

HENNEPIN COUNTY AGING INITIATIVE

Trends and Projections as Related to the Composition and Housing Needs of the Baby-Boomer Generation in Hennepin County

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Executive Summary

This report examines socio-demographic trends in the population in Hennepin County born between 1946 and 1964 and assesses the implication of these trends for the housing preferences and needs of this population. Between 2011 and 2029, America's "baby boom" population will turn 65. This generation will continue to uniquely shape the country's housing market. Our statistical models examine how various social and demographic factors contribute to people's housing preferences. We find that as people age they are more likely to choose single-family homes over multi-family homes, and this is true until they reach their 70s. At that point, the preference for single-family homes diminishes. Wealth and large family size are also both associated with the tendency to choose a single-family home. Meanwhile, racial and ethnic minorities, people born outside the U.S. and individuals with disabilities are more likely to choose multi-family housing over stand-alone houses at any given age and time. Focusing on these contributory factors, we summarize the over-time trends in the baby boomer population. The total number of baby boomers living in Hennepin County decreased slightly between 1980 and 2007, and is expected to decrease to 297,000 by 2020. The population composition of this group has experienced substantial changes since 1980. There has been a steady decline in non-Hispanic whites and American Indians and a consistent increase in black and Asian-Americans. The increase in non-native born Hennepin County residents of the same age as U.S. baby boomers has also added to the diversity of this population. Consistent with their life course, the proportion of baby boomers outside the labor force experienced stable decreases between 1980 and 2000, but has started to increase since early 2007. The proportion of baby boomers in Hennepin County living with a disability that prevents them from working increased between 1980 and 2000 from 4% to 8%. The family size of baby boomers has decreased over the past three decades and the financial status of these families has improved slightly, resulting in fewer baby boomers dwelling in households at or near poverty. Reflective of the shifting trends in the baby-boomer population, the housing preferences of this population have also changed. In general, the majority of baby boomers in Hennepin County have been living in single-family buildings instead of multifamily housing and increasingly so in the past three decades. In 2007, only 17% of the baby-boomer population in Hennepin County lived in buildings containing more than one family, compared with nearly 40% in 1980.

I. Introduction

The approaching retirement of the baby-boomer generation has attracted both research and public policy attention [1, 2]. How to allocate resources to cater to the shifting housing needs of this group is among the impending challenges facing policy makers [3]. This report provides an overview of social and demographic trends that should shape the housing preferences of the baby boom generation. Understanding such trends will inform decision making for a variety of issues related to housing administration.

Few existing studies have specifically addressed the issue of housing preferences among baby boomers. Therefore, this report is based on two major groups of prior research: one that addresses various issues relevant to the aging baby-boomer generation and the other that examines the role of socio-demographic characteristics in housing preference and choice in general. In so doing, we are able to identify social and demographic characteristics that lead individuals to prioritize certain types of housing needs over others, along with the circumstances that might be of particular importance for the baby boomers. Taking off from and extending these bodies of research, we examine trends in the population with regard to these relevant characteristics and circumstances in order to understand how the baby-boomer population has or has not changed over time and what this implies for the potential volume and features of services needed for future years.

This project does not intend to include all relevant literature. Instead, we summarize the vast bodies of literature with the attempt to inform the potential adjustment in housing administrative resource allocation in Hennepin County. To this end, we found two set of findings in previous research particularly relevant. First, people's housing needs are contingent on both their individual characteristics and family circumstances. Among individual characteristics, the most relevant to the current project include race/ethnicity [4, 5, 6], nativity [5, 6], employment status [7] and disability status [8, 9]. Family factors include family size [6], and the wealth and income of the family [6, 10]. Second, the life stage of the baby boomers is important—the housing needs particular to the baby boomers are of course impacted by their aging [3].

In what follows, we examine trends and patterns in the relevant sociodemographic covariates using data specific to Hennepin County drawn from the US Census and the American Communities Survey spanning the years 1980 to 2007. Following a description of the relevant terminology, we show 1) simple trends and projects in the size of the baby-boom generation for Hennepin County from 1980 to 2020, 2) trends in baby boomers' age distribution in Hennepin County from 1980 to 2007, 3) trends in baby-boomer-based sociodemographic covariates influential on housing preferences, 4) trends in housing preferences among baby boomers

stratified by important covariates and, finally, 5) trends in housing preference of Hennepin County baby boomers.

II. Terminology

Wherever possible, the terminology we use is consistent with that used by the US Census Bureau.

- **Baby Boom Generation**—The definition of the baby boom generation is an issue for debate. For purposes of this project, we define this generation as the age cohort born between the years of 1946 and 1964. We do not restrict the birthplace to within the U.S.
- **Housing Preferences**—For this project, housing preferences refer to the baby boomers' actual housing choices—not their expressed housing preferences. The variable is constructed using the number of housing units (both occupied and vacant) in the structure containing their household. The variable is also constructed to distinguish whether a household dwells in a building that contains "1-single house", "2-49 housing units" or "50 housing units and more."
- **Covariate**—Covariates are the characteristics of individuals, families, or households that shape the housing preferences of baby boomers. For this report, the focus is on sociodemographic factors that are routinely collected in population data such as the US Census. The determination of which covariates to include was based on a review of prior research on issues of housing preference, as well as preliminary statistical analysis of the Hennepin county data.
- **Race/Ethnicity**—Race/ethnicity is based on available indicators from the US Census and American Community Survey (ACS). These are self-reports of whether a person considers him/herself "non-Hispanic white," "Black," "American Indian or Alaskan," "Asian," "Other," or "More than one major race."
- **Nativity**—This is an indicator of whether the person was born in the US (or one of its territories) or was foreign born. This is derived from a Census/ACS indicator of "place of birth."
- **Employment Status**—This covariate indicates whether a person was a part of the labor force. Among those who are not in the labor force, it distinguishes between individuals who are actively seeking employment (the "unemployed") from those who are not looking for work.

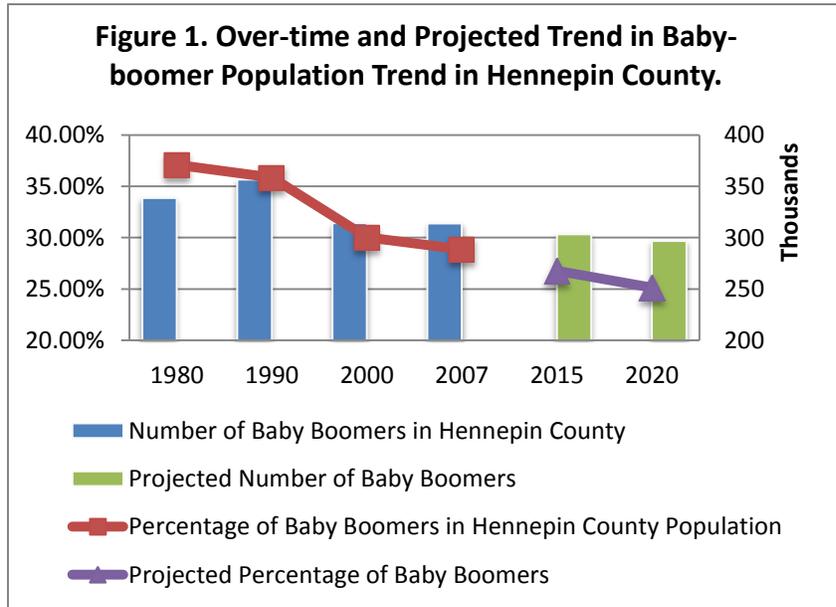
- **Work Disability**—Work Disability indicates whether respondents have any lasting physical or mental health condition that causes difficulty working, limits the amount or type of work they can do, or prevents them from working altogether. The covariate is recoded to be dichotomous for the purpose of this project and measures only whether the person has such a disability; not how severe the disability is.
- **Family Size**—Family size counts the number of family members residing with each individual, including the person her/himself. This covariate ranges from one to six, with six including families of six or larger.
- **Financial Status**—Financial status is measured using the relative location of the respondent to the national poverty threshold. Poverty is based on the ratio of total household income to the federal standards of poverty based on household composition. For the purpose of this report, all baby boomers are categorized into three groups: those residing in households within 200 percent of the poverty threshold, those residing in households between 200 and 499 percent of the poverty threshold and those residing in households beyond 500 percent of the poverty threshold. We call these groups "poor," "middle-class," and "wealthy," respectively.

III. Limitations

The objective of this research is to map out the trends in factors that may influence the nature and volume of housing administration for Hennepin County. Demographic analysis cannot and does not presume to know which individuals are likely to need what kind of housing service. The specific needs of individual are usually more contingent upon their living experiences and other immediate environment not reflected in demographic surveys. Moreover, we assume that the relationships between factors will hold over time, that is, the various factors that we identify as important to housing preferences and indicative of one type of housing preference will continue to be important in the future and indicative of the same housing preference. In the end, the goal is to understand broad population trends that should shape the overall nature and volume of housing administrative work in Hennepin County.

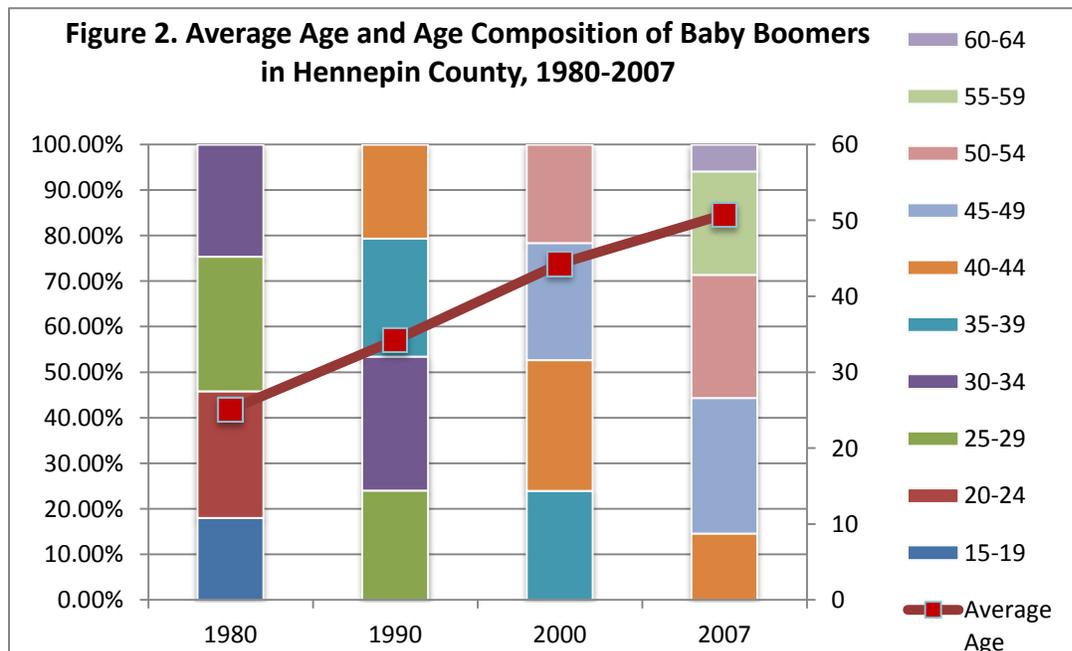
IV. Population Trend and Projects

The population size and percentage of baby boomers in Hennepin County have both been on a downward trend throughout the last 30 years. In the 1980s, there was an initial slight increase in numbers of baby boomers, from around 340,000 in 1980 to 360,000 in 1990. Because this coincided with an overall increase in the population of the county, the percentage of baby boomers in 1990 was still lower than in 1980 (35.85% as compared to 37.1%). Based on the overall trend in population, we estimate that the baby boom



population decreases about 0.3% each year and should reach 303,440 by 2015, and 296,901 by 2020. The change in the overall population size of this group should have a moderate impact on the amount of

resources directed to serve their needs through the next decade (see Figure 1). The sex ratio of the baby boomers has been a stable 1:1 throughout the period of 1980 to 2007 (data not shown).



V. Population Trends in Age for Hennepin County Baby Boomers 1980--2007

The age distribution among Hennepin County baby boomers has been fairly stable and even throughout the past three decades. The number of baby boomers belonging to each five-year age

cohort has been proportional at each time point. There is a slight increase in the percentage belonging to the younger cohorts in the early 2000s, indicating either an inflow of younger baby boomers, or an outflow/higher mortality rate of older boomers. Accordingly, the average age of the baby-boomer population in Hennepin County has increased almost as a linear function of time, from 25.12 in 1980 to 50.79 in 2007. If this trend continues, the average age of the baby boomers in Hennepin County is expected to reach 63 in 2020. In terms of housing, our statistical models revealed that, as people age, they are more likely to live in single-family houses. However, this effect begins to diminish around age 70. In the next decade, the Hennepin County housing market will begin to experience the effects of this preference change, but the greatest effects will likely be felt in the 2020s if past trends continue.

VI. Population Trends in Housing Preference Covariates for Hennepin County Baby Boomers, 1980-2007

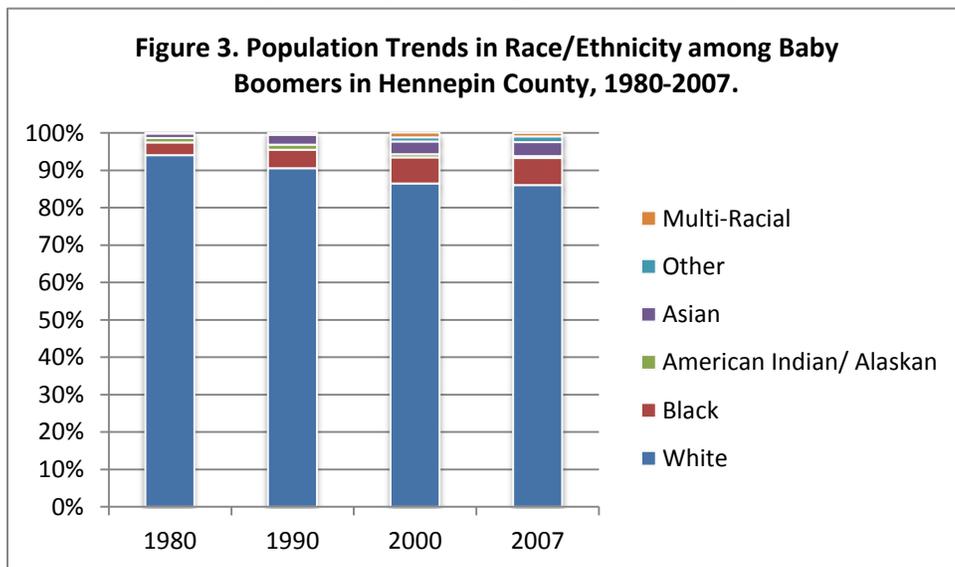
The following section describes trends in the composition of baby boomers in Hennepin County between 1980 and 2007 with respect to a set of covariates influential to housing preferences and choices. These include race/ethnicity, nativity, employment status, work disability, family size and financial status.

Race/Ethnicity

The racial and ethnic composition of Hennepin County baby boomers has undergone systematic change over the past three decades. Three trends are evident from the U.S Census and American Community Survey Data (see Figure 3). To start, the number and percentage of non-Hispanic white baby boomers have decreased substantially. Specifically, the percentage of non-Hispanic white baby boomers has decreased from over 94% (318,000) to 84% (270,000). The greatest decrease happened between

1990 and 2000. In addition, the proportion and number of American Indian baby boomers has also declined steadily, from 1.23% (4,180) in 1980 to 0.5% (1,570) in 2007. Finally, the percentages and numbers of Asian and Black baby boomers in Hennepin County have

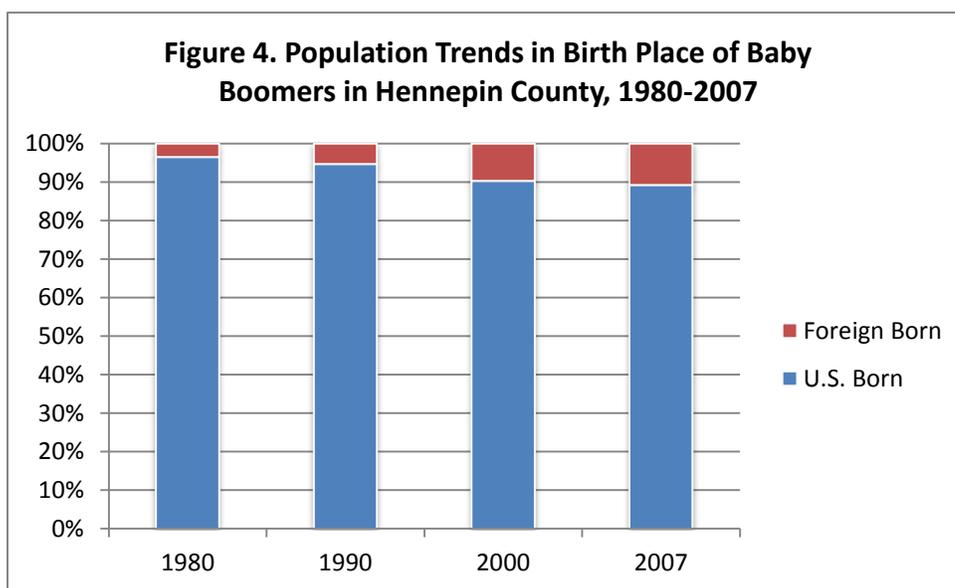
increased consistently and considerably. The number of Asians among baby boomers more than



tripled, from less than 4,000 (1.17%) in 1980 to more than 12,000 (3.82%) in 2007. For the Black baby boomers, the population increased from 11,340 (3.35%) in 1980 to 22,550 (7.18%) in 2007. The rates of growth for both racial/ethnic groups were more dramatic in the 1990s and 1980s than in the 2000s. Nevertheless, the trends were strong and persistent through the early 2000s, suggesting that the coming years may see further overall increase in the proportion of baby boomers who are members of racial minorities. Our models indicate that whites are significantly more likely than racial/ethnic minorities to live in single-family buildings. Although the percentage of whites among the baby boomers has decreased, whites still make up the overwhelming majority of this age group. Thus, their housing preferences will have the greatest impact.

Nativity

Consistent with national trends, there have been substantial increases in the size of the foreign-born population among baby boomers in Hennepin County (See Figure 4). Specifically, the number

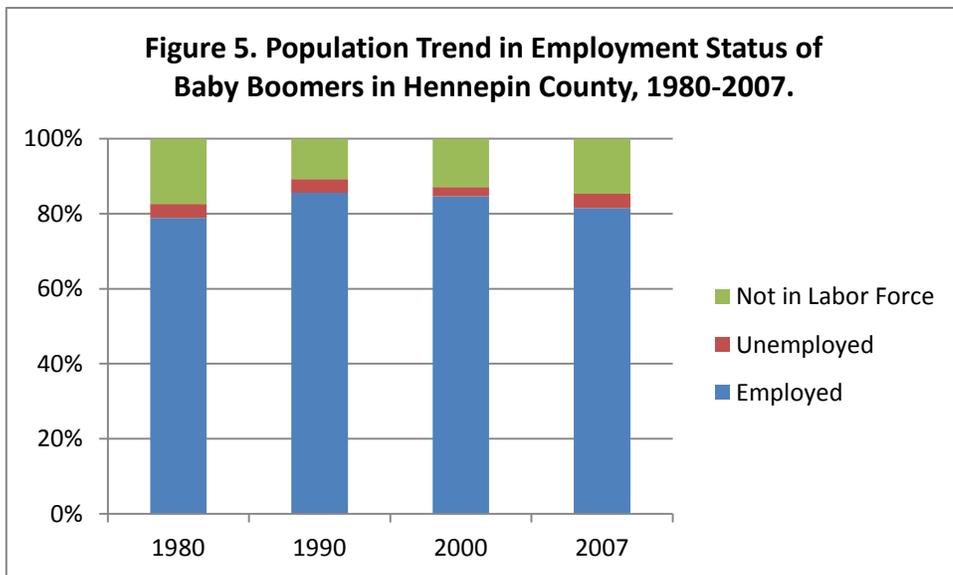


of foreign-born baby boomers increased from less than 12,000 (3.46%) in 1980 to almost 34,000 (10.78%) in 2007. The most rapid increase occurred between 1990 and 2000 and the rate of change has been less drastic before and after that time period. Our multivariate analysis show that foreign born individuals are less likely to own single-family homes, but these individuals continue to be only a small proportion of the baby boomer population.

Employment Status

Consistent with the age composition of baby boomers, the proportion of the population being in the labor maker has fluctuated over the last three decades (see Figure 5). In early 1980, as part of the cohort were still minors, about 17% (59,000) were not in the labor force. The number decreased to around 10% (38,000) in 1990 and stayed fairly stable over the 1990s. In the early 2000s, as some of the baby boomers started to reach retirement age, the number climbed up again and almost reached 15% (46,000) in 2007. As more and more baby boomers will retire in the coming years, this number is likely to increase steadily. The unemployment rates among the Hennepin County baby boomers have been fairly consistent with the national trends: year 2000 witnessed the lowest unemployment rate (2.48% among all baby boomers), corresponding to the economic boom of the

late 1990s. In 2007, 3.8% of the Hennepin County baby-boomer population was unemployed and the number is likely to change according to the performance of the national and state economy in the coming years. Compared to those outside the labor force, both employed and unemployed people are somewhat more likely to live in 2-49-family housing, but less likely to live in buildings with 50 families or more.

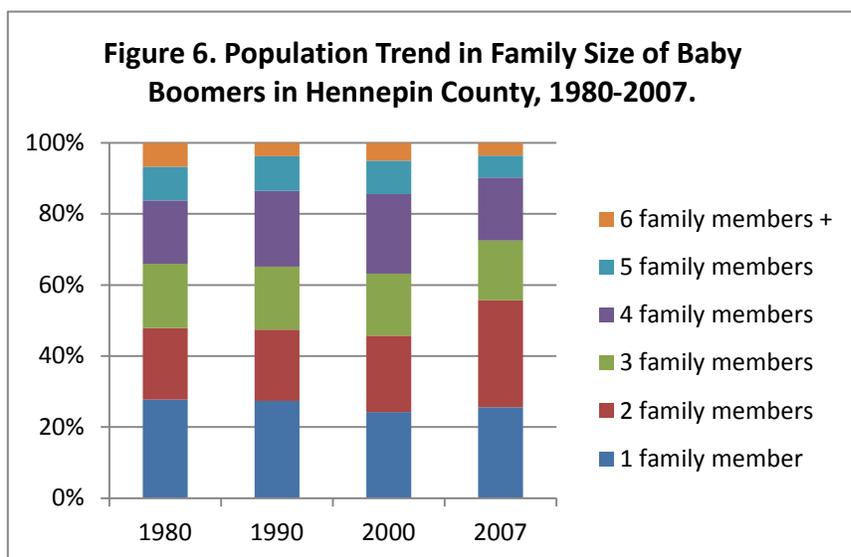


Work Disability

As disability restraining one’s work ability is both relevant to a person’s income and her/his need for housing fatalities, it is an important covariate to take into account when considering housing preference (data not shown). From 1980 to 2000, the proportion of baby boomers in Hennepin County with any work disability has increased stably from less than 4% to more than 8%. Over the early 2000s, this number seems to have decreased slightly. In 2007, 6.6% of the Hennepin County baby boomers are living with any disability that prevents them from working. Disabled individuals are more likely to live in multi-family housing.

Family Size

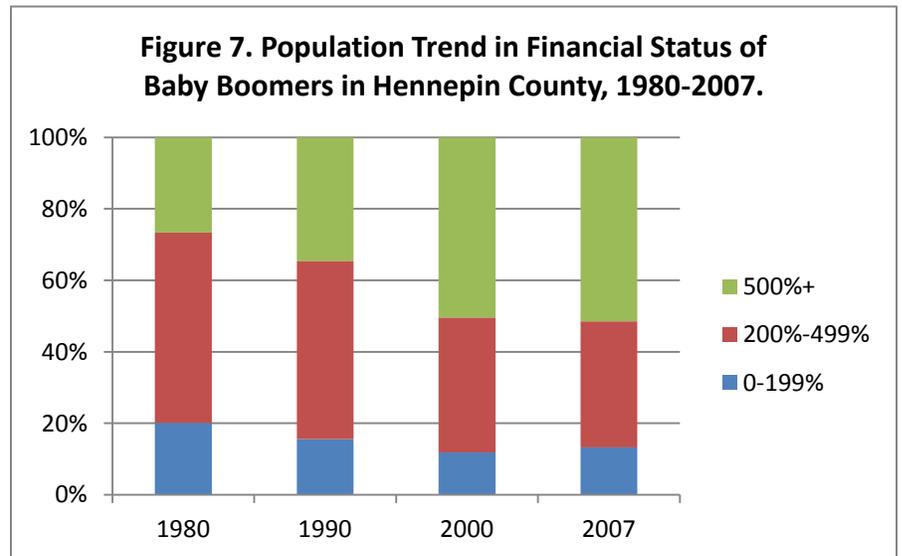
Patterns of family structure, particularly family size, have shifted systematically among baby boomers (see Figure 6). Specially, relatively small families have become more common for this population. In 1980, more than 16% (55,000) lived in families with five members or more, compared to barely 10% (30,000) in 2007. Accordingly, the number of



baby boomers living in a family with 2 to 4 members has increased from 190,000 (56%) in 1980 to 203,000 (65%). Meanwhile, the number and proportion of baby boomers living alone has stayed stable over the past three decades at around 25% to 27%. Large families tend to live in stand-alone houses. As baby boomers' children age and move out of the home, more of the baby boomers will likely turn to multi-family housing.

Financial Status

Consistent with the practice in other governmental reports (Macmillan and Vandormael 2009), the financial status of the baby boomers is measured using the relative location of each person's household to the poverty thresholds in different years. This enables a cross-time comparison. In the past three decades, the financial status of baby boomers in Hennepin County has been characterized by a polarizing trend with



moderate poverty relief (see Figure 7). Specifically, the proportion of "middle class" baby boomers living between 200 and 499 percent of the poverty threshold has decreased consistently and substantially, from more than half (180,000) in 1980 to a little more than a third (111,000) in 2007. Most of the shift seems to have been upward as both the proportion and number of baby boomers residing in high-income household have increased considerably. In 1980, only 26% (90,000) baby boomers in Hennepin County dwelled in "wealthy" households beyond 500 percent of the poverty threshold, compare with more than half (161,000) in 2007. Meanwhile, the proportion of baby boomers residing in and near poverty decreased between 1980 and 2000 from 20% to 12% but has experience a slight increase in the early 2000s to reach 14% in 2007. This process is reflective of the career trajectory of the baby-boomer cohort. The most recent trend showing that the percentage of "poor" households has leveled off might be expected to continue in the coming years. All else being equal, wealthier families are more likely to live in single-family houses. With more than half of the baby boomers in the wealthiest category, this is another indication that most of this group will remain in single-family homes.

VII. Integrating the Multiple Population Trends to Assess Housing Preferences for Hennepin County Baby Boomers.

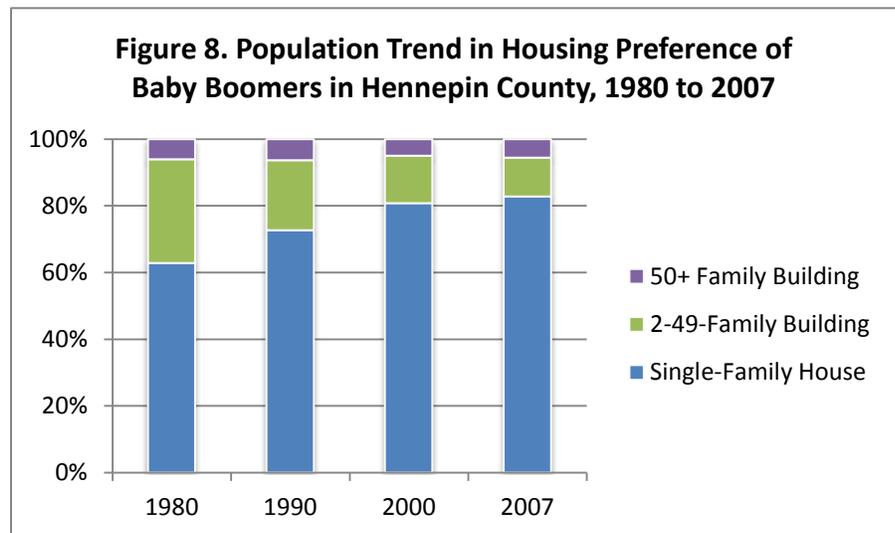
Based on our statistical model, different covariates impact people's housing preferences differently. Specifically, age has a non-linear impact on one's housing choice—while older people are more likely to live in single-family houses, the gap between younger and older cohorts narrows when individuals reach their 70s. In addition, other things being equal, wealth and large family size both contribute to people's choice of single-family homes. The baby boomers are a relatively wealthy group and their wealth has increased over time. Although their average family size has gotten somewhat smaller over time, it has remained relatively stable. Meanwhile, racial and ethnic minorities, people born outside the U.S. and individuals with disabilities are more likely to choose multi-family housing over standalone houses at any given age and time. The percentage of racial and ethnic minorities, foreign-born individuals, and people with disabilities has increased among the baby boomers over time while still representing small minorities. Finally, the effect of employment is complex—compared with those outside the labor market, both the employed and unemployed people are more likely to live in smaller multi-family units but less likely to live in housing with more than 50 families.

As demonstrated in the previous sections, the demographic changes in the covariates discussed above among baby boomers in Hennepin County over the past 30 years have been complex. Using the data containing only baby boomers, we observed the overall trend in housing preferences. In general, the majority of baby boomers in Hennepin County

has been living in single-family buildings instead of multifamily housing and this tendency increased in the past three decades. In 2007, only 17% of the baby-boomer population in Hennepin County lived in buildings containing more than one family, compared with nearly 40% in 1980 (see Figure 8).

The fastest rate of change

happened in the 1980s while the trend seemed to slow down substantially in the early 2000s. This change is reflective of changes in the housing preference of the entire population as well as changes in demographic composition of the baby-boomer population.



VIII. Methodology

The data used in this report come from two sources.

First, we use data from the 1980, 1990, and 2000 US Censuses. For each Census, we used the publicly available 5% sample from the Integrated Public Use Microdata Series (IPUMS-USA) at the Minnesota Population Center [11]. Second, we use data from the American Community Surveys (ACS). These data also come from IPUMS—USA. By virtue of the fact that the ACS is a survey rather than a census of the population, the number of cases in any given year is significantly smaller than that seen in the decennial Censuses. To increase confidence in our non-Census estimates, we pool data from multiple years of the ACS. As Hennepin County was not included in every year of the ACS, we use data from the 2005 through 2008 ACS and refer to them as “2007” throughout the text and the figures.

All analyses focus solely on the population of Hennepin County and we derive this population through a complex compilation of geographic designations. In 1980, counties are identified through a county group designation and Hennepin County is captured through “cntygp98” values of 14 through 18. The protocol changed in 1990 through 2000 and for the 2005 through 2008 ACS; for these data the county is identified through a combination of the state identifier (i.e., statefip =27) and a county identifier (i.e., county =530).

Three analytic strategies were used in this research. First, the population projections are based on the entire population of baby boomers in Hennepin County in each of the Census data sets and in the pooled set of ACS data. Although we experimented with a number of approaches, we present projections based on a simple linear model where the known data from the Censuses and ACS inform a linear regression model that produces an “intercept” indicating the predicted population value in 1980 and a summary indicator of the annual rate of change (the “b-coefficient”) in the population between 1980 and 2007. From this, we simply calculate expected values for years without known data, specifically 2015 and 2020.

The second strategy is a simple accounting of the total number of baby boomers with various characteristics and their housing preferences in Hennepin County at each time period and provides corresponding percentages. For such analyses, the figures include the precise values while the text describes figures rounded to the nearest thousand. Rounding serves as an important reminder that there is a margin of error in all the analyses, including those based on Census data, due to the sample nature of all the data used.

Finally, we fitted a multinomial logistic regression to the Hennepin County data in order to comprehensively assess the impact of each covariate on the likelihood of a person choosing one type of housing over another. The discussion of the covariate effects throughout this report is based on the estimates from this final model.

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