sales of the homes plummeted and his competitors fled, Glisson booked profits by keeping his focus on borrowers with high credit scores. His discipline paid off: He once was satisfied if his company made $\$ 1$ million in loans in a month. Now it does that amount in half a day.

Triad might reap further rewards for its persistence. It's one of a handful of firms that are poised to benefit from a nascent comeback for manufactured homes, shipments of which have been on the rise since 2009. Consolidation among producers and the exodus of lenders have left a just few businesses -- including three owned by Warren Buffett's Berkshire Hathaway Inc.-- to dominate a market that looks primed for growth in the face of rising prices for site-built houses and the potential for regulatory change.

## A Factory-Built Rebuild

Shipments of manufactured homes are steadily recovering after a crash
Source: U.S. Census Bureau
The hope is that more Americans will see the factory units not only as a more-affordable alternative to a traditional single-family house, but also an appealing one, without the old trailer-park stigma. It helps that they've been getting fancier. Scott Richards, a salesman for Rona Homes in Pataskala, Ohio, said that when shoppers come to his lot, he can dazzle them with customization options like hickory cabinets, rainforest showers and built-in entertainment systems coupled with electric fireplaces.
"We've got linoleum floors that look just like hardwood floors," said Richards, who got back into selling factory-made houses after leaving the industry in 2012. "You don’t think about solid granite being in a manufactured home, but we have that as well."

Rona Homes revamped its display lot in March in response to growing demand. Where there once sat three models for customers to see, there are now 13 -- "a whole arsenal" Richards can use to sell buyers on the idea.

The company sells what most people probably picture when they think of manufactured homes -- single- and double-wide houses wholly built on a chassis in a factory -- as well as modular homes, which are factory-built in sections that are assembled on a lot. While a single- or double-wide is often much cheaper than a modular home, both offer cost advantages that come with putting construction on an assembly line.

## 'Time Has Come'

Shipments of manufactured homes to dealers bottomed out in 2009 and have climbed in almost every year since then, according to Census Bureau data. This year, they're expected to cross the 100,000-unit mark for the first time in more than a decade, and Joe Stegmayer, CEO of Cavco Industries Inc., sees no reason why that number can't double.
"I think our industry's time has come," said Stegmayer, whose Phoenix-based company is the No. 3 maker of factory-built houses, behind Berkshire's Clayton
Homes and Skyline-Champion Inc., the product of a merger that was completed in June.

Read More: Blackstone Is Said to Make First Bet on Manufactured Housing An accommodating regulator could help speed up that growth. The Department of Housing and Urban Development is reviewing the rules it places on manufacturers, and in April, HUD Secretary Ben Carson said the agency is "positioned to usher in a new era of cooperation and coordination" with the industry.

Stegmayer said he's looking for some flexibility. Currently, a HUD inspection is required for on-site installation of certain features that are shipped separately from the homes, including dormers and French doors. The rules make the add-ons a hassle for Cavco, yet those modifications are what help the company woo mainstream buyers who might be put off by the boxy look of a typical factory-made home, he said.

## Rising Prices

Six years of steady price gains have put owning a traditional house out of reach of many Americans, especially in the market for previously owned properties, which make up the vast majority of sales. The Urban Institute's Housing Finance Policy Center has pointed to manufactured homes as a partial solution to the affordability crunch, and Vice President Laurie Goodman predicts annual shipments will continue to grow.

With affordable housing in such short supply, "there aren't a ton of alternatives," she said. "And MH is affordable."

Sale prices for new double-wide manufactured homes averaged \$91,400 in March, according to the most recent Census Bureau data. For new single-family homes, including wholly site-built and modular houses, the average price in June was $\$ 363,300$.

The industry faces challenges, including a widely held perception that factory-made houses are cheaply made and tacky. People who would have to stretch to buy a home have plenty of options for renting, including single-family houses. And as manufacturedhome loans typically carry higher rates than conventional mortgages, would-be buyers might have difficulty financing a purchase.

## Loan Market

Change may be coming on that front. Government-sponsored Fannie Mae and Freddie Mac are expanding their loan purchases to include so-called chattel loans, often used to finance manufactured houses that are on leased land. That's something they hadn't done "in any meaningful way" since the early 2000s, said Greg Palm, an analyst at Minneapolis-based Craig-Hallum Capital Group LLC. The program will start small, but if scaled up, could spur more lending and bring down borrowing costs for buyers.

In addition, Congress earlier this year voted to roll back a financial crisis-era regulation that kept dealers from steering their buyers to lenders. Glisson said the move should connect Triad with more of its target borrowers and cut down on screening costs.

Glisson said he's aiming for 10 percent growth as "the bare minimum" in the coming years at Triad, whose only larger competitors are 21st Mortgage Corp. and Vanderbilt Mortgage and Finance Inc., both owned by Berkshire Hathaway. The three firms combined control more than half of the market for manufactured-home loans in the U.S., according to Triad's publicly traded parent, Toronto-based ECN Capital Corp.
"As an industry, we're going to continue to grow," said Glisson, CEO of Triad since 2003. "Houses aren't getting cheaper."

## Fannie-Freddie Look to Provide Financing for Manufactured Homes

By Joe Light, May 8, 2017
Fannie Mae and Freddie Mac may soon begin to provide financing for buyers of manufactured homes, according to draft plans released on Monday.

The move is part of an effort by the mortgage-finance giants to ease burdens on lowincome borrowers, many of whom turn to factory-built housing as a inexpensive alternative to traditional residences. At the same time, it could also bring criticism from people concerned about the riskiness of lending for the mobile homes, which often sit on leased land and can depreciate quickly in value.

The proposals were outlined by Fannie and Freddie as part of broader plans to address affordable housing challenges. The U.S.-controlled companies need to get sign-off for the pilot programs from their regulator, the Federal Housing Finance Agency.

The 2008 law that authorized the bailouts of Fannie and Freddie also required them to develop plans to serve three target areas: manufactured housing, rural housing and affordable housing preservation. The FHFA didn't begin the extended process of implementing the requirement until 2015. The draft plans released Monday will be open to public comment and subject to review by the FHFA before taking effect in January.

## Industry Advocacy

Mobile-home builders and some affordable-housing advocates have long called on Fannie and Freddie to support the industry, arguing that such residences are a primary way some low-income borrowers get into the real estate market. According to the U.S. Census, about 12.3 million Americans owned a manufactured home in 2015, while another 5.4 million rented one.

Buyers of manufactured homes typically are ineligible for standard mortgages because they don't own the land where the home sits. Instead, they have to get a personal property or "chattel" loan that carries a higher interest rate and lasts 10 to 20 years, rather than the 30 years of a typical fixed-rate mortgage.

Fannie and Freddie already finance some loans for homes on land owned by the borrower and, through their multifamily businesses, to owners of entire mobile-home communities on which owners rent land.

The mobile-home industry crashed in the late 1990s and early 2000s, sending some lenders into bankruptcy.

Mike Dawson, a Freddie single-family vice president, said that lending and manufacturing practices are much different than they were at the time of that collapse.

## 'Sustainable Lens'

"We want to look at it from a long-term sustainable lens," Dawson said. "If we participate, we want to make sure that there are responsible lending guidelines associated with it."

Some of the biggest lenders for mobile-home purchases lately have been the manufacturers themselves. Among them are subsidiaries of Berkshire Hathaway Inc.'s Clayton Homes, though they've come under criticism in the last couple years for allegedly discriminatory lending practices. The company disputes the claims.

Jeffery Hayward, Fannie's head of multifamily, said the company through its pilot hopes to collect more data on how chattel loans perform to ensure that they don't put taxpayers at risk.
"Rural and manufactured housing are inextricably linked," Hayward said. "The most affordable housing you can find is often a manufactured house in a rural area."

Like Freddie's Dawson, Hayward said the quality of manufactured homes has improved in the last couple decades, making them better collateral.

Fannie said it could begin by purchasing 350 to 425 chattel loans per year, which could amount to $\$ 20$ million to $\$ 25$ million.

## Section 3 - Real Property or Personal Property

When appraising manufactured homes one of the first things that must be determined is the property classification. In most states this means is it real property or personal property. The rise of the manufactured home brought with it complications the legal system was not prepared to handle. Originally, manufactured homes tended to be taxed as vehicles rather than real estate, which resulted in very low property tax rates for their inhabitants. Some states require a title be issued for all manufactured homes. They are considered a motor vehicle like cars and trucks. Most states have similar laws. These laws go back to when these homes were really trailers and were best described using the word "mobile".

## A. Real Property:

1. Real property is the sum of the tangible and intangible rights in both land and improvements (real estate).
2. Real estate is the physical parcel of land and any improvements or structures that are permanently attached to the land. Improvements would include such things as site improvements (i.e. clearing and grading). Structures would include such things as buildings, pavement, etc. Also a part of the real estate would be appurtenances involving the parcel. Appurtenances include such things as easements that cross the parcel or give access to the parcel.
3. Real property is typically those things that are immovable.
4. Real property can be classed as either tangible or intangible.

Tangible real property is the physical real estate and improvements. It is the items that the owner can use and possess. Intangible real property would be like a mortgage, which is the right to take possession of real estate if the borrower fails to fulfill the requirements of a contract.

## B. Personal Property:

1. Personal property is property that is not defined as real property.
2. Typically it is something that is movable. It is property that can be removed from a parcel without damage either to itself, or to the real property which it is attached.
3. Once movable items such as sinks, bathtubs, etc. are attached to the real estate they are called fixtures and are considered real estate.
4. Attached movable items that are used in a business operation such as barber chairs, bowling alleys, etc. are called trade fixtures and are treated as personal property.
5. Personal property can also be classed as either tangible or intangible. Tangible personal property is the items that you can use and possess. Intangible personal property is items like a share of stock in a corporation.

## C. Property Situs:

1. Situs of real estate is the physical location.
2. Situs of personal property is the taxable location.

## D. Real Estate or Personal Property?

Following are a couple of real life scenarios. How would you classify the manufactured home in each situation and what would be situs of the manufactured homes?

Example \#3-1: The subject property is a 14 foot by 70 foot manufactured home sitting on a concrete slab. The home is located on a five acre tract of ground in the rural part of the jurisdiction and the land is not owned by the owner of the manufactured home. Attached to the manufactured home is an 8 foot by 10 foot deck. Skirting has been placed around the base of the home and the wheels are still attached. The tongue is still attached to the home and is accessible. Also on the property is a 20 foot by 22 foot garage. The garage is not attached to the manufactured home.

Example \#3-2: The subject property is a 14 foot by 70 foot manufactured home that has had the tongue and wheels removed and anchored to cement block piers. Skirting has been placed around the base of the home. The home is sitting on a lot in town owned by the same person that owns the home. Attached to the manufactured home is an 8 foot by 10 foot deck. Also on the property is a 20 foot by 22 foot garage. The garage is not attached to the home.

## E. Apples and Oranges:

Property owners often will provide information on manufactured homes to support their appeal for a lower value. This information may be from newspaper ads or from conversations with manufactured home dealers. This is where an apple to orange comparison may occur. A majority of time the information you receive is probably for a home in a manufactured home park and not one permanently attached to the land. If the subject property is permanently attached, does it have the same value as one in a manufactured home park? The principle of substitution must be considered. That is, you will not pay more for a property than what you can buy a comparable property for.

If you were to buy a home and then have to move it to land you own, would you pay the same as if the home is already in place? You know you would have moving and other associated costs. It is helpful to have information available for moving costs. According
to Marshall \& Swift Valuation Services, their costs include an allowance for up to 100 miles for delivering a new unit. Recent information from a manufactured home mover is shown below.

Single-wide: $\$ 1,800-\$ 2,000 \quad$ Double-wide: $\$ 5,000-\$ 6,000$

## Section 4 - The Cost Approach to Value

## A. The Cost Approach:

The cost approach to value provides a value indication that is the sum of the estimated land value and the estimated depreciated cost of the building and other improvements. The economic principle that provides the foundation for the cost approach is the principle of substitution. The principle of substitution states that a rational, informed purchaser will pay no more for a property than the cost of acquiring an acceptable substitute with like utility, assuming that no costly delay will be encountered in making the substitution. The cost approach works best for new improvements because construction costs are easier to estimate and there is less depreciation.

## B. Steps in the Cost Approach:

1. Estimate the land value as if vacant and available for development to its highest and best use. The best method of finding land value is the use of valid vacant land sales.
2. Estimate the total cost new of the improvements (RCN) as of the appraisal date, including direct costs, indirect costs and entrepreneurial profit from market analysis.
3. Estimate the total amount of depreciation attributable to physical deterioration, functional obsolescence and economic obsolescence.
4. Subtract the total amount of depreciation from the total cost new of the primary improvements to arrive at the depreciated cost of improvements.
5. Estimate the total depreciated cost new of any accessory improvements and site improvements.
6. Add land value to the depreciated cost of the primary improvements, accessory improvements and site improvements to arrive at a value indication by the cost approach.

## C. The Cost Approach Formula:

Value (V) = Land Value (LV) + (Improvement Value (IV) - Depreciation (D)) + Other Building Value (OBV).
D. Types of Costs:

1. Direct Costs - costs incurred on the site (labor, materials, supervision, building permit fees). Direct costs are also referred to as hard costs.
2. Indirect Costs - costs incurred off the site (insurance, architect fees, interest, taxes, etc.). Indirect costs are also referred to as soft costs.
3. Entrepreneurial profit - this is a market derived number that reflects the amount developers expect to receive for their contribution to the improvement. Entrepreneurial profit is included in the cost of manufactured housing whether the cost is derived from a dealer or by use of the Marshall Swift cost manual.

## E. Concept of Costs:

1. Reproduction Cost - this is the cost of constructing a building identical to the subject property in floor plan, style and all aspects, using the same type of construction materials. This method includes the added cost of obsolete design, building techniques and materials.
2. Replacement Cost - this is the construction of a building having the same utility as the subject, as well as the same general amenities, although the building may differ in architectural design, materials of construction and floor plan. This method will be typical costs and it is the method most often used by appraisers. This method will also tend to eliminate functional obsolescence.
3. Original Cost - this is the original cost to construct the subject property.

## F. Estimating Replacement Cost New (RCN):

1. Use of in-house or national cost manuals (i.e. Marshall and Swift). When using a cost manual the typical information that will be required to arrive at a value are year built, brand and model, size, quality, roofing, heating/cooling, plumbing, floors, exterior walls, fireplaces, appliances and skirting. Items that are specific to a certain location will also need to be taken into consideration when costing out a property using a cost manual. For example, the RCN for a manufactured home in Florida could be considerably greater than what is listed in most costing manuals. Besides these costs being constructed to meet HUD codes, each state can set additional building codes that would have an effect on value. Due to the climate and severe weather in some areas of the country, the quality of materials and methods of construction may be a better quality than what typically the costing manuals use to develop costs.

Example \#4-1: The subject property is a 28 foot by 60 foot double wide manufactured home in average quality. It has carpet, metal roof, and vinyl skirting around the entire home that is sitting on piers and forced heat with air conditioning. You do not know the number of plumbing fixtures. The home has a range and oven with a range hood and fan plus a refrigerator. It is located in Little Rock, Arkansas. What would be the estimated cost of the home using the Marshall and Swift information in Attachment A?

| Square footage of home $28 \times 60$ | 1,680 |  |  |
| :--- | ---: | :---: | :---: |
| Base cost from MS $\$ 37.34 \times 1,680$ | $\$ 62,731$ |  |  |
| Carpet adjustment $\$ 2.65 \times 1,680$ | $\$ 4,452$ |  |  |
| Metal roof (Base) | $\$ 0$ |  |  |
| Vinyl skirting $\$ 7.45 \times 176$ linear feet | $\$ 1,311$ |  |  |
| Warm and cool air adjustment $\$ 1.66 \times 1,680$ | $\$ 2,789$ |  |  |
| Plumbing (Base) | $\$ 0$ |  |  |
| Range \& oven | $\$ 900$ |  |  |
| Range hood \& fan | $\$ 240$ |  |  |
| Refrigerator | $\$ 900$ |  |  |
| Adjusted base |  |  | $\$ 73,323$ |
| Current cost multiplier | X 1.03 |  |  |
| Local cost multiplier | X |  |  |
| Replacement cost new |  |  |  |
| Rounded to | $\$ 69,481$ |  |  |

Example \#4-2: The subject property is the same home described in example \#1 except it has a 140 square foot wood deck and a 240 square foot steel carport. The square foot cost of the steel carport is $\$ 9.10$. Using Marshall and Swift what would the estimated value of the manufactured home?

The deck cost must be interpolated. To interpolate something means to find a value between two points. In this example, you have the following information in the M\&S cost manual: a 100 square foot deck at $\$ 18.95$ per square foot. Using the same components a 200 square foot deck would have a cost of $\$ 14.30$ per square foot. Based on this information we know that the square foot price for the 140 square foot deck should be somewhere between $\$ 14.30$ and $\$ 18.95$ per square foot. To find the price per square foot to use on the subject property, we will need to interpolate the data.

Interpolation steps

$$
\begin{aligned}
& \$ 18.95-\$ 14.30=\$ 4.65 \\
& 200 \text { sq ft } 100 \text { sq } \mathrm{ft}=100 \mathrm{sq} \mathrm{ft} \\
& \$ 4.65 \div 100=\$ 0.0465 \text { per square foot difference } \\
& 140 \text { sq } \mathrm{ft}-100 \mathrm{sq} . \mathrm{ft}=40 \text { sq ft. } \\
& 40 \times \$ \$ .065=\$ 1.86 \text { per square foot } \\
& \$ 18.95-\$ 1.86=\$ 17.09 \text { per square foot for the subject }
\end{aligned}
$$

| Adjusted home cost | $\$ 73,323$ |
| :--- | ---: |
| Steel carport cost $\$ 9.10 \times 240$ | $+\$ 2,184$ |
| Deck cost $\$ 17.09 \times 140$ | $+\$ 2,393$ |
| Total base cost | $\$ 77,900$ |
| Current cost multiplier | $\times 1.03$ |
| Local cost multiplier | $\times 0.92$ |
| Replacement cost new |  |
| Rounded to | $\$ 73,818$ |

Problem \#4-1: The subject property is a 24 x 72 foot double wide manufactured home and is an average quality. It has carpet and forced heat but no air conditioning. It is located in Huntsville, Alabama and has nine fixtures plus an extra rough-in and the appliances include range and oven, range hood and fan, dishwasher and refrigerator. The home sits on a continuous concrete wall. What would be the estimated replacement cost new using the Marshall and Swift information in Attachment A and how does the cost per square foot compare to what dealers have indicated?

## G. Local Cost Data:

Another method of estimating the replacement cost new is by surveying manufactured home builders and individuals who have recently purchased new manufactured homes. On the next pages are examples of using this type of information.

## H. Quality Determination

If you list a manufactured home as a stick-built and you use Marshall and Swift as the cost guide, you can use actual cost to assist in determining the quality rating. A 1,600 square foot home will be used in this analysis. Dealers have not indicated a price per square foot difference for size but price is contingent upon interior modifications.

On page 1 of the manufactured housing section of Marshall and Swift, a good quality manufactured home would be equal to a low or fair quality stick-built home. A possible conversion chart is shown on the next page. This chart indicates a more accurate replacement cost new (RCN) for an average quality of manufactured home is as a poor or fair stick-built home in Marshall and Swift. Manufactured home rates from Marshall and Swift are rounded to the nearest dollar. Stick-built siding used was the metal or vinyl siding column. The cost figures will continue to change and will not be current, but the process will remain the same. The base manufactured home has range, oven and refrigerator and central heat and air. Those items were added to the Marshall and Swift base cost.

A $36 \times 44$ (1,584 square foot) manufactured home was used for comparison.

| Base manufactured home |  | \$26.40 |
| :---: | :---: | :---: |
| Composition shingle | + | \$ 1.24 |
| Warm \& cooled air | + | \$ 1.20 |
| Rate per square foot |  | \$28.84 |
| Square foot | X | 1,600 |
| Base home |  | \$46,144 |
| Range \& oven | + | \$ 650 |
| Range hood \& fan | + | \$ 190 |
| Refrigerator | + | \$ 675 |
| Bathroom fixture (1) | + | \$ 500 |
| Total cost |  | \$48,159 |
| Square foot | $\div$ | 1,600 |
| Cost per square foot |  | \$ 30.10 |
| Rounded to |  | \$30.00 |


| Manufactured | Dealer | MS Manuf. | Stick Built | Stick Built |
| :--- | :---: | :---: | :---: | :---: |
| Home Quality | RCN | Cost | Quality | Rate |
| Average | $\$ 55.00$ | $\$ 30.00$ | Fair | $\$ 55.71$ |
|  |  |  | Low | $\$ 48.77$ |

You could use this process to review the value indications of your cost manual. An example using a mass appraisal cost manual is shown to assist in determining what the relationship is to the quality rating.
If you list a manufactured home as a stick-built and use a manual costing system, you can use actual cost to assist in determining the quality rating. The base cost model from a manual will be used with some modifications. No basement will be included but air conditioning will be added to be more comparable to the typical manufactured home.

Manual base: $\quad 1,200$ square feet, one story frame no attic 5 plumbing fixtures

| Base cost | $\$ 55,440$ |
| :--- | ---: |
| Basement | $\$ 7,660$ |
| Air Conditioning | $+\$ 2,100$ |
| Adjusted Base Cost | $\$ 49,880$ |
| County Index (used actual county index of 1.65, <br> which is a combination of the local and current <br> cost multipliers. | $\times 1.65$ |
| Indicated RCN | $\$ 82,302$ |
| Rounded to | $\$ 82,300$ |

Square foot cost for average quality manufactured home, as per dealer, is $\$ 55.00$ and would include similar features such as heating, plumbing and floor covering as the base home model in the mass appraisal cost system. If large differences exist, a complete matching comparison should be made.

RCN as manufactured home: 1,200 square feet $x \$ 55.00=\$ 66,000$
Grade factor:

$$
\$ 66,000 \div \$ 82,300=0.80
$$

Some CAMA systems use an average quality for the base rate and use a factor to adjust for the quality. Example: Low $=0.65$ Fair $=0.80$ Average $=1.00$, etc. Under your cost manual grade adjustments, the closest fit might be Fair grade at 0.80 and in this case a perfect match. This would state an Average quality manufactured home would be equal to a Fair grade stick built home in your cost manual.

A third method of calculating RCN is by abstraction. With this method you abstract the RCN from the market place using sales of newly constructed manufactured homes. It is important to use newly constructed properties so that there is no or very little depreciation to calculate. In this method the land value plus any accessory building value should be subtracted from the sale price which will leave the RCN. Divide the building value by the square footage of the manufactured home to arrive at a price per square foot. (Sale price - land value and accessory building value = RCN. Improvement value / square footage = price per square foot.)

Example 4-3: The subject property constructed this year also sold this year at a sale price of $\$ 120,000$. It is a 28 -foot by 68 -foot doublewide with 1,836 square feet living area. The subject property sits on a five-acre site, which is valued at \$5,000 per acre. There are several outbuildings on the property, which are valued at \$16,000. What are the RCN and the price per square foot of the double wide abstracted from the market data?

| Sale Price | $\$ 120,000$ |
| :--- | ---: |
| Minus land value (5 acres $\times \$ 5,000)$ | $-25,000$ |
| Minus accessory building value | $-16,000$ |
| Replacement Cost New | $\$ 79,000$ |
| RCN per square foot $(\$ 79,000 / 1,904)$ | $\$ 41.49$ |

Problem 4-2: The subject property sits on a five acre tract of land which is currently valued at $\$ 22,000$. The subject is a one year old, 28 by 68 foot manufactured home that sold six months ago for $\$ 132,000$. Property values have been appreciating at a rate of 6 percent per year in the jurisdiction. Also located on the property is a detached garage that is valued at \$8,000 and a small shed that is valued at \$1,500. What are the RCN and the price per square foot of the subject property using abstraction?

Attachment B is the URAR Manufactured Home form used by appraisers for valuing a property for loan purposes.

## I. Developing a Cost Index:

Most cost manuals, particularly in-house manuals, are not updated annually. Even if you use a national cost manual such as Marshall and Swift, which is typically adjusted annually, you may still need to adjust the cost manual to reflect your local market conditions. How is this process done? It is basically a comparison between the cost manual numbers and the numbers you derive from the local market via interviews with builders or data abstracted from sales of newly constructed properties. The cost modifier formula is: Actual cost $/$ current cost table cost $=$ cost index.

Example 4-4: Your current cost manual has not been updated in two (2) years. The cost per square foot for an average quality, doublewide manufactured home is \$37.00. From the market place you have determined that the actual construction cost for an average quality, doublewide manufactured home is $\$ 43.00$ per square foot. What is the cost index that should be used to adjust your cost tables up the current market rate?
$\$ 43.00 \div \$ 37.00=1.16$ or actual construction costs are 16 per cent higher than the costs in the cost manual.

## J. Depreciation:

Depreciation can be defined as the loss in value, from all causes, of property having a limited economic life. In valuing property by the cost approach, depreciation is the difference between replacement or reproduction cost new (RCN) of a property and its market value (less site value) as of the date of the appraisal.

## K. Forms of Depreciation:

1. Physical deterioration - The loss in value due to wear and tear in service and the forces of nature.
2. Functional obsolescence - The impairment of functional capacity or efficiency and is a loss in value brought about by such factors as superadequacy, inadequacy and changes in style, taste, technology and demands. Manufactured homes used for residential purposes may not suffer from any functional obsolescence. Homes used for offices or other non-residential uses may have some functional obsolescence due to poor room arrangement or other factors.
3. External obsolescence - The loss in value brought about by changing economic forces such as changes in highest and best use, legislation, etc. External obsolescence is often referred to as locational or economic obsolescence. This may be found in a county by comparing sales of comparable properties in different economic areas of the county. This could very easily be found in the market if you are comparing sales from one county to another county. Some counties or regions may have the same economic climate, but the market will dictate this if it exists.

## L. Methods of Measuring Physical Deterioration:

1. Comparative Sales Data Method (Abstraction):

With this method, the replacement cost new of the subject property is estimated. Recent sales of properties that are similar in age, condition and desirability are then found. From the sale price the value of the land is subtracted which leaves only the improvement value and then the improvement value is subtracted from the RCN to arrive at the loss in value (depreciation). (Depreciation $=$ RCN $-($ Sale Price - Land Value)) To find the percent of depreciation the next step is to take the depreciation dollar amount and divide it by the RCN. (\% Depreciation = Depreciation $\div \mathrm{RCN}$ )

Example 4-5: The subject property is a 24 -foot by 40 -foot manufactured home. The estimated replacement cost new of the subject property is $\$ 40.00$ per square foot. The subject property sits on a 60 by 120 -foot lot and land in the neighborhood is selling for $\$ 120$ per front foot. The property recently sold for $\$ 42,000$. The manufactured home is three (3) years old. What are the dollar amount of depreciation and the percent of depreciation per year?

| 24 feet $\times 40$ feet $=960$ square feet |  |
| :--- | ---: |
| $\$ 40.00 \times 960$ square feet | $\$ 38,400$ |
| Sale price | $\$ 42,000$ |
| Land value $(\$ 120$ per front foot $\times 60$ <br> front foot) | $\$ 7,200$ |
| Improvement value | $-\$ 34,800$ |
| Accrued depreciation | $\$ 3,600$ |
| Accrued depreciation percentage <br> $\$ 3,60 \div \div \$ 38,400$ | $0.09=9 \%$ |
| Annual per cent of depreciation <br> $0.09 \div 3$ years | $0.03=3 \%$ |

2. Age Life Method:

This method allocates a uniform percentage of value loss each year over the useful life of the property. It assumes that all the forces of depreciation are exerting the same influence on value. It is called the straight-line method of measuring depreciation.

To use the age life method to find depreciation you need to identify the following terms:

Effective age - This is the property's age as indicated by the condition and utility of the property as of the date of the appraisal, not by when it was built. The effective age is estimated by the appraiser at the time the appraisal is done. Effective age is the amount of life that has been used as
of the date of the appraisal. It can also be calculated by the following formula: (Total economic life - remaining economic life)

Total economic life - This is the estimated period over which it is anticipated that the property may be profitably used or will continue to contribute value. There are several ways to find the economic life of a property. One way is to refer to national costing manuals such as Marshall and Swift. These manuals typically will provide an economic life for all types of properties. A second method would be to use the following formula:

Effective age + Remaining Economic Life: - Still another method would be to estimate the total economic life of a property by using the depreciation percentage abstracted from the market place. The formula to use this method is:

1 divided by the percent of depreciation per year expressed as a decimal. The percent of depreciation is effective age divided by the total economic life.

Example 4-6: Following is an example of how to calculate the economic life of manufactured homes using market data. The information used in this example is from actual sales of single wide and doublewide manufactured homes of average quality.

## Single wide manufactured homes:

| \% Depreciation | Age | \% per year | Economic life |
| :--- | :--- | :--- | :--- |
| 46 | 19 | 0.0242 | 41 years |
| 48 | 8 | 0.0600 | 17 years |
| 38 | 10 | 0.0380 | 26 years |
| 53 | 15 | 0.0353 | 28 years |
| 51 | 24 | 0.0213 | 47 years |
| 46 | 16 | 0.0288 | 35 years |

The median economic life from this example is 31.50 years and the mean is 30 years, which would indicate an economic life for single wide manufactured homes at 30 years. As a comparison Marshall and Swift indicates that the economic life for single wide manufactured homes of average quality is 30 years as shown in Attachment $A$.

Double-wide manufactured homes:

| \% Depreciation | Age | \% per year | Economic life |
| :--- | :--- | :--- | :--- |
| 56 | 34 | 0.0165 | 61 years |
| 41 | 31 | 0.0132 | 76 years |
| 25 | 14 | 0.0179 | 56 years |

The median economic life from this set of sales is 61 years and the mean is 64 years, which indicate an economic life of 60 years compared to a range in Marshall and Swift of 40 years. "Manufactured housing now appreciates in value when it is sited in a good location, is the beneficiary of routine maintenance and care, and is supported by a stable housing market. According to Dr. Carol Meeks of the University of Georgia, the life of a new year-round lived-in manufactured home is close to 55.8 years," (How to Find, Buy, Manage and Sell a Manufactured Home Community, George Allen, John Wiley \& Sons., 1996, p.8.)

Past market experience has indicated that homes depreciate at a faster rate as personal property than as real property. This would seem logical if you think of a single-wide for example in a manufactured home park. Research has shown that around $85 \%$ of all homes placed in a manufactured home park when new, never leave the park. The home may change owners several times and the maintenance on the home may be minimal compared to a home placed on real property. Sale price should also be less based upon the principle of substitution as someone purchasing a home from a park to place on real property will have all the additional moving and installation costs.

## Percent Good Tables:

A jurisdiction in Idaho was kind enough to share their information they have been gathering on manufactured homes for the last six (6) years. Included in this material is an EXCEL spreadsheet titled ID Manuf Home Percent Good.xIsx. This spreadsheet has some explanation of the data and shows the three (3) most current years. Also included is a spreadsheet titled MH \% Good Idaho.xIsx. The percent good tables are for the following:

1. Percent good single-wide no land
2. Percent good double and triple-wide no land
3. Percent good single-wide with land
4. Percent good double and triple-wide with land
5. One item of note is that the age goes to 56 years which may be a long economic life for single-wide homes and maybe others without land.

Remaining economic life - This is how much life is left before the home becomes economically valueless. It is the difference between the total economic life and the effective age. (Total economic life - effective age)

Example 4-7: The subject property is a 28 foot by 60 foot manufactured home with a replacement cost new (RCN) of $\$ 42,000$. It has an effective age of three (3) years and remaining economic life of 21 years. What is the percent of depreciation and the amount of total depreciation dollar loss suffered by the subject property?

Percentage of depreciation: 3 years $\div 24$ years $=.125$ or 12.5 percent Amount of total depreciation dollar loss: $\$ 42,000 \times .125=\$ 5,250$

Go to Attachment $A$ and compare the percent of depreciation extracted from the market to Marshall and Swift.
3. Capitalization of Income Method

In this method, net operating income generated by the subject property is capitalized into an estimate of property value. From the property value the value of the land is subtracted which leaves only building value. The building value is then subtracted from the estimated replacement cost new of the structure to determine the loss in value (depreciation).
(RCN - (Income Value - Land Value) = Depreciation)
Example 4-8: The subject property is a 28 foot by 72 foot manufactured home with a replacement cost new (RCN) of $\$ 45,000$. The property is currently being used as a real estate office and the monthly rent is $\$ 600$ per month. After reconstructing an income and expense statement for the property the net operating income was estimated at $\$ 4,780$. The overall capitalization rate is 10 percent. The manufactured home sets on a 6,000 square foot lot and lot values in the area are estimated at $\$ 2.00$ per square foot

The home is six (6) years old. What is the amount of total depreciation dollar and the percentage depreciation loss suffered by the subject property? Also what is the depreciation percent per year?

| Property value from capitalized <br> income $(\$ 4,780 \div 0.10)$ | $\$ 47,800$ |
| :--- | ---: |
| Less: Land value $(\$ 2.00$ per square <br> foot $\times 6,000$ square feet | $\$ 12,000$ |
| Manufactured home value | $\$ 35,800$ |
| Total depreciation dollars <br> $(\$ 45,000-\$ 35,800)$ | $\$ 9,200$ |
| Depreciation percentage <br> $(\$ 9,200 \div \$ 45,000)$ | $0.20=20 \%$ |
| Depreciation percent per year <br> $(0.20 \div 6$ years $)$ | $0.033=3.3 \%$ |
| Economic life $(1 \div 0.033)$ | 30 years |

## M. Methods of Measuring Functional Obsolescence:

1. Paired Sales:

This is the easiest method of measuring functional obsolescence. What is required is two sales that are exactly alike except for the characteristic (functional problem) that you believe may create a loss in value. The sales need to be adjusted for time if necessary. After the time adjustment has been made, the difference between the two sale prices would be the dollar amount of functional obsolescence. Marshall and Swift indicate that the depreciation tables in their manual will contain normal functional obsolescence plus the physical deterioration. That is understandable for site-built homes, but would that also apply to manufactured homes?
2. Capitalization of Rent Loss:

This method would probably be best to use on non-residential manufactured homes. A comparison of rent must be made between the manufactured home and a stick built structure to determine if there is any rent loss. If rent loss is present, then the rent loss would be multiplied by the gross rent multiplier (GRM) (Rent Loss x GRM = Functional Obsolescence). The GRM is calculated by dividing the sale price by the monthly rent for residential property (Sale price $\div$ monthly rent $=$ GRM).

If the manufactured home is a non-residential property the multiplier is called a gross income multiplier (GIM) and is calculated by dividing the sale price by the annual income (Sale price $\div$ annual rent $=$ GIM).

## N. Methods of Measuring External Obsolescence:

1. Paired Sales:

This works the same way as described in the functional obsolescence section. Remember to first adjust the sales for time.
2. Capitalization of Rent Loss:

This method basically works the same way as the functional obsolescence method except for one additional step. In finding external obsolescence we are using the percent of the building in relationship to the total property value. If there is external obsolescence present, you have already accounted for the problem in the land when you found the land value for the subject property. The formula for finding external obsolescence is:
Rent Loss x GIM or GRM x \% of building value.
Case Study \#4-1: A single-wide manufactured home was purchased and moved to a remote area approximately 400 miles away. The property will be placed in a manufactured home park, which is owned by the purchaser, and it will rent for $\$ 400$ per month. The purchaser stated that he paid $\$ 1,500$. The statement noted that the furnishings had no value. The cost of moving the manufactured home was \$300 and the
set up costs were $\$ 200$. The owner wants you to value the home at $\$ 2,000$ because that is his total cost in the home. How would you answer the following questions?

1. How would you determine if the $\$ 2,000$ is the market value of the home?
2. How would the rent be used to measure market value?

Case Study \#4-2: Two property appraisers are discussing the valuation of manufactured homes. Both express a concern that equity in the valuation of these homes is not occurring statewide. They believe a standardized guide should be developed for the counties to use. As they research the situation further they encounter sales from various locations in the state with substantially different sale price for basically the same type of manufactured home. How would you answer the following questions?

1. Can a standardized guide for the state be developed? Does the guide provide information to assist the property appraiser in establishing the manufactured home's grade, cost and depreciation?
2. How can equity be created if the sales are so diverse?

Case Study 4-3: Do single-wide and double-wide manufactured homes depreciate the same according to Marshall and Swift? Do you think that is reflective of your local market?

Case Study 4-4: Do homes in a manufactured home park depreciate at the same rate as those sitting on land owned by the home owner?

## Section 5 - Sales Comparison Approach

## A. Sales Comparison Approach:

The sales comparison approach uses the market to estimate value by comparing the subject property to similar properties that have recently sold. It is based on sales that have already occurred, therefore, it requires the assumption that market behavior in force in the past, will continue into the future. It is based on the economic principles of supply and demand, substitution and contribution. The current inventory of properties on the market represents the supply side and such things as population, mortgage rates and cost of substitute housing represent the demand side. The sale price represents the interaction of supply and demand.

## B. Steps in the Sales Comparison Approach:

1. Defining the appraisal problem - this involves identifying the property, the rights to be appraised, the date of the appraisal and the use and type of value to be estimated.
2. Collecting and analyzing the data - this involves verifying each sale to make sure that it is an open market transaction and that it meets the definition of market value. The property should also be field visited to make sure that the property characteristics currently on the CAMA record reflect what was present at the time of sale.
3. Selecting the appropriate units of comparison - this step involves analyzing the market to determine which unit of comparison gives you a value that is most reflective of market value Typical units of comparison that should be considered if the subject property is a residential property include per unit, per square foot, per room, per bedroom, gross rent multiplier (GRM), etc Unit of comparisons that are typically used for commercial properties include: per front foot, per square foot, per cubic foot, per bay, per room, per apartment, per parking stall, per unit, gross income multiplier (GIM), etc. For manufactured homes the predominant unit of comparison would be square foot. Also you might be able to use a GRM or per bedroom as units of comparison.
Look at the URAR form again that is found in Attachment B.
4. Develop reasonable adjustments - this step involves analyzing the market to see what property characteristics have an effect on market value. This process is based on the economic principle of contribution. Typical property characteristics that might affect the value of a manufactured home are such things as square footage, bedrooms, bathrooms, quality, physical condition, age, other amenities such as a fireplace or air conditioning, etc. Would you anticipate that the same dollar adjustments for site-built homes would be used for manufactured homes? Would the rate per square foot of sale price be less than for the same quality of site-built home?
5. Apply the adjustments to the comparable sales - in this step the comparable sale characteristics that affect value are adjusted to match the subject property which will cause the sale prices of the comparable sales to be adjusted. In this step it is important to remember that all adjustments are made to the comparable sales not the subject property.
6. Analysis of adjusted sale price of comparable sales to arrive at value for the subject property. Most weight should be given to the sale or sales that require the least amount of adjustment.

## C. Typical Adjustments:

1. Financing - this adjustment is always the first adjustment made. A financing adjustment must be made for any unusual market situation that creates a sale price that is different from that represented by cash or typical financing. Most sales will not require a financing adjustment. Other adjustments like excessive personal property or any adjustment for market condition would also be made at this time.

Example 5-1: The subject property is a seven (7) year old manufactured home which recently sold for $\$ 75,000$. Interviews with the mortgage officer indicated that the buyer received a mortgage rate, which is considered to have accounted for a \$2,000 difference in the sale price. Conventional financing is normally found in this neighborhood and is of a slightly lower loan-to-value ratio than found on this sale property. Is financing adjustment needed, if so how much?

$$
F A S P=\$ 73,000(\$ 75,000-\$ 2,000)
$$

A good explanation and example of finance adjustments can be found in the Appendix of the IAAO Property Appraisal and Assessment Administration. (red book)
2. Time - this adjustment is always the second adjustment made in the sale comparison approach. A time adjustment is used to adjust the sale price of the comparable property up to the date of the appraisal for the subject property. If a finance adjustment is made against the comparable sale then the time adjustment should be made to the finance adjusted sale price (FASP). There are four typical methods used to calculate a time adjustment.
a. Resale analysis - this method is used when a property has sold twice within an acceptable time frame. The formula is: (Current Sale - Previous Sale) $\div$ Previous Sale $=\%$ Change. To convert the percentage change into a monthly time trend you divide the total percent of change (\% change) by the number of months between the two sales (\% Change Number of months = \% per month). To develop an annual time trend you multiply the percent of change per month by 12 (\% per month $\mathbf{x} 12=$ annual time trend).

Example 5-2: You have researched the market place and found a nine (9) year old manufactured home that recently sold for $\$ 90,000$. The home has 1,500 square feet of
living area and sits on a 15,000 square foot site. The property was purchased 18 months ago for $\$ 82,000$. What is the monthly and annual time trend indicated by this resale?
$\$ 90,000-\$ 82,000=\$ 8,000 \div \$ 82,000=0.0976$ (total percent change)
$0.0976 \div 18$ months $=0.0054$ (percent change per month)
$0.0054 \times 12$ months $=0.0648$ or $6.5 \%$ (annual time change)
b. Paired sales analysis - if you don't have any properties that have sold twice in the jurisdiction, you can use paired sale analysis to derive a time adjustment. This method involves finding two separate properties that have sold and are essentially identical. The formula is: Current Sale - Previous Sale $\div$ Previous Sale $=\%$ Change. To develop a monthly and annual time trend you would use the same procedure as outlined in (a) above.

Example 5-3: You have researched the market place and found two (2) identical properties that have sold within the past 10 months in the same neighborhood. The properties are both five (5) year old manufactured homes and have the same physical characteristics and amenities. The first property sold 10 months ago for \$76,000. The second property sold this month for $\$ 79,000$. What is the monthly and annual time indicated from the market data?
$\$ 79,000-\$ 76,000=\$ 3,000 \div \$ 76,000=0.0395$ (total percent change)
$0.0395 \div 10$ months $=0.0039$ (percent change per month)
$0.0039 \times 12$ months $=0.0474$ or $4.7 \%$ (annual time change)
c. Sales ratio trend analysis - this method is used in mass appraisal situations and uses data from the sales ratio study to develop a time trend. The data that is used is the median ratio and the targeted ratio level. The formula would be:

Target ratio level / the median ratio = adjustment percent.
Example 5-4: The targeted ratio for the jurisdiction is 1.00. The median sales ratio in the subject property's neighborhood during the past year was .93. What would be the adjustment needed to bring the values up to the targeted level?
$1.00 \div 0.93=1.0753$ (values need to be increased by $7.5 \%$ percent to reach the targeted level of 1.00).
d. Time adjustments can also be calculated by use of Multiple Regression Analysis (MRA). "A particular statistical technique, similar to correlation, used to analyze data in order to predict the value of one variable (the dependent variable), such as market value, from the known values of other variables (called independent variables)." IAAO Glossary.
3. Miscellaneous adjustments - these are any physical characteristics that contribute to value (i.e. square footage, bedrooms, quality, physical condition, etc.). The amount of the adjustments should be found in the market place, if possible, using valid open market transactions. If market data is not available then cost table information could be used as an adjustment amount. These miscellaneous adjustments should be made against the time adjusted sale price (TASP). The method used to find these adjustments in the market place is paired sale analysis. The formula for paired sale analysis is: Sale of a property with contributory characteristic minus the sale of a property without the characteristic = adjustment dollar amount.

Example 5-5: You have determined that a carport contributes to value in your subject property's neighborhood. You have researched the market place and found the following sale information with the carports being the same size as the subject property:

Sale \#1: A 10 year old manufactured home sold 12 months ago for \$82,000. The home has 1,500 square feet of living area, two (2) bathrooms, three (3) bedrooms and no carport. The annual time trend in the neighborhood is six (6) percent.

Sale \#2: A 10 year old manufactured home sold six (6) months ago for $\$ 87,000$. The home has 1,500 square feet of living area, two (2) bathrooms and three (3) bedrooms and a carport. The time trend in the neighborhood is six (6) percent per year.

What would be your recommended carport adjustment?
First step is to adjust sales for time:
Sale \#1: $\$ 82,000 \times 1.06=\$ 86,920$
Sale \#2: $\$ 87,000 \times 1.03=\$ 89,610$
Carport adjustment: \$89,610-\$86,920 =\$2,690
The next step would be to breakdown the adjustment into a unit of comparison such as dollars per square foot or just as a per item value such as the carport.
5. MRA can be used to develop adjustments for manufactured homes the same as for site-built homes. If models are separately built for manufactured homes only, this would require a fairly large number of sales. The variables may have to be reduced to just the key contributors of value such as size, age, condition, number of bedrooms, number of baths and land. Manufactured homes can be included with site-built homes to develop the MRA models and estimate a value through MRA. The appraiser must be aware that this process would be saying that the contributory value for items is the same for manufactured and site-built.

## D. Comparable Sales Grid:

An example of a comparable sales grid can be found at the end of this section. The comparable sales grid should list the characteristics of the subject property and the comparable sales. The net adjustment line is a total of all the adjustments made to the time adjusted sale price. Comparable sales grids will typically use one of the following adjustment methods:

1. Lump sum adjustments - in this method a lump sum dollar amount for each characteristic is used, for example, $\$ 3,000$ per bedroom.
2. Cumulative percentages - in this method a percentage for each characteristic is applied to the time adjusted sale price to derive at a dollar amount for each characteristic adjustment, for example, plus six (6) percent for age. If the time adjusted sale price is $\$ 80,000$ then multiply the $\$ 80,000 \times 0.06$ which gives you a dollar adjustment for age of $\$ 4,800$.
3. Multiplicative percentages - in this method the percentages for each characteristic are multiplied together and then applied to the time adjusted sale price to derive at a total dollar adjustment for all the characteristics. For example, age adjustment, plus six (6) percent; size, plus four (4) percent and quality, plus three (3) percent. The total adjustment would be: $1.06 \times 1.04 \times 1.03=1.135$ or 13.5 percent. Then take this adjustment and multiply it by the TASP to arrive at the total net dollar adjustment.
4. Hybrid adjustments - in this method both lump sum dollar amounts and percentage adjustments would be used. The lump sum dollar adjustments would be made to quantitative characteristics such as size, number of bedrooms, number of bathrooms, etc. The percentage adjustments would be made to qualitative characteristics such as quality, physical condition, etc.

COMPARABLE SALES GRID

|  | SUBJ | SALE 1 | SALE 2 | SALE 3 |
| :--- | :--- | :--- | :--- | :--- |
| SALE PRICE |  |  |  |  |
| DATE OF SALE |  |  |  |  |
| FINANCE ADJUSTMENT |  |  |  |  |
| FASP |  |  |  |  |
| TIME ADJUSTMENT |  |  |  |  |
| TASP |  |  |  |  |
|  |  |  |  |  |
| ADJUSTED SALE PRICE |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Section 6 - The Income Approach

## A. The Income Approach:

The income approach is considered the most appropriate when valuing income producing properties. The underlying economic principle in the income approach is the principle of anticipation, which states that value is created by the expectation of benefits to be derived in the future. When you are valuing a manufactured home used for residential purposes you would typically use the gross rent multiplier (GRM) method to arrive at an income value. To value a manufactured home used for commercial purposes, like office space, you would use the income capitalization method. It would also be possible to use the gross income multiplier (GIM) method on a commercially used manufactured home.

## B. Gross Rent/Income Multiplier:

This method looks at the relationship between income (rent) and sale prices. The multiplier is simply a factor and can be used in an income valuation method called the VIF formula where: Value (V) = Income (I) x Factor (F). When using this method it is important to remember that the subject property and comparable sale properties used to develop the multipliers must be similar or adjusted for any differences.

1. Gross rent multiplier - the GRM, as noted earlier, is used for property that is used for residential purposes. Residential GRM will typically be in a range of 80 to 120 . The GRM on manufactured housing will normally be less than GRM for stick-built properties. In calculating the GRM for residential property use the actual monthly rent of comparable sale property. The formula to calculate the GRM is:

Sale Price / Gross Monthly Rent: When using the GRM to calculate a market value for the subject property always use the market rent in the subject property's neighborhood. The formula using the GRM to find market value is: GRM x Monthly Market Rent.

## Example 6-1: Manufactured Home GRM - Gross Rent Multiplier

Generally, any income approach to value on single-family residential property is by use of a gross rent multiplier. A gross rent multiplier shows the ratio between a property's value and the gross or effective income. The GRM is calculated by dividing the sale price by the rent at the time of sale. Comparable properties can be used in a manner as shown in the following example. In the example, one property is being rented and a comparable property sold as shown on the following page.

## Sale Property:

Sale Date: Current
Land Value: \$ 19,500
Home Quality: Fair
Year Built: 1989
Rental Property: Rent Date: Current

Lot Rent: \$ 95 / month
Home Quality: Fair

Sale Price: $\quad \$ 30,000$
Home Value: \$ 11,500
Home Size: $14 \times 56$

Rent: \$ 300 / month
Home Rent: \$ 205 / month
Home Size: $14 \times 56$

Year Built: 1989
An analysis of this data is shown below.

| Home sale price | $\$ 11,500$ |
| :--- | ---: |
| House rent per month | $\$ 205$ |
| GRM $(\$ 11,500 \div \$ 205)$ | 56.10 rounded to 55 |
| House rent per month | 784 |
| Square feet | $\$ 0.26$ |
| Rent per square foot per month $(\$ 205 \div 784)$ | $\$ 3.12$ |
| Annual rent per square foot $(\$ 0.26 \times 12)$ |  |

Typically in appraisal courses a GRM is in the range of 80-120. Older homes in less than average condition and in areas of decline will have a lower GRM. It seems reasonable that manufactured homes would have a lower GRM because of a shorter economic life. The lower the GRM, the faster a landlord will recover their investment.

Example 6-2: The subject property is a two (2) year old manufactured home that is currently rented for $\$ 675$ per month. The home has three (3) bedrooms, two (2) bathrooms and 1,500 square feet of living area. Analysis of the market indicates that the current rent on the subject property is $\$ 25$ less than the market rent for the neighborhood. Two (2) rental properties in the neighborhood recently sold. They were both three (3) bedroom units with 1,500 square feet. Sale \#1 sold for \$80,000 and rented for $\$ 700$ per month. The second sale sold for $\$ 85,000$ and rented for $\$ 730$ per month. What is the indicated GRM and what would be the estimate of market value using the GRM method?

GRM calculation: $\quad$ Sale \#1-\$80,000 $\div \$ 700=114.29$
Sale \#2 - \$85,000 $\div \$ 730=116.44$
Indicated GRM:115

Subject property's market value: $115 \times \$ 700(\$ 675+\$ 25)=\$ 80,500$
2. Gross income multiplier - the GIM is typically used for commercial property. Typical GIM will be between 5 and 15 . The income that is used in the GIM formula is the annual gross income. The formula for finding a GIM is:

$$
\text { Sale Price } \div \text { Gross Annual Rent. }
$$

When you use the GIM to calculate market value of the subject property always use the gross annual market rent for the subject property's neighborhood. The formula using the GIM to find market value is:

GIM x Gross Annual Market Rent.

Example 6-3: The subject property is a five (5) year old manufactured home that is currently rented to a real estate agency for office space at $\$ 600$ per month. Your research of the market place indicates that the actual rent on the subject property is the same as the market rent in the neighborhood. You have found two (2) recent sales of manufactured homes that were also rented for commercial purposes. Both properties are very comparable to the subject property. The first sale had a sale price of $\$ 70,000$ and was rented for $\$ 575$ per month. The second sale was rented for $\$ 625$ per month and sold for $\$ 73,000$. What would be the indicated GIM using the market data and what would be the market value of the subject property using the GIM method?

GIM calculation: $\quad \$ 70,000 \div \$ 6,900(\$ 575 \times 12)=10.14$
$\$ 73,000 \div \$ 7,500(\$ 625 \times 12)=9.73$
Indicated GIM: 10
Subject property's market value: $10 \times \$ 7,200(\$ 600 \times 12)=\$ 72,000$

## C. Income Capitalization:

This method involves the process of converting (capitalizing) the future net benefits of property ownership (net operating income) into an expression of present worth (value). The basic formula used in this income approach is the IRV formula which states: Value $(\mathrm{V})=$ Income (I) $\div$ Rate (R). Following are the steps in the income capitalization method:

1. Estimate potential gross income (PGI) - when estimating PGI use market rent. A subject property's actual rent may be used if it is representative of the market rent for the neighborhood. When determining market rents it is important to look at properties that are comparable to the subject property in age, quality, physical condition, size, etc. In finding PGI monthly rent must be converted to annual income.

The formula to find PGI is: Monthly Rent x Number of Units x 12 .
Example 6-4: The subject property, a 28 by 68 manufactured home, currently rents for $\$ 475$ per month per unit and contains two (2) office units. A review of the market place shows that the market rent for the neighborhood is $\$ 500$ per month per unit. What is the subject property's PGI?

PGI $=\$ 500 \times 2 \times 12=\$ 12,000$
2. Estimate vacancy and collection loss - both vacancy and collection loss are expressed as a percentage of the potential gross income and are the dollar amount of each deducted from the PGI.

The formula for finding vacancy loss is:
Vacant Units - Total Number of Units x 100
The formula for finding collection loss is:

## Amount Uncollected - Total Rents Billed x 100 .

3. Estimate miscellaneous income - this is income generated from the property other than rent. Examples would be parking rental, resale of utilities, laundry, vending machines, etc. Miscellaneous income is added to PGI.
4. Estimated effective gross income (EGI) - effective gross income is found by the following formula: PGI - vacancy and collection loss + miscellaneous income.
5. Determine operating expenses - not all expenses incurred by a commercial property are considered allowable expenses in this method. Allowable expenses are only those necessary to operate and maintain the property. Typical expense amounts, like market rent, should be pulled from the market place. Examples of allowable expenses are management, utilities, insurance, lawn care, repairs and maintenance, supplies, advertising, etc. Non-allowable expenses include such things as depreciation, debt service, taxes, franchise fees, capital improvements, etc.

Also considered an allowable expense is reserves for replacements. Reserve for replacements is an expense set aside annually so that at the end of an item's economic life there is money available to replace the item. Examples of items that are considered as reserves for replacements are roof cover, HVAC systems, floor coverings, dishwashers, refrigerators, etc. To calculate a reserve for replacement expense you need to know the economic life of the item and the replacement cost new. For example, if an item costs $\$ 10,000$ and has an economic life of 15 years the annual reserve for replacement amount would be: $\$ 10,000 \div 15=\$ 667$.

If you are unable to itemize expenses you may have to develop an expense ratio.
The formula used to find an operating expense ratio is:

## Allowable Operating Expenses (including reserves for replacements) $\div$ Effective Gross Income = Expense Ratio.

6. Find net income - net income is what is left over after the expenses have been removed.

The formula is:

## Effective Gross Income - Operating Expenses = Net Operating Income.

Net operating income also can be found by the following formula:
Effective Gross Income x (1-the Expense Ratio).
7. Develop the appropriate capitalization rate - determining the capitalization rate can be more difficult. There are three (3) components to the rate: discount, recapture and effective tax rate. The capitalization rate can either be abstracted from the market place or developed using the buildup method. To find the capitalization rate from the market place you need to know the net operating income and the sale price of a property. The formula to find the rate is:

## Net Operating Income $\div$ Sale Price $=$ Overall Capitalization Rate .

In the build-up method the capitalization rate is determined by finding each component separately and then adding them together. The discount rate, the return on the investment, can be found by either the band-ofinvestment or mortgage-equity methods. Both methods will require conversations with lenders and borrowers to determine loan rates and terms. Typically the discount rate will be higher for a manufactured home than a stick-built structure because as discussed in the section on financing, the loan rate may be higher.

The recapture rate can be found using the remaining economic life of the subject property. This method gives you straight-line depreciation. To find the recapture rate simply take 1 divided by the remaining economic life. Normally manufactured homes have a shorter economic life than a stick-built structure, which means they would have a higher recapture rate.

The effective tax rate is computed by multiplying the assessment rate by the local current tax rate. The effective tax rate for a manufactured home and a stick-built home should be the same unless manufactured homes
have a different assessment rate than stick-built homes. Use of the property and any state classification system would also be considered.
8. Convert net income into value - this is the final step in the process and it utilizes the IRV formula. Value = Income $\div$ Rate

## Section 7 - Valuation Guides and Market Value

Valuation guides are often a quick method to estimate the value of manufactured housing but not always an accurate reflection of market value. Marshall and Swift have been used as a reference throughout this workshop and are used below against home contributory value as extracted from actual sales to show the ratio between the value indicated and actual sale price.

| Age | Indicated M\&S Value | Actual Home Value | Indicated Ratio |
| :---: | :---: | :---: | :---: |
| 10 | $\$ 38,280$ | $\$ 40,600$ | 0.94 |
| 17 | $\$ 31,750$ | $\$ 51,620$ | 0.62 |
| 18 | $\$ 35,430$ | $\$ 86,080$ | 0.41 |
| 21 | $\$ 28,680$ | $\$ 27,420$ | 1.05 |
| 27 | $\$ 20,910$ | $\$ 42,920$ | 0.49 |
| 27 | $\$ 23,310$ | $\$ 61,180$ | 0.38 |
| 29 | $\$ 20,310$ | $\$ 42,570$ | 0.48 |

All the sales were for manufactured homes of average quality and condition. The results are not unusual. This further supports what was pointed out in the workshop in that the cost per square foot for new homes in Marshall and Swift is below the actual costs and that more depreciation is applied than in the market. The table above seems to reflect that Marshall and Swift is still treating this type of home more like the old mobile homes prior to the HUD Act of 1976.

NADA (National Automobile Dealers Association) publishes a valuation guide for manufactured housing just as they do for cars and trucks. Previously you could go online and provide information and it would give you a value. Now it costs $\$ 30$ per request or you would need to purchase the service. Historically, the indicated values on the NADA were equally as low as those indicated by Marshall and Swift.

Some of the value problems are indeed the starting point, RCN, but some is the amount of depreciation that is applied. Sales should be used to establish a depreciation table and should be developed for the following where applicable.

1. Double-wide as real property.
2. Single-wide as real property.
3. Double-wide as personal property.
4. Single-wide as personal property.
5. Modular, panelized and kit homes as real property.

Past market experience has indicated that homes depreciate at a faster rate as personal property than as real property. This would seem logical if you think of a singlewide for example in a manufactured home park. Research has shown that around 85\% of all homes placed in a manufactured home park when new, never leave the park. The home may change owners several times and the maintenance on the home may be minimal compared to a home placed on real property. Sale price should also be less based upon the principle of substitution as someone purchasing a home from a park to place on real property will have all the additional moving and installation costs.

## Section 8 - Manufactured Home Questions and Answers

## Question \#1:

If a manufactured home or modular is situated upon a basement, should a distinction be made regarding quality? For example, the quality assigned to the housing is fair. The basement itself would be of average quality. It seems the pricing in Marshall Swift isn't equitable in situations such as this.

## Answer \#1:

Does anyone construct a different foundation for a Fair quality home versus an Average quality? Probably not, so the same approach would be consistent for manufactured homes as used for site-built homes. The authors have previously analyzed three basement costs. Two of these were very close and the third was substantially higher. The third cost would be higher because of the size and also may have a greater height than typical. We believe the majority of the basements would be considered average quality. In most cases it would be the simplest to use that cost regardless of the manufactured home quality.

## Question \#2:

It used to be the pricing was based upon the quality of the manufactured home, i.e. the manufacturer and model. Is this still being used?

## Answer \#2:

Most manufactured home guides are setup in this manner. There is often a breakdown by year within the make and model where the quality may have changed. Guides will often show a grade or quality change for the same model in the year 1977. The HUD Code went into effect in 1976 and thus the standards of construction changed for some models starting in 1977.

## Question \#3:

What are guidelines to use for older manufactured homes that have undergone interior renovation/exterior renovation?

## Answer \#3:

Renovation would extend the economic life of the home and thus less depreciation should be applied. The home should be treated in the same manner that you handle stick-built homes. You may make an adjustment to the condition, change the actual age to an effective age or a combination of both. If sufficient sales are available you could get some guidelines from the sales on how the market reacts to the renovation. The principle of substitution is in effect. Someone will pay more for a renovated home versus the home with normal maintenance.

## Question \#4:

Manufactured homes which have been converted to other uses, i.e. - storage sheds, animal shelter, pheasant raising pens, etc., how is the best way to determine value? Is the most appropriate just using a flat value?

## Answer \#4:

At that point the home has lost its identity as a home and probably will never be converted back. Generally, when this occurs, the home is at the end of its economic life. Several options may be available including flat valuing. That approach is probably the least defendable.

A second option could be by applying a salvage percent good as demonstrated in Question \#7. This approach recognizes that the home is near or at the end of its economic life.

A third option would be to list the structure as a shed based upon its current use. The cost as a manufactured home obviously is greater than a shed, but is the contributory value any greater?

## Question \#5:

Should an older modular that has been renovated (such as additions, new pitched roof, exterior siding, etc.) so that its exterior resembles more of a stick-built look be classified as a modular or as a fair quality residence? We have had several sales where buyers assumed it was a stick-built house and were surprised to learn their new purchase was actually a modular from the early 70 's placed upon a basement and improved upon throughout the years. Aren't the agents obligated to inform interested buyers the main area is either modular or doublewide?

## Answer \#5:

If real estate agents are aware of this type of situation, they probably are required to make disclosure.

If there has been extensive remodeling, whether on a manufactured home or a modular, and the home has lost the original identity and then listing as a stick-built home may be appropriate.

Some markets recognize modular homes as being equal to a fair quality stick-built home. Most lending institutions, and thus fee appraisers, are using stick-built ranch style homes as comparable for modular homes. At this point the market appears to give a modular the same economic life, and thus depreciation, as a stick-built. If there has been substantial renovation or remodeling, see the discussion on Question \#3.

## Question \#6:

How can the depreciation for manufactured homes and modular homes best be determined?

## Answer \#6:

This topic was covered in the classroom discussion but is best established from actual sales.

## Question \#7:

Do manufactured homes retain a salvage value and if so, how do you calculate it?

## Answer \#7:

The only avenue to determine this would be through the use of sales where the manufactured home is in poor condition and normally would have exceeded the estimated economic life.

There were four sales considered. All these homes were in poor condition and either was abandoned at time of sale or was determined to not be habitable. The residual percent remaining are shown below.

$$
11 \% \quad 25 \% \quad 14 \% \quad 11 \%
$$

All the indications are very close except for the second sale. Only considering the other three sales, a range of $11 \%-14 \%$ is indicated. A conservative estimate would indicate a $10 \%$ salvage value.

Salvage Sales

| Sale \#1 |  |
| :--- | ---: |
| Sale Date | $8 / 2006$ |
| Sale Amount | $\$ 3,000$ |
| Year Built | 1954 |
| Sale Amount | $\$ 3,000$ |
| Other Improvements | $\$ 1,280$ |
| Land Value | $\$ 730$ |
| Residual Home Value | $\$ 990$ |
| RCN - Low Quality 272 SF $\times \$ 34.29$ | $\$ 9,330$ |
| Indicated Percent Remaining (\$990 $\div \$ 9,930)$ | $0.1061=11 \%$ |


| Sale \#2 |  |
| :--- | ---: |
| Sale Date | $9 / 2006$ |
| Sale Amount | $\$ 4,000$ |
| Year Built | 1960 |
| Sale Amount | $\$ 4,000$ |
| Other Improvements | \$ 340 |
| Land Value | $\$ 520$ |
| Residual Home Value | $\$ 3,140$ |
| RCN - Low Quality 420 SF x \$30.36 | $\$ 12,750$ |
| Indicated Percent Remaining $(\$ 3,140 \div$ <br> $\$ 12,750)$ | $0.2463=25 \%$ |


| Sale \#3 |  |
| :--- | ---: |
| Sale Date | $2 / 2006$ |
| Sale Amount | $\$ 3,000$ |
| Year Built | 1965 |
| Sale Amount | $\$ 3,000$ |
| Other Improvements | $\$ 50$ |
| Land Value | $\$ 520$ |
| Residual Home Value | $\$ 2,430$ |
| RCN - Low Quality 560 SF $\times \$ 31.80$ | $\$ 17,810$ |
| Indicated Percent Remaining $(\$ 2,430 \div \$ 17,810)$ | $0.1364=14 \%$ |


| Sale \#4 |  |
| :--- | ---: |
| Sale Date | $4 / 2006$ |
| Sale Amount | $\$ 5,000$ |
| Year Built | 1978 |
| Sale Amount | $\$ 5,000$ |
| Other Improvements | $\$ 490$ |
| Land Value | $-\$ 2,320$ |
| Residual Home Value | $\$ 2,190$ |
| RCN - Low Quality 560 SF $\times \$ 31.80$ | $\$ 17,810$ |
| Indicated Percent Remaining $(\$ 2,190 \div \$ 20,860)$ | $0.1050=11 \%$ |

## Question \#8:

At what state of dismantle is a manufactured home no longer a manufactured home to be assessed?

## Answer \#8:

Perhaps using the same procedures or process for making that determination for stickbuilt homes should be applied. Often appraisers consider if the roof is gone, the value is gone. See Question \#4 for additional information.

## Question \#9:

What is the difference between a double wide and modular? Should they be assessed differently from each other?

## Answer \#9:

The one difference is in what assembly is on-site versus in the factory. The heating is added at the building site for a modular home. Perhaps the biggest difference is HUD versus local building codes and permanent framing for manufactured home and not for modular homes. Determining how each type of home should be valued must be based upon how the local market reacts. Most fee appraisers and lending institutions consider modular homes the same as stick-built. A large number of county appraisers and fee appraisers are now listing manufactured homes on basements as stick-built to reflect their local market.

## Question \#10:

Manufactured homes (used) seem to sell all over the place from $\$ 200$ to $\$ 8,000-$ $\$ 10,000$ and yet in many cases there seems to be no rhyme or reason to the amount paid. There has been an increase in the population in the county of people whose economic circumstances make manufactured homes more attractive than stick-built homes and so the consumer demand for manufactured homes is very high. How do you value manufactured homes in this environment?

## Answer \#10:

One of the first steps would be to make sure the sales are valid arms-length transactions. It is possible with this type of property to see a large sale range. Some of the difference can be due to interior condition. Experience has shown that manufactured homes exterior will be in better condition then the interior under normal or no maintenance. This is stating that the exterior materials have a longer economic life.

All things being equal, you would want to consider if location is having an influence on the sales. After any location consideration, you would want to use the most typical value indications. Base your conclusions where you have the most and best data. Over the last few years there has been more manufactured homes bought and sold because they fit into an affordable value range. If this demand is creating higher prices, then it should be recognized just as it would be for any other property.

## References

IAAO; Glossary for Property Appraisal and Assessment.
IAAO; Property Assessment Valuation.
Foremost Insurance Company: www.foremost.com
Housing and Urban Development; www.hud.gov
National Home Builders Association; www.nahb.org
Mother Earth News; www.motherearthnews.com
Champion Homes; www.championhomes.net
Manufactured Housing Institute; www.manufacturedhousing.org
Wardcraft Homes; www.wardcraft.com
Modern Home Sales; www.modernhomesales.net
Get My Home Value; www.getmyhomevalue.com
Tool Box; www.toolbox.org
Builder Online; www.builderonline.com
Kansas Homes; www.kansashome.net
Rebel Home; www.rebelhome.net
Mobile Home; www.mobilehome.net
Apex Homes; www.apexhomesinc.com
Wikipedia; www.wikipedia.org
Bob Villa; www.bobvilla.com
Floor plans by manufactured; www.mh-quote.com/
Good reference site!
Modular housing www.modularhousing.com
Building systems www.buildingsystems.org
Sheri Koones, Prefabulous

List of manufactured home manufacturers; www.buildersplanet.com/marketplace/resources/manufactured homes.asp Good reference site!

List of modular home manufacturers; http://modularhomes.info/ Good reference site!
Removed or covered over manufactured home tags http://www.hud.gov/offices/hsg/ sfh/mhs/mhslabels.cfm

## ATTACHMENT A

## URAR Manufactured Home Forms

 pertormed.

Contract Price \$ Date of Contract ls the property eeller the owner of public record? $\square$ Yee $\square$ No Data Source(s)
Is there any finandial assistance (loan charges, asie concessions, gitt or dowinpsyment assistance, etc.) to be paid by any party on behalf of the borrower? $\square$ Yes $\square$ No if Yee, report the total dolar amount and deecribe the thems to be pald.
$\square$ did $\square$ did not analyze the manufacturer's irwolce. Explain the resuts of the analyale of the manufacturer's inwolde or why the analyale was not perfarmed.
Retaller's Name (New Conatruction)
Note: Race and the racial composition of the nelghborhood are not sppralsal factors.


| Dimenalions | Area | Snape |
| :--- | :--- | :--- |
| Specific Zoning Claselfcation | Zoning Description |  |

Specifc Zoning Claseifcation $\quad \square$ Legaling Description
Zoning Campliance $\square$ Legal Nonconforming (Grandtathered Use) $\square$ No Zoning $\square$ illegal (deacribe)
le the higheat and beat use of the subject property as improwed (or as propoeed per plans and spectications) the present use? $\square$ Yes $\square$ No it No, deacribe

| Utilitles | Public | Other (describe) |  | Public | Other (describe) | Off-site improvements-Type | Pubilic | Private |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electicity | $\square$ | $\square$ | Water | $\square$ | $\square$ | Street | $\square$ | $\square$ |
| Gas | $\square$ | $\square$ | Sanitary Sewer | $\square$ | $\square$ | Alley | $\square$ | $\square$ |

FEMA Speclal Flood Hazard Area $\square$ Yes $\square$ No FEMA Flood Zone $\square$ FEMA Map \#
Are the utlities and att-eite improvements typical for the market area? $\square$ Yes $\square$ No if No, deacrbe
Is the alfe alze, shape and topography generally conforming to and acceptable in the market area? $\square$ Yes $\square$ No if No, explain
Is there adequate vehlicular access to the auleject property? $\square$ Yes $\square$ No if No, deecribe

Is the street propeny mairtained? $\square$ Yes $\square$ No if No, descrbe

Are there ary adverse aite conditions or extemal factors (eseements, encroachments, emironmental conditions, land uses, etc)? $\square$ Yes $\square$ No it Yes, describe

The HUD Data PlatelComplance Certicase le locaned on the intericr of the aubject and contains, among other Tinge, the manufacturer's name, tradeimodel name, year manufachured and aerlal number. The HUD Centicartion Label lis located on the exterfor of each aection of the home. PistelCompliance Certticate Information.

$$
\text { Is a HUD Certication Label attached to the exterior of each section of the dweiling? } \square \text { Yee } \square \text { No if No, prowide the cata source(e) for the ruD Certication Label } \ddagger \text { \& }
$$

|  |  | Skirting |  | flocrs |
| :---: | :---: | :---: | :---: | :---: |
| \# of Units $\square$ One $\square$ Acostions | $\square$ Poursa Concrets $\square$ Concrete Runners |  |  |  |
| \# of Stores $\square^{1} \square^{2} \square$ Omer | $\square \square^{\text {Elocx \& Aler }} \square^{\text {Ofner-att descripton }}$ | Exteror wals |  | Wals |
| Dealgn (Syye) | $\square$ full Basement $\square$ Parisal Basement | Root Surtios |  | Trmifinish |
| \# of Sections $\square^{1} \square^{2} \square^{3}$ | BasemertArea $\quad$ 8q. ti. | Gutters \& Downspouts |  | Eath floor |
| $\square$ Other | Basement firieh \% \% | Window Type |  | Bath Wainsoot |
| Type $\square^{\text {Det }} \square^{\text {Alt }} \square^{\text {S-Det/End Unit }}$ | $\square$ Outalde EntryiEst $\square$ Sump Pump | Storm Seenineulited |  | Car Strage $\square^{\text {None }}$ |
| $\square \square^{\text {Exeting }} \square^{\text {Proposed }} \square^{\text {under Conet }}$ | $\square{ }^{\text {Exidence }}$ infestation | Screens |  | $\square$ Divemay \# of Cars |
| Year Sult Eftective Age (Yre) | $\square$ Dampress $\square$ Setiement | Doors |  | Diveway Surtace |
| Aftic $\square$ Nane | Healing $\square$ fikh $\square$ HWEB $\square$ Radant | Amerites | WroodStove(8) \# | $\square$ Garage \# of Cars |
| $\square$ Orop Star $\quad \square$ Stare | Fuel | $\square$ Preplace(s) ${ }^{\text {F }}$ | Fence | $\square$ Carport \# of Cars |
| $\square \square^{\text {flocr }}$ Soume | Cooing $\square$ Central Ar Conationing | $\square$ Patabeck | Porch | $\square$ Altached $\square^{\text {Detached }}$ |
| $\square$ Priened $\square$ Heated | $\square$ Indivaual $\square$ Other | $\square$ fool | Other | $\square$ Eulthin |
|  |  |  |  |  |
| Firished area above grade contains: | Roome Eedroome Ser(e) |  | Square Feet of Grose Living Ares Above Grade |  |

Instalier's Name
Date installed
Model Year
Is the manutactured home attached to a permanent founclaton syetem? $\square$ Yes $\square$ No if No, descrbe the foundation sytem and the manner of anachment.

Have the towing nitch, wheels, and axdes been removed? $\square$ Yes $\square$ No If No, explain.

Is the manufactured home permaneritly connected to a septic tank or sewage syatem and ather utilies? $\square$ Yee $\square$ No if No, explain

Does the dweling have sufficient groes ifing area and room dimensions to be acceptable to the market? $\square$ Yes $\square$ No if No, explain

Additional features (spedal energy efficient Items, non-realy items, etc.)
The appralser must rate the qualty of construction for the subject unit besed on objective criteria (such as N.A.D.A. Manutactured Housing Appralesl Guide², Marshal \& Saitt fealdentlal Cost Hancbook², or cther publehed coat service). The appralser must also report the source used for tris qualty of conatruction rating determination. Qualty $\square$ Poor $\square$ Falr $\square$ Aversge $\square$ Good $\square$ Excelient identiy source of quality raing
Desoribe the condition of the praperty (induding needed repars, deterioration, renovations, remodeling, etc.).

Are There any physical deficiencles or sdverse condtions that affect the livablity, soundness, or atructural integity of the property? $\square$ Yes $\square$ No if Yes, describe

Does the property generally corform to the neighbortiond (functonal utilty, atyle, condifon, use, construction, enc)? $\square$ Yes $\square$ No if No, deacribe

Prowide adequate information for the lendencilent to repicate the below cost figures and caiculations.
Support for the opinion of site value (summary of comparable land sales or other metnode for eatimating ane value)

ESTIMATED $\square^{\text {REPROOUCTION OR }} \square^{\text {REPLACEMENT COST NEW }}$


Manufactured Home Appraisal Report
File $\#$

| There are |
| :--- |
| There are |

comparable propertiee currently oftered for sale in the aubject nelghborhood ranging in price from \$
to \$
There are comparable sales in the subject neighbornood within the past twelve monthe ranging in sale price from \$ to $\$$

$\square$ did $\square$ did not research the sale or transter histary of the subject property and comperable sales. If not, expliain

My research $\square$ did $\square$ did not reveal any prior asles or transfers of the aubject property for the three years prior to the eflective date of Tris appralas.
Data aource(e)
My research $\square$ did $\square$ did not reveal any prior asles or transfers of the comparable sales for the year prior to the date of sale of the comparable asle.
Data source(8)
Report the resula of the research and analyale of the prior sale or transter history of the aubject property and comparable sales (report additional prior salee on page 4).

| ITEM | SUBJECT | COMPARABLE SALE \#1 | COMPARABLE SALE \#2 | COMPARABLE SALE \#3 |
| :--- | :--- | :--- | :--- | :---: |
| Date of Prior Sale/Transter |  |  |  |  |
| Price of Pror Sale/Transter |  |  |  |  |
| Data Source(s) |  |  |  |  |
| Eftective Date of Data Source(s) |  |  |  |  |

Analyals of prior sale or tranater ilatory of the aublect property and comparable asles

Summary of Sales Compariean Approach

Indicated Value by Sales Comparsoon Approach \$
Indicated Value by: Sales Comparison Approach \$

This appralsal ls made $\square$ "as is", $\square$ subject to completion per plans and spedifications on the basis of a hypothetical conditon that the improvements have been completed. $\square$ aubject to the following repairs or alterations on the baels of a hypothetical condition that the repairs or alterations have been completed, or $\square$ aubject to the following required inspection based on the extracrdinary assumption that the concition or deficiency does not require alteration or repair.

Based on a complete visual inspection of the interior and exterior areas of the subject property, defined scope of work, statement of assumptions and limiting conditions, and appralser's certification, my (our) opinion of the market value, as defined, of the real property that is the subject of thls report is
$\$$

Total number of phases
Total number of unilts rented
Was the project created by the corversion of existing bulling(s) into a PuO? $\square$ Yes $\square$ No If Yes, date af converalion
Does the project contain any muli-dweling units? $\square$ Yes $\square$ No Data source(s)
Are the units, common elements, and recreation faciltes complete? $\square$ Yes $\square$ No if No, describe the status af completion

Are the common elements leased to or by the Homeowners' Associaton? $\square$ Yes $\square$ No If Yes, describe the rental terms and options.
Deacribe common elements and recreational faditiles.

Fredde Mac Form 70B March 2005
95 TEAM Consulting, LLC

This report form is designed to report an appraisal of a one-unit manufactured home; including a manufactured home in a planned unit development (PUD). A Manufactured home located in either a condominium or cooperative project requires the appraiser to inspect the project and complete the project information section of the Individual Condominium Unit Appraisal Report or the Individual Cooperative Interest Appraisal Report and attach it as an addendurn to this report.

This appraisal report is subject to the following scope of work, intended use, intended user, definition of market value, statement of assumptions and limiting conditions, and certifications. Modifications, additions, or deletions to the intended use, intended user, definition of market value, or assumptions and limiting conditions are not permitted. The appraiser may expand the scope of work to include any additional research or analysis necessary based on the complexity of this appraisal assignment. Modifications or deletions to the certifications are also not permitted. However, additional certifications that do not constitute material alterations to this appraisal report, such as those required by law or those related to the appraiser's continuing education or membership in an appraisal organization, are permitted.

SCOPE OF WORK: The scope of work for this appraisal is defined by the complexity of this appraisal assignment and the reporting requirements of this appraisal report form, including the following definition of market value, statement of assumptions and limiting conditions, and certifications. The appraiser must, at a minimum: (1) perform a complete visual inspection of the interior and exterior areas of the subject property, (2) inspect the neighborhood, (3) inspect each of the comparable sales from at least the street, (4) research, verify, and analyze data from reliable public and/or private sources, and (5) report his or her analysis, opinions, and conclusions in this appraisal report.

INTENDED USE; The intended use of this appraisal report is for the lendericlient to evaluate the property that is the subject of this appraisal for a mortgage finance transaction.

INTENDED USER; The intended user of this appraisal report is the lender/client.
DEFINITION OF MARKET VALUE; The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assurning the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: (1) buyer and seller are typically motivated; (2) both parties are well informed or well advised, and each acting in what he or she considers his or her own best interest; (3) a reasonable time is allowed for exposure in the open market; (4) payment is made in terms of cash in U. S. dollars or in terms of financial arrangements comparable thereto; and (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions" granted by anyone associated with the sale.
*Acfustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs which are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparisons to financing terms offered by a third party institutional lender that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.

STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS: The appraiser's certification in this report is subject to the following assumptions and limiting conditions:

1. The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it, except for information that he or she became aware of during the research involved in performing this appraisal. The appraiser assumes that the title is good and marketable and will not render any opinions about the title.
2. The appraiser has provided a sketch in this appraisal report to show approximate dimensions of the improvements. The sketch is included only to assist the reader in visualizing the property and understanding the appraiser's determination of its size.
3. The appraiser has examined the available flood maps that are provided by the Federal Emergency Management Agency (or other data sources) and has noted in this appraisal report whether any portion of the subject site is located in an identified Special Flood Hazard Area. Because the appraiser is not a surveyor, he or she makes no guarantees, ekpress or implied, regarding this determination.
4. The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand, or as otherwise required by law.
5. The appraiser has noted in this appraisal report any adverse conditions (such as needed repairs, deferioration, the presence of hazardous wastes, toxic substances, etc.) observed during the inspection of the subject property or that he or she became aware of during the research involved in performing this appraisal. Unless otherwise stated in this appraisal report, the appraiser has no knowledge of any hidden or unapparent physical deficiencies or adverse conditions of the property (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) that would make the property less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied. The appraiser will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because the appraiser is not an ekpert in the field of environmental hazards, this appraisal report must not be considered as an environmental assessment of the property.
6. The appraiser has based his or her appraisal report and valuation conclusion for an appraisal that is subject to satisfactory completion, repairs, or alterations on the assumption that the completion, repairs, or alterations of the subject property will be performed in a professional manner.

## APPRAISER'S CERTIFICATION: The Appraiser certifies and agrees that:

1. I have, at a minimum, developed and reported this appraisal in accordance with the scope of work requirements stated in this appraisal report.
2. I performed a complete visual inspection of the interior and exterior areas of the subject property. I reported the condition of the improvements in factual, specific terms. I identified and reported the physical deficiencies that could affect the livability, soundness, or structural integrity of the property.
3. I performed this appraisal in accordance with the requirements of the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
4. I developed my opinion of the market value of the real property that is the subject of this report based on the sales comparison approach to value. I also developed the cost approach to value as support for the sales comparison approach. I have adequate comparable market and cost data to develop reliable sales comparison and cost approaches for this appraisal assignment. I further certify that I considered the income approach to value but did not develop it, unless otherwise indicated in this report.
5. I researched, verified, analyzed, and reported on any current agreement for sale for the subject property, any offering for sale of the subject property in the twelve months prior to the effective date of this appraisal, and the prior sales of the subject property for a minimum of three years prior to the effective date of this appraisal, unless otherwise indicated in this report:
6.1 researched, verified, analyzed, and reported on the prior sales of the comparable sales for a minimum of one year prior to the date of sale of the comparable sale, unless otherwise indicated in this report.
6. I selected and used comparable sales that are locationally, physically, and functionally the most similar to the subject property.
7. I have not used comparable sales that were the result of combining a land sale with the contract purchase price of a home that has been built or will be built on the land.
8. I have reported adjustments to the comparable sales that reflect the market's reaction to the differences between the subject property and the comparable sales.
9. I verified, from a disinterested source, all information in this report that was provided by parties who have a financial interest in the sale or financing of the subject property.
10. I have knowledge and experience in appraising this type of property in this market area.
11. I am aware of, and have access to, the necessary and appropriate public and private data sources, such as multiple listing services, tax assessment records, public land records and other such data sources for the area in which the property is located.
12. I obtained the information, estimates, and opinions furnished by other parties and expressed in this appraisal report from reliable sources that I believe to be true and correct.
13. I have taken into consideration the factors that have an impact on value with respect to the subject neighborhood, subject property, and the proximity of the subject property to adverse influences in the development of my opinion of market value. I have noted in this appraisal report any adverse conditions (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, efc.) observed during the inspection of the subject property or that I became aware of during the research involved in performing this appraisal. I have considered these adverse conditions in my analysis of the property value, and have reported on the effect of the conditions on the value and marketability of the subject property.
14. I have not knowingly withheld any significant information from this appraisal report and, to the best of my knowledge, all statements and information in this appraisal report are true and correct.
15. I stated in this appraisal report my own personal, unbiased, and professional analysis, opinions, and conclusions, which are subject only to the assumptions and limiting conditions in this appraisal report.
16. I have no present or prospective interest in the property that is the subject of this report, and I have no present or prospective personal interest or bias with respect to the participants in the transaction. I did not base, either partially or completely, my analysis and/or opinion of market value in this appraisal report on the race, color, religion, sex, age, marital status, handicap, familial status, or national origin of either the prospective owners or occupants of the subject property or of the present owners or occupants of the properties in the vicinity of the subject property or on any other basis prohibited by law.
17. My employment and/or compensation for performing this appraisal or any future or anticipated appraisals was not conditioned on any agreement or understanding, written or otherwise, that I would report (or present analysis supporting) a predetermined specific value, a predetermined minimum value, a range or direction in value, a value that favors the cause of any party, or the attainment of a specific result or occurrence of a specific subsequent event (such as approval of a pending mortgage loan application).
18. I personally prepared all conclusions and opinions about the real estate that were set forth in this appraisal report. If I relied on significant real property appraisal assistance from any individual or individuals in the performance of this appraisal or the preparation of this appraisal report, I have named such individual(s) and disclosed the specific tasks performed in this appraisal report. I certify that any individual so named is qualified to perform the tasks. I have not authorized anyone to make a change to any item in this appraisal report; therefore, any change made to this appraisal is unauthorized and I will take no responsibility for it.
19. I identified the lender/client in this appraisal report who is the individual, organization, or agent for the organization that ordered and will receive this appraisal report.
20. The lender/client may disclose or distribute this appraisal report to: the borrower; another lender at the request of the borrower; the mortgagee or its successors and assigns; mortgage insurers; government sponsored enterprises; other secondary market participants; data collection or reporting services; professional appraisal organizations; any department, agency, or instrumentality of the United States; and any state, the District of Columbia, or other jurisdictions; without having to obtain the appraiser's or supervisory appraiser's (ff applicable) consent. Such consent must be obtained before this appraisal report may be disclosed or distributed to any other party (including, but not limited to, the public through advertising, public relations, news, sales, or other media).
21. I am aware that any disclosure or distribution of this appraisal report by me or the lender/client may be subject to certain laws and regulations. Further, 1 am also subject to the provisions of the Uniform Standards of Professional Appraisal Practice that pertain to disclosure or distribution by me.
22. The borrower, another lender at the request of the borrower, the mortgagee or its successors and assigns, mortgage insurers, government sponsored enterprises, and other secondary market participants may rely on this appraisal report as part of any mortgage finance transaction that involves any one or more of these parties.
23. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.
24. Any intentional or negligent misrepresentation(s) contained in this appraisal report may result in civil liability and/or criminal penalties including, but not limited to, fine or imprisonment or both under the provisions of Title 18, United States Code, Section 1001, et seq., or similar state laws.

SUPERVISORY APPRAISER'S CERTIFICATION: The Supervisory Appraiser certifies and agrees that:

1. I directly supervised the appraiser for this appraisal assignment, have read the appraisal report, and agree with the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
2. I accept full responsibility for the contents of this appraisal report including, but not limited to, the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
3. The appraiser identified in this appraisal report is either a sub-contractor or an employee of the supervisory appraiser (or the appraisal firm), is qualified to perform this appraisal, and is acceptable to perform this appraisal under the applicable state law.
4. This appraisal report complies with the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
5. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.

## APPRAISER

Signature
Name
Company Name
Company Address
Telephone Number
Emall Address
Date of Signature and Report
Effective Date of Appralsal
State Certification \#
or State Llcense \#
or Other
State
Expiration Date of Certication or Llcense $\qquad$
ADDRESS OF PROPERTY APPRAISED

[^1]
## SUPERVISORY APPRAISER (ONLY IF REQUIRED)

Signature
Name
Compeny Name
Compeny Address

## Telephone Number

Emall Address
Date Signature
State Certification \#
or State LIcense \#
State
Expiration Date of Certification or License

## SUBJECT PROPERTY

Did not inspect subject propertyDid inspect exterior of subject property from streetDate of inspection
$\square$ Did inspect interior and exterior of sublect property
Date of inspection

## COMPARABLE SALES

Did inspect exterior of comparable sales from street Date of inspection
nelghoortood. This is a required adobendum for all appralsal reports with an eflective date on or after Aprll $1,2009$.
Property Address
City
State
ZIP Code
Borrower
Instructions: The appraiser must use the information required on this form as the basia for hisiher conclusions, and must provide aupport for those conciualions, regarding housing trends and overal market conditione as reported in the Neighbomood section of the appralsal report form. The appralser must ill in all the information to the extent it is avallable and rellable and must provide analyala as indicated below. If any required data is unavalable or is considered urrelabie, the appralser must provide an exptanation. It ie recognized that not all data sources will be able to provide data for the shaded areas below, if it ie avallable, however, the appralser must include the data In the analyals. If data sources provide the required information as an aversge instead of the medan, the appralser should report the avalable figure and identity it as an sverage. Salee and listings must be properties that compete with the sublect property, determined by applying the criterla that would be used by a prospective buyer of the aubject property. The appralser must explin any snomales in the data, auch as seasonal markets, new construction, forediosures, etc

| Inventory Analysls | Pror 7-12 Monthe | Prior 4-6 Monthe | Current - 3 Monthe | Overal Trend |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tatal \# of Comparable Selee (Semed) |  |  |  | $\square$ Increasing | $\square$ Stable | $\square$ Dedining |
| Absorption Rate (Total Salee/Months) |  |  |  | $\square$ increasing | $\square$ Stable | $\square$ Dealining |
| Total \# of Comparable Active Ustinge |  |  |  | $\square$ Dedining | $\square$ Stable | $\square$ increasing |
| Monthe of Housing Supply (Total Latingei'Ab.Rate) |  |  |  | $\square$ Dealining | $\square$ Stable | $\square$ increasing |
| Medlan Sale \& Llst Price, DOM, SaleiLlist \% | Pror 7-12 Monthe | Pror 4-6 Monthe | Current - 3 Monthe | Overal Trend |  |  |
| Median Camparabie Sale Price |  |  |  | $\square$ Increasing | $\square$ Stable | $\square$ Dedining |
| Median Comparable Salee Daye on Market |  |  |  | $\square$ Dedining | $\square$ Stable | $\square$ increasing |
| Median Comparable Liat Price |  |  |  | $\square$ increasing | $\square$ Stable | $\square$ Decilining |
| Median Camparable Llatinge Days an Market |  |  |  | $\square$ Dedining | $\square$ Stable | $\square$ increasing |
| Median Sele Price as \% of List Price |  |  |  | $\square$ Increasing | $\square$ Stable | $\square$ Dedining |
| Seller-(developer, bulder, etc.) pald finandial assistance prevalent? $\square$ Yes $\square$ No |  |  |  | $\square$ Deciling | $\square$ Stable | $\square$ increasing |

 tees, options, etc.).

## Are foredoeure asles (REO sales) a factor in the market? $\square$ Yee $\square$ No if yes, explain (including the trende in liatinge and sales of foreciosed properties).

## Cte data sources for soove information.

Summartze the above information as aupport for your conclusione in the Neighoornood aection of the acpralsal report form. If you used any additional information, such as en analyals of pending esles andicr expired and withdrawn listinge, to formulate your condusions, provide both an explanaton and eupport for your conclusions.

Fr the subject is a unit In a condomintum or cooperative project, complete the following:
Subject Project Data
Total \# of Comparable Seles (Semed)

- Absorption Rate (Total SaleeiMontins)

Tatal \# of Active Comparabie Listings Monthe of Unil Supply (Total LastingeiAb. Rase)
Are forediosure sales (REO sales) a factor in the project? $\square$ Yes $\square$ toredosed propertise

Summarize the abowe trends and address the impact on the aublect unit and project.


## Slgnare

## Supervisory Appraiser Name

Compary Name
Compary Address
State LicenselCertification \# State
Emal Address
Freddle Mac Form 71 March 2009
Page 1 of 1
Fannie Mae Form 1004NIC March 2009

## ATTACHMENT B

## MARSHALL SWIFT COST TABLES

## BASIC DESCRIPTION

Average-quality manufactured houses meet or exceed manufactured home code requirements. The overall quality of materials and workmanship is average and of standard grade. The front elevation will often have some ornamentation. NOTE: Base interior wall height is 8 ' at all qualities. For each foot of variation, add or deduct from the base cost only, $3 \%$.

## FOUNDATION

Setup on steel or concrete piers. Adjust for continuous foundation wall from Lump Sum Adjustments.

## FRAME

Medium-weight steel beam undercarriage with outriggers and cross members.

## FLOOR STRUCTURE

Wood floor joists with particleboard or plywood decking, waterproofing and insulation.

## FLOOR COVER

Lightweight carpet and pad, asphalt or vinyl composition tile. Floor cover is not included in the basic residence cost. Use Square Foot Adjustments to add for floor cover.

## EXTERIOR WALL

Exterior finish is prefinished aluminum, hardboard or plywood sheet, vinyl or hardboard lap siding on 2 " x
4" studs. Adequate fenestration with some trim around aluminum windows. Often the exteriors will have a combination of two textures or two colors. Use percentage adjustments for other types of exterior wall finishes.
ROOF
Engineered trusses and sheathing with corrugated or ribbed metal roofing. Roofs are typically sloped or arched, with front overhang. Use Square Foot Adjustments for other types of roofing.

## INTERIOR FINISH

Medium-quality prefinished seamed plywood or hardboard paneling or paper-veneered drywall on 2" x 3" or 2" x 4' studs. Adequate wardrobe closets and storage. Laminated plastic countertops and backsplash. Standardgrade hollow-core doors. Paint-grade, vinyl-covered particleboard or inexpensive wood veneer kitchen cabinets and bathroom vanity. Ceiling height is typically $7^{\prime}-66^{\prime \prime}$ to $8^{\prime}-0{ }^{\prime \prime}$.

## HEATING

A forced-air furnace based on a moderate climate, with adequate ductwork is included. Use Square Foot Adjustments for other types of heating and/or cooling.

## ELECTRICAL

Ample number of convenience outlets. Some luminous fixtures in the kitchen and bath areas.

## PLUMBING

Seven plumbing fixtures and one plumbing rough-in are included in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray and water heater. For Roman tubs, use plumbing Lump Sum Adjustment cost from Very Good quality. For wet bars, see Page Mfg-26.

## INSULATION

Floor, wall and ceiling insulation for a moderate climate is included in the basic residence cost.

## APPLIANCES

Appliances are not included in the basic residence cost. Add from Lump Sum Adjustments.

## FIREPLACE

Not included. Add from Lump Sum Adjustments.
BASEMENT
Add from Mfg-27.
GARAGE
Add from Mfg-29.

## CARPORT

Cost per square foot of covered area. Cost does not include flooring. Refer to Unit-in-Place costs, Section C. Cost adjustments on each Square Foot Method cost page are based on workmanship and materials conforming to that quality. The plus or minus signs indicate whether an item is an addition to, or a deduction from, the basic residence cost
Square Foot and Lump Sum Adjustments not listed on the cost pages may be determined by reference to Segregated costs, Section B. For detailed cost adjustments or the pricing of specialty items, refer to Page Mfg26, or the Unit-in-Place costs, Section C.
Refer to Section F for the appropriate Current Cost and Local Multipliers, using the "Frame" multiplier column.

```
swiftestimator.com - building cost reports online
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6/2012
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page Mfg-18
```

HOUSING COSTS (per sq. ft, of floor area)

| $\begin{aligned} & \text { LENGTH } \\ & \text { FEET } \end{aligned}$ | ONE-SECTION |  |  |  | 2 | TWO-SECTION |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 8 | 12 | 14 | 1618 |  | 24 | 28 | 32 | 36 |
|  |  |  |  |  | 0 |  |  |  |  |
| 20 | \$67.56 | \$56.57 | \$50.93 | \$48.01 \$45.55 | \$70.13 | \$65.10 | \$6t08 | \$55.6 | 3.03 |
| 24 | 65.31 | 54.24 | 48.91 | 45.9843 .52 | 65.79 | 60.49 | 56.29 | 51.21 | 48.45 |
| 28 | 63.46 | 52.34 | 47.27 | 44.3441 .87 | 62.32 | 56.84 | 52.53 | 47.70 | 44.90 |
| 32 | 61.91 | 50.74 | 45.90 | 42.9640 .50 | 59.47 | 53.87 | 49.48 | 44.86 | 42.03 |
| 36 | 60.56 | 49.38 | 44.72 | 41.7839 .32 | 57.07 | 51.37 | 46.94 | 42.50 | 39.65 |
| 40 | 59.39 | 48.19 | 43.69 | 40.7538 .30 | 55.00 | 49.23 | 44.78 | 40.49 | 37.64 |
| 44 | 58.35 | 47.14 | 42.78 | 39.8537 .40 | 53.19 | 47.38 | 42.91 | 38.75 | 35.91 |
| 48 | 57.41 | 46.20 | 41.96 | $39.03 \quad 36.60$ | 51.59 | 45.74 | 41.27 | 37.24 | 34.40 |
| 52 | 56.56 | 45.35 | 41.22 | 38.3035 .87 | 50.16 | 44.29 | 39.81 | 35.89 | 33.06 |
| 56 | 55.79 | 44.58 | 40.55 | 37,64 35.21 | 48.88 | 42.99 | 38.51 | 34.69 | 31.87 |
| 60 | 55.08 | 43.87 | 39.94 | 37.0334 .61 | 47.71 | 4t81 | 37.34 | 33.61 | 30.80 |
| 64 | 54.42 | 43.22 | 39.37 | 36.4734 .06 | 46.64 | 40.74 | 36.28 | 32.62 | 29.84 |
| 68 | 53.81 | 42.62 | 38.85 | 35.9533 .54 | 45.66 | 39.75 | 35,31 | 31.73 | 28.95 |
| 72 | 53.24 | 42.06 | 38.36 | 35.4733 .07 | 44.75 | 38.85 | 34.41 | 30.90 | 28.15 |
| 76 | 52.71 | 41.54 | 37.91 | 35.0232 .62 | 43.91 | 38.01 | 33.59 | 30.15 | 27,41 |
| 0 | 2.21 | 41.05 | 37.48 | $34.60 \quad 32.21$ | 43.13 | 37.23 | 32.83 | 29.4 | 6.1 |

For other than hardboard sheet siding exterior wall finish, adjust the costs above as follows: Aluminum, $-3 \%$; Lap siding, $+5 \%$; Cement fiber, sheet. $+3 \%$, lap $+5 \%$.
THREE-SECTION: Deduct 18\% from the one-section costs for a tagalong section; use full cost for the two-section portion. For expandos and tip-outs, see page Mfg-26.

SQUARE FOOT ADJUSTMENTS

BOOFING:

| only |  |
| :---: | :---: |
| Allowance | 2. |
| Carpet | 2. |
| Resilient tloor cover | 2. |
| Hardwood, parquet | 9.3 |
|  |  |

HEATING/COOLING:

2" x 4" (base )2" x 6"
4\%
Wood Stresskin Panels ....... Add 8\%
DRYWALL INTERIOR: ............. + \$1.07
Ceilings only ........................... + . 22
USTMENTS
Allowance (if not itemized) $\quad+\$ 2,060$
Range \& oven ......................... +900

| Range hood \& fan ....................... + |  |
| :--- | :--- |
| Rishwasher | 240 |
|  | 680 |


Refrigerator, freestanding . + 900 SKIRTING:
(Per linear foot, 28" height)
Metal or vinyl, vertical ................. $+\begin{aligned} & \$ 7.45 \\ & \text { horizontal lap ................. } \\ & 9.85\end{aligned}$ simulated stone or

            brick panels .......................... +11.25
    Brick or stone veneer ...... .......... + 25.60

| PORCH AND PATIO COSTS (per sq. ft. of landing area) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | \$9.25 | \$33.35 | \$9.10 | \$12.35 | \$17.7 |
| 50 | 7.35 | 25.10 | 8.45 | 11.45 | 12.8 |
| 100 | 5.90 | 18.95 | 7.80 | 10.55 | 9.4 |
| 200 | 4.75 | 14.30 | 7.20 | 9.65 | 6.8 |
| For other types of patio enclosures, refer to Section C. |  |  |  |  |  |
| CARPORT COSTS: <br> (Includes posts and roof only, per sq. Fiberglass |  |  | STOR (Costs | IILING <br> ft.) |  |
|  |  |  | Wood |  | .. \$ |
| Aluminum |  | ...... 7 | Steel |  |  |
| Steel ....... |  | ... 9 | Alumin |  | . 1 |
| BASEMENT and GARAGES: Use costs on pages Mfg-27 and Mfg-29 respectively |  |  |  |  |  |
|  <br> swifiestimatorcom - building cost reports online |  |  |  |  |  |
| The data included on this Mfg-19 |  | comes ob | er update | , schedulu |  |

103 TEAM Consulting, LLC

## DECEMBER 2012

The Current Cost and Local Multipliers should be used to trend the costs published on the preceding pages to a current date and to adjust the costs by location. This section is republished quarterly and is based on two Marshall \& Swift building cost indexes from three districts as published in the Marshall Valuation Service. Other conditional adjustments are found on Page F-11. Comparative Cost Multipliers for residential construction are on Pages $\mathrm{F}-12$ through F -16.

## CURRENT COST MULTIPLIERS

Use the following Current Cost Multipliers by district (see map below) to trend the costs on the preceding cost pages to a current level.

| PAGES | PUB. DATE | EASTERN |  | CENTRAL |  | WESTERN |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | frame | MASONRY | frame | MASONRY | frame | MASONRY |
| SECTIONA |  |  |  |  |  |  |  |
| Low, Fair, Avg. (Singlefam., Detached Houses) | 12/12 | . 99 | 1.01 | 1.00 | . 98 | 1.02 | 1.00 |
| Good, VG, Exc. (Singlefam., Detached Houses) | 12/12 | . 99 | 1.01 | 1.00 | . 98 | 1.02 | 1.00 |
| Mfg-1 to Mfg-28 (MobileMfg. Housing) | 6/12 | 1.01 |  | 1.03 |  | 1.05 |  |
| MU-3to Mul-19 (Multiple Residences) | 9/11 | 1.06 | 1.06 | 1.03 | 1.04 | 1.03 | 1.07 |
| Mul-21 toMul-37(TownHouses \& Duplexes) | 9/11 | 1.05 | 1.05 | 1.03 | 1.03 | 1.04 | 1.07 |
| Mul-3Bto Mukt9 (Uriban Row Houses) | 9/11 | 1.04 | 1.05 | 1.02 | 1.03 | 1.03 | 1.06 |
| Spec-1 to Speo-11(Specid Studies) | 12/11 | 1.05 | 1.06 | 1.04 | 1.02 | 1.04 | 1.04 |
| Spec-12to Spec-39 (Spedal Studies) | 12/11 | 1.06 | 1.05 | 1.04 | 1.01 | 1.04 | 1.04 |
| SECTIONB |  |  |  |  |  |  |  |
| B-1 to B-26 (Segregated Costs) | 9/12 | 1.01 | 1.01 | 1.01 | 1.01 | . 99 | 1.00 |
| SECTIONC |  | EAS | ERN | CEN | RAL | WEST |  |
| C-1 to C-17 (Yard Improvement Costs) | 3/12 | 1.0 |  | 1.01 |  | 1. |  |
| C-18to C-36 (Unit-in-Face Costs) | 3/12 | 1.0 |  | 1.01 |  | 1. |  |
| Green-1 to Green-68 (Green Section) | 3/12 | 1.0 |  | 1.03 |  | 1. |  |

## LOCAL MULTIPLIERS

LOCAL MULTIPLIERS reflect local cost conditions and are designed to adjust the basic costs to each locality. They are based on weighted labor and material costs, including local sales taxes. In some cases, local building problems and practices must be considered. Refer to Page F-11 for further discussion. They should always be combined with the Current Cost Multiplier to obtain a cost multiplier which will bring the costs to the present date and locality of the estimate.
The data is received by us from sources we believe to be reliable, but no warranty, guaranty or representation is made by Marshall \& Swift as to the correctness or sufficiency of any information, prices or representations contained in the Residential Cost Handbook, and Marshall \& Swift assumes no responsibility or liability in connection therewith.

## EXAMPLE

After establishing a replacement cost from a preceding cost page, you should use both a Current Cost and a Local Multiplier. For this example, a Square Foot Method cost page for a wood frame, single-family, detached residence has been used. The assumed Central District Current Cost Multiplier for frame is 1.00 . The Current Cost Multiplier will trend the costs on the Square Foot Method cost page to a current district average.
To adjust the cost to your location, a Local Multiplier should be used. For this example, the assumed location is Canton, Ohio. The Local Multiplier for frame construction is assumed to be .99. If the cost from the Square Foot Method cost page is $\$ 145,000$ the current cost for the residence in Canton, Ohio would be $\$ 143,550$.

$$
\$ 145,000 \times 1.00 \times .99=\$ 143,550
$$



WESTERNCENTRALEASTERN

## UNITED STATES

|  | Frame | Masonry |  | Frame | Masonry |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ALABAMA | . 86 | . 88 | ARKANSAS .......... | . 86 | 86 |
| Anniston ................... | . 84 | . 87 | Blytheville ......... | . 80 | . 80 |
| Auburn | . 82 | . 83 | Fayetteville ............... | . 92 | 92 |
| Bessemer .... | . 90 | . 91 | Fort Smith ................ | . 88 | . 89 |
| Birmingham | . 92 | . 91 | Hot Springs ............... | . 90 | . 91 |
| Dothan ..................... | . 92 | . 91 | Jonesboro ................ | . 81 | . 80 |
| Florence | . 85 | . 86 | Little Rock ........... | . 92 | . 93 |
| Gadsden .................. | . 86 | . 87 | Texarkana ....... | . 86 | . 88 |
| Huntsville | . 91 | . 91 | VVest Memphis ......... | . 91 | . 91 |
| Mobile | . 90 | . 90 |  |  |  |
| Montgomery .............. | . 89 | . 89 | CALIFORNIA ....... | 1.19 | 1.19 |
| Opelika | . 82 | . 83 | Alameda County | 1.37 | 1.39 |
| Phenix City | . 82 | . 83 | Antelope Valley ............ | 1.16 | 1.16 |
| Sheffield .... | . 85 | . 86 | Atascadero ................ | 1.16 | 1.15 |
| Tuscaloosa | . 85 | . 87 | Bakersfield | 1.19 | 1.18 |
|  |  |  | Barstow .................... | 1.17 | 1.16 |
| ALASKA | 1.41 | 1.40 | Big Bear ..................... | 1.21 | 1.19 |
| Anchorage | 1.28 | 1.27 | Bishop ...................... | 1.27 | 1.27 |
| Fairbanks ......... | 1.31 | 1.30 | Blythe ......................... | 1.13 | 1.14 |
| Juneau ..................... | 1.42 | 1.49 | Butte County .............. | 1.15 | 1.14 |
| Kenai Peninsula | 1.28 | 1.27 | Calaveras County | 1.14 | 1.14 |
| Ketchikan ......... | 1.36 | 1.39 | ${ }_{1}$ Coalinga 2 ................. |  |  |
| Kodiak | 1.41 | 1.41 | Contra Costa County . | 1.34 | 1.36 |
| Mat-Su Valley ............ | 1.23 | 1.24 | El Dorado County | 1.21 | 1.20 |
| Sitka ........................ | 1.43 | 1.45 | Eureka ......... | 1.28 | 1.29 |
|  |  |  | Fresno | 1.23 | 1.23 |
|  |  |  | Gilroy ........................ | 1.21 | 1.21 |
| ARIZONA ............. | . 96 | . 96 | Goleta .... |  | 1.18 |
| Apache County .......... | . 89 | . 89 | Hanford | 1.13 | 1.14 |
| Bullhead City............. | . 96 | . 96 | Hesperia .... | 1.13 | 1.11 |
| Casa Grande .............. | . 95 | . 94 | Huntington Beach | 1.24 | 1.23 |
| Cochise County .......... | . 97 | . 96 | Imperial County .... | 1.15 | 1.15 |
| Coconino County | . 95 | . 98 | Indio | 1.18 | 1.16 |
| Douglas ..................... | . 97 | . 97 | Laguna Beach ....... | 1.24 | 1.21 |
| Flagstaff .................. | 1.01 | 1.03 | Lake Arrowhead | 1.22 | 1.22 |
| Gila County ............... | . 89 | . 89 | Lake Tahoe .. | 1.21 | 1.23 |
| Graham County .......... | . 92 | . 93 | Lompoc | 1.19 | 1.17 |
| Greenlee County ......... | . 90 | . 91 | Los Angeles | 1.22 | 1.21 |
| Kingman ................... | . 97 | . 97 | Madera .... | 1.13 | 1.13 |
| La Paz County ........... | . 96 | . 96 | Mammoth Lakes .... | 1.26 | 1.26 |
| Lake Havasu .............. | . 98 | . 98 | Marin County ............... | 1.33 | 1.35 |
| Maricopa County ......... | . 95 | . 94 | Mariposa County | 1.15 | 1.14 |
| Mohave County .......... | . 97 | . 97 | Marysville | 1.14 | 1.14 |
| Navajo County ........... | . 92 | . 95 | Mendocino County | 1.13 | 1.13 |
| Nogales ................... | . 98 | . 98 | Merced | 1.12 | 1.13 |
| Phoenix .................... | . 96 | . 96 | Modesto | 1.21 | 1.23 |
| Pima County .............. | . 95 | . 96 | Mono County .......... | 1.22 | 1.22 |
| Pinal County .............. | . 94 | . 93 | Monterey ................... | 1.23 | 1.26 |
| Prescott .................... | 1.02 | 1.02 | Napa County ............... | 1.21 | 1.25 |


| Santa Cruz County | . 96 | . 95 | Nevada County | 1.17 | 1,17 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sedona ............. | 1.05 | 1.07 | Newport Beach ............ | 1.24 | 1.23 |
| Tucson | . 97 | . 97 | Orange Co. (x/beaches) | 1.22 | 1.21 |
| Yavapai County | . 97 | . 96 | Palm Springs ............. | 1.21 | 1.17 |
| Yuma. | . 96 | . 96 | Paso Robles | 1.16 | 1.14 |
| Yuma County ........ | . 92 | . 93 | Placer County | 1.18 | 1.17 |

## DEPRECIATION

## EXPLANATION OF DEPRECIATION TABLES

The cepreciation tables in thes section were deveroped from aclual case sudes of sales and market value appraisals and are based on an extenced life thecry which encompasses a remaning Ife and effective age approach. From confirmec sales prices, the tand value was deducled to obtain a butding reskdual and the replacement cost of the building was computed. The difference between the replacement cost new of the building and the residual sales price of the buiding was dividen by the replacement cost new, to give the markel depreciaton in percontage. A simiar procedure was followed with the markel value appraisals, always excluding those observed cases having excessive obsolescence.

The data was thern collated by type of conslructorn and usage, plotted with simplar typica! total life expectancles. with curves computed for the groupings for which sufficient data was availabie for statistical reliabilsty. From these curves, a matching family of ernparical mathermatical curves were found from which the deprecaten for any intial iwhen nows normal life expectancy could be compu:ed.

## USE OF THE TABLES

1. Determine the conditon and chronological age of the residence

2 Compare the subject residence with like properties and stucy the effect of or the iack or need of any mocernizatuon or major repair to determine Effoctive Age.
3 Determine Typacal Life Expectanc; from :able below.
4 Enter the Deprectation Table (Page E-12) in the co-umn for the appropnate Life Expectancy and at the Effective Age estimated in Step 2 The corresponding number is a normal percentage of depreciatom.

## TYPICAL BUILDING LIVES

Typical life expectancles of sagle and mullifartily residences are based on case studies of beth actua mortality and ages at which major econstruction had taken place. The exceptions to the studes are the typucal life expectances for modular structures and manufactured housing (mobile hormesi!. Typical life expectances for modular structures assume contormity to site-build residerices in both quality and design typical life expectances for manufactured housing represent the projected mortality of structures produced after the enactment of more stringent ocal and natonal (U S.) buikding codes. All cases of abnommal or excessive obsolescence due to exiernal causes outside of and noi inherent to the subject properties were exclucled.

| QUALITY | SINGLE-FAMILY (Detached) |  | MULTIFAMILY, SENIOR CITIZEN \& SINGLE-FAMILY (Attached) <br> Site-built or modular: <br> Frame/Masonry |
| :---: | :---: | :---: | :---: |
|  | Site-built or modular: | Mfd. Housing: (mobile homes) |  |
|  | Frame/Masonry | Single Wide / Multi-Wide |  |
| Low | 45 : 50 | 20:30 | --- |
| Fair | 50 ; 55 | 25 ; 35 | 45:50 |
| Average | $55: 60$ | 30/40 | 50 : 55 |
| Good | $55: 60$ | 35:45 | 50:55 |
| Very Good | 60:60 | 40 ; 50 | 55:60 |
| Excellent | 60 i 65 | 45;55 | 55:60 |


| SPECIAL STUDIES |  |  |  |
| :--- | :---: | :---: | :---: |
| QUALITY | Resort Cottages <br> and Cabins <br> Frame | Tropical Houses <br> Masonry | Club Houses <br> Frame/Masonry |
| Substandard | 20 | - | $\cdots$ |
| Low | 35 | 45 | $35 / 40$ |
| Fair | 40 | 50 | $35 / 40$ |
| Average | 45 | -- | $35 / 40$ |
| Good | 50 | --- | $40 / 45$ |
| Excellent | --- | -- | $40 / 45$ |

RESHOEMTEA. (OSTH. WOROOA

$\qquad$
$\qquad$

| Effective Age in Years | TYPICAL LIFE EXPECTANCY IN YEARS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 70 | 65 | 60 | 55 |  |  |  | 35 | 30 | 25 | 20 |
|  | DEPRECIATION - PERCENTAGE |  |  |  |  |  |  |  |  |  |  |
| 1 | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% | 2\% | 2\% | 3\% | 3\% |
| 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 6 | 7 |
| 3 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 6 | 9 | 11 |
| 4 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 7 | 9 | 12 | 15 |
| 5 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 9 | 12 | 15 | 20 |
| 6 | 3 | 4 | 4 | 5 | 6 | 7 | 9 | 11 | 14 | 18 | 24 |
| 7 | 4 | 5 | 5 | 6 | 7 | 8 | 10 | 13 | 17 | 22 | 28 |
| 8 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 15 | 18 | 25 | 33 |
| 9 | 5 | 6 | 7 | 8 | 10 | 11 | 14 | 17 | 22 | 29 | 38 |
| 10 | 5 | 7 | 8 | 9 | 11 | 13 | 15 | 20 | 25 | 32 | 43 |
| 11 | 6 | 8 | 9 | 10 | 12 | 14 | 18 | 22 | 28 | 36 | 48 |
| 12 | 7 | 9 | 10 | 11 | 13 | 15 | 20 | 24 | 31 | 40 | 53 |
| 13 | 8 | 10 | 11 | 12 | 15 | 17 | 22 | 26 | 34 | 44 | 57 |
| 14 | 8 | 10 | 12 | 13 | 16 | 19 | 24 | 29 | 37 | 48 | 61 |
| 15 | 9 | 11 | 12 | 15 | 17 | 21 | 26 | 32 | 40 | 52 | 66 |
| 16 | 10 | 12 | 13 | 16 | 19 | 23 | 28 | 34 | 43 | 55 | 70 |
| 17 | 10 | 13 | 15 | 17 | 20 | 25 | 30 | 37 | 46 | 59 | 73 |
| 18 | 11 | 14 | 16 | 19 | 22 | 27 | 32 | 40 | 50 | 63 | 76 |
| 19 | 12 | 15 | 17 | 20 | 24 | 28 | 34 | 43 | 53 | 67 | 78 |
| 20 | 13 | 16 | 18 | 21 | 25 | 30 | 37 | 45 | 56 | 71 | 79 |
| 21 | 13 | 17 | 19 | 22 | 26 | 32 | 39 | 48 | 59 | 74 | 79 |
| 22 | 14 | 17 | 20 | 23 | 28 | 34 | 42 | 51 | 62 | 76 | 80 |
| 23 | 15 | 19 | 21 | 24 | 29 | 36 | 44 | 54 | 65 | 77 |  |
| 24 | 16 | 20 | 23 | 26 | 31 | 38 | 47 | 57 | 68 | 79 |  |
| 25 | 17 | 21 | 24 | 27 | 33 | 40 | 50 | 60 | 71 | 80 |  |
| 26 | 18 | 22 | 25 | 29 | 35 | 43 | 52 | 62 | 74 | 80 |  |
| 27 | 19 | 23 | 26 | 31 | 37 | 45 | 55 | 65 | 75 |  |  |
| 28 | 20 | 24 | 28 | 33 | 39 | 47 | 57 | 68 | 77 |  |  |
| 29 | 21 | 26 | 29 | 34 | 41 | 49 | 59 | 70 | 78 |  |  |
| 30 | 22 | 27 | 31 | 36 | 44 | 52 | 62 | 71 | 79 |  |  |
| 31 | 23 | 28 | 32 | 38 | 46 | 54 | 64 | 72 | 79 |  |  |
| 32 | 24 | 29 | 34 | 40 | 47 | 56 | 67 | 74 | 80 |  |  |
| 33 | 25 | 31 | 35 | 42 | 49 | 58 | 69 | 75 |  |  |  |
| 34 | 27 | 32 | 37 | 44 | 51 | 60 | 71 | 77 |  |  |  |
| 35 | 28 | 34 | 38 | 45 | 53 | 62 | 72 | 78 |  |  |  |
| 36 | 29 | 35 | 40 | 47 | 55 | 65 | 74 | 79 |  |  |  |
| 37 | 30 | 37 | 41 | 49 | 57 | 67 | 75 | 79 |  |  |  |
| 38 | 32 | 38 | 43 | 51 | 59 | 69 | 77 | 80 |  |  |  |
| 39 | 33 | 40 | 45 | 53 | 61 | 70 | 78 |  |  |  |  |
| 40 | 35 | 41 | 47 | 55 | 63 | 72 | 79 |  |  |  |  |
| 41 | 36 | 43 | 49 | 57 | 64 | 73 | 79 |  |  |  |  |
| 42 | 38 | 45 | 51 | 59 | 66 | 75 | 80 |  |  |  |  |
| 43 | 39 | 47 | 52 | 60 | 67 | 76 |  |  |  |  |  |
| 44 | 41 | 48 | 54 | 62 | 69 | 77 |  |  |  |  |  |
| 45 | 42 | 50 | 55 | 63 | 70 | 78 |  |  |  |  |  |
| 46 | 44 | 51 | 57 | 65 | 72 | 78 |  |  |  |  |  |
| 47 | 45 | 53 | 59 | 66 | 73 | 78 |  |  |  |  |  |
| 48 | 46 | 54 | 61 | 68 | 75 | 79 |  |  |  |  |  |
| 49 | 47 | 56 | 62 | 69 | 76 | 79 |  |  |  |  |  |
| 50 | 49 | 57 | 64 | 71 | 77 | 80 |  |  |  |  |  |
| 51 | 51 | 58 | 65 | 72 | 78 |  |  |  |  |  |  |
| 52 | 52 | 60 | 66 | 73 | 78 |  |  |  |  |  |  |
| 53 | 54 | 61 | 68 | 75 | 79 |  |  |  |  |  |  |
| 54 | 55 | 63 | 69 | 76 | 79 |  |  |  |  |  |  |
| 55 | 57 | 64 | 70 | 77 | 80 |  |  |  |  |  |  |
| 56 | 58 | 65 | 71 | 78 |  |  |  |  |  |  |  |
| 57 | 60 | 66 | 72 | 78 |  |  |  |  |  |  |  |
| 58 | 61 | 67 | 72 | 79 |  |  |  |  |  |  |  |
| 59 | 63 | 68 | 73 | 79 |  |  |  |  |  |  |  |
| 60 | 64 | 69 | 74 | 80 |  |  |  |  |  |  |  |
| 61 | 65 | 70 | 75 |  |  |  |  |  |  |  |  |
| 62 | 67 | 71 | 76 |  |  |  |  |  |  |  |  |
| 63 | 68 | 72 | 76 |  |  |  |  |  |  |  |  |
| 64 | 70 | 73 | 77 |  |  |  |  |  |  |  |  |
| 65 | 71 | 74 | 78 |  |  |  |  |  |  |  |  |
| 70 | 76 | 78 | 80 |  |  |  |  |  |  |  |  |
| 75 | 80 | 80 |  |  |  |  |  |  |  |  |  |

# Marshall \& Swift Manufactured Home Cost Manual Sample 

## GENERAL

FACTORY-PRODUCED housing comprises residential structures transported to building sites. There are three generally accepted categories of FACTORY-PRODUCED housing, each of which has distinguishable characteristics and meets a unique set of criteria. The three categories are MANUFACTURED, MODULAR and PANELIZED. Because all three types of FACTORY PRODUCED housing can resemble SITE-BUILT housing, the following guidelines should be considered when estimating replacement cost

MANUFACTURED, also called HUD Code homes are residential structures, single or multi-sec tional units, eight feet or greater in width and at least thirty-two feet in length, built on steel under carriages with necessary wheel assemblies to be transported to permanent or semi permanent sites. The wheel assembly can be removed when the unit is delivered to the home site, but the steel undercarriage may remain intact if it is a necessary structural component. In some instances, the presence of a steel undercarriage as a necessary structural component is the primary distinguishing factor between a manufactured home and a modular house.

MANUFACTURED homes built (in the U.S.) after June 15, 1976, must meet the Federal Manufactured Home Construction and Safety Standards as outlined in Title VI, Housing and Community Development Act of 1974. A HUD seal certifying compliance with these standards must be displayed on each unit. This section may also be used for manufactured and mobile homes built prior to the enactment of HUD standards

Cost Comparison: A Good-quality HUD Code MANUFACTURED home, with an equal number of plumbing fixtures, comparable interior finishes and exterior siding can be equivalent in cost to a Fair to Average quality SITE-BUILT house. Similarly, the Very Good-quality MANUFACTURED home can be comparable in cost to an Average quality SITE-BUILT house. The Excellent-quality MANUFACTURED home, with comparable exterior siding, drywall interior finish, custom interior amenities and features and an equal number of plumbing fixtures in their base costs, can be similar in cost to a Good to Very Good quality SITE-BUILT house

MODULAR housing will meet most local building codes and can be subject to standard regiona or state building codes for modular construction. Although a MODULAR house can be transported on a steel undercarriage, the undercarriage is generally not a permanent and necessary structural component, and is usually removed when the unit is placed on a foundation MODULAR housing can sometimes be priced from the following pages, but generally should be priced from the SITE-BUILT housing costs in Section 12 or 42

When a FACTORY-BUILT residence meets applicable local, state or regional building code requirements for modular construction and carries the HUD seal for manufactured homes, the unit is considered Manufactured and should be priced using this section. For lending purposes if the home is a dual tag home and carries the HUD seal the home is considered Manufactured by conforming guidelines. Factory built homes without a steel undercarriage that carry the HUD seal are still considered Manufactured homes as per conforming guidelines

PANELIZED or prefabricated houses consist of packaged, factory-built components and are siteassembled. All must conform to local and state or regional building codes for SITE-BUILT construction. Some types of "kit" homes are presented individually in Section 12. When applicable, SITE-BUILT residence costs from Section 12 should be used in the absence of Special Study" costs

## COST DEFINITIONS

Manufactured housing consists of single or multisectional units, eight feet or greater in width and at least thirty-two feet in length. After being transported on their own wheel chassis to the site, the units are set up as permanent or semipermanent residences and are connected to the necessary utilities. Utility costs are included in the park costs. If individual utility costs are needed, see Housing Park or Subdivision unit costs found in Section 66.

The residences are usually described in terms of width and length and are priced accordingly (i.e., $12^{\prime} \times 52^{\prime}, 24^{\prime} \times 64$, with a $10^{\prime} \times 40$ tag, etc.). In calculating actual square footage, do not include the hitch in the overall dimensions. Manufactured houses are categorized into six quality levels: Low, Fair, Average, Good, Very Good and Excellent. Photographs, basic descriptions and costs are provided for each of these quality levels.

Photographs are intended to illustrate the general characteristics of this type of housing at a given quality level (i.e., roof overhang, roof pitch, type and quality of materials used, etc.), and are not an indication of typical size, setting or specific manufacturer. Basic descriptions indicate general characteristics of manufactured housing and further describe what is included in the costs at a given quality level

Costs are retail prices, including normal charges for delivery and setup on post and piers within 100 miles of the dealer. Although some units are sold furnished, furnishings or appliances are not included in the base costs. Generally these structures are purchased directly from factory dealers/installers and can, at times, be influenced by inventory discounting, predatory pricing, etc., which are not contemplated here. Local fees, licenses and utility costs are not included and should be added when applicable. Appliances, drapes, skirting, patio roofs, carports and other optional items can be priced separately from Page 10. For basement and garage costs, use sitebuilt housing costs in Section 12

Two (double) sections, three (triple) sections or four (quads) sections are terms used to describe manufactured houses having two or more sections. Square foot costs for two sections, based on length and gross width, are provided on each cost page

Three (triple) sections are priced by using the two section costs for the two (double) main sections and a one (single) section cost for the third section. The third section is often considered a tagalong and requires a cost adjustment as provided on each cost page

Four (quads) sections are to be priced as a pair of two (double) sections with the tagalong percentage adjustment applied to the second two (double) section base cost.

A tagalong is an attached section, usually a full width, but not necessarily the full length of the main section(s). It is the same in both structure and quality as the unit to which it is attached. A tagalong is priced as a single section but requires a percentage cost adjustment as indicated on each of the cost pages.

Tip-outs and expandos are extensions of a main section and are not necessarily of the same quality as the main section to which they are attached. They are considered Optional Items and should be priced from Page 10

The Optional Items listed on Page 10 can be used to adjust items included in the basic housing costs or to add for those items which have not been included. Further patio costs can be found in Section 66

The continuous perimeter concrete wall costs do not include the excavation for a crawl space under the residence. See Section 42 or 51 for excavation costs. Screened porch costs presented in this section are based on the square footage of floor area and include one door

The higher-quality manufactured houses are similar in both design and appearance to modular manufactured houses and, to an extent, site-built residences as found in tract developments. Costs for these types of construction will overlap. The higher-quality manufactured houses will often exceed minimum manufactured home code requirements and will often meet, in part, local building codes.

NOTE: As a marketing tool, manufactured houses can meet applicable local, state or regional building code requirements for modular construction and also comply with manufactured home codes. An advantage of the dual tag is that this type of manufactured house can be placed in a manufactured housing park or in a site-built subdivision. When the dual tag requirements are met, the steel undercarriage is not a necessary structural component and is often removed when the unit is placed on a permanent foundation. For purposes of estimating replacement cost, the dualtag manufactured house can be considered modular and priced from the appropriate site-built cost section.


## LOW-COST HOMES

The Low-cost manufactured home is generally a structure built to minimum standards. It does not include the cheapest construction available prior to enactment of federal standards. The floor plan is usually simple, with little or no attention given to detail.

Exterior finish is prefinished aluminum wall and roof panels. Walls are typically $3^{\prime \prime}$ to 4 " thick, $7^{\prime} 6$ " to 8 ' high, with minimum fenestration, including low-cost windows and doors.

Interiors usually are prefinished plywood or printed seamed hardboard with floors of low-quality carpet and resilient cover. Where complete drywall interiors are encountered, add $\$ .95$ to the base housing cost. Cabinetry and hardware are standard inexpensive units.

Heating and ducting are normally minimal, with insulated straight-line forced-air ducts. Add \$1.70 to $\$ 2.90$ per square foot for air conditioning.
Plumbing includes five inexpensive white fixtures and a rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, water heater and kitchen sink. The rough-in will typically consist of the water supply and waste for a laundry service. All fixtures are usually located along one side of the house (wet wall) with minimal runs. Adjust for more or less plumbing at $\$ 475$ per fixture. Appliances are not included and should be added from Page 10.

## FAIR HOMES

The Fair manufactured home is designed to meet standard manufactured home code requirements. The overall quality of materials and workmanship while average, will be relatively plain in finish and appearance. The home will have an exterior of prefinished aluminum or hardboard sheet siding and limited standard fenestration.

Roofs are typically low pitched, arched or sloped, with minimum overhang on the front elevation.
Interiors are prefinished plywood or printed seamed hardboard with standard-grade cabinetry and hardware. Where complete drywall interiors are encountered, add $\$ .98$ to the base housing cost. Carpet and resilient floor coverings are moderate to average grades.

Heating and ducting are normally minimal, with insulated straight-line forced-air ducts. Add $\$ 1.65$ to $\$ 2.90$ per square foot for air conditioning

Plumbing includes six fixtures and a rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, water heater and kitchen sink. The rough-in will typically consist of the water supply and waste for a laundry service. All fixtures are usually located along one side of the house (wet wall) with minimal runs. Adjust for more or less plumbing at $\$ 550$ per fixture. For whirlpool tub, use the Very Good-quality Lump-sum plumbing adjustment, Page 9. Appliances are not included and should be added from Page 10

HOUSING COSTS (per sq. ft. of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| FEET | $\mathbf{8}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 0}$ | $\$ 57.60$ | $\$ 48.69$ | $\$ 45.68$ | $\$ 43.23$ | $\$ 41.17$ | $\$ 59.60$ | $\$ 55.68$ | $\$ 52.56$ | $\$ 50.03$ | $\$ 47.86$ |
| $\mathbf{2 4}$ | 56.00 | 46.94 | 43.90 | 41.43 | 39.36 | 56.16 | 52.01 | 48.73 | 46.07 | 43.84 |
| $\mathbf{2 8}$ | 54.70 | 45.52 | 42.45 | 39.96 | 37.89 | 53.42 | 49.09 | 45.71 | 42.98 | 40.70 |
| $\mathbf{3 2}$ | 53.58 | 44.32 | 41.23 | 38.74 | 36.66 | 51.15 | 46.71 | 43.25 | 40.47 | 38.16 |
| $\mathbf{3 6}$ | 52.62 | 43.29 | 40.18 | 37.69 | 35.61 | 49.22 | 44.69 | 41.18 | 38.37 | 36.05 |
| $\mathbf{4 0}$ | 51.77 | 42.39 | 39.27 | 36.77 | 34.70 | 47.56 | 42.96 | 39.41 | 36.60 | 34.26 |
| $\mathbf{4 4}$ | 51.02 | 41.59 | 38.47 | 35.96 | 33.89 | 46.12 | 41.46 | 37.89 | 35.05 | 32.73 |
| $\mathbf{4 8}$ | 50.35 | 40.87 | 37.74 | 35.24 | 33.17 | 44.82 | 40.13 | 36.54 | 33.70 | 31.38 |
| $\mathbf{5 2}$ | 49.73 | 40.22 | 37.09 | 34.58 | 32.53 | 43.68 | 38.94 | 35.35 | 32.52 | 30.19 |
| $\mathbf{5 6}$ | 49.16 | 39.63 | 36.50 | 33.99 | 31.94 | 42.64 | 37.88 | 34.27 | 31.44 | 29.13 |
| $\mathbf{6 0}$ | 48.64 | 39.08 | 35.95 | 33.45 | 31.39 | 41.68 | 36.92 | 33.31 | 30.48 | 28.18 |
| $\mathbf{6 4}$ | 48.16 | 38.59 | 35.45 | 32.95 | 30.90 | 40.82 | 36.04 | 32.43 | 29.60 | 27.32 |
| $\mathbf{6 8}$ | 47.71 | 38.12 | 34.98 | 32.48 | 30.44 | 40.02 | 35.23 | 31.63 | 28.81 | 26.53 |
| $\mathbf{7 2}$ | 47.30 | 37.69 | 34.55 | 32.06 | 30.01 | 39.28 | 34.49 | 30.88 | 28.07 | 25.81 |
| $\mathbf{7 6}$ | 46.91 | 37.28 | 34.14 | 31.66 | 29.61 | 38.60 | 33.79 | 30.19 | 27.40 | 25.15 |
| $\mathbf{8 0}$ | 46.55 | 36.09 | 33.77 | 31.27 | 29.24 | 37.96 | 33.15 | 29.56 | 26.78 | 24.53 |

For other than hardboard sheet siding, adjust the costs above as follows: aluminum, - 3\%; lap siding, $+3 \%$; cement fiber, lap, $+4 \%$, sheet, $2 \%$.

THREE-SECTION: Deduct 20\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

## AVERAGE HOMES

The Average manufactured home will have an exterior of prefinished aluminum, hardboard or plywood sheet, vinyl or hardboard lap siding. Use percentage adjustment for variations from the base.
Walls are $4 "$ thick, $8^{\prime}$ high, with adequate fenestration and an attractive entrance. Often the exteriors will have a combination of two textures or two colors.
Interiors are medium-quality prefinished seamed plywood or hardboard. Where complete drywall interiors are encountered, add $\$ 1.04$ to the base housing cost; for taped and textured ceilings only, add $\$ .21$. Resilient flooring, as well as the carpeting, is of conventional residential quality. Cabinetry and hardware are average-quality with self-closing cabinet doors.

Heating is forced air through insulated ducting with provision for air conditioning. Add $\$ 1.65$ to $\$ 2.90$ per square foot for air conditioning.

Plumbing includes seven average-quality fixtures, white or colored, and a plumbing rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray and water heater. The rough-in will typically consist of the water supply and waste for a laundry service. Most fixtures are located along one side of the house (wet wall). Adjust for more or less plumbing at $\$ 620$ per fixture. For whirlpool tub, use the Very Good-quality Lump-sum plumbing adjustment, Page 9. For wet bars, see Page 10. Appliances are not included and should be added from Page 10.

## GOOD HOMES

The Good manufactured home will have an exterior finish of aluminum, vinyl, plywood or hardboard, sometimes a combination of two. The finish is often in various textures such as horizontal siding and board and batten, etc. The base costs are for hardboard siding.
Walls are $4^{\prime \prime}$ thick and 8 ' high, with ample fenestration consisting of numerous residential-type aluminum or vinyl windows, a sliding door and ornamentation around windows and entry.

Interior is of good-quality prefinished seamed plywood, cabinets and hardware are of good quality, and there are many extra interior appointments. Where complete taped and textured drywall interiors are encountered, add $\$ 1.10$ to the base housing cost; for taped and textured ceilings only, add $\$ .27$. Resilient flooring and carpeting are of good quality.
Heating has insulated perimeter ducts with cold-air returns prepared for air conditioning. Add $\$ 1.60$ to $\$ 2.65$ per square foot for air conditioning.

Plumbing includes seven good-quality fixtures, white or colored, and a plumbing rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray and water heater. The rough-in will typically consist of the water supply and waste for a laundry service. Adjust for more or less plumbing at $\$ 790$ per fixture. For whirlpool tub, use the Very Good-quality Lump-sum plumbing adjustment, Page 9. For wet bars, see Page 10. Appliances are not included and should be added from Page 10.

HOUSING COSTS (per sq. ft. of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| FEET | $\mathbf{8}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 0}$ | $\$ 67.15$ | $\$ 56.69$ | $\$ 51.31$ | $\$ 48.53$ | $\$ 46.19$ | $\$ 69.60$ | $\$ 64.81$ | $\$ 60.98$ | $\$ 55.84$ | $\$ 53.31$ |
| $\mathbf{2 4}$ | 65.01 | 54.48 | 49.41 | 46.61 | 44.28 | 65.50 | 60.46 | 56.48 | 51.65 | 49.04 |
| $\mathbf{2 8}$ | 63.26 | 52.68 | 47.85 | 45.06 | 42.72 | 62.23 | 57.02 | 52.94 | 48.34 | 45.69 |
| $\mathbf{3 2}$ | 61.79 | 51.17 | 46.55 | 43.75 | 41.42 | 59.52 | 54.19 | 50.05 | 45.67 | 42.98 |
| $\mathbf{3 6}$ | 60.51 | 49.88 | 45.42 | 42.63 | 40.30 | 57.23 | 51.83 | 47.64 | 43.42 | 40.72 |
| $\mathbf{4 0}$ | 59.39 | 48.74 | 44.45 | 41.65 | 39.33 | 55.25 | 49.79 | 45.57 | 41.50 | 38.79 |
| $\mathbf{4 4}$ | 58.40 | 47.73 | 43.58 | 40.78 | 38.47 | 53.53 | 48.01 | 43.78 | 39.84 | 37.13 |
| $\mathbf{4 8}$ | 57.50 | 46.83 | 42.80 | 40.01 | 37.70 | 52.00 | 46.45 | 42.21 | 38.38 | 35.69 |
| $\mathbf{5 2}$ | 56.70 | 46.03 | 42.09 | 39.31 | 37.00 | 50.64 | 45.06 | 40.82 | 37.09 | 34.40 |
| $\mathbf{5 6}$ | 55.96 | 45.29 | 41.46 | 38.67 | 36.37 | 49.41 | 43.80 | 39.56 | 35.93 | 33.24 |
| $\mathbf{6 0}$ | 55.27 | 44.62 | 40.87 | 38.10 | 35.79 | 48.28 | 42.68 | 38.44 | 34.88 | 32.22 |
| $\mathbf{6 4}$ | 54.65 | 44.00 | 40.32 | 37.55 | 35.26 | 47.25 | 41.64 | 37.41 | 33.93 | 31.27 |
| $\mathbf{6 8}$ | 54.06 | 43.42 | 39.82 | 37.06 | 34.76 | 46.31 | 40.69 | 36.47 | 33.06 | 30.42 |
| $\mathbf{7 2}$ | 53.52 | 42.87 | 39.35 | 36.59 | 34.30 | 45.43 | 39.82 | 35.60 | 32.26 | 29.62 |
| $\mathbf{7 6}$ | 53.01 | 42.37 | 38.91 | 36.16 | 33.88 | 44.63 | 39.01 | 34.80 | 31.52 | 28.91 |
| $\mathbf{8 0}$ | 52.53 | 41.90 | 38.50 | 35.75 | 33.48 | 43.87 | 38.26 | 34.06 | 30.83 | 28.23 |

For other than hardboard sheet wall finish, adjust the costs above as follows: aluminum, - 3\%; lap siding, $+4 \%$; cement fiber, lap, $+5 \%$, sheet, $+3 \%$.

THREE-SECTION: Deduct 18\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

HOUSING COSTS (per sq. ft. of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FEET | $\mathbf{8}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 8}$ | 76.76 | 64.06 | 59.79 | 56.35 | 53.45 | 76.51 | 69.69 | 64.41 | 60.16 | 56.63 |
| $\mathbf{3 2}$ | 75.00 | 62.34 | 58.11 | 54.69 | 51.83 | 73.53 | 66.59 | 61.24 | 56.95 | 53.41 |
| $\mathbf{3 6}$ | 73.49 | 60.88 | 56.67 | 53.26 | 50.42 | 71.02 | 63.97 | 58.57 | 54.26 | 50.71 |
| $\mathbf{4 0}$ | 72.15 | 59.59 | 55.40 | 52.02 | 49.21 | 68.83 | 61.72 | 56.29 | 51.96 | 48.42 |
| $\mathbf{4 4}$ | 70.98 | 58.44 | 54.28 | 50.93 | 48.14 | 66.92 | 59.75 | 54.30 | 49.97 | 46.44 |
| $\mathbf{4 8}$ | 69.91 | 57.43 | 53.28 | 49.94 | 47.18 | 65.20 | 58.01 | 52.53 | 48.22 | 44.69 |
| $\mathbf{5 2}$ | 68.94 | 56.51 | 52.37 | 49.05 | 46.31 | 63.68 | 56.44 | 50.97 | 46.66 | 43.15 |
| $\mathbf{5 6}$ | 68.06 | 55.66 | 51.55 | 48.25 | 45.52 | 62.29 | 55.04 | 49.57 | 45.27 | 41.77 |
| $\mathbf{6 0}$ | 67.26 | 54.89 | 50.80 | 47.51 | 44.80 | 61.04 | 53.75 | 48.29 | 44.01 | 40.53 |
| $\mathbf{6 4}$ | 66.51 | 54.17 | 50.10 | 46.83 | 44.14 | 59.88 | 52.59 | 47.12 | 42.85 | 39.39 |
| $\mathbf{6 8}$ | 65.81 | 53.51 | 49.45 | 46.20 | 43.51 | 58.81 | 51.52 | 46.05 | 41.80 | 38.36 |
| $\mathbf{7 2}$ | 65.16 | 52.90 | 48.85 | 45.61 | 42.95 | 57.82 | 50.52 | 45.07 | 40.83 | 37.41 |
| $\mathbf{7 6}$ | 64.55 | 52.32 | 48.29 | 45.07 | 42.41 | 56.90 | 49.60 | 44.16 | 39.94 | 36.53 |
| $\mathbf{8 0}$ | 63.98 | 51.77 | 47.76 | 44.55 | 41.91 | 56.05 | 48.74 | 43.31 | 39.10 | 35.72 |

For other than hardboard sheet exterior wall finish, adjust the costs above as follows: lap siding, $+4 \%$; cement fiber, lap, $+5 \%$, sheet, $+3 \%$; aluminum, $-3 \%$; plywood with batts, $+2 \%$; log sididng, $+5 \%$.

THREE-SECTION: Deduct $16 \%$ from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

## VERY GOOD HOMES

The Very Good manufactured home is typically found in the high-quality manufactured housing parks. It will exceed minimum requirements of manufactured home codes, with special attention given to separate foyer entries and family living areas.
Exteriors are usually finished to resemble site-built housing with aluminum, vinyl or other siding in various patterns and textures resembling wood. There is usually ornamentation of plastic, mitation brick or stone, etc. The base costs are for hardboard siding or plywood with batts. Use percentage adjustments for variations from the base
Walls are 4 " to $6 "$ thick, $8^{\prime}$ high, with good fenestration consisting of residential-type windows sliding doors and ornamental entrances.

Interiors will have vinyl-covered seamed drywall, simulated brick, stone and natural hardwood veneers and drywall taped and textured ceilings. Where complete drywall interiors are encountered add $\$ .36$ to the base housing cost. Cabinets, vanities and hardware are of good-quality with counters of the best plastics. Floor coverings will be of sheet vinyl, some parquet and good mediumweight carpeting. Where practical, ceiling treatment will include exposed beams, dropped, sloping or cathedral ceilings.

Heating is through floor and ceiling ducts and is ready to adapt for air conditioning. Add $\$ 1.55$ to $\$ 2.65$ per square foot for air conditioning.
Plumbing includes eight Good-quality fixtures and a plumbing rough-in in the base cost. They include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray, water heater and whirlpool tub. Adjust for more or less plumbing a $\$ 820$ per fixture. For wet bars, see Page 10. Appliances are not included and should be added from Page 10.

HOUSING COSTS (per square foot of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FEET | $\mathbf{1 0}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 8}$ | $\$ 80.44$ | $\$ 74.11$ | $\$ 69.15$ | $\$ 65.12$ | $\$ 61.76$ | $\$ 89.11$ | $\$ 80.87$ | $\$ 74.48$ | $\$ 69.39$ | $\$ 65.17$ |
| $\mathbf{3 2}$ | 78.31 | 72.05 | 67.14 | 63.16 | 59.86 | 85.67 | 77.29 | 70.85 | 65.72 | 61.49 |
| $\mathbf{3 6}$ | 76.47 | 70.27 | 65.42 | 61.48 | 58.21 | 82.73 | 74.27 | 67.78 | 62.64 | 58.42 |
| $\mathbf{4 0}$ | 74.86 | 68.72 | 63.91 | 60.01 | 56.78 | 80.21 | 71.67 | 65.15 | 60.01 | 55.80 |
| $\mathbf{4 4}$ | 73.45 | 67.34 | 62.57 | 58.72 | 55.52 | 77.98 | 69.39 | 62.87 | 57.73 | 53.53 |
| $\mathbf{4 8}$ | 72.16 | 66.11 | 61.38 | 57.57 | 54.40 | 76.01 | 67.38 | 60.84 | 55.71 | 51.55 |
| $\mathbf{5 2}$ | 71.02 | 65.00 | 60.30 | 56.52 | 53.38 | 74.23 | 65.58 | 59.04 | 53.92 | 49.78 |
| $\mathbf{5 6}$ | 69.96 | 63.98 | 59.32 | 55.56 | 52.46 | 72.62 | 63.95 | 57.43 | 52.33 | 48.20 |
| $\mathbf{6 0}$ | 68.99 | 63.05 | 58.42 | 54.70 | 51.61 | 71.16 | 62.48 | 55.96 | 50.87 | 46.77 |
| $\mathbf{6 4}$ | 68.10 | 62.19 | 57.60 | 53.89 | 50.83 | 69.82 | 61.13 | 54.62 | 49.56 | 45.47 |
| $\mathbf{6 8}$ | 67.28 | 61.40 | 56.83 | 53.15 | 50.10 | 68.58 | 59.89 | 53.39 | 48.34 | 44.30 |
| $\mathbf{7 2}$ | 66.51 | 60.66 | 56.11 | 52.46 | 49.44 | 67.43 | 58.73 | 52.25 | 47.24 | 43.20 |
| $\mathbf{7 6}$ | 65.78 | 59.97 | 55.45 | 51.81 | 48.81 | 66.37 | 57.67 | 51.20 | 46.21 | 42.20 |
| $\mathbf{8 0}$ | 65.11 | 59.32 | 54.81 | 51.22 | 48.22 | 65.37 | 56.68 | 50.23 | 45.25 | 41.27 |

For other than plywood w/batts or hardboard sheet exterior cover, adjust the costs above as follows: lap siding, $+4 \%$; cement fiber lap, $+5 \%$; aluminum, $-4 \%$; stucco, $+7 \%$; log siding, $+6 \%$; wood stresskin sandwich panels, $+6 \%$.

THREE-SECTION: Deduct 14\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10

## EXCELLENT HOMES

The Excellent manufactured home is similar in both design and appearance to modular constructed houses and to an extent, to site-built residences as typically found in tract development. Costs for these types of construction will overlap. Manufactured homes at this quality level will exceed minimum requirements of manufactured home codes and will often meet, in part, local building codes.

Walls are 4" to 6" thick with a base finish of plywood with batts or hardboard sheets. Use percentage adjustments for other types of exterior finish

The perimeter foundation is continuous reinforced concrete with foundation wall or steel piers under section mating walls. The frame is a heavy steel beam undercarriage with outriggers and cross members, which are necessary structural components. The roof is an engineered truss system with a 3 in 12 to 4 in 12 slope and a minimum 16 " overhang

Interiors have good tape and texture finished drywall with some paper or vinyl wall covering or natural wood veneer paneling. Good natural wood veneer cabinets and vanities with laminated plastic or simulated marble countertops. Walk-in closets or large sliding door wardrobes.

Heating is through floor and ceiling ducts and is ready to adapt for air conditioning. Add $\$ 1.50$ to $\$ 2.60$ per square foot for air conditioning.

Plumbing includes nine fixtures and a plumbing rough-in in the base cost. They include any of the following: deluxe whirlpool tub and lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray, water heater and wet bar. Adjust for more or less plumbing at $\$ 1,030$ per fixture. Appliances are not included and should be added from Page 10.

HOUSING COSTS (per square foot of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | :---: | ---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: |
| FEET | $\mathbf{1 0}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 8}$ | $\$ 93.28$ | $\$ 86.20$ | $\$ 80.65$ | $\$ 76.11$ | $\$ 72.32$ | $\$ 103.70$ | $\$ 94.09$ | $\$ 86.64$ | $\$ 80.68$ | $\$ 75.76$ |
| $\mathbf{3 2}$ | 90.98 | 83.99 | 78.49 | 74.02 | 70.30 | 100.07 | 90.30 | 82.78 | 76.77 | 71.84 |
| $\mathbf{3 6}$ | 89.00 | 82.08 | 76.65 | 72.23 | 68.55 | 96.97 | 87.08 | 79.50 | 73.48 | 68.55 |
| $\mathbf{4 0}$ | 87.27 | 80.41 | 75.04 | 70.66 | 67.03 | 94.28 | 84.30 | 76.69 | 70.66 | 65.74 |
| $\mathbf{4 4}$ | 85.73 | 78.93 | 73.61 | 69.28 | 65.68 | 91.90 | 81.86 | 74.23 | 68.20 | 63.29 |
| $\mathbf{4 8}$ | 84.35 | 77.60 | 72.34 | 68.04 | 64.47 | 89.79 | 79.69 | 72.05 | 66.03 | 61.13 |
| $\mathbf{5 2}$ | 83.10 | 76.41 | 71.18 | 66.92 | 63.39 | 87.89 | 77.75 | 70.11 | 64.09 | 59.22 |
| $\mathbf{5 6}$ | 81.95 | 75.31 | 70.12 | 65.89 | 62.40 | 86.16 | 76.00 | 68.35 | 62.35 | 57.49 |
| $\mathbf{6 0}$ | 80.90 | 74.31 | 69.15 | 64.96 | 61.49 | 84.59 | 74.40 | 66.76 | 60.77 | 55.93 |
| $\mathbf{6 4}$ | 79.93 | 73.37 | 68.25 | 64.09 | 60.64 | 83.14 | 72.94 | 65.30 | 59.32 | 54.51 |
| $\mathbf{6 8}$ | 79.03 | 72.52 | 67.43 | 63.29 | 59.87 | 81.81 | 71.59 | 63.95 | 58.01 | 53.21 |
| $\mathbf{7 2}$ | 78.19 | 71.71 | 66.66 | 62.54 | 59.14 | 80.57 | 70.34 | 62.72 | 56.78 | 52.02 |
| $\mathbf{7 6}$ | 77.41 | 70.95 | 65.93 | 61.84 | 58.47 | 79.41 | 69.18 | 61.56 | 55.66 | 50.90 |
| $\mathbf{8 0}$ | 76.67 | 70.25 | 65.26 | 61.19 | 57.83 | 78.33 | 68.09 | 60.49 | 54.60 | 49.88 |

For other than plywood w/batts or hardboard sheet exterior cover, adjust the costs above as follows: lap siding, + 3\%; cement fiber lap, + 4\%; stucco, + 6\%; log siding, +5\%; wood stresskin sandwich panels, $+5 \%$.

THREE-SECTION: Deduct 12\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

## OPTIONAL ITEMS <br> (IN PLACE)

 site improvements, see Section 66.

| Expandos or Tip-outs: Additional living space which slides out or is tipped out from the main living area. Expandos are generally $8^{\prime}$ wide and $10^{\prime}$ to $14^{\prime}$ ' long. Tip-outs are generally $4^{\prime} \times 10^{\prime}$ or 12 ' in size. |  |  |
| :---: | :---: | :---: |
| Per square foot | \$ 25.75- | \$ 34.50 |
| Foundations: |  |  |
| Continuous concrete foundation wall per linear foot, 18" | \$13.50 - | \$ 15.75 |
| For each 6 " variance from base height, +/per linear foot | 3.55 - | 4.65 |
| For concrete block foundation, deduct per linear foot | . 60 - | 95 |
| For treated wood foundation, deduct per linear foot | . 95 - | 5 |
| Piers, precast, each | 1.00 - | 44.25 |
| formed in place | . 50 | 63.75 |
| steel/concrete buttress | 0.75 - | 5.25 |
| Anchors, per assembly | 20.25 - | 7.75 |
| Hitches, each | 80.00 - | 130.00 |
| Skirting, per linear foot, 28" height |  |  |
| Metal/vinyl vertical | 6.70 - | . 90 |
| horizontal lap | 7.50 | 14.60 |
| simulated stone or brick panels | 8.70 - | 16.30 |
| Plywood/hardboard | 7.25 - | 9.85 |
| horizontal lap | 8.20 - | 15.65 |
| Brick/stone veneer | 19.05 - | 39.95 |
| ncrete block | 10.75 - | 18.1 |
| Precast concrete panels | 15.65 - | 17.85 |
| Entry steps: |  |  |
| Metal, per step . add for landing | $\begin{gathered} \$ 72.50- \\ 320.00- \end{gathered}$ | $\begin{aligned} & 146.50 \\ & 405.00 \end{aligned}$ |
| Molded fiberglass, per step | 95.75 | 203.00 |
| add for landing | 330.0 | 45.00 |
| Wood, per step | 61.50 - | 123.00 |
| Precast concrete, plain finish, two steps | 615.00 | 900.00 |
| three steps <br> Add 20\% for exposed aggregate fin | 5.00 | 1,155.00 |
| Sprinkler system, per sq. ft.of sprinklered area | \$ 2.15 - | \$ 3.55 |
| Gutters and downspouts, per linear foot: |  |  |
| Aluminum | \$ 5.00 - | \$6.55 |
| Galvanized steel | 4.10 | 5.65 |
| Fiberglass or vinyl | 4.20 - | 5.9 |
| Awnings: |  |  |
| Metal, fixed, linear foot | \$23.75- | \$56.50 |
| Canvas, fixed, linear foot | 13.75 |  |
| Roll-up | 45.0 |  |


| Windows, each: |  |  |
| :---: | :---: | :---: |
| Bay | \$535.00 - | \$ 960.00 |
| Bow | 790.00 - | 1,430.00 |
| Garden | 405.00 - | 725.00 |
| Storm windows, per square foot | 3.95 - | 7.65 |
| Storm doors, each | 180.00- | 395.00 |
| Sliding glass doors, each: |  |  |
| Single glazed . . . . . . . . . . . . . . . . . . . . \$ | \$ 555.00 - | \$ 705.00 |
| Double glazed | 895.00 - | 1,285.00 |
| Triple glazed | 1,025.00 - | 1,420.00 |
| Window-type refrig. coolers, each: |  |  |
| 6,000 BTU ......................... . \$ | \$ 760.00- | \$ 895.00 |
| 12,000 BTU | 1,175.00 - | 1,400.00 |
| 18,000 BTU | 1,425.00 - | 1,725.00 |
| For reverse cycle (heat pump) window or wall units, add $25 \%$ to $50 \%$. |  |  |
| Evaporative coolers, window type, each: |  |  |
| 3,000 CFM . . . . . . . . . . . . . . . . . . . . . \$ | \$ 700.00 - | \$ 950.00 |
| 4,500 CFM | 925.00 - | 1,175.00 |
| 5,500 CFM | 1,100.00 - | 1,375.00 |
| For roof installation with duct, add \$475.00. |  |  |
| Drapes, per square foot of living area . . . . \$ | \$ . 65 - | \$ 2.15 |
| Window blinds, metal or fabric, per square foot of living area | . 85 - | 1.90 |
| Indoor-outdoor carpeting, per square foot | 1.50 - | 3.30 |
| Mirrored wardrobe doors, per pair | 280.00 - | 525.00 |
| Built-in hutch, each | 505.00 - | 1,620.00 |
| Wet bar, including cabinetry, and plumbing, each | 1,075.00 - | 2,250.00 |
| Fireplaces or wood-burning stoves: |  |  |
| Prefabricated | 1,150.00 - | 1,975.00 |
| Prefabricated with imitation stone or brick hearth | 1,500.00 - | 2,775.00 |

## APPLIANCES:

Range and oven ............................. \$ 630.00 - \$1,450.00
Microwave combination . . . . . . . . . . . . . . . . . . 1,600.00-2,425.00
Range hood and fan . . . . . . . . . . . . . . . . . . . . . . . . . . 140.00 - 580.00
Range top . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 330.00 - 1,315.00
Oven . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 580.00 - 1,655.00

Microwave combination ..................... . . 870.00-1,705.00
Microwave oven . . . . . . . . . . . . . . . . . . . . . . . . . . 315.00 - 980.00
Dishwasher ................................... 515.00 - 1,025.00
Garbage disposer . . . . . . . . . . . . . . . . . . . . . . . . . . 175.00 - 390.00
Bath heater/vent fan . . . . . . . . . . . . . . . . . . . . . . . 115.00 - 285.00
Trash compactor . . . . . . . . . . . . . . . . . . . . . . . . . . 540.00 - 825.00
Refrigerator, freestanding . . . . . . . . . . . . . . . . . . . . . . . . 515.00 - 2,260.00
Freezer . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 495.00 - 1,630.00
Clothes washer . . . . . . . . . . . . . . . . . . . . . . . . . . . 505.00 - 1,050.00
Clothes dryer ... . ..................... 370.00 - 810.00
Combination unit . . . . . . . . . . . . . . . . . . . . . . . . 955.00 - 1,760.00
Water softener . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 705.00 - 1,390.00

Ceiling fan
Decorative fireplace, electric . . . . . . . . . . . . . . .
CARPORT COSTS (Includes posts and roof only, per square foot)

| Fiberglass | \$5.05 - | \$ 10.30 |
| :---: | :---: | :---: |
| Aluminum | 6.00 - | 11.80 |
| Steel | 6.85 - | 13.80 |

STORAGE SHED BUILDING COSTS
(Cost per square foot, excluding perm. foundation)

| Steel | \$ 7.70 - | \$13.30 |
| :---: | :---: | :---: |
| Aluminum | 11.15 - | 20.10 |
| Wood | 14.70 - | 29.40 |

GARAGES AND BASEMENTS: Use site built housing costs, see

| Sq. Ft. Area | Concrete Slab | Wood Deck w/Steps | Add For Metal Roof | Add For Wood Roof | Add For Screening |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 5}$ | $\$ 8.10-\$ 10.45$ | $\$ 27.20-\$ 42.30$ | $\$ 7.50-\$ 11.55$ | $\$ 9.95-$ | $\$ 16.50$ | $\$ 13.65-\$ 25.85$ |  |
| $\mathbf{5 0}$ | $6.45-8.30$ | $20.60-32.25$ | $6.95-10.70$ | $9.25-$ | 15.15 | $9.90-$ | 18.60 |
| $\mathbf{1 0 0}$ | $5.15-$ | 6.65 | $15.50-24.55$ | $6.45-$ | 9.85 | $8.55-$ | 13.95 |
| $\mathbf{2 0 0}$ | $4.15-$ | 5.30 | $11.65-18.60$ | $5.95-$ | 9.20 | $7.90-$ | 12.35 |

## Sample Manufactured Home

Appraisal Report


Summary Appraisal Report
Manufactured Home Appraisal Report
File \#

| GENERAL DESCRIPTION |  |  |
| :---: | :---: | :---: |
| \# of Units | One | Additions |
| \# of Stories | 1 | $2 \square$ Other |
| Design (Style) |  |  |
| \# of Sections | 1 | $2 \square 3$ |
| Other |  |  |
| Type $\square$ Det. | Att. | s-Det./EndUnit |
| Existing | Proposed | Under Const. |
| Year Built | Effective Age (Yrs) |  |
| Attic |  | None |
| Drop Stair |  | Stairs |
| Floor |  | Scuttle |
| Finished |  | Heated |



| NTTERIOR | materials/condition |
| :---: | :---: |
| Floors |  |
| Walls |  |
| Trim/Finish |  |
| Bath Floor |  |
| Bath Wainscot |  |
| Car Storage | None |
| Driveway \# of Cars |  |
| Driveway Surface |  |
| Garage | \# of Cars |
| Carport | \# of Cars |
| Attached | Detached |
| Built-in |  |

Appliances $\square$ Refrigerator $\square$ Range/Oven $\square$ Dishwasher $\square$ Disposal $\square$ Microwave $\square$ Washer/Dryer $\square$ Other (describe)
Finished area above grade contains: Rooms Bedrooms Bath(s) Square Feet of Gross Living Area Above Grade
Describe any additions or modifications (decks, rooms, remodeling, etc.)

| Installer's Name | Date Installed |  | Model year |
| :--- | :--- | :--- | :--- |
| Is the manufactured home attached to a permanent foundation system? | $\square$ Yes | $\square$ No If No, describe foundation system and the manner of attachment. |  |

Have the towing hitch, wheels, and axles been removed? $\square$ Yes $\square$ No if No, explain.

Is the manufactured home permanently connected to a septic tank or sewage system and other utilities? Yes $\quad$ No If No, explain

| Does the dwelling have sufficient gross living area and room dimensions to be acceptable to the market? Yes No If No, explain |
| :--- | :--- | :--- | :--- |

Additional features (special energy efficient items, non-realty items, etc.)

The appraiser must rate the quality of construction for the subject unit based on objective criteria (such as N.A.D.A. Manufactured Housing Appraisal Guide®, Marshall \& Switt Residential Cost Handbook@, or other published cost service). The appraiser must also report the source used for this quality of construction rating determination. Quality $\square$ Poor $\square$ Fair $\square$ Average $\square$ Good $\square$ Excellent Identify source of quality rating Describe the condition of the property (including needed repairs, deterioration, renovations, remodeling, etc.).

Are there any physical deficiencies or adverse conditions that affect the livability, soundness, or structural integrity of the property? Yes $\quad$ No if Yes, describe

Does the property generally conform to the neighborhood (functional utility, style, condition, use, construction, etc.)? Yes No If $^{\text {I }}$ No, describe

Provide adequate information for the lender/client to replicate the below cost figures and calculations.
Support for the opinion of site value (summary of comparable land sales or other methods for estimating site value)


Summary of Cost Approach


Freddie Mac Form 70B March 2005

| Total number of phases | Total number of units | Total number of units sold |
| :--- | :--- | :--- |


| Total number of units rented | Total number of units for sale | Data Source(s) |
| :--- | :--- | :--- |

F Was the project created by the conversion of existing building(s) into a PUD? Yes No If Yes, date of conversion
Does the project contain any multi-dwelling units? $\square$ Yes $\square$ No Data Source(s)

Are the units, common elements, and recreation facilities complete? $\quad$ Yes $\quad$ No If No , describe the status of completion.

This report form is designed to report an appraisal of a one-unit manufactured home; including a manufactured home in a planned unit development (PUD). A Manufactured home located in either a condominium or cooperative project requires the appraiser to inspect the project and complete the project information section of the Individual Condominium Unit Appraisal Report or the Individual Cooperative Interest Appraisal Report and attach it as an addendum to this report.

This appraisal report is subject to the following scope of work, intended use, intended user, definition of market value, statement of assumptions and limiting conditions, and certifications. Modifications, additions, or deletions to the intended use, intended user, definition of market value, or assumptions and limiting conditions are not permitted. The appraiser may expand the scope of work to include any additional research or analysis necessary based on the complexity of this appraisal assignment. Modifications or deletions to the certifications are also not permitted. However, additional certifications that do not constitute material alterations to this appraisal report, such as those required by law or those related to the appraiser's continuing education or membership in an appraisal organization, are permitted.

SCOPE OF WORK: The scope of work for this appraisal is defined by the complexity of this appraisal assignment and the reporting requirements of this appraisal report form, including the following definition of market value, statement of assumptions and limiting conditions, and certifications. The appraiser must, at a minimum: (1) perform a complete visual inspection of the interior and exterior areas of the subject property, (2) inspect the neighborhood, (3) inspect each of the comparable sales from at least the street, (4) research, verify, and analyze data from reliable public and/or private sources, and (5) report his or her analysis, opinions, and conclusions in this appraisal report.

INTENDED USE: The intended use of this appraisal report is for the lender/client to evaluate the property that is the subject of this appraisal for a mortgage finance transaction.

INTENDED USER: The intended user of this appraisal report is the lender/client.
DEFINITION OF MARKET VALUE: The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: (1) buyer and seller are typically motivated; (2) both parties are well informed or well advised, and each acting in what he or she considers his or her own best interest; (3) a reasonable time is allowed for exposure in the open market; (4) payment is made in terms of cash in U. S. dollars or in terms of financial arrangements comparable thereto; and (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions* granted by anyone associated with the sale.
*Adjustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs which are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparisons to financing terms offered by a third party institutional lender that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.

STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS: The appraiser's certification in this report is subject
to the following assumptions and limiting conditions:

1. The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it, except for information that he or she became aware of during the research involved in performing this appraisal. The appraiser assumes that the title is good and marketable and will not render any opinions about the title.
2. The appraiser has provided a sketch in this appraisal report to show approximate dimensions of the improvements. The sketch is included only to assist the reader in visualizing the property and understanding the appraiser's determination of its size.
3. The appraiser has examined the available flood maps that are provided by the Federal Emergency Management Agency (or other data sources) and has noted in this appraisal report whether any portion of the subject site is located in an identified Special Flood Hazard Area. Because the appraiser is not a surveyor, he or she makes no guarantees, express or implied, regarding this determination.
4. The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand, or as otherwise required by law.
5. The appraiser has noted in this appraisal report any adverse conditions (such as needed repairs, deterioration, the presence of hazardous wastes, toxic substances, etc.) observed during the inspection of the subject property or that he or she became aware of during the research involved in performing this appraisal. Unless otherwise stated in this appraisal report, the appraiser has no knowledge of any hidden or unapparent physical deficiencies or adverse conditions of the property (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) that would make the property less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied. The appraiser will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because the appraiser is not an expert in the field of environmental hazards, this appraisal report must not be considered as an environmental assessment of the property.
6. The appraiser has based his or her appraisal report and valuation conclusion for an appraisal that is subject to satisfactory completion, repairs, or alterations on the assumption that the completion, repairs, or alterations of the subject property will be performed in a professional manner.

APPRAISER'S CERTIFICATION: The Appraiser certifies and agrees that:

1. I have, at a minimum, developed and reported this appraisal in accordance with the scope of work requirements stated in this appraisal report.
2. I performed a complete visual inspection of the interior and exterior areas of the subject property. I reported the condition of the improvements in factual, specific terms. I identified and reported the physical deficiencies that could affect the livability, soundness, or structural integrity of the property.
3. I performed this appraisal in accordance with the requirements of the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
4. I developed my opinion of the market value of the real property that is the subject of this report based on the sales comparison approach to value. I also developed the cost approach to value as support for the sales comparison approach. I have adequate comparable market and cost data to develop reliable sales comparison and cost approaches for this appraisal assignment. I further certify that I considered the income approach to value but did not develop it, unless otherwise indicated in this report.
5. I researched, verified, analyzed, and reported on any current agreement for sale for the subject property, any offering for sale of the subject property in the twelve months prior to the effective date of this appraisal, and the prior sales of the subject property for a minimum of three years prior to the effective date of this appraisal, unless otherwise indicated in this report.
6. I researched, verified, analyzed, and reported on the prior sales of the comparable sales for a minimum of one year prior to the date of sale of the comparable sale, unless otherwise indicated in this report.
7. I selected and used comparable sales that are locationally, physically, and functionally the most similar to the subject property.
8. I have not used comparable sales that were the result of combining a land sale with the contract purchase price of a home that has been built or will be built on the land.
9. I have reported adjustments to the comparable sales that reflect the market's reaction to the differences between the subject property and the comparable sales.
10. I verified, from a disinterested source, all information in this report that was provided by parties who have a financial interest in the sale or financing of the subject property.
11. I have knowledge and experience in appraising this type of property in this market area.
12. I am aware of, and have access to, the necessary and appropriate public and private data sources, such as multiple listing services, tax assessment records, public land records and other such data sources for the area in which the property is located.
13. I obtained the information, estimates, and opinions furnished by other parties and expressed in this appraisal report from reliable sources that I believe to be true and correct.
14. I have taken into consideration the factors that have an impact on value with respect to the subject neighborhood, subject property, and the proximity of the subject property to adverse influences in the development of my opinion of market value. I have noted in this appraisal report any adverse conditions (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) observed during the inspection of the subject property or that I became aware of during the research involved in performing this appraisal. I have considered these adverse conditions in my analysis of the property value, and have reported on the effect of the conditions on the value and marketability of the subject property.
15. I have not knowingly withheld any significant information from this appraisal report and, to the best of my knowledge, all statements and information in this appraisal report are true and correct.
16. I stated in this appraisal report my own personal, unbiased, and professional analysis, opinions, and conclusions, which are subject only to the assumptions and limiting conditions in this appraisal report.
17. I have no present or prospective interest in the property that is the subject of this report, and I have no present or prospective personal interest or bias with respect to the participants in the transaction. I did not base, either partially or completely, my analysis and/or opinion of market value in this appraisal report on the race, color, religion, sex, age, marital status, handicap, familial status, or national origin of either the prospective owners or occupants of the subject property or of the present owners or occupants of the properties in the vicinity of the subject property or on any other basis prohibited by law.
18. My employment and/or compensation for performing this appraisal or any future or anticipated appraisals was not conditioned on any agreement or understanding, written or otherwise, that I would report (or present analysis supporting) a predetermined specific value, a predetermined minimum value, a range or direction in value, a value that favors the cause of any party, or the attainment of a specific result or occurrence of a specific subsequent event (such as approval of a pending mortgageloanapplication).
19. I personally prepared all conclusions and opinions about the real estate that were set forth in this appraisal report. If I relied on significant real property appraisal assistance from any individual or individuals in the performance of this appraisal or the preparation of this appraisal report, I have named such individual(s) and disclosed the specific tasks performed in this appraisal report. I certify that any individual so named is qualified to perform the tasks. I have not authorized anyone to make a change to any item in this appraisal report; therefore, any change made to this appraisal is unauthorized and I will take no responsibility for it.
20. I identified the lender/client in this appraisal report who is the individual, organization, or agent for the organization that ordered and will receive this appraisal report.
21. The lender/client may disclose or distribute this appraisal report to: the borrower; another lender at the request of the borrower; the mortgagee or its successors and assigns; mortgage insurers; government sponsored enterprises; other secondary market participants; data collection or reporting services; professional appraisal organizations; any department, agency, or instrumentality of the United States; and any state, the District of Columbia, or other jurisdictions; without having to obtain the appraiser's or supervisory appraiser's (if applicable) consent. Such consent must be obtained before this appraisal report may be disclosed or distributed to any other party (including, but not limited to, the public through advertising, public relations, news, sales, or other media).
22. I am aware that any disclosure or distribution of this appraisal report by me or the lender/client may be subject to certain laws and regulations. Further, I am also subject to the provisions of the Uniform Standards of Professional Appraisal Practice that pertain to disclosure or distribution by me.
23. The borrower, another lender at the request of the borrower, the mortgagee or its successors and assigns, mortgage insurers, government sponsored enterprises, and other secondary market participants may rely on this appraisal report as part of any mortgage finance transaction that involves any one or more of these parties.
24. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.
25. Any intentional or negligent misrepresentation(s) contained in this appraisal report may result in civil liability and/or criminal penalties including, but not limited to, fine or imprisonment or both under the provisions of Title 18, United States Code, Section 1001, et seq., or similar state laws.

SUPERVISORY APPRAISER'S CERTIFICATION: The Supervisory Appraiser certifies and agrees that:

1. I directly supervised the appraiser for this appraisal assignment, have read the appraisal report, and agree with the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
2. I accept full responsibility for the contents of this appraisal report including, but not limited to, the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
3. The appraiser identified in this appraisal report is either a sub-contractor or an employee of the supervisory appraiser (or the appraisal firm), is qualified to perform this appraisal, and is acceptable to perform this appraisal under the applicable state law.
4. This appraisal report complies with the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
5. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.

## APPRAISER

Signature
Name Robin T. Hannigan, SRA
Company Name
Company Address

Telephone Number
Email Address
Date of Signature and Report
Effective Date of Appraisal
State Certification \#
or State License \#
or Other
State
Expiration Date of Certification or License
ADDRESS OF PROPERTY APPRAISED

APPRAISED VALUE OF SUBJECT PROPERTY \$

## LENDER/CLIENT

Name
Company Name
Company Address
Email Address

## SUPERVISORY APPRAISER (ONLY IF REQUIRED)

## Signature

Name
Company Name
Company Address

Telephone Number
Email Address
Date of Signature
State Certification \#
or State License \#
State
Expiration Date of Certification or License

## SUBJECT PROPERTY

$\square$ Did not inspect subject property
Did inspect exterior of subject property from street Date of Inspection
$\square$ Did inspect interior and exterior of subject property Date of Inspection
COMPARABLE SALES
$\square$ Did not inspect exterior of comparable sales from street
$\square$ Did inspect exterior of comparable sales from street Date of Inspection

## GENERAL

FACTORY-PRODUCED housing comprises residential structures transported to building sites. There are three generally accepted categories of FACTORY-PRODUCED housing, each of which has distinguishable characteristics and meets a unique set of criteria. The three categories are MANUFACTURED, MODULAR and PANELIZED. Because all three types of FACTORY PRODUCED housing can resemble SITE-BUILT housing, the following guidelines should be considered when estimating replacement cost

MANUFACTURED, also called HUD Code homes are residential structures, single or multi-sec tional units, eight feet or greater in width and at least thirty-two feet in length, built on steel under carriages with necessary wheel assemblies to be transported to permanent or semi permanent sites. The wheel assembly can be removed when the unit is delivered to the home site, but the steel undercarriage may remain intact if it is a necessary structural component. In some instances, the presence of a steel undercarriage as a necessary structural component is the primary distinguishing factor between a manufactured home and a modular house.

MANUFACTURED homes built (in the U.S.) after June 15, 1976, must meet the Federal Manufactured Home Construction and Safety Standards as outlined in Title VI, Housing and Community Development Act of 1974. A HUD seal certifying compliance with these standards must be displayed on each unit. This section may also be used for manufactured and mobile homes built prior to the enactment of HUD standards

Cost Comparison: A Good-quality HUD Code MANUFACTURED home, with an equal number of plumbing fixtures, comparable interior finishes and exterior siding can be equivalent in cost to a Fair to Average quality SITE-BUILT house. Similarly, the Very Good-quality MANUFACTURED home can be comparable in cost to an Average quality SITE-BUILT house. The Excellent-quality MANUFACTURED home, with comparable exterior siding, drywall interior finish, custom interior amenities and features and an equal number of plumbing fixtures in their base costs, can be similar in cost to a Good to Very Good quality SITE-BUILT house

MODULAR housing will meet most local building codes and can be subject to standard regiona or state building codes for modular construction. Although a MODULAR house can be transported on a steel undercarriage, the undercarriage is generally not a permanent and necessary structural component, and is usually removed when the unit is placed on a foundation MODULAR housing can sometimes be priced from the following pages, but generally should be priced from the SITE-BUILT housing costs in Section 12 or 42

When a FACTORY-BUILT residence meets applicable local, state or regional building code requirements for modular construction and carries the HUD seal for manufactured homes, the unit is considered Manufactured and should be priced using this section. For lending purposes if the home is a dual tag home and carries the HUD seal the home is considered Manufactured by conforming guidelines. Factory built homes without a steel undercarriage that carry the HUD seal are still considered Manufactured homes as per conforming guidelines

PANELIZED or prefabricated houses consist of packaged, factory-built components and are siteassembled. All must conform to local and state or regional building codes for SITE-BUILT construction. Some types of "kit" homes are presented individually in Section 12. When applicable, SITE-BUILT residence costs from Section 12 should be used in the absence of Special Study" costs

## COST DEFINITIONS

Manufactured housing consists of single or multisectional units, eight feet or greater in width and at least thirty-two feet in length. After being transported on their own wheel chassis to the site, the units are set up as permanent or semipermanent residences and are connected to the necessary utilities. Utility costs are included in the park costs. If individual utility costs are needed, see Housing Park or Subdivision unit costs found in Section 66.

The residences are usually described in terms of width and length and are priced accordingly (i.e., $12^{\prime} \times 52^{\prime}, 24^{\prime} \times 64$, with a $10^{\prime} \times 40$ tag, etc.). In calculating actual square footage, do not include the hitch in the overall dimensions. Manufactured houses are categorized into six quality levels: Low, Fair, Average, Good, Very Good and Excellent. Photographs, basic descriptions and costs are provided for each of these quality levels.

Photographs are intended to illustrate the general characteristics of this type of housing at a given quality level (i.e., roof overhang, roof pitch, type and quality of materials used, etc.), and are not an indication of typical size, setting or specific manufacturer. Basic descriptions indicate general characteristics of manufactured housing and further describe what is included in the costs at a given quality level

Costs are retail prices, including normal charges for delivery and setup on post and piers within 100 miles of the dealer. Although some units are sold furnished, furnishings or appliances are not included in the base costs. Generally these structures are purchased directly from factory dealers/installers and can, at times, be influenced by inventory discounting, predatory pricing, etc., which are not contemplated here. Local fees, licenses and utility costs are not included and should be added when applicable. Appliances, drapes, skirting, patio roofs, carports and other optional items can be priced separately from Page 10. For basement and garage costs, use sitebuilt housing costs in Section 12

Two (double) sections, three (triple) sections or four (quads) sections are terms used to describe manufactured houses having two or more sections. Square foot costs for two sections, based on length and gross width, are provided on each cost page

Three (triple) sections are priced by using the two section costs for the two (double) main sections and a one (single) section cost for the third section. The third section is often considered a tagalong and requires a cost adjustment as provided on each cost page

Four (quads) sections are to be priced as a pair of two (double) sections with the tagalong percentage adjustment applied to the second two (double) section base cost.

A tagalong is an attached section, usually a full width, but not necessarily the full length of the main section(s). It is the same in both structure and quality as the unit to which it is attached. A tagalong is priced as a single section but requires a percentage cost adjustment as indicated on each of the cost pages.

Tip-outs and expandos are extensions of a main section and are not necessarily of the same quality as the main section to which they are attached. They are considered Optional Items and should be priced from Page 10

The Optional Items listed on Page 10 can be used to adjust items included in the basic housing costs or to add for those items which have not been included. Further patio costs can be found in Section 66

The continuous perimeter concrete wall costs do not include the excavation for a crawl space under the residence. See Section 42 or 51 for excavation costs. Screened porch costs presented in this section are based on the square footage of floor area and include one door

The higher-quality manufactured houses are similar in both design and appearance to modular manufactured houses and, to an extent, site-built residences as found in tract developments. Costs for these types of construction will overlap. The higher-quality manufactured houses will often exceed minimum manufactured home code requirements and will often meet, in part, local building codes.

NOTE: As a marketing tool, manufactured houses can meet applicable local, state or regional building code requirements for modular construction and also comply with manufactured home codes. An advantage of the dual tag is that this type of manufactured house can be placed in a manufactured housing park or in a site-built subdivision. When the dual tag requirements are met, the steel undercarriage is not a necessary structural component and is often removed when the unit is placed on a permanent foundation. For purposes of estimating replacement cost, the dualtag manufactured house can be considered modular and priced from the appropriate site-built cost section.


## LOW-COST HOMES

The Low-cost manufactured home is generally a structure built to minimum standards. It does not include the cheapest construction available prior to enactment of federal standards. The floor plan is usually simple, with little or no attention given to detail.

Exterior finish is prefinished aluminum wall and roof panels. Walls are typically $3^{\prime \prime}$ to 4 " thick, $7^{\prime} 6$ " to 8 ' high, with minimum fenestration, including low-cost windows and doors.

Interiors usually are prefinished plywood or printed seamed hardboard with floors of low-quality carpet and resilient cover. Where complete drywall interiors are encountered, add $\$ .95$ to the base housing cost. Cabinetry and hardware are standard inexpensive units.

Heating and ducting are normally minimal, with insulated straight-line forced-air ducts. Add \$1.70 to $\$ 2.90$ per square foot for air conditioning.
Plumbing includes five inexpensive white fixtures and a rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, water heater and kitchen sink. The rough-in will typically consist of the water supply and waste for a laundry service. All fixtures are usually located along one side of the house (wet wall) with minimal runs. Adjust for more or less plumbing at $\$ 475$ per fixture. Appliances are not included and should be added from Page 10.

## FAIR HOMES

The Fair manufactured home is designed to meet standard manufactured home code requirements. The overall quality of materials and workmanship while average, will be relatively plain in finish and appearance. The home will have an exterior of prefinished aluminum or hardboard sheet siding and limited standard fenestration.

Roofs are typically low pitched, arched or sloped, with minimum overhang on the front elevation.
Interiors are prefinished plywood or printed seamed hardboard with standard-grade cabinetry and hardware. Where complete drywall interiors are encountered, add $\$ .98$ to the base housing cost. Carpet and resilient floor coverings are moderate to average grades.

Heating and ducting are normally minimal, with insulated straight-line forced-air ducts. Add $\$ 1.65$ to $\$ 2.90$ per square foot for air conditioning

Plumbing includes six fixtures and a rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, water heater and kitchen sink. The rough-in will typically consist of the water supply and waste for a laundry service. All fixtures are usually located along one side of the house (wet wall) with minimal runs. Adjust for more or less plumbing at $\$ 550$ per fixture. For whirlpool tub, use the Very Good-quality Lump-sum plumbing adjustment, Page 9. Appliances are not included and should be added from Page 10

HOUSING COSTS (per sq. ft. of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| FEET | $\mathbf{8}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 0}$ | $\$ 57.60$ | $\$ 48.69$ | $\$ 45.68$ | $\$ 43.23$ | $\$ 41.17$ | $\$ 59.60$ | $\$ 55.68$ | $\$ 52.56$ | $\$ 50.03$ | $\$ 47.86$ |
| $\mathbf{2 4}$ | 56.00 | 46.94 | 43.90 | 41.43 | 39.36 | 56.16 | 52.01 | 48.73 | 46.07 | 43.84 |
| $\mathbf{2 8}$ | 54.70 | 45.52 | 42.45 | 39.96 | 37.89 | 53.42 | 49.09 | 45.71 | 42.98 | 40.70 |
| $\mathbf{3 2}$ | 53.58 | 44.32 | 41.23 | 38.74 | 36.66 | 51.15 | 46.71 | 43.25 | 40.47 | 38.16 |
| $\mathbf{3 6}$ | 52.62 | 43.29 | 40.18 | 37.69 | 35.61 | 49.22 | 44.69 | 41.18 | 38.37 | 36.05 |
| $\mathbf{4 0}$ | 51.77 | 42.39 | 39.27 | 36.77 | 34.70 | 47.56 | 42.96 | 39.41 | 36.60 | 34.26 |
| $\mathbf{4 4}$ | 51.02 | 41.59 | 38.47 | 35.96 | 33.89 | 46.12 | 41.46 | 37.89 | 35.05 | 32.73 |
| $\mathbf{4 8}$ | 50.35 | 40.87 | 37.74 | 35.24 | 33.17 | 44.82 | 40.13 | 36.54 | 33.70 | 31.38 |
| $\mathbf{5 2}$ | 49.73 | 40.22 | 37.09 | 34.58 | 32.53 | 43.68 | 38.94 | 35.35 | 32.52 | 30.19 |
| $\mathbf{5 6}$ | 49.16 | 39.63 | 36.50 | 33.99 | 31.94 | 42.64 | 37.88 | 34.27 | 31.44 | 29.13 |
| $\mathbf{6 0}$ | 48.64 | 39.08 | 35.95 | 33.45 | 31.39 | 41.68 | 36.92 | 33.31 | 30.48 | 28.18 |
| $\mathbf{6 4}$ | 48.16 | 38.59 | 35.45 | 32.95 | 30.90 | 40.82 | 36.04 | 32.43 | 29.60 | 27.32 |
| $\mathbf{6 8}$ | 47.71 | 38.12 | 34.98 | 32.48 | 30.44 | 40.02 | 35.23 | 31.63 | 28.81 | 26.53 |
| $\mathbf{7 2}$ | 47.30 | 37.69 | 34.55 | 32.06 | 30.01 | 39.28 | 34.49 | 30.88 | 28.07 | 25.81 |
| $\mathbf{7 6}$ | 46.91 | 37.28 | 34.14 | 31.66 | 29.61 | 38.60 | 33.79 | 30.19 | 27.40 | 25.15 |
| $\mathbf{8 0}$ | 46.55 | 36.09 | 33.77 | 31.27 | 29.24 | 37.96 | 33.15 | 29.56 | 26.78 | 24.53 |

For other than hardboard sheet siding, adjust the costs above as follows: aluminum, - 3\%; lap siding, $+3 \%$; cement fiber, lap, $+4 \%$, sheet, $2 \%$.

THREE-SECTION: Deduct 20\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

## AVERAGE HOMES

The Average manufactured home will have an exterior of prefinished aluminum, hardboard or plywood sheet, vinyl or hardboard lap siding. Use percentage adjustment for variations from the base.
Walls are $4 "$ thick, $8^{\prime}$ high, with adequate fenestration and an attractive entrance. Often the exteriors will have a combination of two textures or two colors.
Interiors are medium-quality prefinished seamed plywood or hardboard. Where complete drywall interiors are encountered, add $\$ 1.04$ to the base housing cost; for taped and textured ceilings only, add $\$ .21$. Resilient flooring, as well as the carpeting, is of conventional residential quality. Cabinetry and hardware are average-quality with self-closing cabinet doors.

Heating is forced air through insulated ducting with provision for air conditioning. Add $\$ 1.65$ to $\$ 2.90$ per square foot for air conditioning.

Plumbing includes seven average-quality fixtures, white or colored, and a plumbing rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray and water heater. The rough-in will typically consist of the water supply and waste for a laundry service. Most fixtures are located along one side of the house (wet wall). Adjust for more or less plumbing at $\$ 620$ per fixture. For whirlpool tub, use the Very Good-quality Lump-sum plumbing adjustment, Page 9. For wet bars, see Page 10. Appliances are not included and should be added from Page 10.

## GOOD HOMES

The Good manufactured home will have an exterior finish of aluminum, vinyl, plywood or hardboard, sometimes a combination of two. The finish is often in various textures such as horizontal siding and board and batten, etc. The base costs are for hardboard siding.
Walls are $4^{\prime \prime}$ thick and 8 ' high, with ample fenestration consisting of numerous residential-type aluminum or vinyl windows, a sliding door and ornamentation around windows and entry.

Interior is of good-quality prefinished seamed plywood, cabinets and hardware are of good quality, and there are many extra interior appointments. Where complete taped and textured drywall interiors are encountered, add $\$ 1.10$ to the base housing cost; for taped and textured ceilings only, add $\$ .27$. Resilient flooring and carpeting are of good quality.
Heating has insulated perimeter ducts with cold-air returns prepared for air conditioning. Add $\$ 1.60$ to $\$ 2.65$ per square foot for air conditioning.

Plumbing includes seven good-quality fixtures, white or colored, and a plumbing rough-in in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray and water heater. The rough-in will typically consist of the water supply and waste for a laundry service. Adjust for more or less plumbing at $\$ 790$ per fixture. For whirlpool tub, use the Very Good-quality Lump-sum plumbing adjustment, Page 9. For wet bars, see Page 10. Appliances are not included and should be added from Page 10.

HOUSING COSTS (per sq. ft. of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| FEET | $\mathbf{8}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 0}$ | $\$ 67.15$ | $\$ 56.69$ | $\$ 51.31$ | $\$ 48.53$ | $\$ 46.19$ | $\$ 69.60$ | $\$ 64.81$ | $\$ 60.98$ | $\$ 55.84$ | $\$ 53.31$ |
| $\mathbf{2 4}$ | 65.01 | 54.48 | 49.41 | 46.61 | 44.28 | 65.50 | 60.46 | 56.48 | 51.65 | 49.04 |
| $\mathbf{2 8}$ | 63.26 | 52.68 | 47.85 | 45.06 | 42.72 | 62.23 | 57.02 | 52.94 | 48.34 | 45.69 |
| $\mathbf{3 2}$ | 61.79 | 51.17 | 46.55 | 43.75 | 41.42 | 59.52 | 54.19 | 50.05 | 45.67 | 42.98 |
| $\mathbf{3 6}$ | 60.51 | 49.88 | 45.42 | 42.63 | 40.30 | 57.23 | 51.83 | 47.64 | 43.42 | 40.72 |
| $\mathbf{4 0}$ | 59.39 | 48.74 | 44.45 | 41.65 | 39.33 | 55.25 | 49.79 | 45.57 | 41.50 | 38.79 |
| $\mathbf{4 4}$ | 58.40 | 47.73 | 43.58 | 40.78 | 38.47 | 53.53 | 48.01 | 43.78 | 39.84 | 37.13 |
| $\mathbf{4 8}$ | 57.50 | 46.83 | 42.80 | 40.01 | 37.70 | 52.00 | 46.45 | 42.21 | 38.38 | 35.69 |
| $\mathbf{5 2}$ | 56.70 | 46.03 | 42.09 | 39.31 | 37.00 | 50.64 | 45.06 | 40.82 | 37.09 | 34.40 |
| $\mathbf{5 6}$ | 55.96 | 45.29 | 41.46 | 38.67 | 36.37 | 49.41 | 43.80 | 39.56 | 35.93 | 33.24 |
| $\mathbf{6 0}$ | 55.27 | 44.62 | 40.87 | 38.10 | 35.79 | 48.28 | 42.68 | 38.44 | 34.88 | 32.22 |
| $\mathbf{6 4}$ | 54.65 | 44.00 | 40.32 | 37.55 | 35.26 | 47.25 | 41.64 | 37.41 | 33.93 | 31.27 |
| $\mathbf{6 8}$ | 54.06 | 43.42 | 39.82 | 37.06 | 34.76 | 46.31 | 40.69 | 36.47 | 33.06 | 30.42 |
| $\mathbf{7 2}$ | 53.52 | 42.87 | 39.35 | 36.59 | 34.30 | 45.43 | 39.82 | 35.60 | 32.26 | 29.62 |
| $\mathbf{7 6}$ | 53.01 | 42.37 | 38.91 | 36.16 | 33.88 | 44.63 | 39.01 | 34.80 | 31.52 | 28.91 |
| $\mathbf{8 0}$ | 52.53 | 41.90 | 38.50 | 35.75 | 33.48 | 43.87 | 38.26 | 34.06 | 30.83 | 28.23 |

For other than hardboard sheet wall finish, adjust the costs above as follows: aluminum, - 3\%; lap siding, $+4 \%$; cement fiber, lap, $+5 \%$, sheet, $+3 \%$.

THREE-SECTION: Deduct 18\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

HOUSING COSTS (per sq. ft. of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FEET | $\mathbf{8}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 8}$ | 76.76 | 64.06 | 59.79 | 56.35 | 53.45 | 76.51 | 69.69 | 64.41 | 60.16 | 56.63 |
| $\mathbf{3 2}$ | 75.00 | 62.34 | 58.11 | 54.69 | 51.83 | 73.53 | 66.59 | 61.24 | 56.95 | 53.41 |
| $\mathbf{3 6}$ | 73.49 | 60.88 | 56.67 | 53.26 | 50.42 | 71.02 | 63.97 | 58.57 | 54.26 | 50.71 |
| $\mathbf{4 0}$ | 72.15 | 59.59 | 55.40 | 52.02 | 49.21 | 68.83 | 61.72 | 56.29 | 51.96 | 48.42 |
| $\mathbf{4 4}$ | 70.98 | 58.44 | 54.28 | 50.93 | 48.14 | 66.92 | 59.75 | 54.30 | 49.97 | 46.44 |
| $\mathbf{4 8}$ | 69.91 | 57.43 | 53.28 | 49.94 | 47.18 | 65.20 | 58.01 | 52.53 | 48.22 | 44.69 |
| $\mathbf{5 2}$ | 68.94 | 56.51 | 52.37 | 49.05 | 46.31 | 63.68 | 56.44 | 50.97 | 46.66 | 43.15 |
| $\mathbf{5 6}$ | 68.06 | 55.66 | 51.55 | 48.25 | 45.52 | 62.29 | 55.04 | 49.57 | 45.27 | 41.77 |
| $\mathbf{6 0}$ | 67.26 | 54.89 | 50.80 | 47.51 | 44.80 | 61.04 | 53.75 | 48.29 | 44.01 | 40.53 |
| $\mathbf{6 4}$ | 66.51 | 54.17 | 50.10 | 46.83 | 44.14 | 59.88 | 52.59 | 47.12 | 42.85 | 39.39 |
| $\mathbf{6 8}$ | 65.81 | 53.51 | 49.45 | 46.20 | 43.51 | 58.81 | 51.52 | 46.05 | 41.80 | 38.36 |
| $\mathbf{7 2}$ | 65.16 | 52.90 | 48.85 | 45.61 | 42.95 | 57.82 | 50.52 | 45.07 | 40.83 | 37.41 |
| $\mathbf{7 6}$ | 64.55 | 52.32 | 48.29 | 45.07 | 42.41 | 56.90 | 49.60 | 44.16 | 39.94 | 36.53 |
| $\mathbf{8 0}$ | 63.98 | 51.77 | 47.76 | 44.55 | 41.91 | 56.05 | 48.74 | 43.31 | 39.10 | 35.72 |

For other than hardboard sheet exterior wall finish, adjust the costs above as follows: lap siding, $+4 \%$; cement fiber, lap, $+5 \%$, sheet, $+3 \%$; aluminum, $-3 \%$; plywood with batts, $+2 \%$; log sididng, $+5 \%$.

THREE-SECTION: Deduct $16 \%$ from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

## VERY GOOD HOMES

The Very Good manufactured home is typically found in the high-quality manufactured housing parks. It will exceed minimum requirements of manufactured home codes, with special attention given to separate foyer entries and family living areas.
Exteriors are usually finished to resemble site-built housing with aluminum, vinyl or other siding in various patterns and textures resembling wood. There is usually ornamentation of plastic, mitation brick or stone, etc. The base costs are for hardboard siding or plywood with batts. Use percentage adjustments for variations from the base
Walls are 4 " to $6 "$ thick, $8^{\prime}$ high, with good fenestration consisting of residential-type windows sliding doors and ornamental entrances.

Interiors will have vinyl-covered seamed drywall, simulated brick, stone and natural hardwood veneers and drywall taped and textured ceilings. Where complete drywall interiors are encountered add $\$ .36$ to the base housing cost. Cabinets, vanities and hardware are of good-quality with counters of the best plastics. Floor coverings will be of sheet vinyl, some parquet and good mediumweight carpeting. Where practical, ceiling treatment will include exposed beams, dropped, sloping or cathedral ceilings.

Heating is through floor and ceiling ducts and is ready to adapt for air conditioning. Add $\$ 1.55$ to $\$ 2.65$ per square foot for air conditioning.
Plumbing includes eight Good-quality fixtures and a plumbing rough-in in the base cost. They include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray, water heater and whirlpool tub. Adjust for more or less plumbing a $\$ 820$ per fixture. For wet bars, see Page 10. Appliances are not included and should be added from Page 10.

HOUSING COSTS (per square foot of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FEET | $\mathbf{1 0}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 8}$ | $\$ 80.44$ | $\$ 74.11$ | $\$ 69.15$ | $\$ 65.12$ | $\$ 61.76$ | $\$ 89.11$ | $\$ 80.87$ | $\$ 74.48$ | $\$ 69.39$ | $\$ 65.17$ |
| $\mathbf{3 2}$ | 78.31 | 72.05 | 67.14 | 63.16 | 59.86 | 85.67 | 77.29 | 70.85 | 65.72 | 61.49 |
| $\mathbf{3 6}$ | 76.47 | 70.27 | 65.42 | 61.48 | 58.21 | 82.73 | 74.27 | 67.78 | 62.64 | 58.42 |
| $\mathbf{4 0}$ | 74.86 | 68.72 | 63.91 | 60.01 | 56.78 | 80.21 | 71.67 | 65.15 | 60.01 | 55.80 |
| $\mathbf{4 4}$ | 73.45 | 67.34 | 62.57 | 58.72 | 55.52 | 77.98 | 69.39 | 62.87 | 57.73 | 53.53 |
| $\mathbf{4 8}$ | 72.16 | 66.11 | 61.38 | 57.57 | 54.40 | 76.01 | 67.38 | 60.84 | 55.71 | 51.55 |
| $\mathbf{5 2}$ | 71.02 | 65.00 | 60.30 | 56.52 | 53.38 | 74.23 | 65.58 | 59.04 | 53.92 | 49.78 |
| $\mathbf{5 6}$ | 69.96 | 63.98 | 59.32 | 55.56 | 52.46 | 72.62 | 63.95 | 57.43 | 52.33 | 48.20 |
| $\mathbf{6 0}$ | 68.99 | 63.05 | 58.42 | 54.70 | 51.61 | 71.16 | 62.48 | 55.96 | 50.87 | 46.77 |
| $\mathbf{6 4}$ | 68.10 | 62.19 | 57.60 | 53.89 | 50.83 | 69.82 | 61.13 | 54.62 | 49.56 | 45.47 |
| $\mathbf{6 8}$ | 67.28 | 61.40 | 56.83 | 53.15 | 50.10 | 68.58 | 59.89 | 53.39 | 48.34 | 44.30 |
| $\mathbf{7 2}$ | 66.51 | 60.66 | 56.11 | 52.46 | 49.44 | 67.43 | 58.73 | 52.25 | 47.24 | 43.20 |
| $\mathbf{7 6}$ | 65.78 | 59.97 | 55.45 | 51.81 | 48.81 | 66.37 | 57.67 | 51.20 | 46.21 | 42.20 |
| $\mathbf{8 0}$ | 65.11 | 59.32 | 54.81 | 51.22 | 48.22 | 65.37 | 56.68 | 50.23 | 45.25 | 41.27 |

For other than plywood w/batts or hardboard sheet exterior cover, adjust the costs above as follows: lap siding, $+4 \%$; cement fiber lap, $+5 \%$; aluminum, $-4 \%$; stucco, $+7 \%$; log siding, $+6 \%$; wood stresskin sandwich panels, $+6 \%$.

THREE-SECTION: Deduct 14\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10

## EXCELLENT HOMES

The Excellent manufactured home is similar in both design and appearance to modular constructed houses and to an extent, to site-built residences as typically found in tract development. Costs for these types of construction will overlap. Manufactured homes at this quality level will exceed minimum requirements of manufactured home codes and will often meet, in part, local building codes.

Walls are 4" to 6" thick with a base finish of plywood with batts or hardboard sheets. Use percentage adjustments for other types of exterior finish

The perimeter foundation is continuous reinforced concrete with foundation wall or steel piers under section mating walls. The frame is a heavy steel beam undercarriage with outriggers and cross members, which are necessary structural components. The roof is an engineered truss system with a 3 in 12 to 4 in 12 slope and a minimum 16 " overhang

Interiors have good tape and texture finished drywall with some paper or vinyl wall covering or natural wood veneer paneling. Good natural wood veneer cabinets and vanities with laminated plastic or simulated marble countertops. Walk-in closets or large sliding door wardrobes.

Heating is through floor and ceiling ducts and is ready to adapt for air conditioning. Add $\$ 1.50$ to $\$ 2.60$ per square foot for air conditioning.

Plumbing includes nine fixtures and a plumbing rough-in in the base cost. They include any of the following: deluxe whirlpool tub and lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray, water heater and wet bar. Adjust for more or less plumbing at $\$ 1,030$ per fixture. Appliances are not included and should be added from Page 10.

HOUSING COSTS (per square foot of floor area)

| LENGTH | ONE-SECTION |  |  |  |  | TWO-SECTION |  |  |  |  |
| :---: | :---: | :---: | ---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: |
| FEET | $\mathbf{1 0}$ | $\mathbf{1 2}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 2}$ | $\mathbf{3 6}$ |
| $\mathbf{2 8}$ | $\$ 93.28$ | $\$ 86.20$ | $\$ 80.65$ | $\$ 76.11$ | $\$ 72.32$ | $\$ 103.70$ | $\$ 94.09$ | $\$ 86.64$ | $\$ 80.68$ | $\$ 75.76$ |
| $\mathbf{3 2}$ | 90.98 | 83.99 | 78.49 | 74.02 | 70.30 | 100.07 | 90.30 | 82.78 | 76.77 | 71.84 |
| $\mathbf{3 6}$ | 89.00 | 82.08 | 76.65 | 72.23 | 68.55 | 96.97 | 87.08 | 79.50 | 73.48 | 68.55 |
| $\mathbf{4 0}$ | 87.27 | 80.41 | 75.04 | 70.66 | 67.03 | 94.28 | 84.30 | 76.69 | 70.66 | 65.74 |
| $\mathbf{4 4}$ | 85.73 | 78.93 | 73.61 | 69.28 | 65.68 | 91.90 | 81.86 | 74.23 | 68.20 | 63.29 |
| $\mathbf{4 8}$ | 84.35 | 77.60 | 72.34 | 68.04 | 64.47 | 89.79 | 79.69 | 72.05 | 66.03 | 61.13 |
| $\mathbf{5 2}$ | 83.10 | 76.41 | 71.18 | 66.92 | 63.39 | 87.89 | 77.75 | 70.11 | 64.09 | 59.22 |
| $\mathbf{5 6}$ | 81.95 | 75.31 | 70.12 | 65.89 | 62.40 | 86.16 | 76.00 | 68.35 | 62.35 | 57.49 |
| $\mathbf{6 0}$ | 80.90 | 74.31 | 69.15 | 64.96 | 61.49 | 84.59 | 74.40 | 66.76 | 60.77 | 55.93 |
| $\mathbf{6 4}$ | 79.93 | 73.37 | 68.25 | 64.09 | 60.64 | 83.14 | 72.94 | 65.30 | 59.32 | 54.51 |
| $\mathbf{6 8}$ | 79.03 | 72.52 | 67.43 | 63.29 | 59.87 | 81.81 | 71.59 | 63.95 | 58.01 | 53.21 |
| $\mathbf{7 2}$ | 78.19 | 71.71 | 66.66 | 62.54 | 59.14 | 80.57 | 70.34 | 62.72 | 56.78 | 52.02 |
| $\mathbf{7 6}$ | 77.41 | 70.95 | 65.93 | 61.84 | 58.47 | 79.41 | 69.18 | 61.56 | 55.66 | 50.90 |
| $\mathbf{8 0}$ | 76.67 | 70.25 | 65.26 | 61.19 | 57.83 | 78.33 | 68.09 | 60.49 | 54.60 | 49.88 |

For other than plywood w/batts or hardboard sheet exterior cover, adjust the costs above as follows: lap siding, + 3\%; cement fiber lap, + 4\%; stucco, + 6\%; log siding, +5\%; wood stresskin sandwich panels, $+5 \%$.

THREE-SECTION: Deduct 12\% from the one section costs for a tagalong section; use full cost for the two section portion. For expandos and tip-outs, see Optional Items, Page 10.

## OPTIONAL ITEMS <br> (IN PLACE)

 site improvements, see Section 66.

Expandos or Tip-outs: Additional living space which slides out or is
tipped out from the main living area. Expandos are generally $8^{\prime}$ wide
and $10^{\prime}$ to $14^{\prime}$ long. Tip-outs are generally $4^{\prime} \times 10^{\prime}$ or $12^{\prime}$ in size. Per square foot

## Foundations:

Continuous concrete foundation wall pe
linear foot, 18" . . . . . . . . . . . . . . .

For each 6" variance from base height, + . . . . . . . . . .
per linear foot . . . . . . . . . . . . . . . . . . . . . .
For concrete block foundation, deduct per linear foot
For treated wood foundation, deduct per linear foot
Piers, precast, each
formed in place
steel/concrete buttress
Anchors, per assembly
Hitches, each
Skirting, per linear foot, 28 " height
Metal/vinyl vertical . . . . . . . . . . . . . . . . . . . .
horizontal lap ...................... 6.
simulated stone or brick panels . . .
Plywood/hardboard
horizontal lap
3.55 - 4.65

Brick/stone veneer
Concrete block
Precast concrete panels

## Entry steps:

Metal, per step . . . . . . . . . . . . . . . . . . . . . . . \$ 72.50 - \$ 146.50 add for landing . . . . . . . . . . . . . . . . . . . . . 320.00 - 405.00
Molded fiberglass, per step . . . . . . . . . . . . . 95.75 - 203.00 add for landing . . . . . . . . . . . . . . . . . . . . . 330.00 - 445.00
Wood, per step
Precast concrete, plain finish, two steps three steps.
Add 20\% for exposed aggregate finish.
Sprinkler system, per sq. ft.of sprinklered area $\$ 2.15$ - $\$ 3.55$
Gutters and downspouts, per linear foot:

| Aluminum | \$ 5.00 - | \$6.55 |
| :---: | :---: | :---: |
| Galvanized steel | 4.10 - | 5.65 |
| Fiberglass or vinyl | 4.20 - | 5.95 |
| Awnings: |  |  |
| Metal, fixed, linear foot | \$23.75- | \$56.50 |
| Canvas, fixed, linear foot | 13.75 - | 45.00 |
| Roll-up, linear foot | 22.00 - | 56.25 |


| Windows, each: |  |  |
| :---: | :---: | :---: |
| Bay | \$535.00 - | \$ 960.00 |
| Bow | 790.00 - | 1,430.00 |
| Garden | 405.00 - | 725.00 |
| Storm windows, per square foot | 3.95 - | 7.65 |
| Storm doors, each | 180.00- | 395.00 |
| Sliding glass doors, each: |  |  |
| Single glazed . . . . . . . . . . . . . . . . . . . \$ | \$ 555.00 - | \$ 705.00 |
| Double glazed | 895.00 - | 1,285.00 |
| Triple glazed | 1,025.00 - | 1,420.00 |
| Window-type refrig. coolers, each: |  |  |
| 6,000 BTU . . . . . . . . . . . . . . . . . . . . \$ | \$ 760.00 - | \$ 895.00 |
| 12,000 BTU | 1,175.00 - | 1,400.00 |
| 18,000 BTU | 1,425.00 - | 1,725.00 |
| For reverse cycle (heat pump) window or wall units, add $25 \%$ to $50 \%$. |  |  |
| Evaporative coolers, window type, each: |  |  |
| 3,000 CFM | \$ 700.00 - | \$ 950.00 |
| 4,500 CFM | 925.00 - | 1,175.00 |
| 5,500 CFM | 1,100.00 - | 1,375.00 |
| For roof installation with duct, add \$475.00. |  |  |
| Drapes, per square foot of living area ..... \$ | \$ . 65 - | \$ 2.15 |
| Window blinds, metal or fabric, per square foot of living area | . 85 - | 1.90 |
| Indoor-outdoor carpeting, per square foot . . | 1.50 - | 3.30 |
| Mirrored wardrobe doors, per pair | 280.00 - | 525.00 |
| Built-in hutch, each | 505.00 - | 1,620.00 |
| Wet bar, including cabinetry, and plumbing, each | 1,075.00 - | 2,250.00 |
| Fireplaces or wood-burning stoves: |  |  |
| Prefabricated | 1,150.00 - | 1,975.00 |
| Prefabricated with imitation stone or brick hearth | 1,500.00 - | 2,775.00 |

## APPLIANCES:

Range and oven ............................. . \$ 630.00-\$1,450.00
Microwave combination . . . . . . . . . . . . . . . . . . 1,600.00-2,425.00
Range hood and fan . . . . . . . . . . . . . . . . . . . . . . . . . . 140.00 - $\quad$ 2,425.00

Oven .............. . . . . . . . . . . . . . . . . . . . . . . . . 580.00 - 1.655.00

Microwave combination .................... . . 870.00-1,705.00
Microwave oven . . . . . . . . . . . . . . . . . . . . . . . . . . . 315.00 - 980.00
Dishwasher ................................... . 515.00 - 1,025.00
175.00 - 390.00
115.00 - 285.00 540.00 - 825.00 515.00 - 2,260.00 495.00 - 1,630.00 $505.00-1,050.00$ 370.00 - 810.00 955.00 - 1,760.00 705.00 - 1,390.00 125.00 - 425.00 465.00 - 750.00

Decorative fireplace, electric . . . . . . . . . . . . . . . . 465.00 - 750.00
CARPORT COSTS (Includes posts and roof only, per square foot)

| Fiberglass | \$5.05 - | \$ 10.30 |
| :---: | :---: | :---: |
| Aluminum | 6.00 - | 11.80 |
| Steel | 6.85 - | 13.80 |

STORAGE SHED BUILDING COSTS
(Cost per square foot, excluding perm. foundation)

| Steel | \$ 7.70 - | \$13.30 |
| :---: | :---: | :---: |
| Aluminum | 11.15 - | 20.10 |
| Wood | 14.70 - | 29.40 |

GARAGES AND BASEMENTS: Use site built housing costs, see Section 12.

| Sq. Ft. Area | Concrete Slab | Wood Deck w/Steps | Add For Metal Roof | Add For Wood Roof | Add For Screening |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 5}$ | $\$ 8.10-\$ 10.45$ | $\$ 27.20-\$ 42.30$ | $\$ 7.50-\$ 11.55$ | $\$ 9.95-$ | $\$ 16.50$ | $\$ 13.65-\$ 25.85$ |  |
| $\mathbf{5 0}$ | $6.45-$ | 8.30 | $20.60-32.25$ | $6.95-10.70$ | $9.25-$ | 15.15 | $9.90-$ |
| $\mathbf{1 0 0}$ | $5.15-$ | 6.65 | $15.50-24.55$ | $6.45-$ | 9.85 | $8.55-$ | 13.95 |
| $\mathbf{2 0 0}$ | $4.15-$ | 5.30 | $11.65-18.60$ | $5.95-$ | 9.20 | $7.90-$ | 12.35 |



Summary Appraisal Report
Manufactured Home Appraisal Report
File \#

| GENERAL DESCRIPTION |  |  |
| :---: | :---: | :---: |
| \# of Units | One | Additions |
| \# of Stories | 1 | $2 \square$ Other |
| Design (Style) |  |  |
| \# of Sections | 1 | $2 \square 3$ |
| Other |  |  |
| Type $\square$ Det. | Att. | s-Det./EndUnit |
| Existing | Proposed | Under Const. |
| Year Built | Effective Age (Yrs) |  |
| Attic |  | None |
| Drop Stair |  | Stairs |
| Floor |  | Scuttle |
| Finished |  | Heated |



| NTTERIOR | materials/condition |
| :---: | :---: |
| Floors |  |
| Walls |  |
| Trim/Finish |  |
| Bath Floor |  |
| Bath Wainscot |  |
| Car Storage | None |
| Driveway \# of Cars |  |
| Driveway Surface |  |
| Garage | \# of Cars |
| Carport | \# of Cars |
| Attached | Detached |
| Built-in |  |

Appliances $\square$ Refrigerator $\square$ Range/Oven $\square$ Dishwasher $\square$ Disposal $\square$ Microwave $\square$ Washer/Dryer $\square$ Other (describe)
Finished area above grade contains: Rooms Bedrooms Bath(s) Square Feet of Gross Living Area Above Grade
Describe any additions or modifications (decks, rooms, remodeling, etc.)

| Installer's Name | Date Installed |  | Model year |
| :--- | :--- | :--- | :--- |
| Is the manufactured home attached to a permanent foundation system? | $\square$ Yes | $\square$ No If No, describe foundation system and the manner of attachment. |  |

Have the towing hitch, wheels, and axles been removed? $\square$ Yes $\square$ No if No, explain.

Is the manufactured home permanently connected to a septic tank or sewage system and other utilities? Yes $\quad$ No If No, explain

| Does the dwelling have sufficient gross living area and room dimensions to be acceptable to the market? Yes No If No, explain |
| :--- | :--- | :--- | :--- |

Additional features (special energy efficient items, non-realty items, etc.)

The appraiser must rate the quality of construction for the subject unit based on objective criteria (such as N.A.D.A. Manufactured Housing Appraisal Guide®, Marshall \& Switt Residential Cost Handbook@, or other published cost service). The appraiser must also report the source used for this quality of construction rating determination. Quality $\square$ Poor $\square$ Fair $\square$ Average $\square$ Good $\square$ Excellent Identify source of quality rating Describe the condition of the property (including needed repairs, deterioration, renovations, remodeling, etc.).

Are there any physical deficiencies or adverse conditions that affect the livability, soundness, or structural integrity of the property? Yes $\quad$ No if Yes, describe

Does the property generally conform to the neighborhood (functional utility, style, condition, use, construction, etc.)? Yes No If $^{\text {I }}$ No, describe

Provide adequate information for the lender/client to replicate the below cost figures and calculations.
Support for the opinion of site value (summary of comparable land sales or other methods for estimating site value)


Summary of Cost Approach


Freddie Mac Form 70B March 2005

| Total number of phases | Total number of units | Total number of units sold |
| :--- | :--- | :--- |


| Total number of units rented | Total number of units for sale | Data Source(s) |
| :--- | :--- | :--- |

F Was the project created by the conversion of existing building(s) into a PUD? Yes No If Yes, date of conversion
Does the project contain any multi-dwelling units? $\square$ Yes $\square$ No Data Source(s)

Are the units, common elements, and recreation facilities complete? $\quad$ Yes $\quad$ No If No , describe the status of completion.

This report form is designed to report an appraisal of a one-unit manufactured home; including a manufactured home in a planned unit development (PUD). A Manufactured home located in either a condominium or cooperative project requires the appraiser to inspect the project and complete the project information section of the Individual Condominium Unit Appraisal Report or the Individual Cooperative Interest Appraisal Report and attach it as an addendum to this report.

This appraisal report is subject to the following scope of work, intended use, intended user, definition of market value, statement of assumptions and limiting conditions, and certifications. Modifications, additions, or deletions to the intended use, intended user, definition of market value, or assumptions and limiting conditions are not permitted. The appraiser may expand the scope of work to include any additional research or analysis necessary based on the complexity of this appraisal assignment. Modifications or deletions to the certifications are also not permitted. However, additional certifications that do not constitute material alterations to this appraisal report, such as those required by law or those related to the appraiser's continuing education or membership in an appraisal organization, are permitted.

SCOPE OF WORK: The scope of work for this appraisal is defined by the complexity of this appraisal assignment and the reporting requirements of this appraisal report form, including the following definition of market value, statement of assumptions and limiting conditions, and certifications. The appraiser must, at a minimum: (1) perform a complete visual inspection of the interior and exterior areas of the subject property, (2) inspect the neighborhood, (3) inspect each of the comparable sales from at least the street, (4) research, verify, and analyze data from reliable public and/or private sources, and (5) report his or her analysis, opinions, and conclusions in this appraisal report.

INTENDED USE: The intended use of this appraisal report is for the lender/client to evaluate the property that is the subject of this appraisal for a mortgage finance transaction.

INTENDED USER: The intended user of this appraisal report is the lender/client.
DEFINITION OF MARKET VALUE: The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: (1) buyer and seller are typically motivated; (2) both parties are well informed or well advised, and each acting in what he or she considers his or her own best interest; (3) a reasonable time is allowed for exposure in the open market; (4) payment is made in terms of cash in U. S. dollars or in terms of financial arrangements comparable thereto; and (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions* granted by anyone associated with the sale.
*Adjustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs which are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparisons to financing terms offered by a third party institutional lender that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.

STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS: The appraiser's certification in this report is subject
to the following assumptions and limiting conditions:

1. The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it, except for information that he or she became aware of during the research involved in performing this appraisal. The appraiser assumes that the title is good and marketable and will not render any opinions about the title.
2. The appraiser has provided a sketch in this appraisal report to show approximate dimensions of the improvements. The sketch is included only to assist the reader in visualizing the property and understanding the appraiser's determination of its size.
3. The appraiser has examined the available flood maps that are provided by the Federal Emergency Management Agency (or other data sources) and has noted in this appraisal report whether any portion of the subject site is located in an identified Special Flood Hazard Area. Because the appraiser is not a surveyor, he or she makes no guarantees, express or implied, regarding this determination.
4. The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand, or as otherwise required by law.
5. The appraiser has noted in this appraisal report any adverse conditions (such as needed repairs, deterioration, the presence of hazardous wastes, toxic substances, etc.) observed during the inspection of the subject property or that he or she became aware of during the research involved in performing this appraisal. Unless otherwise stated in this appraisal report, the appraiser has no knowledge of any hidden or unapparent physical deficiencies or adverse conditions of the property (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) that would make the property less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied. The appraiser will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because the appraiser is not an expert in the field of environmental hazards, this appraisal report must not be considered as an environmental assessment of the property.
6. The appraiser has based his or her appraisal report and valuation conclusion for an appraisal that is subject to satisfactory completion, repairs, or alterations on the assumption that the completion, repairs, or alterations of the subject property will be performed in a professional manner.

APPRAISER'S CERTIFICATION: The Appraiser certifies and agrees that:

1. I have, at a minimum, developed and reported this appraisal in accordance with the scope of work requirements stated in this appraisal report.
2. I performed a complete visual inspection of the interior and exterior areas of the subject property. I reported the condition of the improvements in factual, specific terms. I identified and reported the physical deficiencies that could affect the livability, soundness, or structural integrity of the property.
3. I performed this appraisal in accordance with the requirements of the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
4. I developed my opinion of the market value of the real property that is the subject of this report based on the sales comparison approach to value. I also developed the cost approach to value as support for the sales comparison approach. I have adequate comparable market and cost data to develop reliable sales comparison and cost approaches for this appraisal assignment. I further certify that I considered the income approach to value but did not develop it, unless otherwise indicated in this report.
5. I researched, verified, analyzed, and reported on any current agreement for sale for the subject property, any offering for sale of the subject property in the twelve months prior to the effective date of this appraisal, and the prior sales of the subject property for a minimum of three years prior to the effective date of this appraisal, unless otherwise indicated in this report.
6. I researched, verified, analyzed, and reported on the prior sales of the comparable sales for a minimum of one year prior to the date of sale of the comparable sale, unless otherwise indicated in this report.
7. I selected and used comparable sales that are locationally, physically, and functionally the most similar to the subject property.
8. I have not used comparable sales that were the result of combining a land sale with the contract purchase price of a home that has been built or will be built on the land.
9. I have reported adjustments to the comparable sales that reflect the market's reaction to the differences between the subject property and the comparable sales.
10. I verified, from a disinterested source, all information in this report that was provided by parties who have a financial interest in the sale or financing of the subject property.
11. I have knowledge and experience in appraising this type of property in this market area.
12. I am aware of, and have access to, the necessary and appropriate public and private data sources, such as multiple listing services, tax assessment records, public land records and other such data sources for the area in which the property is located.
13. I obtained the information, estimates, and opinions furnished by other parties and expressed in this appraisal report from reliable sources that I believe to be true and correct.
14. I have taken into consideration the factors that have an impact on value with respect to the subject neighborhood, subject property, and the proximity of the subject property to adverse influences in the development of my opinion of market value. I have noted in this appraisal report any adverse conditions (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) observed during the inspection of the subject property or that I became aware of during the research involved in performing this appraisal. I have considered these adverse conditions in my analysis of the property value, and have reported on the effect of the conditions on the value and marketability of the subject property.
15. I have not knowingly withheld any significant information from this appraisal report and, to the best of my knowledge, all statements and information in this appraisal report are true and correct.
16. I stated in this appraisal report my own personal, unbiased, and professional analysis, opinions, and conclusions, which are subject only to the assumptions and limiting conditions in this appraisal report.
17. I have no present or prospective interest in the property that is the subject of this report, and I have no present or prospective personal interest or bias with respect to the participants in the transaction. I did not base, either partially or completely, my analysis and/or opinion of market value in this appraisal report on the race, color, religion, sex, age, marital status, handicap, familial status, or national origin of either the prospective owners or occupants of the subject property or of the present owners or occupants of the properties in the vicinity of the subject property or on any other basis prohibited by law.
18. My employment and/or compensation for performing this appraisal or any future or anticipated appraisals was not conditioned on any agreement or understanding, written or otherwise, that I would report (or present analysis supporting) a predetermined specific value, a predetermined minimum value, a range or direction in value, a value that favors the cause of any party, or the attainment of a specific result or occurrence of a specific subsequent event (such as approval of a pending mortgageloanapplication).
19. I personally prepared all conclusions and opinions about the real estate that were set forth in this appraisal report. If I relied on significant real property appraisal assistance from any individual or individuals in the performance of this appraisal or the preparation of this appraisal report, I have named such individual(s) and disclosed the specific tasks performed in this appraisal report. I certify that any individual so named is qualified to perform the tasks. I have not authorized anyone to make a change to any item in this appraisal report; therefore, any change made to this appraisal is unauthorized and I will take no responsibility for it.
20. I identified the lender/client in this appraisal report who is the individual, organization, or agent for the organization that ordered and will receive this appraisal report.
21. The lender/client may disclose or distribute this appraisal report to: the borrower; another lender at the request of the borrower; the mortgagee or its successors and assigns; mortgage insurers; government sponsored enterprises; other secondary market participants; data collection or reporting services; professional appraisal organizations; any department, agency, or instrumentality of the United States; and any state, the District of Columbia, or other jurisdictions; without having to obtain the appraiser's or supervisory appraiser's (if applicable) consent. Such consent must be obtained before this appraisal report may be disclosed or distributed to any other party (including, but not limited to, the public through advertising, public relations, news, sales, or other media).
22. I am aware that any disclosure or distribution of this appraisal report by me or the lender/client may be subject to certain laws and regulations. Further, I am also subject to the provisions of the Uniform Standards of Professional Appraisal Practice that pertain to disclosure or distribution by me.
23. The borrower, another lender at the request of the borrower, the mortgagee or its successors and assigns, mortgage insurers, government sponsored enterprises, and other secondary market participants may rely on this appraisal report as part of any mortgage finance transaction that involves any one or more of these parties.
24. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.
25. Any intentional or negligent misrepresentation(s) contained in this appraisal report may result in civil liability and/or criminal penalties including, but not limited to, fine or imprisonment or both under the provisions of Title 18, United States Code, Section 1001, et seq., or similar state laws.

SUPERVISORY APPRAISER'S CERTIFICATION: The Supervisory Appraiser certifies and agrees that:

1. I directly supervised the appraiser for this appraisal assignment, have read the appraisal report, and agree with the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
2. I accept full responsibility for the contents of this appraisal report including, but not limited to, the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
3. The appraiser identified in this appraisal report is either a sub-contractor or an employee of the supervisory appraiser (or the appraisal firm), is qualified to perform this appraisal, and is acceptable to perform this appraisal under the applicable state law.
4. This appraisal report complies with the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
5. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.

## APPRAISER

Signature
Name Robin T. Hannigan, SRA
Company Name
Company Address

Telephone Number
Email Address
Date of Signature and Report
Effective Date of Appraisal
State Certification \#
or State License \#
or Other
State
Expiration Date of Certification or License
ADDRESS OF PROPERTY APPRAISED

APPRAISED VALUE OF SUBJECT PROPERTY \$

## LENDER/CLIENT

Name
Company Name
Company Address
Email Address

## SUPERVISORY APPRAISER (ONLY IF REQUIRED)

## Signature

Name
Company Name
Company Address

Telephone Number
Email Address
Date of Signature
State Certification \#
or State License \#
State
Expiration Date of Certification or License

## SUBJECT PROPERTY

$\square$ Did not inspect subject property
Did inspect exterior of subject property from street Date of Inspection
$\square$ Did inspect interior and exterior of subject property Date of Inspection
COMPARABLE SALES
$\square$ Did not inspect exterior of comparable sales from street
$\square$ Did inspect exterior of comparable sales from street Date of Inspection


[^0]:    1 Advisory Opinion 32, Uniform Standards of Professional Appraisal Practice, 2014-2015 Edition, page $\mathrm{A}-111$

[^1]:    APPRAISED VALUE OF SUBJECT PROPERTY S
    LENDER/CLIENT
    Name
    Company Name
    Company Address
    Emall Address

