During the housing boom, rapidly appreciating home values and the resulting increase in home equity, coupled with very accommodating lending standards, helped to fuel the upper-end improvement market. In 2005, homeowners that were in the top 1 percent of spenders accounted for more than one-third of total spending. Today, though, several socioeconomic and demographic changes are shifting consumer demand to smaller-scale and more targeted projects. As a result, more than 57 percent of homeowners reported spending on home improvements in 2012–13 (a slightly higher share than during the 2002–07 upturn), while the top 1 percent contributed less than one-quarter of the total.

Chief among the trends driving this shift in the remodeling market are the delayed entrance of the large millennial generation into homeownership; the aging of the baby boomers into their retirement years; the ongoing decline in the US household mobility rate; and increasing environmental awareness and technological sophistication, particularly among younger households. With these changes come opportunities for stronger growth in spending in several key areas: improvements to the rental stock, retrofits of existing homes to improve accessibility, and system upgrades that are environmentally sustainable. The DIY market is also poised for a rebound.

REINVESTING IN THE RENTAL STOCK
Since the housing downturn, the share of US households that rent rather than own their homes has increased. Indeed, the national rentership rate for households under age 35 stood at 64 percent in 2014, its highest level in three decades. For many of these younger households, the decision to rent reflects lifestyle preferences for more urban locations, hous-
ing affordability issues given their generally lower incomes and higher debt, and greater awareness of the financial risks involved in homeownership.

While rental demand has thus increased, investment in the rental stock has not kept pace. Production was so depressed during the housing downturn that the median age of the rental stock rose to 41 years in 2013, up from 35 years in 2005. However, capital investment in the aging rental stock is finally on the rebound. The National Apartment Association reports that per-unit spending on professionally managed rental properties with 50 or more units jumped by more than 40 percent between 2010 and 2013. However, some of this increase may have been compensating for a decline in maintenance and repair spending, thus offsetting some of the overall growth in spending (Figure 21). On net, then, the recent growth in total spending on this portion of the rental stock was less than 20 percent.

But even this lower figure may overstate the level of rental housing investment because the estimates cover only a small portion of the stock. In particular, single-family homes make up around a third of the rental inventory, and multifamily buildings with two to four units another 17 percent. And while single-family and small multifamily rentals are more spacious on average than units in larger multifamily properties, their rents per square foot tend to be somewhat lower and thus provide less gross revenue for capital expenditures. The owners of these types of properties are also likely to be individuals or couples with limited holdings and little experience managing rental portfolios.

Moreover, the number of single-family rentals has increased significantly in recent years as a result of the housing market crash. According to Joint Center estimates, 3.6 million single-family homes were added on net to the rental stock from 2006 to 2013, largely as a result of the foreclosure crisis. These homes were typically under-maintained not only during the lengthy foreclosure process, but also beginning when their owners realized that they were in financial trouble. When some of these distressed properties are eventually converted back to homeownership, another round of improvement spending is likely to ensue.

Spending on rental improvements and maintenance is lower on average than on owner-occupied homes. The Joint Center estimates that per-unit improvement and maintenance spending on multifamily rental units averages $1,300 annually. By comparison, outlays average $2,200 for owner-occupied multifamily units (condos and co-ops), and almost $3,300 for owner-occupied single-family homes.

The composition of improvement spending is also very different in the rental and owner markets. Almost 60 percent of multifamily rental expenditures are for replacement projects, but less than 50 percent of homeowner expenditures fall into this category. Within replacements, exterior projects account for 27 percent of multifamily rental capital expenditures, systems replacements and upgrades for 20 percent, and flooring, carpeting, and other interior replacements for 12 percent—all above the shares of spending for comparable projects in owner-occupied homes. In contrast, kitchen and bath projects make up a mere 10 percent of capital improvements to the multifamily rental stock, while projects such as pools, playgrounds, club-houses/common areas, laundry rooms, parking and garages, and landscaping account for the remaining 31 percent.

ACCOMMODATING AN AGING POPULATION

While the millennial generation will drive much of the growth in home improvement spending in the coming decades, the baby boomers currently play a significant role in the market. In 2010, 34.3 million baby-boom homeowners were in the high-spending age group of 45–64. According to Joint Center estimates, 34.1 million owners from this generation will be aged 55–74 in 2020 and 29.0 million will be aged 65–84 in 2030.

With the aging of the US population and the traditionally lower mobility rates of older owners, the concern is that overall improvement spending may suffer. But even though spending does decline as homeowners age, lower household mobil-
ity within a given age range does not necessarily imply lower spending. In fact, improvement spending in 2013 was actually modestly higher among owners aged 55–64 who had lived in their current homes for 20 years or more compared to that of same-aged owners with shorter tenure [Figure 22].

Many owners in their mid-50s to mid-60s begin to consider their post-retirement housing needs. Given that much of the US housing stock lacks basic accessibility features, however, many of these older households will have to modify their homes to age safely in place. While over three-quarters of homes owned by households aged 55 and over have a bedroom and full bath on the entry level, only about 60 percent of these homes have no steps between rooms, and less than half have a no-step entry [Figure 23]. In total, less than a quarter of homes occupied by older owners have all of these features. Other accessibility features needed by those with more limited mobility are even less common. For example, only one in ten homes occupied by older owners have extra-wide hallways and doors, while less than 1 percent of older homeowners living in multi-story units have an in-home elevator.

Home builders are responding to the emerging need for more accessible housing, and newly constructed homes could dramatically reduce the gap between demand and supply. The problem, however, is the mismatch between where the aging population lives and where more accessible homes are being built. Households aged 55 and over are spread proportionately across the country, with a slightly higher concentration in slower-growing Frostbelt locations. In fact, the states with the largest shares of older households in 2013 were Delaware, Maine, Michigan, Montana, Pennsylvania, Vermont, and West Virginia (in addition to Florida, Hawaii, and New Mexico). Meanwhile, almost three-quarters of new homes built in the last decade are located in the South and West.

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**Figure 22**
For Older Owners, Improvement Expenditures Decline with Age But Not with Length of Tenure
Average Annual Per-Owner Spending in 2013 (Dollars)

**Figure 23**
Many of the Homes Owned by Older Households Lack the Accessibility Features that Enable Aging in Place
Share of Units Owned by Households Aged 55 and Over with Accessibility Feature in 2011 (Percent)
As a result, many older households in slower-growing regions of the country will likely have to retrofit their existing homes with accessibility features rather than move to new homes. The Joint Center has estimated that even if every new home projected to be built over the coming decade in the Northeast and Midwest had basic accessibility features, the shortfall between the supply of and demand for these units would still be almost a million homes.

PROMOTING ENVIRONMENTAL SUSTAINABILITY

With the growing popularity of energy efficiency retrofits over the past three decades, home improvement projects that promote environmental sustainability have accounted for a growing share of spending. Sustainable projects are defined as those motivated by one or more of the following objectives: energy efficiency; water efficiency and conservation; healthy home/indoor air quality; use of recycled building products; use of rapidly renewable materials; home automation related to other sustainability goals; and utilization of renewable energy sources.

Recent surveys conducted by the Joint Center and the Farnsworth Group found that sustainable home improvement projects generate about 30 percent of revenue at full-service remodeling firms. Moreover, more than four out of five contractors report that sustainable projects account for at least 10 percent of their revenue. Energy efficiency projects are far and away the most common subcategory, with 84 percent of respondents indicating that they had installed these types of improvements during the previous year (Figure 24). Projects related to water efficiency, home health, and use of recycled products are the next most popular subcategories, with about half of contractors indicating that they had recently installed such improvements. Projects related to home automation and renewable energy are much less commonly installed by the typical full-service remodeler, in part because specialty firms have sprung up to serve these markets.

Of the households reporting home improvement spending in 2012 or 2013 in the American Housing Survey, 20 percent indicated that at least one of their projects was for energy efficiency purposes. A broad cross-section of homeowners has made energy efficiency a priority. For example, lower-income owners were almost as likely as those with higher incomes to pursue such improvements. Similarly, younger owners and recent homebuyers (who might be expected to have a long list of competing home improvement priorities) were almost as likely as other households to undertake energy efficiency upgrades.

Interest in most sustainable home improvement categories seems to be on the upswing. Although recent increases in domestic energy production and falling costs may reduce some of the momentum behind energy efficiency investments, other areas remain strong. In particular, spending on projects related to healthy homes and indoor air quality is increasing. According to a 2014 Joint Center/Farnsworth Group survey, almost a quarter of owner respondents indicated some degree of concern about the health impacts of their homes, and one in 20 expressed major or moderate concern over whether their health impacts of their homes.
homes negatively affected the health of household members. Renters are even more apprehensive about conditions, with over a third conveying some level of concern and one in six indicating that healthy home issues are a problem.

REBOUND IN DO-IT-YOURSELF ACTIVITY
From 1995 to 2005, the DIY share of home improvement spending averaged around 25 percent. The DIY share of home improvement product purchases is much higher, however, because costs for DIY projects include only materials while costs for professionally installed projects also include labor, profit, and overhead. A 25 percent share of spending on DIY projects could thus imply that upwards of 45 percent of remodeling materials purchases are installed on a DIY basis.

Since 2005, though, the DIY share of home improvement spending has been on the decline, falling to 17 percent in 2013. The DIY share of home improvement activity is associated with the types of projects undertaken, and key homeowner characteristics such as age, income, household composition, and racial and ethnic mix. All of these factors now point to a turnaround in DIY activity in the coming years.

The recent increase in spending on discretionary home improvement projects is the clearest sign of an imminent rebound. About a quarter of spending on discretionary projects (kitchens, baths, and other additions and alterations) is DIY—significantly higher than the 14 percent share of spending on replacement projects. As the discretionary share of spending returns to more traditional levels, the DIY share should thus follow suit.

The potential for additional growth in discretionary home improvement activity is largely due to changing demographic characteristics—specifically, the impending move of the young, diverse millennial generation into the home improvement market. Younger homeowners devote a larger share of their spending to DIY projects. Indeed, owners under age 35 spent a third of their budgets on DIY projects in 2013, while owners aged 65 and over spent just 11 percent. Income levels also affect the DIY share. More than 20 percent of spending by non-elderly households in the lowest income quintile was on DIY projects, compared with less than 13 percent by those in the highest income quintile.

With the exception of blacks, most racial and ethnic minorities also devote a larger share of their home improvement spending to DIY projects than whites. In addition, married-couple owners spend a slightly larger share of their improvement dollars on DIY projects than do single-person households.

Even though the DIY share did not increase in 2013, overall market growth pushed total DIY spending up from $32.0 billion in 2011 to $33.5 billion. This was the first DIY spending increase since the market peaked in 2007 (Figure 25). The movement of the large millennial generation into the housing market and ultimately into homeownership should propel even stronger growth in DIY spending moving forward. With their moderate incomes and growing racial/ethnic diversity, these households have the key characteristics associated with higher shares of DIY activity.

Beyond the DIY market, millennials are key to the remodeling outlook. With the baby boomers still active in the market and the gen-Xers in their prime home improvement years, spending on remodeling has a solid base on which to build. The millennials’ increasing presence in the rental market has already helped to boost improvement spending in that segment, and it is only a matter of time before this generation becomes more active in the owner-occupied housing market. As that transition occurs, the millennial generation will support strong growth in home improvement spending for decades to come.