Calculating Floodplain Weights and Benchmarking Needs

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Projects using 2010 Census data

1. Calculate Floodplain Weights

2. Benchmark Existing Home Sales (EHS)
Calculating Floodplain Weights

**Goal:**
Share of homes in the floodplain

- U.S. Census data
- 100-year and 500-year floodplain
Calculating Floodplain Weights

Step 1
Overlay the NFHL delineating 100- and 500-year floodplains with the 2010 Census block centroids and aggregate the total number of housing units in the Census Blocks that intersected the floodplain.

Step 2
Aggregate the floodplain housing units to the Census track level.

Step 3
Calculate the share of a Census track’s housing units in the 100-year and 500-year floodplains.

Step 4
Weigh 2018 ACS estimates at the Census track level by floodplain weights.
Example: Characteristics of the housing in the floodplain

Maricopa County, AZ ---- 92.0% of homes intersect the floodplain

Housing in the floodplain
- 1.61 million housing units
- 911,000 owner-occupied units
- 626,000 units with a mortgage
- 1.05 million single-family homes (64% of homes in the floodplain)
Example: How many home sales will be affected by a NFIP lapse

Nationwide
About 40,000 closings per month or 1,300 per day

Most impacted states
Florida (13,500 closings)
Texas (3,150 closings)
California (1,850 closings)

Recent EHS Benchmarks

2000

13% downward revision

using

Decennial Census

2010

11-16% downward revision

using

ACS estimates

Benchmarking Existing Home Sales (EHS)
Results of the last re-benchmark

<table>
<thead>
<tr>
<th>Year</th>
<th>Reported Annual EHS</th>
<th>Re-Benchmarked EHS</th>
<th>Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>5,652,000</td>
<td>5,018,000</td>
<td>-11%</td>
</tr>
<tr>
<td>2008</td>
<td>4,913,000</td>
<td>4,123,000</td>
<td>-16%</td>
</tr>
<tr>
<td>2009</td>
<td>5,156,000</td>
<td>4,335,000</td>
<td>-16%</td>
</tr>
<tr>
<td>2010</td>
<td>4,908,000</td>
<td>4,182,000</td>
<td>-15%</td>
</tr>
<tr>
<td>Total</td>
<td>20,629,000</td>
<td>17,658,000</td>
<td>-14%</td>
</tr>
</tbody>
</table>

Benchmarking Existing Home Sales (EHS)
Thank you

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