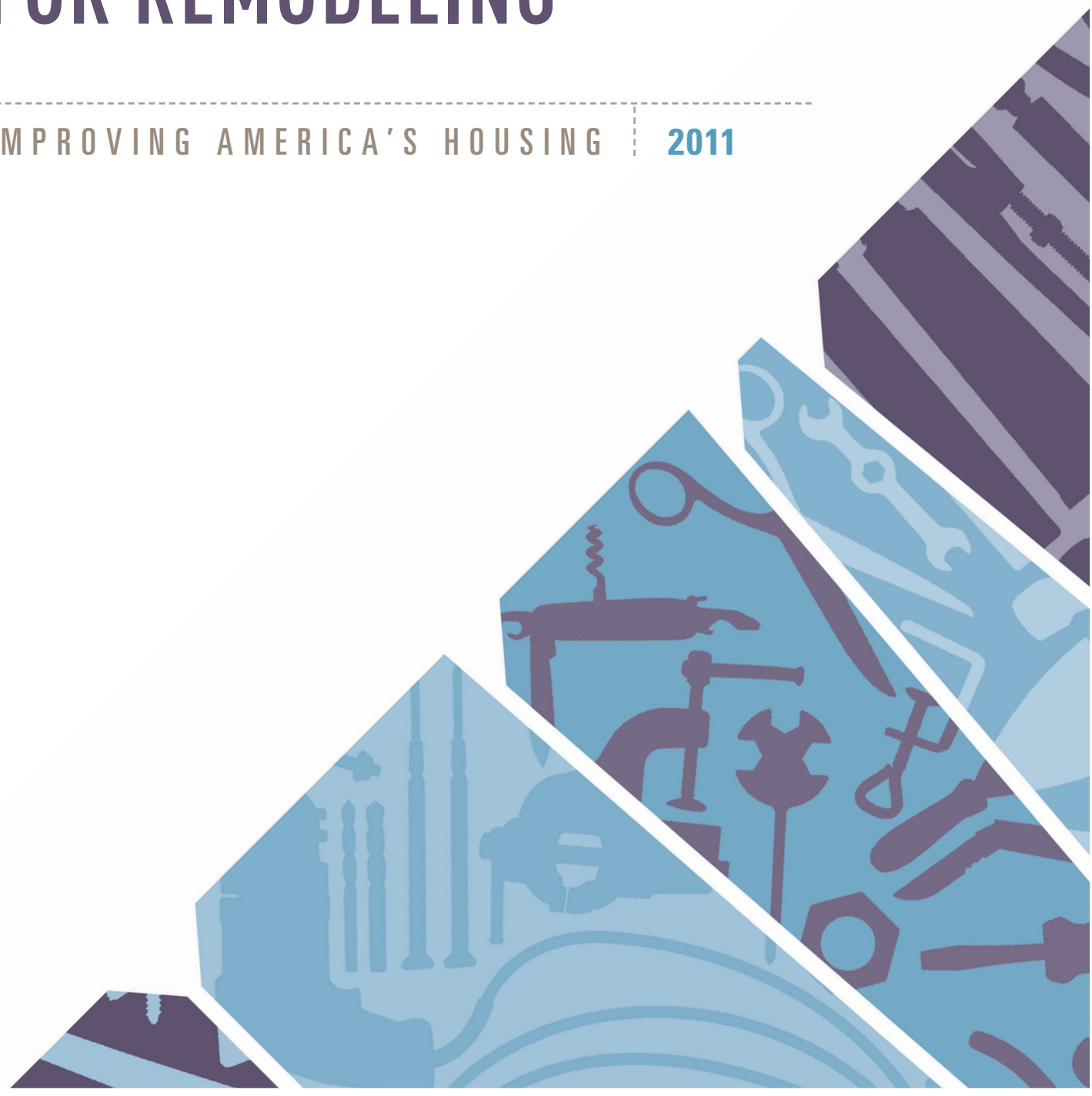
Joint Center for Housing Studies of Harvard University

A NEW DECADE OF GROWTH FOR REMODELING

IMPROVING AMERICA'S HOUSING | 2011



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1 INTRODUCTION AND SUMMARY

Slowly but surely, the US home improvement industry is emerging from its worst downturn since the government began tracking spending in the early 1960s. Homeowners who deferred maintenance and improvements during the recession may soon start to spend more freely. Lower household mobility in the wake of the housing market crash could also mean that homeowners will focus on upgrades with longer paybacks, particularly energy-efficient retrofits.

The industry is also beginning to benefit from spending on the rehabilitation of foreclosed properties. Over the coming years, real spending on homeowner improvements is expected to grow at a 3.5 percent average annual pace, ensuring that the industry captures a large share of the residential investment market.

Remodeling spending peaked nationally in 2007, well after the housing bubble burst but before the collapse of the US financial system sent the broader economy into recession. By Joint Center for Housing Studies estimates, the overall remodeling market—including spending on maintenance and improvements of rental as well as owner-occupied units—fell by 12 percent between the 2007 high and 2009. The peak-to-trough drop in homeowner spending alone was well over 20 percent.

The composition of homeowner expenditures also changed over this period. The share of spending on discretionary projects—kitchen and bath remodels, room additions and alterations, and other interior additions—declined by about three percentage points (from 49 percent to 46 percent) while the share of spending on exterior replacement projects and system upgrades increased by almost exactly the same amount. The share devoted to property improvements and disaster repairs was thus largely unchanged.

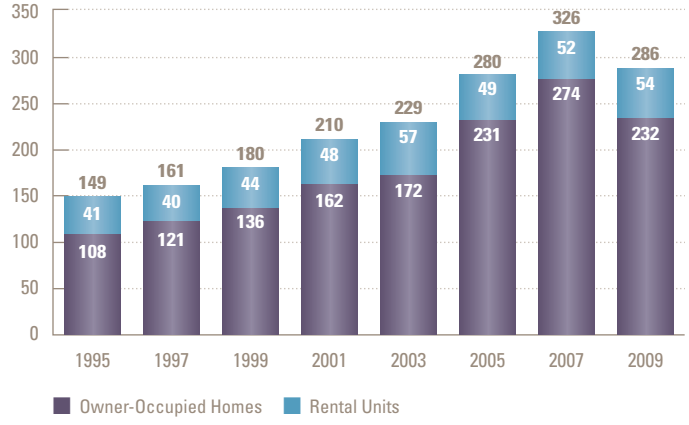
SURVIVING THE CYCLE

At almost $290 billion in 2009, the remodeling market held up much better than new residential construction during the downturn. Indeed, the maintenance component of remodeling expenditures increased slightly in 2007–9—not surprising since this spending category tends to remain fairly stable across cycles.

Figure 1

Even with the Recent Decline, the Remodeling Market Is Nearly $300 Billion

Improvement and repair expenditures (Billions of dollars)

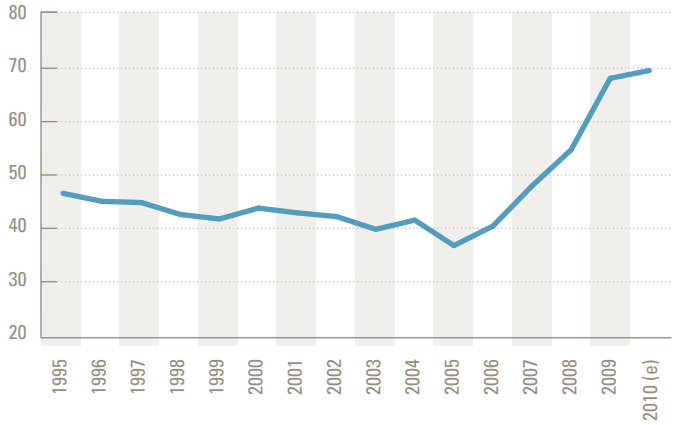


Sources: JCHS tabulations of the 1995–2009 American Housing Surveys (AHS); US Department of Commerce Survey of Expenditures for Residential Improvement and Repairs (C-50); and Abbe Will, *Estimating National Levels of Home Improvements and Repair Spending by Rental Property Owners*, JCHS Research Note N10-2, October 2010.

Figure 2

Remodeling Spending Is Contributing a Growing Share of Residential Investment

Improvement and repair expenditures as a share of total residential investment (Percent)



Note: Total residential investment expenditures include the value of construction put in place for new single-family homes, multifamily homes, and improvements and repairs to owner-occupied and rental units.

Sources: JCHS tabulations of the 1995–2009 AHS; US Census Bureau, C-50 series and Value of Private Construction Put in Place (C-30); McGraw-Hill Construction, Commercial & Industrial Alterations; Bureau of Labor Statistics, Consumer Price Index; and the JCHS Leading Indicator of Remodeling Activity.

Improvements to rental units also increased modestly over this period according to Joint Center estimates. Expenditures by rental property owners have historically been about as volatile as spending by homeowners. During the recent housing market crash and economic recession, however, falling home prices, high unemployment, and record foreclosures discouraged homeowners from making improvements to their properties.

At the same time, a growing share of households chose to rent. This in turn encouraged rental property owners to upgrade their buildings after years of underinvestment. After averaging 2 percent compound annual growth from 1995 to 2007, remodeling spending on rentals continued to grow at this rate in 2007–9 even though overall home improvement expenditures declined. The entire drop in total spending during the downturn thus came from a cutback in improvement projects undertaken by homeowners.

LONGER-TERM TRENDS

The recent downturn notwithstanding, remodeling spending has in general been on a healthy upward climb **(Figure 1).** From 1995 to 2009, the remodeling market nearly doubled in size in nominal terms and was up over 36 percent in real terms, effectively matching the pace of expansion in the broader economy. With the return to modest growth in 2010, the remodeling market likely approached $300 billion.

In recent decades, expenditures on home improvements and repairs have averaged 40–45 percent of total residential investment. However, changes in the remodeling share tend to be countercyclical: when the economy and housing markets are strong, spending on new construction generally grows faster than on remodeling, pushing the remodeling share down. For example, when national housing starts exceeded two million units at the top of the home building market in 2005, the remodeling share of residential investment dropped below 40 percent for the first time in more than two decades.

During housing market downturns, the home improvement share of residential investment rises. When housing markets crashed between 2005 and 2009, the remodeling share thus climbed to more than two-thirds of total residential investment. With continued weakness in construction activity in 2010, particularly in the multifamily sector, the remodeling share of residential investment probably increased further **(Figure 2).**

EMERGING INDUSTRY CONCENTRATION

Despite strong growth in spending through 2007, the residential remodeling industry remained highly fragmented. According to the most recent government census, more than 650,000 businesses received a majority of their revenue by providing remodeling services in 2007, compared with a half-million in 2002. Moreover, this estimate

excludes the large number of part-time, semi-retired, and "moonlighting" contractors reporting gross revenues of less than $25,000.

Self-employed contractors continue to make up a disproportionate share of the industry **(Figure 3).** Two-thirds of all residential remodelers had no employees on payroll in 2007, up from 62 percent in 2002. Even the companies with employees were predominantly small businesses. Half of all general remodeling contractors with payrolls reported less than $250,000 in gross annual revenues in 2007, and 70 percent billed less than $500,000.

Nevertheless, there is evidence of concentration among larger remodeling businesses, especially those specializing in more stable market niches. For example, a growing number of exterior replacement contractors have reached sufficient size to benefit from scale in marketing and lead generation, scheduling, production, and negotiations with building product manufacturers and dealers. Similarly, insurance restoration contractors—who have limited marketing and lead generation needs because they typically work under contract to insurance companies—can focus on establishing larger-scale businesses that operate more efficiently.

Finally, some specialty contracting firms—kitchen and bath remodelers, deck and patio builders, energy-retrofit experts, and outdoor living contractors, among others—have survived one of the worst industry downturns in decades by streamlining their operations and becoming more focused and efficient. Still, the ease of entering and exiting the industry, and the relatively high rate of failures, ensure the industry will remain dominated by small firms and self-employed contractors.

METRO MARKET SHIFTS

Homeowner improvement spending is concentrated among a relatively small number of metropolitan areas. Income and house prices are key determinants of improvement expenditures per homeowner, and high-income households and high-priced homes are typically located in large metros. Indeed, over the past decade the top 10 metro markets were home to just 22 percent of homeowners but accounted for 31 percent of total homeowner improvement spending (defined here as net of routine maintenance expenditures). The top 35 metros were home to 43 percent of homeowners but accounted for nearly 55 percent of spending **(Figure 4).**

Homeowners in metro areas of the Northeast and Midwest, as well as coastal California, have higher incomes and more expensive homes—characteristics that boost remodeling spending. However, metro areas in the South and West have generally seen stronger growth in homebuilding, increasing the stock of homes that need upgrades and improvements. A growing share of homes in Sunbelt metros is also entering the age range (20–30 years old) when homeowner improvement spending is usually strong.

As a result, high-growth remodeling markets have recently been concentrated in key Sunbelt states. The housing bust and subsequent recession, however, have temporarily disrupted regional spending patterns. Of the 20 states with increases in gross domestic product in 2009, only 7 were in the Sunbelt. The traditionally fast-growing states of California, Texas, and Florida all saw major declines in GDP last year. As long as these housing markets remain depressed, the major metropolitan areas of the Northeast and Midwest are likely to gain a growing share of home improvement spending.

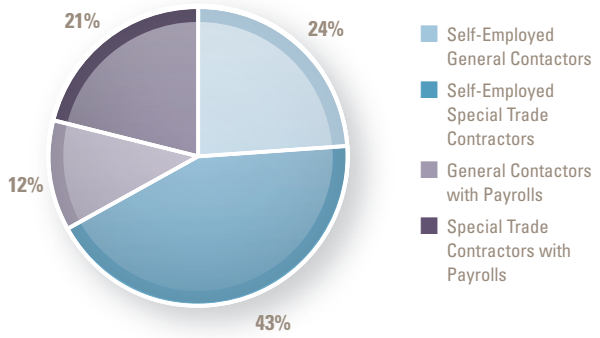
REMODELING IN THE NEW DECADE

The home improvement industry faces several headwinds. House prices have fallen sharply and remain depressed. This has left almost a quarter of homeowners with mortgages in the unenviable position of owing more on their homes than their homes are worth. Furthermore, record numbers of homeowners are seriously delinquent on their mortgages. Under these circumstances, many owners are not in a position to borrow against the equity in their homes to make

Figure 3

Small Nonpayroll Firms Continue to Dominate the Industry

Share of contractors with a majority of revenue from home improvements in 2007



Total Remodeling Contractors = 652,000

Note: Self-employed figures do not include remodelers reporting less than $25,000 in gross receipts in 2007.
Source: JCHS estimates using unpublished tabulations from US Census Bureau, 2007 Economic Census of Construction and Nonemployer Statistics.

Figure 4

Remodeling Spending Is Concentrated in Major Metropolitan Markets

Average annual homeowner spending, 2000–9 (Billions of 2009 dollars)

Notes: Metros shown are the 35 largest by population for which AHS data are available. Spending figures are weighted by population, income, age of the housing stock, and structure types.
Source: JCHS tabulations of the 2001–9 AHS.

improvements. In addition, homeowners that are underwater on their mortgages (i.e., have outstanding loan balances that exceed the market values of their homes) cannot move unless they default on their loans or can cover the difference between the sale value of the properties and the amount owed, or the lenders agree to short sales.

This is dampening remodeling activity by reducing home sales and the additional spending that turnover triggers, both by sellers that fix up their homes to put them on the market, and by buyers that make improvements after purchase. In addition, high unemployment rates and weak consumer confidence are causing many homeowners to defer all but the most essential repairs and replacements. Finally, homeownership rates and the number of homeowners have declined. Since homeowners spend more on improvements on average than owners of rental units, the downturn in homeownership is also limiting the growth in remodeling spending.

But looking beyond these near-term constraints, market fundamentals—the number of homes in the housing stock, the age of those homes, and the income gains of homeowners making improvements—point to increases in remodeling spending in the years ahead. Over the long run, the pace of growth in remodeling spending reflects the pace of growth in the overall economy, with homeowners accelerating some of their expenditures during up cycles and deferring projects during down cycles. According to Joint Center estimates, remodeling expenditures accounted for 2.01 percent of total spending in the US economy in 1995 and for an almost identical 2.03 percent in 2009. Between 1995 and 2009, remodeling spending grew at a compound annual rate of 4.75 percent while the economy grew at a similar compound annual rate of 4.71 percent. Even longer-term Commerce Department estimates of improvements to residential structures have closely tracked the growth in the broader economy.

As the economy and the housing market return to more normal conditions over the next five years, so too will homeowner improvement spending. With concern over environmental sustainability growing and home energy costs expected to rise in the years ahead, spending on green remodeling projects in general—and energy-efficient retrofits in particular—should see healthy gains. In addition, immigration is expected to recover, ensuring that foreign-born households account for a large share of net new households. As these households age into their peak remodeling years (mid-30s to mid-50s), they will support further growth in improvement spending.

Predicting remodeling spending in any given year is challenging because the market is so volatile. But average homeowner spending varies systematically with age, race, and household

Figure 5

Homeowner Improvement Spending Should Grow Strongly Over the Next Five Years

Compound annual growth rate (Percent)

Note: Home improvement spending levels used to calculate the compound annual growth rate are in 2010 dollars.

Source: Table A-11.

type, and this variation can be used to make projections given additional assumptions about changes in the number of homeowners and per household spending. Using this approach, the Joint Center estimates that homeowner spending will increase 3.5 percent per year compounded in 2010–15 after adjusting for inflation.

Just under a third of the increase (about 1.1 percent per year compounded) comes from the 4.5 million growth in the number of homeowners expected over this period. The remaining two-thirds (2.3 percent per year compounded) reflects an increase in per household spending. Spending levels per homeowner are projected to rise because of both an increase in household income and a change in the mix of households. In the next five years, growth in the number of households moving into the 55–64 and 65+ age ranges—when homeowners typically prepare their homes for their retirement years by making aging-in-place retrofits—is expected to be particularly strong.

A 3.5 percent annual pace of growth in home improvement spending puts the 2010–15 period squarely in the middle of the past two five-year periods. In 2000–05, spending increased at an unsustainable pace as the homeownership rate was climbing, house prices were soaring, and lenders were quick to make loans for home improvement projects. In 2005-10, conditions were the opposite: the homeownership rate was falling, house prices were down in most markets, and lenders were hesitant to extend credit. As market conditions move closer to normal, home improvement spending should do the same **(Figure 5).**

Obviously the condition of the broader economy, the pace of house price appreciation, mobility rates among homeowners, credit market conditions, and other factors will greatly influence the amount of home improvement activity in any particular year. Nevertheless, the long-term expansion of the remodeling market is an unmistakable trend, and a relatively healthy economy will assure future growth in the industry.

2

THE ROLLERCOASTER DECADE

The past decade was the best of times and the worst of times for the remodeling industry. The 2000s began with a surge in house prices that generated massive gains in home equity. Thanks to easy lending standards, many owners were able to tap this equity to finance upper-end discretionary improvements.

When the housing bubble burst and the national economy entered a deep recession, however, incentives for discretionary spending vanished. Even spending on do-it-yourself (DIY) projects lost ground during the downturn.

When the national homebuying boom began to pick up momentum in the early part of the 2000s, total spending on improvements to rental as well as owner-occupied properties was growing at a respectable 5 percent average annual rate. As the housing bubble expanded between 2003 and 2007, expenditure growth escalated to almost 12 percent per year on average. But with the housing market crash and the onset of the Great Recession, home improvement spending fell about 16 percent from its mid-2007 peak through 2009.

Improvement spending by homeowners alone plunged more than 23 percent over this period, according to data from the US Census Bureau. This drop is as severe as any the industry has seen in the past several decades **(Figure 6).** In comparison with the nearly 75 percent plummet in residential construction spending, however, the remodeling downturn has been modest over this cycle.

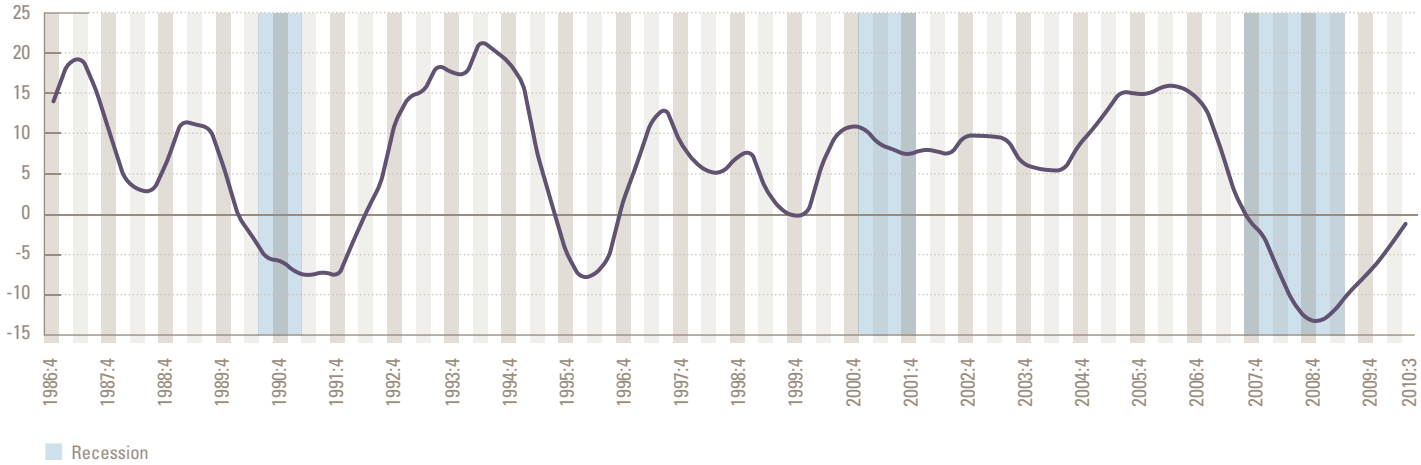
DRIVERS OF REMODELING ACTIVITY

Conditions in the first seven years of the decade were strongly favorable for the home improvement industry. House prices were climbing at an unprecedented pace as low mortgage interest rates and relaxed lending standards enticed more households into homeownership. Rising house prices not only encouraged owners to make improvements to their homes, but also provided growing amounts of equity to finance those projects. And with lenders offering attractive rates for home

Figure 6

The Recent Remodeling Downturn Is the Most Severe in at Least 25 Years

Annual change in homeowner improvement expenditures (Four-quarter moving totals, percent)



Notes: Rates of change for 1985–2007 were calculated using the C-50 series and for 2008–10 using the C-30 series. For methodology and greater explanation of historical remodeling cycles, see Abbe Will, *Understanding Remodeling Cycles,* JCHS Working Paper W08-6, August 2008.

Source: JCHS tabulations of US Census Bureau, C-50 and C-30 series, and National Bureau of Economic Research, US Business Cycle Expansions and Contractions.

equity loans and easy credit, owners had ready access to their windfall housing wealth.

The decision to make home improvements was easy to justify during this period. Indeed, rapid house price appreciation immediately offset a large share of the project cost, exposing owners to little risk as long as prices kept climbing. According to Cost versus Value studies conducted by *Remodeling* magazine and the National Association of Realtors®, owners could recover more than 80 percent of a home improvement's cost on average between 2003 and 2005.

By 2007, though, most of the incentives to undertake home improvement projects had become disincentives **(Figure 7).** House prices were falling in most markets across the country, eroding much of the home equity built up earlier in the decade. In addition, the homeownership rate had peaked at more than 69 percent in 2004 and was trending downward. The drop in the homeownership rate is important for the remodeling industry because owner-occupants typically spend nearly twice as much on improvements per year on average as owners of renter-occupied units.

As the recession took hold, the number of distressed properties began to climb, further dampening improvement spending. By the first half of 2010, the share of mortgaged homes in the foreclosure process was approaching 5 percent, and almost a quarter of all home mortgages were underwater. Homeowners with loans in the foreclosure process typically have neither the resources nor the incentive to undertake improvements other than projects that address immediate threats to health or security. Similarly, banks and other owners of foreclosed properties are unlikely to make improvements until they are ready to put the houses on the market. Even then, they are apt to do only the minimum necessary to prepare the homes for sale. Only when new buyers take possession does spending on distressed properties increase as owners attempt to make up for deferred maintenance and to repair any damage from vandalism that may have occurred during the foreclosure process.

CONCENTRATION OF SPENDING

The national level of homeowner improvement spending depends in part on the number of owner-occupied housing units and the amount that each owner spends on projects. In general, project spending has turned out to be the primary determinant of overall remodeling market growth or decline.

Despite swings in improvement spending over the past decade, the number of homeowners grew at a very steady rate. Between 2001 and the peak of the homebuying boom in 2007, the number of homeowners increased by more than 5.5 million, or almost 1.3 percent per year. This is not unusual as the number of homeowners has increased by more than 1 percent annually for the past several decades.

Figure 7

Drivers of Remodeling Activity Deteriorated Sharply After 2007

Remodeling Drivers				Percent/Percentage Point Change	
	2000	2007	2010	2000–7	2007–10
Average House Price (Index)	104.5	179.7	135.2	72.0	-24.8
National Homeownership Rate (%)	67.4	68.2	67.0	.08	-1.2
Homeowner Equity (Trillions of $)	7.0	11.4	6.8	62.9	-40.4
Average Share of Cost Recovered from Remodeling Projects (%)	n/a	70.1	60.0	n/a	-10.1

Note: 2010 data for house price index, homeownership rate and homeowner equity are through the third quarter.
Sources: S&P/Case-Shiller® National US Home Price Index; US Census Bureau, Housing Vacancy Survey; Federal Reserve Board, Flow of Funds; and *Remodeling* magazine, Cost vs. Value Report.

Figure 8

Higher Spending Per Household Drove the Market Upturn

				Percent/Percentage Point Change	
	2001	2007	2009	2001–7	2007–9
Number of Homeowners (Millions)	70.0	75.5	74.9	7.9	-0.8
Share of Owners Reporting Improvement Projects (%)	28.7	28.8	28.1	0.1	-0.7
Average Spending of Owners Reporting Improvement Projects (2009 $)	7,760	10,830	8,790	39.6	-18.8
Discretionary Spending as Share of Total (%)	34.0	36.8	35.4	2.8	-1.4

Note: Discretionary spending includes kitchen and bath remodeling and other room additions.
Source: JCHS tabulations of the 2001–9 AHS and American Community Survey (ACS).

The share of households that decide to undertake home improvement projects in any given year also varies surprisingly little. Despite changing market conditions over the last 15 years, the share of homeowners reporting improvement projects only ranged from about 27 percent in 2002–3 to about 30 percent in 1994–5. Moreover, changes in share are somewhat countercyclical. Between 2002 and 2005 when spending growth was strongest, about 27 percent of owners were reporting improvements. Conversely, when spending fell sharply in 2008–9, the share of owners reporting project spending actually increased slightly to just over 28 percent.

Spending per household is therefore key. During the housing boom years, the mix of homeowner improvement expenditures tilted more toward discretionary projects. And within the discretionary category, homeowners devoted a larger share of spending to major projects such as upper-end kitchen or bath remodels and major room additions and alterations. During the downturn, the discretionary share of spending fell, along with the share of households undertaking major projects.

Thus while overall homeowner improvement spending increased 78 percent between 2000 and 2007, spending on upper-end discretionary projects was up 110 percent. The discretionary project share climbed from 34 percent in 2001 to nearly 37 percent in 2007 **(Figure 8).** When overall spending fell almost 19 percent in 2007–9, spending on upper-end discretionary projects dropped almost 23 percent. This brought the discretionary share of activity closer to levels in the late 1990s and early 2000s when the market was more balanced.

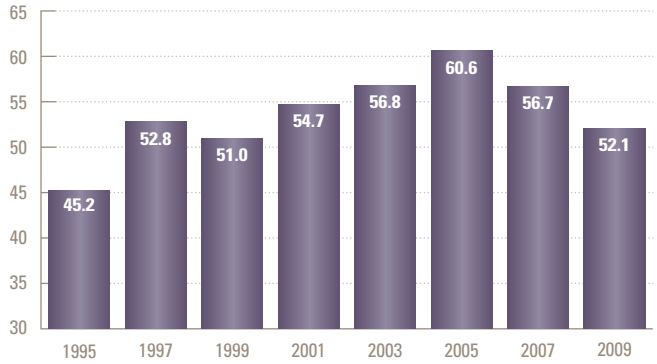
Given that participation in the home improvement market remains relatively steady during upturns but the mix of proj-

ects shifts toward upper-end discretionary projects, the concentration of spending changes as the remodeling industry moves through cycles. Homeowner spending on high-end projects thus accounts for a greater share of total improvement expenditures when the market is strong. Accordingly, the top 5 percent of owners contributed about 60 percent of expenditures during the boom years of 2002–7 but just over 52 percent during the bust in 2008–9 **(Figure 9).**

Figure 9

Spending Becomes More Concentrated During Periods of Strong Growth

Share of total spending by top 5% of owners (Percent)



Source: JCHS tabulations of the 1995–2009 AHS.

COPING WITH THE HOUSING DOWNTURN

Households suffering most from the weak economy and broader housing market downturn were especially likely to scale back on home improvement spending. In particular, owners that saw their house values plummet had little or no equity left to borrow against to pay for home improvements. Others that lost their jobs or experienced cutbacks in income during the national economic recession did not have the resources to undertake anything but the most essential projects. Still others that did have the resources to undertake home improvements often deferred doing so given the uncertain direction of house prices.

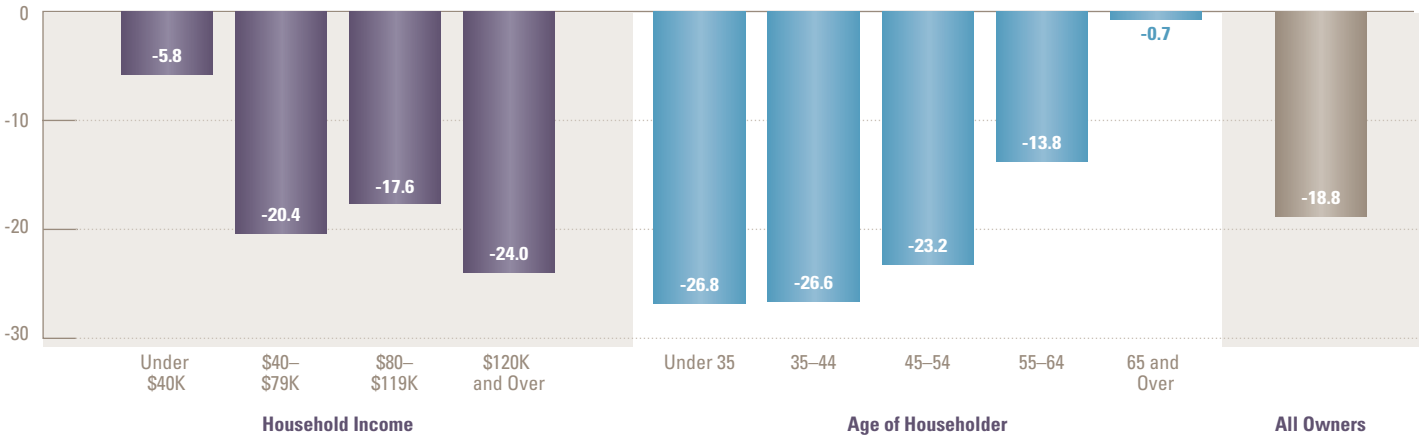
Recent homebuyers were hit especially hard by the housing market collapse. Households that bought near the top of the market had no opportunity to benefit from the surge in house price appreciation earlier in the decade and now have little or no equity in their homes. Owners living in suburbs of major metropolitan areas—particularly recently developed outer suburbs and exurbs where new construction activity was heaviest—also cut back more on home improvement spending than those living in center cities or in nonmetropolitan areas.

Similarly, higher-income owners reduced their expenditures between 2007 and 2009 significantly more than lower-income owners **(Figure 10).** Like all owners, upper-income households on average saw a substantial drop in their home values over this period. This group historically accounts for more high-end

Figure 10

Lower-Income and Older Owners Have Cut Back Least on Spending Since 2007

Change in improvement spending, 2007–9



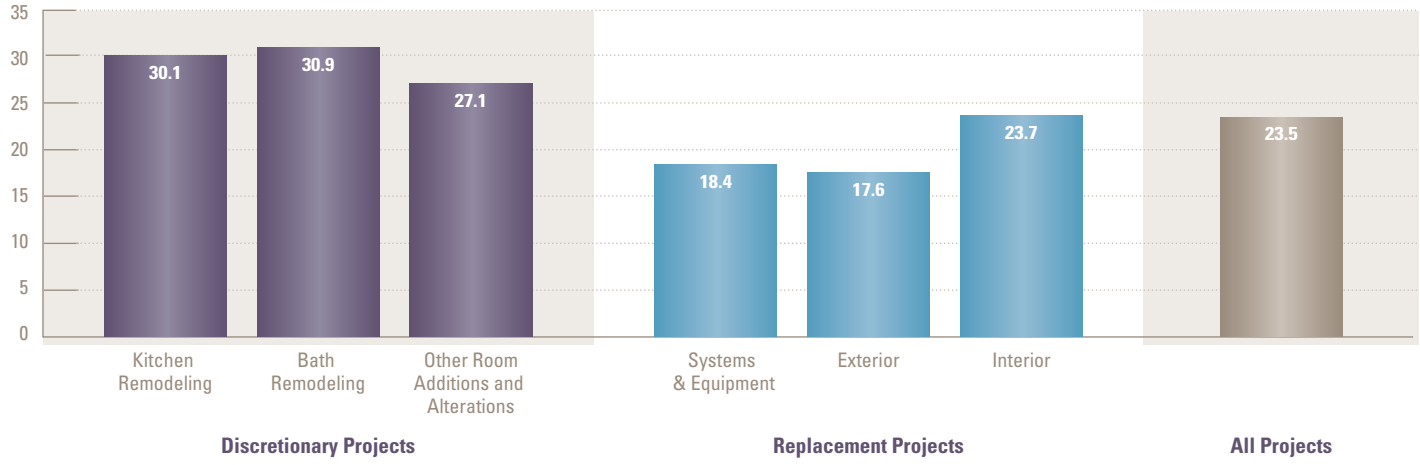
Note: Household income and spending are in 2009 dollars.

Source: JCHS tabulations of 2007–9 AHS.

Figure 11

The DIY Share of Spending Is Higher for Discretionary than for Replacement Projects

DIY share, 1995–2009 annual averages (Percent)



Source: JCHS tabulations of the 1995–2009 AHS.

discretionary projects—the segment where spending has declined the most during the downturn.

Home improvement spending by older owners has held up better. Older households have usually lived in their homes long enough to have a larger equity cushion if home prices fall. These owners also tend to spend more of their improvement dollars on replacement projects and system upgrades, that is, the spending categories that have fallen the least since 2007.

THE DO-IT-YOURSELF PUZZLE

The one home improvement spending category that might be expected to do better during an economic downturn is DIY projects. Homeowners can realize significant savings from performing the upgrades themselves rather than hiring a contractor to do the work. Oddly enough, however, the share of spending on DIY projects in 2008–9 was lower than at any time over the past 15 years.

The condition of the economy, it turns out, is only one of the factors influencing the DIY share. Household income also plays a primary role. While households across the spectrum undertake DIY projects, higher-income owners are somewhat less likely to do so than other groups. As a result, the income mix of households that make home improvements affects the DIY share. The age composition of households also helps determine the DIY share, with younger households—particularly younger families—much more likely to take on such projects than older households.

But among the most significant determinants of DIY activity is the mix of projects. Do-it-yourselfers are much more apt to undertake certain types of home improvements, including minor bath remodels, deck and porch additions, and insulation projects **(Figure 11).** In contrast, homeowners typically leave exterior replacement projects such as roofing or siding, as well as HVAC and other system upgrades, to professional contractors.

The availability of federal tax credits for energy retrofits, along with the usual decline in upper-end discretionary projects during economic downturns, altered the mix of home improvement projects in 2007–9. Thanks to these tax incentives, spending on professionally installed energy-related projects fell less than half as much as overall home improvement expenditures, further reducing the DIY share of home improvement spending.

As the mix of home improvement projects becomes more balanced in the years ahead, however, the DIY share should return to its longer-term average. Moreover, given that younger households are traditionally more active do-it-yourselfers, the entrance of the large Generation Y and subsequent cohorts into the housing market over the coming decade should in fact lift the DIY share of home improvement spending.

3 EVOLVING INDUSTRY STRUCTURE

Despite strong growth in home improvement activity over much of the 2000s, the remodeling industry remains populated by numerous small businesses that are highly susceptible to failure. Ease of entry and undercapitalization of many firms contribute to considerable churn in the industry.

Just before the downturn in 2007, however, larger remodeling firms were beginning to gain market share. As the recovery proceeds, this trend toward concentration is likely to continue.

CHANGES IN SIZE AND COMPOSITION

As of 2007, the last year for which data are available, more than 650,000 contracting businesses were focused on residential remodeling—up from 530,000 five years earlier. Most of this growth reflects significant increases in both special trade contractors and self-employed remodelers **(Figure 12).** Between 2002 and 2007, the number of special trade remodelers grew more than two-and-a-half times faster than that of general remodeling contractors. Since special trade firms often work in both the new construction and remodeling sectors, many of these contractors likely turned their attention to home improvement projects when home building activity started to decline in early 2006.

Over the same five-year period, the number of self-employed remodeling contractors rose more than 30 percent, far outpacing increases in firms with employees. By 2007, self-employed individuals made up fully two-thirds of all residential remodeling businesses, compared with 62 percent in 2002. The relatively low costs of entry into the industry, coupled with a booming market, made remodeling an attractive option for self-employment during this period.

Another defining characteristic of the remodeling industry is the high degree of churn, with large numbers of firms entering and exiting the market every year. In 2003, a year when home

improvement spending was growing strongly nationwide, nearly 18 percent of all general remodeling firms with payrolls were startups.

With so many self-employed contractors and startup firms, it is not surprising that the remodeling industry remains heavily weighted toward smaller businesses. More than 70 percent of self-employed remodelers in 2007 had revenues of less than $100,000. Even contractors with payrolls tend to be smaller operations, with nearly half generating less than $250,000 in revenue that year. At the same time, though, the share of larger payroll firms with revenues over $500,000 climbed from 22 percent to almost 30 percent. The redistribution of firms was especially evident in the $1 million or more revenue category, where the share increased from less than 10 percent in 2002 to about 15 percent in 2007.

CONCENTRATION TRENDS

Although the largest firms still made up a relatively small share of remodeling establishments in 2007, they were responsible for a substantial and growing share of industry activity **(Figure 13).** In that year, general and special trade remodelers with revenues of at least $1 million accounted

Figure 12

During the Housing Boom, the Number of Self-Employed Remodelers Grew Substantially

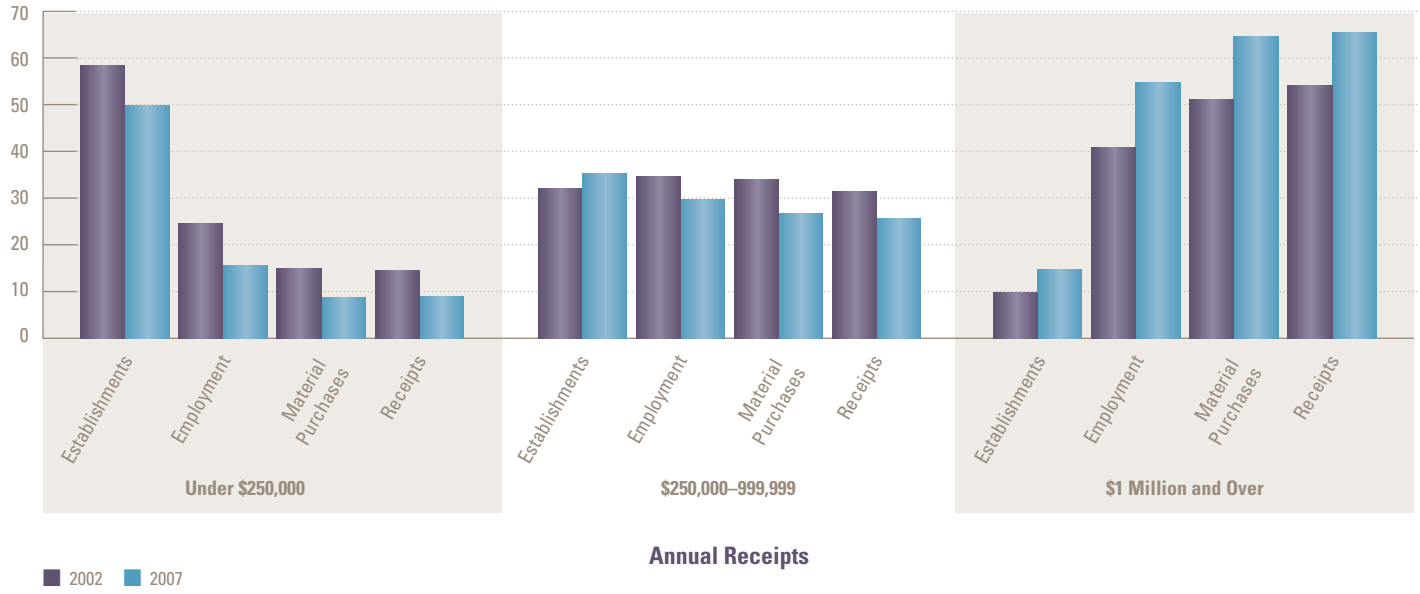
	Number of Remodelers		Percent Change
	2002	2007	2002–7
General Contractors			
Payroll	82,900	77,900	-6.0
Self-Employed	127,200	156,700	23.2
Total General	210,100	234,600	11.7
Special Trade Contractors			
Payroll	117,200	139,500	19.0
Self-Employed	202,900	278,100	37.1
Total Special Trade	320,100	417,600	30.5
Total	**530,200**	**652,200**	**23.0**

Note: Includes self-employed remodeling contractors with annual revenues of at least $25,000.
Source: JCHS estimates using unpublished tabulations from US Census Bureau, 2002 and 2007 Economic Census of Construction and Nonemployer Statistics.

Figure 13

Larger Remodeling Establishments Captured a Growing Share of Jobs, Material Purchases, and Receipts in 2007

Shares of industry totals (Percent)



Source: JCHS estimates using unpublished tabulations from US Census Bureau, 2002 and 2007 Economic Census of Construction.

for 55 percent of total employment, 65 percent of material purchases, and 66 percent of remodeling and repair receipts. Given the dramatic increase in revenue among larger establishments, it is not surprising that the remodeling industry became somewhat more concentrated during the housing market upturn.

Some of the industry concentration may, however, be an artifact of inflation pushing sales into higher revenue categories. Overall consumer prices rose 15 percent between 2002 and 2007, and remodeling costs may have increased even more because strong homeowner demand allowed contractors to compete less on pricing. As a result, a firm may have been able to grow receipts of $400,000–450,000 in 2002 to $500,000 in 2007 without increasing its workload.

Inflation aside, though, larger firms clearly played a more dominant role in the remodeling market over this period. Indeed, the top 50 general remodeling contractors accounted for almost 8 percent of total receipts at payroll firms in 2007, up from 5.2 percent in 2002 **(Figure 14).**

Compared with other industries where many small businesses serve a limited geographical area, remodeling is just as fragmented as auto repair but significantly less concentrated than food services. As noted, the top 50 general remodeling companies accounted for 7.9 percent of industry revenue in 2007, while the top 50 auto repair firms received just 6.4 percent. In contrast, the top 50 food service companies generated more than 20 percent of industry revenues.

The increased concentration of larger remodeling firms between 2002 and 2007 may indicate that the industry is mirroring shifts that have occurred in the home building industry. Remodeling firms have traditionally been similar in structure to home building companies, with many small-scale operations and high levels of business failures. During the 1990s and early 2000s, home builders began acquiring other companies in an effort to expand their land positions and enter new markets. So far, though, remodeling companies do not face similar pressures to consolidate, although the magnitude of the recent downturn may have provided further impetus. Nevertheless, consolidation would offer remodelers important benefits of scale, such as greater operating efficiencies and better negotiating positions with suppliers—not to mention stronger balance sheets to help bridge down cycles.

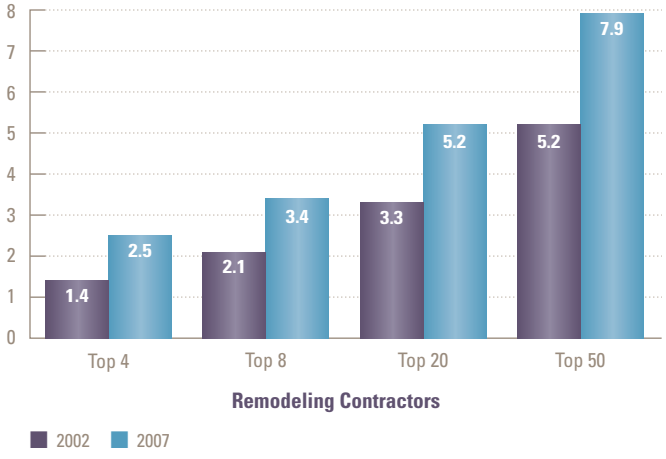
INDUSTRY CHURN AND BUSINESS SURVIVAL

Despite signs of increased concentration among large firms, the steady influx of many small and self-employed

Figure 14

Concentration of the Remodeling Industry Increased Through 2007

Share of receipts for largest remodeling contractors (Percent)

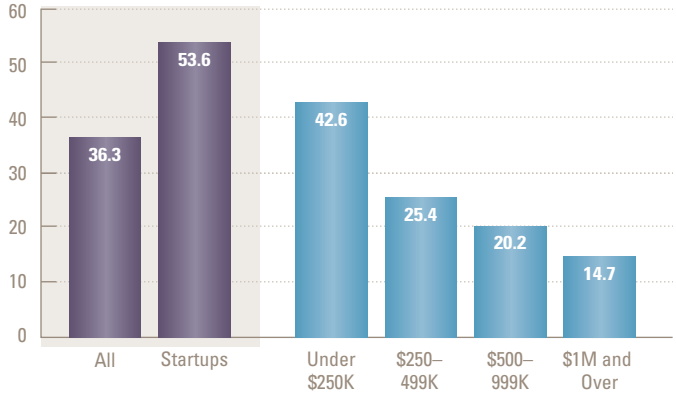


Source: JCHS estimates using unpublished tabulations from US Census Bureau, 2002 and 2007 Economic Census of Construction.

Figure 15

Failure Rates for Remodeling Firms Were High Even During the Market Upturn

Share of establishments in 2003 no longer operating in 2007 (Percent)



Note: Failure rates were calculated by 2003 payroll categories, where under $250,000 in receipts corresponds to less than $50,000 in payroll; $1 million and over in receipts corresponds to more than $250,000 in payroll.

Source: JCHS estimates using US Census Bureau tabulations of the Business Information Tracking Series.

remodelers adds to overall industry fragmentation. As a result, general remodeling contractors have relatively high failure rates **(Figure 15).** According to Joint Center analysis of national business statistics data, more than a third of general remodelers with payrolls operating in 2003 were no longer in business just four years later. Given that such a high percentage of firms exited the industry during a period of healthy growth, failure rates have likely soared since the severe market downturn.

Previous Joint Center research found that size, age, and recent performance are important determinants of business survival. Small remodelers, young businesses, and those with declining revenue are significantly more likely to fail in any given year. While 36 percent of all remodeling firms exited the industry between 2003 and 2007, fully half of startups in 2003 did not survive through 2007. More than 40 percent of establishments with less than $250,000 in revenues also failed. Again, the relationship between establishment size and survival is clear, with remodelers earning $1 million or more in revenues in 2003 having considerably lower failure rates.

Since 2007, remodelers have not only struggled with dramatic declines in homeowner spending but also the pressure of increased competition from builders-turned-remodelers. With the recent collapse of residential construction activity, many home builders turned to the remodeling market as they waited out the housing recovery. For many builders, focusing on remodeling is a relatively easy and attractive way to diversify.

According to a 2009 member census by the National Association of Home Builders, 45 percent of single-family home builders listed residential remodeling as a secondary activity—by far the largest share reported among several diversification choices. The next most popular secondary activities were land development (15 percent), planning or designing (10 percent), and commercial contracting (7 percent). The less volatile remodeling market thus provides a popular fall-back option, particularly for smaller home building firms.

IMPACTS OF THE RECESSION

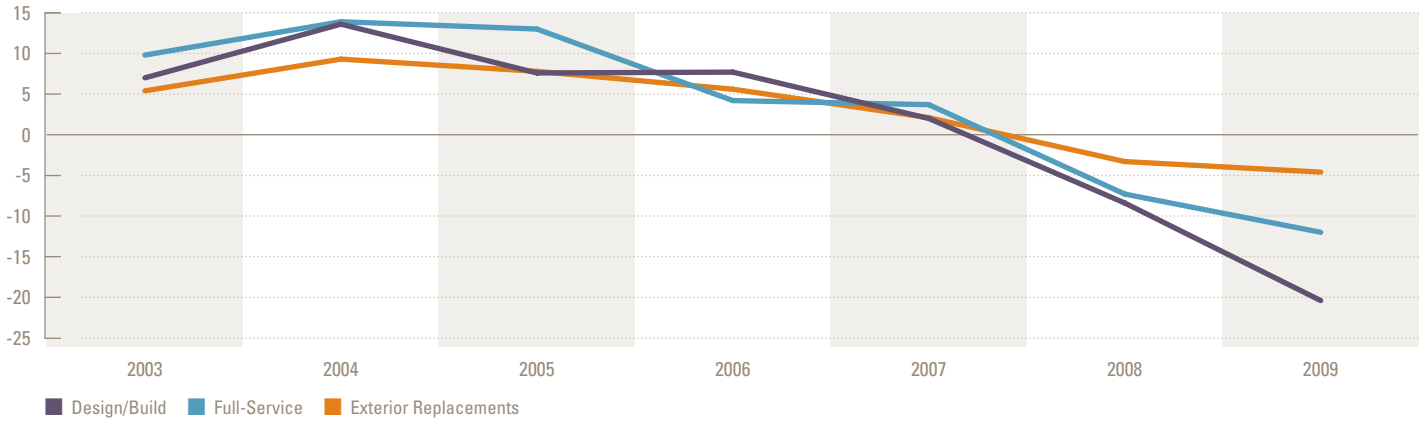
The past few years have clearly been challenging for residential remodelers. Industry payroll employment peaked at more than 310,000 in 2007 and then fell more than 25 percent by the latter half of 2010. Homeowner improvement spending also dropped by more than 23 percent from its 2007 peak, but began to stabilize in 2010—indicating that remodeling employment may soon stabilize as well.

Even the largest remodeling firms saw significantly weaker performance between 2007 and 2009. According to analysis of *Qualified Remodeler* magazine's annual top 500 remodelers list, revenue growth for large companies began to slow in 2005 before dropping sharply in 2008 and 2009 once the market downturn was fully under way. While half of large firms reported revenue declines of less than 4 percent in 2008, the median decline rose to more than 9 percent in 2009.

Figure 16

Contractors Specializing in Exterior Replacements Fared Best During the Downturn

Median annual change in remodeling revenue for top 500 remodelers (Percent)



Notes: Analysis includes remodelers reporting revenue in any two consecutive years and ranking in the top 400 in at least one of those years. Full-service remodelers include kitchen and bath specialists.
Source: JCHS tabulations of *Qualified Remodeler* magazine's Top 500 Remodelers.

Business performance varies by remodeling specialty. During the boom years, revenue growth among design/build and full-service firms outpaced that for exterior replacement contractors. But as homeowners cut back on higher-end discretionary projects such as major kitchen and bath remodels and room additions, revenue declines for design/build and full-service firms were especially sharp. Indeed, the median drop in receipts for design/build firms was more than 20 percent in 2009, while that for exterior replacement firms was less than 5 percent **(Figure 16).** In addition to more stable demand, contractors specializing in exterior replacements benefited from provision of federal tax credits for projects designed to improve home energy efficiency.

EMERGING OPPORTUNITIES FOR REMODELERS

As the industry begins to recover, remodeling firms are surviving the down market by diversifying their services. For example, design/build firms are taking on smaller-scale projects while many full-service contractors are offering handyman or restoration services. Remodelers also have moved into niche markets, such as energy-efficient improvements and other types of green remodeling, rehabilitation of distressed properties, or adaptive retrofits to homes of seniors who want to age in place. Contractors are also using this time to update their information technology and communications systems, and focus more on marketing and branding to attract new customers.

During the housing boom years, the number of remodelers grew rapidly as new contractors entered the market to take advantage of soaring demand. But the sharp retreat in home improvement spending likely put many smaller operations out of business. Potential new entrants now see the risks associated with the highly cyclical construction and remodeling industries. This has opened up opportunities for larger and more stable remodeling firms to capture a larger share of spending as the market recovers. In the years ahead, industry concentration is likely to continue as large firms become more specialized and therefore more efficient, and as customers increasingly value the benefits of more established professional remodeling operations.

4 METROPOLITAN PERSPECTIVES

During the housing market boom, the metro areas that experienced a dramatic runup in house prices also saw a sharp increase in home improvement spending. Once the crash hit and the recession got under way, though, falling house prices and rising mortgage delinquency and foreclosure rates in these same areas led to a commensurate decline in remodeling activity.

In metro markets where housing prices have now stabilized or are beginning to turn up, however, the outlook is for a healthy recovery in improvement spending.

MAJOR MARKET TRENDS

Focusing on metropolitan area trends is critical to understanding overall remodeling activity because these major markets account for a disproportionate share of homeowner spending. Indeed, over the past decade the country's 35 largest metros generated 54 percent of total improvement activity. Moreover, average expenditures per homeowner for this group consistently exceeded national averages by about 25 percent.

Metro-level analysis also provides a sharper lens for viewing remodeling cycles because local demographic characteristics and market conditions vary widely. The decision to undertake a home improvement project, and how much to spend on that project, depends on a broad range of factors including household income, home values, and age of the home. In combination, these factors produce sharply different levels of activity. For example, while the average US homeowner spent $2,600 per year on home remodeling projects in 2000–9, annual spending in the 35 largest metros ranged from $1,200 in San Antonio to $5,100 in San Jose. Spending in New Orleans was also exceptionally high ($5,700 per household) due to improvements in the aftermath of Hurricane Katrina. In general, per household spending was higher in metros located along the West and Northeast coasts than in the South and Midwest, where incomes and home price appreciation were generally lower **(Figure 17).**

Household income and wealth are important drivers of home improvement expenditures. In the highest-spending mar-

kets, such as San Jose, San Francisco, and Washington, DC, median household incomes exceeded $73,800 in 2009—well above the $56,600 average across the 35 largest metros. Homeowners in the 10 highest-income metros thus spent about one-third, or $900, more annually on home improvements than the 35-metro average of $3,100.

Another telling indicator of remodeling spending is home value. In areas with higher home prices, homeowners have more incentive to maintain or increase the value of their homes with more extensive remodeling projects. Indeed, homeowners in the 10 markets with the highest home values spent an average of $4,100 per year on improvements, compared with $2,400 in the 10 metros with the lowest home values. According to Zillow.com, home values averaged $358,000 in the 10 highest-spending metros in 2009 but only $155,000 in the 10 lowest-spending metros.

Finally, age of the housing stock is one of the most critical factors affecting remodeling activity. Much of the oldest inventory is located in the Northeast and Midwest. Fanning out toward the West and South, homes are newer and require less remodeling to maintain or modernize the stock. Accordingly, as a group, homeowners in the largest metro areas with the newest housing stocks spent about 17 percent less on remodeling than the 35-metro average. Homeowners in areas where the median home was built in the 1980s and 1990s—such as Dallas, Orlando, and Las Vegas—spent $2,400 on average each year, while those in areas with older housing spent about $3,300.

SPENDING IN THE TOP 10 MARKETS

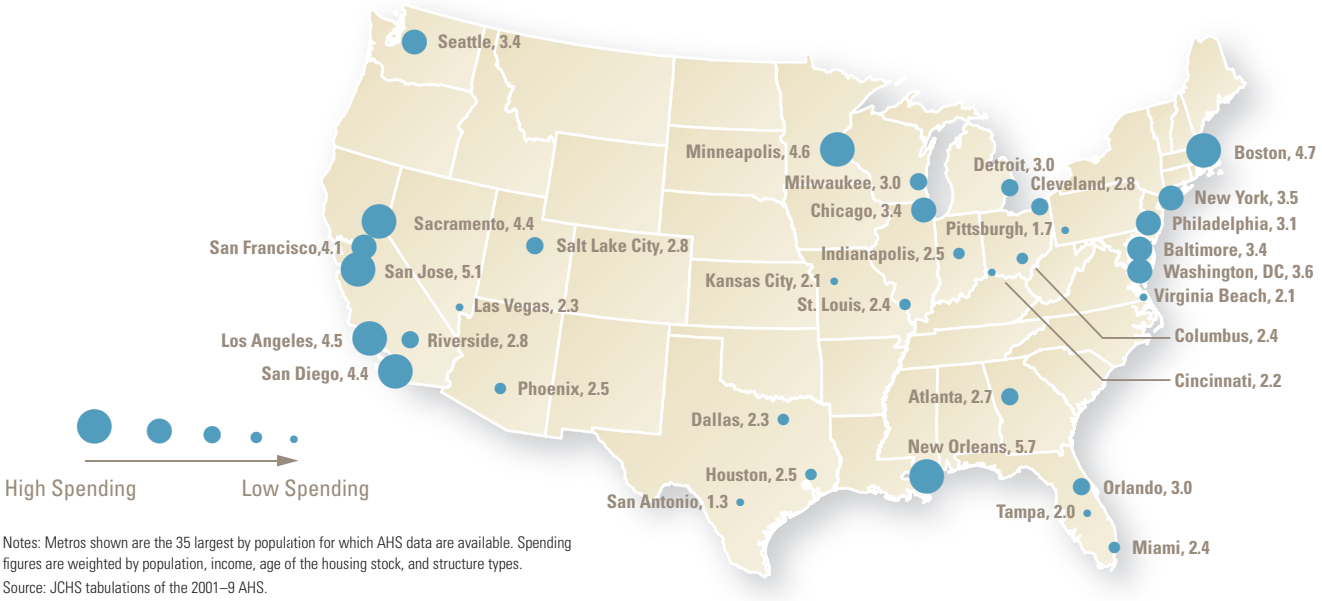
In addition to household income and housing stock characteristics, another key difference between high- and low-spending metropolitan areas is the type of remodeling projects that homeowners undertake. Higher project costs, rather than a larger share of households making improvements, drive up expenditures in high-spending areas. In the 10 markets with the highest expenditures, 58 percent of homeowners reported at least some remodeling activity during the 2000s—slightly above the 56 percent in the bottom 10 markets. However, homeowners in these high-spending metros that made improvements spent twice as much each year on average ($7,400) than those in low-spending metros ($3,700).

More expensive home improvements are likely to be professionally installed rather than do-it-yourself projects. Indeed, in high-spending metros such as San Jose, Minneapolis, and Washington, DC, more than 85 percent of remodeling expenditures went to professional contractors. In low-spending

Figure 17

Top Remodeling Markets Are Located Along the Coasts

Average annual homeowner spending, 2000–9 (Thousands of 2009 dollars)



Notes: Metros shown are the 35 largest by population for which AHS data are available. Spending figures are weighted by population, income, age of the housing stock, and structure types.

Source: JCHS tabulations of the 2001–9 AHS.

areas such as Tampa, Pittsburgh, and Kansas City, however, spending on professionally installed improvements accounted for less than 73 percent of remodeling dollars.

Higher-cost projects also typically fall into the discretionary rather than the replacement category. Homeowners in top remodeling markets thus devote a larger share of their spending to major projects such as kitchen and bath remodels. In addition, more of these discretionary projects are at the upper-end of the cost distribution (expenditures of more than $10,000 over a two-year period). In the 10 highest-spending metros over the past decade, 8 percent of homeowners undertook such high-end discretionary improvements, double the share in the 10 lowest-spending metros. Upscale discretionary projects thus contributed 45 percent of total remodeling expenditures in the top 10 markets but only 26 percent in the bottom 10 markets **(Figure 18).**

Figure 18

Highest-Spending Metros Have More Favorable Market Conditions and a Larger Share of Upscale Project Types

	Top 10 Metros	Bottom 10 Metros	35-Metro Average
Annual Remodeling Expenditures per Homeowner (2009 dollars)	4,200	2,100	3,100
Median Household Income (2009 dollars)	67,900	50,500	56,600
Median Home Value (2009 dollars)	358,000	155,000	220,000
Median Age of the Housing Stock (Years)	39	32	35
Share of Spending on Professionally Installed Projects (Percent)	82	79	81
Share of Spending on Upscale Discretionary Projects (Percent)	45	26	34

Notes: Top 10 and bottom 10 metros are of the 35 largest by population for which AHS data are available. Spending figures are weighted by population, income, age of the housing stock, and structure types. Upscale discretionary projects are defined here as kitchen and bath remodeling, other room additions, other major interior additions, as well as deck/porch and garage/carport attachments of over $10,000.

Sources: JCHS tabulations of the 2001–9 AHS, 2009 ACS, and Zillow.com Home Value Index.

MORTGAGE WOES

When the housing market bubble burst, the aftermath included sharp home price depreciation and soaring mortgage delinquency rates in many parts of the country—particularly those areas where house prices had skyrocketed earlier in the decade. Among the 35 largest metros, First American CoreLogic reports that the share of mortgages originated in 2006 and 2007 that were at least 90 days delinquent in 2009 reached as high as 39 percent in the Miami metropolitan area. While delinquencies in most metros of the Midwest, and particularly Texas, remained in the 9–13 percent range, they jumped to more than 25 percent in many areas in California, Florida, and Arizona.

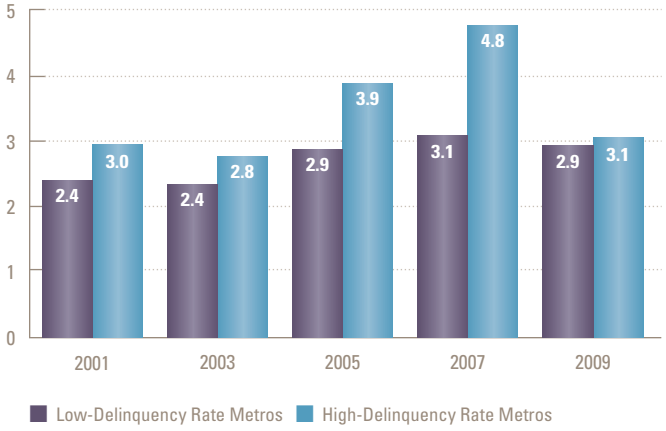
Coupled with tumbling house prices and rising unemployment, the increase in loan delinquencies dramatically slowed remodeling activity in these overheated markets. After an astonishing 60 percent surge in 2000–7, home improvement expenditures in metros with delinquency rates above 14 percent (the median for the 35 largest metros) lost almost all those gains by 2009. Indeed, remodeling activity in these areas rose only 3 percent from 2000 to 2009 **(Figure 19).**

Markets that largely avoided housing bubbles and mortgage problems, however, saw steadier growth in home improvement activity. In metro areas with mortgage delinquency

Figure 19

Spending Cutbacks Were Especially Large in Markets with High Loan Delinquencies

Average annual homeowner spending (Thousands of 2009 dollars)



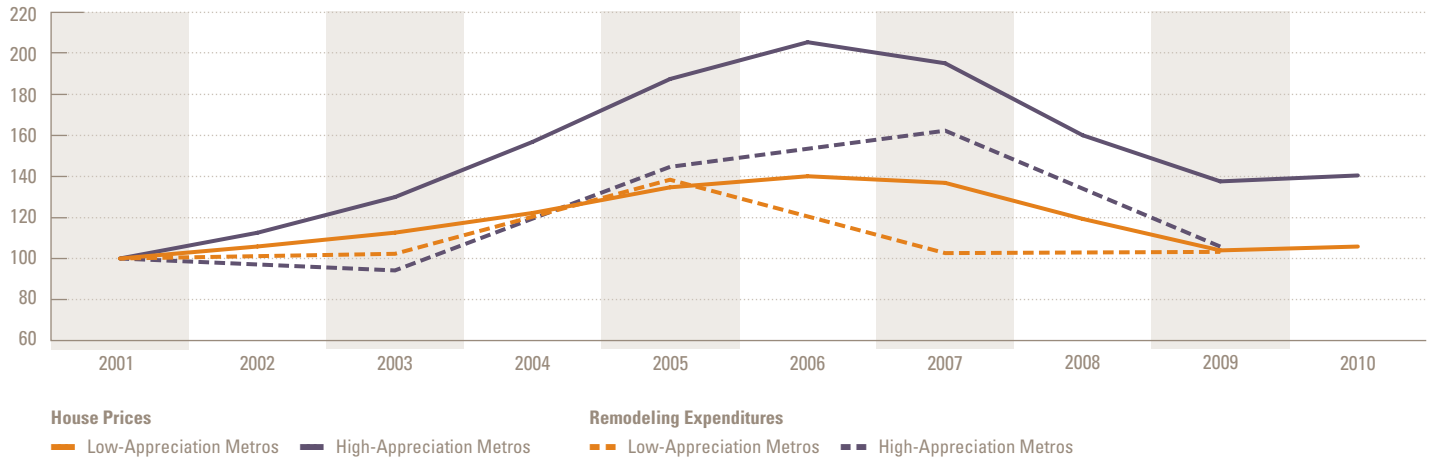
Notes: Spending figures are for the 35 largest metro areas by population for which AHS data are available. Spending figures are weighted by population, income, age of the housing stock, and structure types. In low-delinquency rate metros, less than 14% of mortgages originated in 2006 and 2007 were delinquent in 2009; in high-delinquency rate metros, 14% or more were delinquent.

Source: JCHS tabulations of the 2001–9 AHS and First American CoreLogic, LoanPerformance data.

Figure 20

Improvement Spending and House Prices Track Closely

Indexes



Notes: Indexes include metros for which S&P/Case-Shiller data and AHS remodeling data are available. Low-appreciation metros are those with below-median appreciation between 2000 and the decade peak; high-appreciation metros are those with above-median appreciation.

Source: JCHS tabulations of the 2001–9 AHS and S&P/Case-Shiller Aggregate Indexes from Moody's Analytics DataBuffet.com.

rates below 14 percent in 2009—such as Pittsburgh, Dallas, and Houston—spending also peaked in 2007, although with a smaller cumulative increase of 28 percent from 2000 levels. In stark contrast to the areas that had undergone a dramatic boom and bust cycle, these metros emerged relatively unscathed from the remodeling recession, with average spending up 22 percent over the course of the decade.

HOME PRICES AND IMPROVEMENT SPENDING

House price appreciation will be a major factor in determining the rebound in remodeling activity. Changes in home prices and improvement spending have displayed similar trends throughout the past decade, rising together from 2001 to 2006 and bottoming out in 2009 **(Figure 20).** When metros are grouped according to price increases, it is clear that remodeling expenditures rose more in high-appreciation markets (62 percent) than in low-appreciation areas (38 percent).

Given this close relationship, it is encouraging to see that home prices in many metropolitan areas are showing signs of stabilizing. According to the S&P/Case-Shiller Composite 20 Index, house prices in the first three quarters of 2010 were up 2 percent from the 2009 average. Some metropolitan areas have fared even better. San Francisco is at the top of the list, with house price appreciation of 10 percent in 2010. Appreciation in other California metros, such as San Diego and Los Angeles, was also in the 6–8 percent range.

At the same time, though, house prices continued to fall in many areas, led by a 7 percent drop in Las Vegas. Declines in other metros such as Chicago, Detroit, Seattle, and Tampa have also persisted, albeit at a more moderate 2–3 percent pace. Until house prices fully stabilize, remodeling activity in these markets will remain weak.

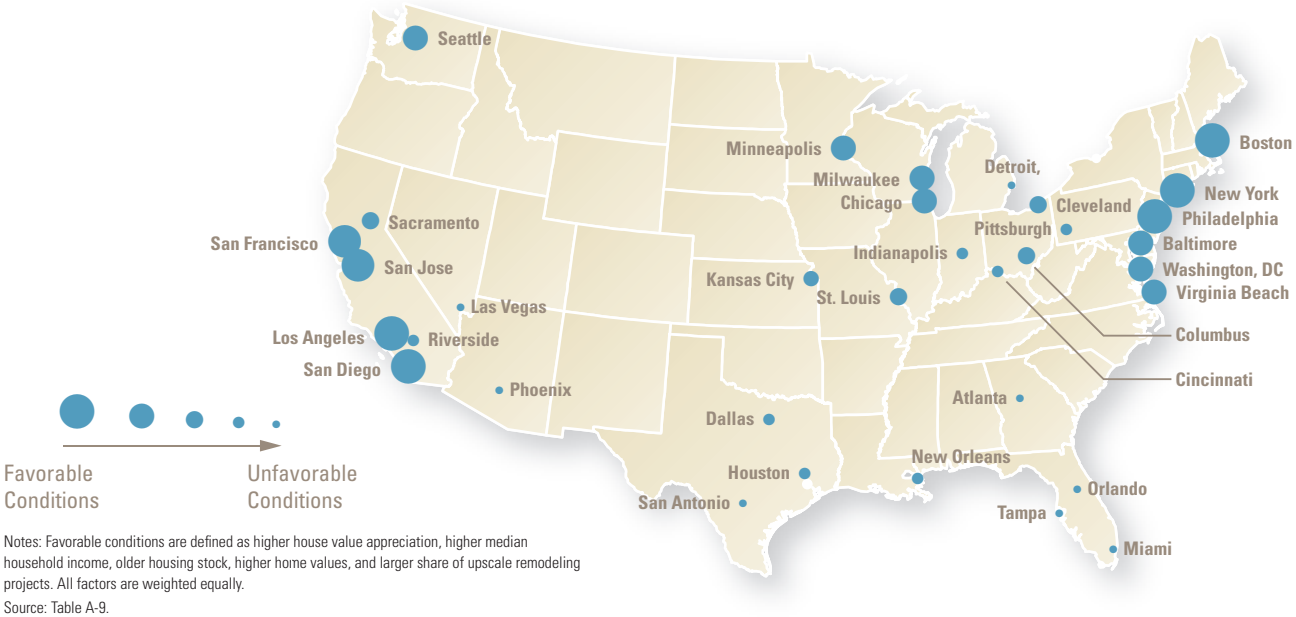
One spending category that held up relatively well in 2007–9 in all regions of the country was energy-related projects, no doubt due in part to federal tax credits for energy-efficient retrofits. Though falling in 2007–9, expenditures on replacements intended to improve energy efficiency, such as installation of new insulation and windows or doors, dropped about half as much as spending on other types of replacements such as plumbing and flooring.

Thanks to this encouraging performance and the extension of the energy tax credit (at a lower rate), spending within the broader category of green remodeling projects will likely continue to grow. Green projects do, however, often require additional expense over traditional remodeling work, and some households resist the higher upfront costs. According to the 2009 Nielsen Energy Survey, the share of households willing to pay a premium for green products (defined as "better for the environment") ranges from 59 percent in San Antonio and Pittsburgh to 64 percent in San Jose. In general, higher shares of households in metro areas along the Northeast and West coasts indicate a willingness to pay more for green products

Figure 21

Conditions in Several Metro Markets Point to a Rebound in Remodeling Activity

Ranking of metros by market conditions in 2009–10



Notes: Favorable conditions are defined as higher house value appreciation, higher median household income, older housing stock, higher home values, and larger share of upscale remodeling projects. All factors are weighted equally.

Source: Table A-9.

than in metros of the South and Midwest. These differences in consumer sentiment will likely influence the adoption rates of green remodeling projects in areas across the country.

THE OUTLOOK

Based on local market conditions in 2009–10, several metropolitan areas appear well-positioned for an upturn in remodeling activity. While many of the stronger metros are among the traditional top-spending markets, conditions in a handful of other areas—such as Philadelphia, Baltimore, Milwaukee, and Chicago—also appear promising **(Figure 21).** These markets may be poised for faster recoveries because they have older housing stocks, higher incomes and home values, and a larger share of upscale remodeling expenditures. In contrast, less favorable market conditions point to slower recovery in overbuilt areas of Florida, as well as Las Vegas and Phoenix. In addition to facing continued home value depreciation in 2010, these areas had the lowest median household incomes and the newest housing stocks in 2009.

Although remodeling activity in distressed metropolitan areas is unlikely to recover quickly, current housing market troubles may also provide new remodeling opportunities. Indeed, improvement spending in overbuilt markets with high foreclosure rates should increase as homes are sold and the new owners attempt to make up for undermaintenance during the downturn and the often protracted foreclosure process.

5

A NEW DECADE OF GROWTH

The new remodeling decade is unlikely to produce the unusual highs and lows witnessed in the 2000s. As the economy moves toward a sustainable recovery, house prices should stabilize and slowly trend up. The inventory of distressed properties will gradually be absorbed and cost-recapture rates for home improvement projects should return to their longer-term average.

If these trends materialize, the growth and composition of home improvement spending over the coming decade should be similar to those in the late 1990s. During that period, homeowner expenditures increased 5–6 percent per year in nominal terms, the discretionary share of project spending averaged about 31 percent, and the top 5 percent of homeowners accounted for about half of total market spending.

The motivations for undertaking home improvements, however, will differ in some important respects in the coming years. The housing market crash has in fact opened up new market opportunities for remodelers. In particular, the growing numbers of foreclosed properties will need rehabilitation after years of underinvestment. In addition, households are moving less often and therefore are more likely to focus on improvements that accommodate their longer-term housing needs. Indeed, energy-efficiency retrofits—projects that make more financial sense if owners expect to remain in their homes for several years—were one of the home improvement categories that increased most in share over the 2007–9 period.

THE UPSIDE OF THE DOWNTURN

One of the major contributors to the remodeling industry slump is the rising number of distressed properties. Owners that are delinquent on their mortgage payments or going through the foreclosure process are unlikely to make improvements to their homes. Even if they have the resources to do so, these owners have little incentive to upgrade since they will not recoup any benefit from the investment.

According to the Mortgage Bankers Association's national delinquency survey, 4.4 percent of all home mortgages

were in the foreclosure process in the third quarter of 2010. Meanwhile, RealtyTrac reports that properties that were either foreclosed or in the process of foreclosure made up about 25 percent of residential sales in that quarter. These homes sold for about a third less on average than those that were not distressed. Such large discounts in the selling price may reflect the fact that the homes are less desirable properties or in less desirable locations, or that the owner (often a bank) wants to sell as quickly as possible. But foreclosed homes are also likely to be in poor condition because of a lack of investment during the foreclosure process—a period that currently lasts almost 500 days on average. New owners may thus need to make up for this deferred maintenance.

Pent-up demand for improvements to distressed properties may be significant. A survey of 1,200 recent homebuyers conducted by the Home Improvement Research Institute in spring 2010 indicates that new owners of existing distressed properties spent almost 15 percent more on average than new owners of nondistressed properties **(Figure 22).** The difference in spending on new distressed and nondistressed homes is even greater. As these properties work their way through the foreclosure pipeline, home improvement expenditures will increase.

THE CHALLENGE OF LOWER MOBILITY

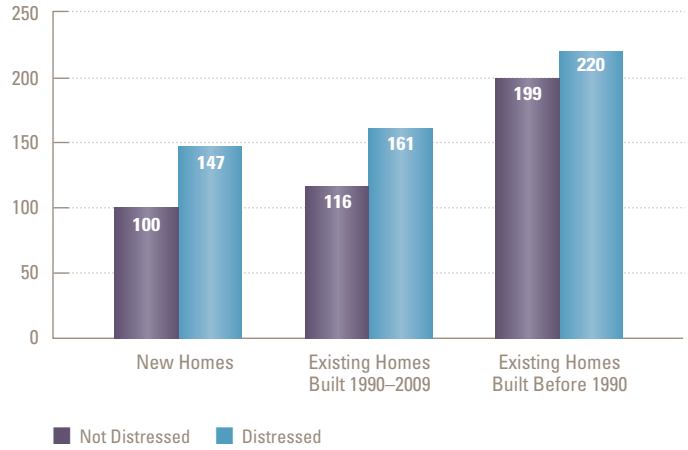
Lower household mobility is another product of the housing downturn. Many owners who would normally have moved in recent years have stayed in their homes either because they were holding out for higher selling prices or because they were underwater on their mortgages and unable to cover the difference between the outstanding loan balance and the sales price. At the same time, many potential buyers have had difficulty getting mortgages under today's stricter underwriting standards, or have delayed purchases out of concern that home prices might decline further. The net result is that the national mover rate fell to just 11.9 percent in 2008—the lowest rate since the Census Bureau began tracking mobility in 1948. Moreover, only 35.2 million people changed residences in 2008, the lowest number since 1962.

While the Great Recession intensified matters, the national mobility rate has in fact been dropping for several decades. In 1985, close to one in five households moved each year. Two trends contributed to the ongoing decline—the aging of the population (because older households tend to change residence less often than younger households), and the rising homeownership rate through the mid-2000s (because owners are less mobile than renters).

Figure 22

Buyers of Distressed Properties Are Spending More on Remodeling

Index of average remodeling expenditures in the first year after purchase, 2010



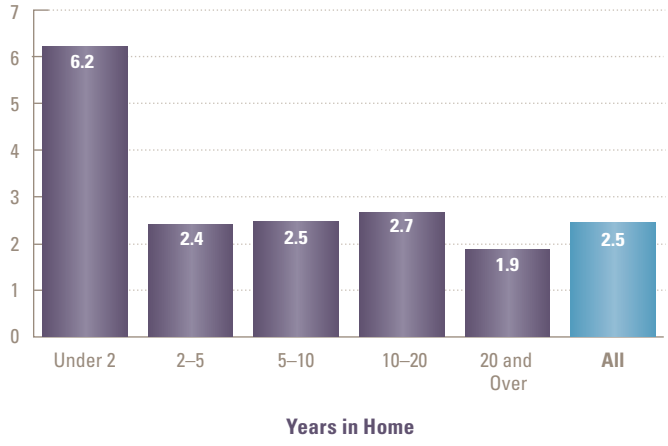
Notes: New distressed properties were either bought from a financial institution or from a builder or developer who "needed to sell the home as soon as possible." Existing distressed properties were bought from a financial institution, purchased as a short sale, or had a loan in delinquency or in the foreclosure process.

Source: JCHS tabulations of the 2010 HIRI Recent Home Buyers Survey.

Figure 23

Home Improvement Spending Declines Sharply After the Second Year of Ownership

Average annual spending per homeowner, 1997–2009 (Thousands of 2009 dollars)



Source: JCHS tabulations of the 1995–2009 AHS.

Mobility is unlikely to increase significantly as the recovery proceeds. Mortgage rates have been unusually favorable in recent years because of weak loan demand as well as Federal Reserve efforts to stimulate the economy. As a result, the overwhelming majority of households have either financed their home purchases or refinanced existing mortgages at what many think will be the lowest rates of their lifetime. As mortgage rates trend up in the years ahead, owners may be reluctant to move because it would require repaying their current loans and losing these attractive interest rates. This mortgage "lock-in effect" is likely to keep mobility rates low.

In general, lower household mobility would be expected to depress homeowner improvement spending. In fact, home sales are typically thought to be the best near-term indicator of a change in home improvement spending. Recent homebuyers spend more than twice as much on remodeling projects on average as owners that have not moved within the past two years **(Figure 23).** While dropping sharply after the initial burst of activity following a home purchase, remodeling expenditures slowly creep up over the first 20 years of ownership, then fall thereafter.

Under current circumstances, however, lower mobility may offset some of its traditionally negative effect on home improvement spending. Rather than trade up, owners that remain in their homes to keep their low mortgage rates may want to upgrade their existing units. As owners make a longer-term commitment to staying in their current homes, they may be more likely to undertake certain improvement projects. For example, a roof replacement may make more sense than a temporary roofing repair. Upgrading an HVAC system or replacing older, less energy-efficient windows may also be a more desirable choice for owners planning to stay put.

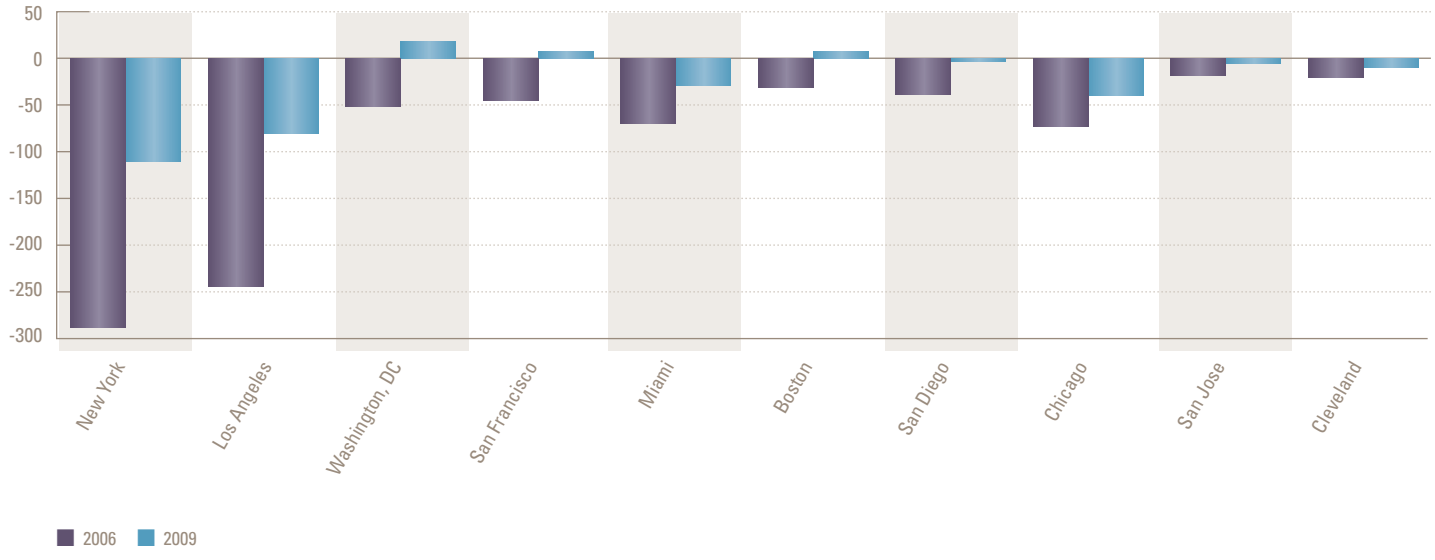
Along with lower mobility, changes in domestic migration may at least temporarily alter regional patterns in home improvement activity. Over the past decade, households have been relocating in significant numbers from the older areas in the Northeast and Midwest to newer areas of the South and West. Topping the list of migration losers over the past decade is New York, which lost 2.0 million persons on net. The top gainer was Phoenix, which added more than a half-million persons on net.

Since the peak in the housing market, however, these long-term trends have changed substantially. Indeed, several traditionally slower-growing or declining metropolitan areas in the Northeast and Midwest, as well as in California, saw

Figure 24

Since the Peak of the Housing Market in 2006, Out-Migration from Metros in the Northeast and Coastal California Has Slowed

Net domestic migration (Thousands)



Notes: Of the 50 largest metropolitan areas in the country, these 10 had the largest increase in net domestic migration in 2009 from 2006 levels. New Orleans is not shown here because of the unusually high rate of in-migration after Hurricane Katrina.

Source: US Census Bureau Population Estimates.

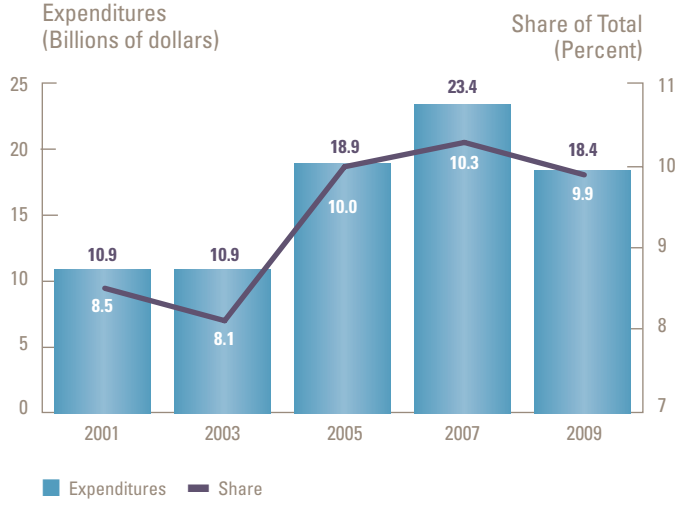
the greatest improvement in net domestic migration between 2006 and 2009. New Orleans posted the largest increase in in-migration as households moved back to the area after Hurricane Katrina. More typically, though, areas that had been on a downward trajectory in terms of net migration began to see something of a turnaround. For example, Boston, San Francisco, and Washington, DC, went from modest net losses to net gains **(Figure 24).** New York, Chicago, and Los Angeles also went from substantial net migration losses in 2006 to only modest net losses in 2009.

Meanwhile, many long-time winners in terms of net migration saw their gains trimmed back significantly. Population gains in such recently fast-growing metros as Orlando, Jacksonville, Las Vegas, and Riverside, came to a virtual standstill in 2009. These areas were among the most overbuilt when the housing bubble burst and therefore have large inventories of unsold new homes as well as high shares of both foreclosed properties and homes with underwater mortgages. Economic growth has also slowed more sharply in these markets in response to the drastic cutbacks in residential construction and their ripple effect on local economic activity.

Remodelers in metro areas along the Northeast corridor and coastal California should benefit from the shift in migration patterns. Areas that have experienced more moderate losses or even gains in net migration typically have higher average household incomes, higher home values, and older housing stocks—characteristics associated with higher home improvement spending. Once today's housing market problems are resolved, longer-term migration trends may shift back to favor the Sunbelt areas. In the meantime, though, areas where net migration has improved should continue to see relatively stronger remodeling spending.

Figure 25

Immigrant Homeowners Remain an Important Market Segment



Source: JCHS tabulations of the 2001-9 AHS.

EMERGING MARKET NICHES

As the economy and housing markets recover, growth in some remodeling segments will be especially strong. Spending by immigrant homeowners is one such category. Between 2003 and 2007, immigrants more than doubled their remodeling expenditures, increasing their share of the overall market from about 8 percent to more than 10 percent **(Figure 25).** But with the national economic recession, net immigration slowed to about 860,000 persons per year between 2007 and 2009, down from about 1.0 million annually in the first seven years of the decade. At the same time, per household spending on improvements fell more among foreign-born than native-born homeowners. As a result, the immigrant share of overall remodeling expenditures dipped back under 10 percent in 2009.

Nevertheless, foreign-born homeowners will remain a vital market for the remodeling industry. Conservatively assuming that inflows are just half of current Census Bureau projections, the Joint Center expects new immigrants to contribute an increasing share of household growth over the coming decades, up from 16 percent in 2005–10 to nearly 20 percent in 2020–5.

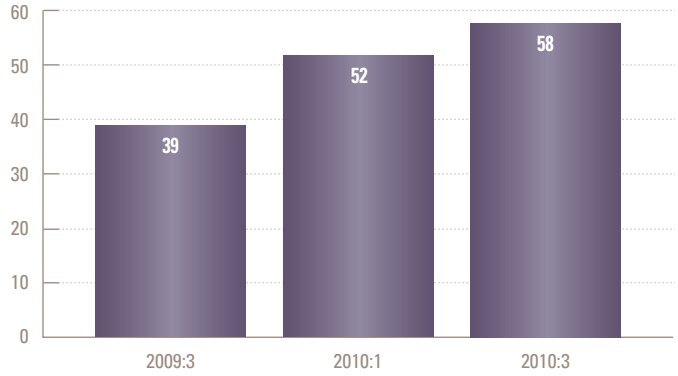
Given the concentration of immigrants in urban and suburban locations as well as in the West (37 percent of foreign-born homeowners live in this region, compared with 19 percent of native-born homeowners), any rebound in immigration in the coming years is likely to disproportionally benefit these areas. Immigrant households also tend to be very active in the DIY market. Over the past decade, Hispanic immigrant homeowners in particular were much more likely to take on DIY projects, outspending other immigrant owners by 21 percent and native-born owners by 26 percent.

Green projects provide another important growth opportunity. Results from the JCHS National Green Remodeling Surveys indicate that improvement projects where homeowners specified green features increased from just under 25 percent of all projects in early 2009 to more than 28 percent in the latter part of 2010. The tax incentives for energy-efficient retrofits under the federal stimulus program helped to support this increase. Another factor is that the share of replacement projects and system upgrades—the spending categories that cover a major-

Figure 26

More Remodelers Report Working on Energy Tax Credit Projects

Share of respondents (Percent)



Project Types in 2010:3	Percent Reporting
Building Envelope	97
HVAC Upgrades/Replacements	41
Renewable Energy Systems	19

Notes: Building envelope projects include insulation, windows, doors, and roofing. HVAC upgrades/replacements include heaters, furnaces, boilers, and air conditioners. Renewable energy systems include solar, wind, geothermal, and fuel cell technologies. Percent reporting by project type are tabulated from 2010:3 survey data.

Source: JCHS 2009–10 National Green Remodeling Survey.

ity of green projects—generally increases during downturns as discretionary expenditures decline. In addition, many homeowners are concerned that home energy costs will climb once economic growth resumes, making energy-efficient improvements attractive investments for the long term.

Energy-efficient upgrades to existing homes offer huge potential savings in terms of national energy conservation. Homes currently account for over 20 percent of national energy usage, and homes built before the 1973 OPEC oil embargo (when energy costs were lower and efficiency was less of a priority) account for about half of the national housing stock. Retrofitting the existing inventory of almost 130 million homes will thus be a massive undertaking.

Remodeling contractors are increasingly targeting energy-related projects and the growth potential that they hold. Between mid-2009 and mid-2010, the share of home improvement contractors reporting that they worked on projects eligible for federal energy tax credits jumped from less than 40 percent to almost 60 percent **(Figure 26).** To date, however, homeowners have focused primarily on smaller-scale green projects that offer a quick payback. Of the general remodeling contractors that reported working on energy tax credit projects in the third quarter of last year, almost all did projects related to the building envelope such as window and exterior door replacements, while fewer than half worked on HVAC upgrades and replacements. Only a small minority installed more expensive renewable energy systems.

With or without federal tax credits, history has demonstrated that market forces can be the most powerful incentive for energy-efficient retrofits. In the years ahead, energy consumption is likely to rise dramatically in rapidly developing countries such as China and India. As American households come to believe that higher home energy costs are inevitable, the perceived payback from retrofits will rise and green remodeling activity will increase.

As the economy continues to improve and the broader housing market stabilizes, remodeling spending should thus return to the average growth rate of the past 15 years. Still, the remodeling market of the coming decade will be different from the one of the past decade, relying less on upper-end discretionary projects to drive growth. Instead, spending on smaller projects—often to replace older features or upgrade basic systems—is expected to increase in share. Growth in the number of households, particularly among those entering their prime remodeling years, will ensure that this nearly $300 billion industry will continue to capture a large share of housing investment in future years.

6 APPENDIX TABLES

The following Web tables provide historical data on improvement spending and additional homeowner detail such as income quintiles, nativity, metro status, and recent mover status. Visit the Joint Center's website at www.jchs.harvard.edu and click on the report cover.

Table A-1

Total Homeowner Improvement Expenditures: 2009

	Homeowners Reporting Projects (000s)	Average Expenditure ($)	Total Expenditures (Millions of $)
Kitchen Remodels			
Minor	1,134	2,785	3,157
Major	834	20,556	17,144
Bath Remodels			
Minor	1,359	1,383	1,880
Major	1,106	9,145	10,113
Room Additions and Alterations			
Kitchen	39	28,707	1,134
Bath	400	9,843	3,938
Created finished bathroom from unfinished space	153	7,029	1,072
Added bathroom onto home	89	18,992	1,685
Bathroom created through structural changes	206	5,742	1,181
Bedroom	549	20,676	11,348
Created finished bedroom from unfinished space	232	10,690	2,483
Added bedroom onto home	140	51,365	7,168
Bedroom created through structural changes	252	6,725	1,697
Other	1,257	13,432	16,890
Created finished recreation room from unfinished space	275	7,394	2,034
Created other finished inside room from unfinished space	459	8,742	4,008
Added other inside room onto home	272	26,876	7,315
Other room created through structural changes	449	7,872	3,533
Outside Attachments			
Deck/Porch	714	4,407	3,146
Added porch onto home	288	4,741	1,367
Added deck onto home	439	4,054	1,778
Garage/Carport	135	11,449	1,551
Added attached garage onto home	59	21,288	1,252
Added carport onto home	77	3,894	298
Systems and Equipment			
Plumbing/Pipes	1,563	1,037	1,620
Electrical System	2,365	1,031	2,439
Plumbing Fixtures	4,026	859	3,457
HVAC	3,314	3,969	13,152
Added/replaced central air conditioning	1,957	3,680	7,201
Added/replaced built-in heating equipment	2,208	2,695	5,951
Appliances/Major Equipment	6,676	628	4,194
Added/replaced water heater	3,259	647	2,110
Added/replaced built-in dishwasher	2,261	498	1,126
Added/replaced garbage disposal	1,491	160	239
Added/replaced security system	1,108	650	720
Exterior Additions and Replacements			
Roofing	3,369	4,989	16,808
Siding	1,136	4,266	4,847
Windows/Doors	4,370	2,619	11,448
Interior Additions and Replacements			
Insulation	1,784	1,014	1,808
Flooring/Paneling/Ceiling	6,827	2,203	15,039
Added wall-to-wall carpeting over finished floor	2,466	1,729	4,263
Added other types of flooring such as wood, tile, marble, or vinyl	4,694	1,848	8,675
Installed paneling or ceiling tiles	1,986	1,058	2,101
Other	829	2,981	2,472
Disaster Repairs	1,063	9,886	10,508
Other Property Additions and Replacements			
Added other outside structure	214	6,429	1,375
Septic tank	177	4,228	749
Driveways or walkways	1,706	2,993	5,108
Fencing or walls	2,223	2,103	4,674
Patio, terrace, or detached deck	1,218	3,132	3,817
Swimming pool, tennis court, or other recreational structure	374	10,189	3,808
Shed, detached garage, or other building	1,088	5,446	5,926
Other major improvements or repairs to lot or yard	468	3,270	1,529
Total	**21,055**	**8,790**	**185,079**

Notes: Homeowner numbers do not add to total because respondents may report projects in more than one category. Household totals were estimated using American Housing Survey (AHS) and American Community Survey (ACS) data. Major remodels are defined as professional home improvements of more than $10,000 for kitchen projects and more than $5,000 for bath projects, and DIY improvements of more than $4,000 for kitchen projects and $2,000 for bath projects.

Source: JCHS tabulations of the 2009 AHS.

Table A-2

Professional and Do-It-Yourself Home Improvement Expenditures: 2009

	Professional			Do-It-Yourself		
	Homeowners Reporting Projects (000s)	Average Expenditure ($)	Total Expenditures (Millions of $)	Homeowners Reporting Projects (000s)	Average Expenditure ($)	Total Expenditures (Millions of $)
Kitchen Remodels						
Minor	621	3,942	2,446	513	1,386	711
Major	462	27,300	12,609	372	12,187	4,535
Bath Remodels						
Minor	654	2,026	1,324	706	788	556
Major	550	13,677	7,519	556	4,664	2,594
Room Additions and Alterations						
Kitchen	26	38,979	1,026	13	8,190	108
Bath	197	16,432	3,242	206	3,377	697
Bedroom	255	34,203	8,712	299	8,821	2,636
Other	557	23,631	13,164	710	5,250	3,726
Outside Attachments						
Deck/Porch	333	6,712	2,233	383	2,384	913
Garage/Carport	76	17,080	1,304	59	4,171	246
Systems and Equipment						
Plumbing/Pipes	870	1,504	1,308	694	450	312
Electrical System	1,523	1,349	2,055	843	456	385
Plumbing Fixtures	1,830	1,330	2,435	2,196	466	1,023
HVAC	2,824	4,161	11,752	532	2,629	1,400
Appliances/Major Equipment	4,215	739	3,116	2,729	395	1,078
Exterior Additions and Replacements						
Roofing	2,698	5,604	15,122	671	2,514	1,686
Siding	780	5,363	4,181	357	1,868	666
Windows/Doors	2,685	3,494	9,381	1,686	1,226	2,066
Interior Additions and Replacements						
Insulation	861	1,445	1,244	922	611	564
Flooring/Paneling/Ceiling	4,081	2,800	11,428	3,174	1,138	3,611
Other Interior	537	3,485	1,870	315	1,909	602
Disaster Repairs	806	11,240	9,063	257	5,631	1,445
Other Property Additions and Replacements	3,323	6,238	20,725	2,871	2,180	6,260
Total	**15,332**	**9,605**	**147,259**	**10,439**	**3,623**	**37,820**

Notes: Homeowner numbers do not add to total because respondents may report projects in more than one category. Household totals were estimated using AHS and ACS data. Major remodels are defined as professional home improvements of more than $10,000 for kitchen projects and more than $5,000 for bath projects, and DIY improvements of more than $4,000 for kitchen projects and $2,000 for bath projects. Job categories are aggregations of the detailed projects reported in the AHS (see Table A-1).

Source: JCHS tabulations of the 2009 AHS.

Table A-3

Total Improvement Expenditures by Homeowner Characteristics: 2009

	Number of Homeowners (000s)	Homeowners Reporting Projects (000s)	Average Expenditure ($)	Total Expenditures (Millions of $)
Total	**74,929**	**21,055**	**8,790**	**185,079**
Income (2009 dollars)				
Under $40,000	24,675	6,113	5,643	34,496
$40–79,999	23,178	6,545	6,776	44,350
$80–119,999	14,051	4,299	9,102	39,132
$120,000 and Over	13,005	4,097	16,375	67,092
Home Value (2009 dollars)				
Under $100,000	19,239	5,112	4,703	24,040
$100–149,999	12,296	3,551	6,220	22,085
$150–199,999	10,854	3,211	6,720	21,574
$200–249,999	7,754	2,263	8,044	18,205
$250–399,999	13,300	3,875	10,859	42,077
$400,000 and Over	11,486	3,044	18,760	57,098
Age of Household Head				
Under 35	8,501	2,512	7,294	18,323
35–44	13,789	4,075	10,026	40,856
45–54	17,802	5,195	9,013	46,823
55–64	15,726	4,486	9,766	43,813
65 and Over	19,110	4,787	7,367	35,264
Generation				
Generation Y (Born 1975 and later)	8,501	2,512	7,294	18,323
Generation X (Born 1965–74)	13,789	4,075	10,026	40,856
Younger Baby Boom (Born 1955–64)	17,802	5,195	9,013	46,823
Older Baby Boom (Born 1945–54)	15,726	4,486	9,766	43,813
Matures (Born 1935–44)	10,236	2,701	8,344	22,538
Seniors (Born before 1935)	8,874	2,086	6,102	12,726
Race/Ethnicity				
White	59,083	16,876	9,200	155,262
Black	5,949	1,577	6,021	9,493
Hispanic	6,127	1,731	7,972	13,796
Asian/Other	3,770	872	7,487	6,527
Spending Level (2009 dollars)				
$0	53,874			
$1–2,499	9,170	9,170	873	8,008
$2,500–4,999	3,676	3,676	3,529	12,973
$5,000–9,999	3,677	3,677	6,912	25,411
$10,000–19,999	2,450	2,450	13,699	33,556
$20,000–34,999	1,110	1,110	26,008	28,868
$35,000–49,999	383	383	41,449	15,884
$50,000 and Over	591	591	102,248	60,379

Note: Income data exclude households not reporting income.
Source: JCHS tabulations of the 2009 AHS.

Table A-4

Professional and Do-It-Yourself Improvement Expenditures by Homeowner Characteristics: 2009

	Professional				Do-It-Yourself			
	Number of Homeowners (000s)	Homeowners Reporting Projects (000s)	Average Expenditure ($)	Total Expenditures (Millions of $)	Number of Homeowners (000s)	Homeowners Reporting Projects (000s)	Average Expenditure ($)	Total Expenditures (Millions of $)
Total	**74,929**	**15,332**	**9,605**	**147,259**	**74,929**	**10,439**	**3,623**	**37,820**
Income (2009 dollars)								
Under $40,000	24,675	4,455	5,972	26,607	24,675	2,716	2,904	7,889
$40–79,999	23,178	4,533	7,323	33,195	23,178	3,506	3,182	11,155
$80–119,999	14,051	3,043	9,634	29,317	14,051	2,368	4,145	9,814
$120,000 and Over	13,005	3,299	17,618	58,130	13,005	1,850	4,845	8,962
Home Value (2009 dollars)								
Under $100,000	19,239	3,330	4,952	16,490	19,239	2,852	2,647	7,551
$100–149,999	12,296	2,515	6,471	16,273	12,296	1,861	3,123	5,812
$150–199,999	10,854	2,310	6,961	16,078	10,854	1,701	3,230	5,496
$200–249,999	7,754	1,659	8,642	14,336	7,754	1,143	3,386	3,870
$250–399,999	13,300	2,977	11,501	34,244	13,300	1,773	4,418	7,833
$400,000 and Over	11,486	2,541	19,611	49,839	11,486	1,109	6,545	7,259
Age of Household Head								
Under 35	8,501	1,539	8,084	12,441	8,501	1,728	3,404	5,882
35–44	13,789	2,731	11,413	31,172	13,789	2,380	4,068	9,684
45–54	17,802	3,655	9,958	36,393	17,802	2,777	3,756	10,430
55–64	15,726	3,434	10,701	36,747	15,726	2,024	3,491	7,066
65 and Over	19,110	3,973	7,679	30,506	19,110	1,530	3,110	4,758
Generation								
Generation Y (Born 1975 and later)	8,501	1,539	8,084	12,441	8,501	1,728	3,404	5,882
Generation X (Born 1965–74)	13,789	2,731	11,413	31,172	13,789	2,380	4,068	9,684
Younger Baby Boom (Born 1955–64)	17,802	3,655	9,958	36,393	17,802	2,777	3,756	10,430
Older Baby Boom (Born 1945–54)	15,726	3,434	10,701	36,747	15,726	2,024	3,491	7,066
Matures (Born 1935–44)	10,236	2,153	8,900	19,157	10,236	978	3,459	3,381
Seniors (Born before 1935)	8,874	1,820	6,235	11,349	8,874	552	2,494	1,377
Race/Ethnicity								
White	59,083	12,298	10,112	124,353	59,083	8,414	3,674	30,910
Black	5,949	1,278	6,134	7,840	5,949	606	2,729	1,654
Hispanic	6,127	1,134	8,874	10,061	6,127	1,012	3,690	3,735
Asian/Other	3,770	623	8,041	5,005	3,770	407	3,742	1,521
Spending Level (2009 dollars)								
$0	59,597				64,490			
$1–2,499	5,170	5,170	893	4,616	5,027	5,027	675	3,392
$2,500–4,999	2,905	2,905	3,161	9,182	1,679	1,679	2,257	3,790
$5,000–9,999	3,151	3,151	6,076	19,147	1,684	1,684	3,720	6,264
$10,000–19,999	2,152	2,152	11,874	25,550	1,149	1,149	6,965	8,006
$20,000–34,999	1,033	1,033	22,216	22,939	507	507	11,703	5,930
$35,000–49,999	369	369	35,022	12,939	160	160	18,446	2,945
$50,000 and Over	552	552	95,865	52,886	233	233	32,174	7,493

Note: Income data exclude households not reporting income.
Source: JCHS tabulations of the 2009 AHS.

Table A-5

Residential Construction and Remodeling Establishments: 2007

	All Residential & Nonresidential Construction Establishments	Residential Construction Establishments		Residential Establishments with Remodeling Receipts			Residential Remodeling Establishments		
	Number (000s)	Number (000s)	Value of Receipts (Millions of $)	Number (000s)	Value of Construction Receipts (Millions of $)	Value of Remodeling Receipts (Millions of $)	Number (000s)	Value of Construction Receipts (Millions of $)	Value of Remodeling Receipts (Millions of $)
General Building Contractors	**212.0**	**172.0**	**356.0**	**119.4**	**150.6**	**64.0**	**77.9**	**55.6**	**51.4**
Special Trade Contractors	**478.0**	**284.4**	**241.5**	**237.8**	**186.4**	**92.1**	**139.5**	**93.1**	**72.9**
Concrete, Structural Steel and Foundation	33.5	17.6	20.1	12.7	11.9	3.8	4.7	3.2	2.4
Framing	19.3	16.8	13.9	9.6	7.0	1.8	3.1	1.3	1.1
Masonry	23.6	16.6	12.8	12.0	8.1	2.9	4.3	2.2	1.8
Glass and Glazing	5.3	2.3	2.9	2.1	2.5	1.5	1.7	1.8	1.3
Roofing	16.6	11.8	13.3	11.5	12.7	8.3	10.0	10.0	7.8
Siding	9.9	9.2	5.9	7.8	5.0	2.9	5.1	3.2	2.5
Electrical	72.4	33.5	28.2	29.9	22.9	10.5	14.9	9.8	7.4
Plumbing, Heating, and Air-Conditioning	92.6	62.6	59.4	57.8	52.0	28.7	41.0	32.4	24.5
Drywall and Insulation	21.0	14.8	19.5	12.0	13.9	4.3	4.7	3.5	2.9
Painting and Wall Covering	35.6	26.7	11.4	23.7	9.6	6.0	16.9	5.9	5.0
Flooring, Tile and Terrazzo	26.4	20.9	15.9	19.3	13.8	7.0	11.3	6.2	5.0
Finish Carpentry	43.4	34.0	20.0	27.9	16.3	10.3	17.9	10.4	8.8
Site Prep and Other	78.3	17.5	18.4	11.5	10.9	4.1	4.1	3.2	2.5

Notes: Includes only establishments that reported revenue. Residential remodeling establishments are defined as those earning more than 50% of receipts from remodeling.

Source: Unpublished tabulations of the 2007 Census of Construction.

Table A-6

Nonpayroll Residential Remodeling Establishments by Annual Receipts: 2007

	Receipts					
	$25–49,999	$50–99,999	$100–199,999	$200–299,999	$300,000 and Over	Total
General Building Contractors	**56,308**	**43,004**	**28,098**	**11,256**	**17,993**	**156,659**
Special Trade Contractors	**118,760**	**88,870**	**46,769**	**12,069**	**11,679**	**278,147**
Concrete, Structural Steel and Foundation	1,545	1,137	690	234	249	3,854
Framing	4,198	1,876	900	256	261	7,490
Masonry	2,618	1,810	1,322	354	374	6,478
Glass and Glazing	734	1,821	963	307	233	4,058
Roofing	6,997	4,793	3,939	1,367	1,536	18,632
Siding	3,343	2,048	1,488	418	515	7,812
Electrical, Plumbing, and HVAC	20,994	19,214	11,979	3,172	2,293	57,653
Drywall and Insulation	6,163	4,110	1,999	564	508	13,345
Painting and Wall Covering	29,797	17,591	6,882	1,491	1,484	57,245
Flooring	16,293	16,260	7,273	1,592	1,906	43,324
Finish Carpentry	16,270	11,775	5,995	1,582	1,493	37,114
Site Prep and Other	9,810	6,435	3,339	732	828	21,143
Total	**175,068**	**131,874**	**74,867**	**23,324**	**29,672**	**434,806**

Notes: The Census of Construction does not report on nonpayroll residential remodeling businesses. JCHS estimates are based on the assumption that the distribution of remodeling receipts for nonpayroll businesses is comparable to that for payroll establishments in the same revenue size category. The remodeling share of total receipts for payroll establishments was calculated and these shares were applied to nonpayroll businesses within each of the revenue categories to estimate the number of nonpayroll remodeling businesses. The total was calculated by eliminating the 562,000 nonpayroll remodelers that reported less than $25,000 in gross receipts in 2007. This procedure provides a conservative estimate of the number of businesses concentrating on residential remodeling.

Source: JCHS estimates based on 2007 Census of Construction and Nonpayroll Statistics.

Table A-7

Residential Remodeling Establishments with Payrolls: 2002 and 2007

Thousands

	2002	2007	Percent Change (2002–7)
General Building Contractors	**82.9**	**77.9**	**-6.0**
Special Trade Contractors	**117.2**	**139.5**	**19.1**
Concrete, Structural Steel and Foundation	4.0	4.7	16.2
Framing	2.2	3.1	41.5
Masonry	4.0	4.3	6.8
Glass and Glazing	1.4	1.7	17.0
Roofing	11.2	10.0	-10.7
Siding	3.1	5.1	60.8
Electrical	11.4	14.9	30.3
Plumbing, Heating, and Air-Conditioning	32.7	41.0	25.6
Drywall and Insulation	2.3	4.7	106.7
Painting and Wall Covering	16.6	16.9	1.6
Flooring, Tile and Terrazzo	8.7	11.3	28.7
Finish Carpentry	16.1	17.9	10.9
Site Prep and Other	3.3	4.1	22.5
Total	**200.0**	**217.4**	**8.7**

Source: Unpublished tabulations of the 2002 and 2007 Census of Construction.

Table A-8

Homeowner Improvement Expenditures by Major Project Categories in Selected Metropolitan Areas: 2000–9

Metropolitan Area	Number of Homeowners (000s)	Total Expenditures (Millions of $)	Expenditures (Millions of $)			
			Professional	Do-It-Yourself	Discretionary	Replacement
Atlanta, GA	1,173	31,685	27,364	4,322	12,379	10,929
Baltimore, MD	669	22,500	19,214	3,286	9,337	9,738
Boston, MA	1,070	49,924	41,851	8,072	25,164	18,733
Chicago, IL	2,293	76,944	60,794	16,150	34,644	32,003
Cincinnati, OH	539	11,604	9,809	1,795	4,236	5,378
Cleveland, OH	565	15,620	12,032	3,589	6,746	7,253
Columbus, OH	439	10,406	8,989	1,416	5,438	3,864
Dallas, TX	1,268	28,788	24,695	4,092	10,119	11,983
Detroit, MI	1,254	37,476	31,352	6,124	13,946	16,271
Houston, TX	1,140	27,946	23,868	4,078	5,445	11,483
Indianapolis, IN	434	10,760	8,426	2,333	3,393	5,731
Kansas City, MO	524	10,959	7,693	3,266	3,779	5,715
Las Vegas, NV	373	8,380	6,859	1,521	2,512	3,111
Los Angeles, CA	2,146	95,907	80,184	15,723	47,485	32,456
Miami, FL	1,346	32,618	26,167	6,451	10,356	14,281
Milwaukee, WI	378	11,405	10,085	1,320	5,305	4,463
Minneapolis, MN	899	41,756	35,922	5,834	21,488	13,376
New Orleans, LA	293	16,758	11,598	5,159	3,441	4,370
New York, NY	3,577	125,366	101,717	23,648	62,690	46,408
Orlando, FL	462	13,913	11,607	2,305	6,199	5,585
Philadelphia, PA	1,512	46,662	38,436	8,226	22,749	17,826
Phoenix, AZ	963	24,020	20,320	3,700	9,722	9,739
Pittsburgh, PA	684	11,786	8,590	3,196	3,571	5,142
Riverside, CA	817	22,675	18,288	4,387	6,248	9,791
Sacramento, CA	468	20,431	12,640	7,791	10,619	7,085
St. Louis, MO	786	19,199	15,743	3,456	7,264	7,374
Salt Lake City, UT	230	6,526	5,057	1,469	2,913	2,649
San Antonio, TX	429	5,340	4,182	1,157	1,582	2,329
San Diego, CA	603	26,487	22,308	4,179	14,834	7,672
San Francisco, CA	894	36,385	30,569	5,816	18,896	12,738
San Jose, CA	357	18,154	16,260	1,894	7,589	6,433
Seattle, WA	796	27,380	20,797	6,583	13,785	10,347
Tampa, FL	777	15,516	11,189	4,327	5,382	8,023
Virginia Beach, VA	394	8,118	6,579	1,539	2,964	4,062
Washington, DC	1,273	45,692	39,045	6,647	23,302	16,967

Notes: Expenditures are in 2009 dollars. Metros shown are the 35 largest by population for which AHS data are available. Spending figures are weighted by population, income, age of the housing stock, and structure types. Discretionary projects are defined here as kitchen and bath remodeling, other room additions, other major interior additions, as well as deck/porch and garage/carport attachments. Replacement projects are defined here as replacements or additions of systems/equipment, flooring, paneling, ceiling, roofing, siding, window/door, and insulation.

Source: JCHS tabulations of the 2001–9 AHS.

Table A-9

Ranking of Major Metropolitan Areas by Market Conditions: 2009–10

Metropolitan Area	House Value Change 2009–10		Median Household Income 2009		Median House Value 2010		Median Age of Housing Stock 2009		Share of Upper-End Discretionary Spending 2009		Cumulative Score	Final Rank
	Percent	Rank	Dollars	Rank	Dollars	Rank	Years	Rank	Percent	Rank		
Atlanta, GA	-7	4	55,460	3	141,530	4	21	5	27	4	20	5
Baltimore, MD	-6	4	65,390	1	237,840	2	38	2	32	3	12	2
Boston, MA	2	1	69,330	1	325,000	1	52	1	50	2	6	1
Chicago, IL	-6	4	58,730	2	192,730	2	44	2	39	3	13	2
Cincinnati, OH	-5	4	51,830	4	149,050	4	39	2	11	5	19	4
Cleveland, OH	-2	2	45,400	5	118,890	5	51	1	40	2	15	3
Columbus, OH	-3	3	50,770	4	135,370	4	34	3	70	1	15	3
Dallas, TX	0	2	54,540	3	133,260	5	25	5	27	4	19	4
Detroit, MI	-14	5	48,540	4	83,300	5	46	2	19	5	21	5
Houston, TX	-5	4	54,150	3	175,270	3	27	4	7	5	19	4
Indianapolis, IN	-3	3	50,410	4	142,030	4	33	3	21	4	18	4
Kansas City, MO	-5	4	54,520	3	154,800	3	35	3	30	4	17	3
Las Vegas, NV	-12	5	53,510	3	128,790	5	15	5	16	5	23	5
Los Angeles, CA	3	1	58,530	2	416,810	1	43	2	52	1	7	1
Miami, FL	-12	5	45,950	5	151,430	4	30	4	31	3	21	5
Milwaukee, WI	-4	3	52,020	4	178,210	3	48	1	40	2	13	2
Minneapolis, MN	-5	3	63,110	2	183,230	3	33	3	40	2	13	2
New Orleans, LA	0	2	46,220	5	151,750	3	36	3	18	5	18	4
New York, NY	-2	2	62,890	2	364,810	1	53	1	39	3	9	1
Orlando, FL	-13	5	46,950	5	126,230	5	20	5	53	1	21	5
Philadelphia, PA	-2	2	60,070	2	205,460	2	47	1	39	3	10	1
Phoenix, AZ	-12	5	52,800	4	137,480	4	21	5	42	2	20	5
Pittsburgh, PA	-1	2	46,350	5	107,010	5	52	1	12	5	18	4
Riverside, CA	-3	3	53,820	3	192,390	3	25	5	24	4	18	4
Sacramento, CA	-4	3	57,360	2	230,620	2	30	4	35	3	14	3
St. Louis, MO	-2	3	51,690	4	140,690	4	40	2	48	2	15	3
San Antonio, TX	-9	5	47,960	5	171,230	3	27	5	27	4	22	5
San Diego, CA	4	1	60,230	2	368,520	1	32	3	62	1	8	1
San Francisco, CA	3	1	73,830	1	515,740	1	46	2	52	1	6	1
San Jose, CA	2	1	84,480	1	573,630	1	36	3	29	4	10	1
Seattle, WA	-7	4	64,030	1	285,260	2	31	4	57	1	12	2
Tampa, FL	-9	5	44,060	5	118,080	5	28	4	7	5	24	5
Virginia Beach, VA	1	1	55,210	3	212,740	2	31	4	36	3	13	2
Washington, DC	-1	2	85,170	1	323,040	2	32	4	45	2	11	2

Notes: The final rank ranges from 1 (most favorable) to 5 (least favorable). Favorable conditions are defined as higher house value appreciation, higher median household income, older housing stock, higher home values, and larger share of upper-end discretionary remodeling projects. All factors are weighted equally. The cumulative score is calculated by adding the rank values for all conditions considered. Metros shown are the 34 largest by population for which AHS data and home value data were available. When estimated home values were unavailable, asking prices were used.

Sources: JCHS tabulations of the 2009 AHS, 2009 ACS, and the Zillow.com Home Value Index.

Table A-10

House Price Appreciation and Mortgage Delinquency Rates in Selected Metropolitan Areas: 2005–9

Percent

Metropolitan Area	House Price Appreciation					Mortgage Delinquency Rate
	2005–6	2006–7	2007–8	2008–9	2009–10	2009
Atlanta, GA	4.3	0.7	-8.5	-11.6	-0.7	17
Boston, MA	-1.8	-4.0	-5.7	-4.9	2.4	13
Charlotte, NC	6.9	5.7	-1.9	-8.2	-2.9	11
Chicago, IL	6.6	-1.0	-10.0	-14.2	-2.6	18
Cleveland, OH	-0.2	-3.8	-7.3	-4.8	1.9	13
Dallas, TX	3.2	0.5	-3.2	-2.3	0.8	11
Denver, CO	2.1	-1.7	-4.9	-2.8	1.4	11
Detroit, MI	-1.4	-9.6	-17.9	-21.3	-2.6	19
Las Vegas, NV	6.1	-6.4	-28.1	-29.8	-7.0	35
Los Angeles, CA	11.6	-5.2	-24.2	-15.4	5.7	26
Miami, FL	17.3	-5.9	-26.5	-22.0	-1.3	39
Minneapolis, MN	2.8	-3.7	-14.4	-15.7	4.5	13
New York, NY	7.5	-2.8	-7.4	-9.8	-1.0	16
Phoenix, AZ	17.7	-7.1	-27.5	-28.0	1.4	28
Portland, OR	17.7	4.4	-6.6	-12.8	-2.0	11
San Diego, CA	1.1	-8.4	-23.3	-13.3	7.6	21
San Francisco, CA	4.4	-4.5	-24.3	-18.4	10.0	19
Seattle, WA	16.0	6.7	-7.3	-14.3	-2.7	11
Tampa, FL	16.9	-7.6	-19.2	-18.8	-3.0	26
Washington, DC	6.2	-6.2	-15.7	-10.8	4.9	18

Notes: Metros shown are the 20 largest for which data were available. House price appreciation rates were annualized from monthly figures. Mortgage delinquency rates are the share of mortgages originated in 2006 and 2007 that were 90+ days delinquent in 2009.

Sources: JCHS tabulations of the S&P/Case-Shiller Aggregate Indexes from Moody's Analytics DataBuffet.com and First American CoreLogic, LoanPerformance data.

Table A-11

Projected Home Improvement Expenditures by Owner Characteristics: 2010–15

Household Type	1996–2000	2010		2015 Projection		2010–15
	Compound Annual Growth Rate of Average Per Owner Spending (Percent)	Average Per Owner Spending (Dollars)	Number of Owner Households (000s)	Average Per Owner Spending (2010 dollars)	Number of Owner Households (000s)	Compound Annual Growth Rate of Average Per Owner Spending (Percent)
White Homeowners						
Married, With or Without Children						
Under 35	4.2	2,984	4,020	3,659	4,244	5.3
35–44	3.4	4,201	6,918	4,959	6,509	2.1
45–54	1.6	3,436	9,417	3,717	8,600	-0.2
55–64	3.5	3,312	8,786	3,940	9,470	5.1
65 and Over	2.6	2,391	8,493	2,714	9,835	5.6
Single Person, Other Family, or Other Non-Family						
Under 35	6.3	1,496	2,414	2,034	2,453	6.7
35–44	-0.9	2,034	2,774	1,942	2,619	-2.1
45–54	0.5	2,267	4,283	2,330	3,904	-1.3
55–64	3.8	2,267	4,376	2,726	4,716	5.3
65 and Over	2.6	1,567	7,992	1,786	8,923	4.9
Minority Homeowners						
Married, With or Without Children						
Under 35	6.8	1,727	1,238	2,397	1,369	8.9
35–44	-0.9	2,242	2,580	2,140	2,854	1.1
45–54	-1.2	2,273	2,528	2,137	2,839	1.1
55–64	2.0	2,683	1,881	2,966	2,361	6.8
65 and Over	11.5	1,666	1,321	2,876	1,747	18.0
Single Person, Other Family, or Other Non-Family						
Under 35	2.0	1,544	968	1,706	1,068	4.0
35–44	4.3	1,782	1,318	2,196	1,417	5.8
45–54	2.3	1,622	1,595	1,821	1,711	3.8
55–64	0.4	1,479	1,276	1,510	1,585	4.9
65 and Over	-0.9	1,188	1,654	1,135	2,093	3.9
All	**4.2**	**2,577**	**75,832**	**2,889**	**80,315**	**3.5**

Notes: White households are non-Hispanic. Minority households include all households except non-Hispanic whites. The 1996–2000 compound annual growth rate of average per owner spending is calculated as the rate of change between the 1994–7 average (using 1995 and 1997 AHS data) and the 1998–2001 average (using 1999 and 2001 AHS data). The JCHS Leading Indicator of Remodeling Activity is used to estimate average per owner spending in 2010 from 2009 AHS data. Owner households in 2015 are projected using the JCHS high-immigration household projections, which assume annual immigration rises from 1.1 million in 2005 to 1.5 million in 2020, as estimated by the Census Bureau's 2008 population projections. The JCHS low-immigration projections assume annual immigration is half the Census Bureau's estimate. The projected number of owner households in 2015 assumes that the homeownership rate is 65.9%, or the same as in 2009. Average per owner spending in 2015 is calculated by applying the growth rate in per owner spending 1996-2000 to 2010 spending levels. The 4.2% compound annual growth rate of average per owner spending in 1996–2000 shown here differs from the 3.9% rate shown in Figure 1.5 because this table averages the 1995 and 1997 AHS data to obtain smoother distributions of spending across household categories.

If household growth were 1 million lower in 2010–5 than assumed here (the difference between the Joint Center's high- and low- immigration scenarios), the projected growth rate for home improvement spending would decrease by 0.3 percentage point per year compounded. Similarly, for every percentage point change in the national homeownership rate of 65.9% assumed here, projected remodeling spending would decrease (increase) by 0.3 percentage point per year. Finally, if the growth in spending per homeowner were 1 percentage point higher or lower than projected rates, the market growth rate would increase or decrease by about 0.2 percentage point per year.

Sources: JCHS tabulations of the 1995–2009 AHS; George S. Masnick, Daniel McCue, and Eric S. Belsky, *Updated 2010–20 Household and New Home Demand Projections,* JCHS Working Paper W10-9, September 2010.

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