Remodeling Market Issues

1. Broader housing market conditions are creating a drag for home improvement spending.

2. Two of the strongest sectors at present are energy efficiency upgrades and reinvesting in distressed properties.

3. Even with relatively weak market conditions, larger contractors are able to achieve some growth.

4. Leading indicator points to market volatility continuing into early 2012 before more sustained growth resumes.
There are Currently an Unusually Broad Range of Measures of the Health of the Home Improvement Industry

Percent change in Q3-2011 as compared to Q3-2010

- BuildFax: 27.2%
- HIRI: 10.4%
- Census: 9.1%
- H-W Mkt Int: -3.4%
- NAHB - RMI: -16.6%

Notes: BuildFax and Census estimates based on July and August 2011 responses, NAHB calculated as Q3-2011 % below neutral score of 50.
Sources: BuildFax Remodeling Index, Home Improvement Research Institute Consumer Sentiment Tracking Study, U.S. Census Bureau C-30 series, Hanley-Wood Market Intelligence’s Residential Remodeling Index, NAHB Remodeling Market Index.
Even with the Downturn, the Remodeling Market is Nearly $300 Billion

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 Estimating National Levels of Home Improvement and Repair Spending by Rental Property Owners by Abbe Will, JCHS Research Note N10-2, October 2010.
Factors Restraining Remodeling Spending

- Owners have less equity in their home.
- Homes are appreciating slower (or still depreciating).
- Owners are moving less frequently.
- Households formations are unusually weak, producing an increase in multigenerational households.
- Households are opting for renting rather than owning.
- The payback for home improvement projects has been declining.
How Much Did Each of These Conditions Affect Remodeling Spending? Description of Analysis

• Analyze remodeling spending for specific demographic group
  – Owners
  – Age 35-44 (expanded for mover analysis)
  – Married with minor children at home
  – Middle and 2nd highest income quintiles for owner households

• Compute average spending for all owners whether they reported a project or not.

• Period of analysis is 2008 to 2009 so that AHS can be used to measure remodeling spending.

• Project categories
  – Discretionary spending - k&b projects; additions and alterations; interior projects;
  – Replacement - exterior replacements; systems upgrades; decks/porches
  – Other - other structures on property; property improvements;
Owners with High Levels of Equity Spend More in Home Improvements

Average remodeling spending in 2009 by equity as a share of value, 2007-09

<table>
<thead>
<tr>
<th>Share</th>
<th>Discretionary</th>
<th>Replacement</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 or less</td>
<td>$1,857</td>
<td>$582</td>
<td>$815</td>
<td>$3,254</td>
</tr>
<tr>
<td>1-19%</td>
<td>$1,603</td>
<td>$645</td>
<td>$610</td>
<td>$2,868</td>
</tr>
<tr>
<td>20-49%</td>
<td>$2,669</td>
<td>$1,072</td>
<td>$970</td>
<td>$4,611</td>
</tr>
<tr>
<td>50%+</td>
<td>$3,565</td>
<td>$1,983</td>
<td>$548</td>
<td>$5,096</td>
</tr>
<tr>
<td>All Owners</td>
<td>$2,345</td>
<td>$1,045</td>
<td>$801</td>
<td>$4,231</td>
</tr>
</tbody>
</table>

Source: JCHS tabulations of the 2007 and 2009 American Housing Surveys.
Owners in Appreciating Markets Also Spend More on Remodeling

Average remodeling spending in 2009 by average annual house price appreciation, 2007-09

Discretionary | Replacement | Other

<table>
<thead>
<tr>
<th>Price Appreciation</th>
<th>Discretionary</th>
<th>Replacement</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;0%</td>
<td>$1,350</td>
<td>$260</td>
<td>$629</td>
</tr>
<tr>
<td>-0% to -1%</td>
<td>$1,532</td>
<td>$643</td>
<td>$629</td>
</tr>
<tr>
<td>0% to 9%</td>
<td>$2,215</td>
<td>$885</td>
<td>$706</td>
</tr>
<tr>
<td>10%+</td>
<td>$2,394</td>
<td>$1,399</td>
<td>$1,027</td>
</tr>
<tr>
<td>All Owners</td>
<td>$2,366</td>
<td>$747</td>
<td>$528</td>
</tr>
</tbody>
</table>

Share:
-10% (31%)
-0% to -1% (31%)
0% to 9% (26%)
10%+ (12%)
All Owners (100%)

Source: JCHS tabulations of the 2007 and 2009 American Housing Surveys.
Homeowner Mobility Has Been Trending Down, But Fell Sharply During the Recession

Recent Buyers Spend More

Average remodeling spending in 2009 by date moved in

Share: (11%) (64%) (25%) (100%)

Note: This analysis uses owners age 35-54 to increase the sample size. Source: JCHS tabulations of the 2009 American Housing Survey.
Household Growth Has Been Anemic in Recent Years

Annual household growth (Thousands)

Note: 2011 annual estimate based on year to year change as of 2011:Q2.
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys.
Slowdown in Household Growth Largely Due to Falling Young Headship and Less Immigration

Slowdown in 2007-2010 Due to Headship Rates

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Household Growth (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>-400</td>
</tr>
<tr>
<td>30-49</td>
<td>-200</td>
</tr>
<tr>
<td>50-64</td>
<td>-100</td>
</tr>
<tr>
<td>65+</td>
<td>0</td>
</tr>
</tbody>
</table>

Slowdown in 2007-2010 Due to Population Changes

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Household Growth (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>-600</td>
</tr>
<tr>
<td>Native Born</td>
<td>200</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Change in annual household growth is difference between average annual growth 2007-2010 and 2001-2007.
With Economic Downturn and Increase in Distressed Homes, Multigenerational Households are Increasing

Share of U.S. population living in multi-generational households

Note: Only children age 25+ counted as generation.
Steady State Spending Lower for Multigenerational Households; Spending May Occur at Transition

Average remodeling spending in 2009 by presence of children age 18+

Source: JCHS tabulations of the 2009 American Housing Survey.
Overall Households Edging Up, But Number of Owners Still Falling Fast

Annual change in households (Millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Homeowners</th>
<th>Renters</th>
<th>Homeownership Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-4</td>
<td>1.5</td>
<td>-0.7</td>
<td>66</td>
</tr>
<tr>
<td>2004-6</td>
<td>1.1</td>
<td>0.1</td>
<td>67</td>
</tr>
<tr>
<td>2006-8</td>
<td>0.5</td>
<td>0.5</td>
<td>68</td>
</tr>
<tr>
<td>2008-10</td>
<td>-0.5</td>
<td>1.0</td>
<td>69</td>
</tr>
<tr>
<td>2010-11</td>
<td>-1.0</td>
<td>1.5</td>
<td>70</td>
</tr>
</tbody>
</table>

Source: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys.
Homeowners Spend More on Improvements Than Do Rental Property Owners

Average annual spending on residential improvements in 2006-7 by tenure status

- **Owner-occupied**: $1,884
  - Discretionary: $993 (57%)
  - Replacement: $560
  - Other: $330

- **Rental**: $1,400
  - Discretionary: $214 (43%)
  - Replacement: $238
  - Other: $105

- **All**: $1,318
  - Discretionary: $234 (100%)
  - Replacement: $423
  - Other: $661

Cost Recovery for Remodeling Projects Has Dropped Sharply in Recent Years

Average percent of cost recovered by project type

- Bathroom: 89% (2004-05), 66% (2008-09)
- Roofing: 84% (2004-05), 64% (2008-09)
- Add / Alter / Create Room: 82% (2004-05), 65% (2008-09)
- Siding: 99% (2004-05), 82% (2008-09)
- Kitchen: 88% (2004-05), 73% (2008-09)
- Window / Door: 87% (2004-05), 77% (2008-09)

Percent of Cost Recovered, 2004-05
Percent of Cost Recovered, 2008-09

Source: JCHS tabulations of Hanley Wood Remodeling magazine’s 2004-05 and 2008-09 Cost vs. Value Reports.
However, There has Been Little Connection Between Cost Recovery and Project Popularity

Average annual improvement spending (billions) and share of total spending

<table>
<thead>
<tr>
<th>Category</th>
<th>2004-05 Average</th>
<th>2008-09 Average</th>
<th>% Change</th>
<th>2004-05 Share</th>
<th>2008-09 Share</th>
<th>PPT Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathroom</td>
<td>$15.3</td>
<td>$15.9</td>
<td>4%</td>
<td>8.1%</td>
<td>8.6%</td>
<td>0.5pp</td>
</tr>
<tr>
<td>Roofing</td>
<td>$15.9</td>
<td>$16.8</td>
<td>6%</td>
<td>8.5%</td>
<td>9.1%</td>
<td>0.6pp</td>
</tr>
<tr>
<td>Add / Alter / Create Room</td>
<td>$34.7</td>
<td>$28.2</td>
<td>-19%</td>
<td>18.5%</td>
<td>15.2%</td>
<td>-3.3pp</td>
</tr>
<tr>
<td>Siding</td>
<td>$6.2</td>
<td>$4.9</td>
<td>-21%</td>
<td>3.3%</td>
<td>2.6%</td>
<td>-0.7pp</td>
</tr>
<tr>
<td>Kitchen</td>
<td>$19.7</td>
<td>$21.4</td>
<td>9%</td>
<td>10.5%</td>
<td>11.6%</td>
<td>1.1pp</td>
</tr>
<tr>
<td>Window / Door</td>
<td>$10.2</td>
<td>$11.4</td>
<td>12%</td>
<td>5.4%</td>
<td>6.2%</td>
<td>0.8pp</td>
</tr>
</tbody>
</table>

Source: JCHS tabulations of the 2005 and 2009 American Housing Surveys.
Overview: Broader Market Conditions Reduced Spending, With Limited Impact on Composition

How each variable affected the level and composition of remodeling spending

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level of Spending</th>
<th>Composition of Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less equity in home</td>
<td>↓</td>
<td>decline in discretionary share</td>
</tr>
<tr>
<td>Slow appreciation in values</td>
<td>↓</td>
<td>minimal change</td>
</tr>
<tr>
<td>Lower mobility</td>
<td>↓</td>
<td>minimal change</td>
</tr>
<tr>
<td>Multigenerational households</td>
<td>unclear, but probably minimal</td>
<td>unclear</td>
</tr>
<tr>
<td>Switch from owning to renting</td>
<td>↓</td>
<td>decline in discretionary share</td>
</tr>
<tr>
<td>Lower cost recovery</td>
<td>mixed and minimal</td>
<td>minimal change</td>
</tr>
</tbody>
</table>

Under Stimulus Program, Growing Share of Contractors Were Working on Green Projects

Share of projects (on a dollar basis) over the past year in which firm installed energy efficient and environmentally sustainable products, average across all respondents

Note: Prior to 2011, the survey asked “Over the past year, for about what share of your projects (on a dollar basis) was energy efficiency and environmental sustainability specifically mentioned as a project goal?”
Green Project Activity Drops Off Somewhat as Compared to Green Client Interest

Share of projects (on a dollar basis) over the past year for which client expressed an initial interest in installing energy efficient and environmentally sustainable products versus share of projects for which firm ultimately installed such products, average across all respondents.

Source: JCHS National Green Remodeling Survey, Q3 2011.
Cost, Uncertain Savings Key Reasons Green Projects Not Undertaken

Share of firms citing reasons why clients decided not to undertake “green” projects even though they showed interest, average across all respondents (Multiple responses accepted)

Source: JCHS National Green Remodeling Survey, Q3 2011.
Repairs to Distressed Properties Offer Growth Opportunities for Remodeling

Average spending and % of sales price on home repairs and improvements for distressed properties closed sales between April and September, 2011

Source: NRT REOExperts - Closed Sales with Repairs, April - Sept 2011.
Though Many Repairs to Distressed Properties are Small, Bulk of Spending is on Major Projects

Share of total spending by per unit expenditure range

- Under $500: 1.6%
- $500-$999: 2.3%
- $1,000-$4,999: 23.3%
- $5,000-$9,999: 24.2%
- $10,000+: 48.6%

Total spending on 3,500 properties sold: $12.9 million

Source: NRT REOE xperts - Closed Sales with Repairs, April - Sept 2011.
Distressed Property Spending Generally Higher in More Competitive Markets

Average spending on home repairs and improvements for distressed properties for closed sales between April and September, 2011

Source: NRT REOExperts - Closed Sales with Repairs, April - Sept 2011.
Even With No Market Growth in 2010, Larger Contractors Were Able to Increase their Revenue

Median annual rate of change in remodeling revenue

Note: Analysis includes remodelers reporting revenue in any two consecutive years and ranking in the top 400 in at least one of those years.

Source: JCHS tabulations of *Qualified Remodeler* magazine’s Top 500 Remodelers.
One Reason for Success is Relative Concentration in Stronger Market Segments

Share of Top 500 Remodelers by type of business in 2010

- Full-Service: 33%
- Exterior: 31%
- Design/Build: 22%
- Kitchen & Bath: 4%
- Insurance Restoration: 9%
- Other: 2%

Notes: Exterior Replacements include roofing, siding, windows, doors, sunrooms, decks and patios. Other includes basement and waterproofing. Source: JCHS tabulations of Qualified Remodeler magazine’s Top 500 Remodelers.
Design/Build and Replacement Specialties Reported Strongest Growth in 2010 Among Large Contractors

Median annual rate of change in remodeling revenue, 2010

Note: Analysis uses firms reporting revenue in 2008 and 2009 that were ranked in the top 400 in at least one year.
Source: JCHS tabulations of Qualified Remodeler magazine’s Top 500 Remodelers.
Over Past Decade, For Larger Contractors, Less Cyclical Specialties Have Seen Better Performance on Average

Compound annual revenue growth, 2000-2010 (Percent)

Note: Analysis includes remodelers ranking in the top 400 in either 2000 or 2010.
Source: JCHS tabulations of Qualified Remodeler magazine’s Top 500 Remodelers.
Planned Spending on Home Improvements Generally Trending Up, But Unusually Volatile

Monthly averages compared to year-ago level for planned spending

Note: Monthly figures are 3-month moving averages centered on reported month and normalized per 100,000 responses; September 2011 estimate based on August and September data only.
Planned Spending on Replacement Projects is Creating the Unusually High Levels of Volatility

Monthly averages compared to year-ago level for planned spending on home improvement projects by project type

Note: Monthly figures are 3-month moving averages centered on reported month and normalized per 100,000 responses; September 2011 estimate based on August and September data only.
Leading Indicator of Remodeling Activity Shows Weakness Resuming Later This Year

Homeowner Improvements
Four-Quarter Moving Totals
Billions of $

<table>
<thead>
<tr>
<th>Year</th>
<th>Billions of $</th>
<th>Rate of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-1</td>
<td>$120.9</td>
<td>-16.1%</td>
</tr>
<tr>
<td>2009-1</td>
<td>$120.1</td>
<td>-13.6%</td>
</tr>
<tr>
<td>2010-1</td>
<td>$118.3</td>
<td>-10.5%</td>
</tr>
<tr>
<td>2011-1</td>
<td>$115.7</td>
<td>-8.0%</td>
</tr>
<tr>
<td>2012-1</td>
<td>$111.8</td>
<td>-7.6%</td>
</tr>
<tr>
<td>2013-1</td>
<td>$112.0</td>
<td>-6.7%</td>
</tr>
<tr>
<td>2014-1</td>
<td>$113.4</td>
<td>-4.2%</td>
</tr>
<tr>
<td>2015-1</td>
<td>$114.5</td>
<td>-1.1%</td>
</tr>
<tr>
<td>2016-1</td>
<td>$112.9</td>
<td>1.0%</td>
</tr>
<tr>
<td>2017-1</td>
<td>$116.8</td>
<td>3.4%</td>
</tr>
<tr>
<td>2018-1</td>
<td>$111.0</td>
<td>-0.5%</td>
</tr>
<tr>
<td>2019-1</td>
<td>$105.6</td>
<td>-8.0%</td>
</tr>
<tr>
<td>2020-1</td>
<td>$110.1</td>
<td>-3.5%</td>
</tr>
</tbody>
</table>

Source: Joint Center for Housing Studies of Harvard University.