Minnesota’s Housing: Shaping Community in the 1990s

What the 1990 Census Says About Minnesota

by John S. Adams, Barbara J. VanDrasek, and Elvin K. Wyly with the assistance of Mui D. Le
Minnesota’s Housing: Shaping Community in the 1990s

John S. Adams, Barbara J. VanDrasek, and Elvin K. Wyly

with the assistance of Mui D. Le

The fourth in a series on: What the 1990 Census Says About Minnesota
A publication of the Center for Urban and Regional Affairs, 330 HHH Center, 301-19th Avenue S., Minneapolis, MN 55455. The content of this report is the responsibility of the authors and is not necessarily endorsed by CURA.

1996

Publication No. CURA 96-2

This report is not copyrighted. Permission is granted for reproduction of all or part of the material, except that acquired with permission from other sources. Acknowledgement would, however, be appreciated and CURA would like to receive two copies of any material thus reproduced.

Edited by Mary Byers and Judith Weir.

Photo credits: pictures on pages 6, 44, 110, and 114 by Robert Friedman; pictures on pages x, 12 (bottom), 32, 42, 50, 66, 78, 84, 90, 98, and 122 by John S. Adams; pictures on pages 12 (top), 30, 36, 52, 58, 62, 70, 72, and 94 by Barbara J. VanDrasek.

This report is the fourth in a series on What the 1990 Census Says About Minnesota. Others in the series are:

Income and Poverty by John Tichy and William J. Craig.

The Path of Urban Decline by John S. Adams, Barbara J. VanDrasek, and Laura J. Lambert.

Are Good Jobs Disappearing? by Dennis A. Ahlborg, Yong-Nam Song, and Scott Leitz.
# Table of Contents

List of Tables and Figures .................................................. v
Acknowledgments ................................................................. ix

Chapter 1. Population, Housing, and the Census
   We Build Our Housing ................................................... 1
   ... Then Our Housing Helps Shape Us ............................... 1
   Attempts to Control and Improve the Housing Process ............ 2
   Content of *Minnesota's Housing: Shaping Community in the 1990s* 3
   1990 Census Data on Housing and Households ....................... 3
   Census Collection and Processing Procedures ...................... 4
   Enumeration of Housing Units ......................................... 5
   Enumerating "The Homeless" ............................................ 5

Chapter 2. Using Census Data
   The 1990 Census .......................................................... 7
   Availability of Census Data ......................................... 7
   Census Terminology ................................................... 8
   Living Quarters .......................................................... 8

Group Quarters ..................................................................... 9
Condominium Status ......................................................... 9
Contract Rent ...................................................................... 9
Gross Rent ......................................................................... 9
Gross Rent as a Percentage of Household Income in 1989 .......... 9
Mortgage Status and Mortgage Loan Payment ....................... 10
Household ......................................................................... 10
Unrelated Individual .......................................................... 10
Family Type ....................................................................... 10
Where to Get Census Data ................................................... 10

Chapter 3. Minnesota's Housing in the Early 1990s
   Location and Structural Characteristics of Housing Statewide ... 13
   Location and Structural Characteristics of Housing in Metropolitan Areas 13
   Tenure and Financial Characteristics of Housing in Metropolitan Areas 14
   Race and Ethnicity ......................................................... 15
# List of Tables and Figures

## Tables

1. Structural Characteristics of Minnesota’s Housing, by Urban and Rural Location, 1990  
   
2. Structural Characteristics of Metropolitan Area Housing in Minnesota, 1990  
   
3. Tenure and Financial Characteristics of Metropolitan Area Housing in Minnesota, 1990  
   
4. Financial Characteristics of Metropolitan Area Housing Units in Minnesota, 1990  
   
5. Housing Expenditures by Household Income Categories, Twin Cities MSA, 1990  
   
6. Age of Minnesota's Housing Stock, 1990  
   
7. Residential Mobility within the Twin Cities Area, 1985 to 1990  
   
8. Public Housing in Public and Indian Housing Projects in Minnesota, by Housing and Redevelopment Authority, 1993  

## Figures

1. Housing Units Built in Minnesota, 1980 to 1990  
   
2. Renter-Occupied Housing Units Built in the Twin Cities, 1980 to 1990  
   
3. Renter-Occupied Housing Units Built in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to March 1990  
   
4. Change in Number of Housing Units in Minnesota Consisting of a Mobile Home or Trailer, 1980 to 1990  
   
5. Housing Units Built in the Twin Cities, 1940 to 1949  
   
6. Housing Units Built in the Duluth, Moorhead, Rochester, and St. Cloud, 1940 to 1949  
   
7. Housing Units Built in the Twin Cities in 1939 or Earlier  
   
8. Housing Units Built in the Duluth, Moorhead, Rochester, and St. Cloud, in 1939 and Earlier  
   
9. Vacant Housing Units for Rent in Minnesota, 1990  
   
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Vacant Housing Units for Rent in Duluth, Moorhead, Rochester, and St. Cloud, 1990</td>
<td>35</td>
</tr>
<tr>
<td>12</td>
<td>Vacant Housing Units in Minnesota for Sale Only, 1990</td>
<td>37</td>
</tr>
<tr>
<td>13</td>
<td>Vacant Housing Units in the Twin Cities for Sale Only, 1990</td>
<td>38</td>
</tr>
<tr>
<td>14</td>
<td>Change in Number of Vacant Housing Units in the Twin Cities for Sale Only, 1980 to 1990</td>
<td>39</td>
</tr>
<tr>
<td>15</td>
<td>Vacant Housing Units in Duluth, Moorhead, Rochester, and St. Cloud for Sale Only, 1990</td>
<td>40</td>
</tr>
<tr>
<td>16</td>
<td>Change in Number of Vacant Housing Units in Minnesota for Seasonal, Recreational, or Occasional Use, 1980 to 1990</td>
<td>41</td>
</tr>
<tr>
<td>17</td>
<td>Change in Number of Occupied Housing Units in Minnesota, 1980 to 1990</td>
<td>45</td>
</tr>
<tr>
<td>18</td>
<td>Change in Number of Occupied Housing Units in the Twin Cities, 1980 to 1990</td>
<td>46</td>
</tr>
<tr>
<td>19</td>
<td>Change in Number of Occupied Housing Units in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990</td>
<td>47</td>
</tr>
<tr>
<td>20</td>
<td>Renter-Occupied Housing Units into Which the Head of Household Moved between January 1989 and March 1990 in the Twin Cities</td>
<td>48</td>
</tr>
<tr>
<td>21</td>
<td>Renter-Occupied Housing Units into Which the Head of Household Moved between January 1989 and March 1990 in Duluth, Moorhead, Rochester, and St. Cloud</td>
<td>49</td>
</tr>
<tr>
<td>22</td>
<td>Population Change in Minnesota, 1980 to 1990</td>
<td>53</td>
</tr>
<tr>
<td>23</td>
<td>Population Change in the Twin Cities, 1980 to 1990</td>
<td>54</td>
</tr>
<tr>
<td>24</td>
<td>Population Change in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990</td>
<td>55</td>
</tr>
<tr>
<td>25</td>
<td>Change in Number of Persons in Nursing Homes, 1980 to 1990</td>
<td>56</td>
</tr>
<tr>
<td>26</td>
<td>Change in Number of Persons Living in Group Quarters in Minnesota, 1980 to 1990</td>
<td>57</td>
</tr>
<tr>
<td>27</td>
<td>Change in Number of Foreign-Born Persons in Minnesota, 1980 to 1990</td>
<td>59</td>
</tr>
<tr>
<td>28</td>
<td>Change in Number of Foreign-Born Persons in the Twin Cities, 1980 to 1990</td>
<td>60</td>
</tr>
<tr>
<td>29</td>
<td>Change in Number of Foreign-Born Persons in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990</td>
<td>61</td>
</tr>
<tr>
<td>30</td>
<td>Change in Number of Nonfamily Households in Minnesota, 1980 to 1990</td>
<td>63</td>
</tr>
<tr>
<td>31</td>
<td>Change in Number of Nonfamily Households in the Twin Cities, 1980 to 1990</td>
<td>64</td>
</tr>
<tr>
<td>32</td>
<td>Change in Number of Nonfamily Households in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990</td>
<td>65</td>
</tr>
<tr>
<td>33</td>
<td>Change in Number of Female-Headed Families and Subfamilies with Related Children under 18, in Minnesota, 1980 to 1990</td>
<td>67</td>
</tr>
<tr>
<td>34</td>
<td>Change in Number of Female-Headed Families and Subfamilies with Related Children under 18, in the Twin Cities, 1980 to 1990</td>
<td>68</td>
</tr>
<tr>
<td>35</td>
<td>Change in Number of Female-Headed Families and Subfamilies with Related Children under 18, in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990</td>
<td>69</td>
</tr>
<tr>
<td>36</td>
<td>Ratio of Males to 100 Females, Ages 16 to 34, in Minnesota, 1990</td>
<td>73</td>
</tr>
<tr>
<td>37</td>
<td>Ratio of Males to 100 Females, Ages 16 to 34, in the Twin Cities, 1990</td>
<td>74</td>
</tr>
<tr>
<td>38</td>
<td>Ratio of Males to 100 Females, Ages 16 to 34, in Duluth, Moorhead, Rochester, and St. Cloud, 1990</td>
<td>75</td>
</tr>
<tr>
<td>39</td>
<td>Ratio of Black Males to 100 Black Females, Ages 15 to 59, in Minnesota, 1990</td>
<td>76</td>
</tr>
<tr>
<td>40</td>
<td>Ratio of Black Males to 100 Black Females, Ages 15 to 59, in the Twin Cities, 1990</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>Poor, White Female-Headed Families in Minnesota with Related Children under 18, 1990</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>Poor, White Female-Headed Families in the Twin Cities with Related Children under 18, 1990</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>Poor, White Female-Headed Families in Duluth, Moorhead, Rochester, and St. Cloud with Related Children under 18, 1990</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>Poor, Black Married-Couple Families in the Twin Cities with Related Children under 18, 1990</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>Poor, American Indian Married-Couple Families in the Twin Cities with Related Children under 18, 1990</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>Occupied Housing Units in Minnesota with No Motor Vehicle Available, 1990</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>Occupied Housing Units in the Twin Cities with No Motor Vehicle Available, 1990</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48.</td>
<td>Occupied Housing Units in Duluth, Moorhead, Rochester, and St. Cloud with No Motor Vehicle Available, 1990</td>
<td></td>
</tr>
<tr>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>Change in Number of Persons in Minnesota Working at Home, 1980 to 1990</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>Renter Households in Minnesota with 1990 Gross Monthly Rent Less Than 20 Percent of Income, and with 1989 Income under $10,000</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>Renter Households in Duluth, Moorhead, Rochester, and St. Cloud with 1990 Gross Monthly Rent Less Than 20 Percent of Income, and with 1989 Income under $10,000</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>Renter Households in Minnesota with 1990 Gross Monthly Rent 35 Percent or More of Income, and with 1989 Income under $10,000</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>Renter Households in the Twin Cities with 1990 Gross Monthly Rent 35 Percent or More of Income, and with 1989 Income under $10,000</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55.</td>
<td>Renter Households in Duluth, Moorhead, Rochester, and St. Cloud with 1990 Gross Monthly Rent 35 Percent or More of Income, and with 1989 Income under $10,000</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>Change in Number of Elderly Persons in Households with Incomes below the Poverty Line in Minnesota, 1980 to 1990</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>Change in Number of Black Persons in Households with Incomes below the Poverty Line in Minnesota, 1980 to 1990</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>Change in Number of Black Persons in Households with Incomes below the Poverty Line in the Twin Cities, 1980 to 1990</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>59.</td>
<td>Change in Number of Hispanic Persons in Households with Incomes below the Poverty Line in Minnesota, 1980 to 1990</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>Change in Number of Hispanic Persons in Households with Incomes below the Poverty Line in the Twin Cities, 1980 to 1990</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>Black Owner-Occupied Housing Units in the Twin Cities without a Mortgage, 1990</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>Asian and Pacific Islander Owner-Occupied Housing Units in Minnesota without a Mortgage, 1990</td>
<td></td>
</tr>
<tr>
<td>107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Hispanic Owner-Occupied Housing Units in Minnesota without a Mortgage, 1990</td>
<td></td>
</tr>
<tr>
<td>108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>Median Monthly Owner Costs for Owner-Occupied Housing Units in Minnesota with a Mortgage, 1990</td>
<td></td>
</tr>
<tr>
<td>111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>Black Owner-Occupied Housing Units in the Twin Cities with a Mortgage, for Which Monthly Owner Costs are under $300, 1990</td>
<td></td>
</tr>
<tr>
<td>112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>Black Owner-Occupied Housing Units in the Twin Cities with a Mortgage, for Which Monthly Owner Costs are $500 or More, 1990</td>
<td></td>
</tr>
<tr>
<td>113</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Acknowledgments

The authors would like to thank the following people for their assistance in compiling and producing this monograph: Angela Lee; Kwang-Koo Kim; Mark Lindberg and Mui D. Le and the University of Minnesota Cartography Laboratory; Brent Allison and the Automated Cartography and Information Center, John R. Borchert Map Library; and Mary Byers for her editorial contributions, Judith Weir for overall editorial supervision, and Chris McKee and Louise Duncan whose careful and constructive editorial and production assistance brought our project to a successful conclusion. Issues of content and accuracy remain the sole responsibility of the authors.
Farmland is slowly engulfed by the expanding suburban frontier. An early sign of expansion is the addition of a newly-built house near the traditional farmstead.
Chapter 1. Population, Housing, and the Census

To the average adult in the United States, the question "What do you do?" represents an inquiry about one's source of livelihood. It means: "Where do you work?" or "What kind of job do you hold to earn your living?". The emphasis is on the person's role as an economic production unit within society.  

The question "Where do you live?" asks about one's private life and private consumption at home in contrast to the employment question, which focuses on the public self. It is in our homes and in our neighborhoods that society reproduces itself, and if things begin to go awry at home or in the neighborhood, we correctly sense that trouble is brewing for society at large. That is why today we are focusing more and more on housing and neighborhoods. And that is why we have prepared this report.

During the early decades of our republic, as the economy was getting on its feet, public and private statistical services provided detailed information on employment, production, goods shipments, and trade. It was not until the Depression years of the 1930s that the federal government sponsored systematic surveys of the nation's housing, and not until the census of 1940 that detailed small-area data on housing in the United States were collected and published for the first time.

We Build Our Housing . . .

Unlike some parts of the world where housing is often built simply and then only for temporary occupancy, or inexpensively for low-income households, new housing in the United States normally is built durably, rather expensively, and for middle- and upper-middle-income households. Housing becomes available for lower-income groups only after the initial occupants have moved on. This tradition of housing supply means that our housing forms a relatively permanent feature of the settlement landscape. We use our houses almost indefinitely. They typically outlast their builders and the households who first occupied them.

The large amounts of real capital stored up in housing and the high real value of services provided annually by our housing inventory slow down the geographical adjustment to production demands elsewhere in the economy, thereby making regional economies and populations far more stable than they otherwise would be.

. . . Then Our Housing Helps Shape Us

Housing provides important clues to social structure and social relationships at the local level. Households may come and go from a neighborhood, but the social relationships that are fostered and nur-
tured there by the design and spatial arrangements of the housing stock help to define the local societies that constitute our state and nation.

The history and geography of a people are revealed in its settlements. Within nucleated settlements—hamlets, villages, towns, and cities—housing constitutes the predominant land use. Housing is seldom the most vivid feature of our settlement fabric, but socially and culturally it is one of the most fundamental in the services that it provides for people and in the formative impact that it has upon them.

The activity we call “housing” involves households using dwellings. Housing activity forms a central feature in the human occupancy of the earth. A house considered by itself is merely a structure. A home, on the other hand, is a household living in a house. The word “home” implies an experience.

Housing is an interactive process that carries meanings at several levels. It has become a symbol of status in our society, a mark of social position, a store of household wealth, a statement of household aspirations, and an expression of identity for the household as a unit as well as for individual household members.

Familiar housing and neighborhood environments of one’s youth help shape later ideas of one’s place in society. In certain crucial respects one’s place in the housing landscape defines and channels one’s participation in social networks and social structures.

An urban household’s decision about where to live reflects social forces that encourage congregation and segregation within cities. The housing landscapes that we create help make social and cultural categories of urban society visible, understandable, and somewhat stable. On the other hand, housing landscapes in our nation’s urban areas are constantly assaulted by the destabilizing effects of changing population age structures, and by the withdrawal of wealth and real estate values from one set of neighborhoods and their transfer elsewhere. Domestic migration and residential mobility, foreign immigration, and interregional wealth shift.

Attempts to Control and Improve the Housing Process

Vigorous legal and social policy initiatives have been launched in Minnesota and nationwide over the years to help break down neighborhood class barriers. Equal opportunity housing laws are passed and enforced in the effort to create color-blind and class-neutral housing markets. Yet despite strong and persistent initiatives to erode neighborhood class barriers, strong zoning laws and firm court decisions usually protect middle-class single-family housing areas by legitimizing certain devices that curtail entry into them by low-income and nonfamily households.

At some deep and poorly articulated level, family-oriented working-class and middle-class neighborhoods evidently are understood by the society at large as important means for nurturing and reproducing selected and privileged lifestyles. As social controls disintegrate in the larger society, neighborhood efforts to defend local zones of intentional social reproduction become ever more fierce. Attempts to disrupt these conservative strongholds are fought tenaciously, perhaps as an expression of a basic instinct to protect and nurture human life itself.

Valiant efforts have been launched in the United States to modify zoning laws and local housing codes in order to expand the number of good-quality housing opportunities for less affluent classes. But it has proved difficult to enhance the housing position of the poor without simultaneously undermining the tenuous and recently diminishing sense of control that is shared by working-class and lower-middle-class households, who increasingly fear that what little they have might be chipped away. Trying to help less fortunate classes without appearing to threaten the position of the better-off remains a social policy dilemma, but our utopian tradition stimulates the nation’s continuing effort.

Some results of this effort are portrayed in *Minnesota’s Housing: Shaping Community in the 1990s*, in which we present a profile of selected features of Minnesota’s housing scene in the early 1990s, and of changes over the years leading up to 1990. Our principal source of data is the decennial Census of Population and Housing, and the main focus is the State of Minnesota and the most important urban areas within the state.
Content of *Minnesota’s Housing: Shaping Community in the 1990s*

The decennial U.S. Census of Population and Housing is an imperfect source of consistent and reliable data describing households and their housing, but it is the best source available. In this report, we draw on 1970, 1980, and 1990 census data for Minnesota to highlight selected housing topics of current interest for the state as a whole, using counties as the unit of analysis, and for the state’s five metropolitan statistical areas (MSAs), with census tracts as the data unit of analysis.

Because statewide maps of Minnesota population and housing generally have been highly stable over the most recent decade or two, this report focuses mainly on locales wherein significant change has been occurring.

Chapters 1, 2, and 3 construct a framework for thinking about the role and meaning of housing in American life, and provide an overview of issues involved in collecting, understanding, and analyzing data from the U.S. decennial census and other sources used in this study.

Chapter 4 examines the geographical distribution of the state’s housing inventory, where old housing is concentrated, and locations where we have been constructing new housing in recent years.

Chapter 5 considers vacant housing, whether for rent or for sale, as well as seasonal housing, which forms a significant portion of the state’s housing inventory.

Chapter 6 describes and discusses housing occupancy patterns and varying rates of housing turnover, both statewide and within our metropolitan areas.

Chapter 7 assesses population change in Minnesota counties during the 1980s, and the major population groups and household types that account for the changes as they affect housing demand.

Chapter 8 distills from the census data some profiles of populations with special housing needs, with special attention to low-income and minority families with children, households lacking convenient automobile transportation, and people working at home.

Chapter 9 examines the circumstances of low-income renters across the state and within our metropolitan areas.

Chapter 10 portrays the changing geographical distribution of low-income elderly and low-income minority persons in Minnesota.

Chapter 11 describes the number and locational distributions of mortgage-free owner-occupants across the state, paying special attention to minority populations.

Chapter 12 discusses mortgage loan and other housing costs incurred by owner-occupants, with attention to household income levels and minority status of householders.

Chapter 13 integrates the issues and the analysis into conclusions about the housing scene in Minnesota, and closes with a review of the unresolved issues still facing the state and local metropolitan leadership.

The appendices provide reference maps of the state and metropolitan area units that were used in this study, with additional geographic detail, plus maps of Minneapolis and St. Paul communities, neighborhoods, and planning districts.

**1990 Census Data on Housing and Households**

For the purposes of this report, three types of census-defined geographical areas are recognized and used: counties, MSAs, and census tracts. A county is the primary political division of a state. Minnesota’s 4.4 million residents live in eighty-seven counties, which vary in population size from Hennepin, the largest, with over a million residents in 1990, to Traverse on Minnesota’s western border (4,463), and Cook in the far northeastern Arrowhead Region (3,868).

A majority of the state’s residents live in the state’s five metropolitan areas. The general concept of a census-defined metropolitan area (MA) includes a large population nucleus, together with adjacent communities that maintain a high degree of economic and social integration with that nucleus. Some MAs are defined around two or more nuclei.
In general, each MA must have either an incorporated place (e.g., a city) with a minimum population of 50,000 or a Census Bureau-defined urbanized area and total MA population of at least 100,000. An MA comprises one or more central counties. An MA also may include one or more outlying counties that have close economic and social relationships with the central county. An outlying county must have a specified level of commuting to the central counties and also must meet certain other standards such as metropolitan character, population density, urban population, and population growth.

*Metropolitan statistical areas* (MSAs) are relatively freestanding MAs and are not closely associated with other MAs. These areas are typically surrounded by nonmetropolitan counties. Minnesota contains five MSAs: Duluth, MN-WI; Fargo-Moorhead, ND-MN; Minneapolis-St. Paul, MN-WI; Rochester, MN; and St. Cloud, MN. In this report, we consider only the Minnesota portions of the state’s MSAs.²

Counties comprising MSAs are subdivided into *census tracts* for statistical purposes. Census tracts are small, relatively permanent statistical subdivisions of a county. Census tracts are delineated for all MAs and other densely populated counties by local census statistical committees following Census Bureau guidelines.

Census tracts usually have between 2,500 and 8,000 persons and, when first delineated, are designed to be homogeneous with respect to population characteristics, economic status, and living conditions.

The spatial size of census tracts varies widely depending on the density of settlement. Census tract boundaries are intended to be maintained over a long time so that statistical comparisons can be made from census to census.

---

**Census Collection and Processing Procedures**

*Residence Rules.* In accordance with census practice dating back to the first U.S. census in 1790, each person was to be enumerated as an inhabitant of his or her "usual residence" in the 1990 census. Usual residence is the place where the person lives and sleeps most of the time or considers to be his or her usual residence. This place is not necessarily the same as the person’s legal residence or voting residence.

*Enumeration Rules.* Each person whose usual residence was in the United States was to be included in the census, regardless of the person’s legal status or citizenship. U.S. citizens with a usual residence outside the country were not enumerated in the 1990 census, although they were included in state counts for purposes of congressional reapportionment.

*Persons Away at School.* College and university students were counted as residents of the area in which they were living while attending school. Children in boarding schools below the college level were counted at their parental home.

*Persons in Institutions.* Persons under formally authorized, supervised care or custody (for example, in federal or state prisons; local jails; federal detention centers; juvenile institutions; nursing, convalescent, and rest homes for the aged and dependent; or homes, schools, hospitals, or wards for the physically handicapped, mentally retarded, or mentally ill) were counted at those places.

*Persons Away from Their Usual Residence on Census Day.* Migrant agricultural workers who did not report a usual residence elsewhere were counted as residents of the place where they were on census day.

---

² 1990 Minnesota MSAs and constituent counties: Duluth, MN-WI (St. Louis County, MN, Douglas County, WI); Fargo-Moorhead, ND-MN (Cass County, ND, Clay County, MN); Minneapolis-St. Paul, MN-WI (Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright Counties, MN, and Pierce and St. Croix Counties, WI); Rochester (Olmsted County, MN); and St. Cloud (Benton and Stearns Counties, MN).
Enumeration of Housing Units

Each housing unit in the country received one of two versions of the census questionnaire:

1. A short-form questionnaire that contained a limited number of basic population and housing questions. These questions were asked of all persons and housing units and are referred to as the 100-percent questions.

2. A long-form questionnaire that contained the 100-percent items plus a number of additional questions. A sampling procedure was used to determine who would receive the long-form questionnaire.

Three sampling rates were used. For slightly more than half the nation, one in six households received the long-form or sample questionnaire. For local units of government (counties, towns, townships, etc.) estimated to have fewer than 2,500 residents, every other housing unit received the long-form questionnaire. For census tracts having more than 2,000 housing units in the Census Bureau's address files, one in every eight housing units received the long-form questionnaire.

Enumerating “The Homeless”

There is no generally agreed-upon definition of “the homeless,” and there are limitations in census counts that prevent obtaining a total count of the homeless population under any definition. The Census Bureau does not have a definition and does not provide a total count of “the homeless.” Rather, the Census Bureau provides counts and characteristics of persons found at the time of the census in selected types of living arrangements.

The Census Bureau collected data for various components of the homeless population at different stages in the 1990 census. “Shelter and Street Night” (S-Night) was a special census operation to count the population in four types of locations where homeless people typically are found.

On the evening of 20 March 1990, and during the early morning hours of 21 March 1990, enumerators counted persons in preidentified locations:

1. Emergency shelters for the homeless population (public and private; permanent and temporary)
2. Shelters with temporary lodging for runaway youths
3. Shelters for abused women and their children
4. Open locations in streets or other places not intended for habitation

In preparation for S-Night, the Census Bureau’s Regional Census Centers mailed a letter to the highest elected official in each of more than 39,000 functioning governments requesting them to identify:

1. All shelters with sleeping facilities (permanent or temporary, such as church basements, armories, and public buildings that could be open on 20 March)
2. Hotels and motels used to house homeless persons and families
3. A list of outdoor locations where homeless persons tend to be at night
4. Places such as bus or train stations, subway stations, airports, and hospital emergency rooms where homeless persons might seek shelter at night
5. The specific addresses of abandoned or boarded-up buildings where homeless persons were thought to stay at night

The Census Bureau encouraged persons familiar with homeless persons, and homeless persons themselves, to apply as enumerators.
Modest-priced housing, built by and for blue-collar workers, has been maintained over the decades by the sweat equity of owner occupants.
Chapter 2. Using Census Data

The 1990 Census

The 1990 Census of Population and Housing was the most detailed tabulation of people living in the United States ever compiled. It contains detailed data on population, race and ethnicity, age and sex, education, employment, income, poverty, housing, and many other topics at several geographic scales:

1. United States and major regions of the country
2. Each state and metropolitan area
3. All 3,000+ counties in the United States
4. Municipalities, census tracts, block groups, and enumeration areas

This report uses several levels of geographical detail. When reporting statewide data, we use Minnesota’s eighty-seven counties as the units of analysis. In some tabulations, we distinguish between urban and rural settings for population and housing. The main focus, though, is on counties and patterns of recent change within them, and on the five metropolitan statistical areas (MSAs) that lie wholly or partially within the state.

When reporting on the MSAs, we use census tracts as the unit of analysis because census tracts provide better geographic detail than city-level data. In cities like Minneapolis and St. Paul, a census tract is often ten to twenty blocks in size, although areal size varies depending on population density. Minneapolis contains 126 census tracts and St. Paul, 82.

Availability of Census Data

Census data are available in different forms:

Printed Census Reports. Many people are familiar with the bound census volumes found in schools or public libraries. These reports are the most accessible and widely used of the various census products.

Summary Tape Files (STFs). The Census Bureau compiles census data onto machine-readable tapes or compact discs (CD-ROM). These data can be easily copied to personal computers and then manipulated with spreadsheet software programs. STF data virtually eliminate the tediousness and errors arising from data entry by hand. STFs also provide more data than do the printed census reports, and at finer levels of geographical and topical detail.

Public Use Microdata Samples (PUMS data). Most publicly available census data are published in summarized formats. The Census Bureau gathers data from individual household census questionnaires and then compiles them into tables that it believes will be useful to a large number of people. PUMS data provide all the detailed responses given by a sample of households, making it possible for the data user to compile the data and cross-tabulations of interest in any form desired. The catch is that most of the geographical identifiers such as the block, tract, or minor civil division are removed from each household record so that confidentiality is preserved for the individual household and its members. PUMS data are available in samples of 1 percent and 5 percent of households in Public Use Microdata Areas (PUMAs) of 100,000 or more population.
Private Industry Compilations. Information companies compile census data for specific uses and sell the data to businesses or to public agencies. These companies purchase special tabulations from the Census Bureau along with the conventional census products and then assemble and deliver the results to clients in accessible, user-friendly formats. Direct mail advertisers and nonprofit organizations are major users of census tabulations that assist them in targeting their promotional activities to certain locations.

This report was prepared principally with data from the 1990 census, and includes some comparisons with results from the 1970 and 1980 censuses. For state- and county-level data, we used printed reports and summary tape files (STFs). For the tract-level analysis we used special tabulations prepared by the Urban Institute in Washington, D.C., in which 1970 and 1990 tract data were reworked to match 1980 census tract boundaries.

Census Terminology

In the previous section we noted that the Census Bureau is unable to contrive an unambiguous and agreed-upon definition for the term “the homeless,” and thus does not attempt to do so. This example highlights the need to use census terminology with precision. Census terms are similar to a code, but when the code is cracked, data may be interpreted and used as intended.

During the years since the first U.S. Census of Housing in 1940, the Census Bureau has developed a series of concepts and definitions to guide census practice and use of census results. Although the Census Bureau uses familiar words and phrases, it attaches precise meanings to them.

Living Quarters

Living quarters are classified as either housing units or group quarters. Usually living quarters are in structures intended for residential use (for example, a one-family home, apartment house, hotel or motel, boarding house, or mobile home). Living quarters also may be in structures intended for nonresidential use (for example, rooms in a warehouse where a guard lives), as well as in places such as tents, vans, shelters for the homeless, dormitories, barracks, and old railroad cars.

Housing Units. A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and that have direct access from outside the building or through a common hall.

Occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements.

Both occupied and vacant housing units are included in the housing inventory, except that recreational vehicles, boats, vans, tents, railroad cars, and the like are included only if they are occupied as someone’s usual place of residence.

If living quarters contain nine or more persons unrelated to the householder or person in charge (a total of ten unrelated persons), they are classified as group quarters.

Occupied Housing Units. A housing unit is classified as occupied if it is the usual place of residence of the person or persons living in it at the time of enumeration, or if the occupants are only temporarily absent (for example, away on vacation).

Data presented for “specified owner-occupied” housing units include only one-family houses on less than 10 acres without a commercial establishment or medical office on the property. The data exclude owner-occupied condominium housing units, mobile homes, trailers, boats, tents, or vans occupied as a usual residence, as well as owner-occupied noncondominium units in multi-family buildings. The distinction between “all” and “specified” owner-occupied units often results in a significantly different count within the census.

Vacant Housing Units. A housing unit is vacant if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration entirely by persons who have a usual place of residence elsewhere also are classified as vacant.
Hotels, Motels, Rooming Houses, etc. Occupied rooms or suites of rooms in hotels, motels, and similar places are classified as housing units only when occupied by permanent residents.

Boarded-up Units. Boarded-up units have windows and doors covered by wood, metal, or masonry to protect the interior and to prevent entry into the building. A single-unit structure or a unit in a multi-unit structure may be boarded up in this way.

Group Quarters
All persons not living in households are classified by the Census Bureau as living in group quarters. Two general categories of persons in group quarters are recognized: 1) institutionalized persons, and 2) other persons in group quarters (also referred to as "noninstitutional group quarters").

Institutionalized Persons. These are persons under formally authorized, supervised care or custody in institutions at the time of enumeration. Such persons are classified as "patients" or "inmates." Institutions such as schools, hospitals, or wards for the physically or mentally handicapped; hospitals or wards for mental, tubercular, or chronic disease patients; wards in general and military hospitals for patients who have no usual home elsewhere; hospital wards for drug/alcohol abuse; rooms for long-term care patients in wards or buildings on the grounds of hospitals, nursing homes, convalescent homes, and rest homes for the aged and dependent; juvenile institutions, including homes, schools, hospitals, orphanages, or residential care facilities for neglected, abused, and dependent children; and correctional institutions, including halfway houses operated for correctional purposes.

Other Persons in Group Quarters (also referred to as "noninstitutional group quarters"). This category includes persons living in group quarters other than institutions. Persons who live in rooming houses, group homes, religious group quarters, or college quarters off campus are classified as "other persons in group quarters" when there are ten or more unrelated persons living in the unit; otherwise the living quarters are classified as housing units.

Persons residing in certain other types of living arrangements are classified as living in "noninstitutional group quarters" regardless of the number of persons sharing the unit: college dorms, military quarters, agricultural worker dorms, other worker dorms, emergency shelters for homeless persons (with sleeping facilities), dorms for nurses and interns in hospitals, crews of maritime vessels, staff residents of institutions, other nonhousehold living situations, and living quarters for victims of natural disasters. Also counted in this category are persons visible in street locations.

Condominium Status
Condominium is a type of ownership that enables a person to own an apartment or house in a development of similarly owned units, and to hold a common or joint ownership in some or all of the common areas and facilities such as land, roof, hallways, entrances, elevators, and swimming pools. Condominiums may be single-family houses as well as units in apartment buildings.

Contract Rent
Contract rent is the monthly rent agreed to or contracted for regardless of any furnishings, utilities, fees, meals, or services that may be included. For vacant units, it is the monthly rent asked for the rental unit at the time of enumeration.

Gross Rent
Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, water, sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else).

Gross Rent as a Percentage of Household Income in 1989
Gross rent as a percentage of household income in 1989 is a computed ratio of monthly gross rent to monthly household income (total household income in 1989 divided by 12). Units for which no cash rent is paid and units occupied by households that reported no income or a net loss in 1989 comprise the category "not computed."
Mortgage Status and Mortgage Loan Payment

"Mortgage" refers to all forms of debt where the property is pledged as security for the repayment of the debt. It includes such debt instruments as deeds of trust, contracts to purchase, land contracts, junior mortgages, and home equity loans.

Amounts reported as mortgage payments include everything paid to the lender including principal, as well as interest payments, real estate taxes, fire, hazard, and flood insurance payments, and mortgage insurance premiums.

Household

A household includes all of the persons who occupy a housing unit as their usual place of residence. By definition, the count of occupied housing units for 100-percent tabulations is the same as the count of households. For example, a retired Twin Cities couple who spend four or five winter months in Florida would retain their Minnesota address as their "usual place of residence," even though they were living in Florida on census day. An American Indian family registered as members of the Red Lake Ojibwe Band and maintaining their legal and voting residence at Red Lake, but living most of the year in Duluth, would have Duluth as their usual place of residence.

A more complicated case, not properly acknowledged by current census practice, is that of a dependent child of divorced parents who share custody of the child, who divides his or her time between the residences of the parents. The child actually has two usual places of residence, but census practice requires that only one be specified for enumeration purposes—usually the place where the child resides on census day.

Householder. One person in each household is designated as the householder. In most cases, this is the person, or one of the persons, in whose name the home is owned, being bought, or rented, and is listed in column 1 of the census questionnaire.

Households are classified by type according to the sex of the householder and the presence of relatives. Two types of householders are distinguished: a family householder is a householder living with one or more persons related to him or her by birth, marriage, or adop-

-10-

tion. The householder and all persons in the household related to him or her are family members. A nonfamily householder is a householder living alone or with nonrelatives only.

Unrelated Individual

An unrelated individual is: 1) a householder living alone or with nonrelatives only, 2) a household member who is not related to the householder, or 3) a person living in group quarters who is not an inmate of an institution.

Family Type

A family consists of a householder and one or more persons living in the same household who are related to the householder by birth, marriage, or adoption. All persons in a household who are related to the householder are regarded as members of his or her family. A household can contain only one family for purposes of census tabulations.

Families are classified by type as either a "married-couple family" or "other family" according to the sex of the householder and presence of relatives. The category of "other family" includes either "male householder, no wife present" or "female householder, no husband present."

Where to Get Census Data

Census data for 1990 are found most easily in official U.S. government depository libraries located in every state. Depository libraries are of two classes: "regional" or "selective." Regional depository libraries receive and permanently maintain the full range of census publications. The regional library serving Minnesota and South Dakota is the Government Publications Library in Wilson Library on the West Bank Campus of the University of Minnesota in Minneapolis.

Selective government publication collections are maintained at the Minneapolis Public Library, St. Paul Public Library, the Law Library in the University of Minnesota Law Center, the University of Minnesota St. Paul Campus Libraries, Hennepin County Library at Southdale, Anoka County Library, Ramsey County Library, the
University of Minnesota—Duluth Library, and the Duluth Public Library. Selective collections maintain only a limited stock of recent publications, usually less than five years old.

In Wilson Library, census data are available for public use in printed and digital form. The University of Minnesota also maintains a Machine-Readable Data Center, which provides computerized census data to the public for a nominal fee. The Census Bureau in Washington, D.C., provides census data to the public in printed, electronic, and microfiche form for nominal fees through the Customer Services Department (telephone: 301/457-4100; fax: 301/457-4611).
Mobile homes provide low-cost housing for a substantial fraction of Minnesota's households. These may be in high density, carefully planned mobile-home parks, in medium-density informal arrangements, or on scattered sites in rural areas.
Chapter 3. Minnesota’s Housing in the Early 1990s

At census time in spring 1990, there were 1.8 million housing units in Minnesota to serve 4.4 million persons. The state’s median housing unit featured an ample 5.5 rooms, with seven of ten units in single-unit attached or detached houses.

Because only 1.6 million units were occupied at census time, more than 10 percent of units statewide were enumerated as vacant. The median number of persons per occupied unit was 2.26, which works out to an average of only .44 persons per room, with only one in fifty units averaging more than one person per room. Owner households occupied almost 72 percent of occupied units.

About one in five occupied units had a householder 65 years of age or older. A fourth of all occupied units housed single persons living alone.

Location and Structural Characteristics of Housing Statewide

Minnesota’s housing stock is mostly urban, and has been so for many years, with two-thirds of the state’s housing units located in urban areas. The Census Bureau defines “urban” as comprising all territory, population, and housing in urbanized areas and in places of 2,500 or more persons outside urbanized areas. In Minnesota, this definition usually means places of 2,500 or more persons in incorporated municipalities, and in census-designated places of 2,500 or more.

Of the one-third in rural areas, just one in nine units stands on a farm (Table 1). Around the state, about 58,000 units stood vacant for sale or for rent at census time, while another 105,000 were available for seasonal, recreational, or occasional use—mainly cabins by lakes, along rivers, or in forested areas of the state. The state also had 56,000 condominium housing units in 1990, almost all of them in urban areas. There is a bit of overlap between the “vacant seasonal” category and the condominium category of housing units because some units fall into both classes.

The state’s housing stock is fairly new. Half of the housing units in Minnesota were built after 1963, and almost one in five was constructed between 1980 and 1989. Most of the recent construction has occurred in urban areas, which leaves the rural areas with an older stock (see Figures 1-3). Almost 30 percent of rural housing units predate 1940, whereas the fraction in urban areas is less than one in four. As might be anticipated from the steady contraction in numbers of family farm households, well over half of Minnesota’s rural farm houses date from before 1940.

Mobile homes continue to provide a substantial number of housing opportunities, especially for low-income households and households in rural areas where local ordinances frequently permit them. Many municipalities prohibit mobile homes because they add public service costs to local governments and school districts, as do other houses and households, but mobile homes are not taxed as residential real estate as are conventional houses attached permanently to a foundation. Consequently, well over half of Minnesota’s owner-occupied 59,000 mobile homes are found in rural areas (see Figure 4).
Table 1. Structural Characteristics of Minnesota's Housing, by Urban and Rural Location, 1990 (counts in 1,000s)

<table>
<thead>
<tr>
<th></th>
<th>Minnesota</th>
<th>Urban</th>
<th>Rural</th>
<th>Rural Farm*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All housing units:</td>
<td>1,848</td>
<td>1,242</td>
<td>606</td>
<td>68</td>
</tr>
<tr>
<td>Owner occupied</td>
<td>1,184</td>
<td>786</td>
<td>398</td>
<td>61</td>
</tr>
<tr>
<td>Renter occupied</td>
<td>464</td>
<td>393</td>
<td>71</td>
<td>7</td>
</tr>
<tr>
<td>Vacant for sale</td>
<td>17</td>
<td>11</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Vacant for rent</td>
<td>41</td>
<td>34</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>Vacant for seasonal,</td>
<td>105</td>
<td>4</td>
<td>101</td>
<td>-</td>
</tr>
<tr>
<td>recreational, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>occasional use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condominium units</td>
<td>56</td>
<td>54</td>
<td>2</td>
<td>+</td>
</tr>
<tr>
<td>Built 1980-89</td>
<td>343</td>
<td>245</td>
<td>98</td>
<td>5</td>
</tr>
<tr>
<td>Built pre-1940**</td>
<td>453</td>
<td>281</td>
<td>173</td>
<td>38</td>
</tr>
<tr>
<td>Median year built</td>
<td>1963</td>
<td>1963</td>
<td>1964</td>
<td>pre-1940</td>
</tr>
<tr>
<td>Owner-occupied mobile</td>
<td>59</td>
<td>26</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>homes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Included in Rural column.
** Row does not add precisely due to rounding.
- : Zero.
+ : Less than 0.1 rounds to zero.


Location and Structural Characteristics of Housing in Metropolitan Areas

Five census-defined metropolitan statistical areas (MSAs) lie partly or wholly within Minnesota. Their population sizes and housing stocks vary in size from the Minneapolis-St. Paul MSA with almost a million households and housing units, to the Moorhead side of the Fargo-Moorhead MSA with fewer than 20,000 (see Table 2). In the Twin Cities and Rochester areas, fast growth in the 1980s meant that more than one in five units in 1990 had been built in the 1980s. The St. Cloud MSA grew even faster, with more than a fourth of its housing units built in the 1980s.

The Duluth MSA and the Moorhead side of the Fargo-Moorhead MSA lagged well behind the other three MSAs in housing construction in the 1980s, so their housing stocks remain comparatively older.

Most of the state's 56,000 condominiums are located in the Twin Cities. A few exist in the other MSAs, but numbers vary from a few dozen to only a few hundred, except in the Rochester area, where numbers rise upward to a thousand in both owner-occupied and renter-occupied structures.

About 100,000 metro households in Minnesota—almost all of them in the Twin Cities and Duluth MSAs—have no motor vehicle available for use by household members. Members of these households must walk, use public transportation where it is available, or rely on others for their transportation needs. At the other extreme, more than 200,000 MSA households in Minnesota have three or more motor vehicles available for their use.

About 20,000 households still lack telephones in their housing units. Probably this is partly a consequence of high cost for some low-income households that are unable to afford phone service even with relatively low life-line rates available in most urban areas. Just over 200,000 MSA households have householders 65 years of age or older. Some of these elderly householders are undoubtedly included in the groups lacking telephone service and without a motor vehicle.
Table 2. Structural Characteristics of Metropolitan Area* Housing in Minnesota, 1990 (counts in 1,000s, except as noted)

<table>
<thead>
<tr>
<th></th>
<th>Mpls.-St. Paul</th>
<th>Duluth</th>
<th>(Fargo) Moorhead</th>
<th>Rochester</th>
<th>Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>All housing units:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built 1980-89</td>
<td>970</td>
<td>95</td>
<td>19</td>
<td>42</td>
<td>70</td>
</tr>
<tr>
<td>Built pre-1940</td>
<td>210</td>
<td>8</td>
<td>2</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Condominiums:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner occupied</td>
<td>198</td>
<td>36</td>
<td>3</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Renter occupied</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vacant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicles available:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 or more</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No telephone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Householder 65 or older</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean household income 1989:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner-occupied units (dollars)</td>
<td>52,073</td>
<td>33,088</td>
<td>37,471</td>
<td>48,905</td>
<td>39,153</td>
</tr>
<tr>
<td>Renter-occupied units (dollars)</td>
<td>24,961</td>
<td>15,961</td>
<td>14,929</td>
<td>24,541</td>
<td>20,324</td>
</tr>
<tr>
<td>Households below the poverty level:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner-occupied units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renter-occupied units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean 1989 household incomes in owner-occupied housing units in the Minnesota parts of MSAs were quite a bit higher than incomes in renter-occupied units. Mean incomes for households in owner-occupied units ranged from a high in the Twin Cities of $52,073 to a low of $33,088 in the Duluth area. The Rochester MSA, with its high-tech manufacturing and high-salaried health care and other professional work forces, ran a close second behind the Twin Cities at $48,905.

Mean incomes among renter households also varied widely, from a high in the Twin Cities area of $24,961 to a low in the Moorhead side of its MSA of $14,929. The census counted about 100,000 MSA households in Minnesota with 1989 incomes below the poverty level. About three-fourths of these households lived in the Twin Cities area, with 55,000 of those living in rented units.

These are high numbers, which we shall discuss in greater detail later. But an equally disturbing number is the 28,000 or so MSA households who owned their own homes, yet received incomes below the poverty line. These data imply that such households probably experience difficulty maintaining their properties, just as they experience hardship paying other bills. When housing fails to receive necessary maintenance and reinvestment, neighborhood attractiveness begins to suffer, and taxing jurisdictions start seeing their real estate tax bases erode.

Tenure and Financial Characteristics of Housing in Metropolitan Areas

Race and Ethnicity

The Census Bureau classifies occupied housing units as owner-occupied or renter-occupied, then subdivides each of these tenure classes according to the race or Hispanic origin of the householder. Although there is substantial national debate in the mid-1990s about what “race” and “ethnicity” mean, there was general acceptance of these concepts in the early 1980s when the 1990 census was planned. Fifteen different categories of race were officially recognized in 1990, plus a category of “other.” These are summarized into the five categories used here: white, black, American Indian/Eskimo/Aleut, Asian/Pacific Islander, and other (see Table 3). Race is self-reported in the census. You are what you say that you are—and if you say nothing, you are classified as “other.”

* Minnesota parts of Metropolitan Statistical Areas.
+ Less than 501 rounds to zero.

Owners and Renters

A glance at the MSA data for Minnesota’s owner-occupied units recalls for us that the state and its MSAs are overwhelmingly of European origin (see Table 3). Over 97 percent of householders in owner-occupied MSA housing units are white. Of the approximately 21,000 who are nonwhite, almost all live in the Twin Cities. Just over 1,500 nonwhite householders are owner-occupants in MSAs outside the Twin Cities. Hispanic-origin owner-occupant householders, who could specify any racial category, numbered about 5,000 in the Twin Cities area. The other four MSAs totaled less than a tenth of that number.

The picture for renter-occupied housing units is a bit different from that for owner-occupied, mainly because some minority groups are overrepresented in low-income categories and because lower-income households tend to be renters rather than owners. Generally, to become an owner requires the borrowing of large sums of money in the form of a mortgage loan. Eligibility for mortgage credit usually requires some liquid assets for a down payment, a predictable household income stream, and a measure of stability in one’s work history, household life, and financial obligations. Because disproportionate shares of minority groups fail to meet loan criteria established by mortgage-lending institutions, or try unsuccessfully to buy housing units deemed to be poor collateral, or are immigrants who have been in the United States or the metropolitan area too short a time to satisfy the criteria for home purchase, they rent their living quarters. For example, among all racial groups about three of ten occupied housing units in the Twin Cities area are renter occupied. But among black householders, renters account for seven of ten.

In other MSAs, the numbers of racial minority households range from a few dozen to a few hundred—the largest being 466 Asian and Pacific Islander renter householders in the Rochester area. In all nonwhite and Hispanic categories in all Minnesota MSAs—with three exceptions—the number of renter-occupied households equaled or exceeded the number of owner-occupied households. Exceptions were the categories of “other” and “Hispanic” in the Rochester area, where owners marginally exceeded renters—58 to 57 and 141 to 120, respectively—and the St. Cloud area, where Hispanic owner-occupant householders just outnumbered renters by a ratio of 110 to 107.

Table 3. Tenure and Financial Characteristics of Metropolitan Area* Housing in Minnesota, 1990 (counts in 1,000s, except as noted)

<table>
<thead>
<tr>
<th></th>
<th>Mpls.-</th>
<th>(Fargo-)</th>
<th>St. Paul</th>
<th>Duluth</th>
<th>Moorhead</th>
<th>Rochester</th>
<th>Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure by race, Hispanic origin of householder:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner-occupied units:</td>
<td>629</td>
<td>59</td>
<td>12</td>
<td>29</td>
<td>47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of occupied units</td>
<td>68.5</td>
<td>74.2</td>
<td>68.3</td>
<td>72.4</td>
<td>72.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>610</td>
<td>58</td>
<td>12</td>
<td>29</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>9</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian/Eskimo/Aleut</td>
<td>2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>6</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic (of any race)</td>
<td>5</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>607</td>
<td>58</td>
<td>12</td>
<td>28</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renter-occupied units:</td>
<td>289</td>
<td>20</td>
<td>6</td>
<td>11</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>252</td>
<td>19</td>
<td>5</td>
<td>10</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>21</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian/Eskimo/Aleut</td>
<td>5</td>
<td>1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>9</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic (of any race)</td>
<td>5</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>250</td>
<td>19</td>
<td>5</td>
<td>10</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vacant units:</td>
<td>52</td>
<td>17</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boarded-up (number)</td>
<td>868</td>
<td>108</td>
<td>19</td>
<td>5</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of specified owner-occupied units:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median (dollars)</td>
<td>87,500</td>
<td>42,200</td>
<td>58,400</td>
<td>71,900</td>
<td>64,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (dollars)</td>
<td>103,700</td>
<td>48,900</td>
<td>61,300</td>
<td>85,100</td>
<td>69,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median contract rent, specified renter-occupied units (dollars):</td>
<td>445</td>
<td>256</td>
<td>295</td>
<td>378</td>
<td>363</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Minnesota parts of Metropolitan Statistical Areas.
+ : Less than 501 rounds to zero.
Vacant and Boarded-up Units

The Twin Cities area had 52,000 vacant housing units at census time (see Table 3). Most of these units were for sale or rent, but some of them were at the very end of their useful life. The last stage for many units awaiting demolition is to be boarded up, and the Twin Cities had 868 such units. Duluth has more than 100 boarded-up units, while the other MSAs contained only a handful. The Twin Cities area has by far the most boarded-up units because this area has had the most vigorous housing market in the state for many years. As developers and builders expand the housing supply in excess of rates of new demand based on population increase, net household formations, and households moving up to better units, there will be surplus units. Units that are structurally obsolete, out of fashion, or located in the least desirable settings will be abandoned and eventually removed. Meanwhile, they are boarded up.

Housing Value and Rent Levels

Where the economy is strongest and expansion greatest, housing prices are highest. Not only does expansion inflate the market value of existing housing, but it stimulates the construction of large numbers of expensive new housing units.

In Minnesota, the Twin Cities area boasts the highest housing prices among the five MSAs (see Table 3). The median value of owner-occupied housing on lots of ten acres or less was $87,500 in 1990. The histogram portraying the distribution of housing values is sharply truncated at low levels, with little available for, say, under $40,000, but highly skewed at the high end. There are many units worth upward of a million dollars or more, so the distribution of values is skewed to the right. This skewness raises the mean value of owner-occupied units in the Twin Cities area well above the median to $103,700. Meanwhile, median contract rent in the Twin Cities led all other MSAs at $445.

Strong growth and high incomes in the Rochester area raised the median value of owner-occupied units to $71,900, with the other MSA values trailing down to the low in the Duluth area of $42,200, which is less than half the level of the Twin Cities. The low housing values in the Duluth area can be traced to a generally stable population and economy for several decades, which has meant little stimulus in demand beyond replacement and upgrading of the existing stock.

Housing Costs as a Fraction of Income

Owner-Occupied Units

Costs of owning a house vary markedly from MSA to MSA depending directly on the price of housing, although differences from area to area are muted when households own their houses free of mortgage debt. In the prosperous and fast-growing Twin Cities, Rochester, and St. Cloud areas, selected monthly owner costs for units with mortgage debt ranged from $820 to $638, whereas at the other extreme the Duluth area total was only $479 (see Table 4).

When housing units are not mortgaged, owner-occupant households implicitly pay themselves the rental value of their units rather than paying a lender for use of someone else’s capital. In this case their monthly out-of-pocket housing expense includes real estate taxes; fire, hazard, and flood insurance on the property; utilities; and fuels. It also includes, where appropriate, the monthly condominium fee for condominiums or taxes, site rent, registration fees, and license fees for mobile homes. These expenses averaged from a high of $220 per unmortgaged housing unit per month in the Twin Cities area to a low of $169 in the Duluth area.

Income and Housing Costs for Owners

Personal consumption expenditures for housing and household operation accounted for 26 percent of all personal consumption expenditures in 1990 (U.S. Bureau of the Census 1992, Table 681). This nationwide average fails to portray the wide range of absolute and relative housing cost situations faced by U.S. households of differing means. Owner households receive income “in kind” in the form of the rental values of their housing units. Their housing asset returns to them a monthly “dividend” so that although their monthly cash outlays may be more than they would spend if renting, their household balance sheet generally improves annually and they may get more and better housing and greater housing satisfaction than they would receive if renting.
Table 4. Financial Characteristics of Metropolitan Area* Housing Units in Minnesota, 1990 (counts in 1,000s, except as noted)

<table>
<thead>
<tr>
<th></th>
<th>Mpls.-St. Paul</th>
<th>(Fargo)-Moorhead</th>
<th>St. Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specified owner-occupied housing units:</td>
<td>531 45 9 22 33</td>
<td>417 23 6 17 22</td>
<td>820 479 586 717 638</td>
</tr>
<tr>
<td>With a mortgage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected monthly owner costs, median (dollars)</td>
<td>114 22 3 5 11</td>
<td>220 169 180 183 183</td>
<td></td>
</tr>
</tbody>
</table>

Household income in 1989; owner costs as a percentage of income:

- Less than $20,000: 65 14 2 3 7
- Median percentage: 28.9 21.1 23.4 25.2 24.6
- $20,000 to 34,999: 106 12 3 5 9
- Median percentage: 24.5 13.2 19.5 21.5 20.5
- $35,000 to 49,999: 133 10 2 6 9
- Median percentage: 21.5 12.4 16.5 19.3 17.6
- $50,000 or more: 227 9 2 9 8
- Median percentage: 15.9 <10.0 12.4 14.6 12.9

Household income in 1989; gross rent as a percentage of income:

- Less than $10,000: 65 9 2 2 5
- Median percentage: 50.0+ 44.7 50.0+ 50.0+ 50.0+
- $10,000 to 19,999: 71 6 2 3 5
- Median percentage: 35.4 27.6 30.1 30.4 31.8
- $20,000-34,999: 84 4 1 3 5
- Median percentage: 23.6 17.7 18.5 19.7 19.8
- $35,000 or more: 66 2 + 2 2
- Median percentage: 16.1 12.1 11.6 13.8 13.6

* Minnesota parts of Metropolitan Statistical Areas.
+ Less than 501 rounds to zero.

As income of owner households rises, the share of their monthly income that is absorbed by owner housing costs drops steadily. In the Twin Cities area, owner households with annual incomes below $20,000 had median housing costs equal to almost 29 percent of income (see Table 4). At the other extreme, Twin Cities owner households with income of $50,000 or more had housing costs equal to only about 16 percent of income. Although incomes and housing prices are higher in the Twin Cities than in other Minnesota MSAs, the same trend repeats in the others, although the percentages are conspicuously lowest in the Duluth area, where the economy and population have been stable for many years and housing costs have remained low compared with other MSAs.

Income and Housing Costs for Renters

The ratio of gross rent as a percentage of household income rises to disturbingly high levels for low-income renter households in the state's MSAs. In the Twin Cities area, which counted 65,000 housing units rented by households with incomes under $10,000, the median percentage exceeded 50 percent—as it did for the 18,000 additional households in the same income category in all the other Minnesota MSAs except Duluth, where it reached almost 45 percent (see Table 4). In higher household income categories, the median percentage of gross rent as a fraction of household income declines steadily, dropping to 16 percent in the Twin Cities area and between 11 and 14 percent in the other Minnesota MSAs.

Households rent for many reasons. Some are at the beginning of the household life course and have not yet finished school, found reasonably permanent employment, or established a permanent household. Some households rent as a result of disintegration due to divorce, separation, or financial reverse. Toward the end of the household's life course, following a partner's death, renting may be seen as a less demanding form of tenure than owner occupancy. For a large share of low-income renters, renting is their only financially feasible housing option. They lack the savings and access to mortgage credit needed to buy, or the houses they feel they can afford are judged as poor collateral by lending institutions.
A number of low-income households that spend large fractions of their current cash income on housing—whether they are owners or renters—are elderly persons who may own substantial assets in the form of their house, their savings, and their investments. If the assets are not liquid or judged to be so, bills must be paid from pensions, Social Security payments, and interest and dividends from savings and investments.

The Twin Cities area in 1990 presents a good illustration of how housing costs comprise the largest single household expenditure for most households, but the proportion of total household budget that is devoted to housing expense varies widely across different income levels (see Tables 5 and 5a).

In 1990, three-quarters of the 864,000 households in the seven-county Twin Cities metropolitan area paid less than 30 percent of their income for housing costs. Among households garnering more than $80,000 annually, however, fully 97 percent devoted less than 30 percent of their income to housing outlays. At the other end of the income distribution, over a third of low-income households (those receiving less than $20,000) paid more than half their income in housing costs. Moreover, these differences widened during the 1980s.

Although the share of higher-income households paying less than 30 percent of their income for housing remained constant over the decade (at more than 97 percent), the share of low-income households devoting more than half their income to housing expanded from 31 percent to 34 percent during the 1980s. By 1990, more than 70,000 households receiving less than $20,000 annually paid more than half their income for housing.

There also is evidence of increasing housing costs among middle-income households: the proportion of households earning between $30,000 and $60,000 that paid more than 30 percent of their income for housing edged up from 9 percent to 11 percent.

Substantial numbers of low-income households reported spending 80 percent or more of their income for housing. In fact, more than 22,000 households reported spending over 100 percent of their incomes for housing. Many of these cases would be retired persons who draw down savings to augment their incomes, and others would be persons who borrowed to supplement their incomes.

At the other extreme, there are many thousands of Twin Cities high-income households that spend very small fractions of their incomes for housing. Some of these own their housing outright, and annual costs for insurance, utilities, and household operations are extremely modest. Some upper-income households consume little housing, whether they rent or buy. They prefer to spend their incomes on other goods and services, or to save their money. Thus, although there is a distinct correlation between income level and the share of income that is spent on housing, there are many cases that diverge sharply from the averages.
Table 5. Housing Expenditures by Household Income Categories, Twin Cities MSA, 1990 (number of households)

| Percent of household income spent on housing* | Income Category |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                              | Under $10,000  | $10,000-$19,999 | $20,000-$29,999 | $30,000-$39,999 | $40,000-$49,999 | $50,000-$59,999 | $60,000-$69,999 | $70,000-$79,999 | $80,000-$89,999 | $90,000-$99,999 and over | Total |
| Less than 10                                 | 444            | 3,282             | 11,154          | 16,850          | 16,158          | 15,227          | 11,805          | 9,565           | 6,455            | 5,014            | 19,013          | 114,967         |
| 10 to 19                                     | 3,047          | 22,146            | 32,266          | 39,530          | 44,018          | 39,416          | 30,136          | 20,305          | 11,809          | 7,517            | 20,568          | 270,758         |
| 20 to 29                                     | 14,526         | 27,819            | 50,241          | 54,248          | 48,668          | 29,361          | 15,086          | 7,225           | 3,501            | 2,996           | 5,204           | 258,875         |
| 30 to 39                                     | 10,330         | 30,132            | 27,030          | 18,293          | 7,245           | 4,275           | 2,568           | 916             | 737              | 366             | 624             | 102,516         |
| 40 to 49                                     | 5,797          | 17,887            | 10,224          | 2,820           | 1,151           | 480             | 361             | 202             | 164              | 0               | 9               | 39,492          |
| 50 to 59                                     | 7,146          | 9,977             | 2,986           | 966             | 243             | 42              | 78              | 28              | 18               | 0               | 0               | 21,484          |
| 60 to 69                                     | 6,804          | 4,807             | 1,087           | 124             | 169             | 313             | 9               | 0               | 0                | 0               | 0               | 13,313          |
| 70 to 79                                     | 5,669          | 2,677             | 199             | 83              | 27              | 41              | 0               | 9               | 18               | 0               | 0               | 8,723           |
| 80 to 89                                     | 4,727          | 1,357             | 155             | 83              | 14              | 0               | 0               | 0               | 0                | 0               | 0               | 6,336           |
| 90 to 99                                     | 4,075          | 783               | 32              | 0               | 0               | 0               | 0               | 0               | 0                | 0               | 0               | 4,890           |
| 100% or more                                 | 21,175         | 1,160             | 77              | 82              | 19              | 0               | 0               | 0               | 0                | 0               | 0               | 22,513          |
| Total                                        | 83,740         | 122,027           | 133,451         | 133,109         | 118,079         | 89,155          | 60,043          | 38,250          | 22,702           | 15,893          | 45,418          | 863,867         |

Table 5a. Percent of Households at Each Income Level Paying More than Specified Percentage of Income for Housing (30% of income is italicized)

<table>
<thead>
<tr>
<th>Specified percent of household income*</th>
<th>Income Category</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under $10,000</td>
<td>$10,000-$19,999</td>
<td>$20,000-$29,999</td>
<td>$30,000-$39,999</td>
<td>$40,000-$49,999</td>
<td>$50,000-$59,999</td>
<td>$60,000-$69,999</td>
<td>$70,000-$79,999</td>
<td>$80,000-$89,999</td>
<td>$90,000-$99,999 and over</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>99</td>
<td>97</td>
<td>92</td>
<td>87</td>
<td>86</td>
<td>83</td>
<td>80</td>
<td>75</td>
<td>72</td>
<td>68</td>
<td>58</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>96</td>
<td>79</td>
<td>68</td>
<td>58</td>
<td>49</td>
<td>39</td>
<td>30</td>
<td>22</td>
<td>204</td>
<td>21</td>
<td>13</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>78</td>
<td>56</td>
<td>31</td>
<td>17</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>66</td>
<td>32</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>59</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>51</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>43</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>36</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>30</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>25</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Housing costs are defined as gross rent for specified renter-occupied housing units, and selected owner costs for specified owner-occupied units.
Almost one in five (19 percent) housing units in Minnesota in 1990 had been built during the previous decade of vigorous expansion and economic development. Of the total of 355,000 new units, 59 percent went to the Twin Cities area, 5 percent or fewer to each of the state’s other metro areas, and 30 percent of the added units were placed outside the five metropolitan areas.

Figure 12 shows that the major zones of new housing construction stretch from the St. Cloud area to Rochester, with extensions eastward through Washington County and westward to McLeod County.

Even in parts of Minnesota experiencing general population decline and economic downturn, there has been new construction to replace units no longer wanted or needed, or to add units in specific growth spots while other units are abandoned in declining towns and rural areas.
Figure 2. Renter-Occupied Housing Units Built in the Twin Cities, 1980 to 1990

Ever since the late 1960s, when young adults born in the post-war baby boom began entering the local housing market in large numbers, the construction of new rental housing has formed a major element on the housing landscape. During the first two decades following World War II, almost all newly constructed housing was erected in the suburbs and almost all of that was of the single-unit detached variety.

During the 1980s, the construction of new rental units continued as almost 94,000 new units were completed—60,000 of them (64 percent) in the Twin Cities area. Most rental units are built in multiple-unit structures, which lowers per-unit land costs, construction costs, and management costs once the units are occupied. In the central cities of Minneapolis and St. Paul, local zoning ordinances exclude multiple-unit housing from broad areas of south Minneapolis and western St. Paul. Concentrations of new rental housing are found in and around the Minneapolis downtown, in St. Paul's southwest Highland Park neighborhood, in and around downtown, and in the Como Park area at the northwest edge of the city.

Central city zones of new rental housing are surrounded by the ring of post-war single-unit housing, beyond which is a ring of new rentals that completely surrounds the central cities. Almost all second- and third-ring suburbs have made some provision for rental housing in their zoning laws, often along major freeways and other highway arterials where they serve as buffer zones between the thoroughfares and quieter areas of single-unit housing, and in strips between commercial-industrial concentrations and single-family neighborhoods.
Figure 3. Renter-Occupied Housing Units Built in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to March 1990

Most renter-occupied units get built as speculative investments, so the volume of construction of such units in the 1980s reflected local growth conditions and expectations that local markets would absorb additional rental units. There were recession years in the early 1980s, which curtailed construction generally. Then there were revisions in the U.S. Internal Revenue Code that rendered new investments in rental housing less lucrative than alternative investment and speculations. The end of the 1980s were generally good times for investors, and rental housing construction increased in areas where population and economic activity were expanding.

The Duluth area with its stable economy received only 1,800 new units during the decade; Moorhead, 900; Rochester, 2,100; and St. Cloud, 7,500—part of the general expansion within the St. Cloud-Rochester corridor.
Figure 4. Change in Number of Housing Units in Minnesota Consisting of a Mobile Home or Trailer, 1980 to 1990

Mobile homes and trailers accounted for almost 112,000 (6 percent) of Minnesota's 1.8 million housing units in 1990. Unlike other elements of the state's housing stock, these units are found mainly outside the major metropolitan counties. The Twin Cities area contains only 25 percent of the statewide total, most of them sited outside major cities.

Although mobile homes and trailers provide attractive, comfortable, and cost-effective housing for many households, especially those with low incomes, local units of government frequently curtail their presence within their jurisdictions because it is recognized that such housing units are under-taxed compared with the costs that they impose on municipalities and other local units of government. The result is that mobile homes and trailers are frequently used in rural areas where their presence is not prohibited, and as second homes in forest and lake-side recreational settings.

Almost all parts of Minnesota received some of the statewide increase of 53,000 mobile homes and trailers during the 1980s. Only the counties of Chippewa and Pennington reported decreases. Recreational areas in counties north of the Twin Cities reported significant increases for the most part. Southern and southwestern agricultural areas of Minnesota reported little change. In these areas, households evidently are able to afford conventional housing, or in areas where rural populations are dropping, conventional housing of decent quality is available for sale or rent at attractive prices.
Chapter 4. Minnesota’s Housing Supply Across Time and Space: Age and Quality Measures

The census records housing age, mainly because—as imperfect as it is—age probably is the best single easy-to-collect surrogate measure of housing quality. With age, wiring, plumbing, roofs, masonry, doors and windows, and other elements of a housing unit require serious maintenance or replacement.

The average age of Minnesota’s housing differs significantly from place to place depending on fluctuations in the economy during different decades, and movements of population toward places of economic opportunity and away from places offering poor prospects (see Table 6; Figures 5-8).

The only measure of size of housing unit provided by the census is number of bedrooms. In 1990, the percentages of units by bedroom count were: no bedroom, 2 percent; one, 14 percent; two, 28 percent; three, 36 percent; four, 16 percent; five or more, 4 percent.

Although housing age is one crude measure of quality, the census offers some others, such as the quality of plumbing, kitchens, water source, means of sewage disposal, type of house heating fuel, and availability of a telephone in the housing unit. There were 24,000 housing units (1.3 percent) lacking complete plumbing facilities, and 21,000 (1.1 percent) that lacked complete kitchen facilities. Statewide, 56,000 housing units (3 percent) were in condominium ownership.

For 73 percent of all housing units, a public system or private company provided water service, whereas 24 percent got water from individually drilled wells. Of the remainder, 41,000 (2 percent) got their water from individually dug wells, and 16,000 (under 1 percent) from some other source.

Sewage disposal was provided by public sewers for 73 percent of Minnesota’s housing units, and 25 percent used septic tanks or cesspools. Only 24,000 units (1.3 percent) used other means.

All Minnesota housing units, with the exception of certain earthsheltered and superinsulated homes, require a source of heat during the cold months of the year. Public utility gas companies provide gas to 63 percent of occupied Minnesota homes; bottled, tank, or liquefied petroleum (LP) gas heats another 8 percent; electricity heats more than 10 percent; fuel oil or kerosene heats 12 percent; and wood is the home-heating fuel for 5 percent. Fewer than 1,000 units use coke; 400 are heated with solar energy; and 8,000 report no fuel used. In 1990, there were 40,000 occupied housing units in Minnesota (2.4 percent) with no telephone.

<table>
<thead>
<tr>
<th>Table 6. Age of Minnesota’s Housing Stock, 1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Built</td>
</tr>
<tr>
<td>1989 to March 1990</td>
</tr>
<tr>
<td>1985 to 1988</td>
</tr>
<tr>
<td>1980 to 1984</td>
</tr>
<tr>
<td>1970 to 1979</td>
</tr>
<tr>
<td>1970 to 1979</td>
</tr>
<tr>
<td>1950 to 1959</td>
</tr>
<tr>
<td>1940 to 1949</td>
</tr>
<tr>
<td>1939 or earlier</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Figure 5. Housing Units Built in the Twin Cities, 1940 to 1949

In the decade of the 1940s, Minnesota built 132,000 housing units that were still standing in 1990. Almost six of ten of these units (59 percent) were located in the state's five metropolitan areas at census time. In fact, just three counties alone accounted for 44 percent of the total: Hennepin (27 percent), Ramsey (11 percent), and St. Louis (6 percent). The economies of these three counties and their core cities were strong at the end of the 1930s, and they continued to boom in years shortly after World War II.

In the Twin Cities area, housing construction that occurred in the 1940s took place mainly around the fringes of the central cities of Minneapolis and St. Paul, and in what was to become the first ring of suburbs around these two central cities. There was a small amount of construction in southern Anoka County and in northern Dakota County; but for the most part, in the 1940s, suburban-type residential development occurred on vacant land just inside the central cities or just outside their borders in West St. Paul, Richfield, eastern Bloomington, Edina and (what was then) Morningside, St. Louis Park, Golden Valley, Robbinsdale, Brooklyn Center, Columbia Heights, Roseville, and Maplewood.

Today, these units are forty years old or older. In many cases, they have been remodeled, expanded, and improved over the years. In other cases, they are showing signs of age, deterioration, and decay. With each passing year many of these units move lower on the distribution of value and attractiveness compared with newer units. In the municipalities where they are located, what had once been prized as new post-war housing units for middle-income households and solid tax bases for local governments are now viewed as examples of incipient blight. Housing and neighborhood maintenance challenges that once appeared confined essentially to the core areas of the two central cities of Minneapolis and St. Paul are increasingly recognized as shared with suburban cities in the metropolitan area.
Figure 6. Housing Units Built in Duluth, Moorhead, Rochester, and St. Cloud, 1940 to 1949

New housing built just before and just after World War II (little civilian housing was built during the war) was generally located inside the central cities, although there were other new units scattered throughout the counties of the state’s minor MSAs.

In the Duluth area, the number of units built in the 1940s was 8,100; in the Moorhead area, 1,200; in the Rochester area, 2,800; and in the St. Cloud area, 3,900. In each case, their geographical distribution emphasizes locations toward the centers of the central cities, but away from the downtown core areas, which were already fully built up at that time.

The number of units added in the Duluth MSA represents the comparative vigor of Iron Range mining activity, which flourished during the decade of the 1940s. The state’s other minor metropolitan areas experienced modest housing construction activity in the 1940s compared with the Duluth area.
A quarter of Minnesota's housing units in 1990 (453,000 of 1.85 million) had been built before 1940, with 56 percent of the state's oldest units located outside the Twin Cities area. The fact that a smaller share of the oldest housing is in the Twin Cities than in Greater Minnesota is a consequence of faster Twin Cities economic and population growth since World War II.

But what is true for the Twin Cities region as a whole—namely, a newer housing stock—is not necessarily true for all parts of the region. Because housing construction in the Twin Cities area began around job centers, and because the two biggest job centers lay at the downtown cores of St. Paul and Minneapolis, the oldest housing in the region was built inside the central cities.

At census time, 53 percent of the 173,000 housing units in the City of Minneapolis, and 47 percent of the 118,000 housing units in the City of St. Paul dated from before 1940. St. Paul's share is lower than Minneapolis's because at the end of World War II, St. Paul still had large expanses of vacant land in the southwestern and eastern parts of the city, so housing that might otherwise have gone up in nearby suburban areas was erected instead inside St. Paul's city limits.

Minneapolis had a larger population than St. Paul and had grown faster by 1945, so there were only a few expanses of vacant land for post-war housing construction in Minneapolis. Most of it went into its first-ring suburbs immediately beyond the city limits whereas St. Paul was capturing a good share of the early post-war housing building boom.

Today, the map of pre-1940s housing discloses a conspicuous share of Twin Cities pre-1940 housing heavily concentrated inside the two central cities. Had Minneapolis and St. Paul been permitted to annex nearby areas after 1945, or had the central cities' limits been extended outward farther at an earlier time, both cities would have captured a greater share of the post-war building boom, which would have eased later planning and financial challenges that both cities confront in the 1990s.
Figure 8. Housing Units Built in Duluth, Moorhead, Rochester, and St. Cloud in 1939 or Earlier

There were 453,000 pre-1940 housing units in Minnesota in 1990—25 percent of the state's total housing stock. The four minor MSAs had 13 percent of the total: Duluth, 36,000; Moorhead, 3,100; Rochester, 6,600; and the St. Cloud area, 13,000.

The geographical distribution patterns of pre-1940 era housing in the state's minor MSAs are of three main types: those inside the central cities, clustered around the downtowns and in neighborhoods easily accessible to downtown by foot or transit; those in the smaller towns and cities within the MSA; and rural farm and nonfarm housing scattered at low density across the MSA counties.
A century-old house, abandoned and boarded up, awaits city-sponsored demolition and replacement by new in-fill units. Prompt condemnation, removal, and replacement encourages neighbors to stay and invest in their own properties.
Chapter 5. Vacant Housing Units for Sale or Rent

There are different kinds of vacant housing. In Minnesota at 1990 census time, about 17,000 units stood vacant for sale, whereas 41,000 were available for rent. Another 105,000 were units for seasonal, recreational, or occasional use. These were mainly cabins by lakes, along rivers, or in forested areas. Other units were vacant and awaiting demolition, or unavailable for occupancy because of structural damage or code violations.

The Twin Cities area had 52,000 vacant housing units at census time. Most of these units were for sale or rent, but some of them were at the very end of their useful life. The last stage for many units awaiting demolition is to be boarded up, and the Twin Cities had 868 such units. Duluth had more than a hundred boarded-up units, while the other MSAs contained only a handful.

The Twin Cities area has by far the most boarded-up units this area has had the most vigorous housing market in the state for many years. As developers and builders expand the housing supply in excess of rates of new demand based on population increase, net household formations, and households moving up to better units, there will be surplus units. Units that are structurally obsolete, out of fashion, or located in the least desirable settings will be abandoned and eventually removed. Meanwhile, they are boarded up (see Figures 9-16).
Housing in multiple-unit structures includes these World War I vintage buildings, each with two or three units.
Figure 9. Vacant Housing Units for Rent in Minnesota, 1990

There were 41,000 vacant housing units for rent in Minnesota in 1990—just 2.2 percent of the state’s total housing stock of 1,848,000 units. Whether extra rental vacancies occur as a result of excesses on the supply side of the local markets (too many new units built, or new units built in the wrong areas) or the demand side (households moving to owner status as their average age rises, and away from renter status), the consequences are the same—excess numbers of vacant rentals.

Of Minnesota’s eighty-seven counties, only twenty-five counted under a hundred vacant units for rent. Most counties had well over a hundred such units, and several nonmetropolitan counties had several hundred.
Figure 10. Vacant Housing Units for Rent in the Twin Cities, 1990

The Twin Cities area had 26,000 of 41,000—or 64 percent—of Minnesota’s vacant housing units for rent in 1990. The metropolitan area had only 56 percent of the state’s households, so new units have been added faster than they have been absorbed, or else households were moving into homeowner status and leaving rentals behind in excess numbers.

Whether extra rental vacancies occur from excesses on the supply side of the local markets (too many new units built, or built in the wrong areas) or the demand side (households moving to homeowner status as their average age rises, and away from renter status), the consequences are the same—excess numbers of vacant rentals.

The Twin Cities housing scene is divided into a series of areal submarkets, with two-thirds of total housing activity occurring in the western half of the metropolitan area. Historically, the two most active middle-class housing submarkets on the Minneapolis side have been in the sector directly south of downtown, extending into western Dakota and eastern Scott counties, and west and northwest of downtown into suburban Hennepin County.

As new units for owner occupancy or for rent were added on the suburban edges of these vigorous sectors, and as households moved outward to take them up, vacancies percolated inward toward the core of Minneapolis. Eventually, excess supply of new units on the outer suburban edges has meant clusters of excess units on the inner sides of these sectors, which are clearly visible south and west-northwest of the Minneapolis downtown.
Figure 11. Vacant Housing Units for Rent in Duluth, Moorhead, Rochester, and St. Cloud, 1990

The 41,000 vacant housing units for rent in Minnesota in 1990 comprised 2.2 percent of the state's total housing stock—well below the national average share for a statewide average. Of the 41,000, only 3,900 were located in the four minor metropolitan areas. The Duluth area accounted for 1,800; Moorhead, 600; Rochester, 600; and St. Cloud, 400.

When markets are strong, rental units get absorbed quickly. When the market is weak, rents drop and households spread out and disperse to absorb available space. In stable areas such as Duluth, much of the vacancy rate can be accounted for by normal turnover; some may result from long-term vacancies such as those northeast of down-town on the inner end of the northeast upper-middle-class expansion sector along Lake Superior's North Shore. The other MSAs had small numbers of vacancies, reflecting balance between supply and demand.
Imaginative re-use of an old public elementary school building, converted to condominiums, adds diversity and renews the neighborhood housing stock.
Figure 12. Vacant Housing Units in Minnesota for Sale Only, 1990

There were just over 17,000 vacant housing units for sale only in Minnesota in 1990, with 51 percent of the state's total within the Twin Cities area. In most counties the count of such vacant units ranges from a few dozen to over a hundred units in counties containing large towns and smaller cities, such as Crow Wing (Brainerd), Freeborn (Albert Lea), Itasca (Grand Rapids), Mower (Austin), and Otter Tail (Fergus Falls).

Vacant units occur in all counties in the state, in rough proportion to the number of existing units. Housing markets are highly localized, and demand and supply tend to match fairly closely. This result comes about because when there is a surplus of units for sale, prices drop to clear the market. When prices drop, renters decide that they can afford to buy. If there is a shortage of units in an area, builders promptly put up additional units to meet demand.

Vacant units come about from normal turnover created by life-course transitions. Above-average numbers of vacant units for sale in a county occur from long-term economic decline and overall population declines such that even though prices slide downward, there are insufficient households to absorb the surpluses at any price, or the surpluses in a county are too remote from needs elsewhere for long commutes to be worth the time and expense.

*C For sale only indicates housing units that are not for rent while they are for sale.
Figure 13. Vacant Housing Units in the Twin Cities for Sale Only,* 1990

Just over half (51 percent) of Minnesota's 17,000 vacant housing units for sale in 1990 were in the Twin Cities area. Statewide, the leading counties were those that were large and growing in the Twin Cities area: Hennepin (5,800), Ramsey (1,600), and Dakota (1,400).

Houses stand for sale when they are new and remain unsold by merchant builders, so in fast-growth areas local supply increases in excess of demand will add to the total. Vacancies of this type are common in northern Dakota County, central Hennepin County, and in the suburban areas north and east of St. Paul.

Houses stand for sale in declining areas where households move on in numbers larger than those able and willing to move in to replace those departing. Clusters of such vacancies are conspicuous in south-central Minneapolis and in the older central parts of St. Paul.

Between these two extreme cases, there is the normal turnover of houses in every community, and at census time in the spring there will be houses for sale throughout the metropolitan area.

* For sale only indicates housing units that are not for rent while they are for sale.
Figure 14. Change in Number of Vacuum Housing Units in the Twin Cities for Sale Only, 1980 to 1990

In 1980 there were just under 16,000 vacant housing units for sale in Minnesota, and ten years later the inventory of such vacant units stood at just over 17,000, representing a statewide increase of 1,100. The Twin Cities share of the statewide net increase was 1,000, implying that because this area was the main growth center of the state, suppliers of new units had been busy building and had overshot the mark in terms of what the market could absorb.

On the other hand, because the state’s housing stock in 1980 was smaller than in 1990, vacancies as a fraction of total occupied housing units is a better index of excess supply. Number of occupied units is a good base for comparison because it equals the count of households, which is probably the best single aggregate measure of housing need.

In 1980, vacant units for sale were 1.1 percent of the statewide total of occupied units, and in 1990 the ratio had dropped to 1.0 percent. Thus, total vacancies of units for sale had risen, but were a smaller fraction compared with all occupied units (and households) statewide.

In the Twin Cities area the same trend occurred. Vacant housing units for sale compared with the total number of occupied units in the Twin Cities dropped in the 1980s from 1.02 percent to 0.95 percent as the number of such vacant units rose from 7,700 to 8,700.

The net rise of 1,000 vacant units for sale in the Twin Cities area hides the fact that some census tracts experienced a drop during the 1980s in their number of vacancies while others saw a rise. In the oldest built-up areas near the core of the central cities, expansion of nonresidential land uses can mean eliminating obsolete housing units that were for sale in 1980 and gone by 1990. In other cases, vacant and obsolete units were removed and replaced by new units that were occupied in 1990. Sometimes vacant units in 1980 were removed and the lots on which they stood were vacant in 1990.

In suburban areas, new units vacant at census time in 1980 were occupied by 1990, so tract totals fell during the decade. In other instances, new construction created vacancies that remained unoccupied by census day, 1990. Overall, there was a clear concentration of tracts with increases in Minneapolis and St. Paul in 1990 compared with 1980. In the suburban portions of the Twin Cities area, the pattern of ups and downs was more mixed due to local situations.

* For sale only indicates housing units that are not for rent while they are for sale.
Figure 15. Vacant Housing Units in Duluth, Moorhead, Rochester, and St. Cloud for Sale Only, 1990

The three main sources of vacancies for sale are normal turnover as household needs change, newly constructed housing units awaiting first occupants, and the oldest, most obsolete units that remain for sale but are unlikely to find buyers. The newest units are typically located in outlying suburban areas. Normal turnover takes place within the existing stock. Obsolete units at or near the end of their useful lives usually are clustered near the downtown cores and show up disproportionately on the maps inside the central cities and at the cores of other cities such as Virginia and Hibbing. Additional old, obsolete, and unwanted units are scattered across rural areas.

The count of vacant units for sale is augmented in declining areas when supply exceeds demand, and in fast-growing areas where builders put up new units faster than the market absorbs them. In 1990, total numbers of vacant housing units for sale were 700 in the Duluth area; 300 in the Moorhead area; 500 in the Rochester area; and 500 in the St. Cloud area.

* For sale only indicates housing units that are not for rent while they are for sale.
In 1980 the Census Bureau separately enumerated "seasonal and migratory" units and "year-round vacant" units. "Seasonal" units included beach cottages and hunting cabins, units offered to vacationers in the summer for summer sports or in the winter for winter sports, and vacant units held for loggers and herders. "Migratory" units were for migratory labor employed for farm work during the crop season. "Year-round vacant" housing units were available or intended for occupancy at any time of the year, such as a unit in a resort area intended for use at any time of the year.

In 1990, the Census Bureau enumerated vacant units "for seasonal, recreational, or occasional use." Units for migrant workers were excluded from this total, but most of the units classified as "year-round vacant" in 1980 were included in the new class. This change in census practice had the effect of exaggerating the growth of Minnesota's seasonal housing—mainly cabins on lakes and in forested areas. Nevertheless, the map faithfully discloses where these units are located, as well as where their numbers have been expanding.

The wilderness areas north of Duluth in St. Louis County, areas near Brainerd in Crow Wing County, Itasca County (Grand Rapids area), Becker County (Detroit Lakes area), and Otter Tail County (Fergus Falls area) are conspicuous growth areas in Minnesota's north-central lake region. The map illustrates the relationship between the availability of forest and lake recreational resources and their accessibility to the greater Twin Cities. The major highways—94, I-35, U.S. 10 northwest of St. Cloud into Otter Tail County, U.S. 169 through Mille Lacs and Aitkin counties, and I-35 to the north—connect the lakes region with Twin Cities populations. Remote regions in the far north remain relatively underdeveloped. It is 200 miles from the Twin Cities to Grand Rapids, and 300 miles to International Falls.

The booming second-home phenomenon in Minnesota and the United States highlights another traditional (and increasingly restrictive) feature of census practice, namely, the idea that households maintain a single primary residence. In fact, increasing numbers have two or more residences, none of which they consider "primary." Traditional census practice assumes that each household moves about in a "daily activity orbit" involving a journey to work linking home and job. But households' daily movement patterns are today more complicated than that. In addition, there are "weekly activity orbits" involving time at the cabin or shore, and there are seasonal movements for households who move south for the winter months and north for the summer. Seasonal homes in Minnesota form an increasingly important part of these complex patterns of movement and of residence.
Indian housing by Mystic Lake Casino (Scott County) shows that new wealth for native people means improved living standards for some; but for many, living on northern reservations, lives of poverty continue.
Chapter 6. Housing Units Recently Occupied

Just as the housing inventory is in flux through new construction, aging, subdivision of units, consolidation of units, deterioration, remodeling, and demolitions, the number and composition of households are constantly in flux as well. One way that households adjust their housing to their needs is by moving from an unsatisfactory unit to another that they prefer.

Research on residential mobility tells us that most moves are short moves and are mainly house related. People want more room or a little less, but try to change their housing without making a substantial change in their neighborhood setting. Movement may be to a better or larger unit when needs require and resources permit. Sometimes the move is in the other direction, to smaller or to cheaper units when needs decline or resources diminish. The result is the same, though: the household changes addresses.

The 1990 census asked householders when they moved into their present units, as a way to assess the rate of turnover within each subarea of Minnesota. Responses revealed that 48 percent had moved into their unit between 1985 and census day, 1 April 1990. Detailed results were as follows: moved in 1989 to March 1990, 19 percent; 1985 to 1988, 28 percent; 1980 to 1984, 14 percent; 1970 to 1979, 19 percent; 1960 to 1969, 9 percent; and 1959 and earlier, 10 percent.

In the seven-county Twin Cities area, nearly 730,000 people moved between 1985 and 1990 (see Table 7). Of the total that moved, 60 percent moved within their own areas, with 94,000 moving but remaining in Minneapolis and 59,000 moving within St. Paul. Another 50,000 persons (7 percent of the total) moved into the central cities from the suburbs, while 118,000 (16 percent) moved to the suburbs from the central cities of Minneapolis and St. Paul (see Figures 17-21).

Table 7. Residential Mobility within the Twin Cities Area, 1985 to 1990 (persons, in 1,000s)

<table>
<thead>
<tr>
<th>Where people lived in 1985</th>
<th>Minneapolis</th>
<th>St. Paul</th>
<th>Developed Suburbs</th>
<th>Developing Suburbs and Rural Areas</th>
<th>Total*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis</td>
<td>94</td>
<td>7</td>
<td>32</td>
<td>41</td>
<td>173</td>
</tr>
<tr>
<td>St. Paul</td>
<td>6</td>
<td>59</td>
<td>21</td>
<td>24</td>
<td>109</td>
</tr>
<tr>
<td>Developed suburbs</td>
<td>17</td>
<td>10</td>
<td>90</td>
<td>75</td>
<td>192</td>
</tr>
<tr>
<td>Developing suburbs</td>
<td>13</td>
<td>10</td>
<td>36</td>
<td>196</td>
<td>255</td>
</tr>
<tr>
<td>Total*</td>
<td>129</td>
<td>86</td>
<td>178</td>
<td>336</td>
<td>729</td>
</tr>
</tbody>
</table>

* Totals do not add precisely due to rounding.

Minnesota's fiscal framework encourages local governments to overzone for expensive, low-density housing in the (often erroneous) belief that such a policy maximizes local government revenues while keeping expenses under control. Meanwhile, school districts, which account for the largest share of local taxing and spending, operate completely independently of local zoning processes.
Figure 17. Change in Number of Occupied Housing Units in Minnesota, 1980 to 1990

Change in the number of occupied housing units at the county level is one of the best ways to assess the dynamics of housing activity in Minnesota. During the 1980s there were thirty-four counties that experienced declines in this measure; the rest saw increases. There were no county declines in the 1970s. Declines mean that local supply exceeds demand, housing prices and rents probably fall or cannot rise, and household wealth tied up in owner-occupied units or investor-owned rental units is shrinking. If owner-occupants or investors attempt to sell to cut their capital losses, their collective action simply magnifies the dilemma they are trying to avoid.

When supply exceeds demand in a county, new construction slows almost to a halt because of the surpluses, and secondary local effects that flow from construction activity—local construction jobs and wages, building supply dealer sales, appliance and furniture sales, general revenues of goods and service dealers—slow down. As property values slowly diminish on some residential properties, local property tax burdens shift from one set of rate payers to another, and effective tax rates rise as more revenues are demanded from a shrinking tax base. The geography of differential change in occupied housing units is far from innocent.

The net increase in occupied housing units in Minnesota counties in the 1980s was 203,000. Leaders were Hennepin (54,000), Dakota (34,000), Anoka (22,000), Ramsey (20,000), and Washington (14,000). These five Twin Cities metropolitan area counties accounted for 71 percent of the net increase statewide. Nearby counties in the St. Cloud–Rochester corridor all increased in number of occupied units at rates exceeding 10 percent.
Figure 18. Change in Number of Occupied Housing Units in the Twin Cities, 1980 to 1990

Twin Cities counties accounted for 80 percent of the net increase of 203,000 occupied housing statewide in the 1980s. Leaders were Hennepin (54,000), Dakota (34,000), Anoka (22,000), Ramsey (20,000), and Washington (14,000). These five Twin Cities metropolitan area counties alone accounted for 71 percent of the net increase statewide.

A small share of tracts in the Twin Cities area had a reduction in the number of occupied housing units in the 1980s, but the large majority saw increases. Increases were concentrated in two types of locations: central city redevelopment areas, and outer suburban areas receiving new construction—northern Dakota County, central Hennepin County, southern and southwestern Anoka County, and the western edge of Washington County.
Figure 19. Change in Number of Occupied Housing Units in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990

During the 1980s the number of occupied housing units in Minnesota expanded by 203,000, with most of the net growth (80 percent) occurring in the Twin Cities area. The Duluth area declined by 2,600, but within the region some recently developing central city tracts added occupied units while older-settled areas along the lake and around the downtown core declined.

Almost all the tracts in the city of St. Cloud had increases, as did the suburbs of counties comprising the metropolitan area as 15,000 occupied housing units were added in the 1980s. The Rochester area—central city as well as surrounding suburban areas—advanced as well, adding 7,400 occupied units during the decade.

The Moorhead area had a modest net increase of 1,300 occupied units, almost all located inside the city.
Figure 20. Renter-Occupied Housing Units into which the Head of Household Moved Between January 1989 and March 1990 in the Twin Cities

Demand for rental units is greatest among the young, the elderly, and low-income households. Supply of rentals is greatest near older core areas of the central cities and at various locations throughout the suburbs, usually along major highway thoroughfares, near commercial and industrial areas, and in separately zoned apartment districts. Older units tend to be cheaper, with prices rising as housing age diminishes.

Steady turnover is typical for rental units. On the metropolitan area map, turnover concentrates in south Minneapolis in the extensive zone of rental units southwest of the central business district. This area has served for most of the twentieth century as perhaps the principal port of entry of young single people into the Twin Cities, as well as for young persons who grew up in the Twin Cities area and are establishing their first households on their own. The census tracts in the vicinity of West Lake Street and South Hennepin Avenue in Minneapolis—at the heart of this zone—feature the highest population densities in the entire Twin Cities area. Thus, two factors have produced the concentration of household turnover: high population density and a high density of rental units.
Figure 21. Renter-Occupied Housing Units into which the Head of Household Moved Between January 1989 and March 1990 in Duluth, Moorhead, Rochester, and St. Cloud

Steady turnover is a fact of life for rental housing. Movement of renters is most common among young households, elderly households, and low-income households—many of whom are included in the first two groups. The distributions on the maps show concentrations of rental housing, mainly in the older parts of the central cities, with declines in frequency moving to the edges of the MSAs.

Almost all households are renters at one or more times during the household life course. The fact that so many persons moved into rental units in so many parts of our minor metropolitan areas in a single year—1989-1990—reminds us that rental housing at present is not confined to single core zones within our metropolitan areas, nor should it be.
Large, new rental units sit amid a golf course, ponds and streams, providing shelter for middle- and upper-income households at early or late stages of their life course.
Chapter 7. Changes in the Demand for Housing

Households range in size from large to as small as a single person living alone. They differ in their incomes and their wealth, which regulate the amount, type, and location of the housing they can afford. Households differ in their housing tastes: some want high-density inner-city life; others want semi-rural housing on a ten-acre lot. They differ in how important they consider housing outlays compared with spending for other goods and services, such as cars, clothes, expensive foods, travel, and entertainment.

To complicate matters further, population size fluctuates as a result of natural change, domestic migration, and international immigration. Migrants are mainly young people, who carry their demographic potential to the places where they settle, then bear children at their destinations rather than at their places of origin. In recent years, domestic migrants from elsewhere in the United States have come to Minnesota and especially to the Twin Cities seeking economic opportunity. They are joined by significant numbers of immigrants from Latin America, Asia, and Africa.

All persons must be housed. Depending on the size of households formed, the population increase yields an increase in number of households needing housing. Depending on their financial circumstances, their need for housing is translated into effective demand in local housing markets (see Figures 22-35).
As the number of elderly persons in Minnesota continues to rise sharply, an increasing number of nursing homes provides shelter and a continuum of services. Often—though perhaps not often enough—it is possible for the elderly to find nursing home care in their own neighborhoods, thus easing the trauma of relocating from homes where they have lived for a long time.
Figure 22. Population Change in Minnesota, 1980 to 1990

Population and household changes arising from natural causes and from net migration into the state underlie much of the demand for additional housing units in Minnesota. The remainder comes from declines in household sizes, improvements to the stock coupled with abandonment of obsolete units, replacement of demolished units, and relocation of households within the state.

During the 1980s, Minnesota population continued its steady expansion from 4.1 million to 4.4 million (up 7.5 percent), but lagged the national expansion rate of 9.8 percent. On the other hand, while the national population growth rate in the 1980s slowed from 11.4 percent in the 1970s, Minnesota's growth rate was up from 7.1 percent. States compete with one another for people, capital, other resources and jobs, and in recent years Minnesota appears robust compared with Midwestern competition.

Growth has been concentrating in metropolitan areas, while the rest of the state barely held its own. At census time 1990, metropolitan area counties in Minnesota housed almost 3.0 million persons, 67.7 percent of the state total. In the 1970s and 1980s, they gained 187,000 and 339,000 persons, respectively. Meanwhile, nonmetropolitan areas gained only a modest 83,000 in the 1970s, then lost 40,000 in the 1980s.

Population change translates into household changes. In the 1980s, the number of metropolitan area households rose by 19.7 percent over 1980, while the count in nonmetropolitan areas had advanced only 3.7 percent. Metropolitan counties added more than 182,000 households, while nonmetropolitan counties added only 19,000 in the 1980s. Part of the difference between population change and household change is due to smaller metro area households (2.60 persons vs. 2.70 in nonmetropolitan areas). At the county level, the corridor between St. Cloud and Rochester stands out as the state's growth center in the 1980s.

Population change reflects economic change. Minnesota lost more than 9,300 farms between 1982 and 1987 while land in farms dropped by more than a million acres. Most counties in the southwestern agricultural corner of Minnesota lost more than 10 percent of their population during the 1980s, typically from 1980 population bases in the 10,000 to 15,000 range. Other counties losing were concentrated in the northwest along the Red River Valley, and in iron mining and tourist areas of the far northeast, where St. Louis County lost more than 24,000 persons.
In the 1980s, Minneapolis–St. Paul MSA population rose 15.3 percent whereas the number of households rose 19.3 percent. Almost all census tracts in outer suburbs of the greater Twin Cities area gained population. These were the locations of new residential developments, and were occupied promptly upon completion.

The ring of suburbs immediately adjacent to the central cities of Minneapolis and St. Paul, especially north, west, and south of Minneapolis, contained mainly tracts that lost population in the 1980s. In many of these areas, which had filled fast in the 1950s and 1960s (e.g., Richfield, eastern Bloomington, the older parts of Edina, St. Louis Park, Robbinsdale, Crystal) children from the end of the baby boom era left home, and elderly spouses were dying in the 1980s. Meanwhile, previously neglected suburban areas along the north and east edges of St. Paul in Ramsey County began filling in with new housing and new populations in the 1980s.

Inside the central cities, patterns are mixed. Parts of St. Paul that had been built up after World War II lost population, especially in the northeast, southeast, and southwest corners of the city. These “post-war suburban developments inside the city” experienced the same changes as did some of the first-ring suburbs of Minneapolis, where development immediately after the war occurred beyond the city limits.

Areas of substantial increase in Minneapolis and St. Paul are mainly of three kinds. One is new housing in and around the downtowns, mainly for middle-income households. St. Paul added 1,200 units of new housing inside the central business district (CBD) in the 1980s, while the Minneapolis CBD gained 1,700 new units. The new housing then attracted additional households, which show up as population increases at the very core.

Additional new housing adjacent to downtown neighborhoods also produced population increase. In Minneapolis, for example, inner areas of Old Northeast and neighborhoods southwest of downtown received new, market-rate housing in the 1980s.

A third type of expansion occurred in new households in existing units. Minneapolis and St. Paul’s stock of old and inexpensive housing is concentrated around the downtowns. Low-income newcomers to the MSA—many of them of minority racial or ethnic background, plus young adults starting their own households, plus student populations—comprise a large share of demand for inner-city housing. As these young households bear children of their own, tract populations increase.
Figure 24. Population Change in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990

The Duluth, MN-WI MSA contains St. Louis County, MN and Douglas County, WI. Our analysis considers only the Minnesota portions of Minnesota MSAs. Population in St. Louis County has been declining for years—232,000 in 1960 and 198,000 thirty years later in 1990 as jobs on the Iron Range and in the Duluth area have disappeared. The City of Duluth had 107,000 residents in 1960, up a few thousand from 1950. But then—as in many central cities—population began a long, slow slide downward. During the 1980s the slide continued as Duluth's population dropped from 93,000 to 85,000. The Duluth city tract map identifies a small handful of tracts in newer areas in the southwest and along the Lake Superior North Shore northeast of downtown that gained population in the 1980s. Most tracts in the city as well as in the county lost population.

St. Cloud grew from 43,000 to 49,000 in the 1980s, while the adjacent counties comprising the MSA also advanced: Benton up 20 percent, Sherburne—along I-94, with convenient commuting to both the Twin Cities and the St. Cloud job centers—up 40 percent, and Stearns up 10 percent.

Moorhead's population advanced from 30,000 to just over 32,000 during the decade, an 8 percent rise, whereas the Fargo-Moorhead, ND-MN MSA, which includes Cass County, ND, plus Clay County, MN, grew by a robust 11 percent (or 16,000) to almost 153,000. Meanwhile, Clay County inched ahead from 49,000 to 50,000. Most MSA growth occurs on the Fargo side of the area, which enjoys a locational advantage in serving much of North Dakota. Moorhead lies remote from most of Minnesota's population and economic activity in a sparsely settled area, but three significant academic institutions, plus other service industries, give the MSA and Moorhead a secure economic base to support a population growing only slowly.

Rochester's population boomed in the 1980s—from 58,000 to 71,000—increasing about 13,000 or more than 22 percent; Olmsted County, which is the only county in the MSA, advanced 16 percent. With almost 30 square miles inside the city limits, much of the expansion could and did occur inside the city. Most tracts added population, as did a few outside, north and south of the city. The few city tracts losing population were clustered around the central business district and the health care complex at city center.
Figure 25. Change in Number of Persons in Nursing Homes, 1980 to 1990

The majority of persons living in nursing homes in 1990 were elderly, although persons requiring skilled nursing care because of chronic physical conditions may be found in these homes regardless of their age. Nursing home populations rose slightly in the 1980s in Minnesota—from 45,000 to 47,000—which was much slower than the rate of increase of the state's elderly population. Persons aged 65 and older comprised 11.8 percent of the state's population in 1980, then rose to 12.6 percent in 1990—an increase of more than 30,000 persons.

Persons in nursing homes in Minnesota's metropolitan counties accounted for a steady 56 percent of the state's total over the decade, rising from 25,000 to 26,000 by 1990. More than two-thirds of the state's population lives in the metropolitan counties, so nursing home populations live disproportionately in nonmetropolitan counties and show no recent tendency to congregate in metropolitan counties as has total population.

The map of change in nursing home populations discloses the modest ups and downs of nursing home populations during the 1980s. Rates of change are reflected in shading patterns, but in most counties these rates are small and may reflect the opening or the expansion of single facilities. Notable increases occurred during the 1980s in the counties of Anoka (+256), Dakota (+442), Hennepin (+151), Olmsted (+219), Ramsey (+750), and Stearns (+324). Most counties had small nursing home populations overall and experienced little notable change. In 1990, the counties with the largest nursing home populations were Hennepin (10,700), Ramsey (4,800), St. Louis (2,600), Dakota (1,500), and Olmsted (1,000).

At a time when the elderly population of Minnesota is expanding briskly, the relative stability of the nursing home populations may indicate that the state's elderly for the most part continue to be self-sufficient.
Figure 26. Change in Number of Persons Living in Group Quarters in Minnesota, 1980 to 1990

All persons not living in households are classified by the Census Bureau as living in group quarters. Three categories are recognized: "institutionalized persons" (patients and inmates restricted to the building or grounds); "noninstitutionalized group quarters" (college dorms, military quarters, agricultural workers' dorms, emergency shelters, etc.); and "other persons in group quarters" when there are ten or more unrelated persons living in the unit (rooming houses, group homes, religious group quarters, college quarters off campus, etc.).

The number of persons in Minnesota group quarters dropped 1 percent in the 1980s to just over 117,000. Metropolitan counties dropped 2 percent while nonmetropolitan counties rose about 1 percent. The complex composition of this total makes generalizations difficult, but the combination of college and university students, prison inmates, and residents of state hospitals comprises a significant portion of the total.

Leading counties, populations in group quarters, and notable contributors to the totals include Anoka (2,000: state hospital); Blue Earth (4,100: Mankato State University); Clay (4,200: Moorhead State University, Concordia College); Hennepin (23,900: University of Minnesota, plus full range of group quarters); Nicollet (2,600: Gustavus Adolphus College, state hospital); Olmsted (2,600: nursing homes); Ramsey (14,704: University of Minnesota plus several private colleges, convents, and seminaries); Rice (5,700: Carlton and St. Olaf colleges; nursing homes); St. Louis (6,600: University of Minnesota–Duluth; College of St. Scholastica); Stearns (6,700: St. John's University and Monastery; College of St. Benedict; state prison); Washington (2,800: Stillwater and Oak Park Heights prisons); and Winona (3,800: Winona State University; St. Mary’s College).

Changes in totals for each county depend on the local mixture of circumstances. Some colleges' enrollments were declining, whereas others were growing. The share of persons under 18 years of age declined during the 1980s, so group homes that served troubled youth were drawing from a pool that was shrinking compared with other age cohorts. Prison populations were rising, but nursing home populations overall were fairly stable even though the number of elderly rose sharply during the decade.
Stores and shops built at streetcar stops during early decades of the twentieth century usually featured professional offices with housing on the upper floors. Professional offices are usually gone today, but the apartments persist as part of a city’s low-cost housing stock.
Figure 27. Change in Number of Foreign-Born Persons in Minnesota, 1980 to 1990

The number of foreign-born persons in Minnesota over the years has depended on rates of immigration into the United States, and the ability of the state to attract immigrants from other states after landing in the United States. Once here, they require housing. Their ability to pay for housing depends on economic circumstances, which vary from time to time and from group to group.

Minnesota received a substantial number of late-19th-century immigrants from northwestern Europe—mainly Germany and Scandinavia—who settled on farm land and in the major cities. Subsequently the Iron Range participated in the major immigrant influx from eastern, southeastern and southern Europe in the decades just prior to World War I. Following the immigrant exclusion acts of the 1920s, there was relatively little fresh immigration into Minnesota until the end of the Vietnam War in the mid-1970s.

Today Minnesota’s map of change in the number of foreign born reflects the distribution of a mainly elderly population of European origin from earlier periods, and a recently arrived, younger population of Asian, Latin American, and African origin, plus persons from the former socialist states of Eastern Europe and the former Soviet Union. In the 1970s, Minnesota’s foreign-born population rose from 98,000 to 107,000 (up 9.8 percent), and to 113,000 in 1980 (up 5.2 percent). As the numbers have risen, the location has shifted toward the metropolitan counties for two reasons. First, the elderly foreign born in nonmetropolitan counties have been dying; second, new immigrants—either directly from abroad or relocated to Minnesota from other parts of the United States—have settled disproportionately in the metropolitan counties where educational and new job opportunities are concentrated.

Leading counties in 1990 include Anoka (4,100 foreign born), Blue Earth (1,200), Dakota (6,300), Hennepin (44,200), Olmsted (4,200), Ramsey (27,400), St. Louis (3,800), and Washington (2,700). As numbers rise in the metropolitan counties, they drop in many nonmetropolitan counties. In St. Louis County, for example, the foreign-born population dropped from 11,000 in 1970 to 3,800 in 1990. The same decline occurred in Wascana County, another Iron Range county, where the total dropped from 1,200 to 400 in the same period.
Figure 28. Change in Number of Foreign-Born Persons in the Twin Cities, 1980 to 1990

In the 1980s, only thirteen Minnesota counties gained foreign-born populations; the other seventy-four lost foreign born. Of those that gained, the major metropolitan counties received the most: Dakota (1,400), Hennepin (7,200), Olmsted (1,800), Ramsey (8,200), and Washington (400).

In the greater Twin Cities area, census tracts that experienced a decrease in the number of foreign born in the 1980s are scattered throughout the region, with notable concentrations around the edges of the central cities and first-tier suburbs. Decreases usually signify elderly foreign born who died or relocated to retirement housing during the decade.

Central city tracts with notable increases are concentrated in low-income housing areas in inner south Minneapolis just south of downtown, in publicly assisted housing areas of North Minneapolis where significant numbers of Asian immigrants reside, and in east Minneapolis in the vicinity of the University of Minnesota.

In St. Paul, major concentrations of tracts with increasing numbers of foreign born lie just northwest, north, and northeast of downtown in areas housing important concentrations of Southeast Asian newcomers.
Figure 29. Change in Number of Foreign-Born Persons in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990

Only thirteen Minnesota counties gained foreign-born populations; the remaining seventy-four lost foreign born. Of those that gained, the major metropolitan counties received the most, and Olmsted (Rochester) with an increase of 1,800 was a conspicuous gainer.

Tracts with major declines cover the City of Duluth and the Duluth MSA, where elderly immigrants—many of whom arrived before World War I—died or relocated during the decade. Most St. Cloud area tracts experienced declines; only a few reported an increase, and those changes were small.

The City of Moorhead enumerated some notable increases, related no doubt to its academic environment. Rochester's hospital, clinic, and related health enterprises along with its computer and related high-tech manufacturing were able to attract and retain conspicuous numbers of foreign-born persons who took up residence in all parts of the city.
Successful experiments of the 1970s, which replaced obsolete downtown commercial and industrial uses with new medium- and high-density housing, have encouraged a continuing expansion of housing in and around the city core that promotes downtown living and commercial vitality.
Figure 30. Change in Number of Nonfamily Households in Minnesota, 1980 to 1990

Perhaps the most dramatic change in household composition in the 1970s and 1980s, which has had a direct bearing on the changing nature of demand for housing, has been the rapid increase in nonfamily households. In the 1970s, three in seven of the 306,000 households added in Minnesota were nonfamily. In the 1980s, just about half of the 202,000 households added were nonfamily.

Nonfamily households include primarily single persons (never married, divorced, separated, widowed) living alone, unmarried and unrelated roommates, same-sex couples, and unmarried male-female couples. Each of these groups has been increasing in number for distinctive reasons.

Over the state, the counties with significant absolute and relative increases lie in and around the St. Cloud-Rochester corridor, and in the recreation and retirement areas of north-central Minnesota.

Only two counties saw a decrease: Wilkin (-195) and Big Stone (-86) on the western Minnesota border—both areas of major population decline during the 1980s.
Figure 31. Change in Number of Nonfamily Households in the Twin Cities, 1980 to 1990

In the 1980s, while the total number of households in Minnesota rose by 14 percent, the number of nonfamily households rose by 25 percent. About two-thirds of the state’s increase in nonfamily households occurred in the Twin Cities area, where 67,000 additional nonfamily households produced a rate of increase of more than 29 percent—somewhat above the state’s growth rate for such households. This continued the differential trend set in the 1970s, when the state’s total rose by 72 percent, to be topped by the Twin Cities where nonfamily households increased 103,000 or 81 percent.

The 1970s boom in nonfamily households was fueled in large part by the children of the post-World War II baby boom, which peaked in the period 1959-1961. Twenty years later, children born in those peak years were leaving home to form their own households, a large share of which were—initially at least—nonfamily households. Many who did marry later separated or divorced, augmenting numbers of nonfamily households.

At the census tract level, important increases occurred in inner-city apartment districts, but most of the change was distributed through the neighborhoods around the edges of Minneapolis and St. Paul, and in first- and second-tier suburbs. Part of these increases can be attributed to elderly couples in which one of the partners died during the decade and the surviving spouse continued living in the house.

Another source of increase is the apartment and condominium opportunities that began appearing in the inner suburbs in the 1970s and especially in the 1980s to house long-time residents who wanted to give up their single-unit detached houses but wished to remain in or near their home neighborhood. Richfield, Bloomington, Edina, St. Louis Park, Robbinsdale, Crystal, New Hope, Roseville, and other first- and second-ring suburbs display increases that may be explained in part in this way.
Figure 32. Change in Number of Nonfamily Households in Duluth, Moorhead, Rochester, and St. Cloud, 1980 to 1990

Stable population in the Duluth area in recent years was accompanied by relatively low rates of increase in numbers of nonfamily households. Numbers rose only 51 percent in the 1970s (+8,000) when the state totals were advancing 72 percent. In the 1980s, when the state's rate of increase slowed to 25 percent, the Duluth area's totals rose only 11 percent (+2,700). The changes that did occur, however, were scattered throughout the city of Duluth as well as the other census tracts of St. Louis County.

The St. Cloud area tells a different story. In the 1970s, the number of nonfamily households advanced by 111 percent (+6,300)—well ahead of the state's average. And again in the 1980s, the St. Cloud MSA led all metropolitan areas and the state average with an increase of 50 percent (+5,900), whereas the state's average rate of advance stood at 25 percent. Almost all tracts in the city of St. Cloud and in the remainder of the MSA were affected by the overall increases.

The Moorhead/Clay County rate of increase of 82 percent in the 1970s (+2,100) trailed only St. Cloud's brisk advance, but in the 1980s the rate had slowed to 19 percent (+900)—almost Duluth's slow pace.

The Rochester area, which grew fast in the 1970s and 1980s and attracted significant numbers of newcomers, saw its count of nonfamily households rise by 4,100 (77 percent) in the 1970s, then by 2,600 more (27 percent) in the 1980s.
In early times, lakeshore development crowded cabins and houses close together and too close to the water. This led to contamination of the water and overuse of water surfaces. Recent statewide controls and local development ordinances require setbacks and lower densities, which can mean healthier lakes.
Figure 33. Change in Number of Female-Headed Families and Subfamilies in Minnesota with Related Children under 18, 1980 to 1990

Female-headed families and subfamilies with children typically involve divorced, separated, or widowed women with dependent children, or women who have never married and are rearing their children without a partner present. A major share of such households experience housing affordability difficulties because their household incomes are typically well below average compared with those of married-couple families with dependent children.

If the female head is working outside the home, she must arrange for child care, which is always costly as a share of household income if not in absolute terms. If she remains at home to care for her children, it means forgoing earned income and depending on public assistance or help from relatives and others, neither of which is usually sufficient to pay for satisfactory family housing, no matter how low the price may be.

The number of female-headed families and subfamilies with children rose abruptly in Minnesota in the 1980s, from 70,000 in 1980 to 97,000 in 1990—an increase of 39 percent. More than half the increase occurred in the Twin Cities, roughly corresponding to the Twin Cities’ share of the state’s population, but the phenomenon was present statewide. Only four counties saw a decrease, and those were experiencing general population decline (Cook, Lincoln, Pennington, Yellow Medicine). Four other counties saw the number of such households increase by more than 100 percent (Benton, Grant, Mankato, Otter Tail).

Major increases occurred in the counties of Anoka (up 2,200), Dakota (2,500), Hennepin (5,900), Ramsey (3,700), St. Louis (1,000), and Washington (1,000). The St. Cloud MSA had an increase of 1,400.
Figure 34. Change in Number of Female-Headed Families and Subfamilies in the Twin Cities with Related Children under 18, 1980 to 1990

The almost 17,000 increase in the number of female-headed families and subfamilies in the Twin Cities area during the 1980s touched all parts of the region. To be sure, there are concentrations in the low-priced housing areas in and around the cores of the central cities of Minneapolis and St. Paul, but there are increases throughout suburban areas as well. Major clusters of tracts recording increases are found in northern Dakota County, southeastern and northeastern Hennepin County, and southern Anoka county.
Figure 35. Change in Number of Female-Headed Families and Subfamilies in Duluth, Moorhead, Rochester, and St. Cloud with Related Children under 18, 1980 to 1990

The Duluth area had an increase in the 1980s of more than 1,000 female-headed families and subfamilies with children. Almost all tracts in the MSA shared in the increase.

The same pervasiveness was characteristic in the St. Cloud MSA, where most tracts shared in the increase of almost 1,400. In the Moorhead/Cay County area the total increase was just over 300. Nevertheless, most tracts had relatively high increases.

In the Rochester MSA, only a few tracts saw a decrease as the overall totals of female-headed families and subfamilies advanced by more than 700 during the decade.
Mixed-use developments on new suburban sites feature medium-density, upper-income housing adjacent to retail and recreational uses. Harmonious landscaping blends with abundant community open spaces.
Chapter 8. Changes in the Demand for Housing by Nontraditional Households

Most of the housing in Minnesota was built for what has been regarded as the traditional family—a married couple with dependent children under 18 years of age. In the 1990 census, such families comprised only 35 percent of all Minnesota households. Historically, tax laws, zoning laws, and housing codes have accorded special privileges to such households and have favored housing types that cater to their wants and needs as measures to support that form of social reproduction of society.

Household types other than the traditional household model—young singles, elderly couples and singles, childless couples, same-sex couples, single-parent families, extended and multigenerational families, groups in group homes, plus others living alone or in institutions—comprise almost two-thirds of all households and groups living in group quarters. Their numbers are rising steadily, and their share of all households has been rising as well (see Figures 36-49).
A University fraternity house is one example of what the census terms "group quarters."

-72-
Figure 36. Ratio of Males to 100 Females, Ages 16 to 34, in Minnesota, 1990

For the large majority of cases, household formations of an enduring kind involve male-female couples. Because people tend to pair up with those who live near them, the ratio of males to females at the county level provides a good indicator of conventional household formations, which provides much of the traditional basis for housing demand.

In Minnesota in 1990, the number of males and females ages 16 to 34 was closely balanced at 662,000 to 666,900, with patterns of migration of young people bringing about imbalance at the local level. In some essentially agricultural counties, young men more than young women remain near home to help take over farming operations and family businesses while the women migrate to college and jobs in other counties, seldom if ever returning permanently to their counties of origin.

Differential migration trends for young men and young women appear to contribute to high male/female ratios in counties such as Jackson (1.11), Lincoln (1.11), and Nobles (1.11) in the southwestern part of Minnesota; Todd (1.11), Traverse (1.10), and Wilkin (1.14) in the west; and the sparsely populated northern counties of Koochiching (1.22), Lake of the Woods (1.12), Marshall (1.11), Pennington (1.14), Red Lake (1.12), and Roseau (1.14) from which young women evidently migrate in search of better opportunities, with few constraints holding them back. At the other extreme are counties with unusually low male/female ratios, such as Brown (.81), Chippewa (.65), Clay (.87), Cook (.67), Lac qui Parle (.77), and Stearns (.76).

In four of the metropolitan areas—which evidently present attractive destinations for students and workers—young men outnumber women: in Twin Cities counties (by 4,000), Clay/Moorhead (by 1,300), Olmsted/Rochester (by 1,000), and St. Cloud MSA (by 4,500). Meanwhile, in the St. Louis County-Duluth area, a place experiencing continued out-migration, young men outnumbered young women by 200.
Figure 37. Ratio of Males to 100 Females, Ages 16 to 34, in the Twin Cities Area, 1990

In the Twin Cities area—a place that evidently presents attractive destinations for students and workers—young women outnumber men by 4,000, but this area-wide average hides significant variations within the metropolitan region.

There is a distinct concentration of males compared with females in the residential and University neighborhoods in Northeast and Southeast Minneapolis, and a concentration of females in the apartment district south and southwest of downtown Minneapolis in the direction of the Lake District. Tendencies that could bring these results about would include young men remaining in their parents' homes while entering the work force, or living in dormitories and boarding houses near the University while attending schools, whereas young women set up independent housekeeping in their own apartments.

Highs and lows in the male/female ratios are less marked in St. Paul, which generally receives fewer young immigrants than does Minneapolis. Apartment areas in various tracts in the southwest corner of the city house a significant number of single and retired women living alone, which can tilt a tract's sex ratio to low levels.

Outside the central cities, most areas feature sex ratios close to 1.0, although in tracts with unusually high percentages of apartments, females appear to dominate. In peripheral tracts in and near rural areas male dominance occasionally appears.
Figure 38. Ratio of Males to 100 Females, Ages 16 to 34, in Duluth, Moorhead, Rochester, and St. Cloud, 1990

Each household type and each living arrangement requires somewhat different housing. The ratio of males to females in a county, a city, or a neighborhood reflects what is happening in population composition and implies the possibility of a continuation of present housing wants and needs.

Usually the ratio of males to females hovers around 1.00, as it does for the Twin Cities (.99) and for the Duluth area (1.01). In Moorhead (.87) and St. Cloud (.86), where college and university populations are well above average, the ratios depart from normal. Inside the cities, at the tract level, university housing (Duluth, Moorhead, St. Cloud) and prison population (St. Cloud) can trigger sharp departures from area-wide averages.
Figure 39. Ratio of Black Males to 100 Black Females, Ages 15 to 59, in Minnesota, 1990

In 1990, the census enumerated 95,000 black persons in Minnesota. Just over 28,000 males and something over 26,000 females in this age group were reported in the state, yielding a statewide ratio of males to females of 1.07. Just as most of the state's total black population lived in the Twin Cities in 1990, almost all the black population ages 15 to 59 lived in the greater Twin Cities area. In fact, only eight of eighty-seven Minnesota counties had a total of more than 400 black persons in 1990.

The number of black males ages 15 to 59 significantly exceeded the number of enumerated black females of the same age in the counties of Anoka, Olmsted, St. Louis, Stearns, and Washington. Most of the state's black population is made up of U.S. natives, but a significant number are recent immigrants from Africa and other parts of the world.

Reasons for ratios departing from parity or from the state average of 1.07 cannot be inferred from these maps, but undoubtedly have something to do with household composition, employment opportunities and school attendance, and patterns of selective migration among the counties of the state and between Minnesota and other parts of the United States and the world.
Figure 40. Ratio of Black Males to 100 Black Females, Ages 15 to 59, in the Twin Cities, 1990

There were just over 27,000 black males in the 15 to 59 age group enumerated by the census in the Twin Cities area in 1990, and just over 26,000 females in the same age group, for an overall male/female ratio of 1.05—somewhat lower than the statewide ratio of 1.07. But the metropolitan average appears to be rather unrepresentative of most tracts in the area.

In the central cities of Minneapolis and St. Paul, tracts with the lightest shading indicate places where females evidently outnumber males to a significant extent or where no black males in this age group were enumerated. Such clusters occur in the Near North community of Minneapolis, parts of upper Northeast Minneapolis near the river, and a group of contiguous tracts south of downtown. In St. Paul, females appear to outnumber males in and around the Summit–University area west of downtown, in the North End, and on the West Side south of the central business district.

Following publication of 1990 census results, representatives of minority groups challenged reported counts asserting that census takers failed to enumerate fully their members. Specifically, it was charged that low-income adult black males were notably undercounted, a claim that is difficult to defend or refute, especially for small areas and for small population groups.

In outer suburban tracts, small numbers of black males and even smaller counts of black females (or none at all) yield extensive areas of dark shading.
Single-family houses built in the decade following World War II provided 900 to 1,200 square feet of living space for thousands of families rearing the Baby Boom generation. They were built in the outer areas of central cities and in the first-tier suburbs of Minnesota's major urban areas. These wood frame houses had four, and sometimes five, rooms on the first floor, leaving the upstairs to be finished as children arrived and means permitted.
Figure 41. Poor, White Female-Headed Families in Minnesota with Related Children under 18, 1990

Every county has some number of poverty-level white women heading families with related dependent children. As the number of characteristics in a census cross-tabulation increases—poor, white, female head, dependent children—the threshold number of households with all of these characteristics that a county must contain before data will be published rises. Only about a fourth of Minnesota's eighty-seven counties met the threshold conditions, and for these a total of 17,600 are mapped.

Counties that show up dramatically are those with unusually large populations (Hennepin, Ramsey, St. Louis, Anoka, Dakota, and so forth), plus those that are experiencing above-average economic hardship (for example, Chippewa, Beltrami) or that have concentrations of households with special needs (for example, Hispanic newcomers in Kandiyohi).
Figure 4.2. Poor, White Female-Headed Families in the Twin Cities with Related Children under 18, 1990

There were just over 12,000 white female-headed families in the Twin Cities area in 1990 with 1989 incomes below the poverty line, and with related children under 18 years of age.

While it is certainly true that the densest clusters of these disadvantaged families are located in the city of Minneapolis south and northwest of downtown, and in St. Paul north of downtown, it is also the case that the large majority lives outside the central cities. There were 2,300 such families in Minneapolis and 2,200 in St. Paul in 1990, leaving 7,600 scattered throughout the greater Twin Cities area.

In suburban Hennepin County, communities reporting significant numbers of white, female-headed families with children under 18 include Bloomington (222), Brooklyn Center (191), Brooklyn Park (595), Crystal (97), Eden Prairie (172), Edina (65), Golden Valley (65), Hopkins (126), Maple Grove (75), Minnetonka (80), New Hope (127), Plymouth (172), Richfield (177), Robbinsdale (48), and St. Louis Park (158). In suburban Ramsey County, significant numbers were enumerated in Maplewood (230), Mounds View (94), New Brighton (65), North St. Paul (96), Roseville (116), and Shoreview (66).

The fact that many suburban communities report high average household incomes often obscures the degree of family deprivation within otherwise prosperous areas. What is true on the average for a tract is seldom true for all households living in the tract.

Some households reporting low incomes may have substantial assets, such as the house they live in, but the poverty measures used by the Census Bureau consider only current income. For families without assets, their difficulties in obtaining decent suburban housing at modest cost are serious because rentals there are usually in newer buildings at above-average prices, and in many communities opportunities are few in number.
Figure 45. Poor, White Female-Headed Families in Duluth, Moorhead, Rochester, and St. Cloud with Related Children under 18, 1990

Most of these households consist of divorced, separated, widowed, or never-married women with their children who have few assets and who are experiencing temporary or—more likely—serious long-term financial hardship accompanied by continuing family responsibilities. These families are generally dispersed throughout their cities and metropolitan areas, although some concentration is notable, mainly in the older central city areas where lower-priced housing is usually available.

In general, when a family breaks up, the mother often tries to remain in the family home as long as financially feasible despite a typically abrupt decline in household income. This preference for geographical stability accounts for part of the dispersal of families throughout cities and MSAs as shown here.
Figure 34. Poor, Black Married-Couple Families in the Twin Cities with Related Children under 18, 1990

For some tabulations a threshold of 400 was needed in order for the Census Bureau to publish detailed cross-tabulations relating poverty status, family status, marital status, and the presence of dependent children in the family. For other tabulations, a threshold of 1,000 was required. The result is that many counties with small counts of families of interest go unreported.

Six counties in Minnesota had 400 or more black persons at census time 1990—St. Louis (Duluth), and five counties in the Twin Cities area. The six counties enumerated 649 such families, with 8 in the Duluth area and the remaining 641 in the Twin Cities area. The dot map based on tract-level detail shows the Minneapolis families clustered in the traditional neighborhoods of black population concentration in South Minneapolis and Near North Minneapolis. The remainder of the Minneapolis families lie east of city center, scattered around the University of Minnesota's West Bank and Dinkytown areas, and southeast of downtown along the Hiawatha-Minneaha corridor as far as Minnehaha Park, located in the southeastern corner of the city.

In St. Paul, most of the families are found west of downtown in and around the concentration of black population in the Summit—University area, with a small secondary cluster on the far East Side near the city limits.
Figure 45. Poor American Indian Married-Couple Families in the Twin Cities with Related Children under 18, 1990

Poverty is widespread among Indian households in Minnesota, but a useful picture of Indian family poverty comparable to the profiles of other groups is made difficult by small numbers in some counties, and counts for American Indian reservations and trust lands, which are excluded from other cross-tabulated county totals because of high thresholds within census disclosure rules. There are fifteen such areas in Minnesota for which census data were collected and published for 1990.

The number of households/occupied units in each (with number below the poverty level) are as follows: all fifteen areas, 8,772 (2,734); Bois Forte (Nett Lake), 115 (53); Deer Creek, 64 (15); Fond du Lac, 1,086 (239); Grand Portage, 125 (28); Leech Lake, 3,109 (954); Mille Lacs, 106 (81); Minnesota Chippewa Trust Lands, 11 (3); Prairie Island, 13 (6); Red Lake, 948 (481); Sandy Lake, 9 (6); Shakopee, 76 (2); Upper Sioux, 14 (6); Vermillion Lake, 12 (0); White Earth, 3,005 (849).

In the ten counties for which poor Indian married-couple families with dependent children were tabulated and published, a quarter are in the Twin Cities—mostly in Minneapolis; another quarter are in the Duluth area, and half are scattered among non-metropolitan counties.

In the Twin Cities area, poor American Indian married-couple families with dependent children live mainly in three locations: southeast of the Minneapolis central business district, North Minneapolis, and in a small area of upper Northeast Minneapolis. A few also live in the northwest suburbs.
New high-rise inner-city residential development along the riverfront places housing next to commercial activity where, formerly, there was heavy industry.
Figure 46. Occupied Housing Units in Minnesota with No Motor Vehicle Available, 1990

Of the 1.6 million occupied housing units in Minnesota in 1990, 8.6 percent (142,000) units had no motor vehicle (car, van, pickup, or panel truck) available for the use by the occupants. A vehicle may be lacking because there is no qualified driver in the household, because the household cannot afford to own and operate a vehicle, because the residents prefer to walk or to use public transit, or because the housing location makes it too difficult to store or otherwise secure a vehicle when it is not in use. There may be other reasons as well.

Households without a motor vehicle available live in all parts of the state, distributed essentially within the general population. In major urban areas where transit services (bus, taxi, van pools, etc.) are available, the absence of a car or truck can usually be accommodated.

In Minnesota's small cities, limited bus service is usually available, as is taxi service for occasional use. In such settings, it is possible for many people to live within comfortable walking distance of the town center, and to satisfy many of their needs by walking.

In the smallest towns and rural areas, households must depend on friends and relatives for transportation, or else limit their movement to places they can reach on foot. Several communities of Old Order Amish people live and farm in different parts of Minnesota. For them, good local mobility is provided by horse-drawn buggies, which are not counted with motor vehicles.
Figure 47. Occupied Housing Units in the Twin Cities Area with No Motor Vehicle Available, 1990

There were 85,000 households in the greater Twin Cities area in 1990 that lacked a motor vehicle for their use, about 60 percent of the statewide total, which is more than the metropolitan area's 56 percent share of households. Two reasons probably contribute to this disparity. First, there are significant numbers of low-income households in the Twin Cities. But second, transit services in the Twin Cities are better developed for the able-bodied as well as for handicapped persons than in any other part of the state. It is convenient for many households to live rather comfortably without a motor vehicle, and they do so.

Twin Cities households without a motor vehicle are concentrated in the cities of Minneapolis and St. Paul, due to a combination of low-income housing near the cores of the two cities plus the good transit service available in just those areas. The two factors combine at the same places.

The highest concentration is in the neighborhoods of Minneapolis just southwest of downtown, where metropolitan populations densities are highest in the Twin Cities and where transit services into downtown and along the southwest corridor toward the Southdale area are among the best in the state.

Each dot represents fifty housing units.
Figure 4.8. Occupied Housing Units in Duluth, Moorhead, Rochester, and St. Cloud with No Motor Vehicle Available, 1990

It is convenient for some households to get by—and even to live rather satisfactorily—without a motor vehicle, and many evidently choose to do so. For others, physical disability or financial limitations prevent them from owning and operating their own motor vehicles.

The Duluth area had 5 percent of the state’s households in 1990, but 7 percent of the households lacking a motor vehicle. The explanation undoubtedly lies along lines similar to the Twin Cities story. First, low-income households concentrate in the inner parts of the central cities of the state’s MSAs. Second, transit services generally are better developed in neighborhoods in and around the downtown areas where bus lines converge, and the larger the city the more abundant on average is its transit service.

Other households lacking motor vehicles live scattered throughout the MSA counties, distributed generally along with the population at large. Duluth MSA reported 9,900; Moorhead MSA, 1,400; Rochester MSA, 2,700; and St. Cloud MSA, 4,100.
Figure 49. Change in Number of Persons in Minnesota Working at Home, 1980 to 1990

Persons working at home include the self-employed who work out of their home as independent contractors in sales, consulting, or other lines of work, and persons who are employees but who do their work for their employer in their own home. Today's improved telecommunications systems, computers, telefax technologies, and fast delivery services mean that many jobs can not only be done at home, but often can be done faster and more efficiently in or from one's home.

Another basis for the expansion in numbers of persons working at home is the industrial restructuring under way in which many companies and organizations have learned that they can cut costs, improve products and services, and increase their bottom-line financial performance by contracting out work that was formerly done by full-time or part-time employees. The total costs to employers of hiring regular employees has been judged by some to be excessive compared with the alternative of contracting work to eager and competitively priced consultants and subcontractors, many of whom work at home.

The Internal Revenue Code makes provisions for self-employed persons working at home as well as employees working at home for whom there is no other place of work provided by their employer. In both these cases, the kinds of housing needed to support the work and the ways in which part of the cost of housing becomes a deductible business expense have some effect on the amount of demand for housing and the type and location of housing desired. To the extent that increasing numbers of workers have no need to make a daily journey to work, telecommuting lessons demand for highway capacity.

Persons working at home in Minnesota in 1990 numbered 116,000, up 16,000 (16 percent) from 1980, which was somewhat faster than the rate of growth of households (14 percent). Even though the total rose, fifty-two counties saw numbers drop by a few dozen or a few hundred workers. Declines are mainly in agricultural areas of the state, probably reflecting people retiring from full-time farming or leaving the farm business during the troubled 1980s. In the Twin Cities area, the number of persons working at home rose by 19,000 in the 1980s, a rate much faster than the increase in the number of households (83 percent vs. 21 percent). Duluth had a similar experience (+64 percent vs. -3 percent), as did the Moorhead area (28 percent vs. 7 percent). Evidently there is no clear and direct relationship between rates of growth in the local economy—whether metropolitan or rural—and rate of expansion in numbers of persons working at home. Persons working at home in the Rochester area increased only 11 percent, whereas the number of households advanced 23 percent in the 1980s. The same occurred in the St. Cloud area (12 percent vs. 30 percent).
Chapter 9. Low-Income Renters

Low-income households can be of any age or composition—from young singles, to young families with dependent children present, to elderly couples living on Social Security and pensions, to elderly singles.

Although household incomes are generally correlated with household wealth, it happens that low-income households differ substantially in their wealth positions, from those with zero or negative net worth, to retired middle-class couples with significant assets but only modest monthly cash flow. Quite often, though, in an essentially free market for housing, people of comfortable means choose to occupy low-rent units, which means that those units are unavailable for households of more limited means.

Embedded in this heterogeneous group are households whose monthly rent extracts a painfully large share of monthly income, causing substantial strains on already stretched budgets. The problem is worst in the large urban areas of the state, which attract people seeking economic opportunity but then confront them with high levels of rents.

Cross-tabulations of income levels with proportions of income that go for rent allow us to identify places where severe problems appear to concentrate. Sometimes public policy responds to needs by means of income supplements in the form of cash or vouchers to ease the rent burden. Other solutions work on the supply side to expand the number of units that require a low monthly rent.

Public housing is one such solution, although it is uncommon as a fraction of all housing units in the state (see Table 8). In Minnesota in 1993 there were just over 22,000 units of public housing owned and operated by the state's 127 housing and redevelopment authorities (HRAs). The largest was the Minneapolis HRA with more than 6,200 units in 39 projects, some of which featured units on scattered sites throughout the city. The St. Paul HRA had more than 4,000 units in 32 projects, some of which also had scattered-site units. The Duluth HRA had in excess of 1,100 units in 13 conventional projects. Eight Indian reservation-sponsored HRAs operated public housing projects on reservations. The remainder of Minnesota's public housing was owned and operated by HRAs sponsored by municipalities, counties, or groups of counties (see Figures 50-55).
Table 8. Public Housing in Public and Indian Housing Projects in Minnesota, by Housing and Redevelopment Authority (HRA), 1993

<table>
<thead>
<tr>
<th>HRA</th>
<th>Units</th>
<th>HRA</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 1,000 Units:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Paul</td>
<td>4,092</td>
<td>Worthington</td>
<td>111</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>6,206</td>
<td>Alexandria</td>
<td>121</td>
</tr>
<tr>
<td>Duluth</td>
<td>1,134</td>
<td>Aitkin County</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Cloud</td>
<td>245</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marshall</td>
<td>139</td>
</tr>
<tr>
<td>300-500 Units:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hibbing</td>
<td>303</td>
<td>Willmar</td>
<td>166</td>
</tr>
<tr>
<td>Winona</td>
<td>366</td>
<td>Fairmont</td>
<td>124</td>
</tr>
<tr>
<td>Leech Lake Reservation</td>
<td>428</td>
<td>Mankato</td>
<td>173</td>
</tr>
<tr>
<td>White Earth Reservation</td>
<td>440</td>
<td>Albert Lea</td>
<td>172</td>
</tr>
<tr>
<td>Fond Du Lac Reservation</td>
<td>364</td>
<td>Red Wing</td>
<td>118</td>
</tr>
<tr>
<td>Red Lake Reservation</td>
<td>463</td>
<td>Hutchinson</td>
<td>100</td>
</tr>
<tr>
<td>Austin</td>
<td>344</td>
<td>Columbia Heights</td>
<td>100</td>
</tr>
<tr>
<td>Dakota County</td>
<td>301</td>
<td>St. Louis Park</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Northwest Minn.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multicounty</td>
<td>107</td>
</tr>
<tr>
<td>100-300 Units:</td>
<td></td>
<td>Subtotal</td>
<td>17,434</td>
</tr>
<tr>
<td>Virginia</td>
<td>271</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brainerd</td>
<td>179</td>
<td>97 HRAs with under</td>
<td></td>
</tr>
<tr>
<td>South St. Paul</td>
<td>293</td>
<td>100 units (total)</td>
<td>4,708</td>
</tr>
<tr>
<td>Benson</td>
<td>108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moorhead</td>
<td>202</td>
<td>Total</td>
<td>22,142</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Housing and Urban Development.

Public housing projects in the Twin Cities provide low-cost shelter for low-income immigrants and native people as they gain a foothold in the local economy.
Some of the circumstances surrounding households with low incomes paying low rents include those in publicly owned or publicly assisted housing, persons renting from relatives or friends at below-market rates, and poor households who manage to locate extremely low-priced rentals, which are scarce in the state’s major urban areas.

When places are steadily increasing in population, incomes on average are rising, and demand for existing housing normally exceeds supply, driving up the cost of rentals. In the Twin Cities area, which has been expanding vigorously for several decades, housing prices are generally high and move steadily higher. Of the 5,000 households in the state who simultaneously had low incomes and paid low rents in 1990, only 1,800 (36 percent) lived in the Twin Cities.

In the central cities they were distributed—not surprisingly—in and near the core neighborhoods where publicly assisted housing is generally found and where the lowest-priced market-rate housing is concentrated.
Minnesota counted 5,000 low-income, low-rent households in 1990, of which 36 percent were in the Twin Cities area. Cases such as these, which are few in number, come about from public assistance in the form of housing-assistance vouchers that can be used in many locations, or public housing, or the rental of extremely low-quality units that are correspondingly low priced.

The estimated 1,800 units in the Twin Cities are scattered across the central cities and into the suburbs, but with little in the way of geographical concentrations.
Figure 52. Renter Households in Duluth, Moorhead, Rochester, and St. Cloud with 1990 Gross Monthly Rent Less Than 20 Percent of Income, and with 1989 Income under $10,000

There are only a few low-income renter households who manage to obtain rental units that absorb less than 20 percent of their income. When that happens in large cities, it is often due to public assistance in the form of housing-assistance vouchers or public housing, or the rental of extremely low quality units that are correspondingly low priced.

Minnesota counted 5,000 such low-income, low-rent households in 1990, of which 56 percent were in the Twin Cities area, and just over 600 more households (12 percent of state total) in the state's four other metropolitan areas. Notable concentrations occur near the cores of the central cities, as well as in and near the Iron Range cities of Virginia and Hibbing. Despite the apparent need for more good quality units at affordable prices, the present inventory of such units in our MSAs is extremely small.
City-sponsored residential redevelopment yields new housing to replace obsolete units. Cost of property acquisition, clearance, land price write-downs, and construction subsidies support this type of neighborhood renewal, but hard-pressed city budgets limit renewal activity to a fraction of what is needed.
Figure 53. Renter Households in Minnesota with 1990 Gross Monthly Rent 35 Percent or More of Income, and with 1989 Income under $10,000

Housing analysts generally agree that the typical renter household can spend no more than 30 to 35 percent of its income for housing without incurring exceptional financial difficulties. This rule of thumb fails to recognize the different asset positions of households. A household with substantial savings may choose to draw down its savings accounts to obtain the housing it wants and the ratio of rent to income may rise to high levels. The rule of thumb also ignores differences in tastes and consumption preferences among households. Some households prefer to spend more money on housing and less on other goods and services. In general, though, low-income renters need low-priced rental options where they choose to live or are forced to live, and low-priced opportunities are few across Minnesota.

In 1990, whereas there were only about 5,000 households with low incomes that were able to locate low-priced rentals, there were almost 81,000 households statewide who had 1989 incomes under $10,000 and who paid more than 35 percent of their incomes for rent in 1990. Ten counties had more than 1,000 such households—Anoka, Blue Earth (Mankato area); Clay (Moorhead area); Dakota, Hennepin, Olmsted (Rochester area); Ramsey, St. Louis (Duluth and the Iron Range); Stearns (St. Cloud); and Washington. In other words, households likely to be under financial stress are distributed throughout the state approximately as population is distributed, with major concentrations in the places where low-priced rentals are concentrated. But regardless of the low level of rentals, the proportion that they absorb of household incomes is still high.
Low-income households can be of any age or composition—from young singles, to young families with dependent children present, to elderly couples living on Social Security and pensions, to elderly singles. Low-income households also differ in their wealth positions, from those with zero or negative net worth, to retired middle-class couples with significant assets but little monthly cash flow.

Embedded in this heterogeneous group are households for whom their monthly rent takes a painfully large share of monthly income, causing substantial strain on already stretched household budgets. The problem is worst in the large urban areas of the state, which attract people seeking economic opportunity but then present them with high rent levels.

Of the state’s 81,000 households whose gross rent is 35 percent or more of their monthly income, and whose annual income was under $10,000, 45,000 (56 percent) lived in the Twin Cities area. Geographical concentrations were greatest in the central cities of Minneapolis and St. Paul, where the largest share of the low-cost housing in the Twin Cities area is located.

Other large clusters of low-income, high-rent households live in the first ring of suburbs around the central cities and undoubtedly include substantial numbers of pensioners whose children are grown and who have vacated their family homes in favor of apartment life, which is convenient and attractive for them, but which absorbs a significant fraction of their monthly incomes.

Another group is single parents, recently divorced or separated, who make every effort to remain in their old neighborhoods so that children can remain in the same schools and close to other family and friends, despite the financial strain this creates.
Minnesota had 5,000 low-income households with low rent in 1990, but 81,000 low-income households with high rent. The Twin Cities area, with its high demand and strict code enforcements ensuring housing quality along with higher average incomes, had 56 percent of the state’s total—just matching its 56 percent of all state households.

The other four MSAs had 15 percent of the low-income, high-rent households but only 12 percent of the state’s 1990 households, so there is something of a concentration of such households in the smaller metropolitan areas.

Where are these low-income, high-rent households living? They can be found in all parts of all four metropolitan areas, with concentrations in the older, higher-density core areas where age and obsolescence of housing means reduced demand and lower prices, and where a larger share of the units in those locations are built in multiple-unit structures and are available for rent.
Small frame houses in Minnesota’s towns provide good-quality, economical shelter on large lots.
Chapter 10. Poverty Populations

Poverty thresholds were established by a federal interagency committee to identify poverty status of households for statistical purposes. The income cutoff used by the Census Bureau to determine the poverty status of families and unrelated individuals included a set of forty-eight thresholds, arranged in a two-dimensional matrix consisting of family size (from one person to nine or more persons) cross-tabulated by presence or absence of family members under 18 years (from no children present to eight or more children present). Unrelated individuals and two-person families were further differentiated by age of the household (under 65, and 65 and older).

Total income of each family or unrelated individual in the sample was tested against the appropriate poverty threshold to determine the poverty status of that family or unrelated individual. The weighted average poverty threshold for a family of four persons in 1989 was $12,674. For a single unrelated individual it was $6,310.

Minority racial and ethnic groups in Minnesota generally experience higher rates of poverty by these measures than do households in the majority white and non-Hispanic populations. Figures 56-60 describe locations where numbers of poverty households are increasing. These patterns are becoming more widely dispersed within the metro areas, which may indicate that access to badly needed affordable housing throughout Minnesota’s metro areas is expanding.
Figure 56. Change in Number of Elderly Persons in Households with Incomes below the Poverty Line in Minnesota, 1980 to 1990

Low-income elderly live in all parts of Minnesota, urban and rural. A majority of persons age in place. As people live longer the numbers of elderly continue to rise absolutely as well as in their proportion to the total population.

In the 1980s, the number of low-income elderly dropped from more than 64,000 to just over 61,000, or 12 percent of persons age 65 and over. Statewide, twenty-four counties gained in number of poor elderly persons, with a few counties gaining more than 100 such persons: Anoka, 176; Dakota, 210; Itasca, 138; Martin, 125; and Wadena, 176.

Remaining counties saw numbers drop, undoubtedly due in part to the prosperity of the 1980s and the improvement of pension and Social Security benefits for retired people during the decade.
Figure 57. Change in Number of Black Persons in Households with Incomes below the Poverty Line in Minnesota, 1980 to 1990

In the past two decades, the numbers and proportions of Minnesota residents with non-European backgrounds have risen sharply. For example, the black population of the state rose from 35,000 to 55,000 (up 51 percent) in the 1970s, then rose to 95,000 (up 79 percent) in the 1980s.

Almost all of the state's increase in the 1980s occurred in the Twin Cities area, where numbers rose from over 49,000 to almost 90,000—a gain of more than 40,000, or 82 percent.

Most of the increase has come about from migration into the state from other states, and some from recent immigration from Africa of persons uprooted by wars such as those in Somalia, Ethiopia, and Eritrea. The second major impetus to expansion has been children born of young migrants into the state. Hennepin County had 60,000 black residents in 1990, 23,000 of whom were under 18 years of age. The median age of black persons in Hennepin County was 24.4 in 1990. Ramsey County had almost 23,000 black persons, with almost 9,000 under 18. The median age for blacks in Ramsey County was 24.1 in 1990.

As the numbers have gone up sharply, the number in poverty households has risen even faster. In the Minnesota counties for which black populations were sufficiently large to permit crosstabulations of income by race, the poverty population of black persons rose from 15,000 to 32,000 in the 1980s (up 106 percent). Thus, while the state's black population rose 79 percent, black poverty population rose 106 percent, with virtually all of the increases concentrated geographically in the metropolitan counties of the Twin Cities.
Figure 58. Change in Number of Black Persons in Households with Incomes below the Poverty Line in the Twin Cities Area, 1980 to 1990

A glance at the maps of the Twin Cities area and the central cities of Minneapolis and St. Paul discloses three main concentrations of black persons in households with poverty-level incomes in 1989: inner South Minneapolis, the Near North of Minneapolis, and the Summit–University neighborhood in St. Paul. These are areas vacated in large numbers after World War II by upwardly mobile middle-class households moving to better housing farther out, leaving behind good-quality structures that were occupied by newcomers to the cities.

The structures are now old, and as relative incomes in these areas of concentrated poverty have slid further down the socio-economic ladder, it has apparently stimulated those who can to leave for better housing and more attractive socioeconomic environments farther out, but it also has meant intensifying the concentration and segregation of increasing numbers of poverty households. On the other hand, in tracts throughout the central cities and in the first- and second-tier suburbs the numbers of black persons in poverty households were rising in the 1980s. The maps and supporting data illustrate three points vividly: 1) too many black persons in the Twin Cities live in poverty; 2) too many of these are children; and 3) they are geographically concentrated in certain housing areas that segregate them from much of the mainstream of population, life, and opportunities in the greater Twin Cities area.
Figure 59. Change in Number of Hispanic Persons in Households with Incomes below the Poverty Line in Minnesota, 1980 to 1990

There were almost 54,000 persons of Hispanic origin enumerated by the Census Bureau in Minnesota in 1990, which was an increase of 68 percent from the 1980 total of just over 32,000. Most of this group appeared to be in the middle-class income groups, but a significant number lived in households below the poverty line. Most of these were in the major urban areas of the state, plus Kandiyohi County (Willmar area) where migrant farm workers and others working in the agricultural products processing industries settled permanently. They provided an early base to which additional newcomers have been attracted in recent years from origins in Texas, other southern and southwestern states, and Mexico.

Income is the main determinant of ability to pay for housing, so households lacking adequate incomes typically cannot obtain adequate housing of the kind they feel they need in suitable settings and locations. Because persons of Hispanic origin in Minnesota generally received 1989 incomes below average for the state, they experienced housing problems to a disproportionate degree.
Figure 60. Change in Number of Hispanic Persons in Households with Incomes below the Poverty Line in the Twin Cities Area, 1980 to 1990

The number of persons of Hispanic origin rose from over 22,000 in 1980 to over 37,000 in 1990, an increase of 66 percent as the overall Twin Cities population advanced 15 percent.

Published cross-tabulations of household incomes by ethnic origins are restricted to places where census-defined thresholds are achieved, and because most counties have only a small population of persons of Hispanic origin, county data are sparse.

Hennepin County counted 2,400 Hispanic persons in poverty households in 1990, and Ramsey County counted 2,800. These two counties accounted for the bulk of the seven-county published total of 7,300 in 1990.

Ethnicity counts in the census are based on self-identification, which can vary from time to time for persons of mixed ancestry and depending on the degree of sensitivity of the person being enumerated. As people move comfortably into the economic mainstream, as most persons of Hispanic origin have, their sensitivity to and identification with the group may change. The counts also vary for this category because of changes over time in the criteria used for Hispanic designation. Thus, the data are somewhat less reliable than some other census measures.

At the tract level, the ups and downs of counts of Hispanic persons in poverty households occur throughout the central cities of Minneapolis and St. Paul, patterns that are much less concentrated than those for blacks or Indians.

There are small changes noted in the suburbs as well, but it is usually the case that they are at locations different from those of other prominent racial or ethnic minorities.
Chapter 11. Minority Owner-Occupant Households without a Mortgage

A household owning its own home, free and clear of mortgage debt, is a traditional symbol in the United States of wealth and economic security. Members of Minnesota's minority groups are disproportionately afflicted with poverty, but at the other end of the income and wealth continuum, we find substantial evidence of economic achievement by members of Minnesota's minority groups.

Figures 61-63 provide a partial portrayal of debt-free owner occupancy by minority households. The portrayal is incomplete because census practice suppresses data for counties and census tracts when the number of minority persons falls below certain thresholds, often 400 or 1,000 persons. As a result, the profile is reasonably representative for places with significant numbers of minority populations, but is quite incomplete where such populations are sparse.
Figure 61. Black Owner-Occupied Housing Units in the Twin Cities without a Mortgage, 1990

The 1990 census estimated that there were just under a thousand black owner-occupied housing units without a mortgage loan in the Twin Cities area. These units often shelter older households who have lived in their houses for a long period of time and have paid off their mortgage loans.

Their stability is the main reason for the clustering of dots in the three traditional areas of black population residence in Minneapolis and St. Paul—south Minneapolis, the Near North neighborhood of Minneapolis, and the Summit-University neighborhood of St. Paul.

There are additional dots scattered into newer and higher-priced neighborhoods in the central cities, and still more in middle-class areas of the first- and second-ring suburbs where notable numbers of professional athletes and other upper-income professional families reside.

Each dot represents one housing unit.
Figure 62. Asian and Pacific Islander Owner-Occupied Housing Units in Minnesota without a Mortgage, 1990

The 1990 census estimated that more than 300 Asian-Pacific Islander owner-occupied housing units without mortgage loans existed in Minnesota, but almost all of them were either in the Twin Cities or in counties where their numbers were so small that the census reports suppressed the data for confidentiality reasons or because the samples were too small to yield reliable estimates.

In the Twin Cities, this group of housing units provides shelter for a highly heterogeneous population, ranging from native-born residents of native parents of Asian descent, to persons arriving as refugees from Southeast Asia after the Vietnam War, to persons who came to attend Minnesota’s colleges and universities and then remained to work, to others who simply moved to Minnesota from elsewhere in the United States or from abroad to live and to work as self-employed entrepreneurs or as employees.

The locations on the map are well dispersed throughout the major metropolitan areas of the state, a pattern consistent with generally average to above-average disposable household incomes and general integration into the housing stock in all major urban areas.
Figure 63. Hispanic Owner-Occupied Housing Units in Minnesota without a Mortgage, 1990

The 1990 census enumerated about 54,000 persons of Hispanic origin living in Minnesota. Of this total, more than 37,000 lived in the Twin Cities area. Although some persons of Hispanic origin have lived in the state for many years, a significant proportion arrived in recent decades from other parts of the United States and from Latin America seeking economic opportunities better than they faced in their places of origin. Many trace their ancestry to Mexico and Cuba. Others left Central America to escape political and economic hardship. Smaller numbers originated in the Philippines, Europe, and elsewhere.

Like earlier migrants and immigrants, those arriving first provided information about jobs and housing to friends and relatives, and local communities expanded. Groups of notable size exist in Freeborn County (Albert Lea) based on the attraction of jobs in meat packing and adjacent industries. In Kandiyohi County (Willmar), turkey processing and related employment has led to a sizable Hispanic community. The largest single cluster of dots on the map appears in Ramsey County (St. Paul), which has housed a sizable Hispanic community for many years.

The longer an immigrant group is present in a community, the greater the chances that their employment situation, economic success, and asset accumulations will show up in the form of homeowners without a mortgage. There are also 400 such households in the Twin Cities, and about 50 others elsewhere in the state. But for a statewide total Hispanic population of 54,000, these are very small numbers.

Detailed county-level statistics on mortgage-free homeownership are provided by the census only for counties with 1,000 or more persons of Hispanic origin. Outside the Twin Cities area, only Kandiyohi and Freeborn meet this criterion.
Chapter 12. Housing Costs for Owner-Occupant Households with a Mortgage

Because the census collects data: 1) on monthly housing costs for owner-occupants, 2) on whether or not there is mortgage debt, and 3) on household incomes, it is possible to cross-tabulate these three measures to identify households with mortgage debt for whom owner costs may absorb an uncomfortably large fraction of household income.

Some owner costs (e.g., taxes, insurance, the costs of fuel, electricity, and even interest rates for mortgage loans with variable rates) are hard to control. These measures are of interest because when owner costs rise to high levels compared with ability to pay, then maintenance is often neglected and public intervention may be appropriate.

Figures 64-66 attempt to identify the extent of these problems, the locations where they are concentrated, and the extent to which they may afflict selected minority homeowners.
Large and expensive single-family houses require extensive maintenance of both the interior and exterior structure, plus careful tending of yards and gardens to preserve the neighborhood character. This contributes significantly to property value.
Figure 66. Median Monthly Owner Costs for Owner-Occupied Housing Units in Minnesota with a Mortgage, 1990

Median monthly owner costs for mortgaged owner-occupied housing units in Minnesota range from highs in Twin Cities-area counties of Carver ($880), Dakota ($899), Hennepin ($831), Scott ($877), and Washington ($863), to medians under $400 in outlying counties of the state such as Big Stone, Clearwater, Cottonwood, Red Lake, Swift, and Traverse.

The levels vary for several reasons. Areas that are growing are receiving a steady flow of new construction, and new houses are built near the top of the price scale. Continued demand for housing in growing areas pushes up prices of existing houses above the state average, and because the Twin Cities area is the major growth center of the state, it follows that prices will be highest in the Twin Cities and its fast-expanding districts.

The opposite is occurring in the low-priced counties, where little new construction is occurring and where almost all sales are for older existing homes in soft markets. In such places, where demand often lags supply, house prices come down and monthly owner costs are correspondingly low.
Homeownership has been a traditional strategy for asset accumulation and a measure of financial independence for working-class and middle-class Americans. As the population of the country rises, and as inflation depletes the currency, households owning residential real estate have, on average, seen their assets increase at rates exceeding inflation. Exceptions are households owning residential real estate in declining regions of the country, or in declining neighborhoods of metropolitan areas—that is, those judged by the market to be least desirable compared with local alternatives.

Black households have owned residential real estate at rates below nationwide averages. What black households own is typically located on the outer edges of traditionally black neighborhoods. Whether due to the fear or the fact of discriminatory treatment at locations well beyond the old neighborhood, or a desire to remain close to familiar areas, family, and friends as other households do when moving, black home-ownership is concentrated at the outer edges of black areas, which, in turn, creep outward from the downtown cores and into the suburbs.

In Minneapolis, there are three main areas of black-owner-occupied housing units with a mortgage for which monthly owner costs were under $300 in 1990—south of downtown, northwest of downtown, and along the Hiawatha-Minnehaha corridor to the southeast of downtown, the latter having been a middle-class black area since the early decades of the 20th century. In St. Paul, the Summit-University area west of downtown and the North End in the vicinity of a major public housing settlement stand out on the map.

Owner occupancy implies stability, but low monthly owner costs imply that houses being purchased are probably modest in value and therefore unlikely to be advancing significantly in value, if they are advancing at all, because rate of value increase for urban housing correlates fairly closely with housing value itself.

*Specified black owner-occupied housing units, i.e., one-family houses on less than ten acres and with no business on the property.
Figure 66. Black Owner-Occupied Housing Units in the Twin Cities with a Mortgage for Which Monthly Owner Costs are $500 or More, 1990

The 1990 census counted just over 28,000 specified owner-occupied and renter-occupied housing units with a black householder. Of these, 7,700 were owner-occupied units, and of these, 5,600 were units with a mortgage for which monthly owner costs were $500 or more.

These units were scattered across the area, with three distinctive clusters in and toward the outer edges of the traditional concentrations of black population in the two central cities—south Minneapolis, Near North Minneapolis, and the Summit–University area of St. Paul. Of the 5,600 total, 2,600 were inside Minneapolis, and 1,100 were in St. Paul. The balance of almost 1,900 was scattered throughout the suburbs, mostly in suburban Hennepin and Dakota counties.

* Specified black owner-occupied housing units, i.e., one-family houses on less than ten acres and with no business on the property.
A substantial fraction of Minnesota's low- and moderate-priced housing is composed of large frame houses that are sixty to a hundred years old. If well maintained, they provide sound shelter in healthy neighborhoods for families of modest means.
Chapter 13. Housing Data and Housing Policy in Minnesota and the Twin Cities

What is Included in the House Price?

Housing is a product that provides a bundle of services to its occupants and to its neighbors. Conventional housing theory tells us that the housing bundle contains two main components—the structure or building itself, and the lot on which the building stands. What is distinctive about housing is the need to consume its services where the unit is located. Most other consumer products, like cars, clothes, and food, can be purchased in one place and then taken elsewhere to use or consume.

The structure, plus improvements to it, provides some of the services used and enjoyed by the occupants. The structure could be a farmhouse, a single-unit detached house on a large suburban lot, a side-by-side duplex, a fourplex, a small apartment house, or one of many other configurations. The structure could be old or new, of brick or wood construction, of colonial or ranch, Cape Cod or some other style, large or small, well built of good materials or slapped together.

The improvements to the structure could be a garage, fireplaces, central air conditioning, wall-to-wall carpeting, modern kitchen with built-in appliances, extra bathrooms, and other features added to the basic structure. When a household buys or rents a housing unit, it acquires the use of all these features. The more features present in the housing bundle, and the more they are wanted by the typical household, the more the typical household is willing to pay for them. Of course, tastes and needs vary from household to household, and from one time in the household life course to the next. Nevertheless, structural features and improvements are part of the housing product, and their market value is determined within local markets where the housing units are located.

The second part of the housing bundle is the lot on which the housing unit stands. In almost all cases—the principal exception is mobile homes and trailers—the purchase or rent of a housing unit includes the purchase or rent of the lot on which the unit stands. In the case of mobile homes and trailers, the lot is usually rented separately from the ownership or rent of the housing unit.

The lot provides three sets of positive or negative features that contribute to the establishment of the lot price. First is neighborhood characteristics. Who lives next door or down the street? What are the nearby houses like? How do people in the neighborhood live? How well do they supervise their children and pets and control their behavior? How well do the neighbors maintain their houses, their yards, and their motor vehicles? Where do they store their belongings? When people buy or rent a housing unit, they pay attention to these things, because surroundings form part of the services delivered by the housing bundle.

Second, there are local environmental features affecting every lot. In a rural area, the lot may lie downwind from a hog feeding operation and odors may be objectionable. In the city, the lot may overlook a quiet, beautiful lake offering highly desirable views. The lot may lie close to a freeway or under the flight path of large airliners taking off and landing, and noise may be objectionable. Or the lot may be next to a nature preserve where the sounds of birds singing may be highly
prized. The pluses and minuses provided to a lot by its environmental features add and detract from the value of the lot.

Finally, each lot is located at a specific place on the globe and offers its residents a certain pattern of accessibility to the places and facilities with which they wish to interact. Accessibility to employment, shopping, recreation, schools, places of worship, and to local and region-wide transportation services carries a price, which is incorporated into the price of the lot.

**What Households Want Compared with What They Get**

The housing choices that households make depend on their tastes, their disposable income and wealth, their pattern of other expenditures, the information they have at the time they make their housing choice, and the availability of suitable choices at the times and places where choices must be made. Relatively few households are sufficiently independent financially that they can decide where to live, then go there, find housing they want, and pay cash for it.

Most households take jobs where they find them, then seek housing they want and can afford in the vicinity of their jobs. For example, if someone from the Iron Range finds a job in St. Paul, he or she must move to the St. Paul area. There are exceptions, such as skilled construction trade workers who commute long distances to jobs that their employers obtain. If jobs are sufficiently remote, workers may return home only on weekends because daily commutes are prohibitively expensive in time and money.

Some households migrate to places where they wish to live, then try to find satisfactory employment and housing at their destination. For example, a young couple from Marshall might decide to move to the Minneapolis area for advanced schooling and subsequent employment. In both these latter cases—whether taking the job, then looking for housing; or picking the location, then hunting for jobs and housing—a locational link between housing and employment must be respected.

People need jobs to pay for their housing, and housing must be located near the jobs. This relationship poses one of the central problems with housing markets—the product does not move from areas of excess supply to areas of excess demand. Housing normally must be used where it is located. Surplus housing units in St. Louis County are of no use to households looking for housing in Dakota County.

In housing policy analysis, we distinguish between supply-side approaches, and demand-side approaches. A supply-side discussion talks about the number of available (for sale or rent) units of different sizes and prices at different locations within a local market, compared with what appears to be the present or forecasted demand or need for housing units of different kinds. To expand the number of available units in a locale may require new construction, or replacement of existing units, or speeding up the turnover of units, or all of these. If a policy is adopted by a municipality or county or metropolitan government to accomplish these ends, then programs will be designed and installed to achieve them.

A demand-side discussion focuses on the households themselves, on their needs, their wants, the information that they have about local housing opportunities, and their ability to pay for housing. Needs may be a matter of law to meet housing codes (persons per room, sanitation standards, etc.). Wants may depend on cultural and family background plus acquired tastes. Information comes from previous housing experience, from relatives and friends, from newspapers and other media, from driving around and exploring local markets, and from real estate professionals. Seldom does it come from one’s formal education or systematic study of professional literature. School curricula may teach pupils and students what they need to know to enter the economy as producers of goods and services, but generally provide little formal guidance on how to be intelligent and informed consumers of most goods and services, including housing.

A household’s ability to pay for housing is a consequence of the amount, type, and predictability of its income stream, the assets it owns or controls that can be used for housing, and the choices it makes about the consumption of other goods and services. Income, employment, and wealth considerations regulate one’s access to mortgage credit. Other consumption choices determine the priority of the housing outlay compared with the importance of outlays for other consumption items. For example, some households spend more than average for cars and less for housing. These choices reflect their prefer-
ence patterns. Others spend more than average for their housing and less for food by preparing meals at home rather than eating out. That is their choice. Still others spend less for housing in remote locations, then spend more for transportation to work, to shop, and for other needs.

Housing policies that work from a demand-side perspective address and attempt to clarify needs, or analyze wants, or remedy information requirements, or augment ability to pay, or combinations of all four. Additionally, there are policy responses aimed at facilitating movement of people from home to work through enhancement of highway and transit opportunities when choices of home location and work location are made independently of one another in ways that make commuting long and costly.

Households use incomplete and sometimes erroneous information to make major locational and consumption decisions sequentially, and then often unwisely—even by their own admission. Overall outcomes are often different from what they would have preferred had better information been available at the time of the decision, or had they made spending decisions with greater care by taking into closer consideration the long-term as well as short-term consequences of their choices.

Supply-Side Housing Policy Issues and Initiatives

In the seven-county Twin Cities region, the housing stock is younger than the statewide average, with a greater percentage of the units in multi-unit structures and smaller in size than state averages. The home-ownership rate is less than in other regions:

- 69 percent of the housing units are in single-unit structures;
- 21 percent of the units were built during the 1970s, and 21 percent in the 1980s; and
- 68 percent of the units are owner-occupied. (Minnesota Housing Finance Agency 1995a, 8-1)

When the number of jobs in a county or a region of the state rises abruptly, the absolute demand for housing rises as well. For example, between early 1992 and the end of 1994, regional job growth ranged from a low of 182 in Minnesota’s northeast region to 43,400 in the Twin Cities metropolitan region. Nearly two-thirds of the state increase occurred in only seven counties.

But absolute demand or need is different from effective demand—that is, need weighted by purchasing power. Because nearly half the jobs attributed to employment growth statewide between 1990 and 1993 were in low-paying industries, the supply of new, market-rate housing did not expand in response to housing demand as measured by job growth (Minnesota Housing Finance Agency 1995a, 1-33).

Demand-Side Housing Policy Issues and Initiatives

The Minnesota Housing Finance Agency (MHFA) uses a “30 percent of income” criterion to measure whether a household’s housing outlay is affordable. A housing outlay is judged to be affordable when 30 percent or less of the household’s income is spent on housing. By this measure, 21 percent of the state’s households in 1990 lacked affordable housing (Minnesota Housing Finance Agency 1995, 1-14). Not surprisingly, most of these had poverty-level incomes. Yearly cost statewide to provide affordable housing to all 28,000 eligible rental households in 1990 was estimated by the Minnesota Housing Finance Agency using the 30 percent criterion as $281 million (Minnesota Housing Finance Agency 1995a, 1-18).

The Minnesota Housing Finance Agency offers three main categories of programs to help households needing financial assistance to acquire or maintain improved housing, or to reduce the cost of what they currently have: 1) rental assistance programs that offer rental subsidies and vouchers to low-income households to enhance their buying power; 2) home mortgage assistance that offers discounted interest rates and down payment assistance to first-time home buyers; and 3) rehabilitation loan programs that offer low-interest loans to qualified home buyers.

Average levels of income, of rents, and of housing prices vary substantially across the state, so qualifying incomes for participation in MHFA assistance programs vary. For example, qualifying incomes for mortgage assistance programs vary from $11,204 in Minnesota’s southwest region to $26,363 in the Twin Cities metropolitan region (Minnesota Housing Finance Agency 1995a, 1-24).
The Twin Cities is the largest of the state’s housing market regions, as defined by the MHFA, containing 53 percent of the state’s households. The majority of the state’s households, population, income, and minority populations is concentrated in this region.

Household composition in the Twin Cities differs from that of the rest of the state. There is a smaller proportion of married-couple families and a larger share of single-parent families and other types of households. Households are younger and more diverse racially. Particularly with regard to race, there is a significant difference between the suburban portions of the metro counties and the central cities of Minneapolis and St. Paul. In the Twin Cities region:

- 55 percent of households are married-couple families;
- 26 percent of households are single persons;
- 12 percent of the households are single-parent families;
- 6 percent of households have heads of color; and
- 4 percent of households are of Hispanic origin. (Minnesota Housing Finance Agency 1995a, 8-1)

According to 1990 census data, median household income in the Twin Cities region is significantly higher than in other areas of the state. Significantly fewer households have extremely low incomes and are living in poverty. However, the region has the highest percentage of households lacking affordable housing. As with race, there is a dramatic difference in income and poverty levels between suburban areas and the central cities. In the Twin Cities region the census reported:

- median household income of $42,766;
- 11 percent of households with extremely low incomes;
- 52 percent of households with incomes greater than 95 percent of the state’s median family income; and
- 8 percent of households with income at or below the poverty threshold for their family size. (Minnesota Housing Finance Agency 1995a, 8-1)

In the Twin Cities metropolitan region 23 percent of households lacked affordable housing in 1990 according to MHFA estimates using the 30 percent criterion (Minnesota Housing Finance Agency 1995a, 8-8). Whereas relatively few households had severe cost burdens (spending more than 50 percent of income on housing), 54 percent of households with extremely low incomes and 62 percent of poverty households had a severe cost burden in 1990 (Minnesota Housing Finance Agency 1995a, 8-8).

Comparatively few married-couple families (13 percent) lacked affordable housing, while substantial fractions of all other households lacked the same (37 percent of single-parent families; 38 percent of single-person households; 20 percent of all others). While single-person households have the greatest number of households with a severe cost burden, a severe lack of affordable housing is more likely for single-parent families than for single-person households (20 percent vs. 15 percent) (Minnesota Housing Finance Agency 1995a, 8-9). But because census data fail to report wealth holdings directly, the affordability data are often hard to interpret. For example, almost one-third (29 percent) of homeowners who lack affordable housing own their housing mortgage-free and clear of debt. In these cases, substantial assets accompany limited cash flow, a type of case that highlights the risks of assessing affordability with narrowly specified criteria.

Problems of Housing Usage

Minnesota has very few substandard units (.02 percent of all units), as measured by inadequate plumbing, sewage, kitchen, water supply, or heating system. What exists is mostly located in non-metropolitan areas and is owner-occupied.

Overcrowding (more than one person per room) is rare and occurs in only 1.5 percent of occupied units statewide. One of the most critical problems for many renter households with low incomes is finding a unit of sufficient size that the household can afford. Very often the household faces a trade-off between overcrowding and excessive rent burden. This is especially true for large households.

The housing stock in an area determines in large part the types of households that live there. Similarly, households' tastes and ability to pay help determine where they live. Within the seven-county Twin Cities area, these forces of housing supply and housing demand have
yielded a landscape of housing usage that displays sharp differences between the central cities and the suburban areas:

- 76 percent of the housing units in the suburbs are single-family (single unit or mobile home);
- 50 percent of central city units are in single-unit structures;
- 81 percent of units built since 1940 are in the suburbs;
- 77 percent of units built before 1940 are in the central cities;
- 63 percent of suburban households are married couples;
- the largest category in central cities is single-person households (37 percent), followed by married-couples (36 percent); and
- there is a 75 percent home-ownership rate in the suburbs versus 52 percent in central cities (Minnesota Housing Finance Agency 1995a, 8-10).

Linking Homes and Jobs—No Simple Answers

The Twin Cities metropolitan region gained 43,442 new jobs in 1992 and 1993—62 percent of the state’s net gain in new jobs. Every county in the region gained, but Hennepin (53 percent of the total) and Dakota (14 percent) were the leaders. Nearly half (45 percent) of the new jobs were in low-paying industries (average under $26,000 per year) such as business services, and retail goods and services (Minnesota Housing Finance Agency 1995a, 8-12, 8-13).

Many of the new jobs were added in and near the outer suburbs (Adams et al. 1994; Wyly 1994). The problem, though, is that persons seeking lower-wage jobs are disproportionately living near the core of the metro area, so are inconveniently located compared with new job opportunities (Pershing 1989). Thus, the affordability problem overall is compounded by a bad mismatch between the location of new jobs and the location of affordable housing. Not only does there seem to be insufficient housing that low-income households can afford, but what exists is concentrated in the central cities of Minneapolis and St. Paul.

One group of observers argues that we should build more low-priced housing units in the Twin Cities metropolitan area, and make sure that most of them are scattered in suburban locations where the new jobs are. This is a supply-side solution which, incidentally, ignores the large volume of relatively modestly priced houses already located in the suburbs, especially those built up rapidly after World War II—Richfield, St. Louis Park, Robbinsdale, Roseville, West St. Paul, and so forth.

Another group argues that rather than building additional cheap housing, we should enhance the education and skill levels of underemployed and unemployed persons as well as fully employed persons who currently earn low wages, because most such persons are possessed of few marketable skills. If these workers had more to offer employers, it is argued, they would earn more and would be able to buy or rent market-rate housing with greater ease. Still others argue for expanded loan and grant programs to enhance the buying power of low-income households. These are demand-oriented policies.

A third group argues that we should address the spatial mismatch between new jobs and low-income households by beefing up the transportation systems that link core neighborhoods with outlying job opportunities. These arguments generally ignore the extremely low densities of population, housing, and jobs in the Twin Cities metropolitan area (5,051 square miles, 11 counties, 1990), while promoting capital-intensive forms of public transit as a response to the apparent mismatch problem.

Metropolitan Housing Policy and Related Influences at the Federal, State, and Local Levels

Under Minnesota’s Metropolitan Land Planning Act, the Metropolitan Council is charged to review and comment on the housing elements of local comprehensive plans, but cannot require changes in those housing elements. The land planning act requires each local government in the metropolitan area to adopt a land use plan that includes a housing element containing standards, plans, and programs that promote the availability of land for the development of low- and moderate-income housing. The act also requires local governments to adopt implementation programs.

The metropolitan housing market is complicated and involves actions of local governments through their land use authority and zoning controls; other governmental units such as county housing and
redevelopment authorities that finance and build housing; and developers who respond to market trends and local zoning rules in locating new housing, and in working within constraints imposed by land and construction costs, financing arrangements, and lenders' requirements. State and federal tax policy and federal monetary policy affecting capital markets are additional influences, as are demographic peaks and troughs that come about from periodic ups and downs in natural change and migration.

The state fiscal framework may be most pernicious, however, in the way it produces unintended consequences for the metropolitan housing market and for local units of government. The problem is the following. Local units of government—municipalities, incorporated townships, school districts, park districts, and other special districts—are required to raise much of their money from local real estate taxes to pay for a variety of general government responsibilities (schools, libraries, law enforcement, courts) as well as local option services (swimming pools, parks, etc.). As a consequence of this ancient fiscal framework, incentives exist for the local units of government to arrange zoning and land uses in their local comprehensive plans in such a way as to enhance the yield of real estate taxes per resident, while keeping local government costs per capita as low as possible. These practices lead to an overzoning for commercial-industrial land and expensive, low-density housing, and an underzoning for low- and moderate-income housing.

Encouraging expensive housing and upper-income households, and discouraging cheap housing and low-income households, becomes a good financial strategy for a local community. But what may in financial terms appear good in the short term for the local community may be bad in the long term for itself, for the metropolitan region, and for the state overall (Gabler 1995). Yet as long as certain governmental expenses that could (and perhaps should) otherwise be borne by state general revenues from sales taxes and income taxes must be paid from locally generated revenues, local units of government are encouraged to continue the exclusionary practices that they have followed for many decades—not because they like to discriminate, but because state law gives them little choice.

In some ways, the metropolitan housing market operates as a single entity, whereby actions in one part of the region affect other parts. In other cases, the Twin Cities metropolitan housing market behaves like a series of areally distinct submarkets, each radiating outward from the cores of the central cities and within each of which supply-demand relationships are worked out somewhat independently from the dynamics within other submarkets in the metropolitan area (Adams 1991). Compounding the housing system's complexity is the private ownership of most of the region's housing, which makes it extremely difficult to manage directly (Metropolitan Council 1994b, 58-9).

This complex housing "engine" provides good shelter for the majority of people in the region, but the housing market has intended and undesirable consequences. In some communities, young people who grow up there and wish to remain when they leave their parents' homes cannot find affordable housing locally. Similarly, low-wage workers may face limited options for living in the city where they grew up or work. Older people who want to vacate the large family home they no longer need and cannot care for, and move into a townhouse, condominium, or apartment in their later years, may not find suitable housing in their old neighborhood or community where they retain strong personal and family attachments.

Another consequence of the way metropolitan housing markets work in the Twin Cities region as in other large U.S. cities is the concentration of the oldest, most affordable housing—and therefore its poorest residents—in the region's core. Despite major gains in the 1970s, 58 percent of the subsidized housing is still located in the region's core. Residents of the core, although close to downtown, often miss out on opportunities to which other people have access, such as newly created suburban jobs (Metropolitan Council 1994b, 59).

Aging stock is another concern for the region. Over three-quarters of the housing in Minneapolis and St. Paul is fifty years old or older. A quarter of the housing in the older developed suburbs is more than thirty years old, the age when substantial investments are needed for maintenance, such as lead-paint removal, replacement of roofs, and improved insulation. Adequate investment in maintenance and rehabilitation, or clearance and replacement is needed to preserve the tax base of communities and to preserve home equity for residents (Metropolitan Council 1994c).
The Metropolitan Council's *Regional Blueprint*, adopted in 1994, pledges to "work with local communities in a partnership to meet the range of housing needs of people at various life-cycle stages; broaden locational choice and access throughout the region for people of all income levels; and support use of public funds to help achieve these goals" (Metropolitan Council 1994c, 56). The council, local units of government, and the nonprofit organizations concerned with housing certainly have their work cut out for them.

**Conclusions**

The main housing issue stems from the fact that the cost of what society considers to be adequate housing usually stands well beyond the means of the average household. Housing is expensive, standards of acceptable housing continue to rise, and people want it and need it, so what is society to do? The answer has been that government gets involved in different ways, depending on the place and time, to ensure that people are satisfactorily housed. We do it one way, the British another, the Soviets used still another approach.

A second set of issues centers on social reproduction—that is, the role that housing is expected to play in supporting the bearing and rearing of children, and in accumulating an asset that parents expect to use in their later years and then leave behind for their kids. In the course of this effort, most people seem to want housing that will surround them with community support systems (including schools) and other households who will reinforce their particular ideas of how to reproduce a healthy society. Rearing children can be a lonely job, but society through its laws and programs has expressed a fundamental imperative to help. Housing policies and zoning laws are deeply embedded in societies' collective decisions of where and how families and other households should live.

A third battleground for housing is ideological and therefore political. Some people have nicer homes and neighborhoods than others have, and advantages that accrue to the well-housed multiply over time, thereby magnifying society's social and economic disparities. These disparities and the structures and processes that control them invite aggressive political action, both to defend and preserve privilege on behalf of those enjoying it, and to minimize disparities when they are believed to be unfairly wide.

Both sides concede that modern society must assume responsibility (they dispute how much) to maintain some kind of floor for living standards, and to provide public assistance to households who fail to acquire minimum-standard housing on their own (even when they can afford it, but choose to use their resources otherwise). Thus, tensions between what we want and what we get—individually and society-wide—seem likely to persist into the indefinite future.
Early twentieth-century zoning practice separated residential structures from railroads and industry. Recent practice, however, includes grain storage silos converted to condominiums, and new medium-density townhouses next to an active railroad.
Appendices
A-2. The Twin Cities Metropolitan Statistical Area (Minnesota only)
A-5. St. Paul Planning Districts

Source: City of St. Paul, Department of Planning and Economic Development.
-129-
A-6. The Duluth, Moorhead, Rochester, and St. Cloud Metropolitan Areas
Sources


Brandt, Steve and Norman Draper. “House the Poor, Sure; The Fight Is over Where.” *StarTribune,* 5 June 1995, 1A ff.


"Shortage of Housing Concerns Rural Community Developers." *DTED Community,* 1:2 (October 1994), 1.


