American Housing Survey Data Shows Changes in Multifamily Supply Unfavorable to Lower-Income Renters

February 11, 2016

“Lower income renters lost ground recently. The average monthly rent of a unit lost from stock was $600 while the average monthly rent of a unit added was $1,000.”

Introduction
This report presents estimates of changes to the multifamily housing stock obtained from the most recent American Housing Survey (AHS) data, from 2011 to 2013. The methodology replicates what is used in producing the US Department of Housing and Urban Development’s (HUD) Components of Inventory Change (CINCH) Reports. Estimated changes are compared to changes published in the CINCH reports from 2005 to 2011. In addition, 2011 to 2013 changes are broken down by tenure, affordability, and assisted rental housing status.

Multifamily Units Lost Are Declining
As shown in Figure 1, while prior CINCH reports have reported losses as high as an estimated 205,000 in the 2005-2007 period, this analysis finds that the latest yearly losses are lower, coming in at approximately 123,000 units lost annually. This figure is in line with industry estimates of approximately 120,000 yearly units lost from the multifamily stock during the 2011-2013 period. Annual additions to the multifamily stock have similarly been decreasing over this period, reaching 183,000 units in 2011-2013 from roughly 350,000 units between 2007 and 2009. Figure 1 also allows a comparison of CINCH estimates of additions to the housing stock to the US Census’s Survey of Construction estimates of multifamily units completed. This shows that CINCH additions are larger than Census estimates of units completed since CINCH additions include both new construction and units that were added in other ways, such as units converted or merged, changed to residential use, or recovered from temporary losses.

Figure 1 Multifamily Housing Stock Changes 2005-2013


1 Throughout, units considered multifamily housing are those where the AHS respondent states that 5 or more apartments are present in their building. The AHS is conducted biennially, in odd numbered years; as such, 2015 AHS public use data will likely be released in the second half of 2016.


3 Direct comparisons of CINCH estimates of new construction and Census estimates of units completed reveal estimate differences over time. These likely occur due to definitional differences in what constitutes a new construction in CINCH versus a completed unit in the Census Survey of Construction. Direct comparisons of units lost and added are avoided due to differences in AHS housing unit weights across survey years (one AHS housing unit typically represents about 2,500 actual housing units). This difference in weights is reflected in the estimate of units present in both surveys differing between the backward- and forward-looking analyses (see https://www.huduser.gov/portal/datasets/cinch.html for more details).
Figure 2 provides further details regarding the tenure status of the changes to the multifamily housing stock from 2011 to 2013. One can observe that the majority of losses and additions to the stock come from either renter-occupied units (45% and 56%, respectively) or units that were vacant or in seasonal use (52% and 40%, respectively). This contrasts with their respective shares of the total stock, where rental units account for between 73% and 74% of the total stock, depending on the survey year, and units that are vacant or seasonal represent only between 16% and 17%. Vacant or seasonal units accounting for a large share of the units added or lost reflects the fact that many units may be vacant due to being in disrepair or being rehabilitated, or were recently completed and up for sale or rental.

**Units Lost Were Affordable to Lower-Income Renters**

While the number of units lost decreased, lower-income renters experienced a disproportionate amount of those lost units. As shown in Figure 3, an estimated 44,000 units or 52% of the approximately 84,000 rental units lost annually between 2011 and 2013 were affordable to Very Low Income renters. HUD defines a unit as affordable to Very Low Income renters if the estimated housing cost is not greater than 30% of the income of renters earning 50% of the median income for their locality (Area Median Income, AMI). In addition, an estimated 65,000 units or 77% of total rental units lost annually were affordable below 80% of AMI — considered Low Income by HUD. As a result, a large share of rental stock was lost to renters who earn the least. Adding to the affordability concerns, Figure 3 further demonstrates that the share of rental units lost that had some form of assistance is larger than the equivalent share of units added (16% and 10% respectively).

**Units Added Were Affordable to Higher-Income Renters**

This report is presented against the backdrop of a challenge in affordability for the rental market. According to REIS, Inc., the vacancy rate in the generally more affordable class B and C properties were a low 3.4% as of the end of 2014. In addition, the vacancy rate for properties subsidized with Low Income Housing Tax Credits at the time was 2.3% according to Integratec Tax Credit Central. These low vacancies suggest indicate that there is a ready demand for affordable apartments. Furthermore, while an estimated 145,000 units were added to the multifamily rental stock annually from 2011 to 2013, as shown in Figure 3, many were not affordable. At 71,000 units, approximately half of the annual units added were only affordable to renters earning more than 80% of AMI, which is above the Low-Income cutoff. Only one-quarter of the units added, approximately 38,000 annually, were affordable to Very Low Income renters, further highlighting renter affordability challenges.

**Conclusion**

The results of this analysis show that both units added to and units lost from the multifamily housing stock experienced a slowdown between 2005 and 2013. In both cases, lower-income renters lost ground. Most of the multifamily rental stock lost was affordable to lower-income renters, with a median monthly rent of $600 in 2011 for these lost units compared with a $750 median rent for units remaining in the stock. By contrast, little of the new stock added was affordable to lower-income renters, with a median rent of $1,000 in 2013 for these new units compared with a median rent of $780 for units remaining in the stock. These trends show the challenge facing lower-income households that are looking for affordable multifamily rental housing. With little new stock affordable to them, many lower-income households are renting apartments that are beyond their financial means, leaving them less money for food, healthcare, transportation to work, and other necessities.

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Tatyana Zahalak  
Economist, Multifamily Economics & Market Research

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4. Figure 3 based on AHS survey respondents where information on housing costs is provided to determine affordability and includes renter-occupied as well as seasonal or vacant units.

5. Rental assistance housing includes units for which interviewed renter states they either: receive some certificate or voucher to help pay rent; have rent subsidized by federal, state or local government; or live in public housing (e.g. low-income housing projects). Some caution is warranted in analyzing results based upon this variable since HUD acknowledges there are known to be errors in the reporting of this variable which often lead to an overestimation of the number of housing units receiving rental assistance (see http://www.huduser.gov/publications/pdf/datacollect.pdf for more details).

6. See footnote 2 regarding sample composition for Figure 3.
The authors thank Kim Betancourt, Hamilton Fout, Mark Palim, Patrick Simmons, and Hristina Toshkova for reviewing this Housing Insights. Of course, all errors and omissions remain the responsibility of the authors.

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2011 Multifamily (5+ Units) Housing Stock
AHS Estimate: 22,492,000 Units

2013 Multifamily (5+ Units) Housing Stock
AHS Estimate: 23,274,000 Units

FORWARD-LOOKING ANALYSIS

Units Lost from Housing Stock
(123,000 per year)

Reason Lost

Conversion or Merger
(13,000)
House/Mobile Home Move
Out (NONE)
Changed to Nonresidential
(90,000)
Demolition or Disaster
(35,000)
Badly Damaged / Condemned
(35,000)
Lost in Other Ways
(72,000)

Lost Housing Stock Units

Owner Occupied
(3%)
Renter Occupied
(45%)
Seasonal or Vacant
(52%)

Reason Added

Conversion or Merger
(1,000)
House/Mobile Home Move In
(30,000)
New Construction
(253,000)
Recovered Temporary Losses
(11,000)
Added in Other Ways
(30,000)

Units Added to Housing Stock
(183,000 per year)

Additions by Tenure Status

Owner Occupied
(4%)
Renter Occupied
(56%)
Seasonal or Vacant
(40%)

BACKWARD-LOOKING ANALYSIS

Units Present in Both Surveys
(22,247,000)
In Both by Tenure Status

Owner Occupied
(10%)
Renter Occupied
(74%)
Seasonal or Vacant
(16%)

Units Present in Both Surveys
(22,911,000)
In Both by Tenure Status

Owner Occupied
(10%)
Renter Occupied
(73%)
Seasonal or Vacant
(17%)

FORWARD-LOOKING ANALYSIS

Units Present in Both Surveys
(22,247,000)

Reason Lost

Conversion or Merger
(13,000)
House/Mobile Home Move
Out (NONE)
Changed to Nonresidential
(90,000)
Demolition or Disaster
(35,000)
Badly Damaged / Condemned
(35,000)
Lost in Other Ways
(72,000)

Lost Housing Stock Units

Owner Occupied
(3%)
Renter Occupied
(45%)
Seasonal or Vacant
(52%)

Reason Added

Conversion or Merger
(1,000)
House/Mobile Home Move In
(30,000)
New Construction
(253,000)
Recovered Temporary Losses
(11,000)
Added in Other Ways
(30,000)

Units Added to Housing Stock
(183,000 per year)

Additions by Tenure Status

Owner Occupied
(4%)
Renter Occupied
(56%)
Seasonal or Vacant
(40%)

BACKWARD-LOOKING ANALYSIS

Units Present in Both Surveys
(22,911,000)
In Both by Tenure Status

Owner Occupied
(10%)
Renter Occupied
(74%)
Seasonal or Vacant
(16%)

Figure 2 Multifamily Housing Stock Analysis Flow-Chart with Tenure Details, 2011-2013

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Figure 3 Multifamily Rental Housing Stock Analysis Flow-Chart with Affordability and Assisted Housing Details, 2011-2013

**2011 Multifamily (5+ Units) Rental Housing Stock**
**AHS Estimate: 18,621,000 Units**

- Units Present in Both Surveys (18,453,000-19,481,000)
- Units Added to Rental Stock (145,000 per year)
- Units Lost from Rental Stock (84,000 per year)

**Lost Housing Stock Units**

**Units Added to Housing Stock**

- Rental Assisted Status
- In Both Affordable to
- Assisted Housing (10%)
- Not Assisted (90%)

**Units Present in Housing Stock in Both Years**

- Rental Assisted Status
- Assisted Housing (19%)
- Not Assisted (81%)

**Units Added to Housing Stock**

- Assisted Housing (19%)
- Not Assisted (81%)
- Very Low Inc. (0-50% AMI) (36-37%)
- Low Income (0-80% AMI) * (79-81%)
- Mid. Inc. & Higher (>80%AMI) (19-21%)

**Units Added to Housing Stock**

- Very Low Inc. (0-50% AMI) (25%)
- Low Income (0-80% AMI) * (51%)
- Mid. Inc. & Higher (>80%AMI) (49%)

**Units Added to Housing Stock**

- Very Low Inc. (0-50% AMI) (52%)
- Low Income (0-80% AMI) * (77%)
- Mid. Inc. & Higher (>80%AMI) (23%)

**2013 Multifamily (5+ Units) Rental Housing Stock**
**AHS Estimate: 19,481,000 Units**

* Based on survey respondents providing information on housing costs. Estimates include units listed as renter occupied, seasonal, or vacant. Results are cumulative, i.e. a unit affordable at 50% AMI is also affordable at 80% AMI.
Methodology
The CINCH methodology uses American Housing Survey (AHS) data to obtain an estimates of changes to the U.S. housing stock. The method identifies units present in consecutive AHS survey years to determine whether units were added or lost from the housing stock and what the reason was for such additions and losses. The analysis is split into a forward-looking component for estimating units lost, and backward-looking component for estimating additions to the housing stock. The affordable designation of housing units lost or added is obtained by matching units present in the AHS with those present in HUD’s Housing Affordability Database System (HADS). This allows the categorization of owner and renter occupied units, as well as vacant units with listed prices or asking rents, into those affordable to individuals earning different income levels relative to Area Median Income (AMI). A unit is considered affordable if the estimated housing cost burden is less than or equal to 30% of a particular AMI level. HADS further allows the identification of whether rental units were categorized as receiving some form of rental assistance.

7 AMI designations are approximately equal to HUD official designations for housing units where the metropolitan area is identified in the AHS. When the metropolitan area is not identified in the AHS, the HADS analysis estimated income relative to a weighted AMI for the respective area.
## Appendix Table 1 Changes in Multifamily (5+ Units) Housing Stock (2005-2013)

### Units Lost from Multifamily (5+ Units) Housing Stock (1,000s)

<table>
<thead>
<tr>
<th>Survey Years</th>
<th>2005-2007 Number (Percent)</th>
<th>2007-2009 Number (Percent)</th>
<th>2009-2011 Number (Percent)</th>
<th>2011-2013* Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base year published numbers</td>
<td>20,928 (100.00)</td>
<td>21,443 (100.00)</td>
<td>21,657 (100.00)</td>
<td>21,952 (100.00)</td>
</tr>
<tr>
<td>Present in Base Year</td>
<td>21,457 (100.00)</td>
<td>22,036 (100.00)</td>
<td>22,286 (100.00)</td>
<td>22,492 (100.00)</td>
</tr>
<tr>
<td>Present in next survey year</td>
<td>21,048 (98.09)</td>
<td>21,650 (98.25)</td>
<td>22,009 (98.76)</td>
<td>22,247 (98.91)</td>
</tr>
<tr>
<td>Units Lost due to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion or merger</td>
<td>99 (0.46)</td>
<td>23 (0.10)</td>
<td>16 (0.07)</td>
<td>13 (0.06)</td>
</tr>
<tr>
<td>House or mobile home moved out</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>3 (0.01)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Changed to nonresidential use</td>
<td>101 (0.47)</td>
<td>101 (0.46)</td>
<td>89 (0.31)</td>
<td>90 (0.40)</td>
</tr>
<tr>
<td>Demolition or disaster</td>
<td>82 (0.38)</td>
<td>77 (0.35)</td>
<td>69 (0.31)</td>
<td>35 (0.16)</td>
</tr>
<tr>
<td>Badly damaged or condemned</td>
<td>29 (0.14)</td>
<td>84 (0.38)</td>
<td>32 (0.14)</td>
<td>35 (0.16)</td>
</tr>
<tr>
<td>Lost in other ways</td>
<td>99 (0.46)</td>
<td>100 (0.45)</td>
<td>69 (0.31)</td>
<td>72 (0.32)</td>
</tr>
<tr>
<td>TOTAL UNITS LOST</td>
<td>410 (1.91)</td>
<td>385 (1.75)</td>
<td>278 (1.25)</td>
<td>246 (1.09)</td>
</tr>
<tr>
<td>Average yearly losses</td>
<td>205</td>
<td>193</td>
<td>139</td>
<td>123</td>
</tr>
</tbody>
</table>

### Units Added to Multifamily (5+ Units) Housing Stock (1,000s)

<table>
<thead>
<tr>
<th>Survey Years</th>
<th>2005-2007 Number (Percent)</th>
<th>2007-2009 Number (Percent)</th>
<th>2009-2011 Number (Percent)</th>
<th>2011-2013* Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post year published numbers</td>
<td>21,443 (100.00)</td>
<td>21,657 (100.00)</td>
<td>21,952 (100.00)</td>
<td>22,531 (100.00)</td>
</tr>
<tr>
<td>Present in post year</td>
<td>22,051 (100.00)</td>
<td>22,432 (100.00)</td>
<td>22,999 (100.00)</td>
<td>23,274 (100.00)</td>
</tr>
<tr>
<td>Present in previous survey year</td>
<td>21,377 (96.94)</td>
<td>21,738 (96.91)</td>
<td>22,433 (97.54)</td>
<td>22,911 (98.44)</td>
</tr>
<tr>
<td>Units added due to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion or merger</td>
<td>33 (0.15)</td>
<td>75 (0.33)</td>
<td>4 (0.02)</td>
<td>1 (0.00)</td>
</tr>
<tr>
<td>House/mobile home moved in</td>
<td>6 (0.03)</td>
<td>0 (0.00)</td>
<td>2 (0.01)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Changed to residential use</td>
<td>110 (0.50)</td>
<td>72 (0.32)</td>
<td>46 (0.20)</td>
<td>72 (0.31)</td>
</tr>
<tr>
<td>New construction</td>
<td>445 (2.02)</td>
<td>503 (2.24)</td>
<td>465 (2.02)</td>
<td>253 (1.09)</td>
</tr>
<tr>
<td>Recovered temporary losses</td>
<td>18 (0.08)</td>
<td>13 (0.06)</td>
<td>33 (0.14)</td>
<td>11 (0.05)</td>
</tr>
<tr>
<td>Added in other ways</td>
<td>66 (0.30)</td>
<td>29 (0.13)</td>
<td>15 (0.07)</td>
<td>30 (0.13)</td>
</tr>
<tr>
<td>TOTAL UNITS ADDED</td>
<td>678 (3.07)</td>
<td>692 (3.08)</td>
<td>565 (2.46)</td>
<td>366 (1.57)</td>
</tr>
<tr>
<td>Average yearly additions</td>
<td>339</td>
<td>346</td>
<td>283</td>
<td>183</td>
</tr>
</tbody>
</table>

### Net Change in Stock (1,000s Units)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Change in Stock</td>
<td>268</td>
<td>307</td>
<td>287</td>
<td>120</td>
</tr>
<tr>
<td>Average yearly net change</td>
<td>134</td>
<td>154</td>
<td>144</td>
<td>60</td>
</tr>
</tbody>
</table>

* 2011-2013 is estimated using American Housing Survey data, other years report published numbers.
### Appendix Table 2 Affordability of Changes in Multifamily (5+ Units) Housing Stock (2011-2013)

#### Units Lost from Multifamily (5+ Units) Housing Stock (1,000s) *

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Owner Occupied</th>
<th>Renter Occupied</th>
<th>Seasonal or Vacant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td><strong>Affordable to:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELI (0 to 30% AMI)</td>
<td>100 (4.34)</td>
<td>2,357 (14.73)</td>
<td>188 (7.67)</td>
<td>2,645 (12.74)</td>
</tr>
<tr>
<td>VLI (30 to 50% AMI)</td>
<td>292 (12.64)</td>
<td>3,775 (23.59)</td>
<td>540 (22.04)</td>
<td>4,608 (22.19)</td>
</tr>
<tr>
<td>LI (50 to 80% AMI)</td>
<td>580 (25.14)</td>
<td>7,089 (44.30)</td>
<td>1,053 (42.93)</td>
<td>8,722 (42.01)</td>
</tr>
<tr>
<td><strong>Up to LI (0 to 80% AMI)</strong></td>
<td>973 (42.11)</td>
<td>13,222 (82.63)</td>
<td>1,781 (72.64)</td>
<td>15,975 (76.94)</td>
</tr>
<tr>
<td>MI or Higher (&gt; 80% AMI)</td>
<td>1,337 (57.89)</td>
<td>2,779 (17.37)</td>
<td>671 (27.36)</td>
<td>4,787 (23.06)</td>
</tr>
<tr>
<td><strong>Rental Assistance Housing</strong></td>
<td>3,048 (19.05)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Units Lost</strong></td>
<td>7 (100.00)</td>
<td>111 (100.00)</td>
<td>57 (100.00)</td>
<td>175 (100.00)</td>
</tr>
<tr>
<td><strong>Average Yearly Losses</strong></td>
<td>4</td>
<td>56</td>
<td>29</td>
<td>88</td>
</tr>
</tbody>
</table>

#### Units Added to Multifamily (5+ Units) Housing Stock (1,000s) *

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Owner Occupied</th>
<th>Renter Occupied</th>
<th>Seasonal or Vacant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td><strong>Affordable to:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELI (0 to 30% AMI)</td>
<td>81 (3.67)</td>
<td>2,665 (15.77)</td>
<td>234 (10.24)</td>
<td>2,981 (13.92)</td>
</tr>
<tr>
<td>VLI (30 to 50% AMI)</td>
<td>336 (15.16)</td>
<td>3,627 (21.45)</td>
<td>446 (19.51)</td>
<td>4,409 (20.60)</td>
</tr>
<tr>
<td>LI (50 to 80% AMI)</td>
<td>576 (25.95)</td>
<td>7,212 (42.66)</td>
<td>928 (40.59)</td>
<td>8,715 (40.71)</td>
</tr>
<tr>
<td><strong>Up to LI (0 to 80% AMI)</strong></td>
<td>994 (44.79)</td>
<td>13,504 (79.88)</td>
<td>1,608 (70.34)</td>
<td>16,106 (75.23)</td>
</tr>
<tr>
<td>MI or Higher (&gt; 80% AMI)</td>
<td>1,225 (55.21)</td>
<td>3,401 (20.12)</td>
<td>678 (29.66)</td>
<td>5,304 (24.77)</td>
</tr>
<tr>
<td><strong>Rental Assistance Housing</strong></td>
<td>3,279 (19.40)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Units Added</strong></td>
<td>14 (100.00)</td>
<td>204 (100.00)</td>
<td>85 (100.00)</td>
<td>303 (100.00)</td>
</tr>
<tr>
<td><strong>Average Yearly Additions</strong></td>
<td>7</td>
<td>102</td>
<td>43</td>
<td>152</td>
</tr>
</tbody>
</table>

#### Net Change in Stock

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Owner Occupied</th>
<th>Renter Occupied</th>
<th>Seasonal or Vacant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td><strong>ELI (0 to 30% AMI)</strong></td>
<td>0</td>
<td>-1</td>
<td>-2</td>
<td>-3</td>
</tr>
<tr>
<td><strong>VLI (30 to 50% AMI)</strong></td>
<td>3</td>
<td>-8</td>
<td>-4</td>
<td>-9</td>
</tr>
<tr>
<td><strong>LI (50 to 80% AMI)</strong></td>
<td>0</td>
<td>24</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td><strong>Up to LI (0 to 80% AMI)</strong></td>
<td>3</td>
<td>14</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td><strong>MI or Higher (&gt; 80% AMI)</strong></td>
<td>4</td>
<td>78</td>
<td>24</td>
<td>107</td>
</tr>
<tr>
<td><strong>Assisted Housing</strong> **</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>7</td>
<td>93</td>
<td>28</td>
<td>128</td>
</tr>
</tbody>
</table>

* Totals in this table differ from those in Table 3 due to unidentifiable affordability of vacant properties without listed price or rent.

** Rental assistance housing includes units for which interviewed renter states they either: receive some certificate or voucher to help pay rent; have rent subsidized by federal, state or local government; or live in public housing (e.g. low-income housing projects). Housing units subsidized with Low Income Housing Tax Credit, a major source of subsidy for new subsidized units, are therefore likely to not be included in this estimate.