# Housing Trends Among Baby Boomers 



Gary V. Engelhardt



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# Research Institute for Housing America 

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## I. Executive Summary

According to the most recent U.S. Census Bureau projections, most of the growth in the number of persons aged 55 and older in the near future will occur because of the aging of the Baby Boomers, who have helped to fuel the growth in the national homeownership rate to historical highs. Broadly speaking, the aging of America and growth in homeownership will have potentially important implications for the housing and mortgage industries for a number of reasons. First, listings by older homeowners are an important source of supply of existing homes for sale, and those older sellers looking to buy another home represent an important source of demand, especially for smaller, trade-down homes or homes with desirable features - e.g., homes with a first-floor bedroom, one-story homes, and condominiums - and in current and future areas of growth in retirees, especially in the West, South, and Southwest. Second, there has been a sustained increase in the demand for second and vacation homes, as well as lots for the building of future retirement homes. Third, there has been recent media attention on empty-nesters selling suburban homes in areas with good schools and purchasing real estate in urban areas to take advantage of urban amenities. Finally, the housing equity of older Americans, which was estimated to be $\$ 2.5$ trillion in 2000 and has grown even larger in the last few years, is the most important non-pension asset in household portfolios, and a large reserve of untapped wealth. Indeed, there has been substantial interest in the development of new mortgage and financial-market products which allow older homeowners to tap into this wealth. Overall, issues involving housing and aging
will be of growing national importance and will have direct bearing on the housing and mortgage industries.

This report focuses on two aspects of the link between population aging and housing and mortgage markets: 1) the potentially increasing demand for second homes; and 2) suburban-to-urban migration among older American homeowners. Specifically, the first part of the report provides a profile of second-home ownership and the mortgage activity associated with second homes for older American households, comprised of individuals aged 50 and older, using data from the 2004 Health and Retirement Study (HRS), a large, nationally representative, random sample of older Americans. The second half of the report provides a profile of home ownership and mobility for metropolitan empty-nest retirementage homeowners, comprised of individuals aged 50 through 69, using data from the 2005 Current Population Survey (CPS), a large, nationally representative, random sample of older Americans, and the 2000 Census.

There are a number of principal findings:

## Second Home Ownership

- In 2004, there were over 43 million American households comprised of individuals aged 50 and older who owned their main residence, of which 15 percent, or 6.6 million households, also owned a second home.
- Most second-home owners either inherited their homes or purchased them with cash. Second-home mortgage originations comprised only about four percent of overall mortgage market originations.
- There are strong regional patterns of demand for second homes, and second-home mortgage activity is heavily geographically concentrated.
- The typical second home is held for about 15 years, but turnover is high: 45 percent of older homeowners with such homes disposed of them within a six-year window. Changes in marital status and health, not income or employment, drive the decision to dispose of a second home and, hence, pre-pay a second-home mortgage.
- Most second-home owners make limited use of their homes: one-half spend 2 weeks or less and two-thirds spend 4 weeks or less per year in the home. Also, only 12 percent of owners intend to sell their main home and eventually occupy their second home.
- Second homes are a small portion of the typical asset portfolio of an older household and are not important drivers of investment decisions.
- Despite anecdotal evidence, the rate of second-home ownership among 50-60 year olds—the peak demanders for these properties among older households—has remained flat over the 12-year period from 1992-2004. The Early Baby Boomers were no more likely to own such homes than older cohorts of homeowners.
- The market for mortgages on second homes for older households is only 6.3 percent of the size of the market for mortgages on primary residences. In aggregate, there is only $\$ 126$ billion in outstanding mortgage debt on second homes for older households.


## Suburban-Urban Migration

- At the national level, empty-nest retirement-age suburban homeowners are not flocking to urban areas in great numbers. In particular, based on the last decade's experience, in a given five-year period, only two percent of all empty-nest retirement-age suburban homeowners can be expected to move to an urban area.
- Suburban empty-nesters are just as likely to move to a non-metropolitan area as they are to an urban area.
- The suburban-to-urban flow of homeowners represents just 5 percent of the stock of all retirement-age empty-nest homeowners located in central cities. When the urban-to-suburban flow of empty-nesters is taken into account, the net migration effect from the suburbs to urban area is -7.2 percent. Any return of empty-nesters to the urban core is not enough to stem the tide of urban-suburban flight.
- Over all metropolitan areas, 76 percent of empty-nest suburbanites who moved to urban areas were white, 60 percent were married, 25 percent were divorced and just over 40 percent had college degrees and were younger than 55 , respectively. About half of these movers had incomes of $\$ 40,000$ or less, and three-quarters had incomes of \$70,000 or less.
- Empty-nest suburbanites moving back to the urban core in the 10 largest metropolitan areas were more likely to be non-white, more highly educated, and to have incomes greater than $\$ 70,000$, respectively, than movers in all other metropolitan areas.
- Although the housing and mortgage markets associated both with second homes and empty-nest movers are small, they will experience sustained growth as the Baby Boomers age, simply because of the sheer size of the Baby Boom cohort. In the next ten years, the number of second homes is forecast to grow by 2 million housing units according to these projections. However, there does not appear to be substantial growth in second-home mortgage activity on the horizon: the number of second-home mortgages is only forecast to grow by a total of 500,000 loans in the decade.

The report concludes with a summary of findings and a discussion of the some of the broader implications of population aging for the mortgage industry.

## II. Trends in Second Home Ownership

This part of the report focuses on second home ownership among older households and is organized as follows. Section 1 provides important background information on the data sources and methods used, and how this analysis compares with previous analyses of second-home ownership. Section 2 sets the stage with some basic facts about homeownership among older households, and then Section 3 presents a profile of second-home ownership. Results on the use and disposition of second homes are given in Section 4. Section 5 presents evidence on the size and scope of the market for second homes and mortgage activity at the national level, as well as the geographic concentration of second-home mortgage lending. Throughout the report, all households with individuals ages 50 and older are referred to as "older households."

## A Brief Overview of Data and Methods

Although there is considerable interest in the mortgage and housing industries, as well as the popular press, in the market for second homes, there have been comparatively few studies of second-home ownership and mortgage activity, with Bishop, Beers, and Hightower (2005) and Di, McArdle, and Masnick (2001) as two of the better known studies. In addition, the recent existing studies of housing among older households, such as Engelhardt (2005), have focused on ownership of and mortgage activity associated with the main residence, but not on second homes. More generally, part of the reason for the lack of study of second-home ownership is a paucity of quality data and small sample sizes, especially for older households, who are the fastest growing part of the population and
own the lion's share of these properties. This had led to newly undertaken survey efforts, such as those by the National Association of Realtors (Bishop, Beers, and Hightower, 2005), to learn more about these markets.

The analysis in this report utilizes data from the Health and Retirement Study (HRS), a large, long-standing, nationally representative, randomly sampled, longitudinal survey of older Americans specially designed to study the economics and demography of aging, including aspects related to housing, income, wealth, retirement, migration, and health. The HRS is funded by the National Institute on Aging and began in 1992 with a nationally representative random sample of 12,682 individuals born in 1931-41 and 8,922 individuals born in 1896-1923 and their spouses (regardless of birth year). These cohorts have been re-interviewed every two years and currently are being interviewed this year. In addition, the HRS began interviews in 1998 with large random samples of individuals born in 1942-47, the so-called War Babies, and 1924-1930, the so-called Children of the Depression (CODA). Both groups have been re-interviewed every two years. In 2004, a large random sample from the Early Baby Boomer cohort, born 1948-53 entered the survey; they are being followed every two years as well. ${ }^{1}$ Overall, the structure of the HRS is such that it is a nationally representative, random sample of older Americans, who are followed from age 50 until death. In 2004, there were 20,139 individuals age 50 and older in the study. It is the largest and most comprehensive study of the housing, income, wealth, retirement, and health behavior of older Americans in existence.

Another distinct advantage of this survey is that it asked detailed questions on housing, both for the main and second (if any) residence. In addition, the HRS clearly distinguishes between investment properties and second homes and condos used for vacation purposes. Specifically, the survey asked "Not including investment property, do you (and your [husband/wife/partner]) own a second home or condo?" This measure includes partial ownership through timeshares. If the respondent indicated "yes," then a long series of questions about the second home ensued. The analysis below is based on the responses to these questions. Because specific questions about the nature and use of individual investment properties were not asked, this report limits the scope of analysis to second homes. ${ }^{2}$

The sample for the analysis below is taken from 2004, the most recent year available, and is limited to homeowners who do not reside in nursing homes. Overall, the analysis sample is composed of 14,983 individuals who comprised 9,658 households. All figures presented below are weighted using the household-analysis weights provided by the HRS

1 A large random sample from the Middle Baby Boomers, born 1954-59, will enter the study in 2010 and be followed every two years.
2 The HRS did collect information on the total value, summed across all investment properties, of real estate other than the main and second homes, as well as total debt associated with those properties, but no information beyond this.

FIGURE 1A
Home Ownership Rate for Older Households by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 1B
Home Ownership Rate for Older Households by Age Group


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.
that adjust for differential sampling and sample attrition. When weighted, the analysis sample represents $64,410,957$ individuals and $43,315,143$ households in the population.

## Basic Facts on Home Ownership Among Older Households

This section presents summary statistics on homeownership among older households from the HRS in order to lay out some basic facts regarding the sample. Figures 1A and 1B are bar charts which show the homeownership rate of older households by the demographic group listed along the horizontal axis. The total height of each bar represents the percent of households in that category who own their main residence. Overall, 77.2 percent of all older households are homeowners. Among white households, 80.4 percent were homeowners, but only roughly 60 percent of non-white households were homeowners. Over 90 percent of married couples were homeowners, whereas the group with the lowest rate of homeownership, 58.3 percent, is comprised of those who never married. Finally, as is well-known, the homeownership rate rises steeply with education. Figure 1 B shows the homeownership rate across five-year age groups. Although the homeownership rate peaks at 80.9 percent for those aged 60 through 64, it is essentially flat at about 80 percent for $55-69$ year olds, after which it declines as age rises. ${ }^{3}$

Figures 2A and 2B show the distribution of all older homeowners (regardless of whether they own a second home) by race, marital, education, and age groups. A total of 88.1 percent of older homeowners were white, 8.2 percent of the households were AfricanAmerican, and 3.7 percent of households were those self-reporting other races. In terms of marital status, the two largest groups were married couples and the widowed, who comprised 57.2 and 21 percent of homeowners, respectively. Those who were separated or divorced, projected by the Census Bureau to be the fastest growing group of older Americans, represented 14.4 percent of households. Finally, those with high-school and college degrees comprised the largest portions of homeowners, 34 and 27.4 percent, respectively. Almost 40 percent of older homeowners were younger than 60 , and, overall, about two-thirds were younger than 70 .

Table 1 presents selected statistics on financial characteristics for home owners only. Each column in the table represents a housing- or financial-behavior outcome; each row represents the relevant population subgroup. Both the mean and median are reported for each of the outcomes: housing equity, household income, total household non-pension wealth, mortgage debt, and the annual mortgage payment. The mean is useful when using

3 When interpreting the tabulations by age group, it should be emphasized that, because this analysis uses data for the year 2004, drawn from a single cross-section, the pattern of behavior across age groups cannot be attributed necessarily to the pure effect of age, because members of each age group also uniquely represented the same year-of-birth cohort, and behavior may have varied across cohorts for a variety of reasons that were independent of age.

FIGURE 2A
Distribution of Older Homeowners by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 2B
Distribution of Older Homeowners by Age Group


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.
the statistics in the table along with those in the figures to make aggregate estimates for the population or subgroup as a whole. The median is shown in square brackets in the table. It represents the midpoint in the distribution of that outcome, such that half of the homeowners in that row's population subgroup had outcomes above the median level and half had outcomes below the median level. The median is the preferred measure and should be thought of as measuring the outcome for the typical homeowner. ${ }^{4}$

From columns 1 and 2 of Table 1, median home equity in the main residence for all older homeowners was $\$ 100,000$, and median household income was $\$ 43,560$. Column 3 of Table 1 shows the median (and mean) total household wealth. It is a comprehensive measure of wealth that includes housing equity, the value of vehicles, collectibles, businesses, and financial assets, less the value of all debt, but excludes the expected present value of entitlements to Social Security and traditional employer-provided pension benefits to be received in the future, as well as assets held in $401(\mathrm{k})$ plans. Therefore, wealth in this column represents all of the household's non-pension resources at the time of the survey with which to finance retirement consumption. The median wealth was $\$ 222,000$. Mean wealth was much higher, $\$ 518,849$, which reflects the skewed nature of the distribution of wealth.

Figures 3A and 3B and columns 4 and 5 of Table 1 give summary information on mortgages for older homeowners. It should be noted that the HRS asks about remaining mortgage balances and payments for up to three mortgages and home equity loans on the main and second homes, respectively, but does not ask any detail on features of the mortgages, such as origination date, origination amount, term, fixed- versus adjustablerate, interest rate, refinancing, etc. This means that only general summary information is available for older homeowners. Therefore, only measures of total mortgage debt and payments for all residences can be calculated.

In particular, Figures 3A and 3B show the percent of older homeowners who had a mortgage on the main home by demographic group. Overall, 41.6 percent of such homeowners had a mortgage (Figure 3A). Column 4 of Table 1 shows total mortgage debt, which is the sum of the remaining balances on all mortgages associated with the main and second (if any) homes, including first mortgages, second mortgages, and outstanding balances on home equity lines of credit, for the sub-sample of homeowners with a mortgage. The mean

4 For example, in the first row, for which the population group is all homeowners, median housing equity, defined as the difference between housing asset value (including the secondary residence, if any) and associated mortgage debt, was $\$ 100,000$, measured in calendar-year 2004 dollars. Thus, half of older homeowners had housing equity greater than $\$ 100,000$ and half had less than $\$ 100,000$. As is well known, the distribution of income and wealth in the population is highly skewed to the right, in that there is a small part of the population that has a disproportionately large amount of overall income and wealth, so that the mean frequently exceeds the median, often times by a substantial amount.

FIGURE 3A
Percent of Older Homeowners with an Outstanding Mortgage by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 3B
Percent of Older Homeowners with an Outstanding Mortgage by Age Group


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.
and median total mortgage debts, conditional on having a mortgage, were $\$ 101,272$ and $\$ 75,000$, respectively, as shown in column 4 of Table 1 . Column 5 shows the mean and median total annual payments associated with these mortgages. The mean and median annual payments were $\$ 11,897$ and $\$ 9,000$, respectively.

## A Profile of Second-Home Ownership Among Older Homeowners

Figure 4A shows the rate of second home ownership among older homeowners by the demographic group listed along the horizontal axis, in which the height of each bar represents the percent of homeowners in that category who also owned a second residence. Overall, 15.2 percent of older homeowners owned a second residence. Among white homeowners, 15.8 percent owned second homes, but just under 10 percent of African-American homeowners owned second homes. Almost 20 percent of married and partnered home-owning couples also owned a second home. Second-home ownership rose sharply with education, with almost one-quarter of older homeowners with a college degree owning a second home. Figure 4B shows the second-home ownership rate across five-year age groups. Ownership of second homes peaked at 18.6 for those aged 60 through 64.

Figures 5A and 5B show the distribution of older second-home owners by race, marital, education, and age groups. A total of 91.6 percent of second-home owners were white, 5.2 percent were African-American, and 3.2 percent were those self-reporting other races. In terms of marital status, the two largest groups were married couples and the widowed, who comprised 73.2 and 11.8 percent of homeowners, respectively. Those who were separated or divorced represented just 7.8 percent of second-home owners. Finally, those with college degrees comprised the largest portion of second-home owners, 42.1 percent. About 40 percent of older second-home owners were younger than 60 , and 60 percent were younger than 65 .

## General Financial Characteristics of Second-Home Owners

Table 2 presents the same statistics on financial characteristics for second-home owners as Table 1 did for all homeowners. Overall, second-home owners are substantially economically better off than the typical homeowner. Specifically, from column 1 of Table 2, median home equity in the main residence for older second-home owners was $\$ 170,000$, compared to $\$ 100,000$ in Table 1 for the typical homeowner. In column 2 of Table 2, the median household income was $\$ 77,120$, almost twice the income of the median homeowner $(\$ 43,560)$ in Table 1. Median wealth for second-home owners was $\$ 487,500$, and mean wealth was over $\$ 1$ million. However, it also appears, from columns 4 and 5 of Table 2, that second-home owners had more mortgage debt and higher annual payments than the typical homeowner.

FIGURE 4A
Second Home Ownership Rates for Older Households by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 4B
Second Home Ownership Rates for Older Households by Age Group


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 5A
Distribution of Older Second Home Owners by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 5B
Distribution of Older Second Home Owners by Age Group


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 6A
Percent of Older Second Home Owners with a Mortgage by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

Table 3 narrows the focus to financial characteristics associated with the second home itself. Column 1 shows the mean and median values of the second home, respectively. The median second home was worth $\$ 80,000$, whereas the mean value was $\$ 197,341$. The substantial difference in mean and median values is the result of variation in the types of second homes owned, some of which are quite modest, and some quite expensive. Not surprisingly, more expensive second homes are owned by white, married, and collegeeducated households.

Column 2 of the table shows that the mean and median years the household had owned the second home were 13 and 10 years, respectively. For those below age 65, the typical second home had been owned for 6-10 years, which when combined with the fact that 60 percent of second homes were owned by those under age 65 (Figure 4B), suggests that for older households the typical second home was purchased when the adult members of the household were in their 40's and 50's. This means that the peak time for second-home purchases for the Baby Boomers is now, as that generation currently is in their 40's and 50 's and the leading edge is even into their early 60 's.

## FIGURE 6B

Percent of Older Second Home Owners with a Mortgage by Age Group and Location of the Second Home


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

## Mortgage Status of Second-Home Owners

Figures 6A and 6B show the percent of second-home owners with a mortgage on the second home by demographic group and by location as measured by the U.S. Census Bureau's Census Division designation in which the second home is located. ${ }^{5}$ Overall, 17.1 percent of older homeowners with second homes had a mortgage on the second home. The likelihood of having such a mortgage rose with education and fell with age. Second homes located in the South Atlantic census division, which includes Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia, were the most likely to be mortgaged ( $23.8 \%$ ), followed by those in the Pacific census division (20.9\%), which includes Alaska, California, Hawaii, Oregon, and Washington.

In terms of the size of the mortgage obligations, the mean and median remaining balances on mortgages on second homes, conditional on having such a mortgage, were

5 The HRS has detailed geographic information on the main and second home, all the way down to the Census tract level, but does not release those data to the public for confidentiality reasons. The finest level of detail available for public use is at the level of the Census division.

FIGURE 7A
Median Loan-to-Value Ratio for Older Second Home Owners with a Mortgage by Race, Marital and Education Groups

Percentage Points


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

## FIGURE 7B

Median Loan-to-Value Ratio for Older Second Home Owners with a Mortgage by Age Group
Percentage Points


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 8A
Median Annual Mortgage-Payment-to-Income Ratio for Older Second Home Owners with a Mortgage by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 8B
Median Annual Mortgage-Payment-to-Income Ratio for Older Second Home Owners with a Mortgage by Age Group


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.
$\$ 112,042$ and $\$ 60,000$, respectively, as shown in column 3 of Table 3. Column 4 of that table shows the mean and median annual payments on mortgages on second homes, which were $\$ 13,456$ and $\$ 9,000$ respectively.

In addition, Figures 7A and 7B show the median current loan-to-value (LTV) ratios, based on the remaining mortgage balance and the current home value (not the amounts at the time of origination) for those who had a mortgage on the second home. The median LTV was 42 percent, and was higher for those with higher educational attainment and lower for those at more advanced ages. In fact, based on additional tabulations not shown in the figure, only 10 percent of second-home owners with mortgages had an LTV of 80 percent or higher, and only 5 percent had an LTV of 90 percent or higher, which, again, suggests that mortgages on second homes are not substantial.

Figures 8 A and 8 B show the median of the ratio of annual payments for mortgages on second homes to household income by demographic group to get a sense of how large mortgages on second homes were relative to household resources. Over all homeowners with such a mortgage, the median ratio was 0.08 , which indicates that the typical older second home owner with a mortgage made payments equal to 8 percent of annual gross income. Second-home owners under age 65, who comprised 60 percent of such owners, pay between $8-10$ percent of annual income on their mortgages.

## Use of Second Homes

An important issue surrounding second homes is the extent to which owners view them as a complement to leisure consumption or as investment properties. Although the HRS did not ask questions that can address this directly, the survey does provide four key pieces of information that shed light on this indirectly. First, to help understand the importance of second homes as an investment vehicle in household portfolios, Figures 9A and 9B show the median housing-equity-to-wealth ratio, expressed as the percentage share of the household wealth portfolio, by demographic group. For the typical second-home owner, just 13 percent of household wealth was in the form of equity in the second home. This portfolio share declines with education and is relatively constant across age groups. This suggests that to the extent second homes are held for investment purposes, wealth tied up in such homes only represents a very small portion of the typical owner's asset portfolio, so that second-home purchases are not a main driver of investment decisions of older households.

Second, Figure 10 plots the percent of older second-home owners by the number of weeks per year spent in the home. More than half of these owners spent two weeks or less. Only about 17 percent spent more than a quarter of the year in the home. The survey did not ask whether the property was rented the remainder of the year.

FIGURE 9A
Median Second Home Equity Portfolio Share for Older Second Home Owners by Race, Marital and Education Groups


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

FIGURE 9B
Median Second Home Equity Portfolio Share for Older Second Home Owners by Age Group


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

Third, Figures 11A and 11B show the percent of second-home owners who planned to make the second home their main residence at some point in the future. Overall, only 12.9 percent of these home owners anticipated permanently moving to the second home. The results in these figures suggest that second homes were a small part of the overall portfolio, on average used sparingly by their owners, and typically not intended for longterm living.

Finally, the fact that the HRS is a longitudinal survey, in which the households have been tracked over many years, can be exploited to examine the determinants of the disposition of second homes. Specifically, looking at all older second-home owners in 1998, 45 percent of them had just one home by 2004. Because, as in Table 4 above for 2004, the median years since the purchase of a second home in 1998 was 10 years, this disposition rate of second homes suggests that the typical second home belonging to older households was owned for about 15 years before being sold.

Table 4 presents some additional, regression-based evidence on what drives older homeowners to sell their second homes. Specifically, the table presents results from the estimation of a probit regression model for all second-home owners in 1998 in which the dependent or outcome variable was whether or not the household had just one home by 2004. The analysis accounts for the impact of income, wealth, and region of residence in 1998, the number of years the second home had been owned as of 1998, whether the

## FIGURE 10

Percent of Older Second Home Owners by Number of Weeks Per Year Spent in Second Home


[^0]

Note: Author's calculations from the 2004 wave of the Health and Retirement Study.
second home was intended in 1998 to eventually become the main residence, whether the second and main homes were located in the same region in 1998, as well as the race, marital status, education, and age characteristics shown in the profile tables above. ${ }^{6}$

The entry in column 1 of the table shows the percentage impact of a $\$ 10,000$ change in annual household income between 1998 and 2004, accounting for the impact of changes in marital and health status, on the likelihood of disposition. The estimation results indicate that such a decrease in income increased the likelihood of a disposition by 1.5 percent. The double asterisks indicate that this effect is statistically different than zero at the fivepercent level. ${ }^{7}$ The entry in column 2 of the table shows the percentage impact of a change in marital status on the probability of disposition, accounting for the impact of the changes to income and health. The results also indicate that such a change raised the likelihood of a sale by almost 39 percent. Finally, the entry in column 3 of the table shows the

[^1]7 All significance levels refer to two-tailed hypothesis tests.

FIGURE 11B
Percent of Older Second Home Owners Who Plan to Make the Second Home Their Main Residence by Age Group and Location of the Second Home


Note: Author's calculations from the 2004 wave of the Health and Retirement Study.
percentage impact of a change from good to poor health on the probability of a sale, accounting changes in income and marital status. The estimation results indicate that such a decline in health raised the likelihood of a disposition by about 17 percent.

Overall, the most important conclusion from this table is that what drives how long older households use and when they dispose of second homes is not income. Indeed, changes in income had only a tiny effect; likewise, changes in employment status (not shown in the table) also had minimal impact. Instead, the primary drivers are marital status and health. The results are very consistent with a set of findings from a broader set of studies examining the determinants of the housing behavior and mobility of the older households, all of which show that marital status and health are the key determinants of housing decisions for older individuals. This is in stark contrast to what drives housing behavior and mobility for younger households. ${ }^{8}$

[^2]
## The Size and Scope of the Market for Second Homes

The tabulations illustrated in Figures 1A-3B, 6A and 6B and the HRS sample weights can be combined to produce estimates of the number of homeowners nationally and by demographic category. These estimates are shown in column 1 of Table 5 . The most important finding that jumps out is that, from a national perspective, the market for second homes is small. From the first row of the table, there are over 43 million households aged 50 or older who were homeowners. Almost 18 million of these households had a mortgage on the main home. However, there were only about 6.6 million households who owned a second home, and only 1.1 million had a mortgage on the second home. These figures imply that among older households, the market for mortgages on second homes is only 6.3 percent of the size of the market for mortgages on primary residences.

Moreover, when looking at the mortgage data in Table 3 and Figures 6A-6B in summary, the dollar value of mortgage obligations on second homes is small. Most second homes have no associated mortgage debt, even for 50-54 year households, who purchased their home typically with the previous 6 years (Table 3). This suggests that most second homes are purchased with cash or inherited. ${ }^{9}$ In aggregate, there is only $\$ 126$ billion in outstanding mortgage debt on second homes for older households.

## Regional Patterns of Demand

A key feature of the market for second homes is that it is localized, because there are certain areas of the country which are unusually attractive in which to own such a home. This means that even if the national market for second homes is small, as documented above, regional and local markets for second homes could be substantially larger in importance. Table 6 illustrates the relationship between the region of the main home, as measured by the Census division, and the region of the second home. Reading across columns for any given row shows how residents of that row's region have their second homes distributed across the country. For example, the cell located in row 1 and column 1 of the table indicates that 244,450 New Englanders also had a second home located in New England. The number in parentheses in that cell is the row percentage: the percentage of home owners whose main home was located in New England and whose second home was also in New England, which, in this case was 57.3 percent. Likewise, in row 1 and column 2, there were 26,522 (or 6.2 percent) New Englanders who had second homes in the Mid-Atlantic region.

One important conclusion from the table is that there are strong patterns of regional demand for the location of the second home. First, the diagonal of the table, shows the number and percentage of second homes in the same region as the main home. Reading

[^3]down the diagonal, the majority of second home owners in each region prefer a second home in the same region. The two Census divisions with the strongest of these "ownregion" demand effects are the South Atlantic (District of Columbia, Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia) and the West South Central (Arkansas, Louisiana, Oklahoma, and Texas). The three Census divisions with the weakest own-region demands are New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), the Mid-Atlantic (New Jersey, New York, and Pennsylvania), and the East North Central (Illinois, Indiana, Michigan, Ohio, and Wisconsin). Second, older households in certain regions have strong preferences for homes in certain other regions. For example, residents of the New England, MidAtlantic, and East North Central states have strong preferences for second homes in the South Atlantic states, and very weak preferences for homes in the Mountain and Pacific states. Alternatively, residents of the Mountain and Pacific states have strong preferences for second homes in the Pacific and Mountain states, respectively, as well as abroad, which probably indicates Canada and Mexico. ${ }^{10}$ So, those in the East and the Great Lakes go south, and those in the West stay west. Proximity matters. Finally, there are a number of cells in the table that have zeroes as entries. This does not mean that literally there is no cross-region second home ownership in those regions. However, it does mean that in a large random sample of older Americans, there are no cases of cross-regional ownership of second homes for that region, which means that statistically speaking there is a very weak demand for second homes in that region.

## Geographic Concentration of Second-Home Mortgages: Evidence from HMDA Data

Because the market for second homes is localized, the market for second-home mortgages is localized as well. In order to illustrate this, the analysis needs to move away from the HRS data because detailed geographic information is not publicly available. Instead, Home Mortgage Disclosure Act (HMDA) data from 2004 are used. There are two advantages of the HMDA data. First, they are nearly comprehensive and provide basic information for almost all mortgage applications in United States, including purchases of homes not intended to be the main residence. Second, they have detailed geographic information on the location of the property, all the way down to the county and Census-tract level of detail. There are 65,111 Census tracts in the United States. Each one contains roughly 1,600 individuals, and in metropolitan areas corresponds with the conventional notion of a neighborhood. Census-tract data allow for incredibly detailed geographic analysis of mortgage application and origination patterns.

[^4]As is well known, there are three important drawbacks of these data. First, they have only limited information on the applicant (race, sex, income), and, in particular, no information on age. This means that any analysis with the HMDA data cannot be limited to older households, but, instead, must speak about all households. Second, there is only limited information on the loan application (origination amount, whether originated, reasons for denial), and, in particular, no information on the loan type, amortization type, points, term, rate, etc. ${ }^{11}$ Finally, there is no way to distinguish whether the purchase of the nonprimary residence was intended as an investment property or for consumption purposes.

Along with the lack of age information, HMDA data track new applications and originations, not the stock of outstanding mortgages, this means that, unfortunately, there is no way to square directly the HMDA findings with the HRS findings. However, together these two data sources represent contributions to an overall portrait of housing and mortgage activity related to second homes.

Before illustrating the geographic patterns of lending, Table 7 gives summary statistics on aggregate mortgage application and origination activity associated with non-primary residences from the 2004 HMDA data for the nation as a whole. Mortgage activity associated with multi-family dwellings is not included. In column 1 of the table, there were 1.35 million applications for the purchase of a non-primary residence, of which 788,461 , or 58.3 percent, resulted in originations, valued in aggregate at $\$ 100$ billion. To get some perspective as to how important this activity is relative to broader measures of mortgage-market activity, columns 5 and 6 of the table express the aggregate amount of non-primary residential originations as a percentage of the value of all originations for that loan purpose and for all originations, respectively. For example, in column 5, originations for the purchase of non-primary residences represented 12.9 percent of all purchase originations, and, in column 6, 4.6 percent of all originations. Overall, the figures in Table 7 reinforce the basic message of Tables 5 and 6: the aggregate markets for second homes and second-home mortgages are small compared to the overall housing and mortgage markets. This accords with data from the Mortgage Bankers Association Midyear 2005 Mortgage Originations Survey as well.

With the aggregate numbers in Table 7 as a backdrop, Map 1 shows for the whole country the geographic concentration of mortgage applications for the purchase of homes not intended as the primary residence by Census tract in 2004, the most recent available year of HMDA data. The measure of concentration is the number of mortgage applications for non-primary-residence home purchases divided by the national number of applications for both primary- and non-primary-residence home purchases. Applications for refinancing and home improvements were excluded, as were those for multi-family dwellings, when

[^5]MAP 1
Geographic Concentration of Mortgage Applications for Non-Primary Residences in 2004, Color-Coded by Deciles of the Concentration Distribution


Note: Author's calculations from the 2004 HMDA data.

## MAP 2

Geographic Concentration of Dollar-Weighted Non-Primary Residence Mortgage Applications in 2004, Color-Coded by Decile of the Concentration Distribution


Note: Author's calculations from the 2004 HMDA data.

MAP 3
Geographic Concentration of Non-Primary Residence Mortgage Originations, Color-Coded by Decile of the Concentration Distribution


Note: Author's calculations from the 2004 HMDA data.

MAP 4
Geographic Concentration of Dollar-Weighted Non-Primary Residence Mortgage Originations in 2004, Color-Coded by Decile of the Concentration Distribution


Note: Author's calculations from the 2004 HMDA data.
calculating this measure. Tracts were ranked into deciles by concentration, and then each decile was assigned a color code in the figure. Each decile contains 10 percent of the nation's 65,111 Census tracts.

The map indicates substantial geographic concentration of non-primary-residence mortgage activity. The hot spots, those places with the greatest concentration of activity, shown in red, are in well known vacation areas, including Florida, the Outer Banks, New Hampshire, Vermont, Maine, the Adirondacks, Northern Michigan, Wisconsin, and Minnesota, the Ozarks, Colorado, Arizona, among others.

Map 2 shows the same map, but with a new measure of concentration: the dollar value of mortgage applications for non-primary-residence home purchases in that location divided by the national dollar value of applications for both primary- and non-primary-residence home purchases. This value-weighted measure places emphasis not just on the volume of applications in a location, but also on the underlying value of the properties, with more expensive locations, which have higher application amounts, getting greater weight. This map shows an overall similar pattern of geographic concentration.

Because only 58 percent of applications for mortgages on non-primary residences were originated in 2004, Map 3 shows a map for which the measure of concentration is based on the number originations, rather than applications. Map 4 shows the same map, but weighted by the dollar amount of the originations. Both maps reinforce the message that there is substantial geographic variation in the amount and intensity of mortgage activity for non-primary residences.

## III. Are Suburban Empty-Nesters Flocking to Urban Areas?

This part of the report examines the extent to which suburban empty-nest homeowners are moving back to the urban core in metropolitan areas and is organized as follows. Part 1 gives a brief summary of the data sources and methods used. Part 2 lays out some basic facts about the mobility of retirement-age homeowners. Then the analysis focuses on the extent to which retirement-age homeowners without children, so-called empty nesters, are moving from the suburbs to the urban core, with those results presented in Part 3. Throughout the analysis, all households with individuals ages 50-69 are referred to as "retirement-age households."

## Summary of Data and Methods

Across metropolitan areas, real estate developers are marketing properties such as townhouses and condominiums in urban areas to childless and older individuals. One attraction of these properties is that they allow empty-nest homeowners who may have located in the suburbs to take advantage of better schools when their children were young to locate near urban amenities that are complements to many retirement lifestyles (Katz, 1994). Although the prospect of retirement-age empty-nest suburbanites returning to urban areas in large numbers as the Baby Boomers age has garnered considerable interest in the popular press, evidence on the mobility patterns of this type of homeowner is just beginning to emerge in recent demographic and economic analyses, including Birch (2005), Frey (2003, 2005, 2006) and Glaeser and Shapiro (2003), among others, using data from the 1970, 1980, 1990, and 2000 Censuses.

The analysis in this report utilizes more recent data than used in the previous studies, specifically from the March 2005 Current Population Survey (CPS), a large, long-standing, nationally representative, randomly sampled, survey given every month to Americans of all ages. The March survey was designed to study income and labor market behavior, but also contains information on homeownership and geographic mobility, so it is well-suited for the analysis. In particular, the survey asked about one-year and five-year geographic mobility. The analysis below is based on five-year mobility, between 2000 and 2005, for two reasons. First, the one-year mobility measure is widely regarded among demographers as being a noisier measure of mobility than the five-year measure. Second, the five-year measure is also used in the decennial Censuses, which allows the CPS and Census data to be used in conjunction with one another.

The analysis focuses on "retirement-age" homeowners, defined as those between the ages of 50 and 69, and includes only metropolitan homeowners, defined as those who resided in a metropolitan area anytime in 2000-2005. Because the CPS is a large survey, even limiting the analysis in this way yields a sample of 15,992 metropolitan retirementage homeowners with which to examine recent mobility patterns. This sample includes an important segment of Baby Boomers, specifically, Early Baby Boomers. In particular, in 2005 those who were aged 50-59 were born between 1946 and 1955.

Although the primary advantage of the CPS is that it is the most up-to-date, nationally representative data source on homeowner mobility, it does have the disadvantage that it can produce small analysis samples when examining relatively infrequent events, which, to foreshadow the results below, will be the case with suburbanite mobility to urban areas. Therefore, to help insure that the findings from the CPS are not spurious, a number of tabulations, especially some of the very detailed ones, below will be done with data from a significantly larger sample: a five-percent random sample of households from the 2000 Census. Like the CPS, the Census inquires about five-year mobility patterns, and, hence, for the 2000 Census measures mobility between 1995 and 2000. The analysis sample from the 2000 Census is composed of 176,768 metropolitan empty-nest homeowners who moved between 1995 and 2000, and represented in aggregate 3,629,930 homeowners. All figures presented below are weighted using the sample weights provided by the CPS and Census.

The primary disadvantage of the CPS and Census data for this analysis is that they do not include information on housing, other than homeownership, or on components of household wealth, including mortgages. Unfortunately, there are no other data sources available that would be appropriate for this study of mobility. The HRS, for example, does not have detailed geographic information that is publicly available. The same caveat applies to the HMDA data used above, which do not include information on age, number of children, and pre-application geographic location necessary for an analysis of the
mortgage characteristics of suburban-to-urban movers. Therefore, although the analysis below will be quite informative about suburbanite mobility, there will be no information on the mortgage characteristics of suburbanites moving back into urban areas.

## Basic Facts on Metropolitan Homeowner Mobility

This section presents summary statistics on homeownership and mobility among metropolitan retirement-age households (ages 50-69) from the CPS in order to lay out some basic facts regarding the sample. Specifically, Figure 12A shows the homeownership rate of retirement-age households by the demographic group listed along the horizontal axis. Overall, 87.2 percent over all retirement-age households are homeowners. Among white households, almost 90 percent were homeowners, and roughly 75 percent of non-white households were homeowners. Over 90 percent of married couples were homeowners, and the homeownership rate rises with education. Figure 12B shows the homeownership rate across five-year age and selected income groups, respectively. The homeownership rate rises gradually with age, but steeply with income.

Figures 13A and 13B show the distribution of all retirement-age homeowners by race, marital, education, and age groups. A total of 85.5 percent of these homeowners were white, 8.8 percent were African-American, and 5.7 percent were those self-reporting other races. The overwhelming majority was married and had at least a high school degree. Over 55 percent of these homeowners were younger than 60 , and about half had annual household income greater than $\$ 70,000$.

Figures 14A and 14B show the percentage of all retirement-age homeowners who reside without children - the so-called empty nesters - by race, marital, education, age and income groups. Because of the age of these homeowners, the vast majority do not live with their children. In particular, a total of 84.1 percent of these homeowners were empty nesters. More highly educated households tend to have children later, and, thus, their children leave the household when the parents are older. Hence, the percentage of homeowners who are empty nesters falls with education. However, by age 60 almost all homeowners are empty nesters. Overall, empty nesters are substantially economically better off than the typical homeowner.

In addition, Figures 15A and 15B show the distribution of empty-nest homeowners by race, marital, education, age and income groups. Like all homeowners, empty nesters tend to be white, married, with at least a high school education.

Figure 16A shows the 5 -year mobility rate by race, marital, and education groups for all homeowners. Overall, almost 18 percent of these homeowners moved in the previous 5 years. Mobility was highest for white and highly educated homeowners. Widowhood is strongly associated with mobility. This is consistent with the analysis above for second homes and, more broadly, for homeownership in general, as documented, for example, in

FIGURE 12A
Homeownership Rate of Metropolitan Retirement-Age Households by Race, Marital and Education Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 12B
Homeownership Rate of Metropolitan Retirement-Age Households by Age and Income Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 13A
Distribution of Metropolitan Retirement-Age Households by Race, Marital and Education Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 13B
Distribution of Metropolitan Retirement-Age Households by Age and Income Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 14A
Percent of All Metropolitan Retirement-Age Homeowners Who Are Empty-Nesters by Race, Marital and Education Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 14B
Percent of All Metropolitan Retirement-Age Homeowners Who Are Empty-Nesters by Age and Income Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 15A
Distribution of Metropolitan Empty-Nest Retirement-Age Homeowners by Race, Marital and Education Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 15B
Distribution of Metropolitan Empty-Nest Retirement-Age Homeowners by Age and Income Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 16A
Percent of All Metropolitan Retirement-Age Homeowners Who Have Moved in the Last 5 Years by Race, Marital and Education Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 16B
Percent of All Metropolitan Retirement-Age Homeowners Who Have Moved in the Last 5 Years
by Age and Income Groups
Percent


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 17A
Percent of Metropolitan Empty-Nest Retirement-Age Homeowners Who Have Moved in the Last 5 Years by Demographic Group


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

FIGURE 17B
Percent of Metropolitan Empty-Nest Retirement-Age Homeowners Who Have Moved in the Last 5 Years by Age and Income Groups


Note: Author's calculations from the 2005 March Current Population Survey (CPS).

Engelhardt (2005). Finally, Figure 16B shows that the mobility rate is relatively constant across income groups and peaks for homeowners in their mid-50's.

In a similar manner, Figures 17 A and 17 B show the mobility rate for the sub-sample of empty-nest homeowners. These mobility rates are not statistically different from those in Figures 16A and 16B. This indicates that empty-nesters are no more likely to move than homeowners with children.

Table 8 shows the distribution by demographic and income groups of empty-nesters for three types of locations: central city of the metropolitan area, suburbs, and non-metropolitan area. In particular, the table shows where the household lived in 2005, regardless of whether the household lived previously in the suburbs or the central city in 2000 (five years prior). For example, the entry in column 1 , row 1 indicates that 19.5 percent of empty-nest movers between 2000 and 2005 lived in the central city. Almost 71 percent lived in the suburbs. Non-white homeowners were more likely to move to a home in the central city than white homeowners. Widowed, never married, those with less than a high school education, and 50-54 year olds were more likely to have moved to the central city.

## Are Empty Nesters Flocking to Urban Areas?

To begin to assess whether empty nesters are flocking to urban areas, Table 9 shows the distribution of empty-nest moves by source and destination location type. The leftmost column of the table shows where the household lived five years ago. Each row shows the percent of moves to each of the locations in the remaining columns. For example, the entry in column 1 , row 1 indicates that 35.4 percent of those who lived in the central city in 2000 moved to another home in the central city by 2005. The second column in the same row shows that 52.5 percent of movers who lived in the central city in 2000 moved to the suburbs; likewise, in column 3, 12.1 percent moved to a non-metropolitan area. There are two important features of the table. First, the values along the diagonal show the "own-location" mobility rate: the likelihood that a retirement-age metropolitan homeowner by 2005 has moved to a location-type similar to the one in which it lived in 2000. As can be seen for suburbanites in the second row, there is a strong tendency ( 79.5 percent) to move to another suburban home. Only about 11 percent of suburbanites moved into central cities. In fact, they were almost as likely to move to a non-metropolitan area ( 9.4 percent) as they were to the urban core.

To help insure that the findings from Table 9 are not spurious, Table 10 repeats the tabulations in Table 2 but using data from the 2000 Census. The tabulations in Table 10 are broadly consistent with those in Table 9 from the 2005 CPS, and the same three empirical patterns emerge. First, suburbanites have a strong tendency ( 81.2 percent) to move to another suburban home. Second, suburban-to-urban moves are relatively infrequent


Note: Author's calculations from the 2000 Census IPUMS data.
(9.4 percent). Finally, suburbanites are just as likely to move to a non-metropolitan area as they are to the urban core.

Because smaller metropolitan areas on average have fewer desirable amenities in the central city and lower commuting times from the suburbs than very large metropolitan areas, it may be that suburban-to-urban mobility may be more prevalent and concentrated in very large metropolitan areas, even if it is not much of a factor nationally. In order to explore this, Figure 18 expands the analysis with the Census data and plots by age group the suburban-to-urban mobility rates for the ten largest metropolitan areas defined by the U.S. Census Bureau (Atlanta, Chicago, Dallas, Detroit, Houston, Los Angeles, New York, Orange County, Philadelphia, and Phoenix) relative to all the other metropolitan areas. As the figure indicates, suburban-to-urban mobility by empty nesters is significantly higher in the largest metropolitan areas ( 12.5 percent) than in all other metropolitan areas ( 7.5 percent).

Overall, when the tabulations in Figures 12A-17B and Tables 8-10 are viewed in combination, they indicate that on a national scale empty-nest retirement-age suburban homeowners are not flocking to urban areas in great numbers. In particular, over the last decade, in a given five-year period, the results indicate that only 2.1 percent of all empty-nest retirement-age suburban homeowners can be expected to move to an urban area. Moreover, this suburban-to-urban flow of homeowners represents just 5 percent of all retirement-age
empty-nest homeowners located in central cities. In fact, when the urban-to-suburban flow of empty-nesters is taken into account, the net migration effect from the suburbs to urban area is -7.2 percent. That is, any return of empty-nesters to the urban core is not enough to stem the tide of urban-suburban flight.

Table 11 concludes the analysis by giving the demographic and income characteristics of empty-nest suburban-to-urban movers by the size of the metropolitan area from the 2000 Census. Over all metropolitan areas (column 1), 76 percent of suburbanites who moved between 1995 and 2000 were white, 60 percent were married, and 25 percent were divorced. Just over 40 percent had college degrees and were younger than 55, respectively. About half of these movers had incomes of \$40,000 or less, and three-quarters had incomes of $\$ 70,000$ or less. In addition, a comparison of columns 2 and 3 shows that those moving back into the urban core in the 10 largest metropolitan areas were more likely to be nonwhite, more highly educated, and to have incomes greater than $\$ 70,000$, respectively, than movers in all other metropolitan areas.

## IV. Implications and Conclusion

This report has examined recent trends in the housing market involving second-home ownership and empty-nest suburban-to-urban mobility for large random samples of households 50 and older. These households were comprised of individuals from the Early Baby Boom as well as pre-Baby Boom birth cohorts.

There are five important findings concerning second-home ownership. First, secondhome ownership is limited: only 15 percent of older homeowners own a second home. Second, among second-home owners, there is a small amount of mortgage activity, which suggests most homes were purchased with cash or inherited. Indeed, second-home mortgages comprise only about 4 percent of overall mortgage market activity. However, this activity is heavily geographically concentrated. Third, the typical second home is held for about 15 years, but turnover is high: 45 percent of older homeowners with such homes disposed of them within a six-year window. Changes in marital status and health, not income, drive the decision to dispose of a second home. Fourth, most second-home owners make limited use of their homes: the majority spends less than a month per year in the home and owners do not intend to sell their main home and occupy their second home full time. Finally, second homes are a small portion of the typical asset portfolio of an older household and are not important drivers of investment decisions.

There are five important findings concerning empty-nest suburban-to-urban mobility. First, on a national scale, empty-nest retirement-age suburban homeowners are not flocking to urban areas in great numbers. In particular, based on the last decade's experience, in a given five-year period, only 2 percent of all empty-nest retirement-age suburban homeowners
can be expected to move to an urban area. Second, suburban empty-nesters are just as likely to move to a non-metropolitan area as they are to an urban area. Third, as a percentage of the stock of all retirement-age homeowners located in central cities, the suburban-to-urban flow of homeowners represents 11.7 percent. Fourth, over all metropolitan areas, 76 percent of empty-nest suburbanites who moved to urban areas were white, 60 percent were married, and 25 percent were divorced. Just over 40 percent had college degrees and were younger than 55, respectively. About half of these movers had incomes of $\$ 40,000$ or less, and three-quarters had incomes of $\$ 70,000$ or less. Finally, empty-nest suburbanites moving back to the urban core in the 10 largest metropolitan areas were more likely to be non-white, more highly educated, and to have incomes greater than $\$ 70,000$, respectively, than movers in all other metropolitan areas.

There are three important implications of this analysis for mortgage markets. First, even though the second-home market currently is and, overall, will continue to be relatively small, there will be sustained future growth in second-home mortgage activity among older homeowners, but it primarily will be due to the sheer size of the Baby Boom cohort, not because Baby Boomers own these properties at a higher rate than older cohorts. Specifically, even though the Baby Boomers are healthier, wealthier, and more educated than older birth cohorts, and these factors are highly correlated with the ownership of second homes, there is actually little evidence that second-home ownership has been rising in younger cohorts. Figure 19 illustrates this by plotting the second-home ownership rates for 50-60 year old homeowners in 1992, 1998, and 2004 from the HRS. Overall, demand has been flat for this age group at around $14-16$ percent, and there was essentially no difference in ownership rates for 50-60 year olds in 1992 - pre-Boomers, born in 193242 - and 50-60 year olds in 2004 - the so-called Early Baby Boomers, born in 194454. Obviously, the Middle and Late Baby Boomers might turn out to have substantially stronger tastes for second-home ownership, but if past experience is any guide, any increase in the second-home ownership rate likely will be modest.

There is a similar implication for suburban-to-urban mobility by empty-nest homeowners. In particular, because only two percent of suburban empty-nest homeowners move to urban areas, this, too, is a small market. The Middle and Late Baby Boomers might turn out to have substantially stronger tastes for urban living in retirement. However, if the experience of the Early Baby Boom and older cohorts is at all predictive of future activity, it would seem that substantial growth in the urban homeownership rate by older households due to migration from the suburbs is unlikely. Frey (2006) comes to a similar conclusion.

This means that the future increase in the size of the second-home and urban retirementhome markets, and their associated mortgage markets, will be driven by increasing numbers of older households as the population ages. Figure 20 illustrates the most recent U.S.

FIGURE 19
Second Home Ownership Rates for 50-60 Year Olds in 1992, 1998 and 2004


Note: Author's calculations from the 1992, 1998, and 2004 waves of the Health and Retirement Study.

FIGURE 20
Midlife and Older Americans as a Percentage of the Future Population


Note: Author's calculations from United States Census Bureau's 2004 Interim Projections by Age, Sex, Race and Hispanic Origin.

Census Bureau projections of the age distribution of the population decennially from 2000 to 2050 for individuals 45 and older. In 2000, 45 to 64 year-olds, the prime years for the purchase of second and urban retirement homes among older households, comprised 22 percent of the population, 65 to 84 year-olds comprised 11 percent and those 85 and older, comprised 1.5 percent of the population, respectively. Almost 35 percent of the population was 45 or older in 2000, whereas by 2050 , this same share is projected to rise to 42 percent, with most of the growth in the number of older persons because of the aging of the Baby Boomers. This will be the primary driver of demand for second and urban retirement homes.

In particular, Figure 21 shows the actual number for 2004 and the projected number for selected future years of second homes and second-home mortgages, respectively, for older households. These projections are based on constant economic assumptions about the ownership rate of main and second homes and the incidence of second-home mortgages among second-home owners from the 2004 HRS presented above, but incorporate the most recent intermediate demographic trends by age, sex, and marital status projected by the Social Security Administration's Office of the Chief Actuary. These demographic projections include anticipated increases in longevity and account for the fact that different racial groups, which will grow in the future at different rates, have different patterns of


Note: Author's calculations from 2004 Health and Retirement Study and Social Security Administration's Office of the Chief Actuary's intermediate demographic projections.
marital status. Therefore, the figure shows the likely evolution of aggregate second-home activity due solely to currently forecast demographic shifts. Nationally, as older households comprise a greater population share, the number of second homes is forecast to rise to 7.5 million by the end of the decade, about 900,000 more second homes than in 2004. Steady growth will continue until 2020, at which point the number of such homes is forecast to be just over 9 million. After 2020, the growth in the share of the population in the prime second-home owning years begins to slow, and, consequently, the number of second homes begins to level off.

The figure also shows the likely evolution of the aggregate number of second-home mortgages due solely to currently forecast demographic shifts. Over the next twenty years, changing demographics alone will contribute very little to the growth of such mortgages, shown in the figure to rise by only 360,000 mortgages over the entire period from 20042025.

Figure 22 shows additional projections through 2015 using the demographic forecasts from the Social Security actuaries and the intermediate assumptions about the 10 -year growth rate of homeownership and mortgages compiled by the chief economists for the National Association of Realtors, Independent Community Bankers of America, National Association of Home Builders, Fannie Mae, and Freddie Mac for the Homeownership Alliance (Berson, et al., 2005). Because the Homeownership Alliance economic assumptions project future growth in homeownership and mortgages, the forecasts for second homes and second-home mortgages in Figure 22 indicate greater future growth than the forecasts in Figure 21. Specifically, the national number of second homes is forecast to rise to 7.7 million by 2010, about 1.1 million more second homes than in 2004 , and to 8.9 million by 2015. Overall, in the next ten years, the number of second homes is forecast to grow by 2 million homes according to these projections. However, there does not appear to be substantial growth in second-home mortgage activity on the horizon: the number of second-home mortgages is only forecast to grow by a total of 500,000 in the decade.

Second, there is substantial geographic concentration of second-home mortgage activity. As a result, local and regional economic conditions related to employment growth and migration will have important influences on the collateral value and credit risk of these properties. In addition to these geographic risks, concerns about the long-run sustainability of the Social Security, Medicare, and traditional employer-provided pension systems, as well as whether the Baby Boomers are adequately preparing for retirement, may have important, unforeseen, effects on the overall level of demand for second and urban retirement homes as the population ages.

Finally, and on a fundamentally broader level, the determinants of baseline pre-payment speeds, not just for second and urban retirement homes, but for all homes, are very different for older than for younger households. At older ages, mobility - one driver of baseline
pre-payment speeds - is not determined by changes in employment, income, or broader labor-market conditions, but instead by changes in marital status, primarily widowhood, and health and functional status. This is very clear in the analyses both of second homes and suburban-to-urban mobility from above. Furthermore, even though pathways for health and functional decline are to a good extent predictable, none of the information gathered in the mortgage application and underwriting process predicts health and functional status. This is in stark contrast to markets for health, life, short-term disability, and longterm care insurance, in which substantial effort is undertaken to gather information to predict health and functional status in order to price those financial products. As the population ages, the composition of households on the demand side of the mortgage market changes, and the mortgage industry seeks to provide products to older populations, the information gathered to assess and profitably price risk may need to change as well.


Note: Author's calculations from 2004 Health and Retirement Study, Social Security Administration's Office of the Chief Actuary's intermediate demographic projections, and homeownership and mortgage projections from the Homeownership Alliance.

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TABLE 1 SELECTED SUMMARY STATISTICS ON FINANCIAL CHARACTERISTICS FOR ALL HOMEOWNERS IN 2004 BY DEMOGRAPHIC CHARACTERISTICS. ALL DOLLAR FIGURES ARE MEANS IN 2004 DOLLARS WITH MEDIANS IN SQUARE BRACKETS

|  | Housing Equity <br> in Main <br> Residence | Total <br> Household <br> Income | Total <br> Non-Pension <br> Wealth | Total <br> Mortgage <br> Debt | Total Annual <br> Mortgage <br> Payment |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Sample | 170,089 | 71,305 | 518,849 | 101,272 | 11,897 |
| All Homeowners | $[100,000]$ | $[43,560]$ | $[222,000]$ | $[75,000]$ | $[9,000]$ |

A. By Race

| White | 176,214 | 74,049 | 555,216 | 103,480 | 11,986 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $[112,000]$ | $[45,680]$ | $[247,000]$ | $[77,000]$ | $[9,000]$ |
| African-American | 82,096 | 46,573 | 177,341 | 79,417 | 9,640 |
|  | $[52,000]$ | $[29,456]$ | $[78,000]$ | $[53,000]$ | $[7,200]$ |
| Other Races | 216,098 | 59,919 | 401,787 | 96,176 | 11,747 |
|  | $[80,000]$ | $[34,248]$ | $[129,000]$ | $[78,000]$ | $[9,600]$ |

B. By Marital Status

| Married | $\begin{gathered} 197,772 \\ {[125,000]} \end{gathered}$ | $\begin{gathered} 92,875 \\ {[62,476]} \end{gathered}$ | $\begin{gathered} 650,993 \\ {[289,000]} \end{gathered}$ | $\begin{aligned} & 109,813 \\ & {[80,000]} \end{aligned}$ | $\begin{aligned} & 12,950 \\ & {[9,600]} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Partnered | $\begin{aligned} & 131,770 \\ & {[70,000]} \end{aligned}$ | $\begin{gathered} 80,981 \\ {[66,100]} \end{gathered}$ | $\begin{gathered} 395,803 \\ {[137,000]} \end{gathered}$ | $\begin{aligned} & 111,664 \\ & {[75,000]} \end{aligned}$ | $\begin{aligned} & 13,642 \\ & {[8,820]} \end{aligned}$ |
| Separated/ <br> Divorced | $\begin{aligned} & 127,523 \\ & {[75,000]} \end{aligned}$ | $\begin{gathered} 44,283 \\ {[31,020]} \end{gathered}$ | $\begin{gathered} 309,315 \\ {[130,000]} \end{gathered}$ | $\begin{gathered} 86,291 \\ {[75,000]} \end{gathered}$ | $\begin{aligned} & 10,168 \\ & {[8,256]} \end{aligned}$ |
| Widowed | $\begin{aligned} & 138,831 \\ & {[95,000]} \end{aligned}$ | $\begin{gathered} 32,418 \\ {[19,612]} \end{gathered}$ | $\begin{aligned} & 341,355 \\ & {[167,125]} \end{aligned}$ | $\begin{gathered} 69,373 \\ {[45,000]} \end{gathered}$ | $\begin{gathered} 7,711 \\ {[5,784]} \end{gathered}$ |
| Never Married | $\begin{aligned} & 125,490 \\ & {[81,000]} \end{aligned}$ | $\begin{gathered} 57,513 \\ {[33,988]} \end{gathered}$ | $\begin{gathered} 423,914 \\ {[187,650]} \end{gathered}$ | $\begin{gathered} 87,953 \\ {[60,000]} \end{gathered}$ | $\begin{gathered} 9,779 \\ {[8,124]} \end{gathered}$ |

C. By Education Group

| High School Dropouts | 102,178 | 18,600 | 244,528 | 60,526 | 7,537 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $[64,000]$ | $[29,122]$ | $[87,000]$ | $[50,000]$ | $[6,000]$ |  |
| High School Degree | 129,480 | 49,310 | 345,421 | 70,686 | 8,594 |  |
|  | $[90,000]$ | $[34,000]$ | $[175,100]$ | $[56,000]$ | $[7,200]$ |  |
|  |  |  |  |  |  |  |
|  |  |  |  | continued next page |  |  |

TABLE 1 (CONTINUED) SELECTED SUMMARY STATISTICS ON FINANCIAL CHARACTERISTICS FOR ALL HOMEOWNERS IN 2004 BY DEMOGRAPHIC CHARACTERISTICS. ALL DOLLAR FIGURES ARE MEANS IN 2004 DOLLARS WITH MEDIANS IN SQUARE BRACKETS

|  | Housing Equity <br> in Main <br> Residence | Total <br> Household <br> Income | Total <br> Non-Pension <br> Wealth | Total <br> Mortgage <br> Debt | Total Annual <br> Mortgage |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Sample | Payment |  |  |  |  |

C. By Education Group (continued)

| Some College | 158,978 | 69,427 | 451,398 | 102,771 | 13,045 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $[101,425]$ | $[49,384]$ | $[221,000]$ | $[80,000]$ | $[9,240]$ |
| College Graduates | 265,768 | 122,227 | 961,803 | 131,400 | 14,083 |
|  | $[170,000]$ | $[81,998]$ | $[446,000]$ | $[100,000]$ | $[11,532]$ |

D. By Age Group

| Ages 50-54 | $\begin{aligned} & 155,302 \\ & {[92,000]} \end{aligned}$ | $\begin{gathered} 98,950 \\ {[69,800]} \end{gathered}$ | $\begin{gathered} 472,562 \\ {[187,000]} \end{gathered}$ | $\begin{aligned} & 112,801 \\ & {[85,000]} \end{aligned}$ | $\begin{aligned} & 13,066 \\ & {[9,924]} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ages 55-59 | $\begin{aligned} & 152,737 \\ & {[92,769]} \end{aligned}$ | $\begin{gathered} 89,982 \\ {[63,672]} \end{gathered}$ | $\begin{gathered} 407,062 \\ {[193,000]} \end{gathered}$ | $\begin{aligned} & 106,775 \\ & {[82,000]} \end{aligned}$ | $\begin{aligned} & 12,598 \\ & {[9,600]} \end{aligned}$ |
| Ages 60-64 | $\begin{gathered} 167,515 \\ {[100,000]} \end{gathered}$ | $\begin{gathered} 77,666 \\ {[49,420]} \end{gathered}$ | $\begin{gathered} 637,268 \\ {[234,500]} \end{gathered}$ | $\begin{gathered} 93,760 \\ {[65,000]} \end{gathered}$ | $\begin{aligned} & 11,752 \\ & {[8,400]} \end{aligned}$ |
| Ages 65-69 | $\begin{gathered} 198,206 \\ {[120,000]} \end{gathered}$ | $\begin{gathered} 63,424 \\ {[39,400]} \end{gathered}$ | $\begin{gathered} 551,070 \\ {[269,000]} \end{gathered}$ | $\begin{gathered} 95,381 \\ {[70,000]} \end{gathered}$ | $\begin{aligned} & 11,617 \\ & {[7,800]} \end{aligned}$ |
| Ages 70-74 | $\begin{gathered} 195,604 \\ {[120,000]} \end{gathered}$ | $\begin{gathered} 50,145 \\ {[34,400]} \end{gathered}$ | $\begin{gathered} 674,940 \\ {[253,000]} \end{gathered}$ | $\begin{gathered} 82,213 \\ {[60,000]} \end{gathered}$ | $\begin{gathered} 8,764 \\ {[7,200]} \end{gathered}$ |
| Ages 75-79 | $\begin{gathered} 184,739 \\ {[120,000]} \end{gathered}$ | $\begin{gathered} 43,481 \\ {[24,900]} \end{gathered}$ | $\begin{gathered} 516,775 \\ {[225,000]} \end{gathered}$ | $\begin{gathered} 70,266 \\ {[52,000]} \end{gathered}$ | $\begin{gathered} 6,622 \\ {[6,000]} \end{gathered}$ |
| Ages 80-84 | $\begin{gathered} 169,871 \\ {[125,000]} \end{gathered}$ | $\begin{gathered} 38,790 \\ {[23,997]} \end{gathered}$ | $\begin{gathered} 451,815 \\ {[270,000]} \end{gathered}$ | $\begin{gathered} 66,970 \\ {[63,000]} \end{gathered}$ | $\begin{gathered} 7,424 \\ {[5,412]} \end{gathered}$ |
| Ages 85-89 | $\begin{gathered} 151,420 \\ {[100,000]} \end{gathered}$ | $\begin{gathered} 33,087 \\ {[20,376]} \end{gathered}$ | $\begin{gathered} 402,129 \\ {[199,000]} \end{gathered}$ | $\begin{gathered} 85,876 \\ {[40,000]} \end{gathered}$ | $\begin{gathered} 8,282 \\ {[5,088]} \end{gathered}$ |
| Ages 90 and older | $\begin{gathered} 144,829 \\ {[100,000]} \end{gathered}$ | $\begin{gathered} 25,055 \\ {[16,600]} \end{gathered}$ | $\begin{gathered} 500,998 \\ {[198,300]} \end{gathered}$ | $\begin{gathered} 126,817 \\ {[105,000]} \end{gathered}$ | $\begin{aligned} & 10,748 \\ & {[9,600]} \end{aligned}$ |

[^6]TABLE 2 SELECTED SUMMARY STATISTICS ON FINANCIAL CHARACTERISTICS FOR HOMEOWNERS WITH SECOND HOMES IN 2004 BY DEMOGRAPHIC CHARACTERISTICS, ALL DOLLAR FIGURES ARE MEANS IN 2004 DOLLARS WITH MEDIANS IN SQUARE BRACKETS

|  | Housing Equity <br> in Main <br> Residence | Total <br> Household <br> Income | Total <br> Non-Pension <br> Wealth | Mortgage <br> Debt | Total <br> Sample |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Mortgage <br> Payment |  |  |  |  |  |
| Homeowners with 290,722 123,293 <br> Second Homes $[170,000]$ $[77,120]$$1,096,041$ <br> $[487,500]$ | 146,817 | 15,390 |  |  |  |
| $[100,000]$ | $[12,000]$ |  |  |  |  |

A. By Race

| White | 280,506 | 126,719 | $1,096,041$ | 149,185 | 15,319 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $[175,000]$ | $[78,112]$ | $[487,500]$ | $[105,000]$ | $[12,000]$ |
| African-American | 123,007 | 77,651 | 328,276 | 124,728 | 15,764 |
|  | $[80,000]$ | $[50,120]$ | $[181,000]$ | $[100,000]$ | $[11,652]$ |
| Other Races | 850,997 | 99,755 | $1,524,573$ | 131,895 | 16,389 |
|  | $[150,000]$ | $[64,104]$ | $[374,000]$ | $[100,000]$ | $[16,800]$ |

B. By Marital Status

| Married | $\begin{gathered} 321,308 \\ {[180,000]} \end{gathered}$ | $\begin{aligned} & 138,717 \\ & {[90,500]} \end{aligned}$ | $\begin{aligned} & 1,183,424 \\ & {[531,500]} \end{aligned}$ | $\begin{gathered} 152,688 \\ {[108,000]} \end{gathered}$ | $\begin{gathered} 15,735 \\ {[12,912]} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Partnered | $\begin{gathered} 248,640 \\ {[132,000]} \end{gathered}$ | $\begin{aligned} & 113,473 \\ & {[85,400]} \end{aligned}$ | $\begin{gathered} 866,404 \\ {[340,800]} \end{gathered}$ | $\begin{gathered} 133,524 \\ {[100,000]} \end{gathered}$ | $\begin{gathered} 13,435 \\ {[12,000]} \end{gathered}$ |
| Separated/ <br> Divorced | $\begin{gathered} 208,875 \\ {[125,999]} \end{gathered}$ | $\begin{gathered} 76,129 \\ {[52,000]} \end{gathered}$ | $\begin{gathered} 730,718 \\ {[377,999]} \end{gathered}$ | $\begin{gathered} 111,552 \\ {[100,000]} \end{gathered}$ | $\begin{gathered} 14,415 \\ {[10,800]} \end{gathered}$ |
| Widowed | $\begin{gathered} 193,604 \\ {[125,000]} \end{gathered}$ | $\begin{gathered} 55,889 \\ {[29,816]} \end{gathered}$ | $\begin{gathered} 634,153 \\ {[322,000]} \end{gathered}$ | $\begin{gathered} 117,624 \\ {[46,000]} \end{gathered}$ | $\begin{gathered} 12,576 \\ {[6,000]} \end{gathered}$ |
| Never Married | $\begin{aligned} & 198,399 \\ & {[85,000]} \end{aligned}$ | $\begin{aligned} & 144,554 \\ & {[53,724]} \end{aligned}$ | $\begin{aligned} & 1,196,300 \\ & {[262,000]} \end{aligned}$ | $\begin{gathered} 177,857 \\ {[178,000]} \end{gathered}$ | $\begin{gathered} 17,689 \\ {[18,960]} \end{gathered}$ |

TABLE 2 (CONTINUED) SELECTED SUMMARY STATISTICS ON FINANCIAL CHARACTERISTICS FOR HOMEOWNERS WITH SECOND HOMES IN 2004 BY DEMOGRAPHIC CHARACTERISTICS, ALL DOLLAR FIGURES ARE MEANS IN 2004 DOLLARS WITH MEDIANS IN SQUARE BRACKETS

|  | Housing Equity <br> in Main | Total <br> Household <br> Income | Total <br> Non-Pension <br> Residence | Total <br> Mortgage | Total Annual <br> Mortgage |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Sample | Wealth | Debt | Payment |  |  |

C. By Education Group

| High School Dropouts | $\begin{aligned} & 156,643 \\ & {[84,000]} \end{aligned}$ | $\begin{gathered} 63,798 \\ {[27,240]} \end{gathered}$ | $\begin{gathered} 716,745 \\ {[206,000]} \end{gathered}$ | $\begin{gathered} 89,764 \\ {[70,000]} \end{gathered}$ | $\begin{gathered} 9,636 \\ {[7,464]} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High School Degree | $\begin{gathered} 170,723 \\ {[125,000]} \end{gathered}$ | $\begin{gathered} 76,167 \\ {[52,000]} \end{gathered}$ | $\begin{gathered} 601,414 \\ {[344,700]} \end{gathered}$ | $\begin{gathered} 84,234 \\ {[70,000]} \end{gathered}$ | $\begin{gathered} 9,399 \\ {[7,620]} \end{gathered}$ |
| Some College | $\begin{gathered} 256,314 \\ {[147,000]} \end{gathered}$ | $\begin{aligned} & 110,548 \\ & {[69,524]} \end{aligned}$ | $\begin{gathered} 814,758 \\ {[424,000]} \end{gathered}$ | $\begin{gathered} 152,714 \\ {[120,000]} \end{gathered}$ | $\begin{gathered} 16,771 \\ {[13,788]} \end{gathered}$ |
| College Graduates | $\begin{gathered} 401,893 \\ {[225,000]} \end{gathered}$ | $\begin{gathered} 167,864 \\ {[114,400]} \end{gathered}$ | $\begin{aligned} & 1,560,515 \\ & {[663,000]} \end{aligned}$ | $\begin{gathered} 175,473 \\ {[132,000]} \end{gathered}$ | $\begin{gathered} 17,629 \\ {[14,400]} \end{gathered}$ |

D. By Age Group

| Ages 50-54 | $\begin{gathered} 254,097 \\ {[175,000]} \end{gathered}$ | $\begin{gathered} 147,880 \\ {[98,639]} \end{gathered}$ | $\begin{gathered} 866,395 \\ {[415,000]} \end{gathered}$ | $\begin{gathered} 179,271 \\ {[135,000]} \end{gathered}$ | $\begin{gathered} 17,147 \\ {[14,400]} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ages 55-59 | $\begin{gathered} 287,182 \\ {[140,000]} \end{gathered}$ | $\begin{gathered} 155,704 \\ {[102,484]} \end{gathered}$ | $\begin{gathered} 791,608 \\ {[417,500]} \end{gathered}$ | $\begin{gathered} 151,555 \\ {[107,000]} \end{gathered}$ | $\begin{gathered} 16,812 \\ {[13,440]} \end{gathered}$ |
| Ages 60-64 | $\begin{gathered} 260,829 \\ {[160,000]} \end{gathered}$ | $\begin{gathered} 130,247 \\ {[90,550]} \end{gathered}$ | $\begin{aligned} & 1,560,810 \\ & {[465,000]} \end{aligned}$ | $\begin{aligned} & 123,961 \\ & {[70,000]} \end{aligned}$ | $\begin{gathered} 13,716 \\ {[10,488]} \end{gathered}$ |
| Ages 65-69 | $\begin{gathered} 407,611 \\ {[179,000]} \end{gathered}$ | $\begin{aligned} & 110,059 \\ & {[67,160]} \end{aligned}$ | $\begin{aligned} & 1,206,539 \\ & {[539,000]} \end{aligned}$ | $\begin{gathered} 141,691 \\ {[108,000]} \end{gathered}$ | $\begin{aligned} & 14,449 \\ & {[9,828]} \end{aligned}$ |
| Ages 70-74 | $\begin{gathered} 299,724 \\ {[185,000]} \end{gathered}$ | $\begin{gathered} 85,019 \\ {[49,492]} \end{gathered}$ | $\begin{aligned} & 1,104,946 \\ & {[530,000]} \end{aligned}$ | $\begin{gathered} 98,284 \\ {[79,000]} \end{gathered}$ | $\begin{aligned} & 10,871 \\ & {[8,652]} \end{aligned}$ |
| Ages 75-79 | $\begin{gathered} 344,192 \\ {[180,000]} \end{gathered}$ | $\begin{gathered} 95,731 \\ {[45,026]} \end{gathered}$ | $\begin{aligned} & 1,020,570 \\ & {[522,000]} \end{aligned}$ | $\begin{gathered} 69,010 \\ {[50,000]} \end{gathered}$ | $\begin{gathered} 7,092 \\ {[3,828]} \end{gathered}$ |
| Ages 80 and older | $\begin{gathered} 209,321 \\ {[150,000]} \end{gathered}$ | $\begin{gathered} 55,808 \\ {[36,140]} \end{gathered}$ | $\begin{gathered} 862,930 \\ {[506,000]} \end{gathered}$ | $\begin{gathered} 104,236 \\ {[100,000]} \end{gathered}$ | $\begin{gathered} 13,527 \\ {[10,344]} \end{gathered}$ |

Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

TABLE 3 SELECTED SUMMARY STATISTICS ON SECOND HOMES BY DEMOGRAPHIC CHARACTERISTICS, ALL DOLLAR FIGURES ARE MEANS IN 2004 DOLLARS WITH MEDIANS IN SQUARE BRACKETS

|  | Current <br> Value of <br> Second Home | Years Since <br> Purchase of <br> Second Home | Remaining <br> Mortgage Balance <br> on Second Home | Annual Mortgage <br> Payment on <br> Second Home |
| :--- | :---: | :---: | :---: | :---: |
| Homple | 197,341 | 13.0 | 112,042 | 13,456 |
| Second Homes with | $[80,000]$ | $[10]$ | $[60,000]$ | $[9,000]$ |

## A. By Race

| White | $\begin{aligned} & 204,410 \\ & {[85,000]} \end{aligned}$ | $\begin{aligned} & 13.0 \\ & {[10]} \end{aligned}$ | $\begin{aligned} & 113,727 \\ & {[60,000]} \end{aligned}$ | $\begin{aligned} & 13,620 \\ & {[9,000]} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| African-American | $\begin{gathered} 85,157 \\ {[50,000]} \end{gathered}$ | $\begin{aligned} & 15.7 \\ & {[14]} \end{aligned}$ | $\begin{gathered} 59,287 \\ {[50,000]} \end{gathered}$ | $\begin{gathered} 8,926 \\ {[5,400]} \end{gathered}$ |
| Other Races | $\begin{aligned} & 152,774 \\ & {[40,000]} \end{aligned}$ | $\begin{aligned} & 12.4 \\ & {[10]} \end{aligned}$ | $\begin{gathered} 182,719 \\ {[130,000]} \end{gathered}$ | $\begin{gathered} 21,478 \\ {[24,000]} \end{gathered}$ |

B. By Marital Status

| Married | 215,108 | 12.5 | 109,057 | 13,152 |
| :---: | :---: | :---: | :---: | :---: |
|  | [90,000] | [10] | [70,000] | [9,000] |
| Partnered | 246,169 | 14.5 | 179,602 | 14,889 |
|  | [65,000] | [13] | [100,000] | [12,000] |
| Separated/ | 84,298 | 12.1 | 60,025 | 13,506 |
| Divorced | [35,000] | [10] | [57,000] | [8,400] |
| Widowed/ | 148,586 | 18.5 | 141,758 | 15,477 |
| Never Married | [70,000] | [16] | [46,000] | [8,160] |

TABLE 3 (CONTINUED) SELECTED SUMMARY STATISTICS ON SECOND HOMES BY DEMOGRAPHIC CHARACTERISTICS, ALL DOLLAR FIGURES ARE MEANS IN 2004 DOLLARS WITH MEDIANS IN SQUARE BRACKETS

|  | Current | Years Since | Remaining | Annual Mortgage |
| :---: | :---: | :---: | :---: | :---: |
| Value of | Purchase of | Mortgage Balance | Payment on |  |
| Sample | Second Home | Second Home | on Second Home | Second Home |

C. By Education Group

| High School Dropouts | 98,093 | 16.4 | 79,479 | 7,787 |
| :---: | :---: | :---: | :---: | :---: |
|  | [50,000] | [12] | [100,000] | [7,200] |
| High School Degree | 107,628 | 14.6 | 67,576 | 8,949 |
|  | [70,000] | [11] | [37,000] | [6,000] |
| Some College | 168,495 | 13 | 104,555 | 12,679 |
|  | [67,000] | [10] | [54,000] | [10,440] |
| College Graduates | 278,633 | 12.2 | 140,805 | 16,581 |
|  | [100,000] | [9] | [80,000] | [10,200] |

D. By Age Group

| Ages 50-54 | $\begin{aligned} & 316,058 \\ & {[80,000]} \end{aligned}$ | $\begin{aligned} & 9.8 \\ & {[8]} \end{aligned}$ | $\begin{gathered} 171,297 \\ {[100,000]} \end{gathered}$ | $\begin{gathered} 14,495 \\ {[10,716]} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Ages 55-59 | $\begin{aligned} & 114,750 \\ & {[60,000]} \end{aligned}$ | $\begin{aligned} & 10 \\ & {[6]} \end{aligned}$ | $\begin{gathered} 101,749 \\ {[60,000]} \end{gathered}$ | $\begin{aligned} & 11,053 \\ & {[7,440]} \end{aligned}$ |
| Ages 60-64 | $\begin{aligned} & 159,826 \\ & {[95,000]} \end{aligned}$ | $\begin{aligned} & 12.2 \\ & {[10]} \end{aligned}$ | $\begin{gathered} 71,621 \\ {[50,000]} \end{gathered}$ | $\begin{gathered} 9,572 \\ {[7,620]} \end{gathered}$ |
| Ages 65-69 | $\begin{aligned} & 224,075 \\ & {[82,000]} \end{aligned}$ | $\begin{gathered} 14 \\ {[10]} \end{gathered}$ | $\begin{aligned} & 110,789 \\ & {[75,000]} \end{aligned}$ | $\begin{gathered} 17,152 \\ {[9,600]} \end{gathered}$ |
| Ages 70-74 | $\begin{aligned} & 143,150 \\ & {[90,000]} \end{aligned}$ | $\begin{aligned} & 15.6 \\ & {[12]} \end{aligned}$ | $\begin{gathered} 66,187 \\ {[60,000]} \end{gathered}$ | $\begin{gathered} 9,549 \\ {[7,200]} \end{gathered}$ |
| Ages 75 and older | $\begin{gathered} 226,225 \\ {[100,000]} \end{gathered}$ | $\begin{aligned} & 24.8 \\ & {[22]} \end{aligned}$ | $\begin{gathered} 44,804 \\ {[30,000]} \end{gathered}$ | $\begin{aligned} & 24,413 \\ & {[6,144]} \end{aligned}$ |

Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

TABLE 4 THE PERCENTAGE INCREASE IN THE LIKELIHOOD OF THE DISPOSITION OF THE SECOND HOME IN THE SIX-YEAR WINDOW FROM 1998-2004 DUE TO CHANGES IN INCOME, MARITAL STATUS, AND HEALTH FOR OLDER HOUSEHOLDS WITH SECOND HOMES IN 1998

|  | $\$ 10,000$ <br> in Annual <br> Household Income | A Change <br> in Marital <br> Status | A Change in <br> Health Status From <br> Good to Poor |
| :--- | :---: | :---: | :---: |
| Outcome | $1.5 \% * *$ | $38.9 \%^{* *}$ | $16.9 \%^{* *}$ |
| Likelihood of Second Home <br> Disposition between 1998 and 2004 |  |  |  |
| Note: Author's calculations based on the results from a probit maximum likelihood estimation of the determinants of dispositions of <br> second homes between the 1998 and 2004 waves of the Health and Retirement Study. |  |  |  |

TABLE 5 NUMBER OF OLDER HOUSEHOLDS WHO OWN THEIR MAIN AND SECOND HOMES BY MORTGAGE STATUS, DEMOGRAPHIC CHARACTERISTICS, AND LOCATION

| Sample | Own Main <br> Home | Have Mortgage <br> on Main Home | Own Second <br> Home | Have Mortgage <br> on Second Home |
| :--- | :---: | :---: | :---: | :---: |
| All | $43,315,143$ | $17,932,405$ | $6,583,621$ | $1,124,671$ |

## A. By Race

| White | $38,185,856$ | $15,387,020$ | $6,031,582$ | $1,002,836$ |
| :--- | :---: | :---: | :---: | :---: |
| African-American | $3,525,853$ | $1,690,415$ | 344,338 | 87,167 |
| Other Races | $1,603,434$ | 854,970 | 207,701 | 34,668 |

B. By Marital Status

| Married | $24,748,685$ | $11,529,509$ | $4,822,709$ | 869,899 |
| :--- | :---: | :---: | :---: | :---: |
| Partnered | $1,373,207$ | 806,898 | 254,459 | 79,879 |
| Separated/Divorced | $6,228,224$ | $3,071,504$ | 66,902 | 91,103 |
| Widowed/Never Married | $10,965,027$ | $2,524,494$ | 984,665 | 83,790 |
| C. By Education Group |  |  |  |  |


| High School Dropouts | $6,303,099$ | $1,560,712$ | 387,302 | 45,889 |
| :--- | :---: | :---: | :---: | :---: |
| High School Degree | $14,736,376$ | $4,819,822$ | $1,650,961$ | 237,106 |
| Some College | $10,365,665$ | $5,092,275$ | $1,774,111$ | 338,931 |
| College Graduates | $11,910,003$ | $6,459,496$ | $2,771,247$ | 502,745 |
|  |  |  |  |  |


| TABLE $5 \quad \begin{array}{ll}\text { (CONTINUED) NU } \\ & \text { HOMES BY MORT }\end{array}$ | BER OF OLD age status, | OUSEHOLDS WH OGRAPHIC CHA | WN THEIR M TERISTICS, | AND SECOND location |
| :---: | :---: | :---: | :---: | :---: |
| Sample | Own Main Home | Have Mortgage on Main Home | Own Second Home | Have Mortgage on Second Home |
| D. By Age Group |  |  |  |  |
| Ages 50-54 | 8,469,844 | 5,379,225 | 1,337,972 | 335,905 |
| Ages 55-59 | 8,552,368 | 5,122,300 | 1,368,956 | 297,831 |
| Ages 60-64 | 6,975,913 | 3,189,154 | 1,299,821 | 206,691 |
| Ages 65-69 | 5,291,851 | 1,871,485 | 842,930 | 105,173 |
| Ages 70-74 | 4,778,097 | 1,129,037 | 809,465 | 100,338 |
| Ages 75 and older | 9,247,070 | 1,241,204 | 924,477 | 78,733 |
| E. By Census Division of the Main (Second) Home |  |  |  |  |
| New England <br> (CT, ME, MA, NH, RI, VT) | 2,061,800 | 724,469 | 391,926 | 52,256 |
| Mid-Atlantic (NJ, NY, PA) | 5,024,556 | 1,698,199 | 614,672 | 102,029 |
| East North Central (IL, IN, MI, OH, WI) | 7,740,416 | 3,030,576 | 637,246 | 78,615 |
| West North Central (IA, KS, MN, MO, SD, ND, NE) | 3,811,733 | 1,459,698 | 425,476 | 32,462 |
| South Atlantic (DC, DE, FL, GA, MD, NC, SC, VA, WV) | 9,646,282 | 4,606,835 | 2,122,754 | 502,007 |
| East South Central (AL, KY, MS, TN) | 2,079,127 | 706,537 | 211,683 | 29,166 |
| West South Central <br> (AR, LA, OK, TX) | 4,088,949 | 1,045,459 | 374,380 | 53,143 |
| Mountain (AZ, CO, ID, MT, NM, NV, UT, WY) | 2,512,279 | 1,314,445 | 601,390 | 104,434 |
| Pacific <br> (AK, CA, HI, OR, WA) | 6,328,342 | 3,347,980 | 815,068 | 170,559 |
| Abroad | 25,989 | - | 352,962 | - |
| Location Not Reported | - | - | 36,064 | - |
| Note: Author's calculations from the 2004 wave of the Health and Retirement Study. |  |  |  |  |

TABLE 6 NUMBER OF OLDER HOUSEHOLDS WHO OWN SECOND HOMES BY THE LOCATION OF THE MAIN AND SECOND HOMES, ROW PERCENTAGES IN
PARENTHESES, COLUMN PERCENTAGES IN SQUARE BRACKETS
Census Division in the Second Home

| Census Division of the Main Home | Census Division in the Second Home |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | New England | Mid- <br> Atlantic | East North Central | West North Central | South Atlantic | East South Central | West South Central | Mountain | Pacific | Abroad |
| New England <br> (CT, ME, MA, NH, RI, VT) | 244,450 | 26,522 | 0 | 0 | 95,390 | 0 | 4,503 | 24,181 | 15,956 |  |
|  | (57.3) | (6.2) |  |  | (22.4) |  | (1.1) | (5.7) | (3.7) |  |
|  | [61.7] | [4.3] |  |  | [4.5] |  | [1.21] | [4.0] | [1.9] |  |
| Mid-Atlantic | 58,566 | 529,262 | 3,068 | 0 | 255,106 | 0 | 3,856 | 16,750 | 9,056 | 64,281 |
| (NJ, NY, PA) | (6.2) | (56.3) | (0.3) | (27.1) |  |  | (0.4) | (1.8) | (1.0) | (6.8) |
|  | [14.8] | [85.4] | [0.5] | [12.0] |  |  | [1.0] | [2.8] | [1.1] | [18.3] |
| East North Central (IL, IN, MI, OH, WI) | 13,895 | 0 | 577,462 | 15,616 | 344,734 | 36,215 | 12,650 | 37,277 | 11,763 | 50,174 |
|  | (1.3) |  | (52.5) | (1.4) | (31.4) | (3.29) | (1.2) | (3.4) | (1.1) | (4.6) |
|  | [3.5] |  | [89.7] | [3.6] | [16.2] | [17.8] | [3.4] | [6.1] | [1.4] | [14.3] |
| West North Central (IA, KS, MN, MO, SD, ND, NE) | 0 | 0 | 14,883 | 376,315 | 51,036 | 0 | 60,563 | 41,655 | 20,925 | 16,910 |
|  |  |  | (2.6) | (64.6) | (8.7) |  | (10.4) | (7.2) | (3.6) | (2.9) |
|  |  |  | [2.3] | [86.9] | [2.4] |  | [16.1] | [6.9] | [2.5] | [4.8] |
| South Atlantic | 55,032 | 59,680 | 32,624 | 7,235 | 1,256,046 | 12,591 | 21,016 | 28,626 | 65,979 | 50,859 |
| (DC, DE, FL, GA, MD, NC, | (3.5) | (3.8) | (2.0) | (0.5) | (79.0) | (0.8) | (1.3) | (1.8) | (4.2) | (3.2) |
| SC, VA, WV) | [13.9] | [9.6] | [5.0] | [1.7] | [59.2] | [6.2] | [5.6] | [4.7] | [8.0] | [14.5] |

TABLE 6 （CONTINUED）NUMBER OF OLDER HOUSEHOLDS WHO OWN SECOND HOMES BY THE LOCATION OF THE MAIN AND SECOND HOMES，ROW PERCENTAGES IN PARENTHESES，COLUMN PERCENTAGES IN SQUARE BRACKETS
Census Division in the Second Home

| $\begin{gathered} {[\tau ' \tau]} \\ \left(8^{\prime} \not \subset 9\right) \end{gathered}$ |  | $\begin{aligned} & {\left[\vdash^{\circ} 0\right]} \\ & (て ゙ L \varepsilon) \end{aligned}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \＆$¢$＇¢ | 0 | GIでて | 0 | 0 | 0 | 0 | 0 | 0 | 0 | peorq＊ |
| ［でて¢］ | ［ 7 G 2 ］ | ［ع0乙］ |  | ［ガて］ | ［9＇t］ | ［ $\dagger$＇t］ | ［ع＂0］ |  | ［6．E］ |  |
| （でてし） | （8．99） | （でとJ） |  | （G＇0） | （9＇غ） | （6＇T） | （で0） |  | （L＇T） | （ $\forall \mathrm{M}$＇ CO ＇IH ‘ $\forall$＇＇YY） |
| 98ĽてIL | 七G6＇ヵて9 | 88t＇\＆てJ | 0 | L6L＇t | LEO＇$\downarrow$ E | Z9L＇LI | 898＇L | 0 | GS¢＇GI | ग！！̣⿺辶 |
| ［LOT］ | ［ $\varepsilon^{\prime}$ L］ | ［ع．$¢$ ］ | ［ع＇0］ |  | ［6．0］ | ［6．0］ | ［L＂0］ |  |  | （ $\wedge$ M＇In＇$\wedge$ N |
| （ع＇8） | （ $\nabla^{\prime \prime}$ 江） | （0＇てL） | （8．0） |  | （で十） | （6．0） | （0＇T） |  |  | ＇WN＇IW＇OI＇OJ＇ZV） |
| 8カカ＇LE | LEて＇09 | て6て＇\＆て¢ | 89でし | 0 | 088‘8T | T08‘E | とてE＇t | 0 | 0 | u！ezunow |
|  | ［ع＇0］ | ［9＇し］ | ［6．TL］ | ［ $¢ 7$ ］ | ［0＇t］ | ［ $\downarrow$＇$]$ | ［0＇${ }^{\circ}$ ］ | ［L＂0］ | ［でて］ |  |
|  | （L＇0） | （8＇乙） | （0＇6L） | （ガて） | （c．9） | （0．غ） | （8＇T） | （ $\left.\varepsilon^{\prime} \tau\right)$ | （9＇乙） | （ XL ＇Y0＇$\forall 7$＇ $\mathrm{yV}^{\prime}$ ） |
| 0 | て9才＇て | 乙69＇6 | カTG「0LZ | 9Lて「8 | 9てI＇てて | ZLI＇OT | GET「9 | 七てどゅ | てT8‘8 |  |
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|  | （ガ8） |  | （6．0） | （8．99） | （でして） | （6．0） | （L＇T） |  |  | （NL＇SW＇ $\mathrm{Y}^{\prime}$＇7V） |
| 0 | 8ヤ6＇LL | 0 | \＆66＇L | て88＇切 | カ90‘Gt | E66＇I | Z99＇E | 0 | 0 |  |
| peorq\％ | Э！！！ | u！ezunow |  |  |  |  |  |  | pue｜SU］ |  |
|  |  |  | ISӘM | fSe | YITOS | łSəM | tSE 3 | -p!W | МวN | J0 uo！s！̣！Snsuəo |

Note：Author＇s calculations from the 2004 wave of the Health and Retirement Study．

TABLE 7 AGGREGATE MORTGAGE APPLICATION AND ORIGINATION ACTIVITY FOR NON-PRIMARY RESIDENCES FOR 2004 BASED ON HMDA DATA, NOT INCLUDING MORTGAGE ACTIVITY ASSOCIATED WITH MULTI-FAMILY DWELLINGS

| Loan Purpose and Occupancy Category |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-Primary | 1,351,791 | \$172.25 | 788,461 | \$100.36 | 12.9\% | 4.6\% |
| Residence Purchase |  |  |  |  |  |  |
| Non-Primary | 1,163,357 | \$184.46 | 591,268 | \$95.63 | 7.2\% | 4.4\% |
| Residence Refinancing |  |  |  |  |  |  |
| Non-Primary | 99,863 | \$8.60 | 49,178 | \$4.99 | 6.8\% | 0.2\% |
| Residence Improvement |  |  |  |  |  |  |

Note: Author's calculations from the 2004 HMDA data.


TABLE 8 (CONTINUED) THE DISTRIBUTION OF ALL METROPOLITAN EMPTY-NEST RETIREMENT-AGE MOVERS BY DESTINATION, LOCATION TYPE AND DEMOGRAPHIC AND INCOME GROUPS

| Sample | Central City | Suburbs | Non-Metro Area |
| :--- | :--- | :--- | :--- |

## B. By Marital Status

| Married/Partnered | 18.0 | 72.0 | 10.0 |
| :--- | :---: | :---: | :---: |
| Separated/Divorced | 19.0 | 71.2 | 9.8 |
| Widowed | 29.9 | 65.4 | 4.7 |
| Never Married | 44.6 | 39.4 | 16.0 |

C. By Education Group

| High School Dropouts | 28.0 | 60.6 | 11.4 |
| :--- | :---: | :---: | :---: |
| High School Degree | 19.5 | 71.4 | 9.1 |
| Some College | 17.3 | 71.8 | 10.9 |
| College Graduates | 19.3 | 72.1 | 8.6 |

## D. By Age Group

| Ages 50-54 | 24.5 | 68.0 | 7.5 |
| :--- | :---: | :---: | :---: |
| Ages 55-59 | 16.2 | 73.6 | 10.2 |
| Ages 60-64 | 18.9 | 70.0 | 11.1 |
| Ages 65-69 | 18.3 | 72.2 | 9.5 |
| E. By Income Group |  |  |  |
| Less than \$20,000 | 21.6 | 64.3 | 14.2 |
| \$20,000-\$40,000 | 21.9 | 64.5 | 13.6 |
| $\$ 40,000-\$ 70,000$ | 19.1 | 73.0 | 7.9 |
| $\$ 70,000-\$ 100,000$ | 18.6 | 71.9 | 9.5 |
| $\$ 100,000-\$ 150,000$ | 18.3 | 71.9 | 9.8 |
| More than $\$ 150,000$ | 18.7 | 76.6 | 4.7 |

[^7]| TABLE 9 THE DISTR HOMEOW | METROPOL <br> destination | Y-NEST R <br> TYPE, FR | T-AGE <br> 005 CPS |
| :---: | :---: | :---: | :---: |
| Location Type in 2000 | Location Type in 2005 |  |  |
|  | Central City | Suburbs | Non-Metro |
| Central City | 35.4 | 52.5 | 12.1 |
| Suburbs | 11.1 | 79.5 | 9.4 |
| Non-Metro | 19.9 | 80.1 | - |
| Note: Author's calculations from the 2005 March Current Population Survey (CPS). |  |  |  |



| TABLE 11 DEMOGRAPHIC AND INCOME CHARACTERISTICS OF EMPTY-NEST RETIREMENT-AGE homeowners who moved from the suburbs to the central city, from the 2000 Census by size of the metropolitan area |  |  |  |
| :---: | :---: | :---: | :---: |
| Characteristic | All Metropolitan Areas | 10 Largest Metropolitan Areas | All Other Metropolitan Areas |
| A. By Race |  |  |  |
| White | 76.2 | 66.0 | 80.0 |
| African-American | 13.4 | 16.5 | 12.3 |
| Other Races | 10.4 | 17.5 | 7.7 |
|  |  |  | continued next page |

TABLE 11 (CONTINUED) DEMOGRAPHIC AND INCOME CHARACTERISTICS OF EMPTY-NEST RETIREMENT-AGE HOMEOWNERS WHO MOVED FROM THE SUBURBS TO THE CENTRAL CITY, FROM THE 2000 CENSUS BY SIZE OF THE METROPOLITAN AREA

|  | All <br> Metropolitan Areas | 10 Largest <br> Metropolitan Areas | All Other <br> Metropolitan Areas |
| :--- | :---: | :---: | :---: |
| B. By Marital Status |  |  |  |


| Married/Partnered | 60.9 | 60.7 | 60.9 |
| :--- | :---: | :---: | :---: |
| Separated/Divorced | 25.2 | 22.9 | 26.1 |
| Widowed | 6.9 | 6.9 | 6.9 |
| Never Married | 7.0 | 9.5 | 6.1 |

C. By Education Group

| High School Dropouts | 11.4 | 13.2 | 10.7 |
| :--- | :--- | :--- | :--- |
| High School Degree | 20.0 | 17.4 | 21.0 |
| Some College | 27.5 | 24.1 | 28.8 |
| College Graduates | 41.1 | 45.3 | 39.5 |

D. By Age Group

| Ages $50-54$ | 40.7 | 41.6 | 40.3 |
| :--- | :--- | :--- | :--- |
| Ages $55-59$ | 27.2 | 26.8 | 27.4 |
| Ages $60-64$ | 18.3 | 18.8 | 18.2 |
| Ages $65-69$ | 13.8 | 12.8 | 14.1 |

## E. By Income Group

| Less than $\$ 20,000$ | 23.4 | 22.6 | 23.8 |
| :--- | :---: | :---: | :---: |
| $\$ 20,000-\$ 40,000$ | 27.4 | 24.4 | 28.5 |
| $\$ 40,000-\$ 70,000$ | 25.2 | 24.5 | 25.4 |
| $\$ 70,000-\$ 100,000$ | 9.5 | 10.8 | 6.5 |
| $\$ 100,000-\$ 150,000$ | 6.8 | 7.6 | 6.8 |
| More than $\$ 150,000$ | 7.7 | 10.1 | 4.7 |

Note: Author's calculations from the 2000 Census IPUMS data.

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[^0]:    Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

[^1]:    6 Specifically, income, wealth, and age were entered in the probit specification as quartic functions to allow for potentially non-linear effects on disposition. The results in Table 6 all come from a single probit estimation.

[^2]:    8 See, for example, Engelhardt (2005) and Venti and Wise (1989, 1990, 2001a, 2001b).

[^3]:    9 The interviewer asked the respondent if the second home was inherited, but that information is not released to the public.

[^4]:    10 The HRS does not indicate which country abroad this is in the public-use data.

[^5]:    11 Starting in 2004, limited data on mortgage rates were added to the HMDA data.

[^6]:    Note: Author's calculations from the 2004 wave of the Health and Retirement Study.

[^7]:    Note: Author's calculations from the 2005 March Current Population Survey

