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INTERIM REPORT
TO THE
MINNESOTA STATE LEGISLATURE:

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RESEARCH
ON
MOBILE, MODULAR,
AND
PANELIZED HOUSING. --

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MINNESOTA HOUSING FINANCE AGENCY

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TABLE OF CONTENTS

INTRODUCTION 1

RESEARCH ACTIVITIES 2

PRELIMINARY RESEARCH FINDINGS 8

CONCLUSION 13

INTRODUCTION

The 1976 Minnesota State Legislature appropriated $50,000 to the Minnesota Housing Finance Agency to ". . . research the potential for utilization of resources provided in Minnesota Statutes, Chapter 462A, for the development, purchase or rehabilitation of mobile homes and other alternative housing delivery systems." In conducting this research, the Housing Finance Agency has focused on manufactured housing systems that produce and market finished housing units. Manufactured housing includes mobile homes, panelized housing, and modular housing; all which incorporate factory assembly of the housing unit or of major components into the housing delivery process. Manufacturers of panelized housing assemble wall, roof and floor panels in a factory and deliver the panels to a building site for final assembly, while modular housing manufacturers assemble these panels into three dimensional units in the factory before delivery to a site.

Research activities have been directed toward gaining a better understanding of mobile, modular, and panelized housing systems and their impact on Minnesota's housing markets, and toward an analysis of the feasibility of developing Agency programs that address these housing delivery systems. This interim report reviews the research activities that have been or are being performed, describes future research activities, and provides a summary of initial research findings.

RESEARCH ACTIVITIES

The research on manufactured housing has two objectives. One is to provide a base of information on these housing delivery systems to assist in the development of state policies. The other is to determine whether the state, through the Housing Finance Agency, should become involved in the financing of manufactured housing. Several research activities are completed, are underway, or are planned for the near future. Each of these activities is described briefly.

I. <u>Background Information</u>

A significant portion of the research activity has involved collection and analysis of information on all aspects of manufactured housing. This informational resource will provide a basis for development of state policies or programs related to manufactured housing.

1. <u>Preliminary Research</u>

An initial report "Mobile, Modular, and Panelized Housing; Preliminary Research Findings" has been prepared and is available from the Housing Finance Agency. The report summarizes preliminary research findings and outlines major issues. The report presents information on:

- The impact of manufactured housing on the production of new housing and on housing markets;
- The nature of the manufactured housing industry, including descriptions of the delivery systems used to produce and market these types of housing;

- The demographic characteristics of residents of manufactured housing;
- The public response to manufactured housing from federal, state and local governments;
- The role of private financial institutions in the delivery of manufactured housing.

As part of this initial research, the Agency conducted a survey of manufacturers of mobile, panelized and modular housing to obtain more specific information on the manufactured housing industry operating in Minnesota and neighboring states.

2. <u>Data Base Development</u>

Accurate and up-to-date information on the production and distribution of manufactured housing is essential for policy and program development. Current data sources do not provide completely reliable data on the distribution of mobile homes throughout the state; and there are no reliable data sources on either the production or distribution of panelized and modular housing. Therefore, the Agency is working with other state agencies, in particular the Building Codes Division of the Department of Administration, developing data sources that will provide improved information that can be updated on a regular basis.

3. <u>Survey of Local Regulation of Manufactured Housing</u>

In developing policies on manufactured housing, it is important that the legislative and state agencies understand the influence of local regulations on the availability of sites where mobile homes can be placed. Therefore, the Agency is conducting a survey of county, municipality and township governments that will provide needed information on the nature and extent of local land use regulations affecting mobile homes. The survey is currently in the design phase and will be conducted in the near future.

4. Analysis of Construction Standards

An important aspect of the Agency research involves compilation of information on quality standards of manufactured housing. This continuing research activity includes the following activities:

- The mobile home construction standards and the Minnesota Building Code and other codes or standards regulating conventional housing construction are being compared with respect to structural and mechanical systems, space, planning, safety standards and other housing quality considerations;
- An analysis is being prepared of code enforcement systems for mobile, modular, panelized and site built housing with respect to plan approval, factory and on-site inspection and final certification;
- An analysis of installation standards for mobile homes is being prepared;
- An analysis of state standards for mobile home parks is being prepared;

- Energy standards under the mobile home standards are being compared with standards under the Minnesota Energy Code and the HUD/FHA Minimum Property Standards.

The Agency is working closely with the Building Codes Division on each of these activities related to construction standards.

5. <u>Housing Cost Study</u>

   One part of the research involves gathering more reliable information on the comparative costs of mobile, panelized, modular and site-built housing. A cost study is currently being conducted that will provide insight into these comparative costs. While development costs under the alternative delivery systems will be compared, the emphasis will be on overall housing costs to the consumer. This approach takes into account not only the purchase price but also the costs of financing and operating the house and potential resale prices for various housing types.

6. <u>Mobile Home Tax Study</u>

   A study is being designed to provide a better understanding of the relationship between the local services received by mobile home residents and the tax revenues obtained from mobile homes and mobile home parks.

II. <u>Housing Finance Agency Program Feasibility Studies</u>

Each of the research activities described above is aimed at compiling reliable and up-to-date information on various aspects of manufactured housing. This information will provide a basis for policy and program development by the legislature, the State Planning Agency, the Housing Finance Agency and other state agencies. The program feasibility studies, which comprise a major part of the research, directly investigate the feasibility of the Housing Finance Agency making use of its resources to aid the delivery of manufactured housing.

This research activity, which is in its preliminary stages, has identified the major activities in which the Agency might become involved. These potential activities include the financing of individual mobile homes and the financing of sites where mobile homes will be placed; construction and/or permanent financing of mobile home parks, condominiums and subdivisions; and financing for the rehabilitation of mobile homes or mobile home parks. The research will also examine the expanded use of manufactured housing within the Agency's apartment development program.

The feasibility of each of these potential program activities is being studied separately. First, a determination is made of the need for a particular program activity. Basically, this involves an analysis of the performance of the private sector in providing a sufficient supply of financing at costs that persons and families of low and moderate income can afford and an analysis of the impact the Agency could have on improving this performance. The feasibility study also involves an analysis of the ability of the Agency to develop a workable program. To develop a program the Agency must have the ability to obtain program funds through the sale of bonds at favorable interest rates and the ability to develop an effective and efficient delivery system. A report is being prepared which outlines the various activities the Agency might become involved with and analyzes the costs and benefits of each potential program.

PRELIMINARY RESEARCH FINDINGS

This section summarizes some of the preliminary research findings. Much of this information is available in "Mobile, Modular and Panelized Housing: Preliminary Research Findings" a report prepared by and available from the Minnesota Housing Finance Agency. The report provides a more detailed analysis of the nature of the manufactured housing industry in Minnesota and the impact that manufactured housing has had on housing markets and on new housing production.

Production of Manufactured Housing

- Nationally, manufactured housing has assumed an increasing role in the production of new housing over the last two decades. Overall, an estimated 28 to 35 percent of all housing production in the early seventies utilized manufactured housing processes. Mobile homes accounted for 16 to 20 percent of total housing prodution.
- Manufactured housing accounted for approximately 40 to 50 percent of all single family housing production over the same period. Of this production, approximately 25 to 31 percent were mobile homes and 15 to 20 percent panelized or modular housing.
- Minnesota mobile home manufacturers produced approximately 7,200 mobile homes annually between 1971 and 1975, with production varying from 9,200 units in 1973, the peak year for mobile home production nationally and in Minnesota, to 4,800 units in 1975.
- Annual shipments of mobile homes to Minnesota dealers averaged 6,300 units over the same period, accounting for approximately 18 percent of all housing production

in the state.

- The manufactured housing survey conducted by the Agency identified ten mobile home manufacturers, four panelized housing manufacturers and two modular housing manufacturers operating in the state.
- Little reliable data is available on the production and shipment of modular and panelized housing at the state level.

Location of Manufactured Housing

- In 1970 there were approximately 30,000 year round, occupied mobile homes in the state, accounting for only 2-1/2 percent of the stock of year round, occupied units. This percentage ranged from less than 1-1/2 percent in the Twin Cities metropolitan area to over 5 percent in four of the state's thirteen development regions (Regions 1, 2, 7E, 7W).
- By 1975, the number of year round, occupied mobile homes in the state had risen by 62 percent to between 45,000 and 50,000 units due to high levels of production during the early seventies. These mobile homes account for 4-1/2 percent of the total year round, occupied housing stock; varying from less than 2 percent in the Twin Cities metropolitan area to over 7-1/2 percent in four development regions (Regions 1, 2, 7E, 7W).
- Approximately 70 percent of all mobile homes are located in mobile home parks. In the Twin Cities metropolitan area virtually 100 percent are in parks, while in the remainder of the state from 60 to 65 percent are in parks.
- In 1975, there were 948 mobile home parks in the state

with approximately 39,000 spaces. The size of parks varies considerably from one area of the state to another. In the Twin Cities metropolitan area 52 percent of the spaces are in parks with over 200 spaces while only 5 percent are in parks with less than 50 spaces. In the rest of the state only 7 percent of the spaces are in parks with over 200 spaces, while 48 percent are in parks with less than 50 spaces.

- Though data is unreliable, as many as 10,000 additional mobile homes may be used as seasonal homes in the state.
- Again, little data on the location of modular and panelized housing is available, though information seems to indicate that, like mobile homes, a disproportionate share are located outside the Twin Cities metropolitan area.

Demographic Profile of Residents

- Mobile home residents are predominately owners, with 90 percent owning their mobile home.
- Owners of mobile homes tend to be younger than owners in general, with the highest proportion of mobile home-ownership in the under 35 age group. In 1970 almost 30 percent of all homeowners in the under 25 age group occupied mobile homes.
- Incomes of mobile homeowners tend to be lower than incomes of homeowners in general. However, most mobile homeowners have moderate rather than low incomes. The 1969 median income of mobile homeowners was 20 percent less than the median income of all owners, but was 25 percent higher than the median renter income.
- Overall, the age and income distributions of mobile home-

owners resemble those of the renter population rather than those of the owner population.

Public Response to Manufactured Housing

- The federal government has primary responsibility for regulation of the construction of mobile homes through the National Mobile Home Construction and Safety Standards. The Building Codes Division of the Minnesota Department of Administration assists in the enforcement of these standards and is responsible for regulating the installation of mobile homes.
- Mobile home parks are regulated with respect to minimum health and safety standards by the Minnesota Department of Health. Local governments also regulate mobile home parks.
- The State Building Code Division regulates the construction of modular and some forms of panelized housing through the manufactured housing provisions within the State Building Code. Local government must permit the placement of modular and panelized housing that has received state certification.

Financing of Manufactured Housing

- Modular and panelized housing are financed by private lenders like site built housing and are eligible for long term mortgage financing.
- Mobile homes are primarily financed by private lenders with installment loans. Terms for new mobile homes are generally 10 to 12 years, considerably shorter than terms on mortgage loans. Though interest rates are higher on mobile home loans than on mortgage loans, down payments and monthly loan payments have tended to compare favorable with mortgage loans due

to the lower prices of mobile homes and credit availability has been subject to less fluctuation. This makes the overall financing package an attractive aspect of the mobile home purchase to many households.

- Though mobile home loan insurance programs have been operating within the Federal Housing Administration and the Veterans Administration since 1970, less than 5 percent of mobile home loans since then have been insured under these programs.

CONCLUSION

This interim report has presented a brief summary of MHFA research activities in the area of manufactured housing. The research findings will form the basis for recommendations on how the State Legislature and the Housing Finance Agency should address manufactured housing. Final research findings and recommendations will be presented in a report to the Legislature during the 1978 Session.