



MINNESOTA

STATE GOVERNMENT

ISSUES

STRATEGY ON AGING - HOUSING

EXECUTIVE SUMMARY

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Executive Branch Policy Development Program
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In an effort to deal with a rapidly growing elderly population and its needs, the Strategy on Aging Task Force was formed. This task force represented seven Minnesota state agencies who have programs that benefit the elderly.

The task force reviewed: 1) demographic data; 2) income support programs; 3) housing programs; 4) social service programs; and 5) long term health care insurance. This technical paper is the staff report on housing.

Any "strategy" concerned with the elderly - particularly dealing with the offering of alternatives to institutionalization, must consider the settings (the housing) in which the elderly live. Housing has a dramatic influence on the elderly individuals physical and emotional well-being.

The elderly, nationally and in Minnesota, are an extremely heterogeneous population. It is no longer adequate to look at the elderly as a group 65 and over. It is necessary to break the population into at least three age cohorts - 65 to 74, 75 to 84, and 85 and older. The growth rate is projected to be highest for those 85 and over. Coupled with this projection is the fact that household income declines with increasing age of the householder. The implication is that there will be an increasing state population of elderly persons with declining incomes and declining levels of independence.

A number of federal and State programs exist to aid the elderly both in housing and services, but no coordination mechanism exists. Currently there are no incentives for coordination.

Most elderly live independently and will continue to do so. It is important to realize that housing is not an either - or proposition (either the "home" or the "nursing home"), but rather a continuum from an independent to a dependent level. Efforts should be made to fill the gaps in the continuum by enabling and facilitating the development of alternatives. All alternatives will have some appeal to some individuals, but no single alternative will appeal to, nor be appropriate for, the entire elderly population.

A simulation model of housing settings and services was created. The simulations demonstrate that as long as individuals require few formal services, homes and apartments are cost effective housing settings. As levels of services increase, shared housing was found to be the most cost effective housing setting, promoting independence through interdependence and allowing the principle of economics of scale to operate in a limited fashion. The value of the informal network was simulated as well. The results show that the State can not afford to supplant the informal network, if anything, efforts should be taken to strengthen it.

Home equity conversion was also studied. Since most elderly Minnesotans own homes, a majority of which are mortgage free, home equity conversion is a potential way to free up personal resources. Home equity conversion programs, however, are of no help to renters and little help to homeowners whose homes are seen as poor investments.

RECOMMENDATIONS

1. Establish an Accessibility Pilot Program.

Rationale: Funds in the form of a grant, deferred loan, or low interest loan would be available for accessibility improvements. At times, elderly persons need only small renovations such as construction of a wheelchair ramp for a bathroom on the first floor in order to remain in their homes. These items are far less costly than having the person move to a nursing home. Elderly households would be referred by the local social services agency to ensure the selection of households that would benefit the most from an accessibility improvement to their residence. This program can reduce the cost of medical assistance for the State and add to the quality of life of the elderly person. The fiscal impact for this item is \$500,000 in 1986-87.

2. Establish a Home Sharing/Shared Residence Program.

Rationale: Funds would be available as seed money for sponsors of home sharing programs. Home sharing programs match existing homeowners with tenants. The homeowner is generally an elderly person and the tenant is generally not as old. The tenant may either pay rent or provide services to the homeowner. Funds would also be available for the conversion of existing buildings into structures with three to twelve private rooms with shared kitchen and common space. The monthly charge per resident would depend upon the services provided to the residents. The fiscal impact for this item is \$1.5 million in 1986-87.

3. A Home Equity Demonstration Program

Rationale: Funds would be available for a sponsor to demonstrate the potential for home equity conversion in Minnesota. Many elderly are house rich, but cash poor. Other areas in the country have established programs to assist the elderly in becoming more economically independent through the use of the equity in their homes. The demonstration program would examine how equity conversion programs would work in rural areas with lower real estate values. This demonstration program would examine the market for the program and the need for consumer safeguards. The fiscal impact for this item is \$225,000 in 1986-87.

THE INTRODUCTION

Nationally and in Minnesota, programs for the elderly are receiving an enormous amount of attention. This attention is being focused on constraining costs in health care, particularly in regard to nursing home expenditures. Balanced against this is the effort to maintain an adequate level of services for those who need them to enhance their quality of life.

The Strategy on Aging Task Force, representing seven Minnesota state agencies, was created to deal with these issues as well. It has been studying a series of possible changes in the public assistance programs serving Minnesota's elderly. Its effort has focused on two areas: 1) The structural changes which result in better coordination between service providers; and 2) settings that will offer alternatives to nursing homes and promote personal independence.

Any strategy concerned with constraining costs by offering alternatives to institutionalization must consider the housing arrangements in which services are delivered. Housing has a significant influence on the elderly individual's behavior, well-being and, of course, the provision of services. Elderly people spend the majority of their time in their homes -- and increasingly that is recognized for its contribution to the health of the individual.

The variety of housing options are actually quite limited when compared with the diversity of elderly "consumers." Therefore, housing arrangements must be developed that meet both the need and the demand of a diverse population. Need and demand, however, are not necessarily synonymous. "Experts" often define needs. It is the consumer though, who determines demand.

Too often, housing is created and services are provided based on the professional's view of the consumers' needs. When this occurs the motivating

principle of the discipline of marketing is violated.* Marketing begins by finding out who the consumers are and what they want.

A key task is to determine both the needs of the target market (in this case the elderly) and the wants and interests of the group as well. If this is done then the consumer's and society's well-being will be preserved or enhanced by a more efficient and effective use of resources and services.**

We are faced with an elderly population that is increasingly better educated, more affluent, more mobile and more selective than those preceding it. A variety of social and economic factors will have a significant affect on future generations of elderly and their needs, preferences and demands for housing and services. For example:***

The housing and service needs of the young old (65-74) differ greatly from those 85 and over.

Women have been entering the work force in unprecedented numbers. Over 50 percent of the women between the ages of eighteen and sixty-four are employed. This means an increase in future retirement benefits and pensions. A life experience of financial management, self-reliance and independent decision making will make the elderly female market even more discerning than it is presently.

One of the greatest factors that will have an impact on future public resources is the huge number of military veterans approaching 65. By 1995, 60 percent of all U.S. males over 65 will be veterans. These veterans and their families have been the recipients of major benefits: home loans, educational grants, health insurance, employment preference, pensions and compensation pay.

These examples are just a few of the groups who will be among the future elderly population for whom we plan housing and services for today. More educated, mobile and affluent with greatly changed expectations than preceding

*Louis E. Gelwicks, "Housing. The Where In The Continuum of Care."
January, 1984, p.3.

**Philip Kotler, Principles of Marketing (Englewood Cliffs: Prentice Hall, Inc. 1980) pp. 24-26.

***Gelwicks, p. 4.

generations, the elderly will put great pressure on society and the marketplace. It is doubtful that they will allow their benefits to be cut, and their standards for services will be high.

In recent years there have been a large number of financial failures in housing, congregate living and other shelter/service arrangements. These failures have resulted because of inadequate market analysis.*

Housing must be seen as a component of a support system which can never be cost effective when it is developed, designed or implemented in isolation from other components of the system and the preferences of the consumers.

A major problem is the tendency to deal with financial feasibility, market feasibility, product design and marketing as independent functions when, in reality, they are interdependent factors within market analysis. A project may "pencil out" as financially very feasible, but simply cannot be sold in the market to selective elderly consumers. Or the project may be attractive to an elderly population but not be financially feasible.

Elderly housing projects with very promising market studies often fail because the marketing budget is too low or the marketing effort was directed to the wrong target market. There are no simplistic solutions to market analysis regarding housing for the elderly. This paper will describe several housing alternatives for the elderly. In light of the lack of market analysis - the results of this work are based on the best data available.

The rest of the paper is divided into the following sections: The Population - which describes the national and state elderly populations and some of their

*Gelwicks, p. 11.

characteristics. The Programs - current federal and state programs that can benefit the elderly. The Options - a description of housing alternatives that exist or could exist for the elderly. The Model - a detailed description of a model that forecasts the costs of various combinations of housing and services for the elderly. The Asset - Home Equity Conversion - which briefly describes some home equity conversion plans with advantages and drawbacks. Finally, The Conclusions - which details the implications of this work.

THE POPULATION

Federal spending for older Americans, because it represents a large portion of the Federal budget, has come under increasing scrutiny. In fiscal year 1985, 26 million elderly individuals (65 and older) will be the benefactors of about \$256 billion in Federal expenditures, almost 28 percent of the total anticipated 1985 federal budget.* (See Figure 1.)

The number of elderly persons in the nation is projected to increase by 50 percent from 1975 to 2000. Those 75 years of age and over will grow at an even faster rate. Nationally, the majority of the elderly reside in owner-occupied housing much of which is mortgage free. Those elderly who rent, as a group, are poorer and will continue being poorer than home-owners. Most elderly renter households are one person female households.

The number of elderly persons 65 and over in Minnesota is projected to increase between 1985 and 1990 at a rate of 1.4 percent per year. It is important to note though, that the growth rate is projected to be largest for those 85 and over - 2.62 percent.** (See Table 1.)

The following data are from an unpublished MHFA analysis of the 1980 Public Use Microdata Sample of the 1980 Census.

The State median household income was \$7,625 for all elderly. For homeowners income was \$9,130 and for renters it was \$5,040. Incomes were lowest when the elderly householder was female, over 75, and dependent on retirement income or dependent on the financial resources of one person. In all areas of the State

*U.S. Congress, Senate, "Older Americans and the Federal Budget: Past, Present and Future." An information paper, April 1984, p. iii.

**Derived from the Minnesota State Demographer's projections for 1985 and 1990.

FIGURE 1

SHARE OF FEDERAL BUDGET
BENEFITING THE ELDERLY
1960 - 1985

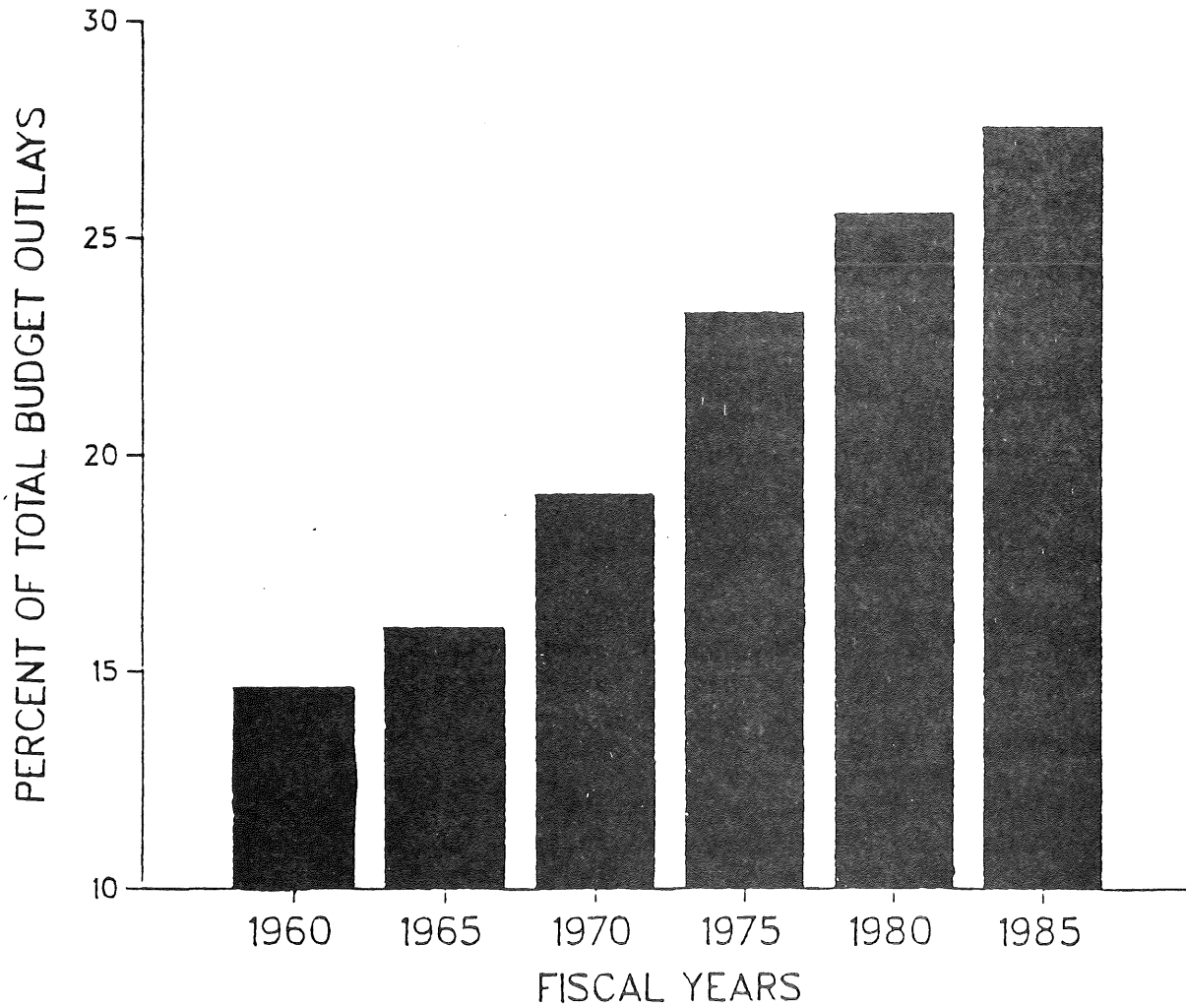


TABLE 1
MINNESOTA ELDERLY POPULATION

AGE	1970	1980	1985*	1990*
65 - 74	239,385 (58.5%)	269,920 (56.3%)	284,094 (55.4%)	295,969 (53.9%)
75 - 84	136,961 (33.5%)	157,748 (32.9%)	168,158 (32.8%)	184,422 (33.6%)
85+	32,997 (8.1%)	51,750 (10.8%)	60,215 (11.8%)	68,542 (12.5%)
TOTAL	409,343(100.0%)	479,418(100.0%)	512,467(100.0%)	548,933(100.0%)

*Based on State Demographer's projections.

and for both homeowners and renters, household income declined with the age of the householder. (See Table 2.)

Marked decreases in household income were associated with increases in age. Older homeowners were likely to have no mortgage payments, but they were also more likely to live in a residence built before 1940 and which might be in need of substantial repair. Eighty-eight percent of all elderly homeowners owned their housing residences free and clear. The monthly housing costs of these homeowners were half as much as the monthly costs of homeowners with a mortgage and less than approximately one-third as great as the monthly costs of renters. (See Figure 2.)

The vast majority of all elderly households were either married couples (42%) or women living alone (40%). Men living alone accounted for 10 percent of elderly households. (See Figure 3.)

The median income of elderly householders living alone was much lower than the median income of married couples. (See Table 3.)

Statewide, 16 percent of elderly householders had household incomes below federal poverty levels. Five to 10 percent of all one-person homeowner households and 20 to 30 percent of all one-person renter households, had incomes below the poverty level. As people aged and became single, the likelihood of falling below the poverty level increased.

Homeowners without a mortgage (88% of all elderly homeowners) had a median monthly housing ratio of 10 percent while renters had a median ratio of 29 percent. Renters have an economic disadvantage since they not only pay a larger share of income for housing, but are also denied the tax and equity benefits of homeownership.

TABLE 2

Median Household Income of Elderly Homeowners
and Renters by Age Group
Regions 1-10, Region 11
1979

Age Group	Regions 1-10		Region 11	
	Homeowners	Renters	Homeowners	Renters
65-74 Years	\$9,400	\$4,900	\$13,165	\$7,010
75-84 Years	6,520	4,370	8,805	5,280
85+ Years	5,630	3,830	7,010	4,515

FIGURE 2

MOST ELDERLY HOMEOWNERS DID NOT HAVE A MORTGAGE
MINNESOTA
1980

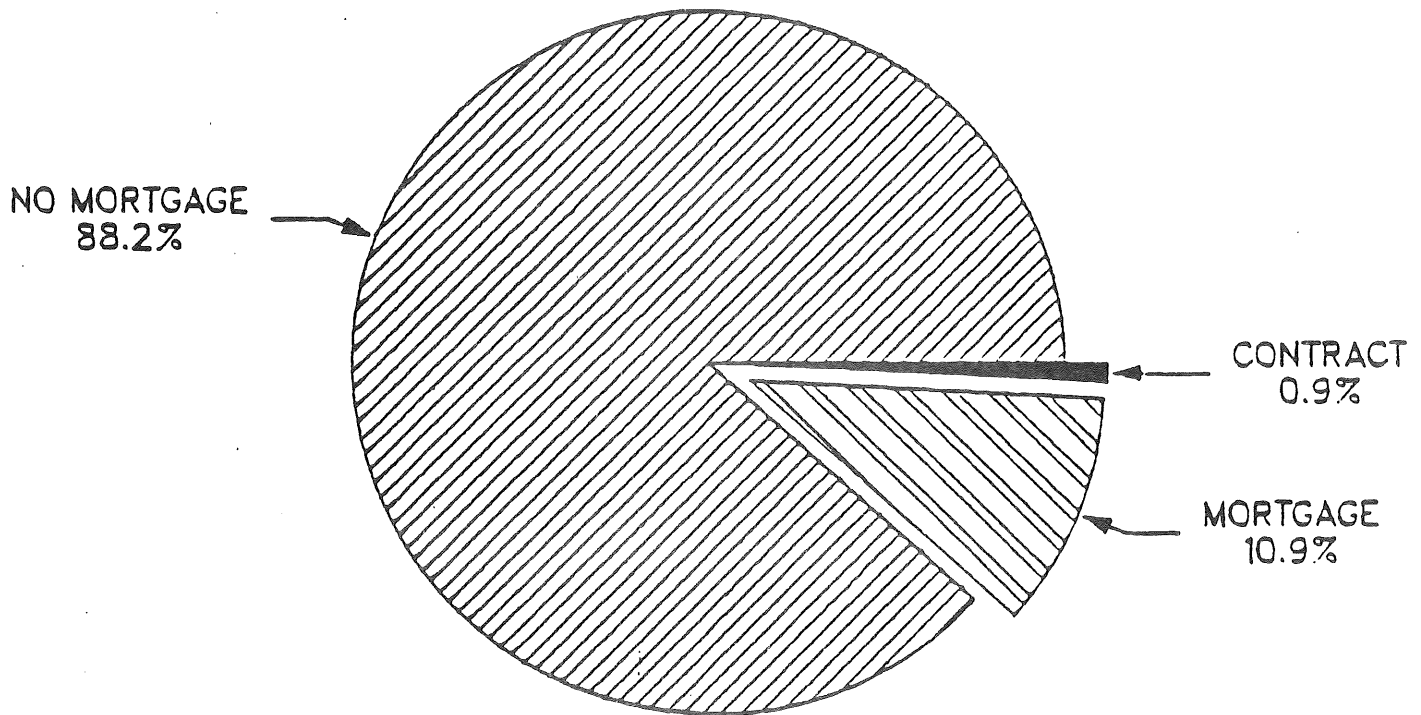
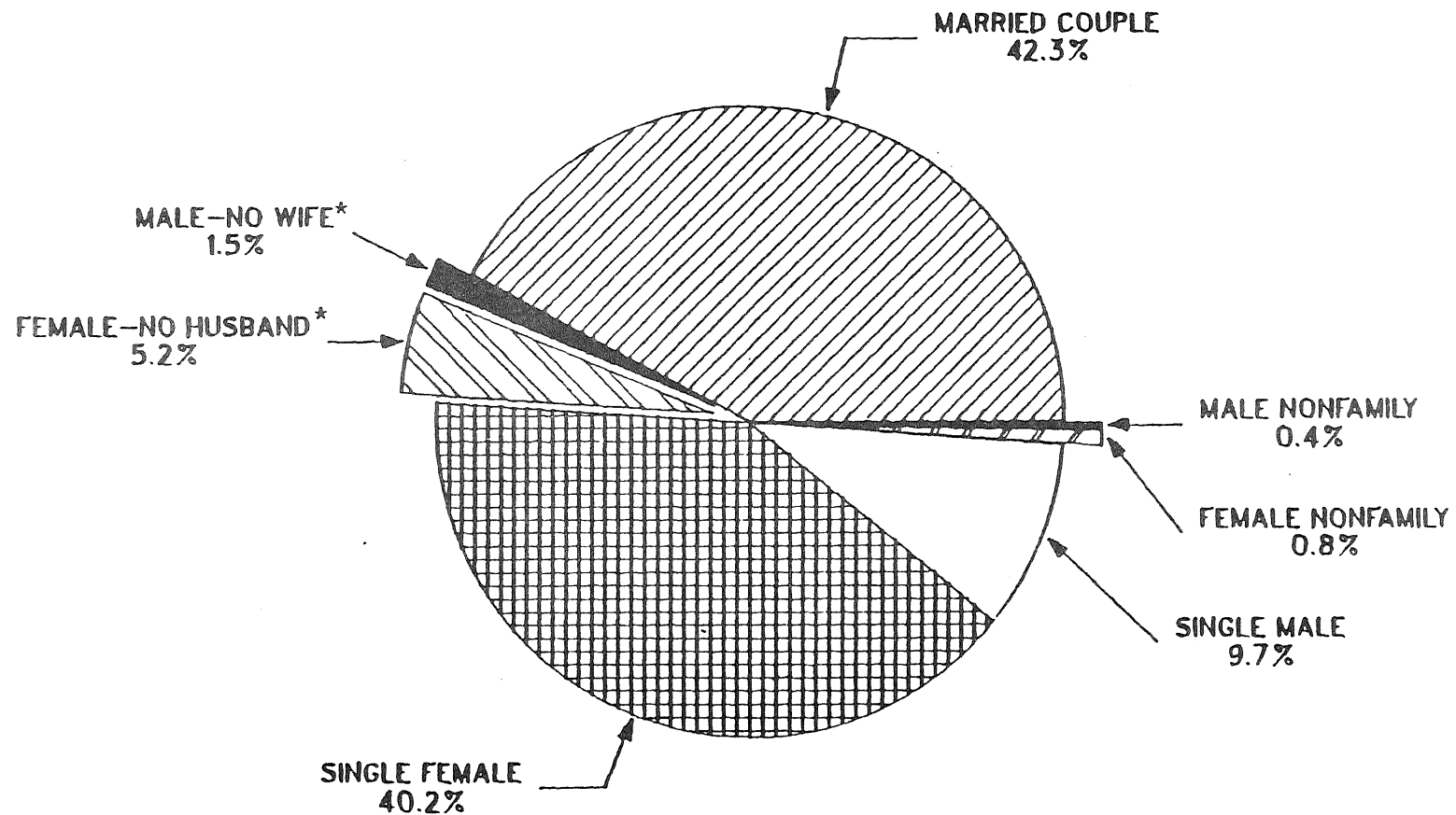


FIGURE 3

MOST ELDERLY HOUSEHOLDERS WERE MARRIED COUPLES
OR WOMEN LIVING ALONE
MINNESOTA
1980



*Households consisting of a male or female head with one or more dependents present but no spouse.

TABLE 3

The Median Income of Elderly Householders Living Alone
Was Much Lower Than the Median Income Of Married Couples
Minnesota
1979

Household Type	Statewide Median Income	
	Homeowners	Renters
Married Couples	\$11,795	\$9,625
Single Females	\$ 5,010	\$4,160
Single Males	\$ 5,780	\$4,560

The implications of the MHFA study coupled with the State Demographer's projections suggest that Minnesota will have an increasing population of persons 75 and over who will have declining incomes and declining levels of independence. Any housing programs which are developed in response to these trends will require better coordination among income maintenance, social services and housing programs than currently exists. If not done, the independence of this population will be jeopardized and dependence upon others will be encouraged and perpetuated - having a dramatic effect upon State resources.

THE PROGRAMS

Federal Level: Some of the housing programs that benefit the elderly include:

New Construction Programs

Section 202: Nonprofit corporations or consumer cooperatives apply directly to HUD for a mortgage loan. Funds may only be used to fund developments for the elderly or handicapped. Section 8 subsidizes the tenant's rent.

FmHA 515: This program provides construction and mortgage financing for rental projects in communities with populations less than 20,000. The financial ability of residents to pay rent is evaluated in determining the extent of the subsidy that the project may receive. Interest reduction is used as a form of subsidy as well as a direct tenant subsidy.

Housing Block Grant: This program is modeled after the UDAG program that is, proposals are submitted in a national competition and are evaluated partially on the degree of leveraging of private dollars. The funds may be awarded in the form of a loan, grant, or interest reduction. Projects must be located in areas that are experiencing a severe shortage of decent rental housing opportunities.

Existing Housing Programs

Section 8 (Moderate Rehabilitation): Property owners who rehabilitate their rental structures receive Section 8 subsidies for the units in their buildings.

Section 8 (Existing): Tenant receives a certificate that pays the landlord the difference between 30 percent of the tenant's income and the apartment rent. Existing housing stock is used.

Voucher Demonstration Program: This program addresses the needs of tenants who may be displaced by the Rental Rehabilitation Program. Only those tenants who have previously received Section 8 assistance or whose incomes are less than 50 percent of the area median may receive a voucher. The voucher is equal to the difference between HUD determined payment standard and 30 percent of the tenant's adjusted income.

Rental Rehabilitation: Grants may not exceed 50 percent of the cost of rehabilitation. \$5,000 per unit is established as a maximum cost. Substandard conditions must be addressed.

Grants

Community Development Block Grant: Funds are allocated directly to Entitlement Cities and to the State for disbursement to smaller cities. The purpose of this program is to remove areas of blight and address the needs of low and moderate income people.

Urban Development Action Grant: All applicants must compete nationally for funds. UDAG funds are primarily used for economic development and rated on the extent of public/private leveraging of funds and of job creation.

State Level: Some of the state housing programs that can benefit the elderly include:

Home Improvement Loans: Maximum home improvement loan up to \$15,000 for up to 15 years at 3 percent to 11 percent interest, based on borrower's income.

Rehabilitation Loans: Maximum loan for basic repairs up to \$7,500. Deferred loan, no interest or repayment unless property transferred within 10 years.

Accessory Apartment Loans: Up to \$15,000 loans to construct an independent rental unit in an existing single family home.

THE OPTIONS: HOUSING ALTERNATIVES

- I. Most elderly live independently and will continue to do so. A majority are also homeowners as opposed to renters with most owning their homes mortgage free. For many this form of housing is by far the least expensive and most independent alternative in which they can reside. It is also generally the most preferred.

Besides single family dwellings, included in this definition are condominiums, cooperatives or any other housing type where there is some control and benefit of equity.

Condominium living has become increasingly popular. This type of housing can be in an apartment building or detached or semi-detached townhouses in which the residents hold title to their living unit but share ownership of the "common elements" with all other owners in the development. While condominium ownership can offer real benefits, the style of life differs from that in conventionally-owned single family homes. For example, homeowners are accustomed to making decisions about when to paint the exterior of their homes, mow the lawn, have a pet, etc. In a condominium community, an elected board of directors decides these things.

Advantages: Condominium ownership provides many of the same advantages of home ownership. The owner gets the same tax benefits but are freed from exterior maintenance.

Disadvantages: There are restrictions as to what the owner can do. Decisions are made by an elected board.

Documents used by developers are complex and often difficult to understand by the elderly owner.

Cooperative housing combines most benefits of home ownership with the convenience and efficiency of multi-family housing. It is an option for older people who are willing to work cooperatively with other owners and who want to build up equity in their living accommodations but prefer to avoid the responsibility or isolation of a single family home. Housing cooperatives are nonprofit corporations that own and operate living facilities for the benefit of the occupants. Co-op membership is composed of people who buy shares in a corporation in exchange for the right to occupy a specific living unit.

Advantages: Cooperative housing may be an affordable option for persons who want to transfer their equity from their present home (if homeowners) to purchase a cooperative share and pay the monthly charges.

Cooperative housing can also lead to additional kinds of in-house cooperative activity, i.e., day care, bulk purchasing of foods and household supplies, etc.

Disadvantages: Cooperatives can be quite expensive. Persons with limited incomes and little or no equity or other financial assets will not be able to get financing or afford the loan payments and monthly charges without receiving subsidies.

II. A significant number of elderly people reside in rental housing. This group lives independently and will also continue to do so. Rental housing is an important option - for those who have been renters all their lives and for those who might wish to divest themselves of a category I type residence but still live independently. Market rate rental housing is available in many different types, sizes and arrangements.

Advantages: It relieves the resident of maintenance and other responsibilities of ownership.

Generally less housekeeping is required.

The setting may lend itself readily to the provision of a variety of additional services.

Disadvantages: The resident often has little control and may be restricted as to having pets, visitors for an extended stay (especially grandchildren), or doing things which give the residence that "homey" touch.

Whereas while owning a residence, equity is accruing, in renting there is no additional financial benefit (i.e., equity accrual or income tax break) other than not having to make what might be large mortgage payments.

- a. A large number of elderly renters live in subsidized housing, i.e., public housing and Section 8. These individuals have normally been renters all their lives and have very low incomes. The advantages and disadvantages are basically the same as those of market rate rental housing with a couple of issues that may be more unique. In subsidized

housing, there has been a remarkable aging in place of the elderly. This has been said to be both good and bad for a variety of reasons. Because these people do not have the resources many existing housing options for the elderly require - particularly when services are included in the residential package - this is normally their only housing option short of a nursing home at great public expense.

Subsidized public housing is costly for two different reasons - 1) Public housing is aging and requires major maintenance expenditures that were not budgeted for. As the housing units continue to age, any required maintenance/rehabilitation necessary will continue to become more and more expensive. 2) Section 8 elderly housing is expensive for just the opposite reason. Maintenance and reserve funds exist for each unit that require large public subsidies to meet rent guidelines for the tenants (30% of gross income).

Because concentrations of elderly are high in some of these units, the provision of services in these settings - if coordinated - could be made effective through the presence of economies of scale. In essence, a congregate type setting for services linked with housing could be created.

Two housing types that are modifications of independent living in categories I and II are Accessory Apartments and Echo Housing. An accessory apartment is a separate and independent residential unit created in a building which has been structurally remodeled, most often in existing single family dwellings. The economic feasibility of installing an accessory apartment depends mainly upon the structural design of the home. There are two different reasons for the creation of

an accessory apartment. First, the elderly homeowner may have one installed in order to supplement current income. Second, an adult child or relative may have one built in order to house the elderly parent(s)/relative(s) in a still independent environment but in a setting where support can be easily given if/as needed.

Advantages: Accessory apartments can provide homeowners with additional income or, if no rent is charged, services in exchange for housing. This is especially likely to be for elderly homeowners, who often are over-housed.

Affordable units are made available to those who need them with little impact on the character and appearance of the community.

Accessory apartments can help promote more efficient use of housing which already exists, while allowing for more privacy than homesharing between two people.

Accessory apartments can allow people to house other family members in an independent manner.

Disadvantages: Accessory apartments normally require expenditures of several thousand dollars or so to remodel the building. A rental income, if charged, will often more than repay the investment, but the initial expenditure could be a problem.

The elderly may not want the responsibility of being a landlord.

Accessory apartment conversions often violate local zoning codes though violations are generally not sought until a complaint is received. Communities are sometimes concerned that by allowing

conversions the character and property values of the neighborhood will be harmed. Prohibiting exterior modifications to the building has been one way some communities have dealt with this concern.

Echo Housing (Elder Cottage Housing Opportunity), as opposed to an accessory apartment, is a separate, self-contained dwelling unit designed for temporary installation in the side or back yard of an adult child's or other relative's home. Smaller than traditional manufactured housing units, the cottage is hooked up to existing sewer, water and electric lines. Much like the accessory apartment concept, this housing type allows independence in a setting where support can be easily given as needed.

Advantages: This concept encourages interdependence - it relies on the family for support as informal care givers.

Echo housing maintains independence and privacy to a greater extent than accessory apartments might.

Disadvantages: Zoning codes and public attitudes about the effect on the "neighborhood" of Echo housing. It may be a more viable option for rural areas.

III. Some old and traditional housing options relying on interdependence are gaining new support as viable housing alternatives for the elderly. Two of these programs are Home Matching or Home Sharing and Shared Housing.

Home matching involves a "homegiver" who owns or rents a residence and is willing to share it with another, and a "homeseeker" wishing to move in with another. The function of a home matching program (which is normally run by a nonprofit

agency) is to match up homegivers and homeseekers who appear compatible. The people directly involved make the ultimate decision about a match and its terms. The agency facilitates the process through matching and counseling.

Lutheran Social Services of Minnesota currently has a home matching program, called Share-A-Home, that matches elderly homegivers with college student homeseekers.

There are a variety of reasons for participating in home sharing arrangements. Some people may do so in order to help with day to day expenses; others may be seeking security or companionship; and still others may be seeking an exchange of services. Some home matching programs serve predominately the elderly while other programs serve almost anyone who is legally an adult.

Advantages: Home-matching promotes a more extensive use of existing housing.

These programs do not require large public subsidies; they help individuals solve problems by using their own resources in their desired way.

Home matching can help ease financial burdens of homeseekers looking for affordable housing and homegivers seeking services or help with expenses.

The programs can alleviate isolation and provide security.

Home matching programs are flexible and can often place people relatively quickly.

Disadvantages: Homeowners may see home-matching as a long-term arrangement while homeseekers might view it as only a temporary solution to urgent problems.

Home matching programs have difficulty matching people with significant problems, i.e., medical, mental, etc.

These programs require great skill and sensitivity on the part of those doing the matching.

Home matching arrangements, in some instances, may affect eligibility for public benefits or assistance programs which are based on household income.

It should be noted that most persons who participate in home matching have limited resources and it is preferable that the supportive agency services be provided at little to no charge. This may require the sponsoring agency to solicit private or public support.

Shared housing for the elderly involves a number of elderly people who live as one household in a residence which no one member owns or rents. The residence is usually either owned by a nonprofit corporation of which the residents are members, or leased to the group by a nonprofit agency.

Shared homes range from about four to twelve units. This option can serve both the frail elderly, who may need significant support services as well as housing, or the basically healthy who, for financial and/or social reasons, wish to live with others. It is probably inevitable that a frailer population needs more sponsoring - agency involvement, more services, and more money for these services. Even if that is the case, shared homes can be a cost effective alternative as compared to other options and institutionalization due to the setting and possible creation of economies of scale. The shared home has private bedrooms and normally private bathrooms for each resident. The rest of the home is shared common space. It is extremely important to ensure adequate private space.

The sponsoring agency generally selects the initial "family" and helps to provide desired and needed services. Interdependence is encouraged in the shared home setting and through it, the need for formal provision of some services is reduced or eliminated that in other settings would be required.

Advantages: Shared homes can encourage friendship and community supports and help overcome isolation.

To a great extent the exchange of informal services within the "family" can compensate for minor medical and physical impairments of the residents.

Shared housing combines mutual support and interdependence with autonomy.

Disadvantages: Shared housing is not for persons who require a great deal of privacy or to whom home ownership is important.

As with home-matching, shared housing may affect eligibility for public benefits or assistance programs which are based on household income.

Single family residence zoning is an obstacle in situations where "family" is defined in terms of biology, marriage or adoption. The concern is the impact that a shared home may have upon the character of the neighborhood and property values.

Shared housing may be particularly attractive to those low income elderly who have been renters all their lives. It is an option for those who do not have the resources or equity to transfer to more expensive housing with services options.

IV. The final broad housing option to be described with its many variations, is the concept of congregate housing. Congregate housing is defined as "an assisted residential living environment offering functionally impaired or socially deprived elderly, though otherwise in good health, the housing and supportive services necessary to maintain or return to a semi-independent life style and prevent premature or unnecessary institutionalization as they grow older."* This definition emphasizes a close connection between housing and services.

Most congregate type settings offer meals (one or more per day) at a central location. Other services that may be readily available include housekeeping, personal care and medical services, counseling, and recreation. Congregate type housing does not necessarily involve the construction of new facilities; it can be created by coordinating and providing services at existing housing sites, i.e., elderly Section 8 and public housing sites with high concentrations of elderly.

Congregate programs are generally designed to serve elderly who are at high risk of institutionalization and are no longer able to live alone. This situation usually occurs due to a combination of health problems and social and economic circumstances.

The motivating concept behind congregate housing is the linkage between housing and services. The particulars of each program are determined by the interplay of funding, site availability, needs of the elderly to be served, and the creativity and vision of those who plan and manage the project.

*Wilma T. Donahue, Congregate Housing for Older People: An Urgent Need, A Growing Demand, p. ii, as cited in Innovative Options In Elderly Housing: A Manual For Local Action, State of Connecticut, February 1982, p. 13.

Advantages: Congregate housing can provide frail elderly with a combination of housing and support services that are needed in order to live as independently as possible.

Congregate housing can prevent social isolation and psychological alienation.

Disadvantages: It is extremely expensive to construct or renovate buildings, particularly since part of the space is often non-income producing (i.e., community kitchen and dining area).

It is difficult, if not impossible to provide meals and other support services without subsidies in some form.

Disagreement exists among congregate "experts" regarding the type of elderly to be served, and design and programmatic features.

Careful planning and management is required to provide the appropriate level of necessary services as well as achieving the right mix of residents in order to avoid an overdependent population.

It is in these housing environments, categories I-IV, that what are normally called home care services are provided. The purpose of providing services in these settings is to enable the recipient to live as independently as possible while avoiding institutionalization.

There are many different kinds of services offered by many different service providers - public, for-profit, and nonprofit - which can make up a basket of services for the physically impaired or income deficient elderly individual. The more common services include meals-on-wheels, homemaker, nursing, home health aide, companionship, CHORE, home maintenance and transportation.

Formal services funded by public dollars should be provided only as a supplement to support services already being provided by informal sources - if such sources exist. Care must be taken not to supplant any informal service network that may be present.

Advantages: Services provided in the residence allows the semi-independent elderly to remain in their housing of choice with only minimal disruption.

If properly targeted, "home" services can prevent premature and/or unnecessary institutionalization.

In either subsidized (public) or private elderly housing complexes, home services can function as the non-shelter support system to enhance independence.

Disadvantages: For those elderly who are unable to pay for the necessary services out of their own resources, eligibility for funding can be a problem. Medicare, Medicaid, Title XX and other federal and state programs cover only some services under some circumstances.

Without coordination by a case manager or some other person able to access the system and assess the appropriate level of services needed, it is extremely difficult to plan an effective individual service program. The problem is availability of appropriate information.

These housing options coupled with services are ways to fill the gaps in the continuum of care from an independent setting to a dependent setting. Some are quite expensive, some are quite affordable. All the options will have an appeal to some of the elderly, but no option alone will have an appeal to all the elderly. The important thing is to allow as many options as possible to be made available to the elderly population. The role of the state should not be to

provide all the possible options, but to provide those that are cost-effective to those individuals that most need them because of inadequate personal resources.

To determine which options may meet this criteria, a simulation model was constructed. The model and its results are detailed in the following section.

THE MODEL

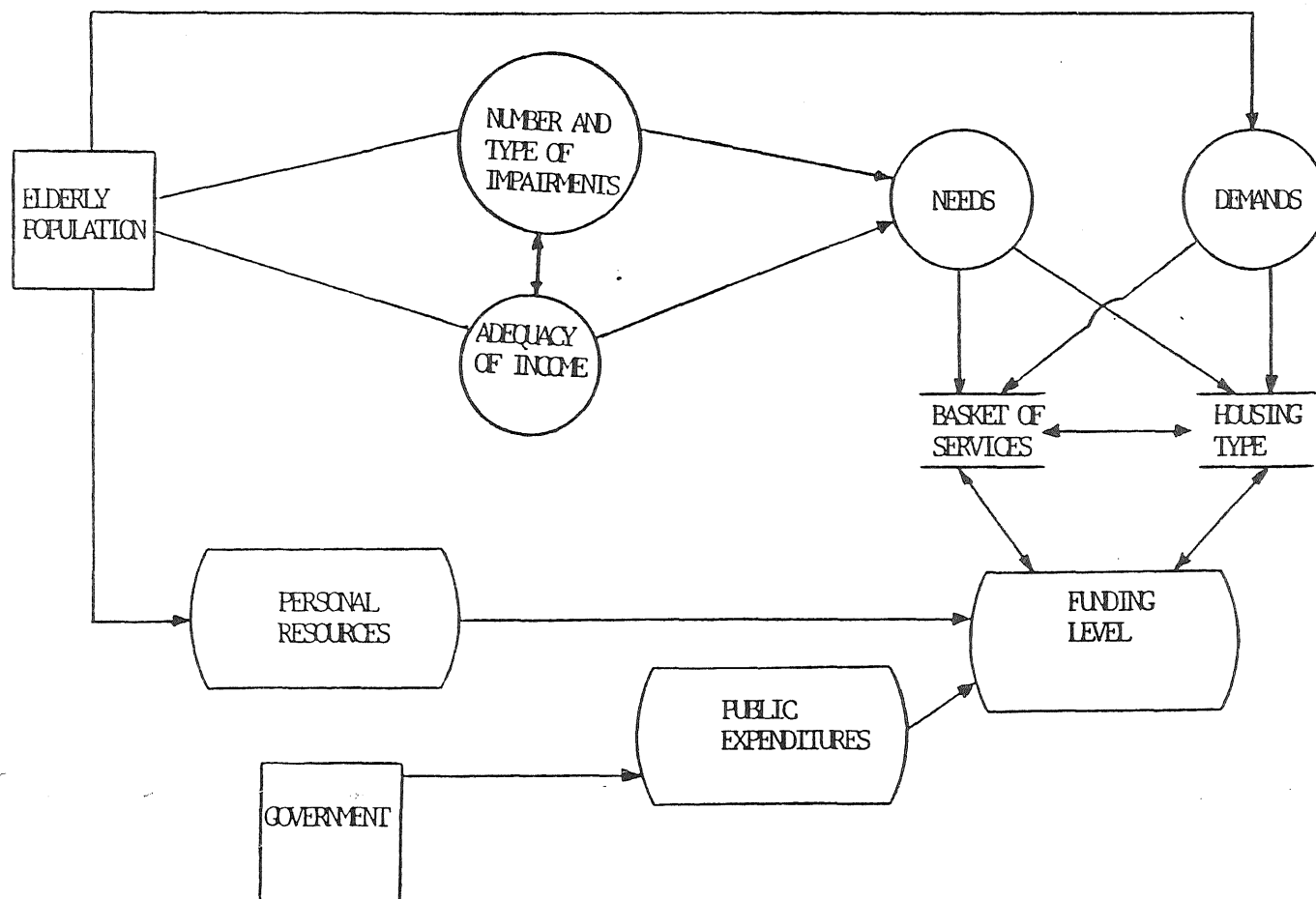
A model, by definition, is an attempt to represent a system or a process that exists in the "real world." A model tries to explain, predict, control or constrain some system or process. Any model represents a compromise between reality and manageability. It must be a "reasonable" yet manageable summary of the real world, so that meaningful insights or conclusions which are not readily identifiable can be derived.

The housing and services cost model that has been constructed is a simulation model, it is descriptive as opposed to normative. The model estimates the cost of providing various services in five housing arrangements. It allows "What if?" questions to be asked. For example, "What would it cost to keep everyone in their home?"

The model can be envisioned as a large matrix with housing settings on the vertical axis, and the costs and quantity of services needed on the horizontal axis. Within each housing setting, the population was segmented by age, household type and income.

In building the model the first step was to describe the relationships that exist between housing settings and the cost of providing services in that setting. (See Figure 1.)

Although a limited number of housing options were selected, given the large number of housing alternatives, these represent the five major "points" on the independent to dependent continuum of housing spoken of in the preceding section. They are the single family home, market rate rental housing, subsidized housing, shared housing and congregate housing (see Figure 2).



HOUSING AND SERVICES
COST MODEL

FIGURE 1

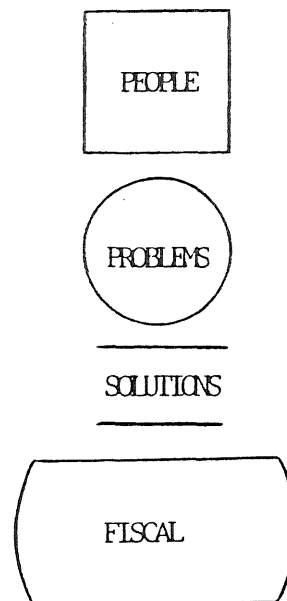
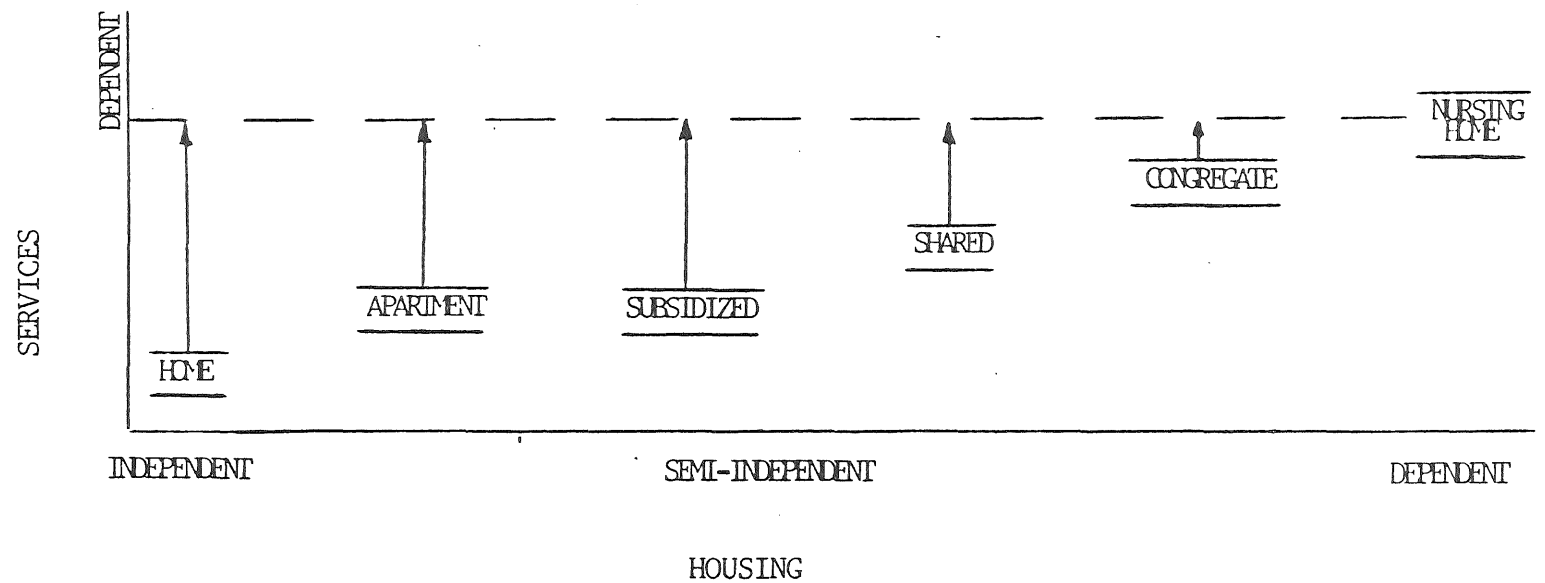


FIGURE 2

HOUSING: THE WHERE IN THE CONTINUUM OF CARE
INDEPENDENCE TO DEPENDENCE



The total costs of each combination of housing setting and services were compared with the costs of "a nursing home" which was assumed to be the most expensive combination of housing and services. Nursing homes were assumed to be the most cost effective providers of the complete basket of services if one needed the complete basket. No assumptions were made regarding the quality of care in nursing homes, though it was assumed to be adequate. Also, no assumption was made concerning the "quality of life" but more independent settings were assumed to have a better quality of life.

Although a great range of nursing home rates exist (see Table 1), per diems of \$47.43 (\$1,423/month), \$60.40 (\$1,812/month), and \$70 (\$2,100/month) were used for simulation purposes. the \$47.43 figure was derived through the following computations:

<u>Type of Nursing Home*</u>	<u>State Number</u>	<u>Percent</u>
Skilled Nursing Facilities	338	(46%)
ICF I's	315	(43%)
ICF II's	84	(11%)
TOTAL	447	(100%)

Taking the medians for each type by Regions 1-10 and Region 11 and assuming equal statewide distribution, figures of \$55.14 (Region 11) and \$43.82 (Regions 1-10) are derived for nursing homes. With approximately 32 percent of these facilities in Region 11 and 68 percent in the rest of the State, the statewide figure is generated $((\$55.14 \times .32) + (\$43.82 \times .68) = \$47.43)$. The \$60.40 and \$70 per diem rates were chosen for simulation due to the frequency of being cited as representative points within the range of rates (see Table 2).

*See Appendix C for definitions of terms.

TABLE 1

FACT SHEET ON NURSING HOME RATES
Source: Department of Human Services

(1983)

Skilled Nursing Facility Per Diem Rates

	Region 11	Regions 1-10
Mean	\$ 63.00	\$ 50.57
Median	61.54	49.19
Maximum	155.13	144.79
Minimum	39.33	31.19
99%	153.70	79.32
95%	74.70	63.45
90%	69.59	59.09

ICF I Per Diem Rates

	Region 11	Regions 1-10
Mean	\$ 53.09	\$ 42.88
Median	53.93	42.01
Maximum	69.21	70.31
Minimum	36.31	27.84
99%	69.20	68.57
95%	63.20	57.25
90%	60.77	51.78

ICF II Per Diem Rates

	Region 11	Regions 1-10
Mean	\$ 33.78	\$ 28.16
Median	33.08	28.40
Maximum	52.95	37.73
Minimum	23.61	19.79
99%	52.95	37.73
95%	45.17	35.40
90%	40.73	32.99

TABLE 2

MONTHLY COSTS OF NURSING HOME SERVICES
WITH DIFFERENT DAILY RATES

Per Diem	D A I L Y R A T E S		
	\$47.43	\$60.40	\$70.00
Housing*	\$300.00	\$300.00	\$300.00
Medical	247.00	328.00	390.00
Personal Care	281.00	374.00	445.00
Meal Preparation	157.00	218.00	260.00
Housekeeping	101.00	140.00	167.00
Maintenance	56.00	78.00	93.00
Social Interaction	56.00	78.00	93.00
Administration	225.00	296.00	352.00
Total Monthly Cost	\$1,423.00	\$1,812.00	\$2,100.00

SOURCE: Department of Human Services.

NOTE: Housing cost would be significantly higher for new construction nursing homes to cover debt services.

Table 2 also presents the allocation of costs in the nursing home. In all housing settings services can be provided. The housing setting influences the level, type and cost of services (see Figure 3).

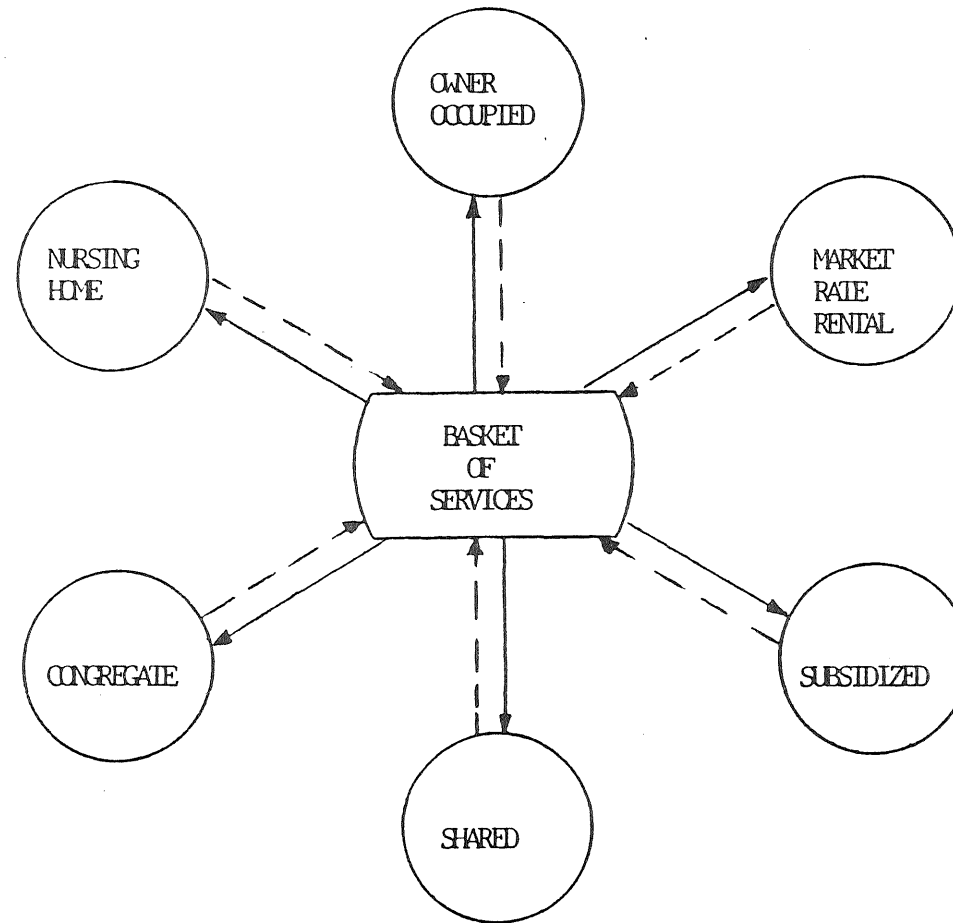
The services that could be provided in the residential settings simulated in the model were broadly defined as: daily medical/health care, daily personal care/assistance, meals - delivered or preparation assistance, housekeeping, home/yard maintenance, and social interaction. In the shared housing and congregate settings the cost of a limited amount of case management was included as part of the cost of the setting. Listed in Table 3 are the cost figures used in the model for each service.

In all the housing settings the cost of each basket of services was estimated. In the single family home setting, 64 possible combinations of these services exist. In the other four settings, because of the setting, fewer combinations of services are needed. As services are formally provided, and the number of services provided increases the different housing options were seen to become more or less costly respective to each other (see Figures 4 and 5). The tables of Appendix D show the costs of the possible combinations of services in the different settings.

Variations in income and housing costs by age, tenure and household type were built into the model. Household median incomes were determined for households below and above the federal poverty standard for each household type (see Table 4). Those households below the standard were considered "poor" and those above the standard were considered "non-poor." Households were divided into two types - single person households and other households. To determine per capita costs and income it was assumed that all "other households" would be two person households allowing housing costs and income to be simply halved. Sources for

FIGURE 3

HOUSING: THE WHERE IN THE CONTINUUM OF CARE



← THE BASKET OF REQUIRED SERVICES DELIVERED IN THAT SETTING
- - - - -> THE SETTING INFLUENCES THE REQUIRED SERVICES

TABLE 3
COSTS OF SERVICES IN ALTERNATIVE
HOUSING SETTINGS

Key	Service	Hours/Month (Hours/Day)	Cost/Hour	Cost/Month
A	Home Medical Care	30 (1)	\$18.73	\$562.50
B	Personal Care	30 (1)	14.07	422.00
	- Subsidized, Shared Housing, Congregate	15 (1/2)	14.07	211.00
C	Meals	30/month(1/day)	2.88/meal	86.25
D	Housekeeping	16 (4/week)	9.00	144.00
	- Apartment, Subsidi zed, Congregate	8 (2/week)	9.00	72.00
	- Shared Housing	4 (1/week)	9.00	36.00
E	Maintenance (Home only)	5	12.50	62.50
F	Social Interaction (Home, Apartment, Subsidized only)	16 (4)	9.75	156.00
	Administration (Shared Housing, Congregate)	4 (1)	20.00	80.00
X	No Services			

TABLE 4-A
ANNUAL HOUSEHOLD INCOME - 1983 DOLLARS

	Below Federal Poverty Levels Annual Income	Above Federal Poverty Levels Annual Income
Homeowners:		
65-74 Single Person Households	\$ 3,828.48	\$ 9,469.66
Other Households*	5,289.13	18,365.11
75-84 Single Person Households	3,833.39	8,177.68
Other Households	5,266.20	14,437.84
85+ Single Person Households	3,884.15	7,542.33
Other Households	5,479.08	13,810.68
Renters:		
65-74 Single Person Households	\$ 3,906.42	\$ 8,629.63
Other Households	5,292.40	15,120.68
75-84 Single Person Households	3,720.40	7,415.69
Other Households	5,269.48	13,118.01
85+ Single Person Households	3,564.84	7,334.48
Other Households	4,594.83	11,419.93

TABLE 4-B
MONTHLY INCOME/HOUSING COSTS/RATIO INCOME TO HOUSING COSTS

	Poor	Non-Poor
Homeowners:		
65-74 Single Person Households	\$319.04/\$100.79/32%	\$ 789.14/\$100.79/13%
Other Households*	440.76/ 108.69/25	1,530.43/ 115.32/ 8
75-84 Single Person Households	319.45/ 94.10/29	681.47/ 97.03/14
Other Households	438.85/ 108.40/25	1,203.15/ 108.39/ 9
85+ Single Person Households	323.68/ 83.68/26	628.53/ 98.58/16
Other Households	456.59/ 98.25/22	1,150.89/ 107.42/ 9
Renters:		
65-74 Single Person Households	\$325.54/\$113.32/35%	\$ 719.14/\$281.65/39%
Other Households	441.03/ 203.71/46	1,260.06/ 350.43/78
75-84 Single Person Households	310.03/ 111.41/36	617.97/ 285.97/46
Other Households	439.12/ 183.40/42	1,093.17/ 329.79/30
85+ Single Person Households	297.07/ 111.12/37	602.87/ 310.25/51
Other Households	382.90/ 216.15/56	951.66/ 310.47/33

*Other households include married couples, female headed and male headed families.

FIGURE 4

COMPARATIVE COSTS OF PROVIDING ONE MEAL/DAY,
HOUSING MAINTENANCE, HOUSEKEEPING AND SOCIAL
INTERACTION BY HOUSING SETTING
costs are per month

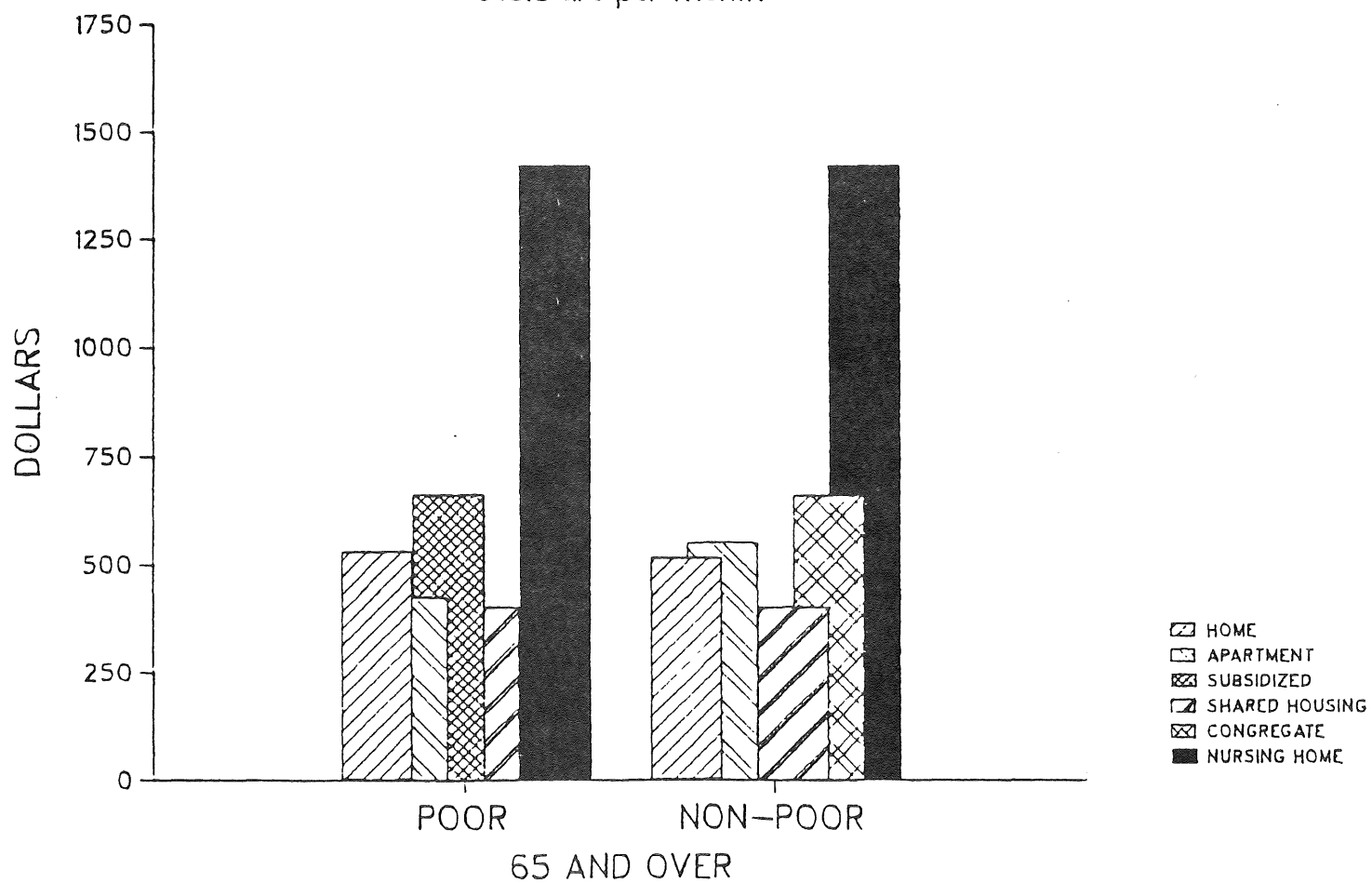
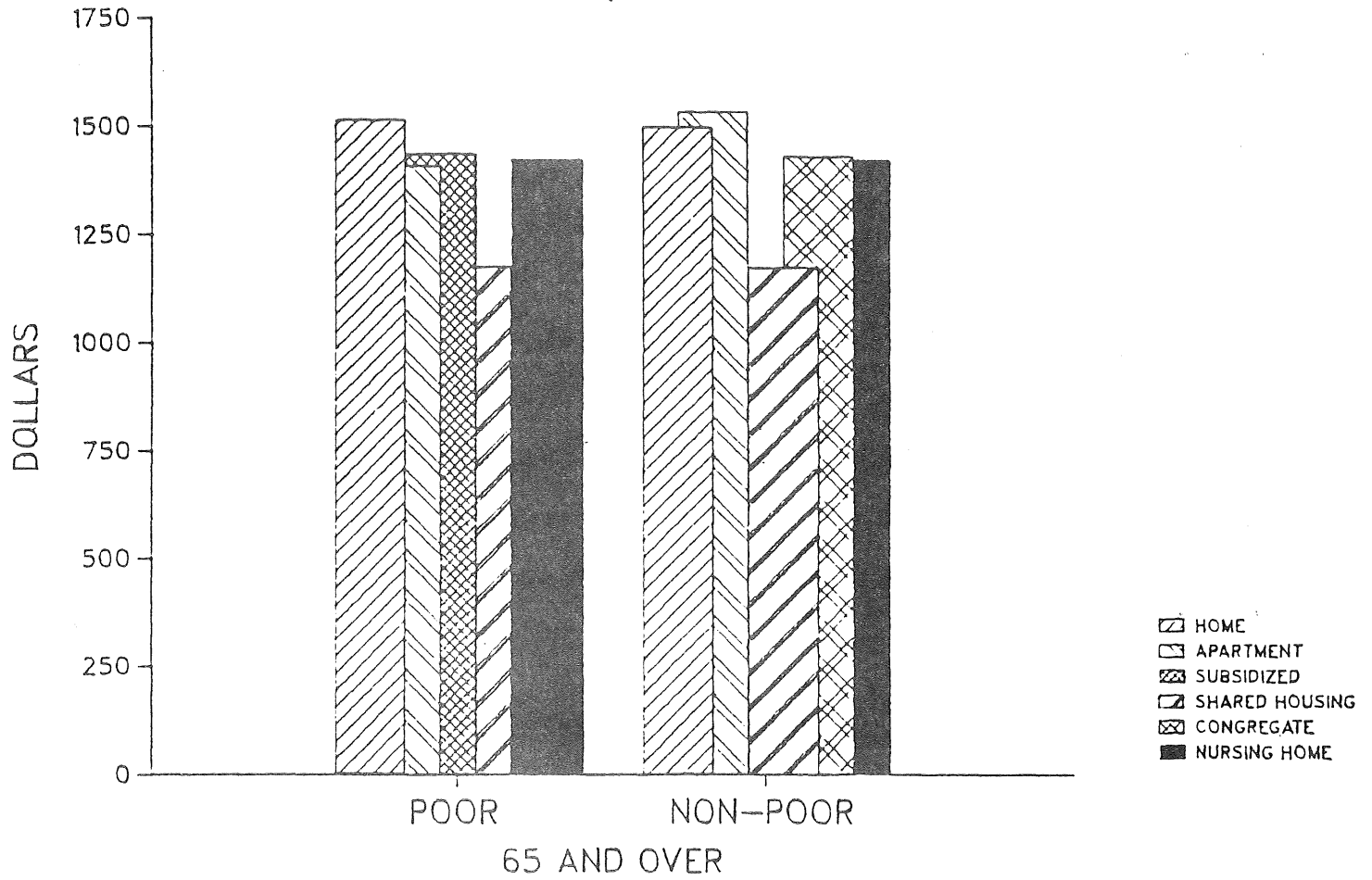


FIGURE 5

COMPARATIVE COSTS OF PROVIDING ALL SERVICES
BY HOUSING SETTING
costs are per month



these figures were census data and MHFA age and housing tenure data.

Public costs of providing services in the various settings were determined by calculating the total cost of the housing and services and then subtracting a figure from the total based on whether:

1. the individual or household was "poor" (below the federal poverty standard) and eligible for public assistance, i.e., entitlement programs and/or subsidized housing;

-or-

2. the individual or household was "non-poor" (above the federal poverty standard) and had to rely on personal resources.

Figures 6 and 7 show, for example, the public costs of providing different levels of services by housing type and income standard. It was assumed that there were no non-poor in subsidized housing and that there were no poor in congregate housing.

The next step in the modeling process was to determine the usage rates, or use factors, for each combination of services. These use factors are from a 1978 Metropolitan Council random survey of elderly living in non-institutional settings (see Table 5). The Wilder Foundation of St. Paul, Minnesota conducted a survey of elderly in Ramsey County in 1980 and the results were very similar to the Metropolitan Council's findings.

It was assumed that renters and homeowners had the same use-factors for all services except those combinations that included outside maintenance, which only homeowners would consume. Residents of shared housing and congregate facilities were assigned higher use factors given the probability of increased age and

FIGURE 6

PUBLIC COSTS OF PROVIDING ONE MEAL/DAY, HOUSEKEEPING,
HOUSING MAINTENANCE AND SOCIAL INTERACTION
BY HOUSING SETTING
costs are per month

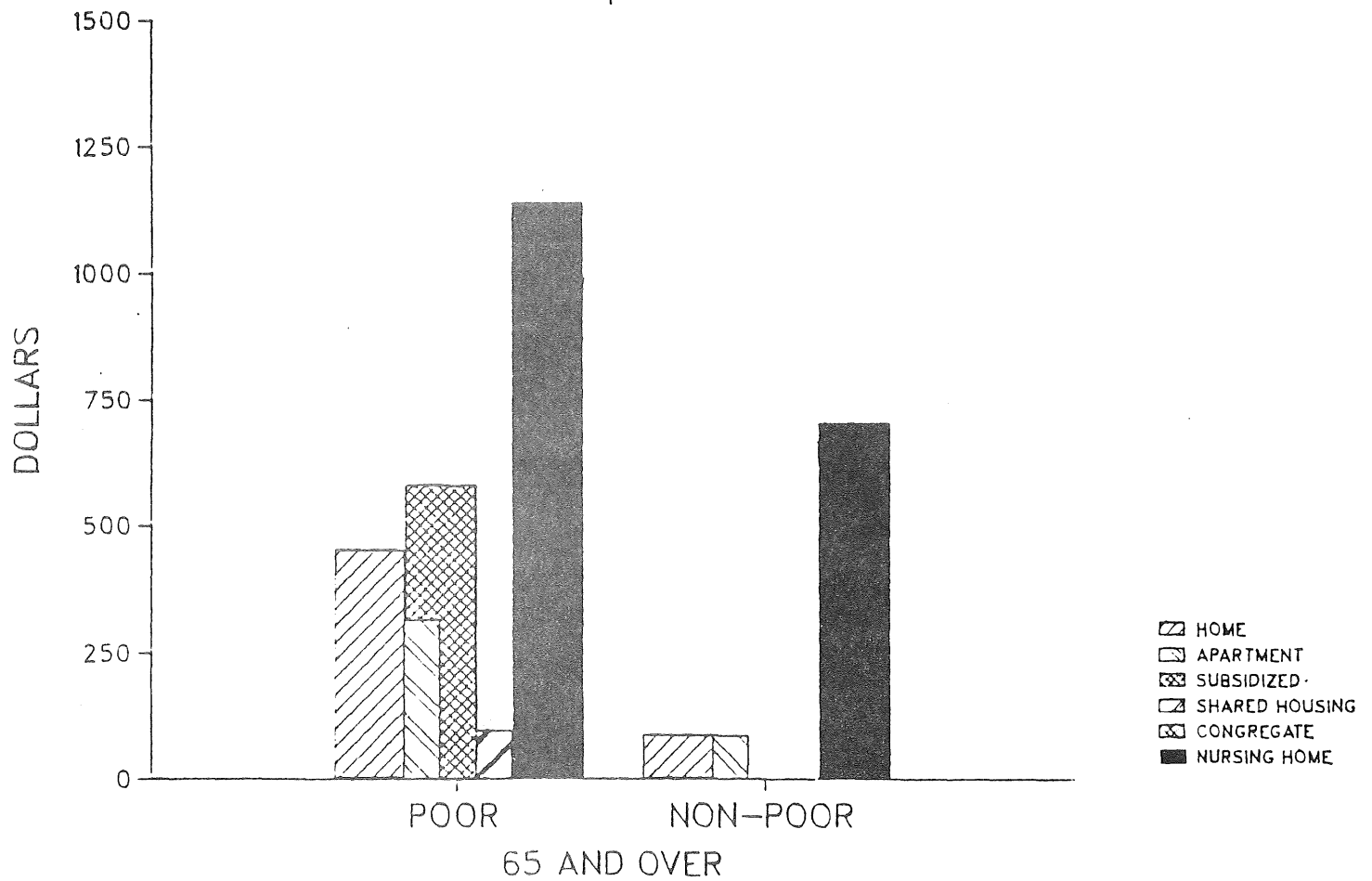


FIGURE 7

PUBLIC COSTS OF PROVIDING ALL SERVICES
BY HOUSING SETTING
costs are per month

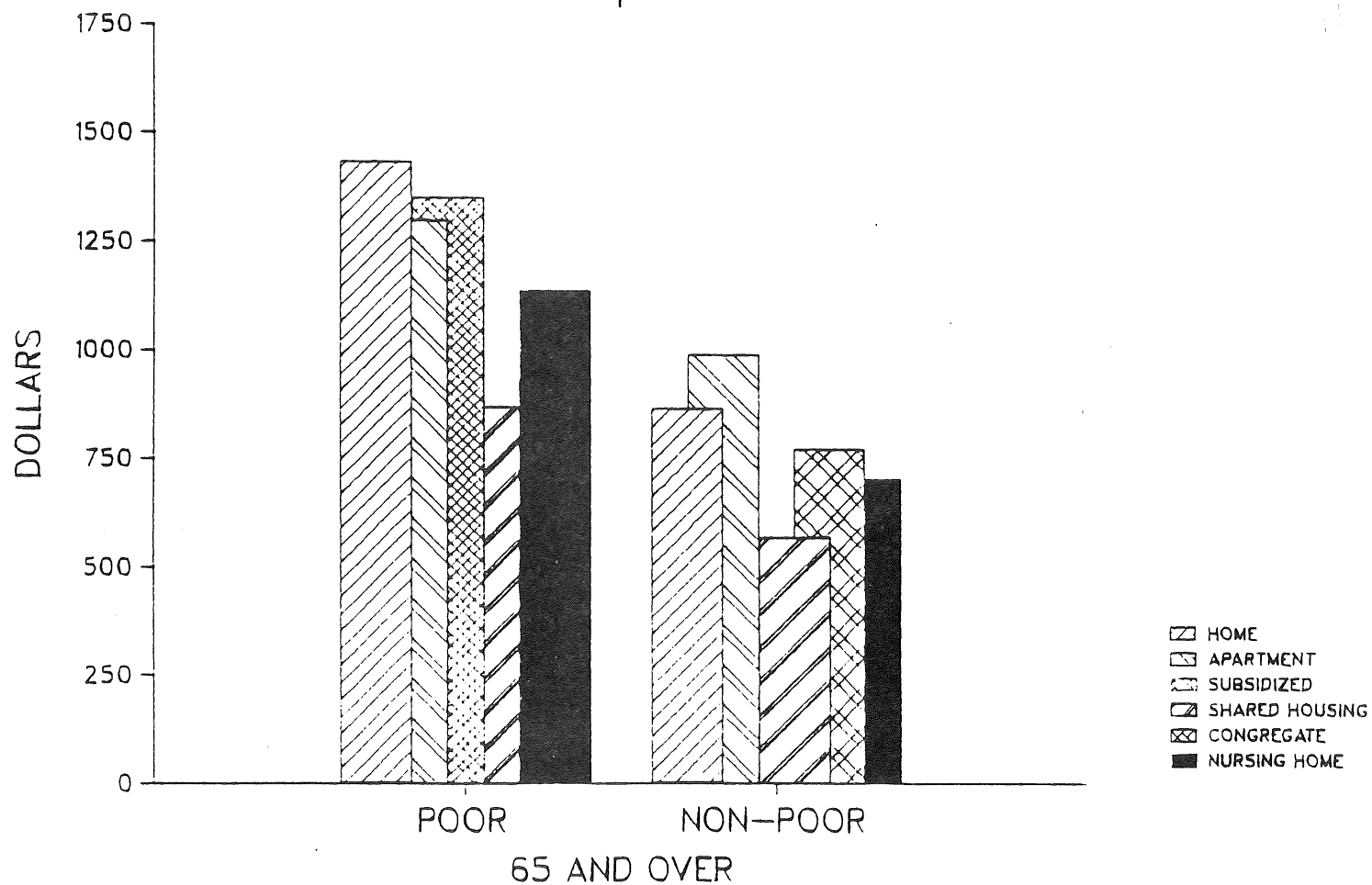


TABLE 5

FACT SHEET ON SERVICES NEEDED BY THE ELDERLY LIVING OUTSIDE OF INSTITUTIONS

Source: Met Council Survey - Random Sample

	% Having Help	% Of Help From Formal Source	
Age 65 - 74			
Grocery Shopping	10.0%	4.0%	(0.4%)*
Running Errands	8.4	0.0	(0.0)
Heavy Maintenance	36.7	10.9	(4.0)
Light Maintenance	21.5	14.8	(3.6)
Housekeeping	9.2	8.7	(0.8)
Meal Preparation	3.6	0.0	(0.0)
Personal Care	2.8	0.0	(0.0)
Daily Medical Tasks	0.8	50.0	(0.4)
Age 75 - 84			
Grocery Shopping	29.8%	5.6%	(1.7%)*
Running Errands	24.3	0.0	(0.0)
Heavy Maintenance	52.5	14.7	(7.7)
Light Maintenance	32.6	11.9	(3.9)
Housekeeping	17.7	15.6	(2.8)
Meal Preparation	7.2	15.4	(1.1)
Personal Care	9.9	5.6	(0.6)
Daily Medical Tasks	3.9	0.0	(0.0)
Age 85+			
Grocery Shopping	61.2%	3.3%	(2.0%)*
Running Errands	46.9	0.0	(0.0)
Heavy Maintenance	61.2	10.0	(6.1)
Light Maintenance	44.9	13.6	(6.1)
Housekeeping	24.5	16.7	(4.1)
Meal Preparation	20.4	20.0	(4.1)
Personal Care	16.3	25.0	(4.1)
Daily Medical Tasks	4.1	50.0	(2.0)

NOTE: Formal sources in this survey included quasi-formal or volunteer organizations.

Service Clusters (from formal and informal sources): The highest percentage of percentage of services needed were for light and heavy maintenance and grocery shopping. As the population aged, more combinations of services were used demonstrating diversity in serving needs. 55.8% of those 65-74 years of age required no services, 37.6% of those 75-84 required no services and 20.4% of those 85+ required no services.

*Percent of total age group getting help from a formal source.

frailty. Although these use factors were based on research done in Region 11, they were assumed to reflect statewide patterns.

It is important to note that the basket of services can be filled through formal provision of the component services, informal provision of the component services, or a combination of both (see Figure 8). The significance of this point will become clear later.

Projections of costs were made for five years, 1985-1990, assuming inflation to be 5.5 percent per year and population increase of those 65 and older to be 1.4 percent per year (65-74, 0.8%; 75-84, 1.9%; 85+, 2.6%). Growth rates in the demand for services were initially assumed to match the population increase.

Two major assumptions were made: 1. medicaid eligible nursing home beds were limited to 40,000 beds (persons) and 2. no more subsidized rental housing was built. People projected to have gone into a nursing home were kept in either the home or apartment (reflecting proportional rates of housing tenure among the elderly) with formal provision of all services. People who would have lived in subsidized housing (excess SUBSDZ) were assumed to have remained in an apartment setting (see Table 6).

Additional simulations were run with nursing home beds capped and uncapped at three different per diem rates and at 10 and 30 percent growth rates in the demand for "home" services (see Tables 7 through 11).

Of particular importance is the estimation of the value of the informal network by the model. Table 12 shows the total costs if no informal network existed. The value of the informal network can be computed to be in the neighborhood of \$49 million per month (see Table 13) or \$588 million per year for 1985. By 1990 the figure is over 800 million per year. This figure shows that the State can

FIGURE 8

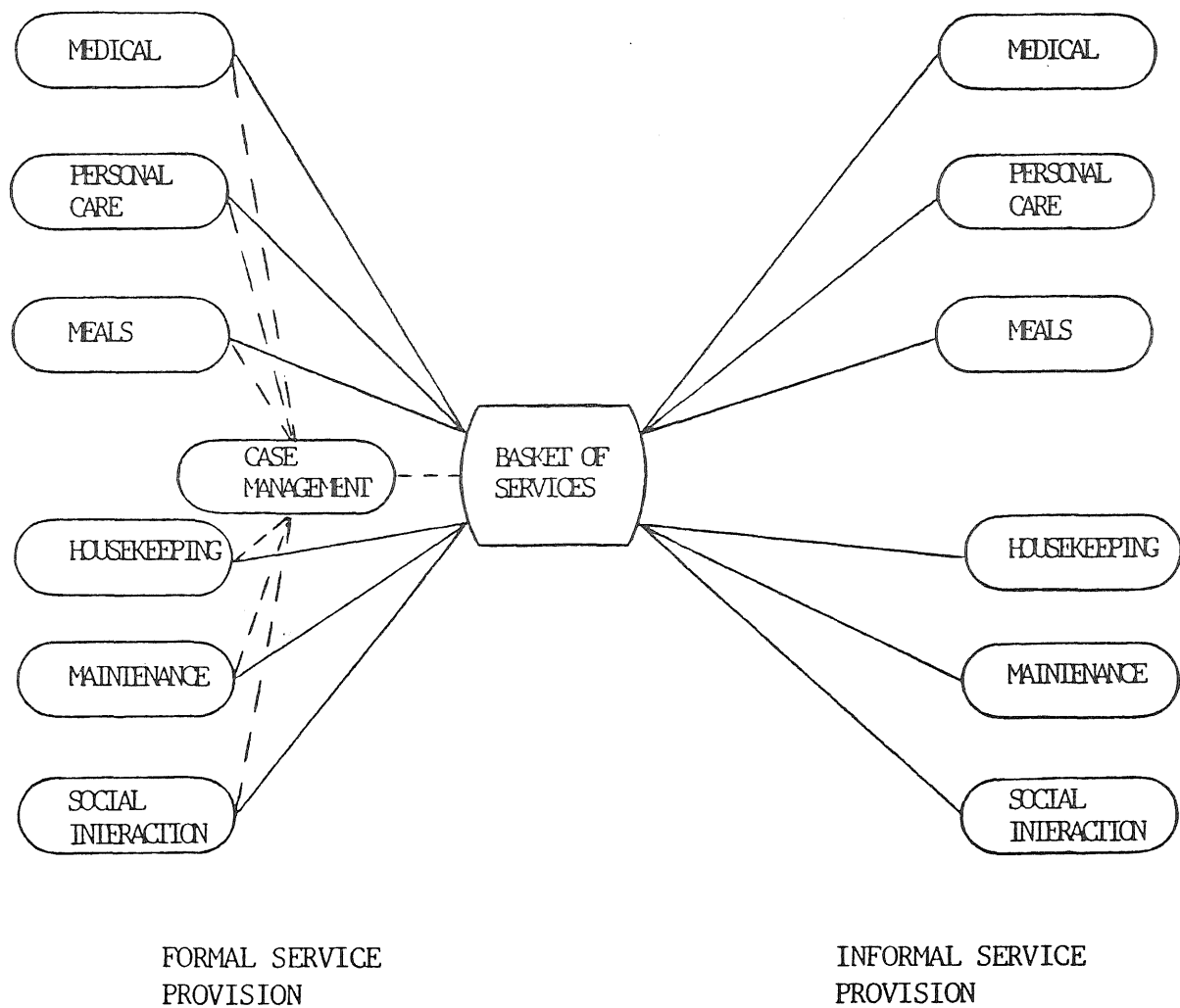


TABLE 6

HOUSING AND SERVICES COST MODEL: AGED 65+
CAP ON NURSING HOME BEDS (40,000) GROWTH IN SERVICES AT RATE OF
POPULATION INCREASE (1.4%/YEAR) NURSING HOME PER DIEM OF \$47.43

1985

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	335,510	\$28,286,332	\$ 735,227	2.6%
Apartment	73,769	\$15,247,285	\$ 206,503	1.4%
Subsidized	38,252	\$13,623,440	\$10,359,435	76.0%
Shared Housing	2,350	\$ 1,013,966	\$ 248,710	24.5%
Congregate	10,004	\$ 6,852,640	\$ 230,092	3.4%
Nursing Home	40,000	\$56,920,000	\$44,158,400	77.6%
Kept in Home	0	\$0	\$0	0.0%
Kept in Apt.	0	\$0	\$0	0.0%
Excess Subsdz.	0	\$0	\$0	0.0%

1990

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	359,663	\$40,153,800	\$ 1,104,240	2.8%
Apartment	79,079	\$21,427,715	\$ 310,148	1.4%
Subsidized	38,252	\$17,833,218	\$13,567,295	76.1%
Shared Housing	2,519	\$ 1,446,500	\$ 370,486	25.6%
Congregate	10,724	\$ 9,778,892	\$ 500,404	5.1%
Nursing Home	40,000	\$77,436,753	\$60,757,852	78.5%
Kept in Home	2,016	\$ 4,428,999	\$ 3,681,073	83.1%
Kept in Apt.	864	\$ 1,780,578	\$ 1,437,841	80.8%
Excess Subsdz.	2,754	\$ 427,584	\$ 29,937	7.0%

NOTE: These are monthly costs.

TABLE 7

HOUSING AND SERVICES COST MODEL: AGED 65+
CAP ON NURSING HOME BEDS (40,000) GROWTH IN HOME SERVICES AT
10%/YEAR NURSING HOME PER DIEM OF \$47.43

1985

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	335,510	\$28,286,332	\$ 735,227	2.6%
Apartment	73,769	\$15,247,285	\$ 206,503	1.4%
Subsidized	38,252	\$13,623,440	\$10,359,435	76.0%
Shared Housing	2,350	\$ 1,013,966	\$ 248,710	24.5%
Congregate	10,004	\$ 6,852,640	\$ 230,092	3.4%
Nursing Home	40,000	\$56,920,000	\$44,158,400	77.6%
Kept in Home	0	\$0	\$0	0.0%
Kept in Apt.	0	\$0	\$0	0.0%
Excess Subsdz.	0	\$0	\$0	0.0%

1990

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	359,663	\$44,069,058	\$ 1,658,965	3.8%
Apartment	79,079	\$21,918,329	\$ 465,953	2.1%
Subsidized	38,252	\$18,042,133	\$13,776,209	76.4%
Shared Housing	2,519	\$ 1,446,500	\$ 370,486	25.6%
Congregate	10,724	\$ 9,778,892	\$ 500,404	5.1%
Nursing Home	40,000	\$77,436,753	\$60,757,852	78.5%
Kept in Home	2,016	\$ 6,160,488	\$ 5,412,562	87.9%
Kept in Apt.	864	\$ 2,522,644	\$ 2,179,908	86.4%
Excess Subsdz.	2,754	\$ 442,623	\$ 44,976	10.2%

NOTE: These are monthly costs.

TABLE 8

HOUSING AND SERVICES COST MODEL: AGED 65+
CAP ON NURSING HOME BEDS (40,000) GROWTH IN HOME SERVICES AT
30%/YEAR NURSING HOME PER DIEM OF \$47.43

1985

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	335,510	\$28,286,332	\$ 735,227	2.6%
Apartment	73,769	\$15,247,285	\$ 206,503	1.4%
Subsidized	38,252	\$13,623,440	\$10,359,435	76.0%
Shared Housing	2,350	\$ 1,013,966	\$ 248,710	24.5%
Congregate	10,004	\$ 6,852,640	\$ 230,092	3.4%
Nursing Home	40,000	\$56,920,000	\$44,158,400	77.6%
Kept in Home	0	\$0	\$0	0.0%
Kept in Apt.	0	\$0	\$0	0.0%
Excess Subsdz.	0	\$0	\$0	0.0%

1990

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	359,663	\$59,354,433	\$ 3,824,640	6.4%
Apartment	79,079	\$23,833,711	\$ 1,074,226	4.5%
Subsidized	38,252	\$18,857,745	\$14,591,821	77.4%
Shared Housing	2,519	\$ 1,446,500	\$ 370,486	25.6%
Congregate	10,724	\$ 9,778,892	\$ 500,404	5.1%
Nursing Home	40,000	\$77,436,753	\$60,757,852	78.5%
Kept in Home	2,016	\$12,920,314	\$12,172,387	94.2%
Kept in Apt.	864	\$ 5,419,713	\$ 5,076,976	93.7%
Excess Subsdz.	2,754	\$ 501,337	\$ 103,690	20.7%

NOTE: These are monthly costs.

TABLE 9

COMPARISON OF COSTS OF NURSING HOME BEDS CAPPED AND UNCAPPED

NURSING HOME PER DIEM OF \$47.43

	<u>Population</u>	<u>Total Cost</u>	<u>Sum of Public Dollars</u>	<u>Public Share</u>
1985 Nursing Home	40,000	\$56,920,000	\$44,158,400	77.6%
1990 Uncapped	42,880	\$83,011,241	\$65,131,666	78.5%

(Growth in "Home" Services at 1.4%/Year)

1990				
Capped	40,000	\$77,436,753	\$60,757,852	78.5%
Kept in Home	2,016	4,428,999	3,681,073	83.1
Kept in Apartment	864	1,780,578	1,437,841	80.8
Total	42,880	\$83,646,330	\$65,876,766	78.8%

(Growth in "Home" Services at 10%/Year)

1990				
Capped	40,000	\$77,436,753	\$60,757,852	78.5%
Kept in Home	2,016	6,160,488	5,412,562	87.9
Kept in Apartment	864	2,522,644	2,179,908	86.4
Total	42,880	\$86,119,885	\$68,350,322	79.4%

(Growth in "Home" Services at 30%/Year)

1990				
Capped	40,000	\$77,436,753	\$60,757,852	78.5%
Kept in Home	2,016	12,920,314	12,172,387	94.2
Kept in Apartment	864	5,419,713	5,076,976	93.7
Total	42,880	\$95,776,780	\$78,007,215	81.4%

NOTE: These are monthly costs.

TABLE 10
COMPARISON OF COSTS OF NURSING HOME BEDS CAPPED AND UNCAPPED
NURSING HOME PER DIEM OF \$60.40

	<u>Population</u>	<u>Total Cost</u>	<u>Sum of Public Dollars</u>	<u>Public Share</u>
1985 Nursing Home	40,000	\$72,480,000	\$59,718,400	82.4%
1990 Uncapped	42,880	\$105,888,663	\$88,009,088	83.1%

(Growth in "Home" Services at 1.4%/Year)

1990				
Capped	40,000	\$ 98,777,878	\$82,098,977	83.1%
Kept in Home	2,016	4,428,999	3,681,073	83.1
Kept in Apartment	864	1,780,578	1,437,841	80.8
Total	42,880	\$104,987,435	\$87,217,891	83.1%

(Growth in "Home" Services at 10%/Year)

1990				
Capped	40,000	\$ 98,777,878	\$82,098,977	83.1%
Kept in Home	2,016	6,160,488	5,412,562	87.9
Kept in Apartment	864	2,522,644	2,179,908	86.4
Total	42,880	\$107,461,010	\$89,691,447	83.5%

(Growth in "Home" Services at 30%/Year)

1990				
Capped	40,000	\$ 98,777,878	\$82,098,977	83.1%
Kept in Home	2,016	12,920,314	12,172,387	94.2
Kept in Apartment	864	5,419,713	5,076,976	93.7
Total	42,880	\$117,117,904	\$99,348,340	84.8%

NOTE: These are monthly costs.

TABLE 11

COMPARISON OF COSTS OF NURSING HOME BEDS CAPPED AND UNCAPPED

NURSING HOME PER DIEM OF \$70.00

	<u>Population</u>	<u>Total Cost</u>	<u>Sum of Public Dollars</u>	<u>Public Share</u>
1985 Nursing Home	40,000	\$84,000,000	\$71,238,400	84.8%
1990 Uncapped	42,880	\$122,851,702	\$104,972,127	85.5%

(Growth in "Home" Services at 1.4%/Year)

1990				
Capped	40,000	\$114,601,790	\$ 97,922,890	85.5%
Kept in Home	2,016	4,428,999	3,681,073	83.1
Kept in Apartment	864	1,780,578	1,437,841	80.8
Total	42,880	\$120,811,367	\$103,041,804	85.3%

(Growth in "Home" Services at 10%/Year)

1990				
Capped	40,000	\$114,601,790	\$ 97,922,890	85.5%
Kept in Home	2,016	6,160,488	5,412,562	87.9
Kept in Apartment	864	2,522,644	2,179,908	86.4
Total	42,880	\$123,284,922	\$105,515,360	85.6%

(Growth in "Home" Services at 30%/Year)

1990				
Capped	40,000	\$114,601,790	\$ 97,922,890	85.5%
Kept in Home	2,016	12,920,314	12,172,387	94.2
Kept in Apartment	864	5,419,713	5,076,976	93.7
Total	42,880	\$132,941,816	\$115,172,253	86.6%

NOTE: These are monthly costs.

TABLE 12

HOUSING AND SERVICES COST MODEL: AGED 65+
COSTS IF NO INFORMAL NETWORK EXISTED FOR
THOSE IN INDEPENDENT LIVING SETTINGS

1985

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	335,510	\$68,611,698	\$ 6,448,639	9.4%
Apartment	73,769	\$21,517,078	\$ 1,944,546	9.4%
Subsidized	38,252	\$16,033,574	\$12,769,570	79.6%
Excess Subsdz.	0	\$0	\$0	0.0%

1986

Housing	Population	Total Cost	Sum of Public Dollars	Public Share of Total Dollars
Home	359,663	\$94,489,444	\$ 8,802,667	9.3%
Apartment	79,079	\$30,844,335	\$ 2,920,520	9.5%
Subsidized	38,252	\$21,209,054	\$16,944,001	79.9%
Excess Subsdz.	2,754	\$ 670,665	\$ 273,018	40.7%

NOTE: Growth in need for services is assumed to be at the population growth rate (1.4%/year).

These costs are monthly costs.

TABLE 13

MONTHLY VALUE OF THE INFORMAL NETWORK
FOR THE ELDERLY POPULATION AND THE PUBLIC

1 9 8 5

Housing	Total	Public Dollars
Home	\$40,325,366	\$5,713,412
Apartment	6,269,793	1,738,043
Subsidized	2,410,134	2,410,135
Excess Subsidized	0	0
TOTAL	\$49,055,293	\$9,861,590

1 9 9 0

Housing	Total	Public Dollars
Home	\$54,335,644	\$7,698,427
Apartment	9,416,620	2,610,372
Subsidized	3,375,836	3,376,706
Excess Subsidized	243,081	243,081
TOTAL	\$67,371,181	\$13,928,586

Note: These figures show the value of the informal network to the elderly population and the public. They also imply that if the elderly had to pay to replace services being provided informally, personal resources would be expended at a much greater rate leading to a likely significant increase in public expenditures.

ill afford to replace the informal network. If anything, based on the simulation model, the informal network should be strengthened.

Implications

The simulations show that as long as individuals require few services, homes and apartments are extremely cost effective. The simulations also show, however, that as the level of services approach the level in a nursing home, the per person costs can exceed those of a nursing home due to the presence of economies of scale in a nursing home setting and the lack of economies of scale in the individual home setting. For example, the cost of the full basket of services possible in the model at the costs given in the "home" in 1990 is projected to require public assistance of \$1,826 per month or \$21,912 for the year. Contrast this with a nursing home in 1990 that is at a current per diem of \$47.43; the public assistance required would be \$1,519 or \$18,228 for the year. However, as nursing home rates approach the other per diems used in the simulations (\$60.40 or \$70.00) then, so long as the growth rate in demand for levels of "in-home" services stays below 10 percent per year, it is more cost effective to provide the full basket of services in the "home." If the growth rates exceed 10 percent then the model shows that settings other than the "home," including the nursing home at the higher per diems become more cost effective.

The simulations also point out, given the levels and costs of services included, that shared housing is more cost-effective than typical and new construction congregate housing while still promoting independence through interdependence. This is not to say that shared housing is "the" answer. On the contrary, it is one part of a solution that must include many options. For the low income renter or homeowner with little equity or assets, shared housing may be attractive.

Caution is warranted as we attempt to keep people in their "homes." The provision of care by formal sources in the home may be less than the cost of nursing home care, however, with a substantial increase in the use of these services in the home, the total cost could approach or exceed the total cost of nursing home care. Shared housing and congregate type settings should be explored therefore as cost effective alternatives on the independent to dependent continuum of living environments.

Maybe most importantly, the model shows that efforts must be made to reinforce the informal service network. If resources were redirected to provide more support to the informal network it is quite possible that the value of the services provided informally could far outweigh the costs.

THE ASSET: HOME EQUITY CONVERSION

The majority of elderly Minnesotans own a home and most own it mortgage free. Having this asset often has been of little use unless sold to recover the equity. Recent efforts though have been undertaken to experiment with alternative forms of equity conversion.

Many home equity conversion plans exist, but all are designed to address basically two problems. First, equity conversion plans are designed to allow the home to become an income producing asset while still residing in it, or second, to maintain and provide housing for as long as desired or until death by reducing housing related expenditures and maintenance costs.

Home equity conversion generally takes three different forms with many possible variations within each form. The three are loan plans, sale plans and deferred payment plans. Loan plans, commonly called reverse mortgages, allow homeowners to draw on their equity through a loan collateralized by the home equity. These loans differ from conventional loans because they do not require repayment of any principal or interest for the term of the loan, generally from three to fifteen years and in some cases for the life of the borrower.

In all loan plans, the size of the monthly payments that can be obtained depends on the property value less any encumbrances, household composition, and the period over which payments are made. The longer the maturity of the loan, the longer the period over which interest accumulates in addition to the disbursements or payments being made.

Repayment of reverse mortgage loans may be over an extended period or in a lump sum. In many cases the borrower would be unable to meet monthly repayment requirements as their income is likely to have decreased. Lump sum repayment usually requires sale of the home.

A common variation of the loan plan is the reverse annuity mortgage (RAM). Under this plan a lump sum is borrowed for a period of time against the equity in the home. An annuity is purchased with the loan proceeds Interest would be paid from the annuity payments. With high interest rates, however, the benefits per period are quite limited. Again, the principal is generally paid at the end of the loan term by sale of the house unless the loan was small or appreciation was sufficient to allow another loan.

The second form of equity conversion is the sales plan. Home equity conversion sales plans, unlike conventional sales, allows one to remain in the home and retain occupancy rights as long as desired. The two common types of sale plans are the sale-leaseback and split equity plans. Unlike other equity conversion plans which involve a partial conversion of equity, these plans require a complete conversion of equity.

In a sale-leaseback, a homeowner sells the home to an investor (e.g., children, other individual, limited partnership, institutional investor, etc.) and leases back the home as a tenant - usually for life. Complicated contracts are required to clarify who is responsible for property taxes and repairs, rental fees, purchase terms. Additionally this contract will govern situations in which the homeowner/tenant moves out of the home or suffers physical or mental deterioration.

Split equity arrangements involve a guarantee of lifetime occupancy of the home and the acquisition of the remainder interest, or residual equity, in the

property by an investor through an installment sale. Whenever the homeowner dies, the title and entire value of the property passes to the investor. As with the sale-leaseback, split equity contracts must specify all rights and responsibilities of each party.

The third type of conversion plan, the deferred payment plan, is designed to allow one to use their equity for home improvements, tax deferrals, and other purposes. These loans usually carry a zero or low interest rate and often require no payment(s) until the homeowner dies or sells the home. The Minnesota Housing Finance Agency (MHFA) has for some time offered this type of plan, the home improvement grant and rehabilitation loan programs, to Minnesota seniors for improvements to their dwellings. Such a program can be viewed as an equity builder because through maintenance and repairs, equity is being maintained and enhanced. The increased equity is then available for possible future conversion.

Another type of deferred payment plan enables the homeowner to use their equity for regular, periodic expenses, such as property taxes or in-home services. The cost of these expenses are not paid in cash but are charged to an account that establishes a lien against the property. The accrued expenses plus whatever interest is charged can be paid at any time, but is not due until the home is sold or the owner dies. Any equity in the house not used to cover the accrued expenses remains the property of the homeowner's estate.

Equity conversion entails costs and risks for the homeowner. Depending upon the method of conversion, the costs could be in the form of interest and/or various fees or commissions. The owner may not receive the benefit of appreciation in the property's value over subsequent years.

In reverse equity loans, the main risk has been that the homeowner will live

longer than the term of the loan and will have to sell the home to repay the loan. Also, there is some risk that the home will depreciate in value over the term of the loan. Prudential-Bache is currently test marketing a plan that ensures payments until age 100. If the recipient lives past 100 the payments will be extended at the same level up to an accumulated period of 40 years. The market area is currently in New Jersey and parts of Pennsylvania.

In split equity and sale-leaseback arrangements there is a danger that the investor or sponsoring body may be unable to make the monthly payments which the elderly person depends upon. With some annuity plans, the homeowner takes the risk that they might not live long enough to justify the expense. With all fixed income payment equity plans, there is the risk that inflation will erode the purchasing power of the payment. Many homeowners consider it risky to deplete their equity during their lifetime. Further, owners also must consider the possibility that the lender or program provider might default on payments.

Unlike a conventional mortgage loan, the lender's risk with a reverse equity loan is least during the early years of the loan. The risk increases with the length of the loan term and possible depreciation in property value. It has been suggested that pension funds are a natural source for financing equity conversion, as the cash outflows of many of these plans (monthly payments leading to a lump-sum payback) are complimentary to the cash inflow of pension funds (contributions over many years leading to a lump-sum distribution or amortized payout).

Lenders lend either upon the security of the property or upon the capability for repayment of the borrower. By both criteria, equity conversion does not fit the conventional lenders way of underwriting loans. The older borrower will often be retired with insufficient income to repay the loan. Lack of income is

perhaps the main reason the loan is needed. Lending on the home alone means that the lender expects the home's value will exceed a loan balance at some future date.

Lender concerns also include the possibility of the homeowner outliving the loan term and being forced to sell the home in order to repay the loan. While the intent of a reverse mortgage loan is not to ensure lifetime occupancy of the homeowner's home, but rather to allow the homeowner to remain in the home for a longer period than otherwise might be possible, few lenders relish the thought of putting an elderly homeowner "out on the street."

Another major concern is property risk. Property risk is the risk that the property securing repayment of the loan will depreciate in value by the end of the loan term. Should depreciation occur, the homeowner may be unable to repay the full amount of the loan. For Minnesota's elderly, particularly those over 85, this could be a real problem in the future (because of low home values and dilapidation).

Home equity programs are of no help to renters and it will be difficult to help homeowners whose houses are not seen as good investments. Home equity conversions may thus be of little help to the most needy elderly.

For many elderly homeowners, debt-free homeownership signifies a hard won lifetime accomplishment. Understandably, they may be reluctant to assume any new mortgage debt or relinquish complete ownership of their homes. The utility dysfunction of giving up something that has become a habit is much higher than what one would be willing to pay to have it in the first place. For example what one is willing to pay for the home can be very quickly smothered by 12 percent interest versus 13 percent interest - but what one would be willing to pay to stay in the home after it has become a way of life after a considerable

number of years is much higher.

Homeownership plays an important role for the elderly. Understanding what home ownership means is therefore essential for sensitive marketing of home equity conversion plans. The home is the main place retired individuals spend their time. The home has psychological value. Owning a home is symbolic of continued life and the ability to function independently. For those interested in a home equity conversion plan, any perceived threat to these meanings of home ownership would probably cause rejection of a plan.

Elderly Minnesota homeowners may be interested in the different equity conversion plans. Depending on the value of the home, significant additional monthly income can be generated, through a reverse mortgage. These payments are of course contingent upon the term of the reverse mortgage (see Tables 1 and 2).

It must be pointed out that most of the State's elderly homeowners live in housing units that are over forty years old (see Figure 1). As housing units age, they have limited equity or value. Further, homeowners that could most benefit from income or housing aid provided by these instruments, the frail and old-old elderly (85+), are also the ones who have the most limited equity (see Tables 3, 4 and 5).

Still, if consumer safeguards are ensured and questions regarding governmental treatment of equity conversion proceeds are clarified, home equity conversion plans can be a significant option in the personal financial plans of Minnesota's elderly.

Government Action

Federal level: A crucial factor in private lenders' decisions to make reverse mortgages is the opportunity for lenders to sell their reverse mortgages on the

TABLE 1

REVERSE MORTGAGE PAYMENT SCHEDULE, REGIONS 1-10:
MONTHLY PAYMENTS(LOANS) AT THE
FOLLOWING INTEREST RATES(%'s):

TERM	TEN	TWELVE	FOURTEEN
1	\$2,841.29	\$2,810.45	\$2,779.90
2	\$1,349.97	\$1,321.43	\$1,293.37
3	\$854.50	\$827.44	\$801.05
4	\$607.99	\$582.20	\$557.25
5	\$461.05	\$436.44	\$412.84
6	\$363.90	\$340.40	\$318.10
7	\$295.18	\$272.77	\$251.70
8	\$244.23	\$222.87	\$203.01
9	\$205.12	\$184.78	\$166.08
10	\$174.29	\$154.95	\$137.36
11	\$149.47	\$131.09	\$114.58
12	\$129.15	\$111.71	\$96.24
13	\$112.29	\$95.76	\$81.29
14	\$98.14	\$82.49	\$68.97
15	\$86.14	\$71.35	\$58.74
16	\$75.89	\$61.92	\$50.19
17	\$67.08	\$53.90	\$42.99
18	\$59.45	\$47.03	\$36.91
19	\$52.81	\$41.13	\$31.75
20	\$47.02	\$36.03	\$27.35

REVERSE MORTGAGE MADE BASED ON 80% OF EQUITY(\$45,000), MORTGAGE
AMOUNT EQUALS \$36,000. PAYMENT SCHEDULE SHOWS THE AMOUNT OF
MONTHLY PAYMENT(LOAN) MADE TO INDIVIDUAL BASED UPON THE TERM(NUMBER
OF YEARS) OF THE RM AND THE INTEREST RATE. IF THE RM WAS FOR 15 YRS
THE PAYMENTS WOULD BE: \$86.14/mnth @ 10%, \$71.35/mnth @ 12%, etc.

TABLE 2

REVERSE MORTGAGE PAYMENT SCHEDULE, REGION 11:
MONTHLY PAYMENTS(LOANS) AT THE
FOLLOWING INTEREST RATES(%'s):

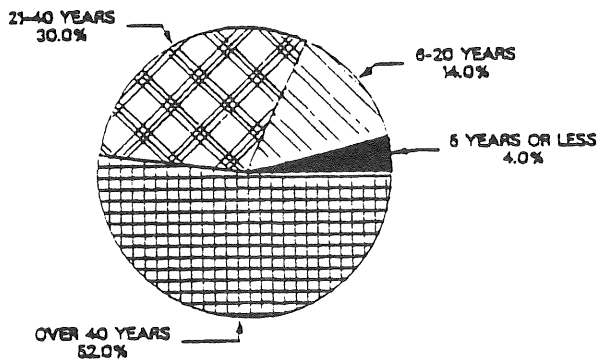
TERM	TEN	TWELVE	FOURTEEN
1	\$4,546.07	\$4,496.72	\$4,447.85
2	\$2,159.95	\$2,114.29	\$2,069.40
3	\$1,367.20	\$1,323.91	\$1,281.68
4	\$972.78	\$931.51	\$891.60
5	\$737.68	\$698.30	\$660.54
6	\$582.24	\$544.64	\$508.95
7	\$472.29	\$436.43	\$402.73
8	\$390.78	\$356.60	\$324.81
9	\$328.20	\$295.66	\$265.72
10	\$278.86	\$247.91	\$219.77
11	\$239.15	\$209.75	\$183.33
12	\$206.64	\$178.74	\$153.99
13	\$179.66	\$153.22	\$130.06
14	\$157.02	\$131.98	\$110.35
15	\$137.82	\$114.16	\$93.99
16	\$121.43	\$99.07	\$80.30
17	\$107.32	\$86.24	\$68.78
18	\$95.12	\$75.25	\$59.05
19	\$84.50	\$65.80	\$50.79
20	\$75.23	\$57.65	\$43.76

REVERSE MORTGAGE MADE BASED ON 80% OF EQUITY(\$72,000), MORTGAGE AMOUNT EQUALS \$57,600. PAYMENT SCHEDULE SHOWS THE AMOUNT OF MONTHLY PAYMENT(LOAN) MADE TO INDIVIDUAL BASED UPON THE TERM(NUMBER OF YEARS) OF THE RM AND THE INTEREST RATE. IF THE RM WAS FOR 15 YRS THE PAYMENTS WOULD BE: \$137.82/mnth @ 10%, \$114.16/mnth @ 12%, etc.

FIGURE 1

MOST ELDERLY HOMEOWNERS LIVED IN HOUSING UNITS
BUILT BEFORE 1940
MINNESOTA
1980

REGIONS 1-10



REGION 11

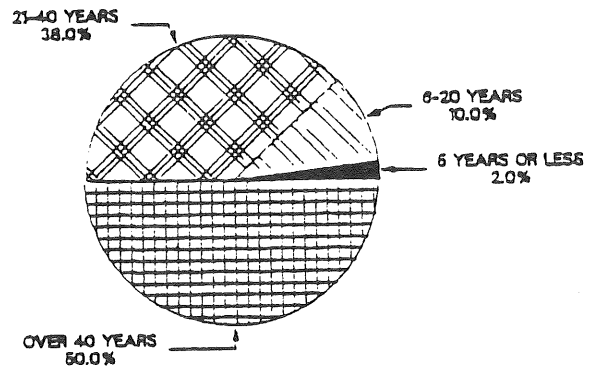


TABLE 3

Value of the Housing Unit in Regions 1-10 and Region 11
for 65 - 74 Year Old Homeowners

Category	REGIONS 1-10		REGION 11	
	Percent	Cumulative Percent	Percent	Cumulative Percent
Less Than \$10,000	6.2	6.2	0.2	0.2
\$10,000 - \$19,999	16.8	23.1	1.8	2.0
\$20,000 - \$29,999	22.5	45.5	6.4	8.5
\$30,000 - \$39,999	21.4	66.9	16.3	24.8
\$40,000 - \$49,999	15.1	82.0	20.3	45.1
\$50,000 - \$59,999	8.8	90.8	20.8	65.9
\$60,000 - \$69,999	4.9	95.7	15.6	81.5
\$70,000 - \$79,999	2.3	98.0	7.7	89.2
\$80,000 - \$89,999	0.8	98.8	4.0	93.2
\$90,000 - \$99,999	0.4	99.2	2.1	95.4
\$100,000-\$124,000	0.4	99.6	2.6	98.0
Over \$125,000	0.4	100.0	2.0	100.0

TABLE 4

Value of the Housing Unit in Regions 1-10 and Region 11
for 75 - 84 Year Old Homeowners

Category	REGIONS 1-10		REGION 11	
	Percent	Cumulative Percent	Percent	Cumulative Percent
Less Than \$10,000	8.8	8.8	0.2	0.2
\$10,000 - \$19,999	22.7	31.6	2.7	3.0
\$20,000 - \$29,999	24.6	56.2	9.7	12.7
\$30,000 - \$39,999	21.2	77.4	18.6	31.2
\$40,000 - \$49,999	11.7	89.1	22.0	53.3
\$50,000 - \$59,999	5.8	94.9	21.9	75.2
\$60,000 - \$69,999	2.4	97.2	12.7	87.9
\$70,000 - \$79,999	1.6	98.8	5.3	93.1
\$80,000 - \$89,999	0.7	99.5	1.8	94.9
\$90,000 - \$99,999	0.1	99.5	1.4	96.3
\$100,000-\$124,000	0.5	100.0	1.7	98.0
Over \$125,000	--	--	2.0	100.0

TABLE 5
Value of the Housing Unit in Regions 1-10 and Region 11
for Homeowners 85 Years Old and Older

Category	REGIONS 1-10		REGION 11	
	Percent	Cumulative Percent	Percent	Cumulative Percent
Less Than \$10,000	10.1	10.1	1.6	1.6
\$10,000 - \$19,999	21.8	31.8	4.2	5.7
\$20,000 - \$29,999	25.7	57.5	10.9	16.7
\$30,000 - \$39,999	20.7	78.2	18.8	35.4
\$40,000 - \$49,999	14.2	92.5	21.9	57.3
\$50,000 - \$59,999	4.2	96.6	20.3	77.6
\$60,000 - \$69,999	1.4	98.0	11.5	89.1
\$70,000 - \$79,999	0.8	98.9	3.6	92.7
\$80,000 - \$89,999	0.3	99.2	2.1	94.8
\$90,000 - \$99,999	--	--	2.1	96.9
\$100,000-\$124,000	0.3	99.4	0.5	97.4
Over \$125,000	0.6	100.0	2.6	100.0

secondary market. Government insurance or guarantees are especially important for marketing reverse mortgages on the secondary market because the guarantee transforms the mortgage into a marketable security that can be purchased by a "prudent man" in a fiduciary role, thus opening the market for pension funds and insurance companies.

Also, potential consumers require clarification of the treatment of home equity conversion proceeds as income in determining eligibility for government benefit programs such as Supplemental Security Income (SSI) and Medicaid. Homeowners receiving periodic cash advances under a reverse mortgage loan would be eligible for government assistance since the disbursement is a loan advance not viewed as income. Proceeds from an annuity (a RAM) would be viewed as income as would proceeds from sale plans, thus reducing SSI benefits and could make participants ineligible for SSI and Medicaid. If home equity conversion is to be a substitute for other government programs and if the proceeds are taxed as income, there will be little incentive for homeowners to convert their home equity. On the other hand, if home equity proceeds are totally exempt from consideration in means-tested programs and from taxation as income, real questions of fairness among those in need of government assistance will arise.

This aspect of home equity conversion - people's willingness to utilize their home equity when they might be eligible for government assistance - is part of a larger policy question being addressed. The scarcity of public resources coupled with the rapid growth of the elderly population requiring more expensive care and services have found decision makers to look to greater dependence on private resources for financing. The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), reinterpreted Medicaid law to permit states to impose liens on an individuals real property if the person is in a nursing home and unlikely to return home, unless certain related persons are still in residence. The trend

toward greater reliance on private financing might affect the acceptability of home equity conversion as a financing alternative in the long run.

State level: Minnesota has legislation allowing home equity conversion programs on the books. Currently one lender, Richfield Bank, makes reverse mortgage loans (30 to date). Minnesota does not, however, exempt equity conversion proceeds from consideration in determining initial or continuing eligibility for, or the amount of, medical or public assistance. South Dakota is the only state to do so.

While national interest in home equity conversion programs is growing, only small numbers of elderly homeowners are currently participating in the programs. A prudent step for the state would be to inform elderly homeowners that home equity conversion exists as a potential means of supplementing income, etc. Through education a stronger demand might be created. As part of this education program a pilot project would be useful. The state role should be to provide initial "seed money" but not run the program. Program evaluation might also be an appropriate state role.

Regarding consumer protection, if no action is taken at the federal level, the state would have to accept responsibility for ensuring consumer safeguards. Eventually this may be the only appropriate role for the state to fill concerning home equity conversion instruments.

SOME EXISTING HOME EQUITY CONVERSION PROGRAMS*

Buffalo Home Equity Living Plans (HELP)

The Buffalo, New York, Home Equity Living Plan (HELP) program, originated in 1981, is a publicly sponsored split equity program. The program's three basic objectives are to (1) relieve the financial burdens of elderly homeowners; (2) preserve a specific neighborhood in Buffalo; and (3) create a self-sustaining, permanent program. A nonprofit organization, HELP, Inc., administers the program which was capitalized by \$1.3 million from Buffalo's Community Development Block Grant (CDBG) funds.

Eligibility requirements for an elderly individual or couple have been that they must (1) be Buffalo residents 60 years of age or older; (2) own a house debt-free or with a small mortgage balance; (3) own a house whose value is found to be suitable under policy guidelines; and (4) have an income below the United States Department of Housing and Urban Development's (HUD) low-to-moderate income limits. Income limits in 1983 were approximately \$15,000 for an individual and \$17,000 for a couple. An elderly individual or couple participating in the program is guaranteed a life estate in the property and HELP, Inc. becomes owner of a remainder interest. The homeowner retains actual title to the property until the homeowner's death at which time HELP sells the house to recoup its investment. HELP, Inc. assumes responsibility for the payment of property taxes, insurance, and all property repairs and maintenance. In addition, the homeowner has a choice of receiving a lump sum cash disbursement or small monthly checks which continue until the homeowner's death. For a

*Heavily drawn from: Gail M. Kaito, A Home Equity Conversion Program for Hawaii's Elderly Homeowners. Honolulu: Legislative Reference Bureau, State of Hawaii. Report No. 1, 1984.

couple, the monthly payments continue until the death of the last survivor. The amount of the disbursements is based on the value of the house and the homeowner's life expectancy. Enrollment in the program involves no initial costs to the homeowner for appraisal or closing. Participants are allowed to withdraw from the program for a period of 12 months after signing the contract, repaying HELP, Inc. for cash or other benefits received. An important provision in the HELP arrangement is that if the corporation fails to deliver the promised payments, HELP forfeits all its right to the property and the homeowner retains payments received as well as the property.

Musashino Program

A different type of program with a home equity repayment option has been in operation since April 1981 in Musashino City, a suburb of Tokyo, Japan. The program, sponsored by the Musashino city government and operated by the quasi-public Musashino Public Welfare Corporation, offers comprehensive health and social services as well as financial assistance to elderly households with the goal of preventing unwanted institutionalization of the elderly. Although the program was designed as a home equity conversion program, it is now more accurately described as a health and social service program with a home equity repayment option.

The program offers three types of assistance to participating households. All program participants are required to subscribe to basic health monitoring services while all other services are optional. Trained staff or volunteers provide "individualized services" which include meal preparation, nursing care, personal care, chore, escort, and other miscellaneous services. Finally, participants may obtain financial assistance which includes a monthly income supplement, larger amounts for non-program-related medical expenses, and a

one-time lump sum for home renovation.

Program participants may pay for the services they receive on a monthly cash basis or arrange for a deferred payment loan secured by their home equity. Those using home equity are limited to using 90 percent of their equity in a single family home or 80 percent of equity in a condominium. Repayment of services with five percent interest is deferred until sale of the property upon the participant's death, at which time family members may repay the outstanding debt in order to retain title to the property. Should a participant exhaust the maximum amount of home equity available, the participant then must rely upon the services provided to Japan's populace through its national health care system.

Pennsylvania Home Equity Living Program

The Pennsylvania General Assembly has established a split equity program very similar to the Buffalo HELP program in benefits as well as in its name. Legislation enacted during 1983 created the program to be governed by a home equity board composed of members of the legislature, the secretary of aging, elected local government officials, and senior citizens. The board was authorized to enter into split equity agreements with participating homeowners and provide for maintenance, fire and extended coverage property insurance, and a monthly cash payment to the homeowner. The homeowner would be assured a life estate in the home and the board would take possession of the home upon the homeowner's death. Participation was limited to homeowners (1) 55 years or older; (2) with an annual income of \$8,200 or less; and (3) whose property value was \$40,000 or below. The General Assembly appropriated \$10 million to implement the program.

The Reverse Annuity Mortgage Program of the San Francisco Development Fund (RAM)

The Reverse Annuity Mortgage (RAM) program of the nonprofit San Francisco Development Fund was begun as a two-year pilot project in Marin County, California, in 1981, with operating costs funded by the San Francisco Foundation, the Ford Foundation, the James Irvine Foundation, and the Federal Home Loan Bank Board. Four lending institutions: Crocker Bank, Bank of American, First Nationwide Savings (formerly Citizens Savings), and Wells Fargo Bank agreed to make a number of reverse mortgage loans on a rotating basis during the pilot period. Now expanding statewide, the program continues to receive operating funds from private foundations. Lenders participating in the statewide expansion include First Nationwide Savings, Crocker Bank, and Security Pacific Bank. Unlike the HELP split-equity arrangement, RAM offers two different loan plans and also offers a sale-leaseback option through the Fouratt Corporation, a real estate company offering the sale-leaseback independently of RAM as well.

Homeowners choosing loan plans retain title to their homes and are allowed to borrow up to 80 percent of the property's appraised value to a maximum amount of \$150,000. An optional lump sum disbursement of up to 25 percent of the loan amount is available to pay off an existing mortgage, make home improvements, cover closing costs, or purchases a deferred annuity. Two types of rising debt loan plans are currently available for terms of 5 to 12 years. Homeowners receive the lump sums or monthly payments, or both, and defer repayment of all principal and interest until the end of the loan term.

The Type I loan, a simple reverse mortgage, involves a fixed interest rate for a fixed term and fixed monthly payments. The Type II loan, a graduated payment RAM, also offers a fixed interest rate for a fixed term; however, monthly

payments to the borrower increase by six percent each year.

Deering Savings Reverse Mortgage

Deering Savings of Portland, Maine, made perhaps the first ever reverse mortgage in 1961. The association made approximately 50 loans before it stopped offering the loans in the early 1980s as a result of high interest rates and the large amount of counseling time involved. The Deering reverse mortgage was a rising debt mortgage structured to meet the individual borrower's needs. In addition to monthly disbursements, advances were also made to pay of existing mortgages or to pay for home repairs. Repayment of all principal and interest was deferred until the end of the loan term. The association found that most of the loans were made for two- to three-year terms, and were required as a result of a spouse's, usually a husband's, death. The widow, often with limited experience in financial matters, would usually sell the property, pay of the debt, and make other living arrangements.

Broadview Savings Equi-Pay Plan

Broadview Savings and Loan of Independence, Ohio, a state-chartered savings institution, began making reverse mortgages in 1977, two years before the Federal Home Loan Bank Board authorized federally chartered institutions to make reverse mortgages. The Equi-Pay plan was an interest-only loan with payouts for 80 percent of a home's appraised value over a term of five to ten years, and repayment periods of up to 25 years. Initial lump sum disbursements were allowed to pay off a small mortgage balance or to make needed home repairs. A homeowner received regular monthly disbursements and repaid current interest on the funds, rather than deferring all interest payments to the end of the payout period. In addition, the homeowner paid \$1 a month toward principal reduction,

and one-twelfth of the annual real property taxes and insurance costs. At the end of the payout term the house could be reappraised to determine if further payouts could be made.

Like Deering Savings, Broadview stopped making Equi-Pay loans in 1981 because of soaring interest rates.

Boiling Springs Savings and Loan "Home Plus" Program

Boiling Springs Savings and Loan Association in Rutherford, New Jersey, recently instituted a reverse mortgage program. The "Home Plus" mortgage is a rising debt loan with a three-year term and a maximum loan amount of 70 percent of property value. After the three year period, the loan may be extended another three years if the property has appreciated significantly.

American Homestead's "Century Plan"

American Homestead, a private corporation headquartered in New Jersey, has developed a modified reverse mortgage program called the Century Plan. This plan provides monthly loan advances until the homeowner dies, sells the home, or reaches 100 years of age, whichever occurs first, at which time repayment is due. However, if the owner reaches 100 the advances will continue up to a cumulative term of 40 years before repayment is expected. The amount of the loan advances is based on the homeowner's life expectancy and property value. Fixed interest charged on the loan amount is set at a rate below the market rate in return for the homeowner agreeing to relinquish a portion or all of the future appreciation in property value. At the time of repayment, the homeowner's liability is limited by the value of the property at that time. Even if the outstanding loan balance and American Homestead's share of appreciation exceed

the property value, American Homestead is limited to recovery of an amount equal to the property value and no more. The company hopes to absorb losses through its pooling of thousands of loans intended to be financed with private capital and marketed nationwide through federally chartered savings and loan associations.

Fouratt Senior Citizen Equity Plan

The sale-leasback most discussed in the United States in recent years is the Fouratt Corporation's copyrighted Senior Citizen Equity Plan or Fouratt Plan.

The plan is designed as follows. A senior homeowner must be 65 years or older if a male and 70 years or older if a female. If a couple, both persons must meet the age requirement. The senior homeowner sells the home to an investor at a discount from the home's market value and enters into a leaseback agreement with the investor. The leaseback is structured as a guarantee of the senior's right to live in the home as long as desired. After the agreement between the buyer and seller has been finalized, the senior's heirs are offered the opportunity to be substituted for the buyer in the purchase agreement on identical terms.

The buyer makes a downpayment and executes a promissory note, including interest, and a deed of trust. The deed of trust secures amortized payment of the note and performance of all the buyer's other obligations under the purchase agreement. The buyer also purchases a single-premium, no-death benefit, deferred annuity that guarantees continuation of the same monthly payments to the senior beginning the month after the purchase payments have ceased. The buyer pays off the promissory note to the senior over a 10- to 15-year period, depending on the senior's life expectancy. The buyer assumes responsibility for

real property taxes, fire and liability insurance, and major maintenance. The senior pays rent to the buyer as long as the senior wished to remain in the home, with rent increases limited by the purchase agreement. If and when the senior desires to move, the senior continues to receive the total amount of purchase (or annuity) payments, without a deduction for rent. If the senior dies before the last of the purchase payments, the senior's estate continues to receive the purchase payments. The estate does not benefit from deferred annuity payments after the senior's death.

While the Fouratt Plan offers attractive payments and security for homeowners, potential difficulties in attracting investors to purchase elderly homeowner's homes are apparent. One community group assessing different home equity conversion plans noted the plan's two primary drawbacks, "(1) negative after-tax cash flows in all years of the transaction; and (2) a non-competitive rate of return, i.e., in the 6-7% range, over a 15-year period."

First Senior

The First Senior sale-leaseback program in the Washington, D.C., area is similar to the Fouratt Plan; however, First Senior will also involve itself in property management after the sale. To attract elderly participants the company plans to offer a free appraisal, free computerized analysis of different mortgage terms, and payment of legal fees for the homeowner's attorney to review the contract. Sellers would be given a promissory note and a first mortgage as well as a deferred annuity insurance policy.

The program began offering the plan in 1982 to homeowners over 65 with minimum property values of \$175,000.

THE CONCLUSIONS

Future housing and service programs for the elderly should be designed based upon the following conclusions.

First, the elderly - contrary to popular myth - are an extremely heterogeneous group with a diversity of needs and preferences. Any programmatic effort that fails to recognize this fact is doomed to failure. When and where possible, a comprehensive market analysis should be undertaken in an effort to determine appropriate alternatives that will satisfy both need and demand.

Second, expectations of the elderly are rising and will continue to do so. This is especially true among the more affluent and better educated elderly population as a whole and the female elderly population in particular.

Third, the elderly (65 and older) as a segment of the population are growing faster than the population as a whole. Within the elderly population, those 85 and over are projected to increase the fastest. As age increases income declines, and for elderly renters - particularly those who have been renters all their lives - it is likely that they will continue to increasingly be at an economic disadvantage relative to homeowners.

Fourth, a number of federal and state programs exist that can benefit the elderly both in housing and services, but no mechanism exists to coordinate these programs to more effectively use public resources. Further, no incentives exist for coordination.

Fifth, recognizing that a continuum of housing settings exist from an independent level to a dependent level, efforts should be made to fill the gaps by enabling and facilitating the development of alternatives. As stated

earlier, all the alternatives will have some appeal to some individuals, but no single alternative will appeal to the total elderly population.

Sixth, the role of the state should be to provide cost-effective alternatives to those individuals who need them most due to inadequate personal resources or support. Anytime government - at any level - gets involved, the provision of public programs can become extremely expensive (see Figure 1). It is thus extremely important that two criteria are used in determining the level of public involvement - 1) that the resources being used are done so in the most cost effective manner possible, and 2) that the programs be means tested and not entitlements. Shared housing and a home-matching program are two housing options that may warrant limited public involvement. The simulation model that was developed demonstrates that shared housing may be a very cost-effective method of housing and service delivery for the low income renter or homeowner with little or no equity or resources.

Seventh, keeping people in their homes can become extremely expensive. On a per capita basis the provision of home care may be less than the per capita cost of nursing home care, but if there is substantial growth in demand for services (the woodwork affect) coupled with projected population increases, then the total cost could approach or exceed the total cost of nursing home care for the population as a whole.

Eighth, the informal network can not be taken for granted regarding the value of services it provides. Effort should be made to reinforce the informal service network while taking care not to supplant it.

Ninth, because most elderly Minnesotans own homes and a majority of these owners do so mortgage free, home equity conversion is a possible way to free up personal resources either to supplement income or provide a home for life, or

both. Equity conversion entails costs and risks for both the homeowner and the lender/investor. These risks are being minimized as further small-scale experimentation continues around the country. Home equity conversion programs are of no help to renters and little help to homeowners whose homes are seen as poor investments. Equity conversion may thus be of little help to the most needy elderly.

The elderly represent a powerful political force and as a group have been the recipient of many entitlement type benefits. However, fiscal responsibility dictates that entitlement programs may have to be means-tested programs. Aid should be available for those who need it. Every effort must be made to encourage personal and financial independence. Through the provisions of alternate housing and service arrangements, i.e., between the "home" and the "nursing home," this goal may be achieved.

The state, facing increasing financial burdens resulting from decreasing federal funding, has attempted to constrain health care costs through measures such as capping the number of nursing home beds and instituting pre-admission screening. The creation of alternative housing and service options, in partnership with local governments and the private and nonprofit sectors, may be the only way for the state to effectively constrain costs in the future while maintaining an appropriate level of support for the elderly. The alternatives to this are either continued increases in the rate of spending or cost constraints that cut spending without providing alternative services neither of which would seem to be politically possible.

APPENDICES

Appendix A:

Market Survey Guidelines (Available Upon Request)

Appendix B:

List And Description Of Federal Programs Benefiting The Elderly In Housing (Available Upon Request)

Appendix C:

Description Of Nursing Home Distinctions (Skilled Nursing Facilities, ICF I, ICF II) (Available Upon Request)

Appendix D:

Cost By Housing Setting, Age And Income Standard Of Possible Baskets Of Services (By Age-Cohort And Household Type) (Available Upon Request)

Appendix E:

Housing And Services Cost Model, Simulations By: Age-Cohort, Income, Variable Growth Rates, Household Type (Available Upon Request) Simulations Under Varied Assumptions, Use Rates, Cost Factors, Etc., Also Available Upon Request.

Bibliography

(Available Upon Request)