

MOBILE HOMES: THE THIRD ALTERNATIVE

So-called mobile homes, the oldest form of industrialized housing, are playing a role of increasing importance in public housing policy. They offer a third choice to people who for one reason or another prefer them to apartments or single-family dwellings. They are not really "mobile" since many are put on site and never moved again. Just where to put them is one of the chief difficulties. It is here that the architect can contribute through the planning of mobile home parks that offer the amenities of a conventional housing development.

Many people have a mild disdain for mobile homes, looking upon their inhabitants as gypsies who move from place to place, as unfortunates who will find other dwellings as soon as circumstances permit or simply as vacationers who really enjoy some measure of roughing it. The same people view the mobile home park as a place of alienation from the community. The belief that mobile home dwellers are isolated transients tends to establish certain attitudes on the part of the detractors.

First, there is a concern about the culture which is housed in such a container as a mobile home; next there is the feeling that the inhabitants of "mobile towns" do not accept their share of civic responsibility; and finally there is the rejection of this kind of housing as hurtful to the esthetic environment. Regardless of these negative attitudes, mobile homes appear to hold hope for solving some of our housing problems.

Mobile homes may have had humble beginnings back during the Depression when the trailers descended upon California from the nation's dust bowls and in the housing shortage days of the '40s when they provided makeshift shelter, but today things are different. Like them or not, they are an important factor in today's housing market. And in the future, their blending with modular dwelling units will very likely play an even greater role in total plans for community development. Apparently, mobile homes not only have come a long way but they "arrived" when President Nixon in April 1970 publicly acclaimed them for having ameliorated the housing crisis. In the same month, Jeh V. Johnson, AIA, presented testimony for The American Institute of Architects before the House Appropriations Committee, Subcommittee on Independent Offices and the Department of Housing and Urban Development, stating: "One sees increasingly the device of local zoning used to exclude multifamily housing and mobile homes and in the process those families who have no other choice."

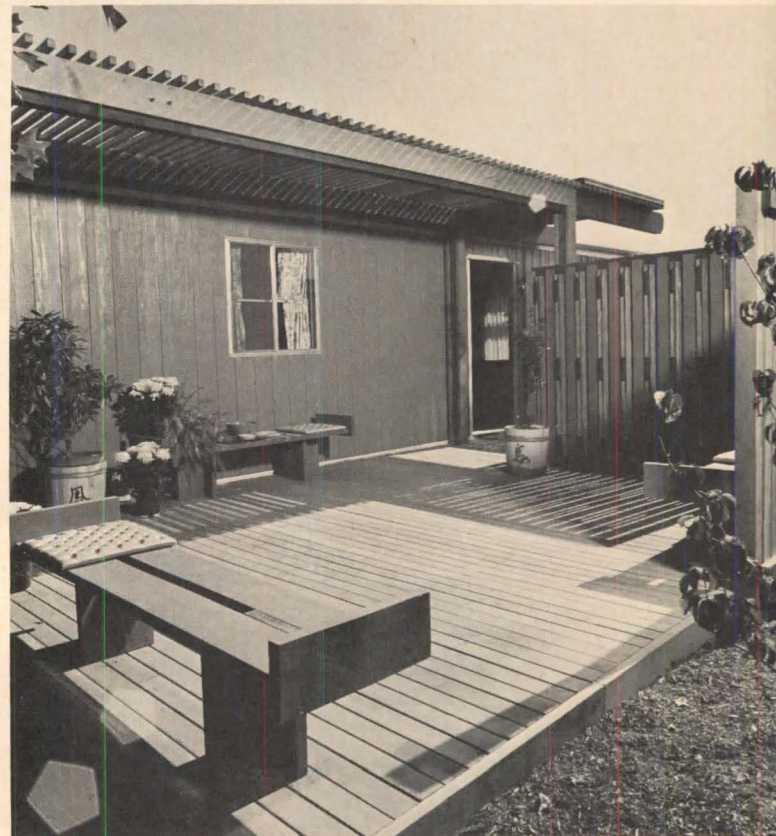
The Mobile Homes Manufacturers Association calls a mobile home a "transportable structure built on a chassis and designed to be used as a dwelling unit with or without a permanent foundation when connected with the required utilities." The difference between a mobile home and a travel trailer is that the latter is smaller and can be towed and operated independently of utility connections. Usually a mobile home is 12 feet wide, 60 feet long and 12 feet high. But there are larger ones, and there are also units which consist of two or more parts that may be separately towed and combined horizontally at the site. Until

recently, most states prohibited units wider than 12 feet on the highways, but at least 14 of them now authorize 14-foot wide homes to be transported, and models of this width are being produced increasingly. The mobile home of today is too large to be towed by an automobile, and MHMA recommends that a professional moving company be used for their transportation.

As size and amenities of mobiles have increased, the "mobility" feature is de-emphasized. Sheldon M. Futernick, a Detroit mobile home park developer, says that they should be called "manufactured homes." Indeed, mobile home manufacturers are increasingly going into the production of mobile modules which can be used to make garden apartments, town houses or highrise apartments. The Electric Heating Association reports a study made of 33 mobile home manufacturers, 90 percent of whom sell modulars to mobile home dealers.

What kind of people live in mobile homes? Robinson Newcomb in *Mobile Home Parks, Part 1: An Analysis of Characteristics* (Washington, D.C.: Urban Land Institute, 1971; a recommended study, which will be followed by a related ULI publication on mobile homes as land users) states: "The points usually stressed in discussions of the characteristics of mobile home occupants are their youth, or age, small size of household, low income and low socioeconomic status." The economist, however,

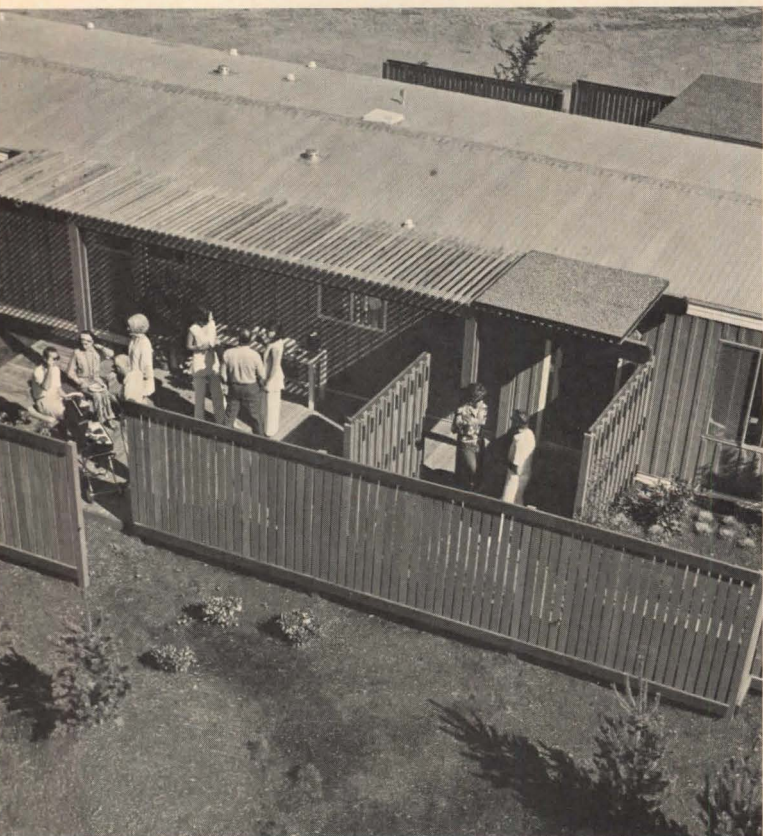
Alex Pierce, AIA, is designer of the all-wood garden complex in the two views here. Underwritten by Western Wood Products Association, the mobile home park near Tigard, Oregon, upgrades the environment.



has found a wide dispersion of characteristics. "Old as well as young, moderately large as well as small households, people with high as well as low income, do occupy mobile homes." He says that if people are given free choices between mobile and other types of homes, "those choosing mobile homes would on the average differ relatively little from those choosing other types of units," such as single-family dwellings and apartments.

Another useful study of mobile home residents has been made by Margaret E. Woods and Earl W. Morris and is reported in *Housing Crisis and Response: The Place of Mobile Homes in American Life* (Ithaca, N.Y.: New York State College of Human Ecology at Cornell University, 1971). They say, "The trend toward mobile homes, insofar as one exists, seemingly is concentrated among younger families, smaller families and families with moderate incomes. . . . So far as the data at hand are concerned, one can only say that, given a particular combination of family characteristics and housing needs, a substantial number of families can be expected to turn to mobile homes." They find a close similarity between characteristics of new apartment dwellers and purchasers of mobile homes, "thus supporting the assumption that mobile homes compete with apartments more than with conventional single-family houses." The researchers find that the mobile home, a third housing alternative, is being used increas-

Outdoor living around a single 20x60-foot mobile home at King City Estates is made more attractive because of the arrangement of patio, screens, fencing and sunshades. A carport is on the opposite side.



ingly by young households of moderate means, and, in some areas, by older, two-person households.

Interestingly enough, a survey conducted in 1969 and reported in the September issue of *Trailer Topics and Mobile Home Life Magazine* found that only 10 percent of the families studied gave economy as a reason for living in a mobile home. Being close to location of work was cited by 46 percent as the most important reason. The Cornell study comments, "The preference for the mobile home style of life seems to be well substantiated by the general lack of plans to move among those age 35 and older and the choice of another mobile home as a destination residence among sizable proportions of the older age groups."

Although MHMA has called a mobile home a "transportable structure," the association's annual *Mobile Homes* often carries articles on the landscaping of mobiles, which is rather a permanent amenity. It would be difficult to move all those recommended "outdoor living rooms" with their terraces, patios, plantings and climbing vines. But whether mobile or stationary, there has been a tremendous growth in the mobile home market in recent years.

Back in 1930, 1,300 units were reported shipped as compared with 90,000 in 1961. According to the Bureau of Domestic Commerce, mobile home production this year will increase to 450,000 units, up about 40,000 from 1970. Some economists see a climb in the next few years to between 500,000 and 600,000 units. A 1969 Department of Commerce study found that 48 percent of all new homes built in that year were mobiles. They represented 94 percent of the homes under \$15,000, 79 percent of those under \$20,000 and 67 percent of those under \$25,000. It is estimated that more than 6 million Americans live in mobiles. Undoubtedly, the mobile home industry is a major force in the housing market.

The MHMA states that acceptance of this kind of home is due to at least three factors: increase in size, comfort and quality of the mobiles; increase in the number of people in the age brackets of 20-34 and 55-74 who find the mobile home appropriate for their lifestyles; and the price. Newcomb cites two factors that have contributed to their success: factory fabrication where the industrialization process of production has made possible the development, application and enforcement of processing standards designed to achieve stipulated levels of performance in use and flexible portability of the completed unit to site on its own wheels, ready for occupancy as soon as utility connections are made. Newcomb also points out the problems. Factory fabrication does not always conform to local building codes and a mobile home can be transported only a limited distance before cost becomes a controlling factor. Also, stresses on the home in transit can be so severe that units develop chronic leaks or go seriously out of square.

In the last decade, price per square foot for mobile homes has declined while the cost of conventional housing has soared. Newcomb points out that any study of comparative costs of mobile home, apartment or traditional house where standardized

measures of price per square foot of living space or monthly cost per room or bedroom are used can yield only rough guides. Mobile homes on site and complete with furniture, carpeting, draperies and major appliances have sold typically for \$8.50 to \$10 per square foot of living area. Prices are not directly comparable with the conventional single-family house, however, because of land, the cost of which can vary considerably. But even without standardized guides to measurement, "It is obvious," Newcomb declares, "that larger, more fully equipped and more structurally sound mobile homes have, in recent years, become available within a price range in which houses have become increasingly scarce." Depending upon the number of units and equipment, a mobile home can cost between \$4,000 and about \$35,000.

A publication of the Department of Housing and Urban Development, *HUD Challenge*, in its July 1971 issue mentions some of the disadvantages of the mobiles in the housing race: Some people are offended by their appearance; they are sold with high interest chattel financing; only in the past two years have they benefited from federal legislation; and zoning boards generally try to prevent their entry into a community. There is also the lack of adequate mobile home sites, problems in reselling used units and the question of durability. And there is the emotional question of taxation. Some people think mobile home owners are not paying their fair share. The Cornell study by Morris and Woods reports a variation of laws and regulations pertaining to mobile homes in the United States. Mobile home owners do pay taxes, such as the sales tax which is applied on the purchase. Some states are studying the possible inequities in taxes between mobile homes and other housing, and the MHMA is working with the State Assessors Association to devise equitable tax procedures. "The settlement of this one issue," say Morris and Woods "might not win unqualified acceptance of the mobile home in all communities . . . but it would remove the strongest premise of their rejection."

The HUD article points out that mobile homes cost less to construct and install on site than any other housing offered today. The cost saving is given to the buyer in the form of lower down payments and monthly payouts over much shorter periods of time than is available to the buyer of the conventional house. Even so, low income families find mobile homes too costly. Few of them have the funds for the down payment, and even if they make that, the monthly payments are more than they can easily afford. "The monthly outlay might total \$170 to cover loan installments on a \$6,000 unit, park rent, taxes, maintenance, utilities and insurance." That would represent 33 percent of a \$6,000 annual income and 50 percent of a \$4,000 one. Many communities are reluctant to provide land for poor families to use as sites for mobiles. If an investor does develop a park that meets with community approval, the mobile home owner may have to pay as much as \$250 to \$300 a month in payments on his home and on the rental for parking space.

Recently there have been developments which may help to overcome the difficulties mentioned. The Cornell study reports that the large proportion of mobile homes have been financed by indirect loans through dealers, with commercial banks and large-scale companies the principal purchasers of dealer contracts. "The most encouraging signs in mobile home lending are those which suggest a changeover to the use of simple interest . . . which would preserve the prime advantage of consumer finance, the relative ease of obtaining loans and at the same time benefit borrowers by allowing a more rapid rise in equity and eliminating prepaid charges."

Significantly, too, the federal government now recognizes mobiles as housing. HUD's Title I mobile home loan insurance program went into effect in 1970. It provides for FHA insurance on 12-year loans up to \$10,000 on new single units, or on 15-year \$15,000 loans on two attached units. The minimum down payment is 5 percent on a home priced up to \$6,000 and 10 percent on the amount over \$6,000. The law requires a much lower



The Meadows, a 356-unit mobile home park on Irvine Ranch in California, is the design of Riley/Bissell/Associates. A main attraction is the community center and clubhouse which provides both indoor and outdoor recreation. It has such amenities as a laundry room wing, a huge kitchen, dining room and a roofed tournament shuffleboard court.

rate of interest on these loans than lenders can get under customary mobile home lending practices; therefore, the program has seen little use to date. Secretary George Romney's request for authority to set maximum interest rates to meet money market conditions was turned down by Congress last year, but HUD reports that he will include a request for such authority again in recommendations for housing legislation.

Since late 1970, the Veterans Administration has guaranteed loans for both mobile homes and owners' lots. VA may set the interest rate to meet market conditions. There may be a maximum loan of \$10,000 on the mobile home or up to \$17,700 where a suitable lot is purchased. VA anticipates a probable 1971 volume of more than 13,000 guaranteed loans.

Also under recent legislation, federal savings and loan associations are authorized to lend up to 90 percent of the home for periods up to 15 years and up to 90 percent of the value of a used mobile for up to eight years. Newcomb reports that at present roughly one-third of new units sold to consumers are bought for cash, including some financed by the buyers through arrangements of their own. The remaining two-thirds are financed

through the dealer on the security of a conditional sales contract or similar arrangement. Not having any sound basis for calculating depreciation, some lenders have given only short-term loans. Indeed, some people have thought that the average life of a mobile was no longer than the typical seven-year chattel loan.

But something is being done about durability. After July 1, 1971, all mobile homes built by the members of the MHMA and the Trailer Coast Association (on the West Coast) must carry a seal which certifies that the mobile has been constructed in compliance with the American National Standards Institute's Standard A119.1. Six years in the making, the standard covers construction of the body and frame as well as plumbing, heating and electrical systems. The requirements are that the manufacturer build to established guidelines and provide a margin of safety. Some 30 states have already adopted the standard.

Probably the biggest problem of the mobile home industry is just where the owner of a mobile can put his home. Woodall Publishing Company, which issues an annual *Directory of Mobile Home Communities*, reports that vacancy factors are minimal and site rentals are increasing. "The unplanned and uncontrolled development of any kind of siting for mobile homes can lead to the conditions many communities fear: tracts of slumlike areas which decrease the value of nearby land and require expenditure of public funds to remedy," is a point stressed by Morris and Woods in the Cornell report. Harry Manley, Chicago's assistant zoning administrator, is quoted in a *New York Times* article dated October 4 as saying, "Under present zoning, you simply

of the so-called conventional type with landscaping, medical and recreational facilities, shopping areas, clubhouses/community centers and other such amenities.

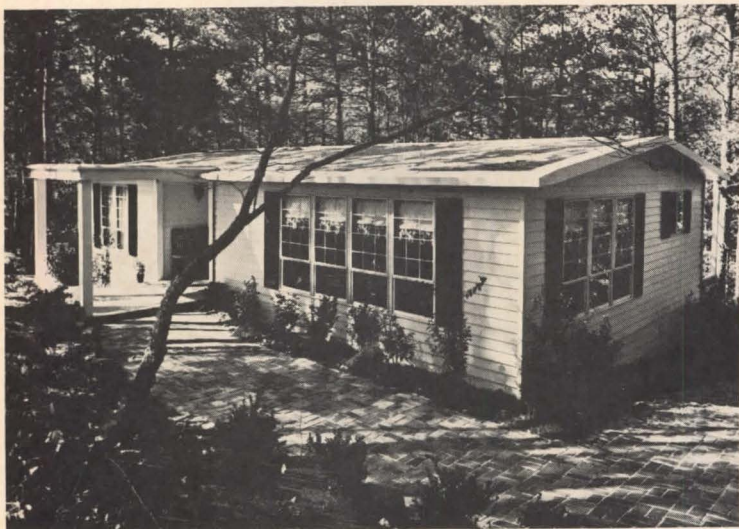
The MHMA in conjunction with the Mobile Home Research Foundation sponsored seminars this fall in cities throughout the country to interest architects and engineers in the development of mobile home parks. A major impetus to their growth is HUD's program of insuring mortgages on them. Under Section 207 of the National Housing Act, FHA can now insure loans up to \$1 million, covering 90 percent of value. In high cost areas, the maximum mortgage can be \$1.45 million. The maximum for space for the dwelling is \$2,500 or \$3,625 in high cost areas. Projects can have up to 400 spaces under these dollar maximums, and neighborhood amenities can be included. HUD has issued the *Mobile Court Development Guide* (Washington, D.C.: US Government Printing Office, 1970) for use in processing projects financed with mortgages. The guide sets forth minimum planning and construction guide criteria to assist FHA insuring officials in arriving at well-informed risk determinations.

Newcomb concludes that the mobile home is doing two things: It is cutting costs and "it is encouraging builders to develop communities that resemble old-fashioned towns in terms of 'neighborliness,'" thus meeting social as well as financial and physical needs. The Cornell study states that the mobile home provides as many benefits as could be desired in a single response to the housing problem, including good quality, low cost, owner occupancy, flexibility of location and rapid response. Its effectiveness, not fully realized, is due to the fact that it is a "stepchild" of housing and "does not fit well into our established housing institutions." The mobile home is only a single technique, but it is a complementary one, whose failure to be recognized is due to "defective observation and analysis of a housing problem."

An assumption has been made that families who live in mobiles are sometimes estranged from the life-support systems of the larger community, from those institutions which have been invented to integrate people into the activities of society. These families are often not only separated from the systems, but they are isolated sometimes from the responsibilities of citizenship. It is not only a matter of not always paying real property taxes, but rather a deep-rooted rejection by many people who have interpreted habitation of a mobile home as a "gypsy" way of life. Associate Director of the Institute for Urban Policy and Administration at the University of Pittsburgh has said, "The old view of the down-and-out families with a lot of kids has created an image that dies hard." He continues, "There are some \$35,000 mobile homes. Many are moved to a site and not moved again." But middle class affluent suburbs continue to fight mobile homes.

It is clear that national public policy recognizes the mobile home as a legitimate third alternative to solving the housing problem and accepts it in theory. But it is at the local level that public policy has to work in practice. Citizens have been slow to accept the mobile home, their disdain turning on the esthetics of the mobiles and the parks in which they are assembled, as well as on the failure of local legislation to place full responsibilities of citizenship on the mobile home inhabitant.

The mobile home is here to stay, however. It would appear that the architect has two immediate roles. The first is to collaborate with others to improve some esthetic qualities of their design. The second is in the creation of well-planned mobile parks and subdivisions which can be integrated into the total community process. It is not only the matter of hooking in the utilities of the mobile home, but of connecting the lives of the individuals and families into the community. MARY E. OSMAN



Chosen as "Mobile Home of 1971" by *House & Garden* magazine, this 24x45-foot dwelling is sited at Lake Lanier, Georgia.

can't build a mobile home park in Chicago." The same article cites cities whose planning commissions have banned mobile home parks because "they contribute nothing to the cost of the school system their children use." Many communities just don't want the parks, sometimes for esthetic reasons.

Big companies are beginning to invest in parks, however. The National Association of Home Builders, some of whose members are eager to develop parks, has produced a film which features several attractive parks, describing them as worthy of endorsement by zoners. The barriers for zoning are breaking down as it is increasingly realized that mobile home parks need not be eyesores but can be a community asset. Dade County, Florida, has adopted a mobile home ordinance which sets a minimum of 30 acres for any mobile home development, with no more than 7.5 homes allowed per acre. Parks are beginning to have all the features of a well-planned housing development