ELDERLY HOUSING CONSUMPTION:
HISTORICAL PATTERNS AND PROJECTED TRENDS

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Executive Summary

The generation collectively known as the "Baby Boomer Generation" has exerted tremendous influence on U.S. society and institutions throughout their lives. This influence will continue as they age and will likely become more pronounced in coming years. Baby Boomers, individually and collectively, are going to redefine what it means to be "elderly" in the U.S.

The sheer numbers of Baby Boomers will greatly affect public policy – as it relates to the elderly as well as to all other ages over the coming years. In 2006 the first Baby Boomer cohort will turn 60. This means that the effective time during which new public policy can be formulated *before* the Baby Boomers begin retiring in large numbers is rapidly diminishing. The associated public policy challenges are numerous and will need to be carefully examined in order to design and implement effective new policies in the very near future.

The Baby Boomer generation is substantially different from earlier generations and policies need to account for those differences. They will remain active and independent longer than previous generations; as a group, they have sufficient wealth to manage retirement as no previous generation has; and they are going to challenge how the elderly are treated and what should be considered acceptable. Understanding the scope of the challenge is one of the first steps. The research summarized in this report begins to address this need.

Based on projections developed during our research (see Figure ES.1), we estimate that the number of senior households headed by those 85 or older will increase by approximately 88 percent from 2.9 million households in 2005 to 5.4 million households by 2030. The household growth is impressive in itself. But this would ignore the larger point – i.e., the increased numbers imply substantial growth in specific social demands and support networks required for these households will need to be planned and developed over the coming years.

Figure ES.1: Historical and Projected Change in the Number of Householders

HH Age	Percentage Change in the Number Householders			
	1985-2005[1]	Average Annual Change (1985-2005)	2005-2030	Average Annual Change (2005-2030)
<35	-0.7	0.0	14.6	0.5
35-44	20.8	1.2	7.0	0.3
45-54	44.7	3.0	1.1	0.0
55-61	26.0	1.5	22.0	0.8
62-74	1.7	0.1	89.1	2.6
75-84	27.5	1.6	84.6	2.5
85+	12.6	0.7	87.5	2.5
Total	**19.1**	**1.1**	**28.8**	**1.0**

1) Data for 2004 and 2005 are estimates.
Note: HH – Householder.
Source: ICF Consulting analysis of AHS data.

It also would ignore important issues of supply and unit affordability. At the national level, the U.S. housing market has not faced systemic housing shortages. Local markets may have relatively short-lived supply issues but these have been addressed by either the market itself or, in instances of market failures, by public policies. This is also true with respect to affordability in that public policy has been clear and determined to provide federal programs that help meet people's safety net needs. The combination of unit supply and affordability will warrant careful consideration. This consideration is necessary in order to ensure that the market adjusts to the changing conditions and can provide sufficient numbers and types of housing units.

Section 1: Background

Purpose of the Research

U.S. Census projects the total population in 2030 will be 364 million, an increase of approximately 30 percent from the year 2000. Just in size alone (an increase of 83 million), the country will look quite different in a relatively short period of time – i.e., approximately one generation. The shifting age distribution of households will further change the shape of the nation. It is, therefore, the growth rate and changing composition of the population that will be driving housing consumption over the coming 25 years.

Beginning in 2006, the first Baby Boomer cohort will enter their 60s. Over the next few decades, as the Baby Boomers age, the elderly population will comprise an increasing share of the total population. This will have a tremendous impact on public policy including affordable housing, Social Security, and Medicare.

It is not only the sheer number of elderly that will have an impact on public policy, but also the characteristics of these elderly. The Baby Boomer generation is expected to remain active and independent longer than previous generations of elderly population; as a group, they have sufficient wealth to manage retirement as no previous generation has; and they are going to challenge how the elderly are treated and what should be considered acceptable.

This research study attempts to understand some of the challenges that changing demographics will have on the housing market and what may be the implications for housing policy. The study explores two key issues in the elderly housing consumption research. The study: (1) looks at how the housing consumption of the elderly has changed over time, and (2) tries to understand what the potential consumption patterns could look like in the future.

The analysis is primary based on the national American Housing Survey (AHS) data for the period 1995 through 2003. In some cases, the research was extended to include the national level AHS data for 1985 onwards.

One of the challenges to this effort is how to define elderly housing consumption. As will be discussed in the literature summary below, there are a number of standard assumptions but several of these will merit a brief discussion prior to our highlighting the different research.

Who is “elderly?” Without a standard definition, researchers have defined elderly slightly differently from one study to another. Lower bound age has ranged from 61 to 65 most often. In our report, we define “elderly” as someone 62 years of age or older. This is typically when people may have reached 40 years of employment, and when they can first start collecting Social Security if they are getting Social Security “early.”

Another issue being discussed in the literature is “aging in place.” This is an important issue in that it is related to how people think of housing. They live in “homes” that have been invested in, both in a financial as well as psychological, or very personal, way. People often have a sense of “place” that is associated with one’s home and this will affect future housing patterns.

This study is organized as follows. The rest of this section presents a literature review. Section 2 summarizes our methodology and pertinent research issues. Section 3 is our discussion of results and is divided into a discussion of a historical analysis and our projections. Finally, Section 4 presents our conclusions and identifies next steps.

Literature Review

This section presents a review of literature on elderly housing and its consumption. It includes those published papers that have used AHS data in the analyses. The papers that did not use AHS data are included in Appendix A.

We identified and reviewed 12 studies, including those mentioned in our original research plan and others identified as a result of online and library database searches. Roughly half of the reviewed studies made use of the AHS data.

Three papers were identified that used AHS data to investigate elderly housing consumption. These papers and the research conclusions are summarized below.

> **"Housing America's Seniors: An Executive Summary"** states that, because seniors are less likely to move as often as younger people do (as shown using AHS data), the housing choices that Baby Boomers are likely to make over the next few years are highly significant to current developers and home-builders. For example, demand for housing that will support people with disabilities, many of whom will be elderly, is projected to increase.
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> The National Institute on Aging's "Assets and Health Dynamics Among the Oldest-Old (AHEAD) Survey" from 1993 is used to provide demographic and housing preference information (e.g., assisted living, shared housing, conventional housing) on seniors over 70 years of age. AHS data from the 1995 survey is used to show that many disabled seniors live in homes that do not provide necessary modifications, such as ramps and door handles, and that those who do have appropriate modifications, spend much of the household's home improvement budgets on replacements for "large ticket" items.
>
> The study concludes that concerns about decreased housing demand are unfounded. Although elderly people do not move too often, many movers prefer newly constructed houses. Others demand 2nd homes, and increased life expectancy will sustain demand as well. Additionally, the market for in-home services (i.e., services enabling seniors to live independently for a longer time) is expected to boom.
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> The major point of concern, the study reveals, is the wealth disparity among seniors. Lower-income seniors may have fewer housing and special care options, along with significant housing cost burdens, particularly for renters.
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> **"The State of the Nation's Housing"** is an annual report produced by the Joint Center for Housing Studies at Harvard University. These reports document current housing issues and are frequently referred to by researchers. We initially proposed using the 2001 document only, but have reviewed the 2005 document as well. These two documents note that, while the housing market continues to face high demand, the inflation-adjusted price of housing and the cost burden are growing. It uses AHS data to provide summary statistics on the cost burden of housing by tenure, race, and metro area (city, suburb, etc.), and information on homeownership rates and rental rates by age and race. Census data are also used in the report to highlight demographic trends.
>
> Aging Baby Boomers are expected to sustain demand for housing as they increase spending on home remodeling (i.e., renovations such as elevators designed to allow them to age in place), luxury apartments, and even the purchase of new, trade-up, and

second homes. The children of Baby Boomers are also adding to housing demand. The report, however, concludes that national, state, and local efforts are needed to ensure that housing will become more affordable for low- and moderate-income families.

The study also provides information on homeownership and rental rates by age and race.

Hermanson and Citro (1999) document basic trends in the housing circumstances of older households using descriptive statistics from analyses of the 1995 AHS to update housing indicators and trends. Principal findings include an increase from 1989 to 1995 in total number of older households and homeownership rates among elderly households. Additionally, it was found that 22 percent of older households rented, 44 percent of older households were single persons living alone (of which 78 percent were headed by women), six percent of older households reported moderate or severe housing quality problems, 60 percent of older owners (and 18 percent of older renters) had lived in homes for at least 20 years, median home values decrease as people age, 80 percent of older homeowners did not have mortgage debt, older owners were less likely to have made home repairs in the previous two years, 62 percent of older renters and 14 percent of older owners spent an excessive amount of their income on housing costs, homeownership rates were lower for older minorities, and 27 percent of the renter households that reported receiving government housing assistance were older households.

Hermanson and Citro conclude that between 1989 and 1995, noteworthy progress had been made in the housing conditions of older persons. Furthermore, the increase in the number of older households headed by persons aged 75 and older occurred entirely among owners, indicating that the elderly had been able to increasingly age in place. Housing quality for the elderly remains relatively high. The authors, however, conclude that some problems yet remain. For instance, home values for older minorities are lower than those for non-minorities, older minority households and older single-person households are more likely than older households in general to live in substandard housing and to have excessive housing costs, necessary housing repairs are dealt with less frequently for older homeowners, the percentage of older and younger owner households incurring mortgage debt has risen, and older rental households continue to face high housing costs and a high cost burden.

The authors do not provide any information on the future demand for elderly housing.

Two other studies we reviewed used AHS data to investigate related questions involving elderly housing supply and policy implications:

The Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century (2002) wrote a report for Congress that identifies existing and future affordable housing needs for seniors (using 1999 AHS data), and then recommends policies to address these needs.

The report finds that senior housing stock is growing while “the nation’s affordable housing stock is in danger of losing significant numbers of units”. For instance, the number of senior households is expected to grow by 53 percent from 2000 to 2020 and the number of seniors with disabilities will increase from 6.2 million to 7.9 million over

this same time period. The Commission also finds that fully one-third of current seniors spend at least 50 percent of their income on housing.

It is concluded that coordination between elderly housing and health care is inefficient and that they should be more integrated with one another. The other recommendations are based on the following five principals: preserving the existing housing stock; expanding successful housing production, rental assistance programs, home- and community-based services, and supportive housing models; linking shelter services to promote and encourage aging in place; reforming existing Federal financing programs to maximize flexibility and increase housing production and health and service coverage; and creating and exploring new housing and service programs, models, and demonstrations.

The report emphasizes that help must come from states and the use of HOME and CDBG funds and Medicaid waivers, local governments and the provision of senior-friendly communities, government and government sponsored enterprises like Fannie Mae and Freddie Mac, community and faith based organizations, and monetary support and voluntarism from individuals.

The authors express concern regarding the use of AHS to predict housing demand, citing as one of the reasons that the data are self-reported and therefore may be less reliable.

"Housing Our Elders" (1999) uses a supplement to the 1995 AHS on home accessibility needs and modifications to develop a baseline of information on elderly housing conditions, needs, and strategies. It is found that "overall, older Americans are among the best housed citizens of a well-housed Nation". However, "millions of elderly households continue to live in housing that costs too much, is in substandard condition, or fails to accommodate their physical capabilities or assistance needs".

The report then outlines the Administration's Housing Security Plan for Older Americans, a framework for national action that meets seniors' most urgent housing needs and respects their dignity, independence, and diversity. Some proposed initiatives under this plan include expanding the Healthy Homes Initiative to show elderly homeowners how they can convert home equity into funds for needed health and safety home improvements, expanding affordable housing opportunities for low income seniors, and improving the range and coordination of housing or service combinations (providing social services where seniors live such that they can continue to live independently).

We also reviewed one study that used AHS data to discuss general U.S. demographic changes that may affect future housing demand:

Masnick (2001) contends that the growth in U.S. minority population, particularly in light of the aging Caucasian population, has strong implications for future housing consumption.

The author uses 1985, 1995, and 1999 AHS data, along with 1995 and 2000 Current Population Survey and Annual Housing Vacancy Survey data, to track housing patterns by race and age cohort in order to track changes in housing demand.

> Masnick's findings include the fact that "out-migration" (from city to suburb) is common among both whites and minorities of all different ages, that "minorities have tended to move more slowly during the 20s and 30s into both household formation and homeownership than have whites", that minorities have relatively fewer households with heads over the age of 65, and that the percentage of single person households will increase due to the aging population and the declining prevalence of married couples.

Lastly, we also reviewed an additional six papers cited in our original research plan that did not use AHS data. Our summaries of these studies are included as an appendix to this report.

Section 2: Methodology

This report contains two analyses. The first is a review of historical AHS data to determine if there are trends in the housing consumption patterns of the elderly. The second analysis contains projections of housing demand by the elderly through 2030.

This section is organized with a brief discussion of the methodology for the historical analysis, followed by the longer discussion of the methodology for the housing projections analysis.

The primary data source for our research has been the AHS. We used the national samples from 1995 through 2003. To derive historical trends for some housing consumption characteristics, however, we extended our data analysis to include all AHS national sample data years starting with 1985.

The analysis is focused on housing consumption characteristics of elderly householders. This means that the study did not analyze housing characteristics of the entire elderly population, of which elderly householders are a subset (i.e., housing consumption of elderly individuals which are not householders are not reflected in the analysis). An example of this is an elderly person who has moved in with other relatives, such as an elderly woman moving in with her daughter.

Although we are primarily interested in the housing consumption of the elderly, we did not limit our analysis to the householders aged 62 and older. For comparison purposes, we looked at all householders. We did this by segregating the householder population into seven age cohorts. The number of age cohorts is large enough to let us capture changes in housing consumption over individuals' lifecycle, without being overly burdensome on the analysis. The cohort widths have been defined such that they can mirror reasonable life bands. For example, people younger than age 35 are most likely to still be renters, whereas people age 35 onwards are more likely becoming homeowners, and age 62 is the earliest age for people to qualify for Social Security. (The typical age to first receive Social Security is age 65.) We used these age cohorts both in our analysis of the historical AHS data and in the projections of future housing consumption.

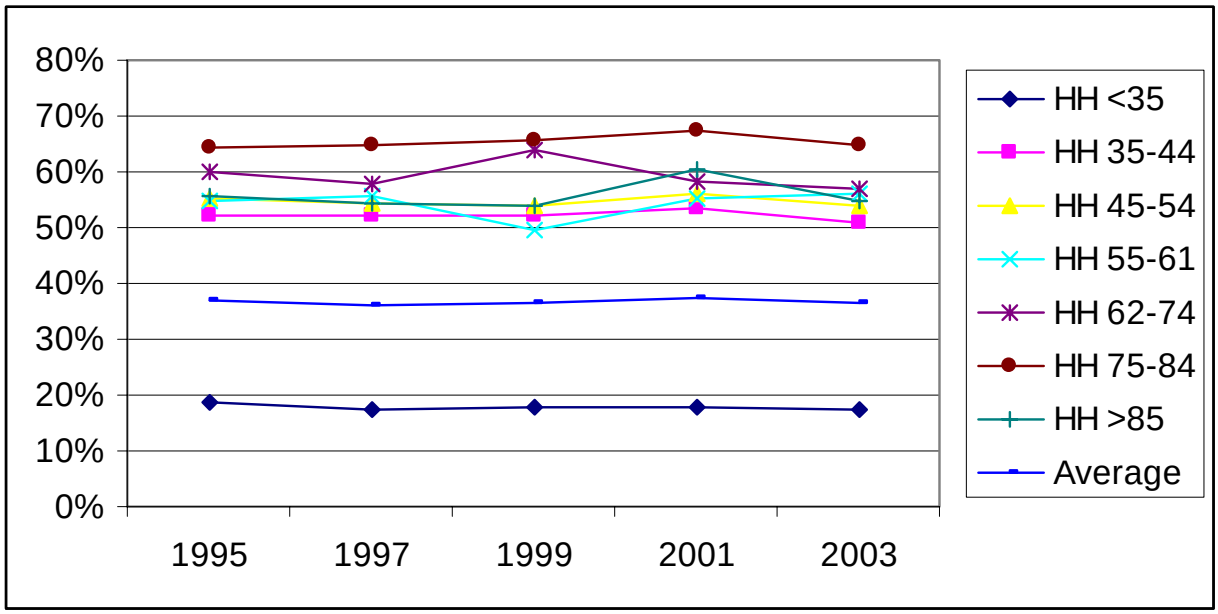
To project the number of householders through 2030, we identified the latest available U.S. Census national population projection figures.[1] Ideally, these projections would include both total population and total household projections. Unfortunately, the U.S. Census only projects the total population, by age, and does not provide projections on the number of households.

We can use these population projections after creating a link between the U.S. Census projections and the known number of households in the AHS datasets. Because rate of family formation and living arrangements vary across age groups, we needed to derive household projections for each age group.

[1] Census used cohort-component method to produce interim state population projections by single year of age and sex. Each component of population change – births, deaths, internal migration, and international migration – was projected separately to 2030 based on recent fertility, mortality, and migration trends. The projections are based on the general assumption that recent demographic trends will continue in the future. Data are available at http://www.census.gov/population/www/projections/projectionsagesex.html.

To project the total number of households in each age cohort, we first calculated the number of householders as a percentage of the total population. We used AHS data for 1995, 1997, 1999, 2001, and 2003 and Census population data for the same years in order to confirm that this was a reasonable assumption for our methodology. As shown graphically in Figure 1, the rates for each age group have been relatively stable over the past ten years.

Figure 1: Householders as a Percentage of Total Population in the Same Age Cohort



Source: ICF Consulting analysis of AHS data.

This stability provided reassurance that we could calculate an average rate for each age cohort from across the five AHS periods (i.e., 1995, 1997, 1999, 2001, and 2003). We then applied these calculated rates to the Census population projections. The result is a reasonable set of projections for the number of householders, within each age group, through 2030.

One of our research goals was to extend this to projections of tenure status (i.e., owning vs. renting) for each age group. In order to do this, we used a method similar to that used to calculate the number of householders.

Specifically, we first calculated the average annual change in tenure status from 1995 to 2003. This time period allows us to account for the effect of a full business cycle on interest rates. This is important because interest rate levels are among the chief drivers of housing purchasing patterns (i.e., limiting analysis to one or two AHS periods may not yield representative estimates).

During that nine-year period, the ownership rate among 62 to 74 year olds increased, on average, by 0.2 percent per year. During that same period, the ownership rate among those aged 75 to 84 increased by 0.5 percent and among those 85 or older, it increased by 1.3 percent.[2] The rental rate decreased for all three age groups with the following average annual

[2] Note that the rate of change in ownership does not reflect the rate of change in population.

decrease: 0.9 percent for those 62 to 74 years old, 1.8 for those 75 to 84, and 3.0 percent for those aged 85 or older.

We assumed that these tenure trends would continue though 2030. We anchored our analysis of tenure trends at the 2030 date. The reason being that if we assumed that tenure trends would continue with a positive annual growth, then the projections for each age group would yield numbers exceeding 100 percent (i.e., distribution of households across the three types of tenure status would exceed 100 percent). Our solution was to uniformly adjust downwards the average annual change in tenure status within each age cohort to ensure that the calculated ownership, renting, and no-cash rent shares for each age group in each year never exceeded 100 percent.[3] Figures 2a and 2b illustrate how we adjusted tenure status for one age cohort.

Figure 2a: Average Annual Growth Rates – Scaling Factor

HH Age	Tenure	Average Annual Growth Rate		Scaling Factor (%)
		Unadjusted (%)	Adjusted (%)	
62-74	Owners	0.23	0.18	-0.04
	Renters	-0.87	-0.92	
	No-Cash Rent	-2.61	-2.65	

Source: ICF Consulting analysis of AHS data.

Figure 2b: Tenure Status for Age Cohort 62-74 in 2030

HH Age	Tenure	Unadjusted (%)	Adjusted (%)
62-74	Owners	87.8	86.8
	Renters	12.6	12.5
	No-Cash Rent	0.7	0.7
	Total	101.1	100.0

Source: ICF Consulting analysis of AHS data.

We used the same methodology to project the share of single-family attached, single-family detached, multi-family, and manufactured units for each age group.

We acknowledge that the adjustment factor used to calculate the number of householders is a simplifying one. It does not account for any subsequent changes in tastes and preferences, much less any changes in life choice trends – e.g., living long enough to remarry and have a second spouse after either being widowed or divorced.

However, the direction or impact these types of changes will have is uncertain. For example, the effect of marriage on the number of households will in turn depend on whether individuals were living independently before marrying and plan to consolidate households, perhaps moving from two single-family houses to a smaller, urban condominium, for example. The reverse might also be true in that the number of households could increase with divorce as one partner moves into a new household, perhaps single-family or perhaps multi-family (especially if finances are strained as a consequence of the divorce).

[3] For example, the adjusted average annual increase in ownership rate for those aged 62 to 74 is 0.2 percent, for those 75 to 84 it is 0.3 percent, and for those 85 or older it is 0.7 percent.

For these reasons, we believe that our assumed adjustment factors are reasonable – especially when it is remembered that we are attempting to project more than 25 years into the future. Policymakers can use these projections to highlight what could be significant trends and to generate discussions.

In the next section, we first present historical numbers and then our projections.

Section 3: Results

Historical Housing Consumption

Figures 3 through 11 present historical housing consumption, by age cohort.

In the period 1985 to 2003, the elderly population aged 62 to 74 decreased by close to six percent, whereas the elderly population aged 75 to 84 grew by close to 35 percent. Householders aged 45 to 54 show a dramatic increase in numbers over the 1985 to 2003 time period – i.e., a 70 percent increase from 12.8 million to 21.8 million. This is interesting because by 1991, the first cohort of the Baby Boomer generation began entering this age category. (The last cohort entered the age category in 2003.)

Another well-documented trend is that Americans are, on average, living longer than ever before. This means that the number of households headed by those 85 and over will be increasing. The period 1985 to 2003 saw a four percent increase for this age category. Although this percentage may seem small, these households are expected to consume a larger share of local services than other age groups (e.g., emergency vehicle trips).

Figure 3: Number of Householders (in thousands), 1985 – 2003

HH Age		1985	1987	1989	1991	1993	1995	1997	1999	2001	2003
<35	**No. of HH**	25,521	25,396	26,164	24,731	23,988	25,830	24,103	24,530	24,837	24,482
	% of Total	28.5	27.6	27.6	26.2	25.0	26.1	24.2	23.9	23.3	23.1
35-44	**No. of HH**	18,013	19,306	20,365	20,935	21,797	22,520	23,270	23,505	23,906	22,524
	% of Total	20.1	21.0	21.5	22.2	22.7	22.8	23.4	22.9	22.5	21.3
45-54	**No. of HH**	12,818	13,482	14,442	14,920	16,376	17,803	18,777	20,048	21,677	21,822
	% of Total	14.3	14.7	15.2	15.8	17.1	18.0	18.9	19.5	20.4	20.6
55-61	**No. of HH**	9,179	8,872	8,747	8,505	8,411	8,481	9,152	9,925	10,437	11,772
	% of Total	10.3	9.7	9.2	9.0	8.8	8.6	9.2	9.7	9.8	11.1
62-74	**No. of HH**	15,282	15,778	15,647	15,287	15,170	14,919	14,276	14,414	14,470	14,411
	% of Total	17.1	17.2	16.5	16.2	15.8	15.1	14.3	14.0	13.6	13.6
75-84	**No. of HH**	6,149	6,484	6,627	6,994	7,120	7,307	7,743	8,107	8,430	8,254
	% of Total	6.9	7.1	7.0	7.4	7.4	7.4	7.8	7.9	7.9	7.8
85+	**No. of HH**	2,502	2,567	2,856	3,021	3,151	2,087	2,166	2,275	2,650	2,603
	% of Total	2.8	2.8	3.0	3.2	3.3	2.1	2.2	2.2	2.5	2.5
Total		**89,464**	**91,884**	**94,847**	**94,393**	**96,013**	**98,948**	**99,487**	**102,803**	**106,407**	**105,867**

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

Figure 4 presents tenure status by age group. This figure can be read along two dimensions. The first is a vertical dimension that shows how housing consumption characteristics vary with age in a given period of time – i.e., year. The second is a horizontal dimension that shows how housing consumption changes over time within a given age cohort.

Ownership rates across all age groups increased between 1985 and 2003. Again, this is a well-documented and understood change that has been driven by a number of economic factors, including, but not limited to, falling interest rates, rising standards of living, public policies helping low- and middle-income families afford home ownership.

Among the elderly population, the ownership rate for population 85 and over exhibited the highest increase – i.e., 16 percentage points. Data show that the ownership rate peaks at the age 62 to 74. The ownership rate decreases with the higher age groups as elderly households shift away from ownership towards renting or moving in with family members.

Also, it is interesting to point out what happens to age cohorts. For example, those aged 45 to 54 in 1985 would be 63 to 72 in 2003. Homeownership rates for this cohort rise from 75.2 percent in 1985 to 82.6 percent in 2003. Aging accounts for 3.2 percentage points of the change while higher homeownership, by age group, accounts for 4.2 percentage points.

Figure 4: Tenure Status (in percentages), 1985 – 2003

HH Age		1985	1987	1989	1991	1993	1995	1997	1999	2001	2003
<35	**Owners**	39.1	39.3	39.0	37.9	38.0	38.9	38.7	39.8	41.5	42.2
	Renters	57.8	57.7	58.1	58.8	58.7	58.1	58.6	57.6	56.0	55.6
	No-Cash Rent	3.0	3.0	2.9	3.3	3.3	3.0	2.7	2.6	2.5	2.1
35-44	**Owners**	68.0	66.6	66.4	65.7	65.3	65.5	66.5	67.5	68.5	68.4
	Renters	30.1	31.5	31.7	32.3	32.8	32.6	31.7	31.0	30.0	30.1
	No-Cash Rent	1.9	2.0	1.9	2.0	1.9	1.9	1.8	1.5	1.5	1.5
45-54	**Owners**	75.2	75.5	75.2	74.3	75.5	75.5	75.8	75.9	76.9	76.3
	Renters	23.3	22.9	23.3	24.1	23.1	23.1	22.9	22.8	21.7	22.4
	No-Cash Rent	1.5	1.6	1.5	1.6	1.4	1.3	1.2	1.3	1.4	1.3
55-61	**Owners**	78.6	79.5	79.1	80.5	80.3	78.8	79.7	80.3	80.3	80.4
	Renters	19.8	19.1	19.1	17.8	18.3	19.6	18.8	18.4	18.3	18.4
	No-Cash Rent	1.6	1.4	1.9	1.7	1.5	1.6	1.5	1.3	1.4	1.2
62-74	**Owners**	78.4	79.6	79.9	80.8	80.9	81.2	81.6	82.6	82.6	82.6
	Renters	19.7	18.5	18.4	17.8	17.5	17.2	16.8	16.0	16.0	16.0
	No-Cash Rent	1.9	1.9	1.7	1.5	1.5	1.7	1.6	1.4	1.4	1.3
75-84	**Owners**	68.1	70.3	72.2	74.2	74.8	76.9	78.9	80.0	80.3	79.8
	Renters	28.6	26.5	25.3	22.9	22.6	20.7	18.9	18.1	17.4	17.9
	No-Cash Rent	3.3	3.2	2.5	2.9	2.6	2.4	2.2	1.9	2.3	2.3
85+	**Owners**	56.8	56.6	56.1	56.9	59.0	66.1	64.2	69.5	72.2	73.0
	Renters	37.2	37.4	38.0	37.7	34.4	29.9	31.4	26.4	24.0	23.5
	No-Cash Rent	6.0	6.0	5.9	5.4	6.6	4.1	4.4	4.2	3.8	3.5

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

Figure 5 is interesting because it highlights how the housing stock is consumed across time. As anticipated, the single-family housing stock is the one most widely consumed, across all age categories.

The increase in single-family detached housing for those aged 62 and older during the 1985 through 2003 period may be highlighting the “aging in place” choice discussed in the literature. Based on the age groups’ rates in 1985, the group aged 45 to 54 would be expected to move out of single-family detached (72.7 percent to 60.8 percent). The actual change, however, was much lower – i.e., 72.5 percent to 71.8 percent.

Other factors may be drivers as well, however – e.g., single-family homes became increasingly affordable as interest rates fell. The shift from apartments, which tend to be rentals, to single-family (detached or attached) may provide evidence supporting the idea of increased affordability. The affordability issue may be subsumed with the increase in single-family attached homes, which, all other things equal, tend to be less expensive than single-family detached homes.

Figure 5: Unit Type (in percentages), 1985 – 2003

HH Age		1985	1987	1989	1991	1993	1995	1997	1999	2001	2003
<35	**SF Detached**	45.0	43.9	44.4	42.6	42.5	42.1	41.8	41.8	43.2	44.4
	SF Attached	5.3	6.6	6.5	7.5	7.5	7.6	7.7	9.2	9.6	7.6
	Apartment	42.9	42.1	42.4	42.6	42.7	42.8	42.6	41.3	40.0	41.7
	Manufactured	6.8	7.3	6.7	7.4	7.3	7.5	7.8	7.7	7.2	6.2
35-44	**SF Detached**	69.7	68.2	67.4	66.6	66.4	66.5	66.7	66.9	66.2	67.4
	SF Attached	4.5	5.0	5.1	5.6	5.4	5.0	5.6	6.4	6.5	5.7
	Apartment	21.4	22.2	22.5	22.5	22.9	22.4	21.9	20.6	20.5	20.3
	Manufactured	4.4	4.6	5.0	5.2	5.3	6.1	5.8	6.1	6.9	6.5
45-54	**SF Detached**	72.5	73.2	72.2	71.1	72.2	72.2	71.5	71.2	71.6	71.7
	SF Attached	4.2	4.5	4.7	5.2	4.7	5.1	5.3	6.0	5.9	5.0
	Apartment	18.5	17.4	18.1	18.3	18.0	17.6	17.1	17.2	16.4	17.2
	Manufactured	4.8	4.8	5.0	5.4	5.1	5.1	6.0	5.6	6.1	6.1
55-61	**SF Detached**	72.7	72.3	72.7	72.8	72.4	71.4	71.5	71.4	71.7	71.6
	SF Attached	4.2	4.9	4.6	4.7	5.2	4.6	4.8	6.2	6.1	5.9
	Apartment	18.7	17.2	17.3	16.9	17.1	17.7	16.4	14.9	15.2	16.2
	Manufactured	4.4	5.5	5.4	5.5	5.2	6.4	7.2	7.4	7.0	6.2
62-74	**SF Detached**	68.8	70.0	70.2	70.3	70.7	70.4	70.9	71.7	71.3	71.8
	SF Attached	4.7	4.9	4.8	5.2	4.9	5.0	5.1	5.5	5.7	5.1
	Apartment	21.0	19.1	18.8	18.6	18.4	18.2	17.4	16.1	15.8	15.5
	Manufactured	5.6	6.0	6.2	5.9	6.0	6.4	6.7	6.7	7.1	7.5
75-84	**SF Detached**	60.8	62.3	62.1	63.4	64.2	65.4	67.3	67.6	68.1	68.0
	SF Attached	4.0	4.5	4.6	4.8	4.8	5.3	5.0	5.5	5.8	5.6
	Apartment	30.4	27.5	27.1	25.4	24.3	23.1	22.0	20.8	19.4	19.6
	Manufactured	4.8	5.7	6.2	6.3	6.8	6.3	5.6	6.2	6.8	6.7
85+	**SF Detached**	49.0	45.7	46.5	46.8	46.7	57.8	55.7	60.7	60.6	62.6
	SF Attached	3.6	5.5	6.1	6.1	5.8	5.4	5.4	6.5	6.1	4.7
	Apartment	36.7	37.7	36.1	36.2	36.5	31.0	32.3	27.7	27.1	26.7
	Manufactured	10.7	11.1	11.4	10.9	11.0	5.8	6.5	5.1	6.1	5.9

Notes: HH – Householders; SF – single-family.
There is a data issue for age group 85+ for 1985 through 1993 AHS. The totals for owner-renter and unit type are not equal in this age category. For all other age groups, the totals for owner-renter and unit type are equal.
Source: ICF Consulting analysis of AHS data.

Housing unit accessibility can be defined both in terms of its exterior (i.e., ease of access to public transport) and its interior (i.e., wide corridors facilitating an easy movement in a wheel chair). One way to measure a unit's interior accessibility using AHS data is through availability of elevators in multi-family units.

Data presented in Figure 6 show that across age groups, most apartment-dwelling householders live in buildings without elevators. The percentage of households living in buildings with at least one working elevator, however, is increasing with age.

In 2003, less than 10 percent of householders aged 35 or younger lived in multi-family units with an elevator, compared to 28 percent of householders aged 62 to 74, 38 percent of householders aged 75 to 84, and 45 percent of householders aged 85 and older.

Looking only at the availability of elevators may not fully illustrate the accessibility of a unit. A unit located on the tenth floor of a multi-story building without a working elevator is less accessible than a unit located on the third floor of the same building. We, therefore, extended the analysis by controlling for the number of floors from the main entrance to the apartment. Data, presented in parentheses, indicate that the majority of people live in multi-family buildings with no more than five stories. The findings suggest that such buildings are unlikely to have elevators.

Data do suggest that availability of elevators is an amenity that elderly value more than the young ones. With aging population, availability of elevators will become increasingly valuable. This finding should be considered when building new or renovating existing multi-family units.

Figure 6: Availability of Working Elevators in Multi-family Units (in percentage), 1997 – 2003

HH Age		1997	1999	2001	2003
<35	**No Elevator**	84.8	84.5	90.4	90.3
	Number of floors <6 / 6+	(99.7 / 0.3)	(99.8 / 0.2)	(99.9 / 0.1)	(99.9 / 0.1)
	At least one working elevator	14.4	15.0	9.3	9.4
	Number of floors <6 / 6+	(83.9 / 16.1)	(85.6 / 14.4)	(75.9 / 24.1)	(75.4 / 24.6)
	All elevators not working	0.8	0.5	0.3	0.4
	Number of floors <6 / 6+	(75.8 / 24.2)	(89.4 / 10.6)	(91.6 / 8.4)	(82.0 / 18.0)
35-44	**No Elevator**	81.4	82.5	88.0	87.2
	Number of floors <6 / 6+	(99.3 / 0.7)	(99.7 / 0.3)	(99.9 / 0.1)	(100.0/0.0)
	At least one working elevator	17.4	16.6	11.6	12.5
	Number of floors <6 / 6+	(77.9 / 22.1)	(79.1 / 20.9)	(70.5 / 29.5)	(67.5 / 32.5)
	All elevators not working	1.2	0.9	0.4	0.2
	Number of floors <6 / 6+	(61.5 / 38.5)	(52.4 / 47.6)	(80.3 / 19.7)	(79.9 / 20.1)
45-54	**No Elevator**	80.9	79.9	84.1	84.8
	Number of floors <6 / 6+	(99.5 / 0.5)	(99.6 / 0.4)	(99.7 / 0.3)	(99.6 / 0.4)
	At least one working elevator	17.3	19.7	15.7	15.0
	Number of floors <6 / 6+	(82.4 / 17.6)	(79.0 / 21.0)	(68.7 / 31.3)	(66.2 / 33.8)
	All elevators not working	1.9	0.4	0.3	0.2
	Number of floors <6 / 6+	(88.0 / 12.0)	(100.0 / 0.0)	(100.0 / 0.0)	(62.0 / 38.0)
55-61	**No Elevator**	79.7	76.7	80.3	81.1
	Number of floors <6 / 6+	(99.5 / 0.5)	(99.4 / 0.6)	(100.0 / 0.0)	(100.0 / 0.0)
	At least one working elevator	18.7	22.8	19.7	18.5
	Number of floors <6 / 6+	(72.4 / 27.6)	(77.9 / 22.1)	(68.6 / 31.4)	(68.8 / 31.2)
	All elevators not working	1.6	0.6	-	0.5
	Number of floors <6 / 6+	(50.9 / 49.1)	(100.0 / 0.0)	-	(71.3 / 28.7)
62-74	**No Elevator**	69.8	66.0	69.5	71.9
	Number of floors <6 / 6+	(99.5 / 0.5)	(99.4 / 0.6)	(99.7 / 0.3)	(99.7 / 0.3)
	At least one working elevator	28.6	32.2	30.4	27.7
	Number of floors <6 / 6+	(76.1 / 23.9)	(75.0 / 25.0)	(69.8 / 30.2)	(68.9 / 31.1)
	All elevators not working	1.5	1.8	0.1	0.4
	Number of floors <6 / 6+	(58.5 / 41.5)	(47.5 / 52.5)	(0.0 / 100.0)	(100.0 / 0.0)
75-84	**No Elevator**	62.0	62.7	62.9	62.0
	Number of floors <6 / 6+	(98.7 / 1.3)	(98.8 / 1.2)	(99.3 / 0.7)	(100.0 / 0.0)
	At least one working elevator	34.9	34.2	36.8	38.0
	Number of floors <6 / 6+	(70.6 / 29.4)	(76.7 / 23.3)	(75.6 / 24.4)	(76.5 / 23.5)
	All elevators not working	3.1	3.1	0.3	-
	Number of floors <6 / 6+	(71.2 / 28.8)	(68.0 / 32.0)	(100.0 / 0.0)	-
85+	**No Elevator**	51.6	53.9	53.7	55.1
	Number of floors <6 / 6+	(97.5 / 2.5)	(97.2 / 2.8)	(100.0 / 0.0)	(99.8 / 0.2)
	At least one working elevator	44.3	44.8	46.3	44.9
	Number of floors <6 / 6+	(77.2 / 22.8)	(76.4 / 23.6)	(69.9 / 30.4)	(74.6 / 25.4)
	All elevators not working	4.0	1.3	-	-
	Number of floors <6 / 6+	(53.9 / 46.1)	(100.0 / 0.0)	-	-

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

One measure of a housing unit's exterior accessibility is the "walkability" of the neighborhood. This measure, as explained in Myers and Gearin (2001), is not easy to quantify. For purposes of our analysis, we are using as a proxy proximity to local shops.

Figure 7 presents the distribution across age groups of householders based on proximity to local shops. These data seem to indicate that housing preferences with respect to location are a function of mobility. This trend appears especially noticeable among the elderly who have recently moved.

Figure 7: Percent of Households Living Within One Mile from Shops, 1995 – 2003

	Last Move	1995	1997	1999	2001	2003
<35	**5+ years ago**	60.6	63.7	61.8	61.1	60.2
	<5 years ago	65.3	71.2	70.4	70.6	70.1
35-44	**5+ years ago**	59.2	62.9	60.0	59.4	59.1
	<5 years ago	62.9	66.2	65.3	64.9	65.5
45-54	**5+ years ago**	56.8	59.5	58.7	58.9	59.3
	<5 years ago	74.2	78.5	79.8	74.8	64.7
55-61	**5+ years ago**	56.6	58.3	58.0	56.8	56.1
	<5 years ago	61.9	59.7	59.2	60.4	58.8
62-74	**5+ years ago**	58.0	58.9	59.0	57.6	56.8
	<5 years ago	60.9	63.3	62.0	59.0	61.3
75-84	**5+ years ago**	58.2	59.8	60.9	60.4	59.6
	<5 years ago	67.9	70.6	68.9	62.6	63.9
85+	**5+ years ago**	61.5	62.6	64.1	61.8	60.9
	<5 years ago	65.9	74.1	73.3	72.0	71.1

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

We also explored the distribution of households living in assisted housing across age groups. As expected, the young and elderly are most likely to need financial housing assistance. In Figure 8, we see that during the period 1997-2003, approximately two percent of householders aged 62 to 74 lived in assisted housing, with the rate increasing to close to three percent for those aged 85 and older in 2003.

Figure 8: Households Living in Assisted Housing (in percentages), 1997 – 2003

HH Age	1997	1999	2001	2003
<35	2.3	2.3	2.3	2.2
35-44	1.3	1.4	1.3	1.1
45-54	1.2	1.2	1.1	1.2
55-61	1.7	1.3	1.5	1.6
62-74	2.2	2.1	2.2	1.9
75-84	2.6	2.4	2.4	2.7
85+	4.9	4.5	3.4	2.8

HH – Householders.
Source: ICF Consulting analysis of AHS data.

The rate of elderly living in assisted housing has been relatively stable over the past decade. An increasing elderly population, however, means that, even if the rate of elderly living in assisted housing remains constant or even relatively stable, there will be a dramatic increase in the number of assisted housing units required for the burgeoning elderly population. Any unmet need may necessitate further federal involvement in assisted housing programs to meet the safety net needs of the elderly population.

Figure 9 presents housing mobility patterns across time and age categories. It differentiates between those who are recent movers (i.e., those who moved less than five years ago) and those who have been relatively settled (i.e., last moved more than five years ago). It also includes data on gender distribution, by age categories.

Since this analysis is focusing on the householder, which have historically tended to be male, the gender distribution, and the changes to it over time, is very interesting. The gender distribution is shown in parentheses in Figure 9.

The mobility patterns have been relatively consistent (differing by only a couple of percentage points) across time. And for those aged 62 and older between 1995 and 2003, the spread has been less than one percentage point except for those aged 85 or older where the difference is more than four percentage points. Specifically, we see fewer people aged 85 or more being recent movers between 1995 and 2003. This may be indicating that people are beginning to more consistently age in place.

The gender distribution of householders, however, has been changing. Starting with those householders aged 45 through 54, we see almost an eight percentage point decrease in the proportion of male householders for both recent and not so recent movers. This apparent trend is evident for those between 55 and 61, with a decrease of almost four percentage points and a three-percentage point decrease for those between ages 62 and 74.

The apparent trend reverses itself for those aged 75 or more with an increase in the number of male householders. For the age category 75 to 84, the number of male householders increases by one percentage point for those who have not recently moved (and falls by one percentage

point for recent movers). For those aged 85 or more, the number of male householders increases two percentage points for not so recent movers but almost eight percentage points for recent movers.

This may be evidence of men living longer than they have in the past. Maximum life expectancy is a complex calculus driven by a variety of genetic and environmental factors (e.g., date of birth, ethnicity, lifestyle patterns) but for our purposes, it may be sufficient to note that the increase in number of male householders may be a function of increased longevity as much as increased or prolonged independent living. This may be a trend to watch in the future because it will have bearing on the types and manner of services provided to the elderly.

Figure 9: Distribution of Householders by Last Move (in percentages), 1995 – 2003

HH Age	Last Move	1995	1997	1999	2001	2003
<35	5+ years ago (male / female)	10.5 (67.5 / 32.5)	10.5 (64.0 / 36.0)	10.4 (61.8 / 38.2)	11.2 (59.2 / 40.8)	12.3 (55.7 / 44.3)
	<5 years ago (male / female)	89.5 (60.8 / 39.2)	89.5 (58.3 / 41.7)	89.6 (55.2 / 44.8)	88.8 (53.2 / 46.8)	87.7 (53.1 / 46.9)
35-44	5+ years ago (male / female)	41.2 (72.1 / 27.9)	39.8 (71.8 / 28.2)	40.0 (68.6 / 31.4)	41.2 (67.1 / 32.9)	41.4 (64.3 / 35.7)
	<5 years ago (male / female)	58.8 (64.3 / 35.7)	60.2 (63.4 / 36.6)	60.0 (59.7 / 40.3)	58.8 (57.4 / 42.6)	58.6 (55.8 / 44.2)
45-54	5+ years ago (male / female)	60.4 (72.8 / 27.2)	59.0 (72.6 / 27.4)	58.3 (70.4 / 29.6)	60.6 (68.5 / 31.5)	62.1 (64.9 / 35.1)
	<5 years ago (male / female)	39.6 (61.8 / 38.2)	41.0 (60.2 / 39.8)	41.7 (58.7 / 41.3)	39.4 (56.4 / 43.6)	37.9 (54.3 / 45.7)
55-61	5+ years ago (male / female)	68.8 (71.5 / 28.5)	67.7 (70.0 / 30.0)	67.1 (68.9 / 31.1)	68.5 (66.6 / 33.4)	68.8 (66.5 / 33.5)
	<5 years ago (male / female)	31.2 (62.0 / 38.0)	32.3 (60.0 / 40.0)	32.9 (57.0 / 43.0)	31.5 (54.2 / 45.8)	31.2 (52.8 / 47.2)
62-74	5+ years ago (male / female)	76.3 (62.6 / 37.4)	77.2 (62.4 / 37.6)	75.9 (60.7 / 39.3)	76.2 (60.7 / 39.3)	76.0 (59.7 / 40.3)
	<5 years ago (male / female)	23.7 (57.4 / 42.6)	22.8 (58.0 / 42.0)	24.1 (58.0 / 42.0)	23.8 (53.2 / 46.8)	24.0 (51.9 / 48.1)
75-84	5+ years ago (male / female)	83.1 (48.4 / 51.6)	82.4 (49.4 / 50.6)	82.6 (49.2 / 50.8)	83.4 (49.7 / 50.3)	83.2 (49.3 / 50.7)
	<5 years ago (male / female)	16.9 (40.9 / 59.1)	17.6 (42.6 / 57.4)	17.4 (43.2 / 56.8)	16.6 (39.3 / 60.7)	16.8 (39.9 / 60.1)
85+	5+ years ago (male / female)	82.8 (34.2 / 65.8)	83.9 (33.2 / 66.8)	86.3 (34.2 / 65.8)	85.0 (34.3 / 65.7)	86.5 (36.2 / 63.8)
	<5 years ago (male / female)	17.2 (29.6 / 70.4)	16.1 (31.2 / 68.8)	13.7 (32.7 / 67.3)	15.0 (36.9 / 63.1)	13.5 (37.2 / 62.8)

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

Figure 10 demonstrates that proximity to family or friends as a reason for moving has shown an increasing trend in the period 1995-2003 across all age groups. The figure shows that, in 2003, eight percent of the householders age 62 to 74 who moved in the past five years did so to be closer to family or friends. For those over the age of 75 the rate was even higher; over 14 percent for householders age 75 to 84, and close to 13 percent for those aged 85 and over.

We also looked at whether convenience of public transport and leisure activities are a significant determinant for relocation. We would expect that the importance of these two factors in relocation decision would increase with age. Somewhat surprisingly, only a very small percentage of individuals indicated that public transport or proximity to leisure activities were a determining factor for relocation. These results are presented in Appendix B.

Figure 10: Reasons for Moving – Proximity to Family or Friends (in percentages), 1995 – 2003

HH Age	Last Move	1995	1997	1999	2001	2003
<35	5+ years ago	0.0	0.4	0.2	1.0	1.0
	<5 years ago	6.7	7.9	8.5	8.9	9.2
35-44	5+ years ago	0.2	0.2	0.1	0.2	0.2
	<5 years ago	4.1	4.5	5.0	4.7	5.5
45-54	5+ years ago	0.1	0.0	0.1	0.2	0.3
	<5 years ago	3.7	4.4	4.7	5.9	5.6
55-61	5+ years ago	0.1	0.1	0.1	0.2	0.1
	<5 years ago	5.3	5.6	4.9	5.1	6.8
62-74	5+ years ago	0.1	0.0	0.0	0.0	0.2
	<5 years ago	7.2	8.3	8.3	7.4	7.9
75-84	5+ years ago	0.1	0.0	0.0	0.1	0.1
	<5 years ago	9.3	11.2	10.6	12.3	14.2
85+	5+ years ago	0.2	0.0	0.2	0.2	0.1
	<5 years ago	8.7	11.8	13.8	9.0	12.8

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

Projections of Elderly Housing Consumption

Figures 11 through 16 present our projections, by age cohort, for the years 2005 through 2030.

Figures 11 and 12 show that the elderly population age 62 to 74 is expected to be the fastest growing segment of the population over the next 25 years. This age cohort is expected to grow at an average annual rate of 2.6 percent. This average annual growth rate is impressive when it is compared to the average annual growth rate for the total population, which is one percent.

Figure 11: Projected Number of Householders (in thousands), 2005 – 2030

HH Age		2005	2010	2015	2020	2025	2030
<35	No. of HH	25,355	26,097	26,900	27,547	28,209	29,055
	% of Total	22.9	22.4	21.9	21.3	20.8	20.4
35-44	No. of HH	22,755	21,459	21,288	22,344	23,667	24,358
	% of Total	20.6	18.4	17.3	17.3	17.4	17.1
45-54	No. of HH	23,195	24,502	23,668	22,367	22,258	23,450
	% of Total	21.0	21.0	19.3	17.3	16.4	16.5
55-61	No. of HH	12,400	14,419	16,074	16,573	15,632	15,124
	% of Total	11.2	12.4	13.1	12.8	11.5	10.6
62-74	No. of HH	15,539	18,353	22,223	26,128	28,701	29,387
	% of Total	14.1	15.7	18.1	20.2	21.1	20.6
75-84	No. of HH	8,479	8,413	8,747	10,202	12,979	15,648
	% of Total	7.7	7.2	7.1	7.9	9.5	11.0
85+	No. of HH	2,862	3,423	3,814	4,064	4,478	5,368
	% of Total	2.6	2.9	3.1	3.1	3.3	3.8
Total		**110,585**	**116,666**	**122,714**	**129,225**	**135,924**	**142,390**

Note: HH – Householder
Source: ICF Consulting analysis of AHS data.

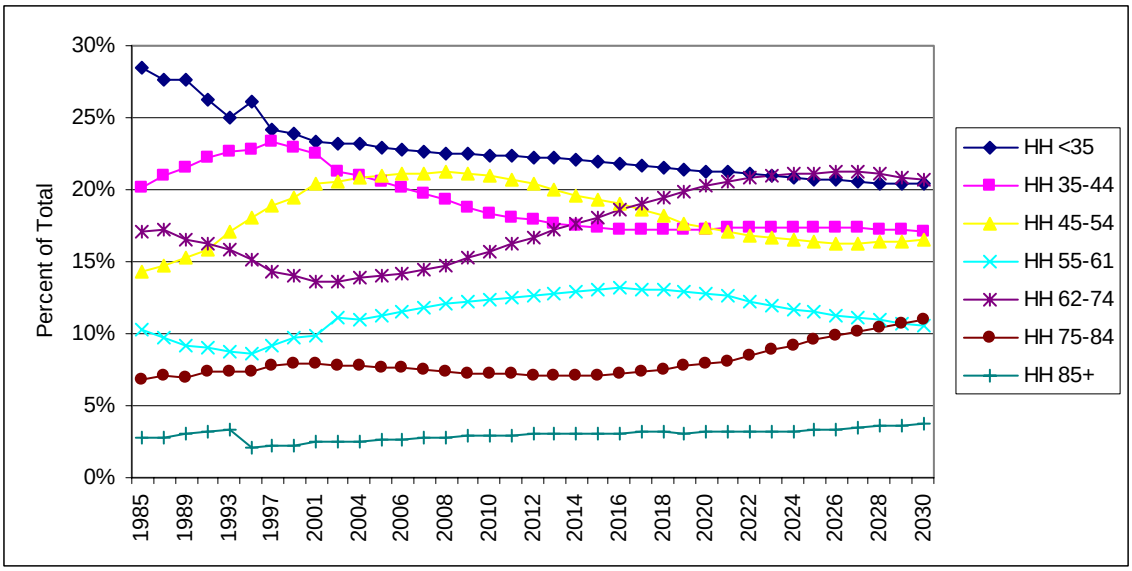
Figure 12: Historical and Projected Change in the Number of Householders

HH Age	Percentage Change in the Number Householders			
	1985-2005[1]	Average Annual Change (1985-2005)	2005-2030	Average Annual Change (2005-2030)
<35	-0.7	0.0	14.6	0.5
35-44	20.8	1.2	7.0	0.3
45-54	44.7	3.0	1.1	0.0
55-61	26.0	1.5	22.0	0.8
62-74	1.7	0.1	89.1	2.6
75-84	27.5	1.6	84.6	2.5
85+	12.6	0.7	87.5	2.5
Total	**19.1**	**1.1**	**28.8**	**1.0**

1) Data for 2004 and 2005 are estimates.
Note: HH – Householder
Source: ICF Consulting analysis of AHS data.

The Baby Boomer generation is approaching retirement age. Figure 13 highlights this with a trend line (see trend line with asterisks). By the 2020's, the elderly aged 62 to 74 will comprise more than 20 percent of the total households.

Figure 13: Historical and Projected Householders, 1985 – 2030



Source: ICF Consulting analysis of AHS data.

Figure 14 presents our projected tenure trends by age cohort. The projections are based on the assumption that recent trends will continue into the future. As was discussed in the Methodology, some adjustment to the growth rates was necessary, however, to ensure that the distribution within each age group does not exceed 100 percent. The same scaling factor was applied to the growth rates for all three tenure types within each age group.

Figure 14: Projected Tenure Status (in percentages), 2005 – 2030

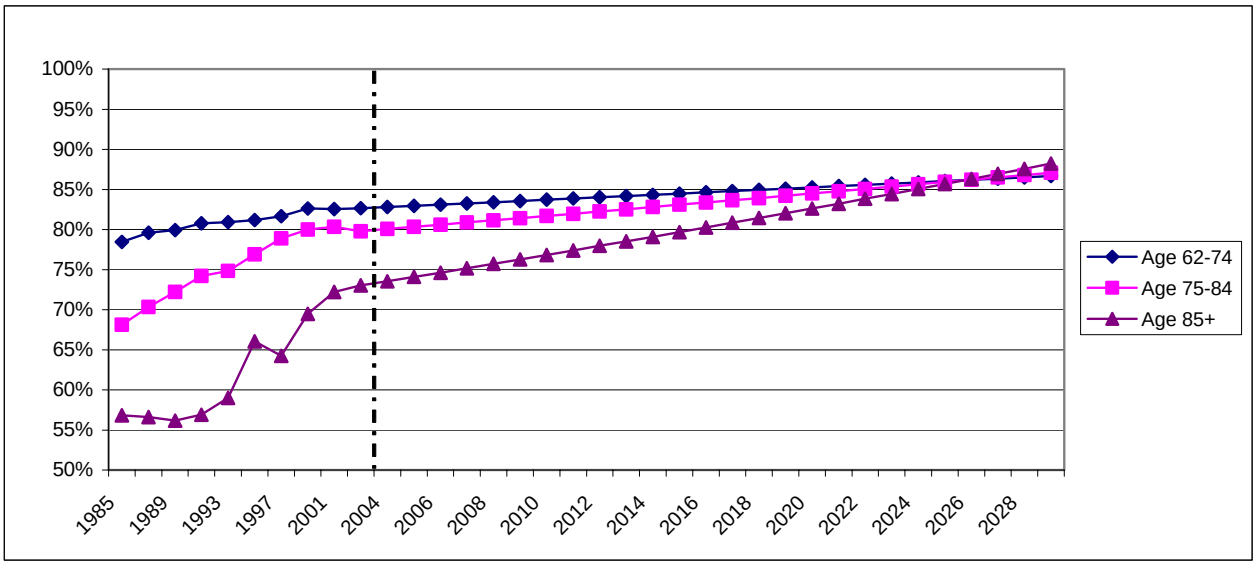
HH Age		2005	2010	2015	2020	2025	2030
<35	Owners	42.9	44.8	46.8	48.8	51.0	53.2
	Renters	54.9	53.0	51.1	49.4	47.6	46.0
	No-Cash Rent	2.0	1.6	1.3	1.0	0.8	0.7
35-44	Owners	68.7	69.0	70.6	72.1	73.7	75.4
	Renters	29.7	29.4	27.8	26.3	24.9	23.5
	No-Cash Rent	1.4	1.4	1.2	1.0	0.9	0.7
45-54	Owners	76.5	77.0	77.4	77.9	78.4	78.8
	Renters	22.2	21.8	21.3	20.9	20.4	20.0
	No-Cash Rent	1.3	1.2	1.2	1.2	1.2	1.1
55-61	Owners	80.7	81.5	82.2	83.1	83.9	84.7
	Renters	18.1	17.4	16.7	16.1	15.4	14.8
	No-Cash Rent	1.1	1.0	0.8	0.7	0.6	0.5
62-74	Owners	83.0	83.7	84.5	85.3	86.0	86.8
	Renters	15.7	15.0	14.3	13.7	13.1	12.5
	No-Cash Rent	1.3	1.1	1.0	0.8	0.7	0.6
75-84	Owners	80.3	81.7	83.1	84.5	85.9	87.4
	Renters	17.2	15.7	14.2	12.9	11.8	10.7
	No-Cash Rent	2.3	2.2	2.1	2.0	1.9	1.8
85+	Owners	74.1	76.8	79.7	82.6	85.7	88.9
	Renters	21.8	18.3	15.3	12.8	10.7	8.9
	No-Cash Rent	3.4	3.0	2.7	2.4	2.1	1.9

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

Figures 14 and 15 demonstrate that the ownership rate among the elderly will continue to increase over the next two decades. The ownership rate will reach 89 percent for those 85 years of age and older in 2030, compared with 74 percent in 2005. This is an expected trend, according to the literature, because the elderly are increasingly choosing to age in place, when they have that as a feasible option.

We should note, however, that the ownership rate for those aged 75 and older is likely slightly overstated for the period 2025 to 2030. It is unlikely that households will switch to ownership after age 75. Thus, we would expect ownership rate for those aged 75 and over to be slightly lower than for those aged 62 to 74.

Figure 15: Historical and Projected Ownership Rate among Elderly Householders, 1985 – 2030



Source: ICF Consulting analysis of AHS data.

Figure 16 presents projected unit type distribution, by age cohort. The projections are based on the assumption that recent trends for each unit type component (i.e., single-family detached, single-family attached, apartment, and manufactured) within each age group will continue into the foreseeable future. Again, we applied an adjustment to the growth rate in order to ensure that the distribution across unit types within each age group does not exceed 100 percent. The same scaling factor was applied to the growth rates for all four types of units within each age group.

Figure 16: Projected Unit Type (in percentages), 2005 – 2030

HH Age		2005	2010	2015	2020	2025	2030
<35	**SF Detached**	44.9	46.2	47.5	48.9	50.3	51.7
	SF Attached	7.6	7.6	7.6	7.6	7.6	7.6
	Apartment	41.4	40.5	39.7	38.9	38.1	37.4
	Manufactured	5.9	5.3	4.7	4.1	3.7	3.3
35-44	**SF Detached**	67.5	67.5	67.8	68.0	68.3	68.5
	SF Attached	5.8	5.9	6.4	6.9	7.5	8.1
	Apartment	20.0	19.7	18.5	17.3	16.2	15.1
	Manufactured	6.6	6.7	6.9	7.2	7.6	7.9
45-54	**SF Detached**	71.5	70.9	70.4	69.8	69.2	68.7
	SF Attached	4.9	4.9	4.8	4.7	4.6	4.6
	Apartment	17.1	16.7	16.4	16.1	15.8	15.5
	Manufactured	6.4	7.1	8.0	9.0	10.0	11.2
55-61	**SF Detached**	71.4	71.0	70.5	70.0	69.6	69.1
	SF Attached	6.3	7.4	8.7	10.2	11.9	13.9
	Apartment	15.8	14.9	14.0	13.2	12.4	11.7
	Manufactured	6.1	5.9	5.7	5.5	5.3	5.2
62-74	**SF Detached**	71.9	72.3	72.6	73.0	73.3	73.7
	SF Attached	5.2	5.2	5.3	5.3	5.4	5.4
	Apartment	14.9	13.4	12.0	10.8	9.7	8.8
	Manufactured	7.8	8.5	9.3	10.1	11.0	12.0
75-84	**SF Detached**	68.4	69.5	70.6	71.7	72.9	74.0
	SF Attached	5.7	5.9	6.2	6.4	6.6	6.9
	Apartment	18.8	16.8	15.0	13.4	12.0	10.8
	Manufactured	6.8	7.1	7.4	7.6	7.9	8.2
85+	**SF Detached**	63.6	65.9	68.3	70.8	73.4	76.1
	SF Attached	4.6	4.1	3.8	3.4	3.1	2.8
	Apartment	25.6	23.0	20.6	18.5	16.6	14.9
	Manufactured	5.9	5.9	6.0	6.0	6.0	6.0

Note: HH – Householders; SF – single-family.
Source: ICF Consulting analysis of AHS data.

Section 4: Conclusions

We know the Baby Boomer generation is approaching retirement age. The first cohort will turn 60 in 2006. We also know that by virtue of the Baby Boomers' sheer numbers, they have sufficient market clout to force large-scale changes in the housing stock.

As can be seen in Figure 17, there has not been a consistent growth rate associated with the housing stock over the past 20 years. Housing starts in this figure demonstrate a very real dynamism that in turn reflects both changing national, macro-economic as well local conditions and circumstances.

Figure 17: Housing Starts (in thousands), by Housing Category, 1975 – 2004

Year	Single-Family	Multi-Family	Manufact. Housing	Total Starts	Annual Change
1985	1,072	670	283	2,025	
1986	1,179	626	256	2,061	1.8%
1987	1,146	474	239	1,859	-9.8%
1988	1,081	407	224	1,712	-7.9%
1989	1,003	373	203	1,579	-7.8%
1990	895	298	195	1,388	-12.1%
1991	840	174	174	1,188	-14.4%
1992	1,030	170	212	1,412	18.9%
1993	1,126	162	243	1,531	8.4%
1994	1,198	256	291	1,745	14.0%
1995	1,076	278	319	1,673	-4.1%
1996	1,161	316	338	1,815	8.5%
1997	1,134	340	336	1,810	-0.3%
1998	1,271	346	374	1,991	10.0%
1999	1,302	338	338	1,978	-0.7%
2000	1,231	338	281	1,850	-6.5%
2001	1,273	329	196	1,798	-2.8%
2002	1,359	346	174	1,879	4.5%
2003	1,499	349	138	1,986	5.7%
2004	1,611	345	122	2,078	4.6%
Average	**1,174**	**347**	**247**	**1,768**	**0.5%**
Median	**1,154**	**339**	**241**	**1,813**	**-0.3%**

Source: Table A1, The State of the Nation's Housing 2005, Joint Center for Housing Studies, Harvard University.

The housing market's dynamic nature, both in terms of supply as well as demand, is an ongoing challenge for businesses, policymakers, and researchers.

The inherent uncertainty associated with long-term projections is why analysts typically do not extend analyses much beyond the "near" future, say out to the next 24 months. (For example, the Second Quarter, 2005 issue of the Mortgage Banker's Association Quarterly Report states that good analysts do not make long-term projections since there is so much variability in the market – e.g., the effect Katrina is having on the construction industry.)

Policymakers, however, cannot wait until they have perfect information to make decisions. They must make decisions with the best available data possible, especially when the policies will need to develop over time. Our research outlines in broad terms what changes are likely and how the population changes may encourage specific policy actions that in turn will help provide the desired market incentives.

Implications for Meeting Housing Demand of Elderly

As this report's projections have demonstrated, the population changes will be substantial, both in terms of size and composition. The construction industry and other components of the housing industry will, therefore, need to adjust to meet those demands. Although housing markets have 25 years to adjust, there may be a need for public policies to ensure that the markets adjust smoothly.

Developers and renovators have incentives to maximize financial returns, and they may find that this would be best achieved by creating or renovating "luxury" units. For example, developers may remain focused on the renovation of older buildings and creating luxury condominiums for young professionals or Baby Boomers purchasing second homes. Focusing on these units may create an effective gap for particular types of housing units that are not as profitable for developers. This would ignore multi-family and or affordable housing needs for the elderly – i.e., those who are at greatest risk in our society. For example, we project that in 2030 there will be 5.4 million householders aged 85 or older. This is an increase of almost *2.5 million households* over current numbers. To put this number in context, the AHS has relatively consistently been adding a similar number of households every two-year period for the entire nation. Further, this projected increase is for only *one* age cohort, and may well be a conservative projection if life expectancies continue to improve. Careful consideration is warranted on the amount and types of services consumed by older households (i.e., householders in excess of 85 years) since they may consume more services per capita than other age categories. This would mean that these households would have a disproportionate effect on service providers and service providers' budgets, whether local, state or federal.

Developers already create planned communities for specific market segments. With the increasing number of Baby Boomers, who expect to age in place, work longer in life, and remain active longer, developers will need to rethink what a standard community can be and to whom it would appeal. Features that are added to units to improve accessibility are also likely to appeal to the larger marketplace. These communities can be constructed to be appealing to both the young as well as the elderly – as a consequence of improved accessibility standards.

As presented in our report, the rate of elderly living in assisted housing has been relatively stable over the past decade. An increasing elderly population, however, means that, even if the rate of elderly living in assisted housing remains constant or even relatively stable, there will be a dramatic increase in the number of assisted housing units required for the burgeoning elderly population. Any unmet need may necessitate further federal involvement in assisted housing programs to meet the safety net needs of the elderly population.

Segments of the elderly population may be able to extend the time during which they can live independently or with limited or short-term assistance. The needs of this segment of the elderly population could be met by mechanisms as simple as programs that assist those seeking to remain independent and living in their own home. Aging in place is feasible only for those with the financial wherewithal to fund the necessary renovations (e.g., bathroom and kitchen upgrades). Those unable to independently afford such renovations from day-to-day accounts

may need access to innovative financial instruments. The provision of such instruments could provide societal benefits in that the elderly would not find it necessary to enter into expensive, long-term care facilities (that may ultimately need to be taxpayer funded) as long as possible.

AHS Data Issues and Associated Research Impacts

The current AHS survey instrument is comprised of questions focused on the current condition of a unit and its neighborhood. The AHS does not include questions that are *prospectively* focused. Examples would be the following:

- Do you see yourself living in this unit in 5, 10, or 15 years?
- If so, can you afford to renovate the unit to address accessibility needs?
- What renovations would be necessary?
- Will the neighborhood still address your needs (e.g., home delivery of groceries)?
- Do you have particular or specific housing requirements?
- Do you own or have access to a computer?[4]
- Are you computer literate? Do you use a computer to conduct daily activities – e.g., purchasing medications and other goods online?

There also may be benefits associated with creating identifiers to encourage the linking of datasets. This could provide researchers with deeper access to a number of data sources.

Next Steps

This report has presented our historical estimates as well as future projections of housing consumption. We suggest that additional research be conducted to extend and refine our analyses using the AHS. Many of our assumptions were simplifying ones and could warrant further review in order to develop more sophisticated or refined projection estimates.

Using the simple projections now available, policymakers can begin to be informed about market changes. The exact numbers may change but the general trends should be sufficient to begin generating policy discussions. There is a range of activities that will need to be conducted to fully address the coming demographic changes. There will not be a single answer – e.g., a new federal agency for the aged – but rather a collection of policy measures that can actively address changing demographic and market conditions.

[4] It is reasonable to expect that access to computers and the ability to use them will be increasingly important in the future. For those with limited mobility and or other health concerns, computers may serve as an important link to the markets (e.g., grocery stores, pharmacies). This is why it will be important to add such questions to future versions of the AHS survey.

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Appendix A. Papers Reviewed but Not Cited

Schafer, R. 1999. Housing America's Elderly Population: Joint Center for Housing Studies, Harvard University.

> Schafer analyzes the housing choices of America's elderly using data from the 1993 Assets and Health Dynamics Among the Oldest-Old (AHEAD) survey. The five housing choices that Schafer includes are assisted living in 60-plus communities, 60-plus communities without assistance, shared housing, supported housing, and conventional housing.
>
> The author finds that, on average, 75 percent of the elderly people live in conventional housing and that this does not vary across different regions or income levels, but does vary among educational achievement and net worth. Assisted living is particularly uncommon, even among people over 85 (of which only 7 to 10 percent choose this option). Schafer also analyzes data that measure difficulty with activities of daily living (ADL). People with a lower ADL percentage (and thus have more difficulty) are more likely to live in shared housing but not assisted housing. Finally, he finds that 25 percent of elderly people have housing expenditures of equaling more than 30 percent of their income and 75 percent of those in assisted communities pay over half of their income towards housing.

Myers, D. and Vidaurri, L. 1996. Real Demographics of Housing Demand in the United States. Reprinted from The Lusk Review for Real Estate Development and Urban Transformation. Volume II-Number 1.

> Myers and Vidaurri discuss the argument between "cohort analysts" who foresee continued and rising housing demand by the Baby Boomer generation and traditionalists who foresee sharp declines in demand now that the Baby Boomer generation is beginning to pass age 45.With support from Census Bureau population data, the authors track cohort trajectories of ownership of large homes (those with seven rooms or more) in relation to 1980 and 1990 cross-sectional data. The latter (younger) cohort was found to demand larger homes in higher proportions.
>
> Thus, demand for large homes should be sustained, which contradicts the conclusions of traditionalists who do not use cohort analysis. Likewise, the analysis dictates that mean housing values will remain high despite an aging population. Myers and Vidaurri conclude that cohort analysis is appropriate in projecting future housing consumption.

Schafer, R. 1999. Determinants of the Living Arrangements of the Elderly. Joint Center for Housing Studies, Harvard University.

Similarly to his other article, Schafer uses 1993 AHEAD data to analyze elderly housing choices. In this report, he uses a regression model with race, gender, metro location, region, tenure, age, marital status, education level, number of ADLs, number of non-resident children 18 or older, number of non-resident children within ten miles, household income, and net worth as independent variables.

Schafer finds that assisted communities are favored by older households and when there are no children living within ten miles but are unaffected by the presence of difficulties with activities of daily living (ADL) or instrumental activities of daily living (IADL). Shared housing is favored by households who have difficulties with activities of daily living and by households without any non-resident children. Supported housing is also favored by those who have difficulties with activities of daily living.

Education, income, net worth, and gender are determined to be relatively insignificant in their regression model.

McCarthy, L. and Kim, S. 2005. The Aging Baby Boomers: Current and Future Metropolitan Distributions and Housing Policy Implications. University of Wisconsin – Milwaukee.

McCarthy and Kim identify the changing demographic and housing characteristics of elderly people within and across U.S. metropolitan areas using 1990 and 2000 U.S. Census Bureau data. They then consider some of the underlying factors driving the change with respect to housing choice and demand, using regression analysis for the years 1990 and 2000.

The explanatory variables include region, minority proportion of the population, median household income, log of population, median home values, and heating and cooling degree days. All variables included in the model were found to be significant.

The authors next project the extent of a “gap” (shortage) in elderly housing, healthcare, and community support.

Finally, they assess the implications for federal housing policies and local government zoning regulations of the growing elderly population, the extent that the elderly like to “age in place”, and increased demands on public expenditure given growing government budget constraints.

The report concludes that HUD needs to continue to monitor local housing costs across the U.S. so that its programs for homeowners take into account variations in housing costs among the more and less expensive metropolitan housing markets. HUD also must continue to respond to the increasing demand for funds for home modification assistance for elderly homeowners who desire to “age in place.”

Bodaken, M. and Brown, K. 2003. Preserving and Improving Subsidized Rental Housing Stock Serving Older Persons. National Housing Trust.

Bodaken and Brown emphasize preserving and improving existing senior affordable housing rather than producing new housing. The report aims to provide and summarize specific data on the existing subsidized elderly rental housing stock in the U.S. under Section 202, Section 515, etc., and then make policy recommendations to HUD. The data are provided by the National Housing Trust, which uses several HUD sources, and are not independently verified.

The major themes of the recommended policies include setting aside existing resources for preservation of housing, increasing the flexibility of existing HUD tools for preservation, and fully funding programs that match state and local efforts to preserve primarily elderly, subsidized housing.

Myers, D. and Gearin, E. 2001. Current Preference and Future Demand for Denser Residential Environments. Housing Policy Debate, Vol. 12 (4).

Myers and Gearin (2001) explore survey evidence on housing preferences to assess the future demand for denser, easily walkable residential environments in the United States as a whole.

The authors review the results from several surveys, including the 1996 NAHB survey, the 1998 American LIVES survey, and 1998 Vermonter Attitude on Sprawl survey. The authors forecast future demand by applying survey results to demographic trends derived from U.S. Census Bureau data.

The authors find that the variation in housing density preferences are closely related to age, with preferences for locations in close proximity to shopping areas and public transportation increasing after age 45. Based on the projections of future housing demand and supply, the authors conclude that the demand for centrally located town houses, preferred by older households, will exceed the supply by 2010.

With respect to data availability, the authors note that “[a]lthough hard data on actual occupancy of different housing types can be gathered from the American Housing Survey or the Census, “walkable” dimension is not clearly measured.”

Appendix B. Supporting Figures

On the following pages are supplemental figures. These figures are considered informative and do provide many details on our research process, including highlighting output from a variety of programs and cross-tabulations.

The figures included in Appendix B are for referral and general information purposes only. None of these figures are individually discussed, in contrast to the figures included in the main body of the report.

Figure B.1: Distribution of Households by Monthly Housing Costs (in percentages), 1995 – 2003

HH Age	Monthly Expense ($)	1995	1997	1999	2001	2003
<35	0-999	81.8	84.3	80.9	73.9	71.1
	1,000-1,999	12.3	14.3	15.9	21.8	23.6
	2,000-2,999	1.0	1.4	2.6	3.5	4.2
	3,000-3,999	0.1	0.1	0.5	0.5	0.5
	4,000-4,999	-	-	0.1	0.3	0.5
	5,000-5,999	-	-	-	0.1	0.1
	6,000-6,999	-	-	-	-	-
35-44	0-999	74.3	72.1	67.7	60.4	58.1
	1,000-1,999	21.5	23.5	26.3	30.8	31.2
	2,000-2,999	3.6	4.0	4.0	6.3	8.0
	3,000-3,999	0.6	0.5	1.3	1.3	1.1
	4,000-4,999	-	-	0.4	1.0	1.2
	5,000-5,999	-	-	0.2	0.2	0.3
	6,000-6,999	-	-	-	-	0.1
	7,000-7,999	-	-	-	-	-
	8,000-8,999	-	-	-	-	-
	9,000-9,999	-	-	-	-	-
	10,000-19,999	-	-	-	-	-
45-54	0-999	75.1	74.4	69.9	62.9	60.7
	1,000-1,999	20.7	21.1	23.7	28.3	29.2
	2,000-2,999	3.5	3.9	4.0	6.0	7.1
	3,000-3,999	0.7	0.5	1.6	1.3	1.1
	4,000-4,999	-	-	0.4	1.0	1.3
	5,000-5,999	-	-	0.3	0.4	0.5
	6,000-6,999	-	-	-	0.1	0.1
	7,000-7,999	-	-	-	-	-
	8,000-8,999	-	-	-	-	-
	9,000-9,999	-	-	-	-	-
	10,000-19,999	-	-	-	-	-
55-61	0-999	84.8	81.9	77.2	72.0	68.2
	1,000-1,999	12.5	15.0	18.1	22.0	23.7
	2,000-2,999	2.3	3.0	3.2	4.1	5.6
	3,000-3,999	0.4	0.2	1.0	1.0	1.1
	4,000-4,999	-	-	0.2	0.6	0.9
	5,000-5,999	-	-	0.1	0.3	0.4
	6,000-6,999	-	-	-	-	0.1
	7,000-7,999	-	-	-	-	-

Figure B.1: Distribution of Households by Monthly Housing Costs (in percentages), 1995 – 2003

HH Age	Monthly Expense ($)	1995	1997	1999	2001	2003
62-74	0-999	93.7	92.4	88.8	84.5	82.8
	1,000-1,999	5.2	6.6	9.0	12.5	13.3
	2,000-2,999	0.9	0.9	1.5	2.1	2.6
	3,000-3,999	0.1	0.1	0.4	0.5	0.4
	4,000-4,999	-	-	0.1	0.3	0.5
	5,000-5,999	-	-	0.1	0.1	0.2
	6,000-6,999	-	-	-	-	0.1
	7,000-7,999	-	-	-	-	-
	8,000-8,999	-	-	-	-	-
	9,000-9,999	-	-	-	-	-
75-84	0-999	97.2	95.7	93.6	92.1	91.2
	1,000-1,999	2.4	3.8	4.8	6.6	6.9
	2,000-2,999	0.3	0.4	1.5	1.0	1.5
	3,000-3,999	0.1	0.1	0.1	0.1	0.1
	4,000-4,999	-	-	-	0.1	0.1
	5,000-5,999	-	-	-	0.1	-
	6,000-6,999	-	-	-	-	0.1
85+	0-999	95.9	95.0	93.9	91.2	92.0
	1,000-1,999	3.8	4.9	4.4	5.9	5.9
	2,000-2,999	0.2	-	1.8	2.6	1.9
	3,000-3,999	0.1	0.1	-	-	0.2
	4,000-4,999	-	-	-	0.2	-
	5,000-5,999	-	-	-	0.1	-

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

Figure B.2: Distribution of Households by Location (in percentages), 1997 – 2003

HH Age	Location	1997	1999	2001	2003
<35	Central City of MSA	36.8	37.7	37.5	38.0
	Inside MSA (not in central city – urban)	32.4	32.0	32.8	32.5
	Inside MSA (not in central city – rural)	11.5	10.6	11.2	11.0
	Outside MSA, urban	8.4	8.1	8.0	7.7
	Outside MSA, rural	11.0	11.6	10.5	10.8
35-44	Central City of MSA	30.9	30.1	28.9	28.0
	Inside MSA (not in central city – urban)	34.1	35.0	35.8	36.0
	Inside MSA (not in central city – rural)	15.1	15.6	15.9	16.2
	Outside MSA, urban	6.5	6.2	6.2	6.4
	Outside MSA, rural	13.4	13.0	13.3	13.4
45-54	Central City of MSA	27.9	27.5	27.4	27.5
	Inside MSA (not in central city – urban)	34.3	34.3	34.2	34.4
	Inside MSA (not in central city – rural)	16.2	16.2	16.3	15.8
	Outside MSA, urban	6.8	6.8	6.9	7.3
	Outside MSA, rural	14.8	15.2	15.2	15.0
55-61	Central City of MSA	26.9	25.7	25.3	25.7
	Inside MSA (not in central city – urban)	33.5	33.8	33.7	33.5
	Inside MSA (not in central city – rural)	15.1	16.3	16.6	17.0
	Outside MSA, urban	7.0	6.6	7.3	6.8
	Outside MSA, rural	17.5	17.5	17.2	17.0
62-74	Central City of MSA	27.5	26.7	26.2	25.1
	Inside MSA (not in central city – urban)	32.2	31.6	32.6	31.9
	Inside MSA (not in central city – rural)	14.0	14.7	14.7	16.1
	Outside MSA, urban	9.1	9.1	7.8	7.9
	Outside MSA, rural	17.3	18.0	18.8	18.9
75-84	Central City of MSA	28.0	27.4	26.8	26.6
	Inside MSA (not in central city – urban)	33.6	33.9	33.9	33.8
	Inside MSA (not in central city – rural)	11.4	11.5	12.2	12.3
	Outside MSA, urban	10.5	10.2	10.3	9.4
	Outside MSA, rural	16.6	17.0	16.8	17.8
85+	Central City of MSA	32.0	29.3	29.4	27.3
	Inside MSA (not in central city – urban)	30.1	32.0	32.7	34.8
	Inside MSA (not in central city – rural)	9.9	10.5	10.9	11.7
	Outside MSA, urban	13.8	13.7	11.8	11.9
	Outside MSA, rural	14.1	14.6	15.2	14.3

Note: HH – Householders.
Source: ICF Consulting analysis of AHS data.

Figure B.3: Reasons for Moving – Change from Owner to Renter or Renter to Owner (in percentages), 1995 – 2003

HH Age	Last Move	1995	1997	1999	2001	2003
<35	**< 5 years ago**	4.5	3.9	4.0	3.9	3.8
35-44	**< 5 years ago**	4.4	3.6	3.4	3.1	2.6
45-54	**< 5 years ago**	3.5	2.9	2.9	2.6	2.4
55-61	**< 5 years ago**	2.8	2.9	1.8	2.5	1.5
62-74	**< 5 years ago**	1.3	1.0	1.9	1.1	1.1
75-84	**< 5 years ago**	1.1	1.6	0.9	1.2	1.6
85+	**< 5 years ago**	2.0	2.0	1.7	0.6	0.7

Notes: HH – Householders.
Rates are calculated as a percentage of all householders in the same age group who moved in the past five years.
Source: ICF Consulting analysis of AHS data.

Figure B.4: Reasons for Moving – Wanted Lower Rent or Less Expensive House to Maintain (in percentages), 1995 – 2003

HH Age	Last Move	1995	1997	1999	2001	2003
<35	**< 5 years ago**	2.2	2.4	1.9	2.5	2.6
35-44	**< 5 years ago**	1.8	1.5	1.6	1.5	1.7
45-54	**< 5 years ago**	1.9	1.5	1.8	1.5	2.2
55-61	**< 5 years ago**	2.5	2.0	2.2	2.5	1.8
62-74	**< 5 years ago**	3.3	2.2	3.0	2.8	1.8
75-84	**< 5 years ago**	3.1	4.1	1.5	2.0	2.9
85+	**< 5 years ago**	1.8	2.9	2.8	1.9	3.2

Notes: HH – Householders.
Rates are calculated as a percentage of all householders in the same age group who moved in the past five years.
Source: ICF Consulting analysis of AHS data.

Figure B.5: Reasons for Moving – Convenience of Leisure Activities (in percentages), 1995 – 2003

HH Age	Last Move	1995	1997	1999	2001	2003
<35	**<5 years ago**	0.6	0.9	1.0	1.1	1.3
35-44	**<5 years ago**	0.4	0.5	0.7	0.9	0.8
45-54	**<5 years ago**	0.3	0.8	0.6	1.1	0.9
55-61	**<5 years ago**	0.5	0.9	1.0	1.2	1.3
62-74	**<5 years ago**	1.6	0.9	1.9	1.9	0.8
75-84	**<5 years ago**	0.3	1.0	1.6	1.1	1.0
85+	**<5 years ago**	0.0	1.3	1.4	1.5	1.6

Notes: HH – Householders.
Rates are calculated as a percentage of all householders in the same age group who moved in the past five years.
The rates for householders who moved more than five years ago were close to zero across all age groups and years.
Source: ICF Consulting analysis of AHS data.

Figure B.6: Reasons for Moving – Convenience of Public Transport (in percentages), 1995 – 2003

HH Age	Last Move	1995	1997	1999	2001	2003
<35	**<5 years ago**	0.5	0.8	0.8	0.8	0.6
35-44	**<5 years ago**	0.4	0.4	0.4	0.5	0.7
45-54	**<5 years ago**	0.4	0.6	0.4	0.4	0.6
55-61	**<5 years ago**	1.0	0.4	0.5	0.5	0.4
62-74	**<5 years ago**	0.5	0.1	0.5	0.9	0.6
75-84	**<5 years ago**	0.2	0.7	0.5	0.2	0.2
85+	**<5 years ago**	0.0	0.0	0.0	0.5	0.0

Notes: HH – Householders.
Rates are calculated as a percentage of all householders in the same age group who moved in the past five years.
The rates for householders who moved more than five years ago were close to zero across all age groups and years.
Source: ICF Consulting analysis of AHS data.

Figure B.7: Structure Choice Before and After the Move (in percentages), 1995 – 2003

HH Age	Last Move	Structure	1995	1997	1999	2001	2003
<35	<5 years ago	Same	17.0	14.4	15.2	15.9	15.3
		Smaller	16.6	15.5	14.0	13.7	13.5
		Larger	14.1	12.7	12.8	13.0	11.5
35-44	<5 years ago	Same	23.0	18.3	18.5	17.5	18.4
		Smaller	10.0	7.5	7.2	7.0	7.0
		Larger	11.3	9.3	9.3	9.1	8.7
45-54	<5 years ago	Same	23.9	18.9	19.4	17.5	18.0
		Smaller	9.8	8.9	7.2	8.0	7.8
		Larger	9.9	6.5	7.2	6.4	6.6
55-61	<5 years ago	Same	20.7	17.4	18.2	18.7	17.3
		Smaller	11.9	9.2	7.5	8.7	6.9
		Larger	9.8	5.7	6.4	5.3	5.7
62-74	<5 years ago	Same	21.5	14.6	5.1	19.0	16.4
		Smaller	10.9	8.3	4.5	6.5	8.7
		Larger	7.5	4.6	4.7	4.5	4.5
75-84	<5 years ago	Same	12.1	11.7	11.0	11.5	12.8
		Smaller	14.5	13.5	11.5	9.7	12.4
		Larger	10.5	3.1	5.2	3.6	4.5
85+	<5 years ago	Same	13.4	4.6	5.1	7.0	2.8
		Smaller	14.8	12.2	14.3	16.6	12.6
		Larger	7.6	5.0	7.1	2.6	5.5

Notes: HH – Householders.
Rates within the age group do not add up to 100 percent due to a large number of missing observations on previous housing unit.
Source: ICF Consulting analysis of AHS data.