Although per-owner spending on home improvements averaged $4,700 in 2010–11, this national number masks the wide range of expenditure patterns across the country. At one extreme, about 43 percent of owners reported no remodeling projects over this period. At the other, 4 percent of owners spent at least $25,000 on home improvements. Several local market factors—including household demographics and mobility rates, as well as housing characteristics and economic conditions—explain this wide variation.

For example, with their relatively higher average incomes and older, more expensive homes, owners in the Northeast report home improvement expenditures that are more than 20 percent above the national average. Similarly, owners in the South, where both incomes and home values are lower, spent almost 10 percent less than the national average. While spending in all regions rose during the housing boom and declined with the bust, owners in the West reported a particularly rapid run-up in expenditures followed by a steep decline, mirroring the volatility of house prices in the region.

**METROPOLITAN AREA TRENDS**

Most home improvement spending occurs in the nation’s metropolitan areas. Indeed, 75 percent of the nation’s homeowners lived in metro areas and accounted for 81 percent of all remodeling expenditures in 2011 (Figure 16). The high concentration of spending is due in part to the fact that incomes and mobility rates tend to be higher in metro than in non-metro areas. Given that there is generally less available land to build new homes, metro area house prices also tend to be significantly higher. In fact, average house prices in metropolitan areas were 66 percent above those in non-metropolitan areas in 2011. It is therefore unsurprising, given this degree of concentration, that homeowners in metropolitan areas were responsible for a disproportionate share of improvement spending growth leading into the housing market upturn and a disproportionate share of the decline during the downturn.

Home improvement spending is also highly concentrated in the larger metros. In 2011, the 50 largest markets accounted
for 60 percent of expenditures. And of these, just 15 contributed more than a third of the total. Large metro areas were also disproportionately hit by the foreclosure crisis. Between 2007 and 2011, about 57 percent of existing home sales, but two-thirds of all real estate owned (REO) sales by lenders, were located in the 50 largest metros. Similarly, repair spending on distressed properties is concentrated in these major metro areas.

**TOP-SPENDING METROPOLITAN AREAS**

Of the 50 largest metro areas in the country, the top 10 in terms of average home improvement spending per owner in 2011 are concentrated in coastal regions. Four are along the Northeast seaboard (Boston, Providence, New York, and Washington, DC), while two others (San Francisco and San Jose) are on the West Coast. That leaves four metros in the interior regions of the country—Austin, Denver, Phoenix, and Las Vegas—on the top spending list.

With their relatively older housing stocks and higher incomes, metropolitan areas on both coasts of the country have traditionally had the highest per-owner spending levels. More recently, however, high mobility rates and high levels of spending on distressed properties have raised per-owner outlays in key markets of the South and West (Figure 17). This regional shift largely reflects the rising shares of younger households moving into these areas, as well as stronger economic conditions. Turnover of distressed properties is also fueling remodeling expenditures in several of these markets as lenders prepare foreclosed homes for sale.

**Figure 16**

*The Metro Share of Improvement Spending Increased During the Housing Upturn and Dipped During the Downturn*

Metro Area Share of Homeowner Improvement Spending (Percent)

**Figure 17**

*While Still Concentrated on the Coasts, Improvement Spending Has Increased in Metros of the South and West*

Average Annual Per-Owner Improvement Spending in 2011

Note: Metros shown are 50 largest ranked by population from the 2010 Decennial Census.

Source: Table A-5.
Incomes, Home Values, and Mobility Rates Are Higher in Top Spending Markets

<table>
<thead>
<tr>
<th>2011</th>
<th>Top 10 Metros</th>
<th>Bottom 10 Metros</th>
<th>Major Metros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Share of Owners Earning More than $100,000</td>
<td>42%</td>
<td>26%</td>
<td>32%</td>
</tr>
<tr>
<td>Median Home Value</td>
<td>$289,000</td>
<td>$153,000</td>
<td>$210,000</td>
</tr>
<tr>
<td>Median Home Equity</td>
<td>$159,000</td>
<td>$70,000</td>
<td>$110,000</td>
</tr>
<tr>
<td>Average Share of Spending by Top 5 Percent of Owners</td>
<td>53%</td>
<td>39%</td>
<td>45%</td>
</tr>
<tr>
<td>Share of Improvement Spending on Upper-End Discretionary Projects</td>
<td>24%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Average Share of Owners That Moved in 2008 or Later</td>
<td>18%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Average Annual Remodeling Expenditures per Owner</td>
<td>$3,500</td>
<td>$2,200</td>
<td>$2,800</td>
</tr>
</tbody>
</table>

Notes: Top and bottom metros are sorted by average annual per-owner improvement spending in 2011. Based on data for the 50 largest metro areas ranked by population from the 2010 Decennial Census. Home value, equity and remodeling spending data were only available for 30 of the metro areas from the 2011 AHS. Source: Table A-5.

HOUSEHOLD INCOME AND METRO SPENDING LEVELS
In general, remodeling spending per homeowner is higher in metropolitan areas with larger shares of higher-income households (Figure 18). These households tend to live in higher-valued homes and typically have more home equity to finance improvement projects. Nationally, owners with household incomes above $100,000 in 2011 spent nearly two-and-a-half times more on average than owners with incomes below $100,000. As a result, metro areas where at least 45 percent of households earned above $100,000—including Boston, New York, San Francisco, San Jose, and Washington, DC—ranked among the top 10 for average remodeling expenditures per owner.

Improvement spending in metros with larger shares of higher-income households is generally greater in part because of the presence of homeowners in the top 5 percent of spenders (with outlays of at least $24,100 in 2010–11). For example, among metros with the highest expenditures per household, the top 5 percent of spenders contributed 53 percent of total outlays. Among metros with the lowest expenditures per household, however, the top 5 percent contributed only 39 percent. To underscore the importance of top spenders to overall metro area activity, household spending among the remaining 95 percent of homeowners averaged only $1,500 in 2010–11. In metropolitan areas with smaller shares of high-income households, improvement activity per owner was much lower. In three such metros—Birmingham, Orlando, and Tampa—less than 25 percent of homeowners earned more than $100,000 in 2011.

Households with higher incomes often have more resources to spend on upper-end discretionary projects, including major kitchen and bath remodels or room additions. Indeed, metros with the largest shares of spending on such projects in 2011—Los Angeles, New York, Providence, San Diego, San Francisco, and San Jose—also had greater concentrations of higher-income households. Within the top 10 spending metros, homeowners spent 24 percent of their remodeling budgets on upper-end projects. In the bottom 10 metros, that share was just 16 percent. Not surprisingly, metropolitan areas with larger shares of spending on upper-end discretionary projects also tend to have higher home values and equity levels. The exceptions are Columbus and Pittsburgh, which both rank among the top 10 in terms of share of spending on upper-end projects but have relatively low median home values and home equity levels.

CONTRIBUTIONS OF HOUSING STOCK AGE AND HOUSEHOLD MOBILITY
The age of the owner-occupied housing stock is another key factor in metro area remodeling expenditures. Owners of older homes not only need to replace worn-out exteriors and systems (such as roofs, siding, and heating and air conditioning equipment), but they also often want to add some of the products and features available in newer homes. Most of the country’s older housing stock is located in the Northeast and Midwest.

Metros with the largest shares of homes built before 1960 include Boston, Buffalo, Cleveland, New York, Philadelphia, and Pittsburgh. Of course, some of these older cities also have larger shares of higher-income households, which help to boost local improvement spending levels. Other metros with older housing stocks that have relatively small shares of higher-income homeowners (particularly Buffalo, Cleveland, and Pittsburgh) thus rank in the middle to low range of spending per owner.

Nonetheless, the age of the housing stock has apparently become less of a factor than homeowner mobility rates (the share of owners that moved in the past four years) in determining metro-level improvement spending. Households tend to spend more on remodeling when they first move into a home. As a result, a number of cities in the South and West—where the housing inventory is relatively new but mobility rates are high—now report much higher average improvement expenditures than in the past. In particular, Las Vegas...
and Phoenix all have housing stocks that were largely built in 1960 or later and all have small shares of higher-income homeowners, which typically correspond to lower spending levels. Even so, these metros now rank at or near the top of the list in terms of per-owner remodeling spending.

Other metros with high mobility rates are Austin, Denver, Oklahoma City, Raleigh, and Riverside, where at least one in five owner households in 2011 moved within the previous four years. Metros with high spending levels as well as high mobility rates tend to be concentrated in the Southwest, where the population is younger and employment growth has been stronger in recent decades than elsewhere in the country. In contrast, four out of the five metros with the lowest rates of homeowner mobility—Chicago, Cleveland, Philadelphia, and Pittsburgh—rank in the lowest two-fifths of metros for homeowner improvement spending.

**Presence of Distressed Properties**

During the housing downturn, the plunge in house prices precipitated a wave of foreclosures in many metropolitan areas. The foreclosure process often takes years to complete, and most foreclosed homes spend additional time in the lender’s REO inventory. During this protracted period, millions of distressed properties receive little or no upkeep. But once foreclosure is completed, banks and other institutions typically invest in repairs to get the homes ready for sale and back into active use.

According to Joint Center estimates, lender expenditures on distressed properties amounted to $1.7 billion in 2011, with Atlanta, Las Vegas, Orlando, Phoenix, and Riverside posting the highest shares of spending (Figure 19). Local housing market conditions dictate the average amount that banks and institutions expend to prepare distressed properties for the market. In 2011, lenders invested considerably more per property in higher-priced markets such as Denver, Los Angeles, Portland, Raleigh, and Washington, DC. In large measure, this disparity reflects the fact that properties in these markets often need to be in better condition to sell at a competitive price within a reasonable amount of time. By comparison, in depressed Rust Belt metros such as Cleveland, Detroit, Milwaukee, and Pittsburgh, improvement spending per REO property was less than a third of outlays in more competitive markets.

Mirroring these trends, improvement spending by homeowners in markets with higher levels of distressed properties varies widely depending on local economic conditions as well as household income, mobility rates, and other factors. Detroit, Memphis, and Miami all ranked within the bottom quintile in terms of per-owner improvement spending. All three of these

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**Figure 19**

**Pre-Sale Spending on Distressed Properties Has Been Especially Strong in Many Southeast and Southwest Markets**

Spending on Bank-Owned Properties as a Share of Total Homeowner Improvement Spending in 2011 (Percent)

![Map showing spending quintiles](image)

Notes: Shares range from 0.02% to 1.45%. Improvement spending is for all properties disposed during calendar year 2011 by Fannie Mae. Metros shown are 50 largest ranked by population from the 2010 Decennial Census.

Source: Table A-5.
metropolitan areas also had low shares of higher-income households as well as relatively low mobility rates. In contrast, metros with high mobility rates—Las Vegas and Phoenix—ranked in the top quintile for spending. The higher spending in these areas also relates to repairs made to distressed properties that were being returned to the owner-occupied stock.

Patterns of homeowner improvement activity have changed significantly in the aftermath of the housing market boom and bust. Metros with larger stocks of distressed properties—such as Denver, Las Vegas, and Phoenix—have seen a rebound in spending and are now among the top 10 major metros for average per-owner expenditures, up from the middle or bottom ranks in previous decades. At the same time, areas that were especially hard hit by the economic recession—Detroit being an obvious example—have seen the largest spending declines over the past decade.

LONGER-TERM TRENDS
Much of the increase in remodeling spending that took place in metro areas during the boom years was lost during the housing bust. Among the largest 10 metros in the country, average spending rose significantly in most of these metros in the 1990s before easing or declining during the last decade. Over the entire period from the 1990s to 2011, Atlanta, Dallas, Houston, and Washington, DC, posted aggregate increases of 30 percent or more in spending. At the other extreme, Chicago and Philadelphia registered inflation-adjusted declines (Figure 20).

Remodeling markets that have performed the best since the 1990s tend to be Sunbelt metros. In contrast, Boston, Chicago, and Los Angeles posted the strongest spending gains during the remodeling boom years, but also the steepest declines over the past decade. Indeed, these areas recorded below-average growth on net since the 1990s compared with other large metros.

As the housing recovery continues to strengthen and homeowners restore wealth lost during the economic crisis, remodeling activity in metropolitan areas is likely to increase. Given a more stable economic environment for house prices and employment growth, metropolitan spending patterns should become less volatile than in the past two decades—a favorable development for an industry that is challenged by unpredictability.