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Housing Issues. by B. Warner Shippee  
et al. For sessions of Commission  
on Minnesota's Future, January 14,  
15, 16, 1975.

HOUSING (CURA)

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COMMISSION ON MINNESOTA'S FUTURE

JANUARY 14, 15, 16, 1975

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## PREFACE

This paper was prepared for the Commission on Minnesota's Future by the Center for Urban and Regional Affairs of the University of Minnesota under the direction of B. Warner Shippee, coordinator of housing studies with the collaboration of John Adams, William Angell, Michael Gleeson, Abe Farkas and Curtis Sipple. It is in every sense, a working paper. The ideas expressed in it are solely the work of its authors and do not represent the position of the University or the Center for Urban and Regional Affairs.

Time and the competing demands of other responsibilities have not allowed us the luxury of much discussion or mutual criticism. Nor have we had the opportunity to refer drafts to others working in the field of housing. The results therefore are tentative and episodic and are offered in the hope that they may stimulate thought and discussion.

The Housing Problem is more than the slum and more than the predicament of the low-income family. It spurs migration from cities and deters movement into them. It is the source of many discontents among millions of mishoused or dishoused families yearning to be rehoused. It affects family budgets, security, happiness, and stability. It is tied into the issues of segregation and decay. Though the Federal government looks upon housing shortage and other imperfections of the housing market as factors in national employment and economic activity, few other problems have more serious impacts on the economic well-being of cities and the social well-being of their citizens.

Charles Abrams, The City is the Frontier, 1965

Ah, love, let us be true  
To one another! for the world, which seems  
to lie before us like a land of dreams,  
So various, so beautiful, so new,  
Hath really neither joy, nor love, nor light,  
Nor certitude, nor peace, nor help for pain;  
And we are here as on a darkling plain  
Swept with the confused alarms of struggle and flight,  
Where ignorant armies clash by night.

Mathew Arnold, Dover Beach, 1867

In housing everyone is something of an expert but no one is expert enough to override persuasively the direct experience of another. The future, also, is everyone's concern and at the same time no one's special province. Housing and future together create a hazardous world for amateur and expert alike.

We have been given a series of five housing issues to consider, suggesting alternative futures where we can. First, we were prone to want to restate the issues but decided that time would not allow us this luxury and therefore we have stayed with the original statements. These issues are:

1. What are the special circumstances which make it necessary for government to become involved in housing policy and problems?
2. Are the public and private costs of traditional detached single family housing units likely to continue to increase compared with adequate alternative forms of housing? If so, are Minnesotans prepared to pay the higher individual and social costs of such units?
3. Can Minnesota through public policy ensure that all citizens of the State have access to a housing unit that meets a minimum standard?
4. What are the most efficient ways in which Minnesota can provide at least minimum standard units for all Minnesotans?
5. Does Minnesota need housing programs for special populations (eg. urban, rural, elderly, Indian Reservation) rather than general housing programs for low income units?

As we address the issues, one of the major problems is that of

public priority. In large measure it seems to be true that the process by which the housing supply is augmented and altered is largely dominated by other than housing objectives. Neither the goals of housing consumers or producers are determining, as housing outcomes are largely by-products of concern for the national economy. The question is much less what the economy can do to improve housing conditions, than it is what housing production can do for the economy. A major cost of housing is the cost of capital required to produce and acquire it. Benefits of housing programs which flow to the consumer or the producer take second place to concerns for return on capital. A major task for the future is to redress this balance.

Our assignment is one of explaining rather than concluding; suggesting rather than deciding. We have not resisted the urge to recommend, however, when we feel recommendations may be useful. Most of the recommendations occur in the text in the section discussing government involvement with housing, Issue 1. One of our recommendations is basic: Minnesota needs to develop a comprehensive State housing policy if effective use is to be made of future resources and the housing process improved towards meeting the needs and expectations of the residents of the State. This housing policy should be based on values which emphasize housing choice and opportunity. It should be coordinated with Statewide policies on land use, environmental protection and energy utilization and related to policies on welfare, health, education and recreation. These ideas are spelled out in more detail later.

The text which follows includes brief sections on the nature and importance of housing, a discussion of future directions, and then a consideration of each of the issues.

A. The Nature of Housing

Housing implies far more than simply shelter, the structure which protects its inhabitants from the elements and provides them a resting place. In addition, ideas of privacy, location, utilities, environmental amenities and investment are all included in housing, although the way these elements are combined varies greatly from place to place and from household to household. Each of these ideas is described briefly.

Privacy

For most people housing implicitly suggests the idea of privacy for a family or other self-selected group and for the individuals which make it up. "Each child should have his own bedroom." The house should provide "a place where a person can be by himself" as well as places to socialize with people whom he chooses.

Location

Housing implies the idea of specific location, i.e. each dwelling place is permanently fixed in location and takes on characteristics of that location. Few dwellings are ever moved.

Utilities

Even in remote locations in Minnesota, housing includes the idea of services to which it is permanently connected or which are brought to it on a regular basis. These may include electricity, gas, sewer system, telephone, mail service and in urban areas many others.

Environmental Amenities

Housing shares a host of characteristics which are not within the dwelling unit but which are accessible to it. They may include schools, recreational facilities, cultural facilities, shopping facilities, landscaping, gardens, farmlands, wildlife, and last but



not least neighbors. People choose housing not only for its internal amenities and its appearance, but for its accessibility or remoteness from a great many other facilities and activities.

### Investment

For a majority of Minnesota's households, housing also is an economic investment. For these owners of housing, the house and the land on which it stands may be their largest and most important possession and investment. A threat to their housing not only threatens their way of life, but may also jeopardise their economic position.

### B. The Significance of Housing

Housing is not only of fundamental concern to everyone but is also, in the aggregate, by far the largest economic enterprise in Minnesota. While exact numbers are impossible to arrive at, estimates have been made of the total expenditures for Minnesota housing. The most comprehensive such attempt was made for 1973 by William J. Angell, Extension Housing Specialist at the University of Minnesota and one of the contributors to this paper. Mr. Angell's paper The Importance of Housing in Minnesota is included in Appendix A.

In summary, Angell estimates the total expenditure for housing at roughly \$4.5 billion and the investment in housing at \$3.2 billion in 1973. His figures do not include public services and amenities. Angell's estimates may vary considerably from those used by others due to the inexact nature of the data available. They do, however, bring into perspective the importance of housing in the Minnesota economic picture.

### C. Future Directions

The future will not come upon Minnesota as a sea change and a

sharp break with the present. Rather, the shape of that future is potential in the present. The present, however, includes so many varied trends and so many apparent contradictions that the question becomes one of which of these trends and which problems and opportunities will tend to dominate and affect Minnesota's housing.

In suggesting any possible futures, it is clear that selected value assumptions underlie alternative directions. It seems to be more realistic and advantageous to describe future contexts in which a variety of decisions, many unforeseeable, will be made rather than sketching a rigid set of circumstances in which all choices are allegedly predictable.

With this in mind, we have assumed that such desirable values include increasing housing choice for consumers, maximizing aggregate housing consumption for low and moderate income people, stimulating and maintaining healthy neighborhoods and community cooperation, and promoting efficient and effective use of resources.

Some of the contexts or themes in the present which have a close relationship to what will be done about Minnesota's housing opportunities and housing problems in the future are:

1. Population change
2. Employment change
3. Changing life styles
4. The problem of air and water pollution
5. The energy situation
6. The existing housing supply
7. The cost of housing
8. New technological developments

1. Population Change

The Planning Agency's population projections for Minnesota indicate the following annual growth rates for population and household by five year periods until the year 2000:

ESTIMATED ANNUAL INCREASE IN POPULATION  
AND HOUSEHOLDS IN MINNESOTA

<u>Period</u>	<u>Population</u>	<u>Households (Occupied Housing Units)</u>
1970-75	18,271	14,606
1975-80	26,373	21,196
1980-85	32,002	23,922
1985-90	31,582	19,725
1990-95	24,949	10,707
1995-2000	17,179	6,849

Source: Minnesota State Planning Agency

During this period, the number of young families is expected to decline as will families with heads over 65 years of age while middle-aged families will increase in absolute numbers and relative to the total. The number of people under 20 will decline considerably while there will be more middle aged people. The population between the ages of 30 and 49 is predicted to almost double in the thirty year period.

Only when they are grouped into families or households - i.e. one or more people occupying a housing unit, do population projections take on full meaning for housing. The projected large bulge in the number of households in the middle aged group whose heads are 30 to 65 years of age is of special significance in looking at the demand for housing in the next quarter century.

A closer look at these figures shows the following changes by age groupings and family types:

<u>Age of Head</u>	<u>No. of Husband-Wife Households</u>		<u>Gain or Loss</u>		
	<u>1970</u>	<u>2000</u>	<u>1970</u>	<u>2000</u>	
20-29	145,666	144,094	-	1,572	
30-44	257,694	522,485	+	264,791	
45-64	299,096	414,032	+	119,936	
65+	118,311	116,151	-	2,160	
<u>Female Head Household</u>					
20-64	57,666	79,890	+	22,224	
65+	16,744	19,688	+	2,944	
<u>Other Male Household</u>					
20-64	19,724	29,496	+	9,772	
65+	7,361	7,227	-	134	
<u>Primary Individual</u>					
Male	20-64	57,318	85,716	+	28,398
	65+	28,417	27,898	-	519
Female	20-64	70,813	98,104	+	27,291
	65+	80,136	94,226	+	14,090

Source: Minnesota State Planning Agency and U.S. Census, 1970.

The effect of this increase on the housing market will not be simple or direct. Actually, the number of young families will increase, according to the Planning Agency projections, through the 1980's as more of the large number born in the 1950's move into household forming ages. It will then decrease by 2000 to 1970 levels. In the late 80's and through the 90's, the number of families in the middle ages will increase. So the effect would seem to be something like this:

- 1975-85 increase in young families
- 1985-95 increase in families with children
- 1995 on increase in empty nesters

The areal distribution, the kinds of households and the age distributions all will have major impact on Minnesota's housing future.

The number of children in households will be another factor of major importance. The Planning Agency has provided us with projected age distributions of the population. In 1970, there were 1,151,089 children between the ages of 0 and 14 or 2.8 children for each husband and wife household with a head between the ages of 20 and 44. In 2000, there will be a projected 979,656 children between the ages of 0 and 14 or 1.47 children for each household of similar description. Clearly, in 2000, families are expected to be much smaller on the average than in 1970. Throughout the state, in 1970, more than 60% of the households included no person under 18 years of age. By the year 2000, the Planning Agency expects this percentage to substantially increase. Perhaps 20% or less of the households will have young people in them.

## 2. Employment and Income

Employment and income taken together have perhaps the greatest impact on the nature and distribution of housing. Location of employment within fairly wide parameters determines the general location of housing in the State. Although, there is a feedback relationship and the existence of a resident employment pool may influence the location of employment opportunities.

If employment opportunities are dispersed more widely throughout the State or concentrated in areas with less available housing, housing will need to be built to serve the resulting increased population. How close this housing is built to the new jobs will reflect in part the availability and price of gasoline.

Household income present and prospective has much to do with housing. A family's ability to demand and the producer's ability to

supply housing is directly related to the relationship between housing costs and the family income. However, families differ markedly in value they place on housing as compared with other items which they consume.

The amount and proportion of income spent on housing varies widely among households in the same economic groups and also between groups. It is not unusual for low income households to pay 40% or more of their income for housing nor for high income households to pay 10% or less. However, in the middle income ranges, there is also considerable variation in the amount and percentage of income spent for housing.

The Planning Agency's projection indicates that in constant dollars mean family income will increase very modestly between 1970 and the year 2000. Mean family income in Minnesota in 1970 was \$10,899. In the year 2000, it is projected to be \$11,334.

As family size decrease, however, the amount per household needed for other items in the budget may decrease and the amount available for housing increase. Meanwhile presumably the amount of space needed per household would also decline somewhat.

### 3. Life Styles

Are there changes in values and in how people wish to live which will alter the housing future for Minnesota? How will these be affected by other trends in society? Some of the significant themes are discussed in the following paragraphs.

#### a. The Urban World

In one sense it is a truism to say that all Americans and all Minnesotans now live in an urban world. Through mass communication, television, radio, cable and the printed word, through mass education and through expeditious transportation, urban values and culture have

permeated to the last corner of the most remote section of the State. The 1970 Census shows that 96.2% of all households in the State are blessed with a television set. So it is possible to be isolated physically and share the delights of the City and the world. What in the old days came slowly through the mail and in the weekly paper or magazine, can now be had continuously 24 hours a day. Teenagers all over the world listen to the same music and adults watch the same soap operas and football classics.

This pervasive "urbanization" is sometimes thought to be the same as homogenization. In a way, however, it has tended in another direction. For while the hamlet and the village and the ethnic neighborhood have been opened up to the standardizing affects of mass media, at the same time the infinite variety of the urban world has been brought to the living room of the most isolated individual. Urban carries with it the ideas of independence and choice, variety and glamour. It connotes sophistication and urbanity as well as standardization.

Now, as never before, one may live in almost any kind of setting from slum to mansion, from farm to downtown hi-rise and at the same time have the news, the music, the drama, the sports and the educational opportunities of the world literally at his finger tips. There is every reason to believe that the variety of these opportunities will continue to expand.

In making locational housing choices, the question is then one of what one wants to be close to and experience directly, rather than vicariously through television and radio.

Most of Minnesota offers a great variety of direct experience within relatively easy reach for most people, particularly for those

for whom automobile transportation is available. The infirm, the elderly without cars, and small children have more narrowly defined opportunities for direct experience than others. Clearly, housing locational choices will be reduced with the energy shortage if gasoline becomes scarcer and more expensive. Fewer people will have the option of reaching almost anything they wish to do because it is within easy driving time.

Place of work is frequently cited as the most important determinant of location of housing both in the greater region and in the local community. This is undoubtedly true at the macro scale for employed people in choosing the general location or community in which they live. However, in Minnesota, particularly in the Twin Cities Metropolitan area, almost all jobs are within easy reach of a great variety of different neighborhoods and living arrangements. Thus location of employment does not become a very important factor in choosing a specific living place or neighborhood. Indeed with an increasing number of households including two or more workers, a particular workplace may be rather irrelevant to housing locational choice. In any Minnesota community, a one-half to three-quarter hour driving radius will encompass 75 to 100% of all local job opportunities.

Access to other kinds of direct experience thus is more important in choosing housing for most people than is the location of job. Primary among these are schools for families with children, recreational opportunity, goods and services, and cultural activities. Actually, in many parts of Minnesota the legal access to schools may be more important to people than is physical access. One makes a choice to live in the Roseville or the Edina school district rather



than close to a particular school in Roseville or Edina. In the central cities, a particular school may be most important in considering the "kind of people" one's children will be exposed to. This is somewhat mitigated by the moves towards school integration which tend to make all schools more socially heterogeneous.

b. Children

The declining birthrate has already begun to influence the attitude of retail establishments. Declining enrollments have in a few short years turned the world of many school districts upside down. What was a desperate shortage of facilities and teachers, suddenly has become an oversupply. The declining birthrate also influences the housing demand and aspirations of thousands of households. Housing needs are very different for families with young children than for all-adult households.

The number and proportion of childless households has been growing rapidly all over Minnesota. It may reach 80% of the total by 2000. There were 1,251,099 children 14 years of age or less in 1970. This represented 32.9% of the total population. State Planning Agency projections indicate that this number will dwindle to 979,656 by 2000. Then children will represent only 21.5% of the population. The population projections indicate that at no time in the next quarter century will Minnesota have as many children as it has today.

It is not possible to predict accurately how this lesser number of children will divide themselves into households. Will there be just as many families with children but each will have fewer children? Or will a substantial number of families decide not to have children at all? Then there will be fewer families with children, but they will average about the same size as they do today? Clearly this

makes a difference. If in 2000, the families with children average 1.5 children per household, the 979,656 children will be found in 653,104 families. If the average is 2.5, it will mean that there are 391,862 families with children. If the average should climb to 3, only 326,552 families will include children. These figures displayed show the following:

<u>Mean No. of Children in Families with Children</u>	<u>No. of Households with Children</u>	<u>Percent of Total</u>	<u>Households Without Children</u>
1.5	653,104	39.8	985,903
2.0	489,828	29.9	1,149,179
2.5	391,862	23.9	1,249,145
3.0	326,552	19.9	1,312,455

A State with some 653,000 households including children will have far different housing requirements and aspirations than one with 326,000.

In 1970, there were just over 500,000 housing units in the State with six or more rooms. Evenly distributed, all of the families with children in 2000 could be accommodated in the present supply of large houses if there was an average of 2 children per family or more. (The Planning Agency assumes a continuing average of about 1.9 live births per family). If the average was 1.5 one-half of the existing supply of five room units (total 306,000) would have to be utilized in addition for some of the one child families.

A State which currently accommodates some 1,250,000 children might not have too much trouble providing housing and facilities for 979,000. Even though there may be no theoretical shortage of housing for families with children, however, there may be a maldistribution which relates to either location or to ability to pay for housing available.

Small pre-school children and their mothers are usually a lot less easily mobile than the rest of the adult population. They are dependent upon the resources of the immediate neighborhood to a greater extent than are teenagers, young adults, and men and women who are employed out of the house. The growing movement to provide day care centers for young children in some areas is making some inroads on this dependence in some places.

Addition of children to the household is a major reason for families to move. We can, therefore, make some predictions about the direction of the market by projecting when children will arrive as well as their number.

The State Planning Agency projects the number of live births in the period 1970 to 1975 to average 56,600 annually. This will rise to about 71,500 annually for the period from 1980-85 and decline to between 60,000 and 70,000 from 1995 to 2000. This will mean that more households will presumably be making the choice to move because of their children during the 1980's than are doing so currently and than will do so later. The annual live birth figure for the 1980-85 period is still about 20,000 per year less than at the post World War III high point.

Incidentally, the propensity to move and seek larger, more acceptable quarters when the family grows, is much more marked than the movement in the other direction. Empty nesters, families whose children have left home, are likely to remain in their houses and use the empty bedrooms for visitors and storage.

#### C. Adults

Adults who work outside the dwelling are much less closely tied to the immediate neighborhood than are children and mothers. Schools and

playgrounds are of no particular concern to them, traffic is less of a hazard, and the corner grocery or service center diminishes in importance. Such neighborhood amenities become more important again for the old. Other attractions can dominate the choice of place to live for active adults. Greater flexibility is also possible within the dwelling unit. Child care and child play are not important. As we have seen, perhaps 80% or more of Minnesota households will be child-free in 2000. Even now something over 60% fall in this category.

Another trend in present society is important. Many couples, who ultimately intend marriage, delay making a lasting commitment of this kind while others may not be contemplating marriage at all. Informal groupings of individuals make up a larger proportion of Minnesota households and these range from being quite stable to being very transitory. Some are related to therapeutic, educational, or ideological concerns.

Whether this trend will substantially affect new housing design remains to be seen. Newer apartment developments for adults are, however, providing far more common facilities, swimming pools, sauna baths, exercise rooms, tennis courts, meeting rooms, etc. than did their counter-parts of a generation ago. Relationships to golf course, tennis clubs, riding paths and hiking trails, cross country skiing and little theatres all are touted by developers much more frequently than they used to be. Meanwhile communal groups of people seeking places to live together are leasing or buying large old houses in both city and country and rearranging them to meet the particular needs of the group. Builders are emphasizing "carefree living" in selling townhouse and similar developments. Responsibility for exterior maintenance, yard care, snow removal and the like is socialized either

through contributed work (in coops) or monthly charges for service in condominiums and other private developments.

While builders have added community facilities to be used in common by people in the development, few have attempted to radically change the style of the unit itself by transferring some of the traditional familial functions in common spaces. For example, it has been suggested that a group of households might sacrifice common space within this dwelling unit for space which might be jointly used i.e. dining space, game space, t.v. room, etc. Shared space requires shared management, however, and many communal groups have run aground on the hard rock of temperamental difference and minor variations in housekeeping style.

#### d. Things

Dwellings are not only needed by Americans to provide living space for themselves but also to shelter their belongings. The affluent society has given birth to the most heterogeneous and widely shared collection of possessions the world has ever seen. Consumption, conspicuous consumption and conspicuous waste have left the drawing rooms of the wealthy and the social climbers and have permeated the homes of about every class in society. Sometimes it would seem that the greatest shortage was the shortage of storage space. Many two car garages never see an automobile because they are the resting place for all sorts of other appurtenances. They take the place of the old fashioned attic and basement.

Current rages for old things have created a whole new activity of informal buying and selling with the garage sale, the flea market and rummage sale enjoying an unprecedented popularity. This recycling operation has its practical side as it keeps in circulation out-grown

and unwanted goods.

Concurrent with the continuing mania for possession and consumption is a minor theme particularly noted on college and university campuses and their satellite neighborhoods. A strong counter-trend to materialism has set in with many young people aspiring only to the jeans on their legs, the shirts on their back, and the stereo on which to play their records and tapes.

So counter forces are in evidence. For some, the future seems to require more space to keep an ever mounting pile of possessions. To others, less space may be needed because they abjure material possessions. Interestingly, the young people who decry material things like old places with their ample space in preference to new small apartments. Those who are finding more or less satisfactory housing in mobile homes settle for smaller spaces cleverly arranged with much of the furniture either built in or bought with the house.

A particular group of adults whose housing desires are having a special impact, particularly in the vacation land of central and northern Minnesota, are retired people in late middle age. There has been a continuing migration of retired people to the lake country seeking to make their homes where they grew up, or visited for vacations, or only recently discovered. They are found in new houses, old cottages newly winterized, and mobile homes. Sometimes they spend the entire year; sometimes they winter farther south. This is likely to be a lasting trend and may be greatly increased if the tendency towards early retirement should continue. They provide added impetus and back up market for public housing for the elderly which has become an important factor in communities all across the State.

e. The Land

These retired people express one aspect of a more general major force which cannot be disregarded in considering the future of housing. This is the special relationship which most Minnesotans along with other Americans have to the land, both that held and used in common, and land to which they hold title.

When recently asked about the desires of people moving in to the Bemidji area, a local banker remarked that mostly, "they want 40 acres of brush."

Forty acres of brush, a city lot, a lake shore cabin, a hobby farm, or a tree farm all reflect a deep desire to own a piece of the land and live on it part or all of the time. Whether it reflects a genuine preference for lawn care or country life or life in the woods or a need for sound investment or a hedge against inflation or multitudinous other reasons, many Minnesotans of all ages have a stake in the land; many more would like to have one. In 1970, 825,000 Minnesota households owned houses in which they lived and 77,000 were reported to have second homes. Of the owner occupied housing units, 110,717 were on farms, 191,876 in other rural locations, and 522,036 were counted as urban.

Land ownership is not limited to the well established. Thirty percent of all the husband-wife families with heads under 25 years of age in Minnesota occupied housing units which they owned. The percentage jumps to 58% for families with head aged from 25 to 29. Sixty-one percent of families with female heads owned their own homes.

While we may anticipate that land use controls will be strengthened and the rights of ownership further limited, the widespread dispersal

of ownership and the propensity to live on land one owns will continue into the foreseeable future. Further, although the heady inflation in land costs has a containing effect, there is still a considerable amount of woodland and swamp and brush waiting to be divided up.

Two important sets of constraints will significantly shape the things to come in Minnesota housing. These are environmental concerns and the control of pollution, and energy resource shortages.

#### 4. Environment and Pollution

Concern over the preservation and improvement of the natural environment will continue to be a major theme in Minnesota. High on most Minnesotan's regard for their State are its unusual natural resources, its lakes, streams, forests and fields, wildlife and ski slopes. With the rigors of its continental climate come the pleasures of skiing and skating, snowmobiling and sliding in winter and swimming and boating, hunting and fishing, hiking and bird watching in spring and fall and summer. The preservation and enhancement of these natural assets has become a matter of public involvement at every level of government and of private investment; from the million dollar expenditures of major developers to the few dollars that hundreds of thousands of natives invest each year in fishing and hunting licenses.

Housing impacts the environment in two major ways:

1. As a land use which can alter or destroy the natural environment.
2. As a producer of pollution.

Minnesotans have been relatively unfettered in their individual freedom to build their houses where and how they will. Only relatively recently, however, have the elements of comprehensive area wide or state wide land use policy begun to emerge. The Shoreline Zoning Act



is an example of policy regarding one major but limited resource. Minnesotans now can continue to live seasonally or all year round on lakes, but the conditions of their building and the limitations on their use of land is mandated by the State and determined in detail by the County.

The proposed land use controls of the Metropolitan Council, which would concentrate housing and other urban development in an urban service area and limit it in the rural service area, preserving open space and agricultural lands, are another major step in this direction.

Land as a basic and irreplaceable resource will continue to be debated, and movements towards more land use planning and control will limit areas in which housing can be built. Something like Metro Council's land use framework may be considered by other development regions and in time probably will be mandated by the legislature for the entire State. In addition, large areas of Minnesota are currently held for public use or in public trust by the Federal, State, County and municipal governments and are not now available for residential development.

As statewide land use policy develops, it should be closely related to a comprehensive housing policy.

The dwelling as a polluting agent mainly relates to land and water pollution through the disposal of sewage, air pollution from smoke and fumes, and problems of solid waste disposal. These factors, particularly potential water pollution, affect where housing is located. In its recent statement on land use framework, among other objectives, the Metropolitan Council calls for development of more effective septic tank and individual sewage disposal systems. Much of the deleterious effects of dispersed development could be ameliorated by

sewage disposal systems which require little or no water runoff for their use. While major attention has been directed to these problems in the Metropolitan areas and major municipalities, the sprawl around cities of all sizes in Minnesota is beginning to be recognized as an environmental hazard.

#### 5. Energy Resources

Limitations on supplies of natural gas and petroleum may vitally affect the production and location of new housing and the utilization of existing housing stock. The two major direct consequences have already been sharp increases in the cost of residential utilities and the cost of transportation.

In 1970, housing units in Minnesota depended upon the following sources for heat:

utility gas	53.9%
bottle gas	6.2%
electricity	2.6%
oil or kerosene	34.3%
coal or coke	1.4%
wood	.6%
other	1.0%

In most of the regions of the State, far more dependence is put on kerosene for heating. Only in regions 7E, 9, 10, and 11 are less than 50% of the housing units dependent upon kerosene; while in Regions 1, 2, 4 and 6W more than two thirds of the homes use kerosene for heating. The price of kerosene for home heating has risen more than 100% in the past year. Proposals to tax oil by the barrel as a conservation measure would add steeply to this cost. Meanwhile, the price of utility gas has risen and is expected to increase further as supplies are limited and demands increase.

Part of the answer lies in greatly increased insulation. Most of the existing housing inventory was built at a time when energy was

cheap and plentiful and little attention was paid to scientifically insulating houses to conserve heat. Until fairly recently, even less attention has been paid to alternative forms of energy for domestic use. The experiments with solar heating devices at the University of Minnesota and elsewhere indicate that solar heat may make a real contribution for new housing in the future. The high initial costs may be offset by their minimal costs of operation. Beyond the actual economics, solar heating plants will relieve demands on fossil fuels. It may be that a useful subsidy in the future would be a subsidy to developers to cover the initial costs of complete insulation, triple windows, and solar heating plants.

To a lesser extent, because of lower consumption rates, the same problem exists for heating water and cooking fuel. Here bottle gas plays a significant role in areas not served by gas utilities.

The other significant effect of energy shortages on housing results from the increase in the cost of gasoline and limitations on its availability. Minnesota, like most of America, travels by private automobile. In Minnesota in 1970, 87.2% of all occupied housing units had one or more automobiles available. Of all the workers working away from home, 81% travelled to work by automobile, 11% walked, 6% took bus or streetcar, and 2% other means.

The expected deepening of the energy crisis and further rise in gasoline prices will force car sharing and increase pressure for effective mass transit, particularly in relatively densely developed areas. Location of new housing will have to take much greater account of relationship to public transportation.

Both the squeeze on heating and cooking fuels and on gasoline has its greatest effect on people of low and fixed incomes who will have

difficulty adjusting their budgets particularly in the face of other rising costs.

6. Effect of the Existing Housing Supply

The Census of 1970 reported 1,219,597 year around housing units in Minnesota of which 1,153,946 were occupied. By 1975, the State Planning Agency estimates that the number of occupied units had increased to 1,226,978 and projects a further increase of 412,781 for a total of 1,639,759 by the year 2000. Allowing for a certain amount of replacement, it is very clear that in the foreseeable future, most Minnesotans will be living in housing which is now in existence. Even in the best building years, only about three percent has been added to the Minnesota housing supply.

Residential patterns and housing types in the future will be similar to what they are today. The amount of sprawl may increase, probably at a much reduced rate, and the additions to the housing supply may continue to favor the trend of the past few years toward fewer freestanding detached single family houses and more clustered and multi-family structures. Table 1 shows the 1970 distribution of occupied housing by housing type for the State as a whole, divided between renters and owners. It indicates the predominance single family detached housing has in the current inventory.

In most places in the state, the housing patterns of the future can be thought of as variations on the patterns of today. In built up areas, whether in the major metropolitan centers or out-state, very little change may be evident, with occasional replacement of buildings and added housing on vacant lots. At the fringes and in the faster growing areas, future patterns for the most part can be thought to be expansions and extensions of present day development. These will vary

from place to place as they do today. Declining communities will see a continuing spreading out of the population in the existing housing supply. In some cases, whole new suburbs and even new towns may come into being. Abandonment of buildings which have become uneconomic, both in rural areas and in the cities, will continue to be a problem, with a limited answer provided through urban homesteading and the purchase or rental of rural old houses by families or groups of young people for seasonal or full time use.

Obviously the effect and importance of the existing housing supply will vary from place to place and region to region in the State. In some places, virtually all of the housing supply in the year 2000 will be in buildings in existence at present, most of which were built by 1940. In fourteen of the forty-eight cities in Minnesota with between 10,000 and 50,000 people in 1970, over half of the housing supply was at least forty years old. Forty-two percent of the cities with populations between 2,500 and 10,000 fell into this category.

On the other hand, there will be whole suburbs and major settlements in 2000 which have been virtually entirely created within the past quarter century. These neighborhoods will be less oriented to the needs of children than were the bedroom suburbs of the post war era and most probably will include a much more substantial proportion of apartments and clustered houses of various types.

Much could be said about the existing housing supply in Minnesota which has meaning for the future. Comparison of data from several censuses indicates that as a whole the quality of housing has improved over the last several decades. The 1970 inventory for the state as a whole had the following characteristics:

73.1% of all housing units were in one unit structures  
46.7% of all housing units were built in 1939 or earlier  
20.3% of all housing units were added in 1960 or later  
71.4% of all housing units were served by a public water supply  
70.9% of all housing units were served by public sewer  
93.3% of all housing units included a private bath and toilet  
and were served with hot and cold running water  
95.2% of all housing units had complete kitchen facilities for  
the exclusive use of the household.

On these and other characteristics, however, there was considerable variation from place to place. Urban housing is somewhat more likely to be fully equipped than is rural housing. However, 84.8% of all rural housing in the state had complete plumbing facilities and 89.7% had complete kitchen facilities in 1970.

The Census not only provides a count of housing units but also tells us how many rooms there were in these units, a grand total of 6,385,407 or 1.67 rooms for every person in the State. This average, of course, includes households of one or two persons in large houses and families of eight or more in small units.

It has been thought that a rough standard of 1.01 or more persons per room represents significant overcrowding. This is particularly true in apartments as compared with detached houses which have the advantage of private outside space, basements, and other auxiliary private space not included in the room count. A tabulation of census data indicates that there were only 5000 households in apartment buildings of three or more units in Metropolitan areas in the State which were crowded by this definition. An additional 1200 households were situated in non-metropolitan areas.

Another method of looking at crowding is also afforded by census data. Assuming that families with children should have at least one more room than the number of children i.e. for 2 children 3 rooms is a minimum, for 3 children 4 rooms, etc., 11,500 households in metropolitan areas and 16,000 households outside of metropolitan areas were overcrowded in 1970. The data indicates that the problem becomes more prevalent as the number of children increases and supports other evidence that large families of low and moderate income are likely to be housed in inadequate space.

Table 1  
 Distribution of Occupied Housing Units in Minnesota, 1970  
 By  
 Housing Type and Tenure

<u>Type of Structure</u>	<u>Owner Occupied</u>		<u>Tenant Occupied</u>	
	<u>No.</u>	<u>Percent</u>	<u>No.</u>	<u>Percent</u>
Total	824,634	100.0%	329,312	100.0%
1 Family Detached	754,248	91.4%	88,353	26.8%
1 Family Attached	1,988	.2%	2,973	.9%
2 Family	32,830	3.9%	57,666	17.5%
3 & 4 Family	5,076	.6%	33,143	10.0%
5 or more Family	3,678	.4%	185,055	43.9%
Mobile Homes	29,740	3.6%	2,920	.9%

The cost of housing has increased dramatically in the last two decades, and particularly in the last several years. However, the increases in income have been even more dramatic. Consequently, the average wage earner is able to afford as good or better a house in 1974 as in previous years without spending a greater proportion of his income on housing. This is true both nationally and in the Twin Cities area (see Tables 1 and 1A).

However, this happy finding masks some important information on the nature of housing cost increases and masks differences in impact of those increases. For example, there are many components of the cost of housing, and they are not all increasing at the same rate. An exploration of cost increase component by component is enlightening and suggestive for public policy. Also, the "average wage earner" is a statistical creation; averages hide great disparities in rent to income and homeownership cost to income ratios.

One of the most important differences both in income and in costs may be between the incomes of those seeking housing and those satisfactorily housed and between the costs of standard housing available on the market and the cost of occupied housing. Young people forming households tend to make up a disproportionate number of the households seeking housing and may have lower incomes than other established families. New housing which is at the top of the cost pyramid probably makes up a disproportionate share of housing for sale or rent at any one time.

This is a brief investigation of the increases in housing cost components and their differing impacts on income and geographical groupings within Minnesota. The data which this paper is based on are not very satisfying or complete and often are aggregated to national or metro-only levels. Nevertheless, they do suggest some policy directions.

#### Homeownership and Rental Costs

Rents have increased only half as fast as homeownership costs in the last two decades both nationally and in the Twin Cities. Indeed, rents have increased less than half as fast as incomes and less than the consumer price index as a whole (Tables 1 and 1A).



Yet some households have not had their incomes keep pace with the average increase. Consequently, there are disparities in rent-income ratios. Notice in Table 2 and 2A that lower income groups pay higher proportions of their income for housing than higher income groups. Table 2 shows a national pattern of increased housing quality (very grossly measured) and increased rent-income ratios from 1960-1970. The absolute ratios are particularly notable: income groups below \$5000 have median rent-income ratios of 27% to 64%. In Minnesota the situation is much the same, with income groups below \$5000 having median rent-income ratios above 25%. (table 2A) In the State, this translates into 82,000 households paying a median 35+% of their income for rent, 125,000 paying a median 24-34% (of some 300,000 renting households in 1970).

Median ratios are difficult to draw conclusions from, of course, because they only indicate the mid-point of a whole distribution of ratios and give no information about the distribution itself. The Metropolitan Council's widely quoted statement that only 15% of the areas population could afford the mean price of a new single family house in 1971, and that only 50% could afford the average rental of a new apartment by itself is subject to the same problems. In fact, means are poorer measures than medians for these purposes. And it is important to add that only 3% (at most) of the population moves into new units in any year; the vast majority of us live in used housing. More detailed information on distributions of incomes and prices/rents which includes both new and used housing are needed. They do not exist in readily usable forms at this time.

The next section deals with the cost components and income comparisons of homeownership. This is where the costs have risen the most steeply, and this is the type of housing which most Minnesotans live in (and will live in for some time to come).

#### Components of the Cost of Homeownership

Through 1973 the cost of homeownership rose faster than any other component

of the index of total housing cost (beginning in 1974 its increase was exceeded by certain fuel components, as discussed below). In fact, in the Twin Cities the cost of homeownership index rose even faster than incomes from 1967-72 (the total housing cost rose less fast than incomes). A number of factors contributed to this rapid increase.

#### Home Purchase Price

Of the five components making up the cost of homeownership index, the most significant single component contributing to the change from 1967-73 was home purchase price. Table 4C shows that 31% of the increase from 1967-72 was due to the increase in this component; approximately 35% of the increase from 1967-73 was due to this component. As shown in table 4B, however, preliminary figures for 1974 indicate that the increases in interest rates has driven the component "mortgage interest payments" up 133% through the 2nd quarter of 1974, and that if these figures held for the year this component would then dominate the increase in the cost of homeownership index for the 1967-74 period.

Table 1

## Changes in Income and Housing Costs: U.S. 1953-1972

Measure of Income or Cost	Percentage Increase Over the Period				
	1953-1972	1963-1972	1967-1972	1967-73	1967-Sept., 1974
Per Capita Disposable Income	141%	78%	39%	56%	69%
Hourly Earnings in Manufacturing	119	55	35	44	59
Consumer Price Index (CPI)	56	37	25	33	52
Housing Component of CPI*	60	39	29	35	55
a) Shelter	76	48	34	41	58
Rent	43	25	19	24	31
Cost of Homeownership	87	57	40	46	68
b) Fuel & Utilities	44	22	20	27	54
Fuel Oil & Coal	45	27	18	36	123
Gas & Electricity	43	21	20	26	50
c) Household Furnishings & Operations	32	28	21	25	47

\*Rent and homeownership, together with a minor hotel-motel expenditure component, comprise the shelter component of the CPI. The shelter component, in turn, is one of the components making up the housing component; the others are fuel and utilities, and household furnishings and operations.

Source: Housing in the Seventies, p.8-3 and updates.

Detailed Sources Include: Department of Commerce, Business Conditions Digest, September, 1972 and July, 1973; Department of Labor, Bureau of Labor Statistics, Employment and Earnings, July, 1972, Table C-1; Handbook of Labor Statistics, 1972, Table 127; Monthly Labor Review, May, 1973, Table 25; Economic Report of the President, 1973; Survey of Current Business, Oct. 1974.

Table 1A

## Changes in Income and Housing Costs: Minneapolis, St. Paul 1953-1972

Measure of Income or Cost	Percentage Increase Over The Period				
	1950-1972	1962-1972	1967-1972	1967-1973	1967-Sept., 1974
Per Capita Total Income	185	77	34	NA	NA
Consumer Price Index (CPI)	55	36	25	33	54
Housing Component of CPI*	60	41	31	36	60
a) Shelter	80	51	37	42	66
Rent	63	25	21	23	28
Cost of Homeownership	81	56	39	45	73
b) Fuel & Utilities	45	21	23	31	48
Fuel Oil & Coal	41	23	15	35	117
Gas & Electricity	43	16	24	30	47
c) Household Furnishings & Operations	20	24	19	22	48

Source: Department of Labor, Bureau of Labor Statistics, Employment and Earnings, May, 1974; Monthly Labor Review, Dec., 1974.

## Rent-Income Ratios and Rental Housing Conditions by Income Class, 1960 and 1970: U.S.

Income Class	Median Rent-Income Ratio		Percent of Households With Central Air Conditioning		Percent of Crowded Households		Percent of* Households Lacking Complete Plumbing	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	35.3	39.6	1.0	8.6	15.6	10.1	19.5	8.0
Less than \$2,000	57.8	64.0	0.5	4.2	15.9	7.4	40.3	18.1
2,000-2,999	28.7	51.8	0.5	4.4	20.6	9.7	22.3	12.6
3,000-3,999	22.3	31.8	0.7	5.1	19.2	12.6		
4,000-4,999	18.3	26.7	0.9	5.8	17.5	13.1	10.9	8.2
5,000-5,999	16.6	22.4	0.9	6.8	16.2	12.9		
6,000-6,999	15.0	20.2	1.0	7.5	14.5	12.1	5.3	4.3
7,000-9,999	12.3	16.8	1.4	8.4	12.1	11.6		
10,000-14,999	10.2	12.7	2.6	11.8	10.9	10.1	2.8	1.8
15,000 and Over	6.7	9.0	5.5	19.3	8.4	8.4		

\*Income Classes: Less than \$2,000  
2,000 - 3,999  
4,000 - 5,999  
6,000 - 9,999  
10,000 and Over

Source: Housing in the Seventies, p.8-63.

Detailed Sources: Department of Commerce, Bureau of the Census, Census of Housing, 1960 and 1970.

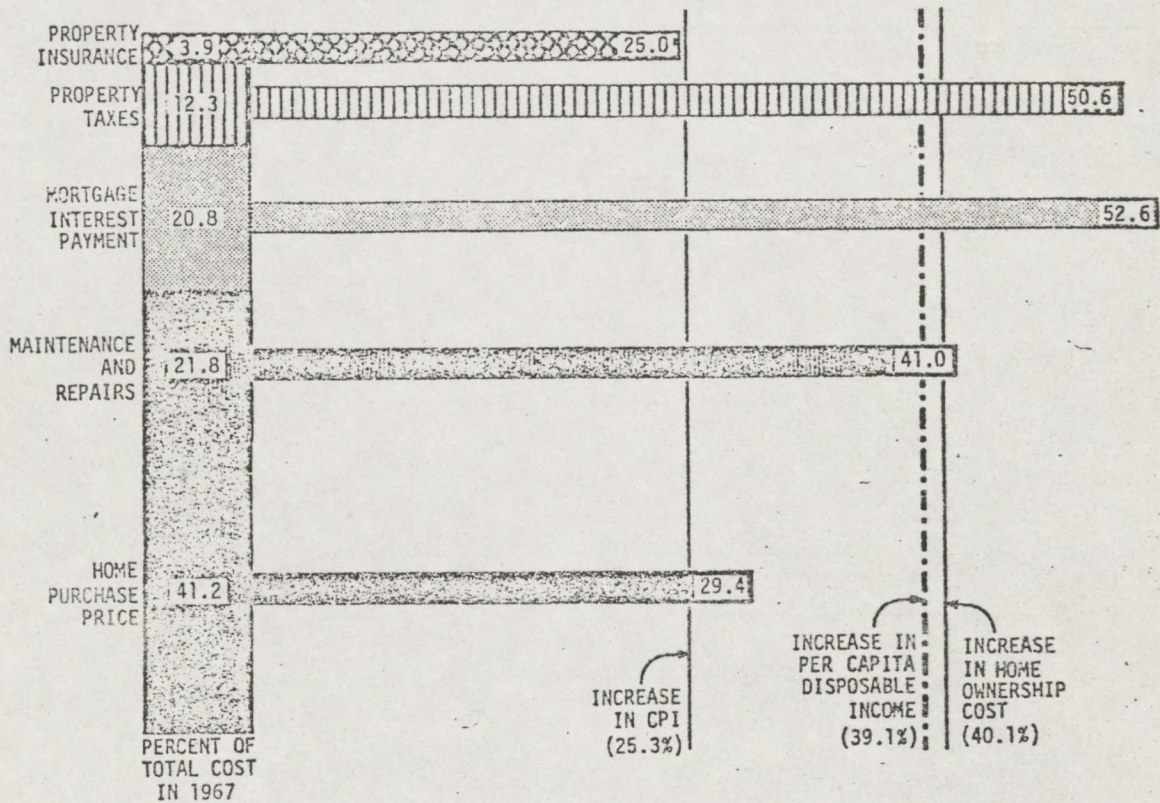
## Rent-Income Ratios by Income Class, 1970 For Minnesota and Selected Regions

Income Class	Category Within Which Median Rent-Income Ratio Falls				
	Minnesota	Region 1	Region 3	Region 7	Region 11
Less Than \$2,000	35+%	35+%	35+%	35+%	35+%
2,000-2,999	35+	35+	25-34	35+	35+
3,000-4,999	25-34	25-34	20-24	25-34	25-34
5,000-6,999	20-24	15-19	15-19	20-24	25-34
7,000-9,999	15-19	10-14	10-14	15-19	20-24
10,000-14,999	10-14	10-14	10-14	10-14	15-19
15,000-24,999	10-14	0-9	0-9	0-9	10-14
25,000 And Over	0-9	0-9	0-9	0-9	0-9

Source: Minnesota Housing Characteristics From the 4th Count Summary Tape of the 1970 Census, (St. Paul: Minnesota Analysis a Planning System, Agricultural Exemption Service, University of Minnesota, 1974) Table 129.

Table 4A

PERCENT INCREASE IN HOMEOWNERSHIP COSTS AND PER CAPITA INCOME, 1967-1972



SOURCE: DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS, RELATIVE IMPORTANCE OF COMPONENTS IN THE CONSUMER PRICE INDEX; HANDBOOK OF LABOR STATISTICS, 1972; MONTHLY LABOR REVIEW, FEBRUARY 1973, TABLE 25.

Housing in the Seventies, p.8-10.

Percent Increase in Homeownership Costs and Per Capita Income, 1967-73 with Projections on 1967-1974

Property Insurance	3.9	23%	24%	(Oct. 74)
Property Taxes	12.3		52%	51% (Oct. 74)
Mortgage Interest Payments	20.8		78%	133% (2nd Q. '74)
Maintenance and Repairs	21.8		50%	81% (Oct. 74)
				69% (Sept. 74)
				68% (Sept. 74)
Home Purchase Price	41.2		45%	57% (2nd Q. 74)
Increase in CPI*		(36%)		
			53%	(Oct. 74)
				Increase in Per Capita Disposable Income (56%)
				*Increase in Homeownership Cost (46%)

Source: Department of Labor, Bureau of Labor Statistics, Relative Importance of Components In The Consumer Price Index; Handbook of Labor Statistics; Monthly Labor Review.



Table 4C

Components of Change in Homeownership Cost Index, 1967-1972, 1967-1973

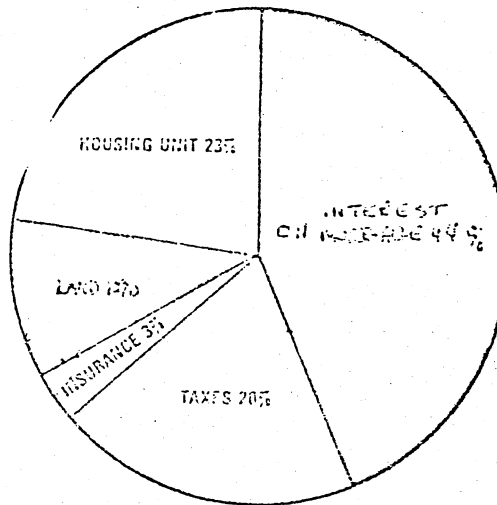
Component	Percentage Contribution 1967-1972	Approximate Percentage Contribution 1967-1973
Home Purchase Price	30.9%	35%
Mortgage Interest Payments	27.9	31
Maintenance and Repairs	22.9	21
Property Taxes	15.7	12
Property Insurance	2.5	1
Total	100.0%	100.0%

Source: Housing in the Seventies, p.8-11 and updates.

Detailed Source: Department of Labor, Bureau of Labor Statistics, Relative Importance of Components in the Consumer Price Index; Handbook of Labor Statistics, 1972; Monthly Labor Review, February 1973, Table 25.

Data are not available for the state or metropolitan area which breakout these components of homeownership costs. Tables 4A, B, C are all based on national data. The Metropolitan Council in 1973 did publish the following chart (Housing: Policy Plan, Program, p.6).

Chart 5A

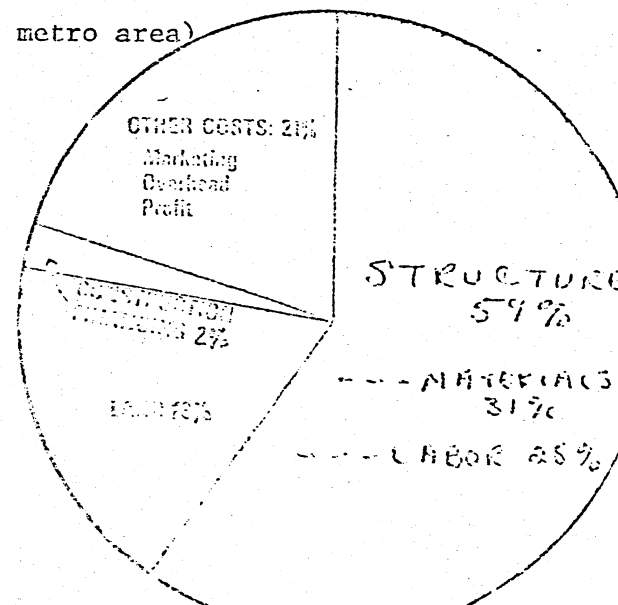


*Over 75 per cent of the consumer's monthly housing cost is consumed by interest, land, taxes, and insurance.*

No sources for the chart are cited, but it is presumed to describe the metro area. Percentages recalculated from chart 4A for the U.S. to match the Metro Councils categories and update to 1972 are: insurance-4%, property taxes-17%, mortgage interest payments-29%, and home purchase price (equals land and housing unit)-49%. Differences between the two sets of percentages are difficult to evaluate without a clearer understanding of the Metro Council data sources.

A second chart from the Council report divides up the purchase price of a new single family house (presumably again in the metro area)

Chart 5B



*Land, labor, and materials make up more than three-fourths of the selling price of a single-family home.*

A comparable table using U.S. data is reprinted from the Douglas Commission report Building the American City (1968).

Table 5C: Selected Components of Cost as a Percentage of Total Development Cost for Single-Family Houses, 1966

Items	Representative	Range
Site.....	15	10-19
Construction:		
Direct.....	66	61-74
Indirect.....	3	2-5
Subtotal.....	84	80-87
Financing.....	3	1-4
Marketing.....	4	2-5
Administrative and general.....	6	5-8
Net profit before taxes.....	3	2-6

Source: Based on NAHB survey, using model accounting system, of approximately 40 builders in all parts of the Nation in 1966, each producing an average of 30 to 100 homes per year. Selling prices of homes ranged from \$10,000 to \$100,000.

These percentages of purchase price attributable to different factors are instructive. They demonstrate the multitude of factors which exist and the relatively small impact which any one factor can have on the total purchase price. For example, a labor saving of 20% would only reduce the purchase price of the house described in Chart 5B by 5%. It is worth noting that the cumulative effect of increases in the various factors can be extremely large--see the Minnesota Housing Institute discussion of this question in "The Multiplicity of Factors That Contribute to the Cost of Housing" (April, 1974).

While the absolute percentage of components of purchase price are instructive, perhaps even more instructive are the relative changes in those components. Table 5D compares the increases in site value, labor costs and construction material costs from 1967. The increases in the cost of land are the most dramatic, nearly doubling from 1967 to 1972. Land now

Table 5D

Relative Price Increases of Housing Capital Inputs and CPI, 1967-72, 1967-73, and Preliminary 1967-74

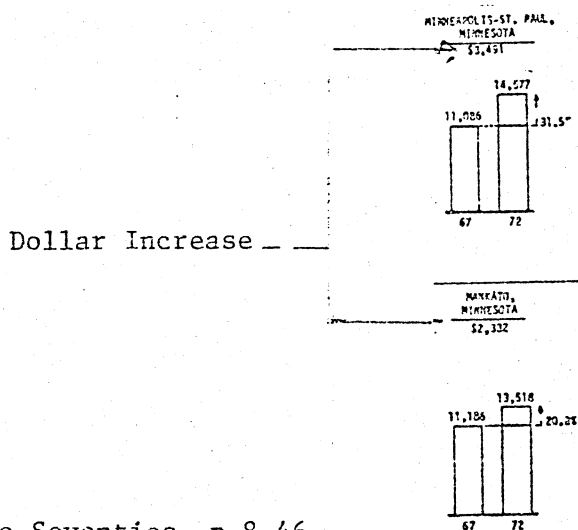
Year	Site Value	Labor Costs	Construction Material Costs	CPI
67-72	+97%	+35%	+27%	+25%
67-73	NA	55%	+38%	33%
67-74 (May)	NA	63%	+51%	52% (Sept.)

Source: Housing in the Seventies, p. 8-15, and Updates; Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Oct., 1974; The Average Weekly Earnings of Construction Workers From Table C-1 Made Relative to CPI; Department of Commerce, Construction Review, Oct., 1974, Table E-2; The Index of All Construction Materials was Made Relative to the CPI.

accounts for a larger proportion of the purchase price of a home than at any time since World War II. This proportion would have been even larger if the size of lots had not declined (12% since 1967). In Minnesota, Solem (speech to legislative seminar, January 1974) indicates that the increase in the value of the average lot in the metro area is up at least 75% since 1970 and up 50% for single family lots outstate.

Labor and materials costs are also up, though far less dramatically than land costs. However, the increases have been greatest most recently. In Minnesota Solem reports that labor and material costs have increased 24% in the metro area since 1970 (28% in Duluth; Rochester, 23%; St. Cloud, 18% and Worthington, 18%). A national study based on FHA data included a comparison of construction costs (labor and materials) of a typical house in 1967 and 1972 in Minneapolis-St. Paul and in Mankato.

Chart 6



Source: Housing in the Seventies, p.8-46.

### Mortgage Interest Payments

The second most significant component accounting for the increase in the cost of homeownership index is mortgage interest payments, (See Table 4C), accounting for 28% of the increase from 1967-72 and approximately 31% of the increase from 1967-73. Even more significant are the preliminary 1974 data which reflect the large rise in interest rates; if final, they would make the mortgage interest component the most significant component contributing to

the increase in the cost of homeownership. Mortgage interest payments increased 78% for 1967-73 (vs. 45% for the purchase price), but because they accounted for less of the total cost of homeownership, contributed less to the increase. However, the preliminary payment increases for 1967-74 saw mortgage interest payments up 133%, (U.S. 57% for purchase price) and this is enough to change the relative contributions.

#### Maintenance and Repairs

This component has risen with the increases in labor and materials cost. It has risen more rapidly than home purchase price (50% vs. 45%), but because it accounts for less of the total cost of homeownership, contributed less to the increase 1967-73. (See Tables 4B and C.)

#### Property Taxes

Property tax increases for 1967-73 are 52% contributing approximately 12% to the total cost of homeownership increase from 1967-73. Preliminary data for 1974, however, indicate that while the absolute increase is about the same, relative to other components property taxes will contribute less to the overall increase in the cost of homeownership 1967-74.

#### Property Insurance

This component has contributed the least to the increase in the cost of homeownership (approximately 1% from 1967-73) and has in fact risen less than the consumer price index as a whole.

### Fuel and Utilities

This component of the housing index is computed separately from the shelter component (which is comprised of rental and cost of homeownership) and from the household furnishings and operation component. Fuel and utilities has traditionally contributed less to the overall housing cost index than has the shelter component or the housing furnishings and operations components. That may well be about to change. See table 1 and 1A.

Fuel and utilities has increased 20% from 1967-72 and 54% from 1967-Sept. 74 (U.S.). In the Twin Cities the increase has been 23% from 1967-72 and 48% from 1967-Sept. 74. All of these increases are less than the overall housing cost index increases. But the subcomponents of fuel and utilities tell a different story. The subcategory gas and electricity has increased about the same as the fuel and utilities index. The category fuel oil and coal, however, has increased 18% 67-72, 36% 67-73, and 123% 67-Sept. 74. Comparable figures for the Twin Cities are 15%, 35% and 117%.

These figures are especially important to the extent that they indicate trends and to the extent that these increases extend beyond the metropolitan area. Chart 7 demonstrates the potential problem. Fuel oil and kerosene is the predominant home heating fuel for all but 3 of Minnesota's 13 regions.

8. The Future Scene

Rather than draw any comprehensive picture of alternative futures we have tried to discuss some of the elements which will significantly affect the future of housing in Minnesota. Others, however, have had more temerity and we have included in appendices B and C discussions of alternative and potential futures which may be enlightening. William Angell has walked out on a limb and drawn some tentative conclusions of how housing may be in Minnesota in the year 2000. Neil Gustafson and Mark Cohen of the Upper Midwest Council have provided three alternative scenarios of life as it may be. We commend them all to the readers attention.



D. Issue 1: WHAT ARE THE SPECIAL CIRCUMSTANCES WHICH MAKE IT NECESSARY FOR GOVERNMENT TO BECOME INVOLVED IN HOUSING POLICY AND PROBLEMS?

Government has long been involved in housing. Some of the earliest legislation of which we have any knowledge spoke to its regulation. Today in the United States housing has become a matter of public concern at all levels of government. Indeed, local governments frequently find that housing regulation takes up a substantial part of their time and attention.

In order to examine the role of government in housing and its possible directions in the future, we need first to look briefly at the special characteristics of housing. Each of these may have parallels for other commodities. Added together they make up a unique complex of products, services, ideas and experiences.

1. Special Characteristics of Housing

a. Housing not a Product

Housing is not a product in the sense that a plate is a product, a chair is a product, or even such a complicated thing as an automobile is a product. Like an automobile, a dwelling unit is made up of thousands of parts. Unlike an automobile, much of the assembly of these parts is traditionally done at the site where the dwelling unit is to be located. The major exception to this is the mobile home and, to a lesser extent, a prefabricated house. Unlike most products, a housing structure can be added to, remodelled, and rehabilitated.

b. Fixed in Location

A dwelling is normally attached to the land and shares the locational assets and liabilities of its site. It cannot be readily moved or disposed of off its site. Even a mobile home is very expensive to move and loses much of its value if it must be moved very far. The costs of moving conventional housing are so high that it loses most of its value if it must be displaced. When moved, a dwelling loses the attributes of its old site and takes on those of another.

c. Monopoly Position

Its very fixity in position gives each house unique characteristics. None other has exactly the same combination. It monopolizes the space it occupies. Every other house or apartment is only a partial substitute, even though many of its characteristics may be the same or similar and viewed as equally desirable by consumers. Although generalizations are often made about neighborhoods and types of houses, e.g. three bedroom split-levels or studio apartments, the consumer frequently has a much more specifically defined idea of what he wants; and once he occupies it he enhances its uniqueness.

d. Durability

Houses are very durable. Unlike many man-made things, houses are very long lived and may exist through several generations of occupants and owners. At any one time the overwhelming majority of people occupy housing previously lived in by others. Accretions to the housing supply are very gradual. Over the past decade additions to the Minnesota supply have averaged less than 3% a year. In some rural counties and in the older developed parts of cities, additions have been made at a rate of less than 1% annually. Even in the newer suburbs of the Twin Cities, additions rarely exceed over 10% in a year.

e. High Cost

Housing makes up by far the largest item in most family budgets. The proportion of household income which goes for housing varies greatly between families. Although many low income people may pay upwards to 50% of their income for housing, upper income people may pay well under 10%. Since the war, both old and new housing have risen in price along with other consumer goods. Average contract rents in Minnesota, for example, rose 61% from 1960 to 1970. (Costs are discussed in more detail in another section of this paper.)

f. Housing. A Necessity

Housing, as shelter, has long been listed along with food and clothing as a

necessity as compared with commodities considered luxuries. Today housing, with all of its various attributes, may be considered a necessity. As standards have changed, more and more amenities associated with the dwelling place are usually included as necessary for a minimum housing standard.

g. Emotional and Symbolic Connotations

For most people, their housing has many meanings which are not easily scaled or measured. Living place is more or less intimately involved with each individual's identity. Home is more than where you hang your hat. It is somehow inextricably intermingled with your sense of self and your personality. Upon moving into a new dwelling, a family or individual will immediately begin to adapt it to its own ways. Many factors appear to enter into this process and its importance varies greatly between people. That an overwhelming majority of people respond to questions about their house and neighborhood positively, may mean less objectively about the environment than it suggests identification with that environment. In a recent Metropolitan Council Attitude survey, for example, over 90% of the respondents said they were satisfied with their housing.

Rejection of one's home may indeed be a very painful process and may be closely tied to a general rebellion against family, the confines of the old neighborhood, and the limitations on one's life which it imposes.

Housing; like job, becomes a part of the public personality of an individual. Others may categorize him in terms of where he lives. They assume that much can be told about his value as an individual from the style, size, location, and state of maintenance of his dwelling. There are "good" addresses and "bad" addresses. The good addresses may carry privileges with them which bad addresses do not have. These considerations may relate to the ethnic, social, and economic reputation of the neighborhood. Such names as Back Bay, Georgetown, Edina, Germantown, Greenwich Village, Frogtown, Kenwood, and Kensington all carry with them connotations which tend to rub off on their residents in their own view and in the perception

of others. So, too, whole categories of housing-"the housing" or "the projects;" or in England "Council Housing" for public housing; the "high rises" for housing for the elderly-may characterize whole groups of residents.

#### h. Housing's Impact on Others

In urban settings, and to some extent elsewhere, what one household does with the property which it occupies impinges on neighbors, and passersby. The appearance of a dwelling and the activities which go on in and around it not only affect the image of the household but also the image of the neighborhood. Thus the householder may feel constrained to mow his lawn, pick up trash, and repair the exterior of the house not only for his own sake, but also for the sake of his reputation with his neighbors. Noisy children and untoward goings-on may also be repressed for the same reason.

Variations in life style, too, may be upsetting if they significantly alter the exterior appearance of dwellings or create noise, smells or sights which neighbors may regard as unseemly. The feeling that the Joneses don't really belong here may change the whole feeling of a neighborhood which previously had no Joneses-- as far as non-Joneses are concerned.

#### i. Housing's Environmental Impact

The operation of a dwelling is energy consuming and pollution producing - in smoke and furnace fumes, sewage, and garbage. Cess polls which contaminate water supplies, garbage which attracts rats, and leaves or trash burning all cannot be confined to the premises of the individual dwelling and affect the neighborhood and community environment.

In addition to these direct consequences of house operation, the location of housing near or far from jobs and other activities necessitates transportation which, whether by automobile or mass transit, has more or less environmental impact.

#### j. Housing and Mental and Physical Health

Although the exact relationship of housing to health is debatable, there is

plenty of evidence that physically inadequate housing and overcrowding are deleterious to the physical and mental well being of the occupants. Dramatic reductions in infant mortality, for example, have followed the dampproofing and coldproofing of dwellings. Psychologists and psychiatrists feel that the lack of privacy in badly overcrowding quarters frequently is accompanied by emotional and mental problems. Beyond this, however, an increasing body of knowledge is being developed relating to the interaction between the human being and his living environment. While this has not yet led to immediately applicable principles and standards, valuable insights have been gained.

#### k. Household Mobility and Housing Stability

The housing picture would be somewhat different if each family or household, once formed, remained in the same dwelling unit and neighborhood throughout its life cycle. This, of course, is far from the case for most Minnesota households. Changes in family size, social and economic status, location of employment, and many other factors contribute to a considerable mobility which is typical of American life, particularly in urban areas. The 1970 census shows that in Minnesota over one-third of the households owning their homes moved in the past five years, while 78% of the renters had moved in the same period. Only 24% of owners and 5% of renters had lived in the same dwelling unit for over 30 years.

This means that most households tend to occupy several housing units during their existence. This movement from dwelling to dwelling makes up, by far, the larger part of the movement in the housing market; and most families moving have had previous housing experience together. Used dwellings contribute much the largest proportion of the housing units available for rent or sale at any one time.

#### 2. The Nature of Government Involvement

This bundle of qualities which characterize housing, each with a thousand variations, make it a subject of a complex community and governmental response. Government is involved with the institutional framework which governs the ownership