East Metro Housing Needs

Projections of low-income and cost-burdened households by 2010 and 2020

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Summary

This report presents projections of the need for housing affordable to low-income households in the East Metro area of Twin Cities, including Anoka, Dakota, Ramsey, and Washington counties. Its primary purpose is to help inform the development decisions of nonprofit housing developers in the region, but may also be helpful to city and county planners, community development agencies, and affordable and workforce housing funders.

For the purposes of this study we define households as "low-income" if their annual income is at or below 60 percent of the region's Median Family Income (MFI), and "very low-income" if their income is at or below 30 percent of MFI. For 2008 the U.S. Department of Housing and Urban Development has set the Twin Cities' (including the East Metro) MFI at $80,900. Thus, for purposes of this study, households earning the equivalent of $48,500 or less in today's dollars are defined as "low-income," and households earning $24,250 or less in 2008 are defined as "very low-income."

This summary briefly outlines what is known about current needs and discusses previous projections before discussing our projections.

Background and current needs

The nearly 1.5 million people, and well over one-half million households, that live in the East Metro make up about half of the Twin Cities 7-county region, and about one-quarter of the state's population. Ramsey County is the most populous of the four counties and about one in five East Metro households live in the city of St. Paul. The next largest cities in the East Metro, all with between 54,000 and 67,000 residents, include Blaine and Coon Rapids in Anoka County, Burnsville and Eagan in Dakota County, and Woodbury in Washington County.

St. Paul is also home to the East Metro's highest poverty rates, highest concentration of low-income households, and the most subsidized housing – both in raw numbers and as a proportion of all housing – of any of the jurisdictions. On the other end of the spectrum, Washington County currently has the lowest proportion of low-income households and highest median income.

There are nearly 200,000 "low-income" households in the East Metro, of which 30 percent are located in St. Paul. Nearly two-thirds of the region's low-income households are cost-burdened and therefore in need of more affordable housing. **Overall about 127,000 low-income households in the East Metro are spending 30 percent or more of their income on housing, including nearly 70,000 very low-income households**.

Homelessness

Although this study does not make specific projections about homelessness in coming years, a notable number of the East Metro's population does experience this most extreme form of housing need each year.

Currently, about 2,000 people experience homelessness on any given night in the East Metro. Currently, there are about 2,000 emergency shelter and transitional housing beds in the East Metro, which is nearly identical to the number of sheltered and unsheltered in the region cited earlier. In addition, the East Metro provides about 1,450 "permanent supportive housing" beds designated for formerly homeless families and individuals.

Current needs among renters

The East Metro is currently home to nearly 120,000 households that rent. In 2006 the overall median income for renters in the East Metro was about $30,000, which equates to a maximum affordable rent of no more than $750 per month.

Seventy percent of renters in the East Metro are low-income, and about half of all renters face cost-burdens. Close to 90,000 renter households in the East Metro meet our definition of low-income, with close to 50,000 meeting the definition of very low-income. **In raw numbers, the current unmet need for more affordable housing among renters equates to the 60,000 low-income renter households that are spending 30 percent or more of their income on housing, including about 41,000 cost-burdened very low-income renter households.**

Current needs among homeowners

More than three-quarters of all households in the East Metro – well over 400,000 – own their home. The median household income for homeowners in the region was $75,000 in 2006, which equates to a maximum affordable home price of about $238,000.[1]

Overall, about 31 percent of the East Metro's home owners were cost-burdened in 2006, but that rate was doubled among the 108,000 low-income owners in the East Metro. Fewer than 10 percent of owners in the region meet the definition of very low-income, but fully three-quarters of those 35,000 households are cost-burdened. Numerically about **67,000 low-income homeowners are spending 30 percent or more of their income on housing, including about 27,000 cost-burdened very low-income households**.

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[1] After accounting for utilities, about $1,560 remains for monthly housing payments. Assuming 10 percent down and 8 percent interest for 30 years yields a $238,181 purchase price. Note that this calculation ignores mortgage insurance and taxes.

Current needs by type and location

A final observation about current low-income housing needs is that they differ by type and location. For example, the majority of low-income households with cost-burdens in the suburbs are currently homeowners, while the reverse is true in St. Paul. Additionally, while the 127,000 low-income and cost-burdened households in the East Metro are split fairly evenly between renter and owner households, the nearly 70,000 very low-income households with cost-burdens are much more likely to currently be in rental housing.

Previous projections

Two earlier studies have made projections similar to those presented here. *The Next Decade of Housing in Minnesota*, conducted by BBC Research & Consulting, was jointly commissioned by Minnesota Housing, the Family Housing Fund, and the Greater Minnesota Housing Fund.[2] Released in 2003, the study projects low-income housing needs for the decade 2000-2010. *Determining Affordable Housing Need in the Twin Cities 2011 – 2020* was conducted by the Metropolitan Council under the guidance of an advisory panel convened for purposes of the study.[3]

Overall, *Next Decade* projects a growth of 27,463 low-income households in the East Metro during the current decade, resulting in an addition of 16,104 new housing needs. The report also estimates that some of the new need – approximately 40 percent – will be met by the public and philanthropic sectors. Thus, according to the report, the East Metro's total projected "unmet new housing construction need" is somewhere just under 10,000 units.

The Metropolitan Council's projections cover the decade 2011 to 2020. Their projections are provided to fulfill their responsibility for land-use planning in the 7-county metro, as well as the Council's more specific mandate to use this authority to contribute to the provision of affordable housing in the region.

The Council's projections are meant to serve as a guide for the affordable housing sections of municipalities' comprehensive plans. The Council's report starts by identifying an overall need for the 7-county region by 2020, and then assigns by formula responsibility for development of the needed units to municipalities in the region. Overall, the Council projects a household growth of nearly 89,000 for the East Metro, which translates to a collective need for development of over 22,000 units affordable to low-income households in Anoka, Dakota, Ramsey, and Washington counties.

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[2]   Currently available at: www.mnhousing.gov/news/reports/index.aspx

[3]   Currently available at: www.metrocouncil.org/planning/Housing/HousingNeeds.htm

This study's projections

Based on data from the Census Bureau, the State Demographer, and the Metropolitan Council, **this study projects that there will be nearly 140,000 low-income and cost-burdened households in the East Metro by 2010, and nearly 170,000 by 2020. These numbers include significant numbers of cost-burdened very low-income households: nearly 70,000 by 2010 and over 84,000 by 2020.**

1.   Number of households by incomes and cost burdens, 2000 to 2020
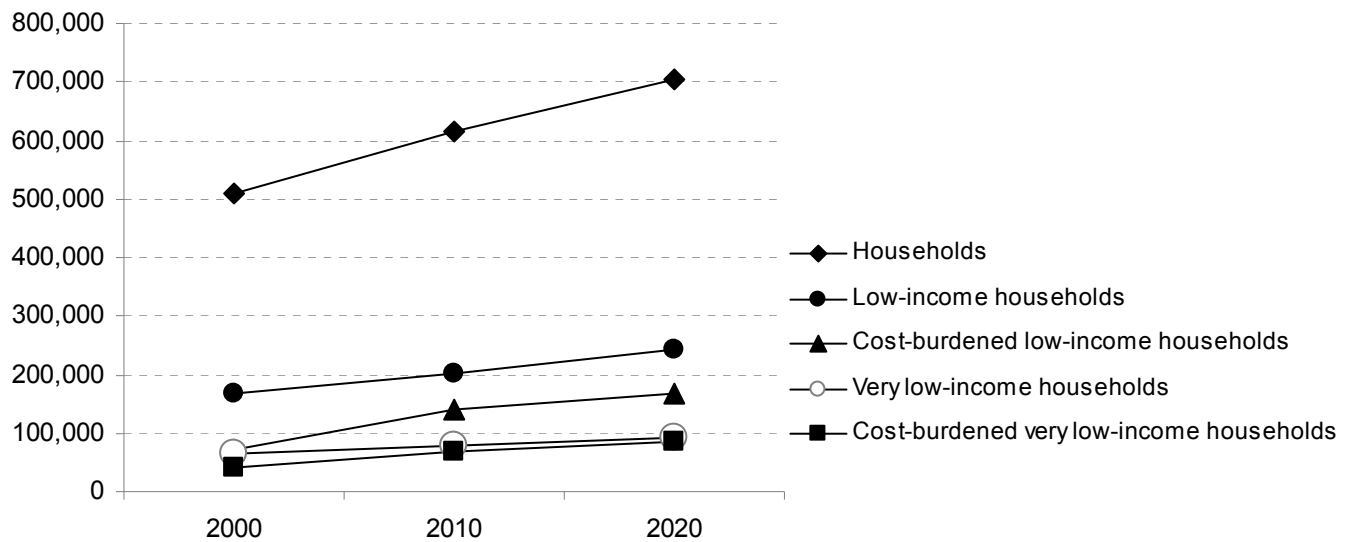
Source: *Metropolitan Council (for households) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.*

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars (very low-income households are included in the counts of low-income households); Cost-burdened = spending 30 percent or more of income on housing.*

We project that by 2020 a higher percentage of low-income housing needs will exist in the suburbs than is currently the case. About one-quarter of low-income housing needs will exist in St. Paul, another quarter will be in Dakota County, 20 percent will be in Anoka County, with the remainder roughly split between Washington and suburban Ramsey counties.

2. Low-income and cost-burdened households, 2000, 2010 and 2020
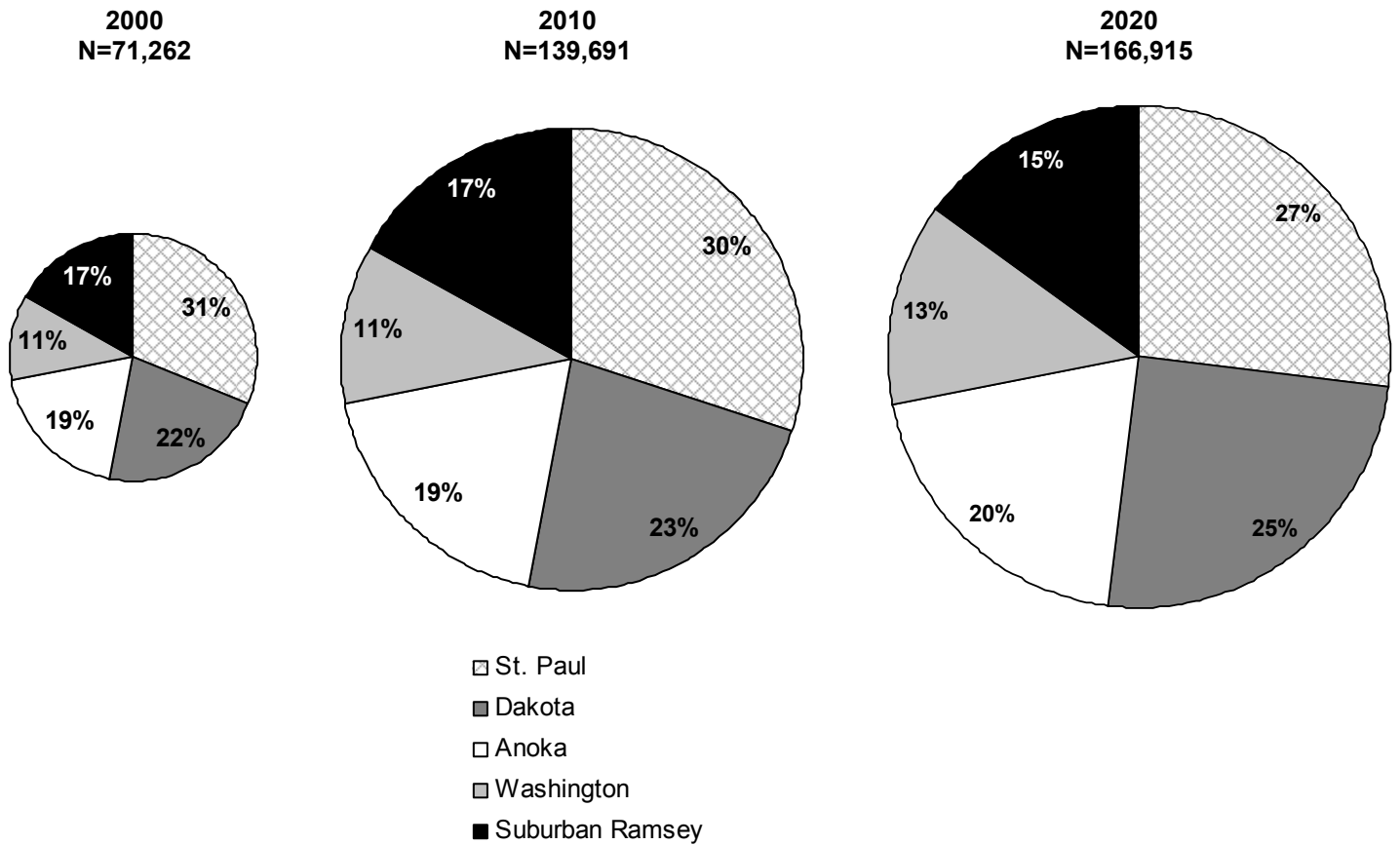
2000
N=71,262

2010
N=139,691

2020
N=166,915

- ☐ St. Paul
- ■ Dakota
- ☐ Anoka
- ☐ Washington
- ■ Suburban Ramsey

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Cost-burdened = paying 30 percent or more of income on housing.*

Projected needs by household size and senior status

To help address questions concerning the type and size of units (or subsidies) that are needed, we estimated the need by household size and also specifically projected needs among households headed by someone age 65 or older.

In terms of the size of the low-income households in need of more affordable housing, we are projecting that in both 2010 and 2020 about half of the low-income housing needs will exist among single person households, another quarter will be among two person households, an eighth in three person households, and the remainder split between households with four persons and those with five or more persons. Note, however, that our "by household size" projections lean toward smaller households due to our definition of "low-income," which is not indexed for household size.

3. Projected housing cost burdens by household size and income level, 2020
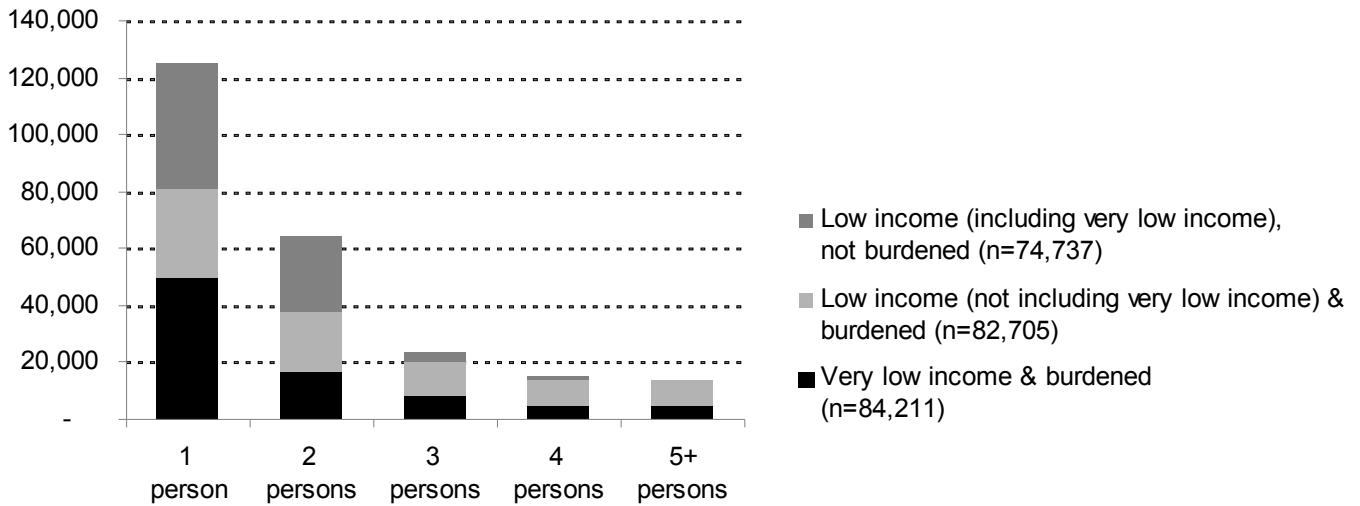
Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars (very low-income households are included in the counts of low-income households); Cost-burdened = spending 30 percent or more of income on housing.

The aging of the baby boom generation means that the demographic profile of the East Metro will change rapidly in coming years. The number of senior households is on track to increase by 20 percent in this decade, and by over 40 percent in the following decade to nearly 135,000 households by 2020. **We are projecting that by 2010 there will be over 25,000 very low-income senior households in need of more affordable housing, and that by 2020 that number will grow to more than 35,000.**

Comparison with previous studies

Though the definitions vary somewhat from study to study, our current study projects a far higher growth in "new need" during the current decade than did the *Next Decade* report, as well as a somewhat larger increase than projected in the Metropolitan Council's report. We are projecting an increase of over 68,000 cost-burdened low-income households by 2010, which is roughly comparable with the 16,000 new needs projected for the region in *Next Decade*. By 2020, we project that the region will add another 27,000 "new needs," which is roughly comparable with the 22,000 in new units that the Metropolitan Council's report apportions to the East Metro.

These differences are due largely to our reliance on mid-decade data not available to the earlier studies, which shows a rapid growth in cost-burdening among low-income households. In fact, according to data from the Census Bureau's American Community

Survey, cost burdens have increased faster than the number of low-income households in during the first half of the current decade.

Limitations and avenues for future research

Like preceding projections, ours are subject to multiple limitations. Chief among these is that our starting point definition for "low-income" did not index for household size. This also was the case for both *Next Decade* and the Metropolitan Council's projections. The availability of data that would allow us to safely index for household size within our modeling is somewhat questionable. However, our reliance on a single cut-off level for defining "low-income" regardless of household size places some limitations on the results, since most developers of housing affordable to low-income households operate within the bounds of state and federal eligibility criteria, which are typically indexed for household size.[4]

Additionally, other economic factors, such as longer-term changes in mortgage interest rates, the job market, and energy costs – all of which will undoubtedly continue to exercise a great deal of influence over housing markets – are not included in our model. These factors are extremely difficult to predict, as would be sudden demographic changes such as a major influx of immigrants or a major unforeseen out migration from the region to other areas. Ideally key parameters such as these could be built into our modeling and manipulated to show ranges of potential needs under different scenarios.

Finally, the projections presented here do not attempt to model how advancements in private, public, and philanthropic involvement in low-income housing may impact the needs we are projecting.

Despite these limitations we believe that the estimates provided in the report will prove useful to those seeking to address housing needs in the East Metro.

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[4]   For this reason we suggest that readers refer to the "very low-income" projections for 1- and 2-person households in the detailed results at the end of the report, and the "low-income" results for households with 3 or more persons.

Introduction

This report presents projections of the need for housing affordable to low-income households in the East Metro area of Twin Cities. Its primary purpose is to help inform the development decisions of nonprofit housing developers in the region. In addition, this report may be useful to other entities including public sector planners, advocates, and for-profit developers.

Geographic coverage

The study defines the East Metro as the four counties in the Wilder Foundation's "Greater St. Paul" mission area: Anoka, Dakota, Ramsey, and Washington counties. As is the case in many areas, the East Metro is facing substantial demographic changes as well as challenging housing market dynamics. Therefore Wilder, and its partners on this project, the Frey Family Foundation and Twin Cities Local Initiatives Support Corporation (LISC), felt an examination of the likely evolution of the demand for low-income housing would be useful to development planning over the coming years.

Time horizon

This study is based on data through 2006 and presents projections for the dates 2010 and 2020. This time horizon is long enough to provide decision-makers with the needed perspective, but short enough to provide meaningful estimates.

Previous studies

This study takes as its point of departure two previous studies that included projections of housing in the Twin Cities metropolitan area.

The Next Decade of Housing in Minnesota was produced in November, 2003, by BBC Research and Consulting on behalf of Minnesota Housing Finance Agency, Greater Minnesota Housing Fund, and the Family Housing Fund. Its purpose was to project net needs for affordable housing for the entire state through 2010.[5] The report included separate projections for the Twin Cities area and included less detailed projections on the county level. The housing projections for the Twin Cities were based on U.S. Census data for 2000 and on population projections made by the Metropolitan Council through 2010.

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[5] Currently available at: www.mnhousing.gov/news/reports/index.aspx

Determining Affordable Housing Need in the Twin Cities, 2010-2020 was produced by an Advisory Committee to the Metropolitan Council in 2006, and updated in 2007.[6] The study employed a methodology compatible with that used in *Next Decade* to project overall need for affordable housing in the Twin Cities 7-county area for the following decade. It then went on to allocate the overall need to individual counties and cities as input to their land use planning.

This study

This study extends and complements those earlier studies in a number of areas. The study addresses:

■ *Needs by jurisdiction*: We present detailed projections for the entire East Metro, as well as its five primary component jurisdictions: Anoka County, Dakota County, City of St. Paul, Suburban Ramsey County, and Washington County.

■ *Needs by household size*: To help inform development decisions concerning the future demands by unit size and type, we project needs by household size for each jurisdiction.

■ *Needs for senior housing*: The projections included here also separate out demand for low-income senior housing.

■ *Needs by income level*: The projections in this study also distinguish between the needs of low-income and very low-income households.

Definitions: "low-income" and "need"

To answer the question of how much low-income housing will be needed in the future, we first had to establish a working definition of "low-income." Following both *Next Decade* and the Metropolitan Council's projections, we define households as "low-income" if their annual income is at or below 60 percent of the region's Median Family Income (MFI). Every year U.S. Department of Housing and Urban Development (HUD) establishes regional MFI levels, and associated program eligibility thresholds, based on the Census Bureau's estimated median income for family of four in a given region.[7]

HUD's 2008 MFI for the Twin Cities (including the East Metro) is $80,900, which means that households earning the equivalent of $48,500 or lower in today's dollars are defined in

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[6] Currently available at: www.metrocouncil.org/planning/Housing/HousingNeeds.htm

[7] See http://www.huduser.org/datasets/il.html

this report as "low-income." Additionally, we define households earning 30 percent of MFI or lower, $24,250 in 2008, as "very low-income" (see Appendix A for further detail).

Note that while the income eligibility thresholds for most housing subsidy programs are indexed for household size, neither this study, nor *Next Decade* nor the Metropolitan Council's projections are indexed for household size. This means that our analysis will tend to over-estimate the number of 1, 2, and 3 person households that would qualify for housing assistance and tend to underestimate the number of larger households that would qualify at HUD income thresholds.

The "need" for low-income housing is another concept that needs definition. On one level a need or demand for lower-cost housing exists for each lower-income household. For purposes of this report, however, the "need" is defined as the number of low-income households that are spending so much on their housing that they may be at risk of eviction, foreclosure, homelessness, or are severely compromised in their ability to pay for life's other necessities. As a rule of thumb, households that spend 30 percent of their income on housing are defined as "cost-burdened." Low-income households with cost burdens are defined here as in "need" of housing.

Note that this definition of need addresses only the demand side of the equation. We do not address the number of units, or types of subsidies, needed to fulfill our projected demands.

Remainder of report

The next section of this study describes the current low-income housing situation in the East Metro area. The following section summarizes the methods and conclusions of the two previous studies. Succeeding sections describe our projection methods and assumptions, and present our final results.

Current needs

This section of the report provides some information concerning current needs for low-income housing, to serve as context for the projections presented in later sections. We start with general background about the housing market as a whole, and then take a look at some segments of the low-income housing market in a way that our later projections do not explicitly address. Specifically, we present information related to homelessness, and briefly address the current needs of low-income renters and low-income homeowners.

Background

The nearly 1.5 million people, and well over one-half million households, that live in the East Metro make up about half of the Twin Cities 7-county region, and about one-quarter of the state's population. Ramsey County is the most populous of the four counties and about one in five East Metro households live in the city of St. Paul. The next largest cities in the region, all with between 54,000 and 67,000 residents, include Blaine and Coon Rapids in Anoka County, Burnsville and Eagan in Dakota County, and Woodbury in Washington County.

Some notable variations exist between the counties in the East Metro. As shown in Figure 4, the foreign-born population is highest in Ramsey County, especially St. Paul. The region's central city is also home to the highest poverty rates, highest concentration of low-income households, and the most subsidized housing – both in raw numbers and as a proportion of all housing – of any of the jurisdictions. On the other end of the spectrum, Washington County currently has the lowest proportion of low-income households and highest median income. Suburban Ramsey has the highest portion of senior residents.

There are nearly 200,000 "low-income" households in the region. Thirty percent of low-income households are located in St. Paul, compared with 20 percent of all households in the region. **The region's current "low-income housing need," as defined in this report, is comprised of the 127,000 low-income households that spend 30 percent or more of their income on housing. This includes nearly 70,000 very low-income households with cost burdens.**

Washington County has the lowest proportion of households that are both low-income and cost-burdened in the region, accounting for 11 percent of the region's current overall need, and only 9 percent of the region's very low-income households with cost burdens (compared with 15% of the region's household population). It is also notable, however, that none of the jurisdictions appears to be doing a dramatically better or worse job of

affordably housing its low-income residents. The proportions of low-income households that are cost-burdened exceeds 60 percent in each jurisdiction.

4.   Selected housing-related data by county, 2006 estimates

	Anoka	Dakota	St. Paul	Suburban Ramsey[†]	Washington	East Metro
Population *	328,614	391,613	286,620	228,439	228,103	**1,463,389**
65 years or older **	8%	8%	10%	16%	9%	**10%**
Foreign born **	7%	8%	14%	7%	7%	**8%**
Poverty rate **	6%	5%	21%	6%	5%	**8%[†]**
Households *	119,138	147,824	113,574	92,575	83,762	**556,873**
Average household size *	2.8	2.6	2.5	2.5	2.7	**2.6**
Median household income **	$66,315	$70,502	$43,654	$59,263	$76,380	**$63,352[†]**
Low-income households[††] *(percent of all)** *	37,286 *(31%)*	43,637 *(30%)*	59,316 *(52%)*	35,063 *(38%)*	21,827 *(26%)*	**197,129** ***(35%)***
Very low-income households[††] *(percent of all)** *	14,459 *(12%)*	16,589 *(11%)*	31,173 *(27%)*	14,572 *(16%)*	7,744 *(9%)*	**84,537** ***(15%)***
Households spending 30% or more of income on housing						
Cost-burdened[††] *(percent of all)** *	40,258 *(34%)*	48,844 *(33%)*	48,212 *(42%)*	30,762 *(33%)*	27,897 *(33%)*	**195,973** ***(35%)***
Low-income and cost-burdened[††] *(percent of low-income)[†]*	22,635 *(61%)*	29,090 *(67%)*	40,190 *(68%)*	20,944 *(60%)*	14,317 *(67%)*	**127,176** ***(65%)***
Very low-income and cost-burdened[††] *(percent of very low-income)** *	11,461 *(79%)*	13,860 *(84%)*	25,329 *(81%)*	11,696 *(80%)*	6,069 *(78%)*	**68,415** ***(81%)***
Subsidized units *(percent of all households)*[*,]*** *	3,795 *(3%)*	6,443 *(4%)*	17,862 *(16%)*	4,620 *(5%)*	4,056 *(5%)*	**36,776** ***(7%)***
Subsidized units added in 2005 and 2006***	22	55	770	117	59	**1,023**

*Sources: Metropolitan Council (*) and US Census Bureau, 2006 American Community Survey (ACS; **), HousingLink (***), and author's estimate (weighted average or interpolation) based on 2006 ACS (†) or applying percentages derived from ACS to Metropolitan Council data (††). "Subsidized units" including both unit- and tenant- based subsidies targeting households at or below 60% of MFI; and a limited number targeting up to 80% of MFI. "Subsidized units added" includes only physical units (as opposed to any new tenant-based vouchers). Note that, as estimates, numbers presented in this table are subject to error; for example, the ACS data presented above generally have margins of error of at least ± 1 percentage point.*

Note: Low-income is defined here as an annual income at or below $47,100 (60% of MFI). Very low-income is defined here as an annual income at or below $23,550 (30% of MFI). Very low-income households are included in the counts of low-income households.

Homelessness

This report does not attempt to project the numbers of people who will be experiencing homelessness in 2010 or 2020. Therefore, this section provides a summary of what is known about these most acute housing needs. "The homeless" are a far-from-stable population, with some falling into homelessness for only a night or two and others remaining homeless for months and even years.

The number of people experiencing homelessness on any given night in the East Metro has hovered around 2,000 for the past few years. The main source of data on homelessness in Minnesota is the point-in-time survey that Wilder Research conducts every three years. The survey includes those meeting the federal government's definition of homelessness; those staying in emergency and domestic violence shelters, transitional housing programs for the homeless, and those found in places "not meant for human habitation" (encampments, bus shelters, and the like).

Comparing findings from Wilder's recent surveys, there was an increase of less than 10 percent in persons sheltered in the East Metro from 2000 to 2006 (see Figure 5). The only notable increase from 2000-2006 was among teen-agers who were on their own on the night of the survey, the so-called "unaccompanied youth." This apparently dramatic increase (85%), likely has more to do with an increase in shelter space over the past few years, which makes it easier to count youth experiencing homelessness.

The 2006 survey included interviews representing 256 persons living on the street; up from 80 in 2000. This apparent increase likely has less to do with actual changes in the numbers on the streets than it has to do with the improved outreach efforts in the 2006 survey.

A notable trend over the past few surveys is the increase in percentage of homeless adults with difficult personal barriers. For example, the proportion of homeless adults in Minnesota with a serious mental illness has increased from 36 percent in 2000 to 52 percent in 2006. Similarly, the proportion unemployed grew from 59 percent to 72 percent, and the proportion of ex-offenders increased from 36 percent in 2000 to 47 percent in 2006.

5.   Sheltered homeless population by county, 2000 and 2006*

	2000	2006	Change 00-06
Anoka	**225**	**170**	*-55*
Men	31	23	*-8*
Women	67	54	*-13*
Unaccompanied youth	1	2	*1*
Children	126	91	*-35*
Dakota	**305**	**253**	*-52*
Men	74	49	*-25*
Women	79	83	*4*
Unaccompanied youth	1	1	*0*
Children	151	120	*-31*
Ramsey	**1,067**	**1,311**	*244*
Men	197	350	*153*
Women	348	421	*73*
Unaccompanied youth	26	49	*23*
Children	496	491	*-5*
Washington	**54**	**60**	*6*
Men	2	3	*1*
Women	18	26	*8*
Unaccompanied youth	0	0	*0*
Children	34	31	*-3*
East Metro total	**1,651**	**1,794**	*143*
Men	304	425	*121*
Women	512	584	*72*
Unaccompanied youth	28	52	*24*
Children	807	733	*-74*

Source: *Wilder Research statewide survey of Minnesotans without permanent shelter.*

*   *October 26, 2000 and October 23, 2006. Table includes those housed in emergency shelters (including domestic violence shelters and emergency hotel vouchers), and transitional housing programs. In addition, the survey identified 256 individuals living "on the street" in 2006.*

A second source of data relevant to homelessness in the East Metro is administrative data from the region's shelters. This source is most developed in Ramsey County, which has seen fairly substantial increases in the numbers of people using emergency shelters in the first half of the decade. For example, since 2000 the total number served in Ramsey County shelters grew from 3,367 to over 4,500. Over that same time the number of families entering shelters (not including domestic violence shelters) declined by 9 percent (from 353 to 329), while the number of single females more than doubled (from 265 to 575), and the number of single males grew by over 50 percent (from 1,889 to 2,927).[8]

Administrative data show that in 2004 and 2005 about a quarter of all those using shelter met an operational definition of "long term homelessness" (858 in 2004 and 1,049 in 2005), with nearly 90 percent of those persons being single males. Research has shown that housing programs that couple rent subsidies with supportive services, often referred to as "permanent supportive housing," can be particularly effective with this population. On the other end of the spectrum, many of the families and individuals that become homeless for a short period of time might be able to avoid homelessness if emergency rental assistance, subsidized housing, or income supports were more readily available.

In light of these trends, what is the current capacity and program mix for housing those who experience homelessness? And what planning is underway to address the needs? Currently, there are about 2,000 emergency shelter and transitional housing beds in the East Metro, which is nearly identical to the number of sheltered and unsheltered in the region. In addition, the region provides about 1,450 "permanent supportive housing" beds designated for the formerly homeless (Figure 6). About two-thirds of the total current capacity is designated for families experiencing homelessness. Approximately 80 percent of the region's current capacity is located in Ramsey County.

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[8]   Craig Helmstetter and Joanne Arnold, "Counting on Shelter: Emergency and transitional housing use in Ramsey County, 2004 and 2005," (www.wilder.org/report.html?id=1934).

6. Bed capacity and unmet needs in housing programs for the homeless, 2006

	Families	Single adults	Youth	Total
Emergency shelter				
Current capacity (beds)	330	336	16	682
Under development	0	40	0	0
Unmet need	*117*	*39*	*10**	*156*
Transitional housing				
Current capacity	922	277	88	1,287
Under development	0	0	0	0
Unmet need	*164*	*136*	*50**	*350*
Permanent supportive housing				
Current capacity	946	492	12	1,450
Under development	18	114	0	132
Unmet need	*755*	*514*	*50**	*1,319*

Note: Both transitional and permanent supportive housing are referred to as "supportive housing," with the main distinction being that transitional housing is typically time limited to 24 months, while "permanent" supportive housing is not.

Source: Anoka, Dakota, Ramsey, and Washington County Exhibit 1 Application to the US Department of Housing and Urban Development, June 2006. Note that the "unmet needs" presented here are determined by community experts and provided in the context of an application for funding from HUD's competitive homeless assistance programs funding.

* The HUD applications do not specifically single out needs for youth-specific housing. The unmet needs of 10 shelter beds, 50 transitional beds, and 50 permanent supportive housing beds is taken from the recommendations in "Heading Home Ramsey," the City of St. Paul/Ramsey County Homeless Advisory Board's plan to end homelessness.

County planners and non-profits in all four East Metro counties are actively engaged in efforts to improve housing and services to meet the needs of those experiencing homelessness. For example, all four counties have active homeless prevention programs and "Continuum of Care" committees organized to help access federal homeless assistance dollars, and all have agencies participating in the state's plan to end long-term homelessness.

Recently the Ramsey County/City of Saint Paul Homeless Advisory Board has developed two especially important plans related to the provision of additional units for those experiencing homelessness. First, in 2005 the Board released a plan to end long-term homelessness by 2010 that calls for creation of an additional 920 units of permanent supportive housing.

Second, in 2006 the Board released a draft of an even more ambitious plan to end homelessness. This plan calls for, among other things, an aggressive expansion of

available rental subsidies, through both an increased supply of federal Housing Choice Vouchers (Section 8) and creation of 500 flexible rental assistance vouchers. For homeless youth, including teen parents, the plan calls for a small increase in shelter capacity and a large increase – 100 units – of transitional or permanent supportive housing. Perhaps also relevant to the broader discussion of housing capacity is the goal that the plan sets to reduce the county's population in emergency shelter by 50 percent over the next five years. Anoka and Dakota counties are also in the process of developing local plans to end homelessness.

Rental housing

The East Metro is currently home to nearly 120,000 households that rent. As shown in Table 7, about one-third of the region's rental households are located in St. Paul. The proportion of the population that rents varies substantially by jurisdiction, from over 40 percent in St. Paul to 15 percent or less in Anoka and Washington counties. Renting households also vary by age throughout the region, with younger households being most likely to rent, householders in their prime working years (35 to 64) renting least frequently, and rental frequency rising somewhat again among households headed by someone retirement age or older.

Renters tend to have smaller households and much lower incomes than homeowners. In 2006 the overall median income for renters in the East Metro was about $30,000, which equates to a maximum affordable rent of no more than $750 per month. Median renter incomes range from a low of about $23,000 in St. Paul to a high of nearly $36,000 in Dakota County, which translates to maximum affordable rents of $570 and $890, respectively. Comparing median rent to median income suggests that the rental markets in Anoka, Dakota, and Suburban Ramsey are more affordable than is the case in either St. Paul or Washington County.

Low-income households are much more likely to live in rental housing than are higher income households. For example, 45 percent of low-income households in the East Metro rent, compared with only 23 percent of all households in the East Metro. Seen another way, 70 percent of the region's renters meet our definition of low-income. Therefore the state of the region's rental market is especially important for purposes of this report.

Close to 90,000 renter households in the East Metro meet our definition of low-income, with close to 50,000 meeting the definition of very low-income. Low-income renters are very likely to face cost burdens, and very low-income renters are extremely likely to face housing cost burdens. **In raw numbers, the current unmet need for more affordable housing among renters equates to the 60,000 low-income renter households that are**

spending 30 percent or more of their income on housing, including about 41,000 cost-burdened very low-income renter households.

7. Selected information related to households that rent, 2006 estimates

	Anoka	Dakota	St. Paul	Suburban Ramsey[†]	Washington	East Metro
Renter households	16,926	30,888	*41,090*	19,744	10,831	**119,479**
*(rate)**	*(15%)*	*(20%)*	*(41%)*	*(24%)*	*(13%)*	**(23%)**
Rental rate by householder age						
15 to 34 years	27%	41%	*59%*	63%	33%	**44%**
35 to 64 years	11%	13%	*27%*	34%	5%	**16%**
65 years and over	19%	19%	*25%*	33%	22%	**22%**
Average renter household size*	2.2	2.0	*2.2*	1.9	1.8	**2.1[†]**
Median income, renter households*	$32,531	$35,581	*$22,791*	$31,230	$34,579	**$29,775[†]**
Median rent*	$792	$821	*$732*	$775	$926	**$787[†]**
Low-income households that rent	13,061	18,642	*35,608*	14,971	6,698	**88,980**
(percent of all renter households)[†]	*(71%)*	*(62%)*	*(76%)*	*(69%)*	*(61%)*	**(70%)**
Very low-income households that rent	6,406	9,465	*22,398*	7,460	3,342	**49,071**
(percent of all renter households)[†]	*(35%)*	*(31%)*	*(48%)*	*(35%)*	*(30%)*	**(38%)**
Households spending 30% or more of income on housing						
Cost-burdened	8,885	14,752	*25,844*	10,580	5,045	**65,106**
(percent of renters)[†]	*(48%)*	*(49%)*	*(55%)*	*(49%)*	*(46%)*	**(51%)**
Low-income and cost-burdened	8,074	13,246	*24,817*	9,710	4,616	**60,463**
(percent of low-income)[†]	*(62%)*	*(71%)*	*(70%)*	*(65%)*	*(69%)*	**(68%)**
Very low-income and cost-burdened	5,499	8,255	*18,598*	6,283	2,740	**41,375**
(percent of very low-income)[†]	*(86%)*	*(87%)*	*(83%)*	*(84%)*	*(82%)*	**(84%)**

*Source(s):   US Census Bureau, 2006 American Community Survey (ACS; where numbers are shown, percentages from ACS are weighted to Metropolitan Council estimates; *), author's estimate (weighted averages and interpolations) based on 2006 ACS ([†]). Note that, as estimates, the Metropolitan Council and ACS data presented in this table are subject to error; for example, the ACS data presented above generally have margins of error of at least ±1 percentage point.*

Note: Low-income is defined here as an annual income at or below $47,100 (60% of MFI). Very low-income is defined here as an annual income at or below $23,550 (30% of MFI). Very low-income households are included in the counts of low-income households.

Owner occupied housing

The East Metro has a high homeownership rate. More than three-quarters of all households in the East Metro – well over 400,000 – own their home. Following the general pattern for the region, the highest ownership rates, median incomes, and home sales prices are in the suburbs, especially Washington County. Table 8 shows selected information related to homeownership in the region, as of 2006.

Several trends in homeownership are beyond the scope of our analysis. Two of these are noted in the table. First, the East Metro, like the Twin Cities as a whole, is subject to a large gap in homeownership rates between White households and households of color. In the East Metro overall the ownership rate for households of color is only about two thirds of the ownership rate for whites. Second, the region also has been hit hard by the foreclosure crisis. From 2005 to 2006, the number of sheriff's sales increased by 73 percent. Unease in the housing market has led to a slowdown in sales and a stalling in home sales prices throughout the East Metro.

In 2006 the median income of home owning households was over twice that of renter households in the region, and ranged from a low of $62,000 in St. Paul to $82,000 in Dakota and Washington counties. These median incomes roughly equate to a maximum affordable home price of $197,000 in St. Paul and $260,000 in Dakota and Washington counties ($238,000 for the East Metro as a whole).[9] These home values are fairly similar to the existing home values and sales prices in each of the jurisdictions.

Overall, about 31 percent of the East Metro's homeowners were cost-burdened in 2006, but that rate was doubled among the 108,000 low-income owners in the region. Fewer than 10 percent of owners in the region meet the definition of very low-income, but fully three-quarters of those 35,000 households are cost-burdened. **About 67,000 low-income homeowners are spending 30 percent or more of their income on housing, including about 27,000 cost-burdened very low-income households**.

Finally, a comparison of current rental and ownership markets shows that low-income housing needs differ by type and location. For example, the majority of low-income households with cost burdens in the suburbs are currently homeowners, while the reverse is true in St. Paul. Additionally, while the 127,000 low-income and cost-burdened households in the region are split fairly evenly between renter and owner households, the nearly 70,000 very low-income households with cost burdens are much more likely to currently be in rental housing.

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[9]   Assuming 10 percent down and an 8 percent mortgage interest rate and accounting for utility costs within the affordability limit. Note that this calculation ignores mortgage insurance and taxes.

8. Selected information related to homeownership, 2006 estimates

	Anoka	Dakota	St. Paul	Suburban Ramsey[†]	Washington	East Metro
Households owning** (rate)*	100,717 (85%)	117,729 (80%)	66,994 (59%)	70,984 (76%)	72,780 (87%)	**429,204 (77%)**
Average household size*	2.9	2.7	2.6	2.6	2.8	**2.7**
Ownership rate for White, non-Hispanic householders*	86%	82%	68%	79%	87%	**81%**
Ownership rate for householders of color*	68%	59%	36%	53%	82%	**52%**
Median household income for owners*	$73,084	$82,017	$62,499	$70,153	$82,018	**$75,039[†]**
Median value, owner-occupied units *	$229,700	$247,900	$209,800	$237,400	$263,400	**$238,800[†]**
Median sales price of existing units (change from '05)**	$224,000 (0%)	$233,650 (1%)	$199,000 (2.1%)	$238,400 (1%)[††]	$253,925 (1%)	**$229,900 (1%)[††]**
Number of sales (change from '05)**	4,528 (-23%)	5,842 (-19%)	3,399 (-14%)	2,714 (-14%)	3,596 (-14%)	**20,079 (-18%)**
Foreclosure proceedings** (increase over '05)	849 (63%)	880 (92%)	-- --	1,047 (125%)	414 (70%)	**3,190 (73%)**
Low-income owner households (percent of all owners)[††]	24,225 (24%)	24,996 (21%)	23,708 (35%)	20,093 (28%)	15,128 (21%)	**108,150 (25%)**
Very low-income owner households (percent of all owners)	8,053 (8%)	7,124 (6%)	8,775 (13%)	7,112 (10%)	4,402 (6%)	**35,466 (8%)**
Households spending 30% or more of income on housing						
Cost-burdened** (percent of all)	31,500 (31%)	34,189 (29%)	22,496 (34%)	20,281 (29%)	22,892 (31%)	**131,358 (31%)**
Low-income and cost-burdened** (percent of low-income)[†]	14,560 (60%)	15,844 (63%)	15,373 (65%)	11,233 (56%)	9,700 (64%)	**66,710 (62%)**
Very low-income and cost-burdened** (percent of very low-income)[†]	5,962 (74%)	5,605 (79%)	6,731 (77%)	5,413 (76%)	3,329 (76%)	**27,040 (76%)**

Sources: *US Census Bureau, 2005 American Community Survey (ACS *), Saint Paul Area Association of REALTORS (SPAAR**, this source includes the majority of home sales but excludes those not involved in the MLS), HousingLink (proceedings = Sheriff's sales; ***), author's estimate (weighted averages and interpolations) based on 2006 ACS ([†]), or SPAAR data ([††]). Note that, as estimates, all numbers presented in this table are subject to error; for example, the ACS data presented above generally have margins of error of at least ±1 percentage point.*

Note: *Low-income is defined here as an annual income at or below $47,100 (60% of MFI). Very low-income is defined here as an annual income at or below $23,550 (30% of MFI). Very low-income households are included in the counts of low-income households.*

Previous projections

Two earlier studies have made projections similar to those presented here. *The Next Decade of Housing in Minnesota*, conducted by BBC Research & Consulting, was jointly commissioned by Minnesota Housing, the Family Housing Fund, and the Greater Minnesota Housing Fund.[10] *Determining Affordable Housing Need in the Twin Cities 2011 – 2020* was conducted by the Metropolitan Council under the guidance of an advisory panel convened for purposes of the study.[11]

Published in 2003, *Next Decade* projects housing needs through 2010 for the purpose of providing a common point of reference for all parties involved with developing affordable housing. The Metropolitan Council report, published in 2006 and updated in 2007, was conducted to inform municipalities of the amount of affordable housing development they would be expected to include in their statutorily mandated comprehensive plans.

Both efforts are to be commended. Both reports employed a reasonable methodology, and both have proven useful for their respective purposes. Both have also been subject to some controversy, especially the Metropolitan Council study due to the sensitive nature of assigning municipalities responsibility for producing affordable housing. For purposes of this report, we briefly summarize some of the key assumptions and finding of each study as a precursor to the discussion of our methods and the findings. Note that we return to the findings from these studies in the concluding section of the report, which draws comparisons between our projections and those made in the two studies discussed here.

Next decade of housing

The basic formula employed in *Next Decade*, as shown on page 3 of the report, is as follows:

(1) New low-income households 2000-2010

minus

(2) Expected provision of low-income units by the private market by 2010

minus

(3) Expected provision of low-income units by public and philanthropic sectors by 2010

equals

(4) Unmet need for new low-income units in 2010

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[10] Currently available at: www.mnhousing.gov/news/reports/index.aspx

[11] Currently available at: www.metrocouncil.org/planning/Housing/HousingNeeds.htm

Note that while existing needs for low-income units, defined as numbers of low-income households spending 30 percent or more of their income on housing (including those experiencing homelessness), are provided in the report, the main focus is on the projected growth in need.

For projections of low-income households (step 1), BBC relied on data from the US Census, Minnesota Planning, and the Metropolitan Council, as well as commercial data providers. To arrive at the expected provision of low-income units by the private market (step 2) BBC projected forward the current percentage of low-income households assumed to be suitably housed in the private market. This percentage was arrived at by starting with the number of low-income households and subtracting those who are cost-burdened (i.e., paying 30% or more of their income on housing), and also subtracting the number of subsidized units. The report indicates that the resulting proportion has been stable in recent history, presumably making it a reasonable estimate of private market provision of low-income housing.

BBC worked with its partners on the study to estimate the expected provision of low-income units by the public and philanthropic sectors (step 3). They did so by reviewing (and unduplicating) lists of units funded by a variety of sources. Unlike the other projections in the series this data was provided at the regional level (Twin Cities 7-county), rather than the county level.

Next Decade's basic findings

Overall, *Next Decade* projects a growth of 27,463 low-income households in the East Metro during the current decade, resulting in an addition of 16,104 new housing needs. The report also estimates that some of the new need – approximately 40 percent – will be met by the public and philanthropic sectors. The report does not make those projections at levels lower than the Twin Cities 7-county region as a whole, but if it did the total projected "unmet new housing construction need" would likely be just under 10,000 units.

9. Summary of *Next Decade* projections 2000-2010, by county

	Anoka	Dakota	Ramsey	Washington	East Metro
Existing households, 2000	106,596	131,481	201,978	71,520	**511,575**
Low-income households, 2000	32,438	37,353	91,058	17,974	**178,823**
Cost-burdened low-income households, 2000	14,013	16,791	40,505	8,263	**79,572**
Households added 2000-2010	22,427	28,894	13,890	20,082	**85,293**
Low-income households added 2000-2010	5,888	16,850	-2,844	7,569	**27,463**
Projected new low-income housing needs 2000-2010 (not served by private market)	3,026	8,665	0	4,413	**16,104**

Source: *Next Decade of Housing: Twin Cities Metropolitan Area Regional Report (2003).*

While we do not rely on this same assumption, it is notable that even though *Next Decade* projected this decline in low-income households, Ramsey County starts off with a much higher concentration of low-income households. According to the report, 45 percent of all households in Ramsey County are low-income, compared to 28 percent in the suburban counties. Further, if one were to take as the grand total overall need for 2010 the combination of low-income cost-burdened households in 2000 added to the projected new low-income households not served by the private market by 2010, Ramsey County remains the county with the highest level of affordable housing needs in the East Metro at the end of the decade.[12]

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10. Summary of *Next Decade* projections for the East Metro, by type of household

	Families with children	Seniors	Non-Senior households without children	East Metro*
Existing households, 2000	188,431	78,822	244,322	**511,575**
Low-income households, 2000	47,582	50,771	80,468	**178,823**
Cost-burdened low-income households, 2000	21,075	24,390	34,105	**79,572**
Households added 2000-2010	33,188	7,413	44,689	**85,293**
Low-income households added 2000-2010	8,426	4,704	14,338	**27,463**
Projected new low-income housing needs 2000-2010 (not served by private market)	6,142	2,614	7,348	**16,104**

Source: *Next Decade of Housing: Twin Cities Metropolitan Area Regional Report (2003).*

*   *Categories do not always sum to total, apparently due to the way the numbers were rounded in the original report.*

Looking at the *Next Decade* projections by household type, it would appear that the largest needs exist among non-senior households without children. In 2000, more than 34,000 such households were cost-burdened, and by 2010, more than 7,000 will be added to their ranks. This sort of pattern holds for every county in the East Metro, although *Next Decade* projects both Anoka and Washington Counties to add more families with low-income housing needs than either seniors or non-seniors without children.

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[12]   40,505 cost-burdened in 2010+ 0 added needs by 2010 = 19 percent of all households in Ramsey; while in the combined suburban counties 39,067 cost-burdened in 2010+ 16,104 new unmet needs by 2010 = 14 percent of all households in Anoka, Dakota, and Washington counties combined.

Next Decade's basic assumptions and limitations

As is necessarily the case with any report of its nature, *Next Decade* is subject to
assumptions and limitations, some of which we can start to examine due to new data that
has accumulated since publication of the report. This examination is not meant in any
way to discredit *Next Decade*, particularly since some of their assumptions have proven
very good.

Population projections: As mentioned above, *Next Decade* relied on Metropolitan Council's
2000-2010 household growth forecasts into its model. Since the report was published the
Metropolitan Council has published yearly estimates, as well as new forecasts that can be
used to improve upon the earlier projections.[13] Overall, the new forecasts are 3 percent
higher than the previous forecasts, which is an increase of nearly 20,000 households over
earlier projections. While this is not an overwhelming difference for the East Metro as a
whole, the new forecasts, which we rely on for the present report, are over 5 percent
higher in Anoka County, and nearly 7 percent higher in Washington County.

11. Household projections

	2000 US Census *	Original 2010 forecast *	2006 estimate **	New 2010 forecast ***
Anoka	106,596	129,023	119,138	135,670
Dakota	131,481	160,375	147,824	164,190
Ramsey	201,978	215,868	206,149	219,170
Washington	71,520	91,602	83,762	97,749
Total	**511,575**	**596,868**	**556,873**	**616,779**

*   US Census Bureau and Metropolitan Council, as presented in Next Decade of Housing (2003).

**   Metropolitan Council, Twin Cities Population and Household Estimates, 2006.

***   Metropolitan Council, Regional Development Framework – Revised Forecasts January 3, 2007.

Provision of low-income housing by the private market: As mentioned above, *Next
Decade* accounts for the number of low-income households whose needs would be met
by the private market in step 2 of its basic formula. It does so by subtracting the number
of cost-burdened households from the larger number of low-income households, which
the report claims to be a fairly stable proportion. Since the report was published, however,

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[13]   There is a discrepancy between US Census Bureau estimates and those produced by the Metropolitan
Council, most notably in that the Census Bureau estimates that the City of St. Paul's population
decreased 2000-2005, while the Metropolitan Council estimates suggest a slight increase. Throughout
this report we rely on Metropolitan Council estimates when possible.

the region and the nation as a whole has seen a growth in housing cost-burdens, as evidenced by the current foreclosure crisis, as well as more recent data. Census Bureau data suggests cost burdens for low-income households in the East Metro have grown from 42 percent in 2000 to 65 percent in 2006.[14]

Even before the current foreclosure crisis the continued ability of the private market to provide historic levels of low-income housing may have been somewhat questionable due to the growth in condominium conversions and the more general increase in housing valuation. Further, *Next Decade* did not explicitly attempt to account for units lost due to demolition.[15]

Provision of low-income housing by the public and philanthropic sectors: Step 3 in *Next Decade*'s model included an "expected provision of low-income housing by public and philanthropic sectors 2000-2010." One problem with this step is that functionally it may double-count subsidized housing. The 2000 Census data which served as input to the model would have included data on people living in subsidized units as a matter of representing the entire population. So step 2 likely includes households living in subsidized housing as being among those living in affordable units provided by the private market. Thus, the additional subtractions of subsidized units in step 3 could underestimate the need by, in effect, double counting subsidized units.

To the extent that step 3 remains an important step in the process, however, it would be important to have reasonable projections of the provision of low-income housing by public and philanthropic sources. Now, midway through the decade, it is possible to verify the expectations used in *Next Decade*, thanks to *Housing Counts*, an annual joint publication of HousingLink and the Family Housing Fund. According to *Housing Counts*, the production of affordable housing in the 7-county metro is somewhat lower than the predictions made in *Next Decade,* with an annual pace of 1,069 units produced 2004 to 2006, compared with the predicted pace of nearly 1,400 per year.

If this discrepancy holds, just over 3,000 of the Twin Cities area households – including roughly 1,500 in the East Metro – that *Next Decade* predicted would be adequately housed at the end of the decade will not be receiving housing subsidized by public and philanthropic sources. Further, *Next Decade* does not explicitly model for a potential loss

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[14] Author's analysis of data from U.S. Census Bureau's Census 2000 and 2006 American Community Survey.

[15] According to HousingLink and the Family Housing Fund, there were 340 units permitted for demolition in St. Paul 2002 to 2006. Since some number of these units were either unoccupied or market rate, the number of units affordable to low-income units that were lost to demolitions is unknown (*HousingCounts 2002-2006*, published by HousingLink and Family Housing Fund in July 2007 available at www.housinglink.org/counts.htm as of 1/9/2008). Anecdotally, the number of demolitions appears to be on the increase due to increases in numbers of foreclosed properties.

of subsidized housing through the expiration of federal contracts on otherwise privately held units. Although hundreds of units could be lost through this process, the public and philanthropic sectors seem to be responding to minimize this potential threat.[16]

12. Expected and actual provision of low-income housing by public and philanthropic sectors

	Expected provision 2000 to 2010*	Actual new units 2004 – 2006**
Anoka		22
Dakota		129
St. Paul		1,155
Suburban Ramsey		191
Washington		59
Total East Metro		**1,556**
Total 7-County Metro	**13,856 (1,386 per year)**	**3,206 (1,069 per year)**

*   *Next Decade. In the Next Decade report BBC declined to project expected provision of affordable housing at a smaller geographic level than the 7-county region.*

**   *Housing Counts, HousingLink and the Family Housing Fund.*

Other limitations: Beyond the limitations pointed out above, two other limitations deserve noting. First, since *Next Decade* begins by identifying the number of new low-income households added in the decade, their model does not leave open the possibility that, in effect, needs will be added from among the low-income households existing at the beginning of the study period. Mid-decade data now available suggest that the growth in cost burdens has exceeded the growth in low-income households, which *Next Decade*'s basic framework would not accommodate.

A final limitation of *Next Decade* has to do with a lack of finer grained detail. For example, *Next Decade* does not make projections for the city of St. Paul separate from Ramsey County. Additionally, while *Next Decade* does project by senior versus non-senior households, it does not attempt projections by unit size beyond family with children and households without children. Further, *Next Decade* does not attempt to divide its projections between low and very low-income households as we do in the present report.

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[16]   For example, *Housing Counts* indicates that 933 units have received either preservation or stabilization funding in St. Paul 2002 to 2006, and another 589 have been stabilized or preserved in suburban East Metro 2004 to 2006. That report also notes the loss of only 71 units to conversion throughout the suburbs of the entire 7-county metro area over the past three years (HousingLink and Family Housing Fund, July 2007).

Most of the limitations noted above are explicitly recognized in *Next Decade*, which states "These limitations combine to make the estimates presented in this report a conservative picture of affordable housing needs in Minnesota" (page 5). Despite the assumptions that may now appear in need of correction, the report accomplished its goal of "serv[ing] as a benchmark for further discussion, analysis and research… to further clarify the need for low-income housing throughout Minnesota" (page 1).

Metropolitan Council affordable housing need projections

The Metropolitan Council provides its affordable housing need projections due to its responsibility for land-use planning in the 7-county metro, as well as the Council's more specific mandate to use this authority to contribute to the provision of affordable housing in the region. The Council's projections pick up where *Next Decade* leaves off, covering the period 2011-2020, and building directly on many of the assumptions as well as some of the basic steps in that earlier report.

As in *Next Decade*, the Council follows the steps of (1) projecting the number of low-income households in the region, and (2) subtracting the number of private sector units that will serve low-income households. Importantly for their purposes, however, the Metropolitan Council only subtracts *existing* private sector units that will meet low-income housing needs; private sector units yet to be developed are left in. Further, instead of subtracting units provided by public and philanthropic sources (step 3 in the *Next Decade* formula), the Metropolitan Council keeps those units as a part of its projected need, and even adds vacant units that would be needed to maintain market equilibrium, as well as units designated for homeless households.

The Council's departures from the *Next Decade* are due to its responsibilities for land-use planning. The Council is interested in *all* units that require development, since these units may impact land use. The Council's projections are to serve as a guide for the affordable housing sections of municipalities' comprehensive plans, so the Council's report goes on to assign responsibility for development of the needed units to sewered municipalities throughout the region. The formula the Council developed to assign these units takes into account each municipality's forecasted population growth, job growth, and availability of transportations options.

Metropolitan Council's basic findings

For the purposes of the present report it is notable that the Council only projects the numbers of low-income households at the level of the 7-county region. The county- and East Metro-level information summarized in Table 13 is derived from the formula-driven apportionments made at the municipal level.

The Metropolitan Council projects a need for more than 22,000 units affordable to low-income households in the East Metro by 2020. Notably, the Council apportions most of this need to the suburbs, including well over 4,000 units in Anoka County, well over 5,000 units in Washington County, and well over 7,000 units in Dakota County.

13. Summary of Metropolitan Council projections 2011-2020, by county

	Anoka	Dakota	Suburban Ramsey†	St. Paul	Washington	East Metro
Projected number of households, 2010*	135,670	164,190	99,170	120,000	97,749	**616,779**
Households added 2011-2020*	22,090	29,100	5,500	7,000	25,015	**88,705**
Apportioned new low-income housing units**	4,482	7,611	1,911	2,625	5,627	**22,256**

Sources: ** Metropolitan Council, Regional Development Framework-Revised Forecasts, January 3, 2007 (www.metrocouncil.org/planning/framework/ accessed 1/5/08). ** Metropolitan Council, 2011 – 2020 Allocation of Affordable Housing Need by City/Township, November 2007 (www.metrocouncil.org/planning/housing/housingneeds.htm accessed 1/3/08).*

Assumptions and limitations of the Metropolitan Council's projections

Like *Next Decade* one of the Metropolitan Council's major assumptions is that there will not be a growth in housing needs among the low-income population residing in the region at the start of the decade. The Metropolitan Council only looks at the added increment of new households, making the scenario that we have observed this decade mathematically impossible. In effect, the Metropolitan Council's model does not allow for cost burdens to grow faster than low-income households. This possibility may be of less concern to the Metropolitan Council, however, since the Council's main concern lies with land-use planning. A rapid growth in cost burdens could be addressed through subsidies to existing housing rather than the development of new housing affordable to low-income households.

Other assumptions built into Metropolitan Council's projections, and explicitly discussed in that report, include those around the municipal apportionment formula. The municipal-level apportionments, however, are less relevant to the current study.

A final limitation of the Metropolitan Council's report is that it does not attempt to identify need by size of household, income level, or age. Again, this may be due to the Council's particular locus of control and emphasis on land use rather than social planning. Without somewhat greater detail on the types of units needed, however, it is possible that the Council's apportionment goals could be met through the development of 22,256 efficiency units for seniors at the very top of the low-income definition. While that scenario is far-fetched, it does point to a need for somewhat more detailed projections to help guide development decisions, which is what we provide in the next section.

Projected demands

We estimate demands for low-income housing in a manner similar to that established in *Next Decade* and the Metropolitan Council's report, but rely on our own set of methods and assumptions. The steps we used for these projections include the following:

Step 1: Project the number of low-income households

Step 2: Project the number of cost-burdens among low-income households

Step 3: Estimate needs by household size

All of our projections were made at the county level and relied on county-level data, except for the city of St. Paul, which was treated separately. (See appendix B for a more detailed explanation of our methods.)

To get to the number of low-income households we first created a seven by seven matrix of householder age by household income using decennial census data. We then updated the matrix using age projections from the state demographer to arrive at projected income distributions for the years 2010 and 2020. Note that since the state demographer does not project by *householder* age, we derived householder age from overall age-of-population projections, based on patterns observable in the 2000 census data. The projected age by income distributions were then applied to the Metropolitan Councils household forecasts for 2010 and 2020.

Like *Next Decade*, we are concerned here not only with the number of low-income households, but with those who would have housing affordability problems. Therefore, we project numbers of low-income households with housing "cost burdens" of 30 percent or more. These projections relied on 2005 and 2006 American Community Survey data, which estimate the number of cost-burdened households by income and tenure (home owners versus renters), for each county and the city of St. Paul.[17]

Unlike *Next Decade*, we did not attempt to project development of such units. Neither did we add a factor for homeless households, assuming that most such households would be accounted for in the bottom of the income distribution.

After projecting the numbers of low-income and cost-burdened households we estimated the demands by household size, based on a special tabulation of 2000 census data available

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[17] The 2006 ACS provides cost-burdening estimates for the same tenure by age by income distribution observable for each jurisdiction in 2000 census data. Our projected demands are quite sensitive to the general increase in cost burdening between 2000 and 2006, as discussed in Appendix B.

from the US Department of Housing and Urban Development (HUD). Our estimates result from applying the proportional distribution from the tabulations that show the number of persons per household "with conditions" – including cost-burdened households – by income for each jurisdiction in this study.

Results for all households

The two trends that dominate our projections are the overall household growth pattern and the aging of the population. Since our model does not attempt to forecast changes in the job market, mortgage interest rates, wealth effects, or, for example, large influxes of immigrants, overall household growth and aging largely dictate the projected changes in numbers of low-income and cost-burdened households in the East Metro.

The Metropolitan Council has forecast a 21 percent growth in households for the decade 2000 to 2010, followed by a 14 percent increase in the next decade, leaving the region with over 705,000 households by 2020. Due to the aging of the baby boom generation (born 1946-1964), the growth of senior households is particularly rapid from 2010 to 2020, growing by 71 percent to nearly 135,000 households.

14. Number of East Metro households, 2000 - 2020
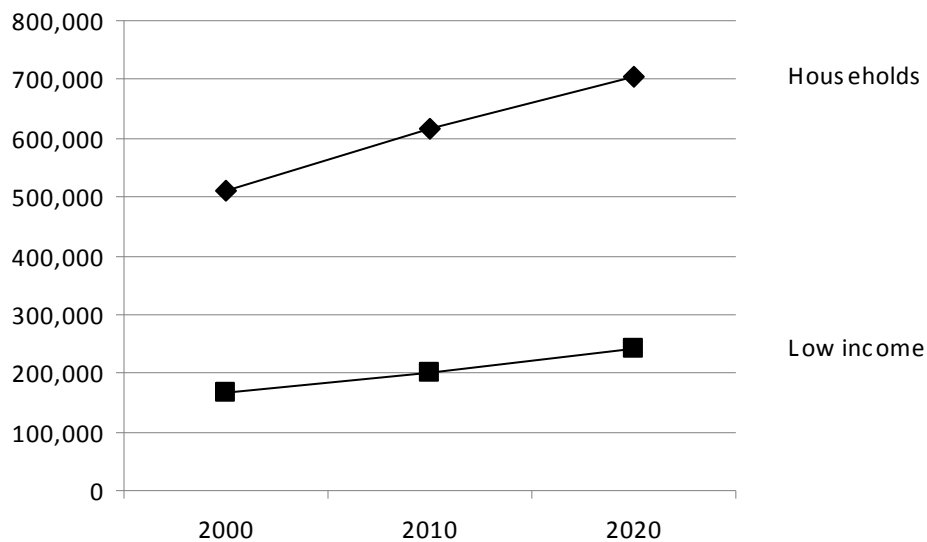
Source: *Metropolitan Council (for households) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.*

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars.*

Based largely on these two trends, we are projecting that the number of low-income households – those earning the equivalent of $48,500 or less in 2008 dollars – will reach about 202,000 by 2010, including nearly 77,000 very low-income households.[18] We project that by 2020 nearly 40,000 additional households will add to the ranks of low-income holds region-wide, bringing the total to just over 242,000.

15. Number of households by incomes and cost burdens, 2000 - 2020

Source: Metropolitan Council (for households) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.

Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars (very low-income households are included in the counts of low-income households); Cost-burdened = spending 30 percent or more of income on housing.

For purposes of this report we are most concerned with households that are both low-income and living in housing that is not affordable to them. As shown in Figure 15, **we are projecting that there will be nearly 140,000 low-income and cost-burdened households in the East Metro by 2010, and nearly 170,000 by 2020. These numbers include significant numbers of cost-burdened very low-income households – nearly 70,000 by 2010 and over 84,000 by 2020.**

Trends in the first part of the current decade suggest that greater proportions of lower income households will be cost-burdened at the end of the decade than was the case at the beginning. In 2000, over 40 percent of low-income households were cost-burdened, including over 60 percent of very low-income households. Based on current trends we project that these proportions will increase to approximately 70 and 90 percent, respectively, in both 2010 and 2020.

Beyond the increase in numbers, the geographic patterns of growth are also worth noting. In the coming decade we expect most growth to take place in the suburban areas of the region, owing to the near complete development of land in St. Paul. As shown in the top

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[18]   See Appendix A for the definitions of low-income used in this report.

panel of Figure 16, more than 90 percent of the East Metro's household growth during 2010 to 2020 will occur in the suburbs. The bottom panel shows that while very low-income households will continue to be concentrated in St. Paul through 2010 (and through 2020), 84 percent of the growth in very low-income households will occur outside of the region's central city.

16. Location of households and low-income households, 2010 and 2020
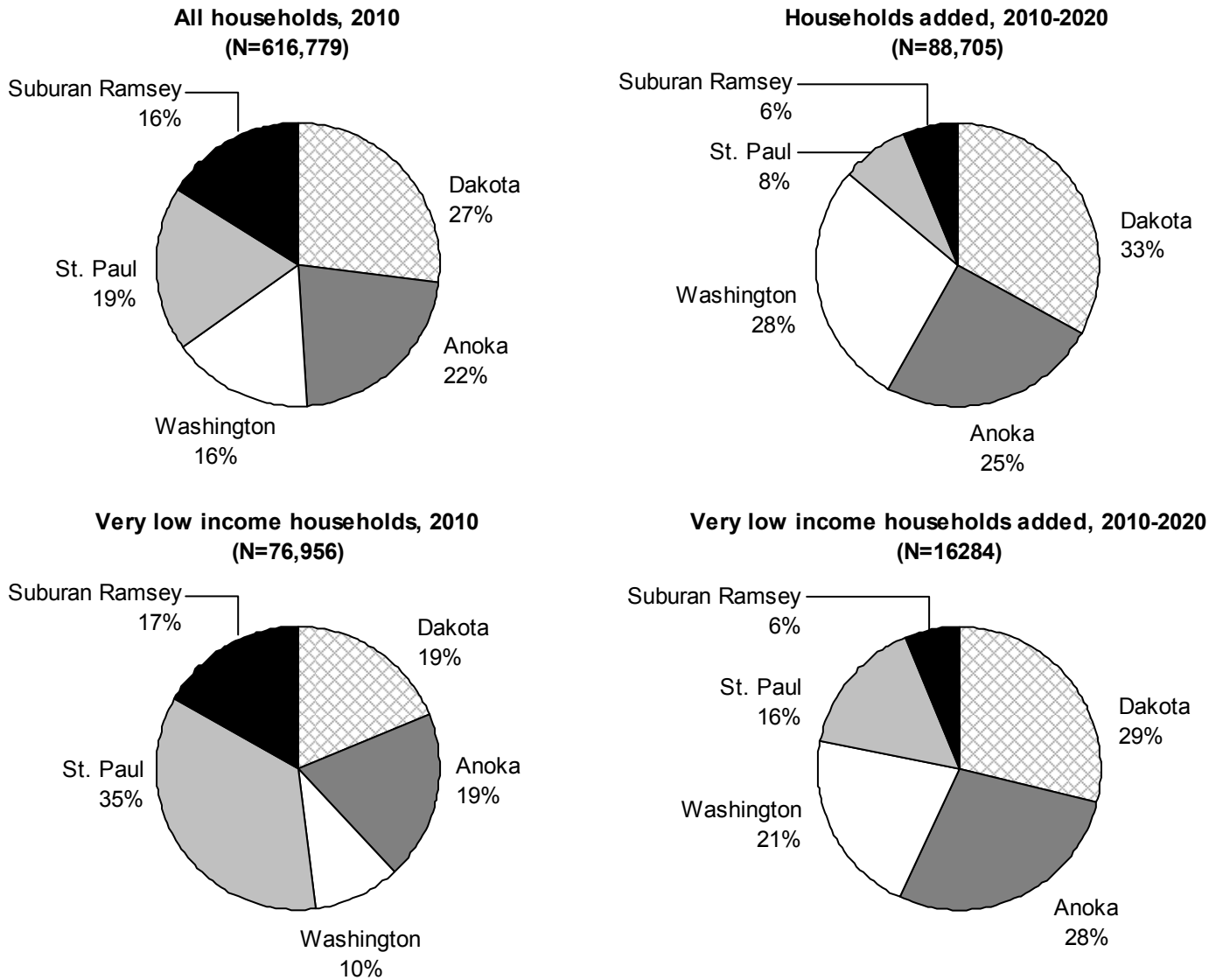
All households, 2010
(N=616,779)

Suburan Ramsey 16%
Dakota 27%
St. Paul 19%
Anoka 22%
Washington 16%

Households added, 2010-2020
(N=88,705)

Suburan Ramsey 6%
St. Paul 8%
Dakota 33%
Washington 28%
Anoka 25%

Very low income households, 2010
(N=76,956)

Suburan Ramsey 17%
Dakota 19%
St. Paul 35%
Anoka 19%
Washington 10%

Very low income households added, 2010-2020
(N=16284)

Suburan Ramsey 6%
St. Paul 16%
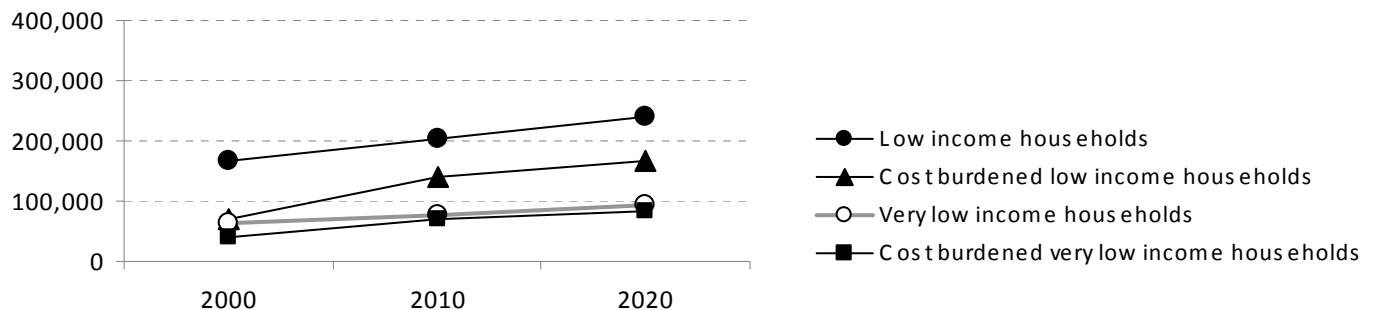Dakota 29%
Washington 21%
Anoka 28%

Source: *Metropolitan Council (for households) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.*

Note: *Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars.*

Jurisdictional results for all households

Table 17 presents the overall projected needs for affordable housing by jurisdiction (see the appendix for additional detail). The table shows in greater detail a trend observable in graph above: In the current decade the growth among cost-burdened low-income households actually outpaces the growth of low-income households. Methodologically this is due to our reliance on 2005 and 2006 American Community Survey data to model cost burdens. Practically, what this means is that the region is losing the ability for low-income households to access units that are affordable to them. Current evidence of this trend can be seen in the boom in foreclosures.

We are also projecting that each of the suburban areas will experience a fairly rapid growth in low-income housing needs. Throughout the region there were nearly 41,000 low-income households facing cost burdens at the start of the current decade. We are projecting that number to more than double to 84,000 by 2020. That pattern is most dramatic in Anoka, Dakota, and Washington Counties, where the numbers of cost-burdened very low-income households are projected to rise by around 250 percent between 2000 and 2020.

17. Households by income, cost burden, and jurisdiction 2000, 2010, and 2020

	Anoka	Dakota	St. Paul	Suburban Ramsey[†]	Washington	East Metro
2000						
Households	106,428	131,151	112,109	89,127	71,462	**510,277**
Low-income households	30,186	34,835	56,661	29,598	16,731	**168,010**
Cost-burdened low-income households	13,365	15,799	21,824	12,285	7,989	**71,262**
Very low-income households*	10,597	11,226	25,684	10,709	5,439	**63,655**
Cost-burdened very low-income households	6,795	7,815	15,280	7,370	3,624	**40,884**
2010						
Households	135,670	164,190	120,000	99,170	97,749	**616,779**
Low-income households	40,033	44,721	58,904	34,858	23,837	**202,354**
Cost-burdened low-income households	26,891	32,788	41,713	23,060	15,239	**139,691**
Very low-income households*	14,523	14,738	26,706	12,989	7,999	**76,956**
Cost-burdened very low-income households	12,424	14,259	24,069	11,967	7,028	**69,747**
2020						
Households	157,760	193,290	127,000	104,670	122,764	**705,484**
Low-income households	50,370	56,758	63,641	37,939	32,944	**241,652**
Cost-burdened low-income households	33,925	41,726	45,163	24,938	21,164	**166,915**
Very low-income households*	19,074	19,430	29,240	14,026	11,470	**93,239**
Cost-burdened very low-income households	16,248	18,770	26,293	12,861	10,039	**84,211**
Added 2010-2020						
Households	*22,090*	*29,100*	*7,000*	*5,500*	*25,015*	***88,705***
Low-income households	*10,336*	*12,037*	*4,737*	*3,081*	*9,108*	***39,298***
Cost-burdened low-income households	*7,034*	*8,938*	*3,450*	*1,878*	*5,925*	***27,224***
*Very low-income households**	*4,550*	*4,692*	*2,534*	*1,036*	*3,471*	***16,284***
Cost-burdened very low-income households	*3,824*	*4,511*	*2,223*	*895*	*3,011*	***14,464***

Source: Metropolitan Council (for households) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.

Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.

* Very low-income households are included in the counts of low-income households.

Needs by household size for all households

While projecting demand by unit size is beyond the scope of this work, we take a step in this direction by projecting the number of low-income households by household size.

To estimate needs by household size we apply the household size by income distribution shown in special tabulations of Census 2000 data to our overall projections of low-income and cost-burdened households.[19] Effectively, we assume that the distribution of household sizes among low-income households will remain the same.

For purposes of allocating needs according to household size it is important to recall that our overall projections of low-income and cost-burdened households relied on single income cut offs for designating "low-income" and "very low-income." For example, a single person household making $48,500 is defined as "low-income," but a five person household making $49,000 is not. This across-the-board-style definition was also used by the earlier *Next Decade* and Metropolitan Council studies, but has some obvious limitations. Larger households need more bedrooms, and since more bedrooms result in higher housing costs, even relatively higher incomes can easily be subject to housing cost burdens for larger households. To address this issue many housing subsidy programs index their income qualifications by household size, allowing larger households to earn more money than smaller households.

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[19] http://www.huduser.org/DATASETS/spectabs.html, accessed 6/26/07. We applied the tables showing household size by income for households "with conditions." " 'With Conditions' is defined as a household having at least one of the following housing conditions: lacking complete plumbing facilities, lacking complete kitchen facilities, with more than 1.01 persons per room, and selected monthly owner costs greater than 30 percent of household income… or gross rent as a percentage of household income… of greater than 30 percent." Our analysis of the tables suggests that a majority of households "with conditions" are cost-burdened, making the "with conditions" tables more appropriate for these purposes than, for example, HUD's special tabulations showing household size by income. Additionally, these special tabulations are available for each jurisdiction in our analysis (suburban Ramsey is derived by subtracting St. Paul from Ramsey County).

18. Projected housing cost burdens by household size and income level, 2010
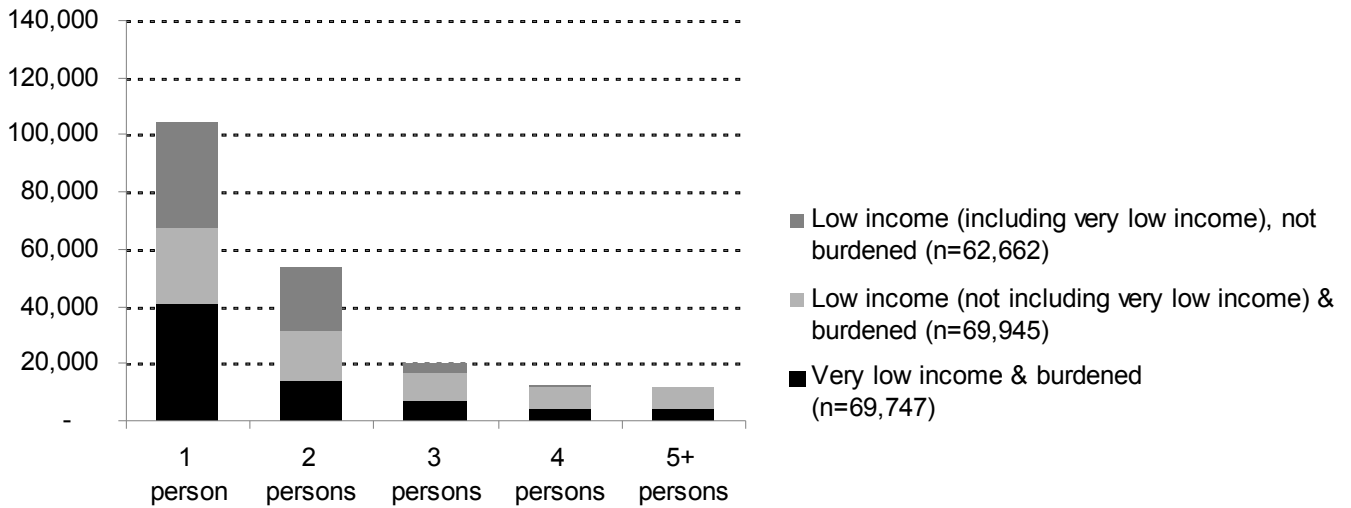
Legend:
- Low income (including very low income), not burdened (n=62,662)
- Low income (not including very low income) & burdened (n=69,945)
- Very low income & burdened (n=69,747)

Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars. Very low-income households are included in the counts of low-income households.

We did not index income cut-offs for household size in our modeling of low-income and cost-burdened households due to data limitations and the complexities it would have introduced to the analysis. If we had indexed for household size, however, our results would very likely have shown somewhat greater needs among larger households. Indeed, as Figure 19 shows, our methods produced results suggesting that over one-third of both 1- and 2-person households that will meet our definition of "low-income" in 2010 will *not* face housing burdens, but that virtually all 3, 4, and 5 person households will. Thus, given the nature of our projections, it may be helpful for some readers to focus on the "very low-income" category for 1 and 2 person households, and the "low-income" category for households of 3 or more persons (see Appendix A for more on income definitions).

Figures 20 and 21 show overall projections of low-income housing needs by household size. By 2010 about half of all low-income housing needs will be among single person households, including nearly 60 percent of all needs among very low-income households (those making the 2008 equivalent of $24,250 or less per year). Low-income households that are not very low-income – those with incomes between $24,250 and $48,500 in today's dollars – are more likely to be multi-person households.

19. Projected needs by size of household, 2010

Legend: Low income & burdened; Very low income & burdened

Household size	Very low income & burdened	Low income & burdened
1 person	40,966	26,836
2 persons	13,681	17,639
3 persons	6,814	10,146
4 persons	4,058	7,868
5+ persons	4,228	7,456

Note: *All households shown above are projected to be cost-burdened (spending 30% or more of income on housing). Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars. Very low-income households are included in the counts of low-income households.*

20. Projected needs added, 2010-2020, by size of household
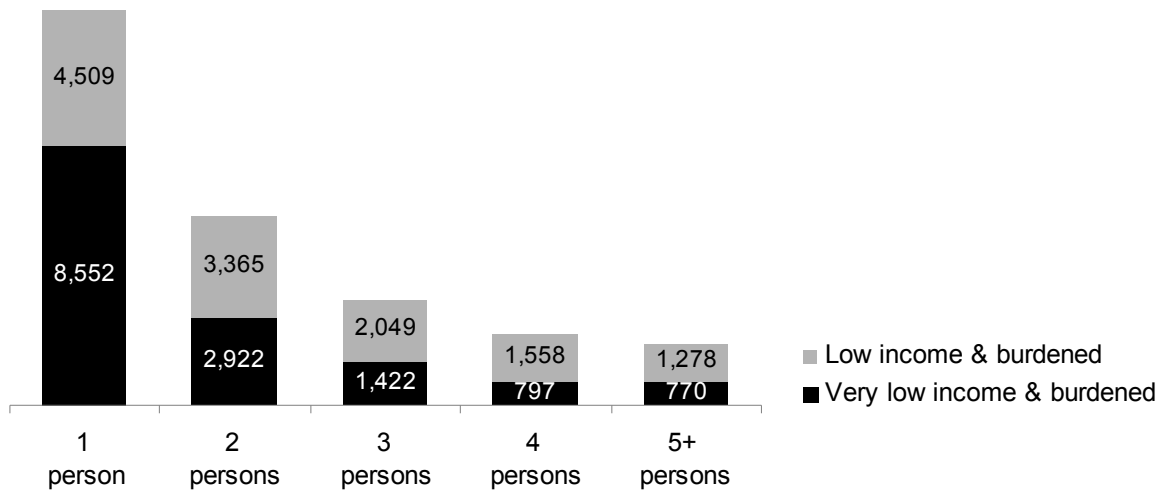
Legend: Low income & burdened; Very low income & burdened

Household size	Very low income & burdened	Low income & burdened
1 person	8,552	4,509
2 persons	2,922	3,365
3 persons	1,422	2,049
4 persons	797	1,558
5+ persons	770	1,278

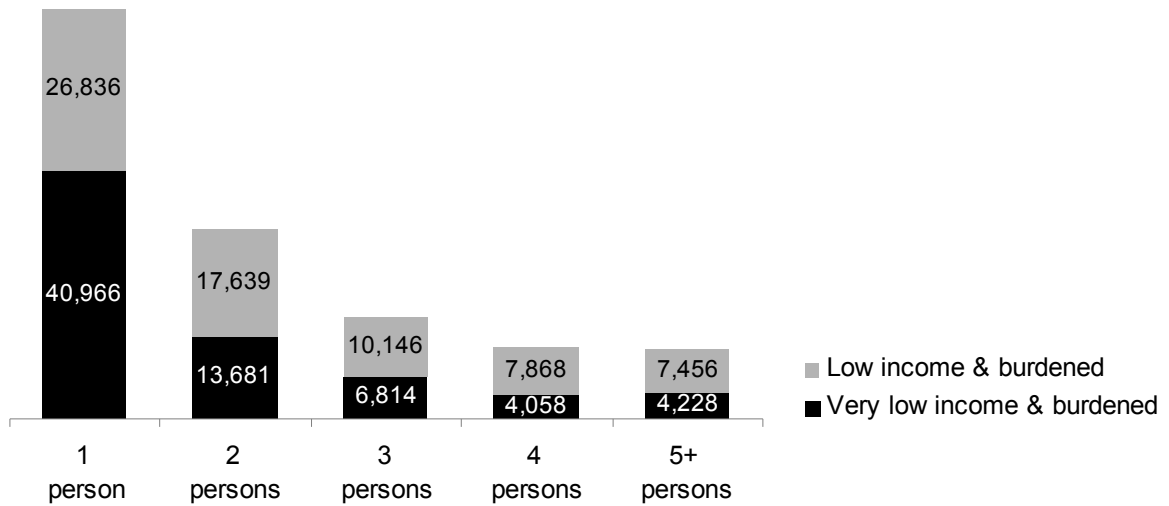*Note:* *All households shown above are projected to be cost-burdened (spending 30% or more of income on housing). Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars. Very low-income households are included in the counts of low-income households.*

21. Needs by income level, household size, and jurisdiction 2010 and 2020

	Anoka	Dakota	St. Paul	Suburban Ramsey †	Washington	East Metro total
2010						
Cost-burdened low-income households	26,891	32,788	41,713	23,060	15,239	**139,691**
1-person	11,912	16,343	19,771	12,458	7,301	**67,802**
2-person	6,504	7,229	8,163	5,597	3,814	**31,321**
3-person	3,688	4,342	4,437	2,572	1,920	**16,960**
4-person	2,619	2,756	3,746	1,571	1,240	**11,926**
5+-person	2,168	2,118	5,596	862	964	**11,683**
Cost-burdened very low-income households	12,424	14,259	24,069	11,967	7,028	**69,747**
1-person	6,907	8,947	13,187	7,788	4,162	**40,966**
2-person	2,652	2,608	4,382	2,430	1,615	**13,681**
3-person	1,404	1,394	2,388	1,036	590	**6,814**
4-person	788	689	1,724	518	332	**4,058**
5+-person	673	622	2,388	195	329	**4,228**
2020						
Cost-burdened low-income households	33,925	41,726	45,163	24,938	21,164	**166,915**
1-person	15,027	20,798	21,406	13,472	10,140	**80,863**
2-person	8,205	9,200	8,839	6,053	5,297	**37,608**
3-person	4,653	5,525	4,804	2,781	2,666	**20,431**
4-person	3,304	3,508	4,056	1,698	1,722	**14,281**
5+-person	2,736	2,696	6,059	933	1,339	**13,732**
Cost-burdened very low-income households	16,248	18,770	26,293	12,861	10,039	**84,211**
1-person	9,032	11,777	14,405	8,370	5,946	**49,518**
2-person	3,469	3,433	4,786	2,612	2,306	**16,603**
3-person	1,836	1,835	2,609	1,113	843	**8,236**
4-person	1,030	907	1,884	557	474	**4,855**
5+-person	880	819	2,609	210	470	**4,998**

Source: Metropolitan Council (for households) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.

Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing. Very low-income households are included in the counts of low-income households.

Results for senior households

The aging of the baby boom generation means that the demographic profile of the East Metro will change rapidly in coming years. The number of senior households is on track to increase by 20 percent in this decade, and by over 40 percent in the following decade to nearly 135,000 households by 2020. We are projecting that there will be a similar rate of increase among low- and very low-income senior households, as well the proportions of senior households that are both low-income and cost-burdened.

Senior households are much more likely than non-senior households to be either low- or very low-income, and are more likely to have low-income housing needs.[20] By 2010, for example, we project that 30 percent of senior households will be low-income, compared with 12 percent of all households.

During the decade 2010 to 2020, much of the general increase in low-income households, and thus the increase in low-income housing needs during that decade, will be due to increases in the number of households headed by someone age 65 or older. We are projecting that 37 percent of all needs among very low-income households will be among senior households in 2010, and that proportion will increase by 5 percentage points by 2020. Perhaps more dramatically, we are projecting that of the entire 14,500 added new increment of very low-income housing need in the East Metro during that decade, fully 10,000 will be headed by seniors.

Since senior households tend to be 1- and 2- person households, we encourage readers to focus on very low-income households when looking at the region's needs for affordable senior housing.[21] **We are projecting that by 2010 there will be over 25,000 very low-income senior households in need of more affordable housing, and that by 2020 that number will grow to more than 35,000.**

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[20] This is true even though many senior households have paid off their mortgages in full. Census data suggests that many senior homeowners with paid mortgages still face housing cost burdens, and we assume that these burdens are primarily due to the costs of property taxes, insurance, and utilities.

[21] Since the vast majority of senior households are either 1- or 2-person households we did not conduct a household size analysis for senior households.

22. Number of households by incomes and cost burdens, 2000 - 2020
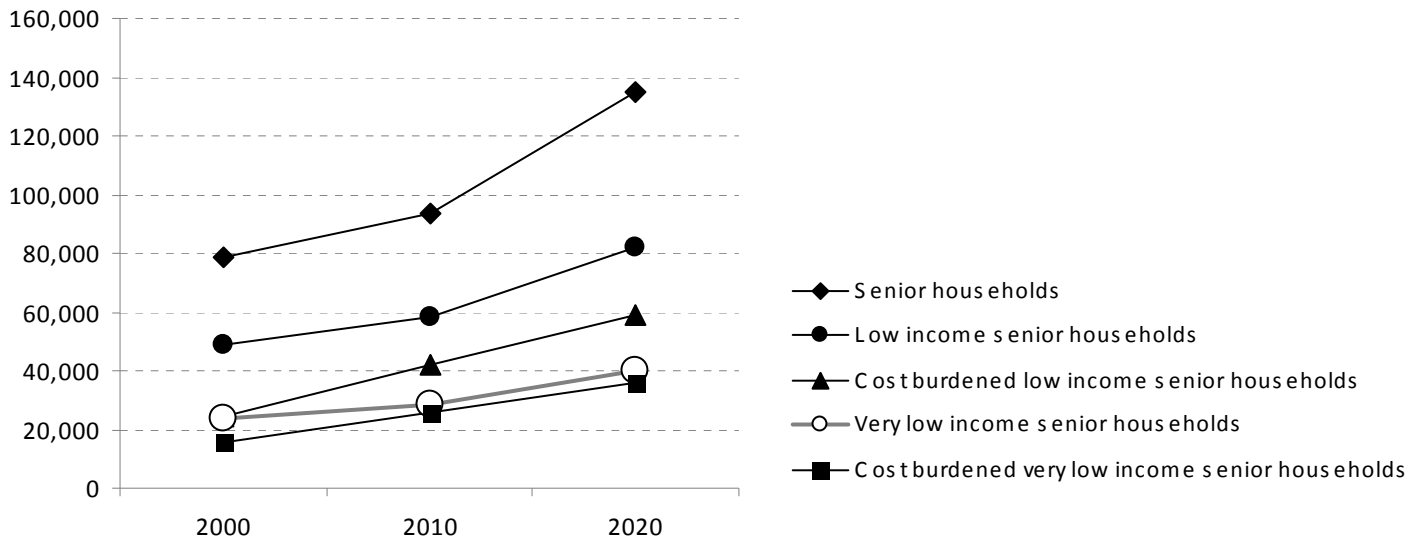
Source: *Metropolitan Council (for households), State Demographers Office (for age projections) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.*

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars (very low-income households are included in the counts of low-income households); Cost-burdened = spending 30 percent or more of income on housing.*

Jurisdictional results for senior households

In general the distribution of senior households in the East Metro follows a pattern very similar to that of other households in the East Metro, with about one in five senior households located in St. Paul. The distribution of low-income senior households differs somewhat, however, with far less concentration of low-income seniors in the central city. For example, while we are projecting that 35 percent of all of the region's very low-income households will reside in St. Paul by the end of this decade, we are projecting that only 24 percent of very low-income seniors will reside in St. Paul. We project that these proportions will remain similar through 2020.

Our results for senior households also suggest that nearly all of the household growth in Ramsey County over the coming decade will occur among senior households. In St. Paul we project a total increase of 7,000 households 2010 to 2020, including an increase of more than 6,000 senior households. In suburban Ramsey we project a total increase of 5,500, including an increase of more than 6,000 senior households. This is possible since the changes reflected in the model are *net* changes. Households of all ages will be coming and going from each jurisdiction, and our results suggest that by 2020 more seniors will "enter" suburban Ramsey than leave, but that more non-senior households will "leave."

Note that in this case, "entering" is much more likely to result from the baby boom "entering" senior status than it is from some mass migration to the county.

23. Senior households by income, cost burdens, and jurisdiction 2000, 2010, and 2020

	Anoka	Dakota	St. Paul	Suburban Ramsey †	Washington	East Metro total
2000						
Households	13,742	17,045	19,581	18,929	9,449	**78,746**
Low-income households	9,021	10,201	13,190	11,117	5,567	**49,095**
Cost-burdened low-income households	4,633	5,409	6,160	5,176	3,048	**24,425**
Very low-income households*	4,501	4,587	7,301	5,066	2,471	**23,925**
Cost-burdened very low-income households	2,831	3,147	4,467	3,352	1,662	**15,459**
2010						
Households	18,777	21,496	18,753	21,910	12,949	**93,885**
Low-income households	12,216	12,798	12,470	13,216	7,534	**58,234**
Cost-burdened low-income households	8,575	9,871	9,169	9,174	5,120	**41,908**
Very low-income households*	6,162	5,826	6,844	6,297	3,412	**28,541**
Cost-burdened very low-income households	5,204	5,614	6,032	5,663	2,975	**25,488**
2020						
Households	27,804	32,988	25,518	28,027	20,519	**134,856**
Low-income households	17,966	19,252	16,811	16,390	11,739	**82,158**
Cost-burdened low-income households	12,655	14,846	12,350	11,237	7,998	**59,086**
Very low-income households*	9,110	8,705	9,173	7,522	5,332	**39,841**
Cost-burdened very low-income households	7,713	8,395	8,093	6,760	4,665	**35,627**
Added 2010-2020						
Households	*9,027*	*11,492*	*6,765*	*6,117*	*7,570*	***40,971***
Low-income households	*5,750*	*6,454*	*4,341*	*3,174*	*4,206*	***23,925***
Cost-burdened low-income households	*4,080*	*4,975*	*3,182*	*2,063*	*2,878*	***17,178***
*Very low-income households**	*2,948*	*2,879*	*2,329*	*1,224*	*1,920*	***11,300***
Cost-burdened very low-income households	*2,509*	*2,781*	*2,061*	*1,098*	*1,690*	***10,139***

Source: Metropolitan Council (for households), State Demographers Office (for age projections) and Wilder Research (for low and very low-income projections), based on Metropolitan Council and U.S. Census Bureau data.

Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.

* Very low-income households are included in the counts of low-income households.

Comparisons and limitations

The projections presented in the previous section are imprecise. Just as the authors of the *Next Decade* report, writing five years ago, could not have predicted the extent of the current foreclosure crisis, neither can we predict how future fluctuations in interest rates, job markets, and migration patterns will impact the housing market.

To help place this study in context, we conclude the report with some comparisons between our projections and those made by others, as well as a section that notes some of the major limitations of the current study and possible avenues for future research.

Comparison of current results with previous studies

Comparing the current study with previous projections shows some substantial differences. First, while definitions used in *Next Decade* found more low-income households to be cost-burdened in 2000 than does our study, *Next Decade* projected that fewer low-income households would be added to the region. This difference is almost entirely in the difference of projections for Ramsey County. *Next Decade* projected a net loss of 2,844 low-income households in Ramsey County over the decade; the current study projects an increase of 7,500.

The biggest difference between *Next Decade* and the current study is the projected "new need." *Next Decade* arrives at this need by estimating the added low-income households and then subtracting projected numbers of needs met by the private market. Although not shown in Table 24, *Next Decade* also projects that about 40 percent of the "new low-income needs not served by the private market" in the Twin Cities 7-county region will be met by public and philanthropic sectors. Extending that projection to the East Metro would make the discrepancy between *Next Decade* and the current study even wider.

Our projections, on the other hand, do not isolate the potential growth in need to the newly-added low-income households. Indeed our "new need" is double the added increment of low-income households. This is because our definition of "new need" is an estimate of the low-income households that are cost-burdened at the end of the decade. Functionally we are taking into account the thousands of households that began the decade as low-income households without burdens that we project will become cost-burdened. We are, of course, able to take this factor into account due to mid-decade data not available to the authors of *Next Decade* in 2003.

24. Overall results of current study, compared with two previous studies

	2000 – 2010		2011 – 2020	
	Next decade	**Current study**	**Metropolitan Council**	**Current study**
Need at start of decade	79,572	71,262	NA	139,691
Low-income households added in decade	27,463	34,343	NA	39,298
"New need" added in decade*	16,104	68,430	22,256	27,224
Total need (existing plus new)	95,676	139,691	NA	166,915

*   *Defined as low-income households not served in the private market for both* Next Decade *and Metropolitan Council studies, with the latter including a 5 percent market stabilizing vacancy rate. Defined as projected number of households that are both cost-burdened and low-income for the current study.*

In 2010 to 2020 our projections do not show "new needs" outpacing the number of low-income households. For this report we are assuming that the increases in the proportion of cost-burdened households that we have seen in the current decade will not continue on their upward trajectory, but will instead stay level. Therefore, the differences between the "new need" estimated by this study and the Metropolitan Council are not as stark. Our projections are over 20 percent higher – even without considering the vacancy factor that is included in the Metropolitan Council's projections. This discrepancy does not appear to be driven by a major difference between the Metropolitan Council's projections and ours in any one of the four component East Metro counties, but is consistent across each.

Since the Metropolitan Council's projections are aimed at new development needs, their study does not estimate the existing low-income needs at their starting point in 2011, nor total needs by 2020. As shown in Table 24, we only make comparisons concerning the projected added increments of low-income households since the Metropolitan Council's methodology starts with projections at the 7-county level and only goes to smaller levels when apportioning these needs. Recall that a key difference between the current study and the Metropolitan Council's is that while the current study includes far more detail concerning the types of units needed (income levels, household size, and needs for senior housing), the Metropolitan Council's projections are far more detailed in terms of addressing how many new needs are to be addressed by each municipality in the region.

Limitations and avenues for future research

The current study has many limitations. Perhaps chief among these is that we did not index our definitions of low- and very- low-income for household size. This was also a limitation of the *Next Decade* and Metropolitan Council studies. Indexing our definitions for household size would have added some value to our projections, since our end-goal was to inform non-profit developers' housing decisions. Non-profit housing developers have to pay very close attention to the income eligibility requirements demanded by their funders, and these eligibility requirements are typically indexed for household size.

Harmonizing our income definitions more closely with the eligibility requirements set forth by the U.S. Department of Housing and Urban Development would have added value to this report. Now, at the end of this project, we have developed a conceptual framework that would allow us to do so. We believe that this could be accomplished by adding the household size dimension as an input to our model. Although this would require data inputs not readily available from among the extensive demographic data currently made available either by the Census Bureau, the State Demographers Office, or the Metropolitan Council, we believe that much of the requisite data could be obtained from via Census Bureau Public Use Micro Sample (PUMS) data. This would, however, require testing. For example, deriving estimates of low-income and cost-burdened three person households at the county level would likely push the bounds of the PUMS data.

Another limitation of our projections, also present in earlier studies, is our inability to include several economic factors, including wealth effects. Our modeling only accounts for income, so there is no adjustment for the number of older households that may, for example, be cost-burdened due to a combination of low current incomes and high taxes or utilities, but may have built substantial untapped equity in their homes. Although Census data show that a number of households headed by older adults have paid mortgages, but still have cost burdens, currently we are not certain whether a correction should be added to factor in any untapped equity. Further, it is difficult to predict how common instruments that may address this situation, such as reverse mortgages, may become.

Additionally, other economic factors, such as longer-term changes in mortgage interest rates, wage rates, and the job market, will undoubtedly continue to exercise a great deal of influence over housing markets and they are not included in our methods. These factors are extremely difficult to predict, as would be sudden demographic changes such as a major influx of immigrants or a major out migration from the region to other areas. Ideally key parameters such as these could be built into our modeling and manipulated to show ranges of potential needs under different scenarios. Perhaps such dynamic modeling could also build in the option of projecting not only cost-burdened households, but also

households that appear to be pushed into substandard housing (overcrowded, lacking adequate plumbing, etc.) due to their economic circumstances.

In lieu of detailed modeling of various economic factors and wealth effects, we have relied heavily on the measure of cost-burdened households. While this is not uncommon in the housing literature, it is often assumed, as in the *Next Decade* report, that this measure is stable over time in percentage terms. The latest data from Census 2000 and the subsequent ACS cast doubt on this assumption. Cost-burdened households as a percentage of low-income and very low-income households showed dramatic increases between 2000 and 2006 for most jurisdictions considered here. Since our results are so sensitive to this measure, tracking it in the coming decade should give a good indication of the accuracy of our forecasts. To the extent that the percentage of cost-burdened households in a given jurisdiction in 2020 is lower than the percentage in 2006, our forecast will likely be high.

Finally, we have not attempted to model housing supply in this study. This is an important consideration since the data show that simply creating a unit of housing that is affordable for each low-income households will not solve the problem. Many middle and upper income households bargain hunt and end up in units that would be affordable to lower income households. Thus, further analysis would be required to estimate a combination of subsidized units (or vouchers), which typically come with income qualifications, and private market units that would be necessary to meet the needs projected here. The projections presented here do not attempt to model how advancements in private, public, and philanthropic involvement in low-income housing may impact future demands.

Appendix

A. Income tables

B. Forecasting methods

C. Detailed projections by jurisdiction

A. Income tables

These tables show the income cut offs used by the US Department of Housing and Urban Development (HUD), as well as the cut-offs that were used for this report and how our definitions relate to those used by HUD.

A1. Median family income, 2008

	Household size					
	1	**2**	**3**	**4**	**5**	**6**
30% of median	17,000	19,400	21,850	**24,250**	26,200	28,150
50% of median*	28,300	32,350	36,400	40,450	43,700	46,900
60% of median**				**48,500**		
80% of median***	43,050	49,200	55,350	61,500	66,400	71,350
Current report's income cut-off expressed as a percentage of median income by household size						
Very low-income (up to $24,250)	43%	37%	33%	30%	28%	26%
Low-income (up to $48,500)	86%	75%	67%	60%	55%	52%

Source: *U.S. Department of Housing and Urban Development (www.huduser.org/DATASETS/il.html, accessed 3/30/2008), except calculations for 60 percent and information presented in two bottom rows (author's estimates).*

Note: *HUD's 2008 Median Family Income for the Minneapolis-St. Paul-Bloomington metropolitan area is $80,900. HUD's income limits are derived from an estimated median family income for a family of four in each metropolitan area, subject to various conditional modifications. Also note that the 50 percent designation (*) is also called "very low-income," the 60 percent cut-off presented here (**) was derived by doubling the 30 percent cut-off, and the 80% designation (***) is also called "low-income" by HUD.*

A2. Median family income, 2000

	Household size					
	1	**2**	**3**	**4**	**5**	**6**
30% of median	13,800	15,750	17,750	**19,700**	21,300	22,850
50% of median*	23,000	26,300	29,550	32,850	35,500	38,100
60% of median**				**39,400**		
80% of median***	35,150	40,150	45,200	50,200	54,200	58,250
Current report's income cut-off expressed as a percentage of median income by household size						
Very low-income (up to $19,700)	41%	36%	32%	29%	27%	25%
Low-income (up to $39,400)	82%	72%	64%	57%	53%	50%

Source: *U.S. Department of Housing and Urban Development (www.huduser.org/DATASETS/il.html, accessed 3/30/2008), except calculations for 60 percent and information presented in two bottom rows (author's estimates).*

Note: *HUD's 2000 Median Family Income for the Minneapolis-St. Paul metropolitan area is $68,600. HUD's income limits are derived from an estimated median family income for a family of four in each metropolitan area, subject to various conditional modifications. Also note that the 50 percent designation (*) is also called "very low-income," the 60 percent cut-off presented here (**) was derived by doubling the 30 percent cut-off, and the 80 percent designation (***) is also called "low-income" by HUD.*

B. *Forecasting methods*

Overview

This appendix explains the methods we used to estimate current housing affordability and project future housing affordability. While we want to our methods to be transparent, some details have been omitted to limit the size and complexity of this document.[22]

Below we discuss the methods we used to:

- Measure housing affordability,

- Forecast households by income and age,

- Forecast housing cost-burdened households, and

- Forecast households by income and household size.

Measuring housing affordability

We have used the ratio method to determine housing affordability. This method sets a normative limit to the amount of household income that can be spent on housing before the household becomes "cost-burdened." Following others,[23] we chose a standard limit of 30 percent of household income.

We focused on the population for whom this limit may have the most severe consequences – those households with the lowest incomes. We chose to define two levels of income – "low" income as 60 percent of the median family income and "very low" income as 30 percent of the median family income. This loosely conforms to the guidelines for receiving funding from HUD under some of their more popular programs and the 60 percent limit is consistent with income definitions used in the *Next Decade* and Metropolitan Council reports cited earlier in this report. (See Appendix A for more details on income limits.)

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[22] Feel free to contact us with questions or comments: Craig Helmstetter (cdh@wilder.org) or Allen Burns (wab@wilder.org).

[23] See for example Thalmann, Phillippe. 1999. "Identifying Households Which Need Housing Assistance." *Urban Studies* 36(11):1933-47.

While these limits on income and the ratio method are widely used, they are not the only or perhaps even the best measures of housing affordability. For example, the National Association of Realtors uses another ratio method (effectively between the median home sales price and the median household income) as an index to show the relative affordability of home ownership over time. Obviously, this method is focused on the home ownership market and particularly the private market. It also makes no distinctions between household income levels or ages – two important facets of our study.

More to the point, Stone argues for a substantially different type of method altogether – the residual income approach.[24] Stone points out that the normative ratio limit is based on research into what households actually spend on housing, as opposed to what households *should* spend on housing, so that the limits are relatively arbitrary. Stone's residual income approach also uses household income and housing costs, but subtracts them rather than dividing them. The result is the amount of disposable household income left after housing costs. While this method has much to recommend it, we chose to use a ratio method in spite of Stone's critique, mostly because we believe it will be well understood by our audience, it is easily comparable to previous work, and it is tractable given our basic data sources.

The foundations of our estimates and projections are data from the 2000 Census, the Census Bureau's 2005 and 2006 American Community Surveys (ACS), the Metropolitan Council's household projections, and the Minnesota State Demographer's population projections. Our work critically depends on the self-reported income and housing cost data available from the Census Bureau. To the extent that this data is biased, our results will reflect the bias rather directly.

Forecast of households by county or city

By comparing the population by age with the households by age and income in the 2000 Census, we derived a ratio of household formation for each cell in a matrix of seven age ranges and seven income ranges for each area. Combining this derived ratio of household formation with the Minnesota Demographer's population projections by age, we calculated an estimate of households by age for each area and each projection time period (2010 and 2020).

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[24] Stone, Michael E. 2006. "What Is Housing Affordability? The Case for the Residual Income Approach". *Housing Policy Debate* 17:1 (www.fannymayfoundation.com/programs/hpd/pdf/hpd_1701_stone.pdf). Also see Pelletiere, Danilo. 2008. "Getting to the Heart of Housing's Fundamental Question: How Much Can a Family Afford?"(www.nlihc.org/doc/AffordabilityResearchNote_2-19-08.pdf).

We assumed that, for each area, the future household income distribution (over the seven income ranges) would remain constant for each age range. Using this assumption about the future income distribution, we estimated the distribution of future households by age and income for each area and each projection time period. Because the data on housing costs is different for renters and home owners, we estimated the distribution of households separately for each, using data from the 2000 Census and 2006 ACS to determine the tenure distribution by age and income for each area.

Finally, we used the Metropolitan Council's projections of future households to benchmark our estimates to take advantage of their resources and expertise in this area. For each projection period and each area, we compared our estimate of total households to the Metropolitan Council projection by forming a ratio. We used that ratio to adjust every cell in the matrix, so that our forecasts would, in total, match the Metropolitan Council forecasts for each projection period and each area. We did not adjust the projected numbers of low-income households in any of the jurisdictions to reflect potential push or pull factors such as the availability of lower-wage jobs, public transportation, or other services.

Forecast of cost-burdened households by income range

For each geographic area, we used the 2000 Census and the 2006 ACS to derive the percentage of cost-burdened households by income range. We adjusted for the change in value of income between the two years using the urban CPI from the Bureau of Labor Statistics and standardized on 2000 dollars.

We were surprised by the increase in the percentage of cost-burdened households in most low-income ranges and most geographic areas over the short gap between the 2000 Census and the 2006 ACS. For the main body of our work we assume that the level of cost-burdened households in 2010 and 2020 will be the same as the 2006 ACS levels. We made this assumption after replicating the analysis using the 2000 cost-burdening ratios to project demands in 2020. Under this assumption, the total cost-burdened low-income households in 2020 would be 110,000, including 61,000 cost-burdened very low-income households. This compares to 170,000 and 84,000 in the main report. Obviously, the results are quite sensitive to changes in the cost-burdening percentage. In the end we maintained the assumption that cost-burdening by income would remain at 2006 levels for both 2010 and 2020 since we currently have no indication that the percentage will recede to 2000 levels.

Forecast of households by income range and household size

After projecting the total number of households with cost burdens in both 2010 and 2020, we went on to estimate the size of the households that would be facing housing needs. To do this we relied on special tabulations of the 2000 Census, done by HUD. These tabulations show the distribution, by size and income, of households with a variety of housing "conditions," including overcrowding, poor plumbing and electricity, or cost burdens of at least 30 percent.[25] (We would have preferred a tabulation showing only those households with cost burdens to be consistent with our projections, but our analysis suggested that a large majority of the households in the special tabulations were cost-burdened.)

We then applied the distribution of households by size for very low-income and for low-income households "with conditions" to our projections for each jurisdiction in the study. This assumes that the household size distributions for 2000 would remain constant over the study period. There is certainly evidence that household sizes have been falling over the last several decades, but our estimates control for this to a certain extent by estimating within the income limits specified above. Despite this, our estimates will over-estimate household size to the extent that household sizes within the low- and very-low-income categories and "with conditions" have also been declining.

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[25] See the Housing and Urban Development web site: http://www.huduser.org/DATASETS/spectabs.html. Note that this web site returned inaccurate data unless we used Microsoft Internet Explorer as a browser.

C. Detailed projections by jurisdiction

C1. Anoka County

	2000	2010	Change '00-'10	2020	Change '10-'20
Households	106,428	135,670	29,242	157,760	22,090
Low-income households	30,186	40,033	9,847	50,370	10,337
Cost-burdened low-income households	13,365	26,891	13,526	33,925	7,034
1-person	*5,920*	*11,912*	*5,992*	*15,027*	*3,115*
2-person	*3,232*	*6,504*	*3,272*	*8,205*	*1,701*
3-person	*1,833*	*3,688*	*1,855*	*4,653*	*965*
4-person	*1,302*	*2,619*	*1,317*	*3,304*	*685*
5+-person	*1,078*	*2,168*	*1,090*	*2,736*	*568*
Very low-income households*	10,597	14,523	3,926	19,074	4,551
Cost-burdened very low-income households	6,795	12,424	5,629	16,248	3,824
1-person	*3,777*	*6,907*	*3,130*	*9,032*	*2,125*
2-person	*1,451*	*2,652*	*1,201*	*3,469*	*817*
3-person	*768*	*1,404*	*636*	*1,836*	*432*
4-person	*431*	*788*	*357*	*1,030*	*242*
5+-person	*368*	*673*	*305*	*880*	*207*
Senior households	13,742	18,777	5,035	27,804	9,027
Low-income senior households	9,021	12,216	3,195	17,966	5,750
Cost-burdened low-income senior households	4,633	8,575	3,942	12,655	4,080
Very low-income senior households*	4,501	6,162	1,661	9,110	2,948
Cost-burdened very low-income senior households	2,831	5,204	2,373	7,713	2,509

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.*

* *Very low-income households are included in the count of low-income households.*

C2. Dakota County

	2000	2010	Change '00-'10	2020	Change '10-'20
Households	**131,151**	**164,190**	**33,039**	**193,290**	**29,100**
Low-income households	**34,835**	**44,721**	**9,886**	**56,758**	**12,037**
Cost-burdened low-income households	15,799	32,788	16,989	41,726	8,938
1-person	*7,875*	*16,343*	*8,468*	*20,798*	*4,455*
2-person	*3,483*	*7,229*	*3,746*	*9,200*	*1,971*
3-person	*2,092*	*4,342*	*2,250*	*5,525*	*1,183*
4-person	*1,328*	*2,756*	*1,428*	*3,508*	*752*
5+-person	*1,021*	*2,118*	*1,097*	*2,696*	*578*
Very low-income households*	**11,226**	**14,738**	**3,512**	**19,430**	**4,692**
Cost-burdened very low-income households	7,815	14,259	6,444	18,770	4,511
1-person	*4,903*	*8,947*	*4,044*	*11,777*	*2,830*
2-person	*1,429*	*2,608*	*1,179*	*3,433*	*825*
3-person	*764*	*1,394*	*630*	*1,835*	*441*
4-person	*377*	*689*	*312*	*907*	*218*
5+-person	*341*	*622*	*281*	*819*	*197*
Senior households	**17,045**	**21,496**	**4,451**	**32,988**	**11,492**
Low-income senior households	10,201	12,798	2,597	19,252	6,454
Cost-burdened low-income senior households	5,409	9,871	4,462	14,846	4,975
Very low-income senior households*	4,587	5,826	1,239	8,705	2,879
Cost-burdened very low-income senior households	3,147	5,614	2,467	8,395	2,781

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.*

* *Very low-income households are included in the count of low-income households.*

C3. City of Saint Paul

	2000	2010	*Change '00-'10*	2020	*Change '10-'20*
Households	**112,109**	**120,000**	**7,891**	**127,000**	**7,000**
Low-income households	**56,661**	**58,904**	**2,243**	**63,641**	**4,737**
Cost-burdened low-income households	21,824	41,713	19,889	45,163	3,450
1-person	*10,344*	*19,771*	*9,427*	*21,406*	*1,635*
2-person	*4,271*	*8,163*	*3,892*	*8,839*	*676*
3-person	*2,321*	*4,437*	*2,116*	*4,804*	*367*
4-person	*1,960*	*3,746*	*1,786*	*4,056*	*310*
5+-person	*2,928*	*5,596*	*2,668*	*6,059*	*463*
Very low-income households*	**25,684**	**26,706**	**1,022**	**29,240**	**2,534**
Cost-burdened very low-income households	15,280	24,069	8,789	26,293	2,224
1-person	*8,372*	*13,187*	*4,815*	*14,405*	*1,218*
2-person	*2,782*	*4,382*	*1,600*	*4,786*	*404*
3-person	*1,516*	*2,388*	*872*	*2,609*	*221*
4-person	*1,095*	*1,724*	*629*	*1,884*	*160*
5+-person	*1,516*	*2,388*	*872*	*2,609*	*221*
Senior households	**19,581**	**18,753**	**-828**	**25,518**	**6,765**
Low-income senior households	13,190	12,470	-720	16,811	4,341
Cost-burdened low-income senior households	6,160	9,169	3,009	12,350	3,181
Very low-income senior households*	7,301	6,844	-457	9,173	2,329
Cost-burdened very low-income senior households	4,467	6,032	1,565	8,093	2,061

Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.

* Very low-income households are included in the count of low-income households.

C4. Suburban Ramsey County

	2000	2010	Change '00-'10	2020	Change '10-'20
Households	**89,127**	**99,170**	**10,043**	**104,670**	**5,500**
Low-income households	**29,598**	**34,858**	**5,260**	**37,939**	**3,081**
Cost-burdened low-income households	12,285	23,060	10,775	24,938	1,878
1-person	*6,637*	*12,458*	*5,821*	*13,472*	*1,014*
2-person	*2,982*	*5,597*	*2,615*	*6,053*	*456*
3-person	*1,370*	*2,572*	*1,202*	*2,781*	*209*
4-person	*837*	*1,571*	*734*	*1,698*	*127*
5+-person	*459*	*862*	*403*	*933*	*71*
Very low-income households*	**10,709**	**12,989**	**2,280**	**14,026**	**1,037**
Cost-burdened very low-income households	7,370	11,967	4,597	12,861	894
1-person	*4,796*	*7,788*	*2,992*	*8,370*	*582*
2-person	*1,497*	*2,430*	*933*	*2,612*	*182*
3-person	*638*	*1,036*	*398*	*1,113*	*77*
4-person	*319*	*518*	*199*	*557*	*39*
5+-person	*120*	*195*	*75*	*210*	*15*
Senior households	**18,929**	**21,910**	**2,981**	**28,027**	**6,117**
Low-income senior households	11,117	13,216	2,099	16,390	3,174
Cost-burdened low-income senior households	5,176	9,174	3,998	11,237	2,063
Very low-income senior households*	5,066	6,297	1,231	7,522	1,225
Cost-burdened very low-income senior households	3,352	5,663	2,311	6,760	1,097

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.*

*   Very low-income households are included in the count of low-income households.

C5. Ramsey County

	2000	2010	Change '00-'10	2020	Change '10-'20
Households	201,236	219,170	17,934	231,670	12,500
Low-income households	86,259	93,763	7,504	101,580	7,817
Cost-burdened low-income households	34,108	64,773	30,665	70,101	5,328
1-person	*16,980*	*32,246*	*15,266*	*34,898*	*2,652*
2-person	*7,253*	*13,774*	*6,521*	*14,906*	*1,132*
3-person	*3,691*	*7,010*	*3,319*	*7,587*	*577*
4-person	*2,797*	*5,311*	*2,514*	*5,748*	*437*
5+-person	*3,387*	*6,432*	*3,045*	*6,961*	*529*
Very low-income households*	36,393	39,696	3,303	43,266	3,570
Cost-burdened very low-income households	22,650	36,036	13,386	39,154	3,118
1-person	*13,168*	*20,950*	*7,782*	*22,763*	*1,813*
2-person	*4,278*	*6,806*	*2,528*	*7,395*	*589*
3-person	*2,154*	*3,427*	*1,273*	*3,724*	*297*
4-person	*1,414*	*2,249*	*835*	*2,444*	*195*
5+-person	*1,636*	*2,603*	*967*	*2,828*	*225*
Senior households	38,509	40,663	2,154	53,546	12,883
Low-income senior households	24,307	25,686	1,379	33,201	7,515
Cost-burdened low-income senior households	11,336	18,343	7,007	23,587	5,244
Very low-income senior households*	12,366	13,141	775	16,694	3,553
Cost-burdened very low-income senior households	7,819	11,695	3,876	14,854	3,159

Note: Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.

* Very low-income households are included in the count of low-income households.

C6. Washington County

	2000	2010	Change '00-'10	2020	Change '10-'20
Households	**71,462**	**97,749**	**26,287**	**122,764**	**25,015**
Low-income households	**16,731**	**23,837**	**7,106**	**32,944**	**9,107**
Cost-burdened low-income households	7,989	15,239	7,250	21,164	5,925
1-person	*3,828*	*7,301*	*3,473*	*10,140*	*2,839*
2-person	*2,000*	*3,814*	*1,814*	*5,297*	*1,483*
3-person	*1,006*	*1,920*	*914*	*2,666*	*746*
4-person	*650*	*1,240*	*590*	*1,722*	*482*
5+-person	*506*	*964*	*458*	*1,339*	*375*
Very low-income households*	**5,439**	**7,999**	**2,560**	**11,470**	**3,471**
Cost-burdened very low-income households	3,624	7,028	3,404	10,039	3,011
1-person	*2,147*	*4,162*	*2,015*	*5,946*	*1,784*
2-person	*833*	*1,615*	*782*	*2,306*	*691*
3-person	*304*	*590*	*286*	*843*	*253*
4-person	*171*	*332*	*161*	*474*	*142*
5+-person	*170*	*329*	*159*	*470*	*141*
Senior households	**9,449**	**12,949**	**3,500**	**20,519**	**7,570**
Low-income senior households	5,567	7,534	1,967	11,739	4,205
Cost-burdened low-income senior households	3,048	5,120	2,072	7,998	2,878
Very low-income senior households*	2,471	3,412	941	5,332	1,920
Cost-burdened very low-income senior households	1,662	2,975	1,313	4,665	1,690

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.*

* *Very low-income households are included in the count of low-income households.*

C7. East Metro total

	2000	2010	Change '00-'10	2020	Change '10-'20
Households	**510,277**	**616,779**	**106,502**	**705,484**	**88,705**
Low-income households	**168,010**	**202,354**	**34,344**	**241,652**	**39,298**
Cost-burdened low-income households	71,262	139,691	68,429	166,915	27,224
1-person	*34,603*	*67,802*	*33,199*	*80,863*	*13,061*
2-person	*15,968*	*31,321*	*15,353*	*37,608*	*6,287*
3-person	*8,623*	*16,960*	*8,337*	*20,431*	*3,471*
4-person	*6,076*	*11,926*	*5,850*	*14,281*	*2,355*
5+-person	*5,991*	*11,683*	*5,692*	*13,732*	*2,049*
Very low-income households*	**63,655**	**76,956**	**13,301**	**93,239**	**16,283**
Cost-burdened very low-income households	40,884	69,747	28,863	84,211	14,464
1-person	*23,995*	*40,966*	*16,971*	*49,518*	*8,552*
2-person	*7,991*	*13,681*	*5,690*	*16,603*	*2,922*
3-person	*3,990*	*6,814*	*2,824*	*8,236*	*1,422*
4-person	*2,393*	*4,058*	*1,665*	*4,855*	*797*
5+-person	*2,515*	*4,228*	*1,713*	*4,998*	*770*
Senior households	**78,745**	**93,884**	**15,139**	**134,856**	**40,972**
Low-income senior households	49,095	58,234	9,139	82,158	23,924
Cost-burdened low-income senior households	24,425	41,908	17,483	59,086	17,178
Very low-income senior households*	23,925	28,541	4,616	39,841	11,300
Cost-burdened very low-income senior households	15,459	25,488	10,029	35,627	10,139

Note: *Low-income = households earning the equivalent of $48,500 or less in 2008 dollars; Very low-income = households earning the equivalent of $24,250 or less in 2008 dollars; Cost-burdened = spending 30 percent or more of income on housing.*

* *Very low-income households are included in the count of low-income households.*