Housing Affordability in California

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September 29, 2016
Background

• “$1000 Increase in the home price leads to pricing out about 206,269 households.”  *NAHB*
  *August 1, 2014*

• “The rising cost of regulations is making homes unaffordable.”
  *CIBA August 18, 2014*
Study

To understand the relationship of home prices to construction costs, including those imposed by regulations, I managed a study by the UCLA Anderson Forecast that PG&E had commissioned.

William Yu, Economist, Anderson Forecast
Jerry Nickelsburg, Senior Economist, Anderson Forecast
Methodology

• Via builder interviews, determine the largest construction cost categories

• Gather data on costs of construction inputs from six robust sources (Turner index, wage index, PPI lumber, PPI metal, PPI mineral, PPI crude materials)

• Compare to trends in housing prices using the Case-Schiller Index and Lincoln Institute of Land Policy
Construction Costs

The graph shows the trend of construction costs from 1984 to 2012 for various cities including DC, New York, San Jose, San Francisco, Oakland/Scramento, San Bernardino, San Diego, Santa Ana, and Los Angeles. The costs are represented in dollars ($).
Home Prices

The graph illustrates the trend of home prices over time, with specific emphasis on major cities. The x-axis represents the years from 1984 to 2012, while the y-axis shows the price in dollars, ranging from $0 to $1,400,000. The graph includes cities such as San Francisco, San Jose, Santa Ana, Oakland, Los Angeles, San Diego, Sacramento, and San Bernardino.
Is there a Cause and Effect Relationship?
...Or even a Correlation?
Anderson Forecast Conclusions

1. “We cannot find evidence that structure cost increase will cause higher home prices in either coastal or inland California.”

2. “We cannot find statistically significant evidence that California’s ... Title 24 is associated with home construction costs in 8 Metros in California, in which 2 Metros are in inland California.”
On the other hand, Energy Costs **do** affect households.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Low-Income Households</td>
<td>4%</td>
</tr>
<tr>
<td>Average of All U.S. Households</td>
<td>7%</td>
</tr>
<tr>
<td>For those who got LIHEAP Assistance</td>
<td></td>
</tr>
<tr>
<td>Before Assistance</td>
<td>16%</td>
</tr>
<tr>
<td>After Assistance</td>
<td>11%</td>
</tr>
</tbody>
</table>
Energy Intensity

• On average, Low Income households
  – Use 98% as much electricity as average of all households
  – Use 86% as much gas as other households
  – But do so on an average of less than half the square footage (ergo > energy intensity)
  – And with less than half the income (~$31k/yr vs. ~$63k/yr)
If you would like a copy of the report, send me an email or give me your card.

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