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by

Walter L. Meyer*

The paper briefly reviews the nation's housing crisis and the problems limiting our building industry's ability to provide the homes required today. Current governmental policies and economic factors which affect the development of sound low-cost housing programs are noted. The market demand for the mobile home as housing for our people is discussed with projections made of future production.

The primary purpose of this study is to focus on the mobile home industry's claim that their product is low-cost housing and the ideal solution to this urgent need. Data from a 1968 HUD survey and a research study sponsored by Owens-Corning Fiberglas Corporation, published in early 1970, were used to make comparisons and observations. The characteristics of the mobile home occupants, their preferences and objections, and the family income and home investment economics are outlined. The "cost" of the mobile home is analyzed and related to the cost of the conventional "stick-built" house. The cost per month to the buyer is

It is concluded that mobile home sales are high and increasing because the industry can factory produce quality units at lower prices and in sufficient quantity to meet current demand. Consumer acceptance is favorable now since satisfactory alternatives at low prices are still lacking, especially which low-income people can afford. Lastly, the necessary financing to buy them is more readily available than for conventional housing. However, there is still the question whether mobile homes, as such, provide adequate living at a low-cost to the buyer over the long term or are as good or better values than the housing alternatives now available or expected in the near future.

INTRODUCTION

The housing shortage today is generally conceded to be the worst in our nation's history. The major obstacles to the building of more homes have been the rising costs of land, labor, materials, and money. While the serious inflation plaguing our economy has been slowed, it has not been checked. Interest rates are still high, and savings institutions are still short of sufficient mortgage funds. There is a crucial shortage of skilled manpower in the building industry, and this shortage is becoming worse. Productivity of construction labor is not increasing proportionally to the rapid rise in wage rates. Land is costly and becoming scarce. Outdated building codes and archaic zoning laws are serious barriers to the increase of industry's production ability. The fragmented building industry has not utilized mass production practices effectively and is not able to serve mass markets properly. It is also criticized for its inefficiency and lack of innovation in the development of cost reducing methods and techniques. With all these unsolved problems, the future appears bleak in a home building industry faced with an unrelenting growing demand for housing, particularly low-cost housing. Unfortunately many government policies at this time are unfavorable to the housing situation, especially in such vital areas as soning, building codes, and financing.

NIXON'S HOUSING GOALS

In his second annual National Housing Goals Report to Congress in April,

President Nixon said that mobile homes will be providing four million of the 26

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million housing units, the nation's 10-year goal included in the Housing and Urban Development Act of 1968. Noting that mobile homes can no longer be ignored as a housing factor, the President states that they "constitute a major if not the largest single source of acceptable new housing available at prices which moderate-income families can afford". The Nixon Administration estimates mobile home starts will peak out at 475,000 units in fiscal 1971, then level off and by 1976 will be below the present level of 400,000 units a year.

President Nixon says by 1978 there will be an increase in conventionally built homes, modular housing production in general will expand (now being promoted by HUD's Operation Breakthrough), and an increasing difficulty to obtain suitable sites for mobile home parks "should lessen the present domination of the low-cost housing market by the mobile home as it is now known, and may lead some present mobile home producers to shift their focus more toward generalized modular housing".

MOBILE HOMES INDUSTRY GROWTH

Mobile homes have had an accelerating growth in recent years. In 1969, the mobile home industry accounted for 412,690 units shipped², more than tripling the 118,000 units shipped in 1962, which represents a ratio of about one to every three new conventional housing starts throughout the nation. Another sizable increase is anticipated next year to perhaps as high as 475,000 units and to one million units by 1975³. Conventional housing starts in 1970 are estimated at 1,440,000 units⁴.

TABLE 1

Mobile Homes and Conventional Dwelling Units Compared 5,6

1960-1970

Year	Mobile Home Units Shipped	% Change	Conventional Housing Starts	% Change
1970	475,000 (est.)	15.1	1,440,000 (est.)	-4.0
1969	412,690	29.8	1,499,900	-3.0
1968	317,950	32.3	1,545,500	16.9
1967	240,360	10.6	1,321,900	10.5
1966	217,300	0.4	1,196,200	-20.8
1965	216,470	13.1	1,509,600	-3.3
1964	191,320	26.8	1,561,600	-4.9
1963	150,840	27.8	1,642,000	10.0
1962	118,000	30.8	1,492,400	9.3
1961	90,200	-13.0	1,365,000	5.3
1960	103,700	23.0	1,296,000	- 1

As Table 1 shows, the mobile home share of the total national housing output has increased steadily in the past ten years and in 1969 was approximately 21.6 per cent of the combined total of conventional housing starts and mobile home production. It is well known that millions of Americans live in mobile homes, but it is not clear which of our people form the market for this housing.

The mobile home industry's share of the under \$15,000 housing market has been growing steadily since 1963, and "the mobile home is just about the only option available to families with incomes of less than \$8,000 who want to own their own homes". In 1968, mobile homes represented 96% of all single family homes sold under \$12,500, 90% of all single family homes sold under \$15,000, and nearly 60% of all 530,000 single family homes sold at any price. In 1969, the mobile homes industry provided 94 per cent of all new one family homes selling for under \$15,000, 79 per cent under \$20,000, and 67 per cent under \$25,000 (412,690 homes out of a total of 614,490 - about two out of three)².

One of the major reasons for the rapidly increasing interest in mobile home living is the development of attractive, well-maintained parks with recreational

facilities, and organized social activities. The modern mobile home park provides paved streets, landscaping, underground utilities, and suitably prepared sites. Residents generally own their mobile homes, and pay rent by the month for the use of space in the mobile home parks. The mobile home is seldom moved after being installed on a site and improved with skirting, covered patio, carport and similar appurtenances.

The typical mobile home is twelve feet wide and usually at least sixty feet long (less three feet for the hitch). This average size 12-wide mobile home with 684 square feet of living space costs approximately \$8.75 per square foot 9, or \$6,000 and includes major appliances - the range, refrigerator, water heater, and furnace - and furnishings such as furniture, carpeting, draperies, lamps, mirrors, and sometimes even a picture on the wall of the living room. By comparison, a site constructed tract home today with the lot included but unfurnished is approximately \$20.00 per square foot 9. The median price of conventionally built new houses is \$27,000 while half of all families "probably cannot afford to pay much more than \$15,000 for a home" 1. Prices of the 12-wide unit range from \$4,000 to \$8,000, the expandables (with a pull-out 6 ft. x 10 ft. room section to add to the width of a 12-wide living room or bedroom to make the home L shaped) from \$4,500 to \$9,000, whereas the double wide homes of between 1200 to 1600 square feet range from \$8,000 to \$15,000 9.

Housing supply and demand is closely related to population trends and is influenced by the state of the economy. Net household formations continue to increase, and by 1975 the number of households will be growing at a projected rate of one and one-third million annually⁵. Two age groups provide the major market for mobile homes. The 20-29 bracket, where most family formations take place. shows an expected population rise from 31,139,000 in 1970 to 36,748,000 in 1975. Retired people, particularly those in the 65-74 age group, are estimated to number 12,097,000 in 1970 and to increase to 13,191,000 in 1975. In addition, the economic status of all working people will improve because of higher wages and fringe benefits and a more stable income, and older people will have increased social security benefits and perhaps an earlier retirement as the age limit is moved ahead. The population trend is clearly up for these two age groups who form a substantial share of the mobile home market. Two recent housing surveys, one by the Department of Housing and Urban Development and the other by Owens-Corning Fiberglas Corpora tion are used as a basis to indicate preferences of mobile home buyers and park residents and also some of the characteristics of the people who enjoy this type of living.

THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT SURVEY

The HUD survey¹⁰, published in the fall of 1968, shows the most "typical" mobile home household as one of two or more persons with "the head between 25 and 34 years of age and with an income of between \$8,000 and \$10,000 a year", as compared to the median income for mobile home families of \$6,620 per annum, and with over two-thirds having incomes less than \$8,000.

Mobile home occupants have lower median incomes than all families primarily because they are younger people. Compared to the total number of households in our population from a percentage standpoint, there are twice as many heads of household under 35 years of age and half as many of retirement age living in mobile homes. The study shows 47 per cent of all mobile home households have no children under 18, 63 per cent have no children under 6 years, and only 27 per cent have children of school age, 6 to 18 years. Therefore, it appears that mobile homes for the most part do not serve families with school age children.

It also shows 44 per cent of the respondents stated they bought and are

living in a mobile home because of the lower cost, 49 per cent cited they like the styles of living, 17 per cent said it gave them more freedom to move if necessary, and 8 per cent indicated no other housing was available. Therefore, lower cost is a major factor in peoples' decision to buy and live in a mobile home.

OWENS-CORNING FIBERGLAS CORPORATION SURVEY CHARACTERISTICS

In the OCF survey 11, half of the family heads of the mobile households interviewed were under 35 years of age, 28 per cent were in the 35 to 54 age group and 19 per cent were 55 years and older. The high percentage of mobile home owners in the under 35 years of age bracket implies that cost is a determining influence in their decision to buy a mobile home, and when the buyers interviewed noted the advantages they saw in mobile home living, the importance of cost was emphasized. Twenty-five per cent of the buyers cited mobile homes as being more economical than other forms of housing, and 10 per cent listed cost as an advantage of mobile home living.

In the survey sample, family incomes of 70 per cent were under \$10,000 annually, with the median for all being about \$7,500. According to the banker's rule of thumb that a person should not spend more than two-and-a-half times his annual income for a home, half of the people surveyed must have homes priced at \$18,750 or much less. Relating this measure to our present prices for single-family units, cost becomes even more important as a factor in the buving of a mobile home.

A high proportion, 73 per cent, indicated that their present home was their first mobile home living experience. Nearly half of the families came directly from single-family houses, a quarter of the families came from apartments, over a fifth from previous mobile homes and 3 per cent from town houses. When the owners were asked what their next type of housing would be, 31 per cent said their next move would be to another mobile home with over 60 per cent wanting a single family house— 46 per cent to a new one, and 15 per cent to an older used one. This implies that most people are presently living in a mobile home simply because it is the only feasible solution to their housing needs under present conditions, but that they really prefer to own a conventional house.

COMPARING COSTS OF THE MOBILE HOME TO THE CONVENTIONAL HOUSE

According to both the HUD and OCF surveys, lower cost is one of the primary considerations for the mobile home buyer which strongly suggests that most buyers of these units do not understand the difference in the costs of mobile homes compared to the costs of improved realty - the "stick-built" house, and that the mobile home and the house represent different concepts in shelter. The problem stems from the hasty comparison of the dealer's mobile home price tag, roughly \$6,000 to \$15,000, with new conventional house prices that include the lot from \$15,000 to you-name-it.

The price of a new mobile home includes many features that are not common to the house and vice-versa. Unlike the price of a new house, a mobile home price does not include the cost of the land, lot and subdivision improvements, utility services, or a permanent foundation. A prospective mobile home buyer should realize that in addition to park rental he usually has extra cost items such as concrete ribbons or strips on which the mobile home sits, concrete blocks and stabilizer jack to support the home, steps for the exterior doors, skirting for the exterior of the home, and over-the-roof ties in high wind areas. One can also add carports, patios, storage sheds and the like at additional cost. A mobile home is generally sold with major appliances and furnishings included, while the price of a new house usually excludes such appurtenances. Insurance and taxes are

additional costs for both the mobile home and the house. The yearly insurance cost is slightly higher for the mobile home. As for taxes, the mobile home owner will usually be charged much less because a mobile home is taxed in most states as personal property rather than real estate - as long as the wheels remain attached.

In most cases, the mobile home dealers offer the financing arrangements with add-on interest. The usual down payment is about 15 percent and the monthly installment contract for the balance usually provides 7 years for repayment. The dealer then sells the contract to a bank or finance company.

A typical example is a buyer of a \$6,200 mobile home who pays 10 per cent down, \$620, plus the sales tax of \$310, and processing fees of approximately \$20, or a total of \$950 at time of purchase. He finances the \$5,250 balance with a 7 year chattel or installment loan at 7 per cent add-on interest. Under these terms, interest of \$2,573 is added to the loan amount of \$5,250 and the buyer contracts for \$7,823 with \$93.13 monthly payments for 84 months. Because this is an add-on consumer credit type debt, the simple annual equivalent interest rate is 12.16 per cent. On a conventional loan basis, for comparative purposes only using the same terms, simple interest at 7 per cent (actually about 9 1/4 per cent in today's market) would amount to \$79.25 per month instead of \$93.13. The total interest for the 7 years would be \$1,407, not \$2,573 - a

Although the purchase price of a mobile home appears to be low in cost, the high cost of chattel financing increases the monthly payments and total cost of a mobile home substantially.

Today, a mobile home depreciates approximately 10 to 15 per cent of its base cost the first year and 5 to 10 per cent each year thereafter. This relatively high depreciation rate causes lenders to take a close look at a borrower's credit and to require an adequate down-payment, usually a minimum of 15 per cent. Mobile homes, although a building, are personal property while the house on the lot is real property. The mobile home is largely depreciated over a 10 to 15 year period, but in recent years conventional housing in most areas has depreciated little, if at all, or has even appreciated. Real property appreciation over the years has come from the increase in the value of the land under the house, not the house itself which as a building depreciates 2 per cent

TABLE 2

COMPARATIVE COSTS IN OWNING A MOBILE HOME OR A CONVENTIONAL HOUSE

	Mobile Home on 7 years basis	Conventional House on 30 years basis
Total acquisition cost	\$ 6,530.	\$15,400.
Purchase Price	6,200.	15,000.
Money outlay at time of purchase:		
Sales tax and processing fee	330.	
Closing costs		400.
Down payment (10%)	620.	1,500.
Amount financed	\$ 5,250.	\$13,100.
Other estimated costs:		
License fees and ownership tax	\$ 525.	
Insurance	630.	\$ 2,100.
Appliances and furnishings		2,580.
Maintenance	650.	6,300.
Site extras	200.	
Landscaping		500.
Principal and interest payments	7,823.	38,801.
Taxes		13,500.
Park rental	4.620.	
Total of other estimated costs	\$14,448.	\$63,781.
Total money outlay over 7 and 30 years	\$15,398.	\$65,681.
Average monthly cost	183.31	182.45
Equity assumed after 7 and 30 years	3,100.	15,000.
Average monthly cost after deducting equi	ty 146.40	140.78

a year as a rough rule of thumb. This depreciation factor also tends to limit the entrance of low-income people into the mobile home market.

Actually many low-income families cannot afford either the mobile home or the conventional house. A comparison of the main cost considerations of these two types of shelter is shown in Table 2.

From the above analysis it appears that the conventional house is the lowest cost housing from a long term standpoint. The lower initial money outlay requirement makes the mobile home an attractive alternative for those with little savings. Other factors, influencing the choice between these two housing alternatives, include appearance and general acceptance, livability, location and lot size, storage space, less housekeeping and maintenance.

Until a "breakthrough" is made in industrialized housing, mobile home sales should increase compared to other forms of unsubsidized low-cost housing, and particularly if its rapid depreciation can be slowed, and if it can be financed with more favorable interest costs. Additional mortgage funds must be made available to create a more competitive financing market for all our housing needs. More and cheaper land and higher density use are also necessary. The updating and liberalizing of our local building codes to allow the use of newer, better, and less expensive building materials and methods is long overdue. Restrictive zoning is also a serious obstacle, especially to lower land costs. These changes would not only lower the cost of the mobile home but also the costs of conventional. sectionalized or modular, and other types of manufactured houses. We have seen that most of our low-income families cannot afford our "low-cost housing" which is the "lowest-cost housing" now being provided by the housing industry. What we need desperately today is "lower-cost housing" than the mobile home and the conventional house as we know them, and it must be priced within reach of our low-income people.

CONCLUSIONS

Mobile home sales today and the data from the two surveys reviewed confirm that the mobile home provides adequate and acceptable housing for an increasing number of our people. It is questionable, however, if it can be called low-cost housing per se although it appears to be the lowest cost housing presently available in any quantity.

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