### Joint Center for Housing Studies Harvard University

## Housing Turnover by Older Owners: Implications for Home Improvement Spending as Baby Boomers Age into Retirement

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#### **Abstract**

As baby boomers relocate or downsize in retirement, or simply die off, they will release a very large amount of housing onto the market. Older homeowners (age 55+) accounted for about one third of housing turnover in the U.S. between 1997 and 2007, and this share will increase as the large baby boom generation continues to age into their retirement years. This inevitable turnover of housing units will have considerable implications for home improvement spending as the new occupants update or reconfigure homes to fit their needs. This paper examines how the turnover in housing by the cohort immediately preceding the baby boom generation might lend insight into the housing and home improvement markets over the next two decades. The experience of these older cohorts provides insight into the characteristics of housing likely to turn over in the coming decades, as well as the types of households likely to purchase them. Our research finds that older sellers generally live in their home for many years and they sell relatively older housing stock to much younger buyers, which generates significant levels of home improvement spending after the sale. Yet, a declining mobility rate in recent years also suggests more baby boomers may choose to stay in their homes and age in place. Whether aging in place implies significant upgrading to their homes to accommodate their changing needs remains to be seen. Certainly the housing choices made by baby boomers as they age into retirement years, and as the housing market begins to improve, will dramatically affect the size and composition of home improvement spending in the years and decades ahead.

#### I. Introduction

The oldest baby boomers (born between 1946 and 1965) began to turn 65 in 2010. As they relocate in retirement, downsize and choose better located or configured housing for their changing needs, or simply die off, they will release a very large amount of housing onto the market. What kind of housing will be turned over to future buyers in terms of the age of the housing, type of structures, and condition? Who will buy this housing? How much remodeling and repair activity will take place before the sale and how much in the years immediately after the sale?

The answers to these questions lie in the future, but to begin to anticipate the answers we will examine housing turnover that has taken place between 1997 and 2007 among the older cohorts making these life-course transitions immediately ahead of the baby boomers. We show that older sellers during this 10-year period have generally lived in their home for many years, they vacate structures that tend to be older, they sell to buyers who are generally much younger than themselves, and the housing units being turned over undergo considerable renovation and repair activity immediately after the sale.

Similar findings have been presented in an earlier Joint Center report released a decade ago, <sup>1</sup> and the results should resonate with many of us who have aging relatives who moved out of their homes late in life. The research presented here, however, expands the earlier findings and summarizes what we know about sales by the elderly over a longer time period. It is more extensive than previous findings in the analysis of remodeling behavior of housing turned over by the elderly, and attempts to anticipate likely differences that exist between the recent experiences of these pre-boomer elderly and the circumstances that boomers will face as they turn over their housing during the coming decades.

This paper broadly addresses the question of how the aging of the baby boom generation is likely to shape the housing and home improvement markets over the next two decades. As they approach their retirement years, some of these households will select other housing options, thereby freeing up their units for other households. Others

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<sup>&</sup>lt;sup>1</sup> See "Improving America's Housing: Remodeling Homes for Changing Households," Joint Center for Housing Studies of Harvard University, 2001.

may choose to stay in their current units, which has equally important implications for housing choices for our population. Looking historically at the age and location of units turned over by households age 55 and over, as well as the characteristics of purchasing households, helps provide a sense of what types of homes are likely to turnover in the next couple of decades and the types of households likely to purchase them. Preparing a home for sale coupled with changes to a home undertaken by a purchasing household account for an important segment of the home improvement market. Moreover, the duration of occupancy of the previous owner, as well as the age and location of the home are important factors in determining likely home improvement activity.

#### II. Data and Methodology

The biennial American Housing Survey (AHS) conducted by the U.S. Census Bureau for the Department of Housing and Urban Development is the largest, regular national housing survey in the United States. The AHS provides a wealth of housing and householder statistics including very detailed data on homeowner spending for home improvements. A key feature of the AHS is that it is a longitudinal survey and has had the same sample of housing units since 1985, which allows data users to link surveys in order to see how homes and households change over the years. By linking the owner-occupied housing units between consecutive surveys, it is possible to analyze remodeling activity that occurred both before and after the sale of the unit. With the 1995 survey, questions pertaining to home improvements were largely revamped and expanded to include more detail on the types of projects homeowners undertake, how much they spend per project and whether the project was installed professionally or as a 'do-it-yourself.' All of these elements make the AHS an ideal data source for understanding housing turnover and remodeling activity.

By linking owner-occupied housing units in the seven AHS public-use files between 1995 and 2007, it is possible to identify units that underwent one or more changes in ownership during this time period, and to then analyze the demographic and socioeconomic characteristics of these sellers and buyers, as well as the type and amount of remodeling activity that was done both before and after the sale. For every pair of consecutive surveys from 1995-2007, buyers and sellers were identified using the following procedures. First, recent movers were identified using the DATE, HHMOVE and HHMOVM variables, where DATE provides the date of the survey interview, and HHMOVE and HHMOVM indicate, respectively, the year and month the current householder moved into the housing unit. If the householder moved into the unit in a month after the interview date of the *previous* survey of the unit then we consider the householder to be a recent mover, or "buyer." By definition then, the householder that was interviewed during the previous survey of the unit is the previous owner, or "seller."<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Using this methodology resulted in a small share of cases of "unknown" mover status for those owners who moved into the unit during the same month as the previous survey interview. Since it was not possible to know for certain whether the new owners or the previous owners were interviewed in the previous

The survey interview date and householder move-in date are also used to precisely calculate the amount of time a recent mover has been living in their housing unit at the time they are surveyed for the AHS, which is especially important for comparing the remodeling activity of recent buyers and sellers. Recent buyers tend to have lived in their unit for less than two years at the time they are surveyed for the AHS, while most sellers have been in their homes for many years and can therefore report remodeling activity for the full 24 months (approximately) since the previous survey of their unit. For this reason, "average annual" remodeling expenditures of buyers need to be calculated based on the number of months they have lived in the unit in order to make a fair comparison to the recent spending of sellers. To make this correction, we examine the relationship between total remodeling spending and number of months a buyer in three broad age groups occupied the unit prior to the survey. We use this relationship to predict the average likely spending of a buyer after 21-23 months (the same average number of months that sellers have been in residence since the previous survey of the unit), and use this prediction to generate average annual expenditures for the two years preceding each AHS survey. <sup>3</sup> The methodology for estimating average annual recent buyer remodeling expenditures is described in Appendix A.

Finally, an important issue that arises when tabulating data from linked AHS surveys is which household weights to apply to the survey data, where each survey includes a WEIGHT variable that is used to sum observations to national household counts for that survey year. In this research sellers and buyers are weighted using the weights provided for the year in which they were surveyed. For example, the number and share of sellers in 2005 by age of buyers in 2007 is weighted using the sellers' weights in 2005 since the output of this tabulation is counts of sellers in 2005.

survey, households of unknown mover status were simply pooled with the non-mover households and were thus excluded from the housing turnover analysis.

<sup>&</sup>lt;sup>3</sup> It is also important to note that the AHS systematically misses any remodeling activity that is undertaken by the seller after being surveyed and before the buyer takes possession of the home. This is a nontrivial limitation to the AHS since a great deal of remodeling tends to occur when a house is being prepared for sale, possibly while the house is on the market to improve its salability, and even after an offer is accepted as a condition of closing.

#### **III. Overview of Recent Housing Turnover**

Between 1997 and 2007 approximately 24.5 million owner occupied homes are identified in the six American Housing Surveys taken over that period where a buyer purchased an "existing" home that could be linked with an owner (seller) who headed the household in the same unit during the previous survey, approximately two years earlier. <sup>4</sup> Not surprisingly, buyers of existing housing tend to be younger and sellers tend to be older (Figure 1). Indeed, the average age of sellers between 1995 and 2005 is 47.9 years compared to 40.4 years for the average buyer.

Figure 1: Relatively More Sellers are Older and More Buyers are Younger

Distribution of sellers and buyers by age, 1995-2007 35% 30% 25% 20% 15% 10% 5% Under 25 25-34 65-74 75+ 35-44 45-54 55-64 ■ Sellers Buyers

Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

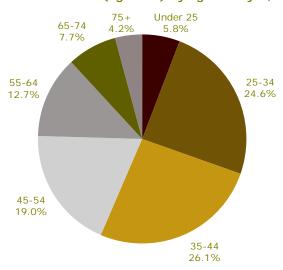
Of the 24.5 million owner-occupant sellers between 1997 and 2007, approximately 7.6 million, or almost one third, were over the age of 55 at the time of sale. The focus of this research is on the experience of these "older" sellers who made housing transitions just ahead of the younger baby boomer cohorts. As seen in Figure 2, sales by older sellers are heavily distributed toward buyers younger than themselves. About three-fourths of sales by older homeowners were transacted with buyers younger

<sup>4</sup> This is only a subset of the possible options from his survey. The remainder of buyers purchased a newly built home, a home that was rented or vacant or couldn't be interviewed during the previous survey, or a home that was new to the survey sample.

than age 55. Buyers under the age of 45 purchased fully 57 percent of homes by older sellers, and the median age of these under-45 buyers was about 33 years old. The median age of over-55 sellers was about 68 years, making the average under-45 buyer about 35 years younger than the average over-55 seller. To be sure, some sales by older buyers living in age-restricted retirement communities cannot be purchased by buyers under the age of 55. Many other retirement communities where elderly congregate, while not age-restricted, are nonetheless eschewed by younger buyers. Still, less than 25 percent of homes sold between 1997 and 2007 by sellers age 55 and older were purchased by buyers in the same age range.

Figure 2: Majority of Housing Turned Over by Older Sellers Goes to Younger Buyers

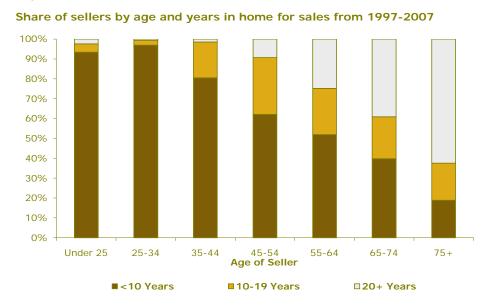
Share of sales of older sellers (age 55+) by age of buyer, 1997-2007



Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

Overall, the age of the owner-occupied housing stock has been trending up steadily over the past decade. The median age of the stock was 29 years in 1997 and increased to 32 years by 2007. Aging of the stock has implications for remodeling activity since occupants of older homes typically have greater home improvement expenditures, as does the fact that older sellers also tend to have lived in the unit they sold for many years (Figure 3).

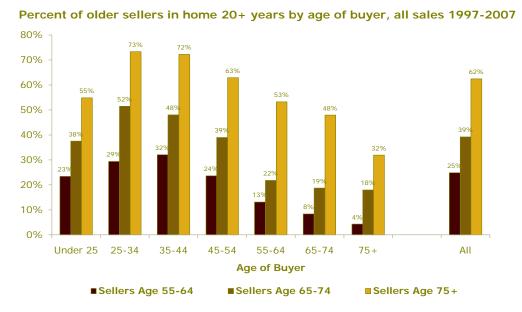
Figure 3: Older Sellers Have Lived in Home for Many Years



Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

Fully 62 percent of sellers over the age of 75 were living in their unit for 20 years or more, while this number for 65-74 year olds was 39 percent and for 55-64 year olds was approximately 25 percent. When linked with the age of the buyer of these units, sellers age 75+ who have lived in their units 20 years or more rises to 73 percent when buyers are age 25-34 and 72 percent when buyers are age 35-44. Long-term occupancy rates by sellers age 55-64 and 65-74 are also higher than average when the buyers are young (Figure 4).

Figure 4: Younger Buyers are the Most Likely to Buy from Older Sellers Who Have Been Living in their Homes for 20 Years or More

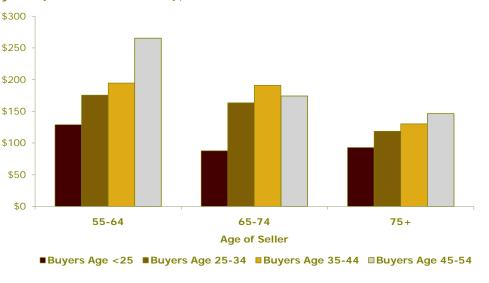


Source: JCHS tabulations of the 1995-2007 American Housing Surveys

Presumably, the age and condition of these units make them more affordable to younger buyers, and perhaps the units are located in places where younger buyers desire to or are willing to live. Figure 5 shows that, for sellers who have been in their homes for at least 20 years, the older the seller the lower the value of the home. This relationship holds across most age groups of buyers. Figure 5 uses buyers' valuations as the most recent, but a very similar pattern is obtained when sellers' valuations of the same units were obtained two-years earlier (data not shown).

Figure 5: Younger Buyers Purchase Lower-Valued Homes from Older Sellers

Median buyer-reported value of homes purchased from sellers in unit 20+ years (Thousands of 2007\$), all sales 1997-2007



Source: JCHS tabulations of the 1995-2007 American Housing Surveys

Housing turnover is determined by household mobility rates, and mobility has been declining for many years now. One reason for the downward trend in mobility is the aging population, since older households are generally less mobile than their younger counterparts. Additionally, we've seen a general trending up of the homeownership rate over the past few decades, and owners tend to be less mobile than renters. The growth in multi-earner households has also slowed mobility rates, as has the increase in commuting that allows a change in job without requiring a change in residence. The 2008-2009 national economic recession further accelerated the downward trend in mobility because so many owners were left underwater (or nearly so) on their mortgages, making it difficult for households to move. Mobility rates among older owners posted the sharpest drop (Figure 6).

Figure 6: The Mobility Rate of Older Homeowners Fell the Most with Housing Downturn

Percent change in homeowner mobility rates by age, 2005-2009



Note: Mobility rates are defined as the share of householders reporting having moved within the previous 12 months. Source: US Census Bureau, Current Population Survey.

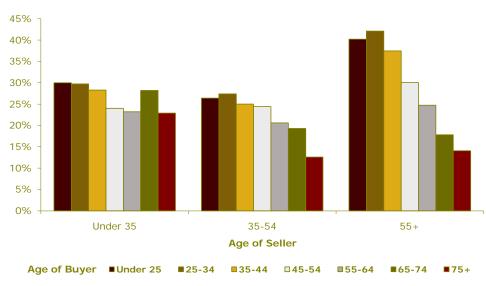
Many seniors who planned to retire and move to a different home deferred that decision after the recent financial crisis took a toll on both the equity in their homes and their retirement accounts. Still, fewer seniors than younger owners had their home equity completely wiped out because most had owned their homes for many years and had paid down significant amounts of debt. Thus, many older owners still stand to cash out equity if they sell their homes, just not as much as they thought they might before the drop in prices. It will take time for older owners who lost equity to adjust to the new realities about the values of their homes. When baby boomers do eventually turn over their housing to a younger generation, they will likely have extended their tenure in the home by a few more years.

#### IV. Characteristics of Housing Sold by Older Sellers

Knowing the kind of housing turned over to younger buyers by older sellers in terms of the age of the housing (a proxy for condition) and type of structure should help inform how much remodeling and repair activity might take place before the sale and in the years immediately after the sale. Buyers of pre-1960 built housing sold by older sellers were most likely to be between the ages of 25 and 44, and the older the seller, the higher the share of older vintage units changing hands (Figures 7 and 8). Generally, the younger the buyer of these homes, the more likely that they purchased a home built before 1960. Homes sold by sellers under the age of 35 are only slightly more likely to be older homes bought by younger buyers, and for middle-age sellers, the pattern is broadly similar. For older sellers, however, the pattern is much stronger. When the seller was age 75+ and the buyer was under age 45, between 55 and 60 percent the homes changing hands was built before 1960.

Figure 7: Older Sellers Sell Older Housing to Younger Buyers

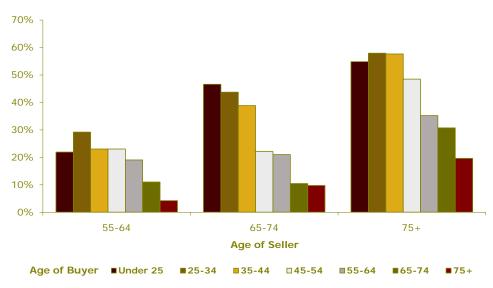
Share of purchases built before 1960



Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

Figure 8: Share of Older Homes Sold to Younger Buyers Increases Greatly with Seller Age

Share of purchases built before 1960



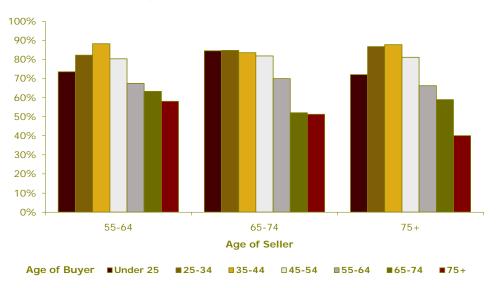
Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

Looking not at the share of sales that were built before 1960, but at the share of 1960 built homes sold to younger buyers, the patterns are even more skewed. One third of all units sold between 1997 and 2007 by sellers age 55+ were built before 1960. Buyers under the age of 45 purchased two thirds (67 percent) of all units of all vintages sold, irrespective of age of seller, but purchased almost three quarters (72 percent) of units sold that were built before 1960. Buyers under age 45 purchased 57 percent of housing of all vintages sold by sellers age 55+, but purchased 68 percent of all housing sold by these older sellers if it was built before 1960.

The final characteristic of housing sold by older sellers to younger buyers that we shall consider is structure type. In general, the younger the buyer the larger the percentage of the sales that are single family detached units. On average, between 80-to-90 percent of homes sold by older sellers to younger buyers are single-family detached. This compares to a much lower share when the buyer is elderly (Figure 9). Elderly sellers selling to elderly buyers are more likely to be living in senior housing where mobile homes or condos/coops are a greater proportion of the stock.

Figure 9: Younger Buyers Buy Single Family Homes from Older Sellers

#### Share sold that are single-family detached



Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

#### V. Remodeling Activity of Sellers, Buyers and Non-Movers

Turnover generates a disproportionate share of home improvement activity. Sellers typically undertake minor improvements to attract more potential buyers, while buyers often undertake more extensive projects preparing their home for the years that they will occupy it. However, the exact amount of turnover related home improvement activity is difficult to measure. The remodeling data collected by the AHS is imperfect in providing a precise answer to this question, and can provide only a partial answer.

Among older sellers we can perhaps expect that this pre-sale remodeling activity might be less extensive than among younger sellers. First, older sellers are not likely to undertake major high-ticket projects like kitchen or bath remodels just to sell a house. Those projects are more likely to be undertaken by younger sellers who had planned to live in the home and enjoy the remodel, but then had to move to take a new job, obtain more space for growing families, or because divorce or other family matters required a move. Secondly, as we shall see below, the high level of remodeling activity of recent buyers suggests that remodeling needs were largely unmet by the previous owner. Remodeling needs that might have been identified in a home inspection and need to be addressed before closing are more likely to be taken care of by the seller if they are relatively minor. Major repair needs might be addressed by adjustments to the selling price and then undertaken by the buyer after the sale.

The AHS does not collect information on remodeling expenditures of sellers that took place between the date the sellers were last interviewed and the date the buyers moved into the unit. The best we can do is to measure average remodeling expenditures for sellers in the two-year period before the buyer took possession. Comparing remodeling activity in one survey period for sellers and another survey period for buyers is also problematic because recent buyers have lived in their new home for much less than two years on average at the time they are surveyed about their recent remodeling activity. Sellers, on the other hand, are likely to have lived in the home for most, if not all, of the 2-year survey period that preceded the period of the sale of their home. This is especially true of older sellers, as we have seen above, the majority of whom were in their homes for ten or more years before selling. The longer an owner is in the home, the more time available for remodeling.

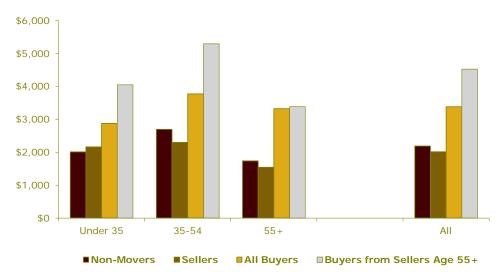
To better understand this particular problem we have examined the relationship between improvement spending and the duration of time a buyer has been in the unit before the survey. For three broad age groups of buyers there is a general upward trend in expenditures the longer a buyer has been in the unit. Using a line of best fit to represent this trend, we can predict the average expenditures for buyers after 21-23 months residence, a similar average duration of residence of sellers in the previous survey period. Using these observed (for sellers) and predicted (for buyers) remodeling expenditures for approximately 22 months prior to the survey, we can calculate an average annual (12 month) expenditure. We follow a similar methodology to obtain buyers' expenditures for each age group of buyers for units purchased from all sellers and from sellers over the age of 55. This methodology is further described in Appendix A.

In addition, we can examine the remodeling activity of non-movers by age during the same time period as buyers. Since all non-movers have been in their units continuously from one survey to the next, we can assign them an average duration of residence of 24 months. Thus, we can compare average annual expenditures for three groups – buyers, sellers and non-movers. In Figure 10, the average annual remodeling expenditures are plotted by age of sellers, non-movers and buyers. It is clearly the case that buyers spend considerably more than either sellers or non-movers in the same age groups. Buyers of units from older sellers have higher expenditures than buyers from all sellers. The buyer expenditures peak in the 45-54 age group, as might be expected because of growing families, growing home equity and growing incomes.

<sup>&</sup>lt;sup>5</sup> In most surveys there were between one and three observations in the 65-74 age group of recent buyers that had very high remodeling expenses – so high as to seriously distort the averages for the age group. For this reason, the data for buyers in the 65-74 age group were culled of a total of 12 such extreme outliers across all six surveys conducted between 1997 and 2007. It is not apparent why only 65-74 year old buyers seem to have manifested this problem.

Figure 10: Recent Buyers Spend Considerably More Than Recent Sellers or Non-Movers

Average annual remodeling expenditures (2007\$), 1997-2007

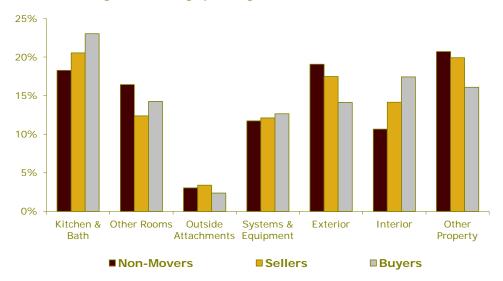


Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

In addition to spending more on remodeling, buyers are more likely to spend a greater share of their remodeling dollars on kitchens and baths and on other interior additions/replacements (Figure 11). Non-movers are slightly more likely than sellers to spend their money on exterior addition/replacement projects, and even more likely than buyers. All other categories of remodeling show no clear selectivity for one type of owner over another. Buyers of units from older sellers are slightly more likely to spend a greater share of their remodeling dollars on kitchens and baths (Figure 12).

Figure 11: Buyers Focus Remodeling Dollars on Kitchen & Bath and Interior Alterations

Share of average remodeling spending across all owners, 1996-2007



Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

Focusing just on kitchen/bath remodeling, for younger buyers the share spent on kitchen/bath remodeling does not change all that much with age, with between 22 and 27 percent of total spending in that category for buyers under the age of 55 (Figure 12). When sellers are age 55 and older, buyer share of remodeling dollars spent on kitchens and baths is slightly higher than for homes purchased from all sellers for most age groups. In contrast, we can see that the older the seller, the less sellers spend in this category, dropping from just under 30 percent for the youngest age group to about 10 percent of all expenditures for the oldest age group. For non-movers, the highest share is for the youngest owners and the lowest share for the oldest owners, with all intermediate age groups about equal. Note especially the higher expenditure share of buyers age 75+ on kitchen/bath remodels relative to their contemporaries who were either non-movers or sellers in each remodeling period, especially when the unit was purchased from an older seller.

Figure 12: Buyers from Older Sellers Spend Slightly Higher Share of Remodeling Dollars on Kitchens and Baths

Share of average remodeling spending for kitchens and baths, 1996-2007



Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

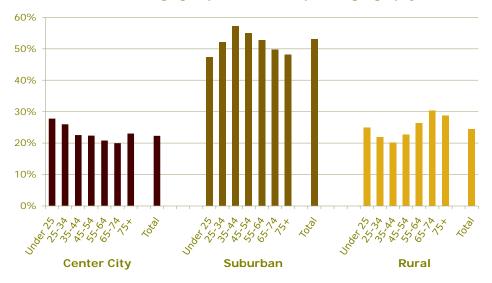
# VI. What Can We Expect from Baby Boomers in the Future in Terms of Turnover and Implications for Remodeling Activity?

In 2010 baby boomers are age 45-64. Over the next 20 years, this entire generation will turn 65. While we expect that many of the housing adjustments baby boomers will make in old age will parallel what we have observed for the generation preceding them in the age structure, there are sure to be differences. Many boomers have been in their homes for many years, and, just like the previous generation, many will wind up selling those homes to younger buyers. These homes will often be good candidates for significant remodeling. But, as we will see below, boomers live in more recently built housing, on average, and much of this housing is located in the suburbs. While more recently built, housing built in the 1960s and 1970s will be 30-50 years old during the 2010-20 decade and will also be in need of systems updates, remodeling and repair. In addition, boomers will turn 65 with more of them still active in the labor force, either by choice or by necessity, and their jobs will tend to tie them to their housing. More still have young grandchildren because of the delayed marriage and family formation of their children, and continue to play active roles in their grandchildren's lives. Again, if the grandchildren are nearby, we suspect that they will tend to hold onto the larger family home for longer periods than elderly owners who do not have grandchildren as an active part of their routine.

The majority of owners live in the suburbs, no matter what their age (Figure 13). Figure 13 also shows that there is a slight advantage to young adults in cities, to middle age owners in suburbs, and to older owners in rural areas. About 54 percent of baby boom owners age 45-64 lived in the suburbs in 2007 compared to about 49 percent of the elderly. Figure 14 shows that *within* each metro area classification, even though the total numbers of owners are different, the age distribution of those owners is broadly similar. Between 43 and 45 percent of each area metro classification's owners are middle age, so the influence of baby boomers on future housing turnover in any particular area is widespread across cities, suburbs and rural communities. In addition, there are very similar shares of both city and suburban area owners being either young (33-34 percent) or old (22-23 percent). Only the rural areas have a lower share of young (27 percent) and higher share of old (29 percent) owners.

Figure 13: Within Each Age Group Owners are More Concentrated in Suburbs

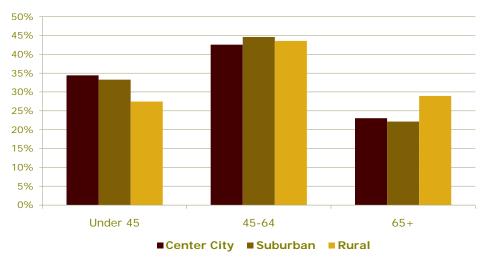
Share of homeowner age group in each metropolitan geography



Source: JCHS tabulations of the 2007 American Housing Survey.

Figure 14: Age Distributions of Owners are Broadly Similar Across Metropolitan Geographies

Share of homeowners in each metropolitan geography by age

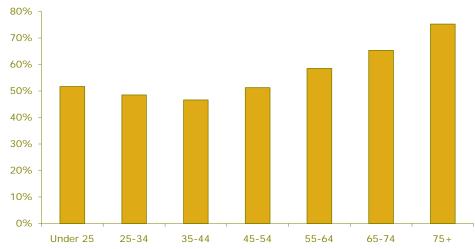


Source: JCHS tabulations of the 2007 American Housing Survey.

As seen in Figure 15, a smaller share of suburban baby boomers (approximately age 45-64) live in housing built before 1980 than do elderly suburban owners (age 65+). The slightly higher concentration of elderly in cities and non-metro areas helps explain the older housing occupied by persons age 65+, but it is also likely that suburban elderly live in the closer-in (and older) suburbs compared to suburban baby boom owners, who are more likely to live in newer suburbs farther from central cities. This differential age distribution of suburban residents is currently undergoing a shift, as younger minority families are moving into the inner suburbs.

Figure 15: Suburban Elderly Live in Older Housing Relative to Boomer Owners



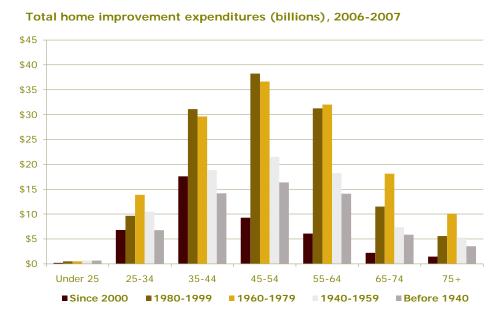


Source: JCHS tabulations of the 2007 American Housing Survey.

When baby boomers begin to turn over this suburban housing over the next 20 years, the remodeling that takes place will likely be different from what we have seen when today's elderly turned over their homes. Not only will a greater share of the housing be built since 1980, but the profile of buyers will also change, with more buyers being minority households with growing families. The new owners of baby boomer suburban housing will likely be concentrated in 35-44 and 45-54 age groups and higher income categories that have historically spent the most on remodeling.

During the recent surge in remodeling expenditures, baby boomers spent freely on remodeling projects. Examining total expenditures in 2006-07 by vintage of housing and age of owner we see that baby boomers led in total expenditures for any age group, and that while housing built between 1960 and 1979 accounted for the largest share of total remodeling dollars that were spent, housing built between 1980 and 1999 came in a close second among boomer expenditures (Figure 16).

Figure 16: Baby Boomers Have Spent Considerably on Remodeling Housing Built in 1980s and 1990s

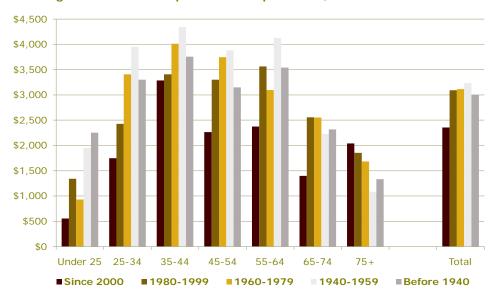


Source: JCHS tabulations of the 2007 American Housing Survey.

The sheer number of baby boom owners occupying housing built between 1980 and 1999 explains part of their high total expenditure amount. But when the average expenditure per owner is calculated, the large amount of remodeling undertaken by the average boomer household is also evident. Even though the largest per household expenditure for owners of any age is for the older vintage housing built 1940-1959, followed by expenditures on housing built 1960-1979, average expenditures on housing built between 1980 and 1999 was a close third, and for 55-64 year olds was second only to those living in units built 1940-49 (Figure 17).

Figure 17: Even On a Per Owner Basis, Boomer Remodeling Spending Still Significant

Average annual home improvement expenditure, 2006-2007



Source: JCHS tabulations of the 2007 American Housing Survey.

This recent remodeling activity in houses built in the 1980s and 1990s tells two important stories. The first is that the suburban housing stock lends itself to remodeling activity. Updating kitchens and baths, increasing energy efficiency, reconfiguring rooms, updating heating and cooling systems, enlarging garages, adding decks, and even adding rooms for offices, gyms, or other activities that were not a part of typical home life when the homes were first built will continue to be demanded. Some of this remodeling (perhaps even the majority) will be done when the homes change owners.

But a second storyline will perhaps reveal itself more fully in the future. Remodeling that has already taken place to the suburban housing stock and will continue to take place in the future will perhaps allow baby boomers who might have moved either in anticipation of retirement or post-retirement to stay put for more years than they had originally planned. Mobility rates have been trending downward since the mid-1980s. While it used to be a rule of thumb that persons living in an owner occupied household had a 10 percent chance of moving in any given year (it was 9.5 percent for 1986-87), today that figure is almost half as large (5.5 percent for 2007-2008). While the current

recession is partly to blame for depressing mobility rates, the downward trend has happened through good times and bad. In 2007-08 only 3.3 percent of 45-64 year old owners changed residences. This may imply a permanent reduction in mobility for households in this age range, or it may point to pent-up demand for these households as the economy improves and the housing market begins to thaw.

In the near-term, we are likely to see mobility rates remain below their long-term trend. Until house prices begin to recover, a large share of the population will continue to owe more on their mortgage than their house is worth, limiting their ability to move. And many baby boomers who still have a positive equity balance on their homes have taken advantage of historically low interest rates for fixed-rate mortgages in recent years through a purchase or refinance. As the economy recovers and mortgage rates begin to rise, the historically low rates held by baby boomers today will provide disincentives to mobility, since for these households moving implies prepaying their current mortgage with its favorable interest rate, and taking out a new, higher market-rate mortgage.

For homeowners who are currently underwater with their mortgages, it is hard to imagine that they would spend more money on their homes to undertake discretionary renovation and remodeling. On the other hand, many baby boomers have been in their homes long enough to have paid down a significant portion of their mortgages and still have home equity. Faced with the variety of forces we have discussed above that would serve to keep them in their homes beyond age 65, some will choose to remodel those homes so that they are more energy efficient, enjoyable, or ultimately more marketable should they decide to move.

#### **VII. Conclusion**

The turnover of housing units not only influences the workings of the broader housing market, but has significant implications for home improvement spending. This paper looks at recent trends in turnover by older households, and discusses some likely trends as the large baby boom generation begins turning age 65 in 2010. Older homeowners account for a significant share of the housing turnover in the U.S. Over the 1997-2007 period, in cases where we were able to match buyers and sellers in the AHS linked file, just over 30 percent of sellers were age 55 and older. Older owners typically have lived in their homes for extended periods of time. Almost 40 percent of sellers age 65-74 and over 60 percent of sellers age 75 and older had lived in the same unit for at least 20 years.

Since the homes sold by older households are older and typically more affordable, a majority were purchased by much younger buyers. This has important implications for home improvement spending. The time around the sale of a home typically generates more home improvement spending, and the sale of older homes to younger households generates a particularly high level of home improvement spending. Homebuyers age 35 to 44 spend more on average for home improvements than any other age group.

Housing turnover of baby boomers as they age into retirement will likely differ from the recent experience of older sellers. First, they have made different housing decisions than preceding generations. Boomers are more likely to live in newer homes and in suburban locations. Secondly, their home improvement spending patterns have been significant, as they have continued to undertake home improvement projects as they have aged into their 50s and early 60s. Finally, at least in recent years, mobility of baby boomers has declined, meaning that they are staying in their current units longer. This may imply that they plan to age-in-place in their current units, which also suggests opportunities for significant upgrading to accommodate their changing needs as they age.

Yet aging in place is unlikely to generate the same amount of remodeling activity as would be true if the home was turned over. However, this lower mobility may be a reflection of the housing market downturn beginning in 2006, where house prices have significantly declined. These conditions have stifled mobility at least temporarily, and how aging boomers respond to lower valuations and to tighter mortgage lending

conditions as the housing market begins to improve will dramatically affect the size and composition of home improvement spending in the years ahead.

## **References**

- Joint Center for Housing Studies. 2001. "Improving America's Housing: Remodeling Homes for Changing Households," R01-1. Available at: <a href="http://www.jchs.harvard.edu/publications/remodeling/remodreport2001.pdf">http://www.jchs.harvard.edu/publications/remodeling/remodreport2001.pdf</a>.
- U.S. Department of Housing and Urban Development, American Housing Surveys, National Data, 1995-2007.
- Joint Center for Housing Studies. 2010. "The State of the Nation's Housing," SON-10. Available at:
  - $\underline{http://www.jchs.harvard.edu/publications/markets/son 2010/son 2010.pdf}$

## Appendix A: Methodology for Estimating Average Annual Recent Buyer Remodeling Expenditures

The American Housing Survey collects data on the nation's housing stock as well as key characteristics of households living in the housing stock. The AHS is conducted once every two years and returns to the same housing units each time to gather this data. The AHS asks all homeowners in the survey to report on any home improvements they have undertaken in the past two years, or approximately the length of time since the previous survey of their unit was conducted. In this way the AHS provides a two-year estimate of the total remodeling market size. Yet, certainly not all households have lived in their unit for a full two years at the time they are surveyed for the AHS. In particular, the amount of time a recent mover has been living in their housing unit at the time they are surveyed for the AHS is significantly less than the sellers of these units and households that do not move between surveys. For this reason, it is especially important to adjust for time spent in the housing unit when comparing the reported remodeling activity of recent buyers, sellers and non-movers.

Recent homebuyers tend to have lived in their unit for far less than two years at the time they are surveyed for the AHS, while most sellers have been in their homes for many years and can therefore report remodeling activity for the full 24 months since the previous survey of their unit. Therefore, the average annual remodeling expenditures of buyers should be calculated based on the number of months they have lived in the unit in order to make a fair comparison to the recent spending of sellers. To make this adjustment of recent buyer spending, we examine the relationship between total remodeling spending and number of months a buyer occupied the unit prior to being surveyed, as well as the age of the buyer since age has a direct influence on remodeling activity (where middle-aged households have historically spent the most on remodeling compared to other age cohorts). See Table A-1.

Table A-1: Remodeling Expenditure of Recent Homebuyers by Months in Unit and Age of Buyer

Average across all owners for sales from 1997-2007, 2007\$

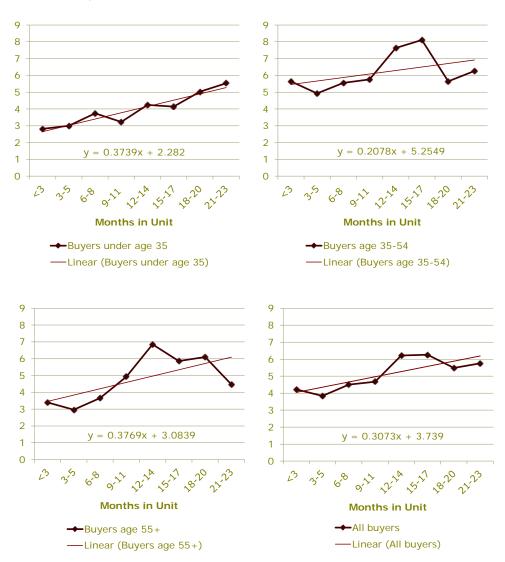
Age	Number of months in unit								
of Buyer	<3	3-5	6-8	9-11	12-14	15-17	18-20	21-23	AII
Under 35	2,819	2,995	3,736	3,225	4,239	4,139	5,028	5,535	3,884
35-54	5,640	4,927	5,553	5,761	7,624	8,109	5,648	6,256	6,276
55+	3,400	2,963	3,667	4,930	6,853	5,858	6,098	4,469	4,856
All	3,884	3,884	3,884	3,884	3,884	3,884	3,884	3,884	5,137

Source: JCHS tabulations of the 1995-2007 American Housing Surveys.

A line of best fit is calculated for each age cohort and used to predict the average spending of a typical buyer after the first 21-23 months in their newly purchased home, which is the same average number of months that sellers have been in residence since the previous survey of their unit. This predicted value is then adjusted to reflect average annual expenditures for recent homebuyers that are comparable to sellers and non-movers. A similar set of calculations was made for homes sold by sellers over the age of 55 (data not shown).

# Remodeling Expenditure of Recent Homebuyers by Months in Unit at Time of Survey and Age of Buyer

Average across all owners for sales from 1997-2007, Thousands of 2007\$



Source: JCHS tabulations of the 1995-2007 American Housing Surveys.