Eye on the Apartment Market: Multifamily Dashboard

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PANELISTS

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THE LAST FED FUNDS RATE HIKE WAS 10 YEARS AGO
ECONOMIC SNAPSHOT: THEN VS. NOW

**Employment**

- 2005: 134 million
- 2015: 144 million

**20-34 year olds***

- 2004: 58 million
- 2014: 68 million

**Retail sales ex auto**

- 2005: $760 billion
- 2015: $920 billion

*Latest data available
WHAT ABOUT THE MULTIFAMILY MARKET 10 YEARS AGO?

**Rentership Rate (Percent)**

- 2005: 28%
- 2007: 30%
- 2009: 32%
- 2011: 34%
- 2013: 36%
- 2015: 38%

**Urban Apartment Units (millions)**

- 2005: 1.5 million
- 2015: 2.0 million

Sources:
- NMHC
INSTITUTIONAL INVESTORS ARE CHOOSING HIGH RISE OVER GARDEN APARTMENTS

Apartments held in NCREIF Property Index in 2005

- Garden: 70%
- High Rise: 27%
- Low Rise: 3%

Apartments held in NCREIF Property Index in 2015

- Garden: 32%
- High Rise: 59%
- Low Rise: 9%
Over the last 10 years, the number of apartment units inside CBDs jumped by 19% -- more than double the rate of the suburbs.
## Apartment Snapshot: Then vs. Now
Markets with the Largest Rent Growth

<table>
<thead>
<tr>
<th>Rank</th>
<th>Market</th>
<th>Avg. Monthly Rent, Q4 15</th>
<th>10-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>San Francisco, CA</td>
<td>$2,988</td>
<td>84%</td>
</tr>
<tr>
<td>2</td>
<td>San Jose, CA</td>
<td>$2,474</td>
<td>81%</td>
</tr>
<tr>
<td>3</td>
<td>Denver/Boulder, CO</td>
<td>$1,297</td>
<td>71%</td>
</tr>
<tr>
<td>4</td>
<td>Portland, OR-WA</td>
<td>$1,164</td>
<td>64%</td>
</tr>
<tr>
<td>5</td>
<td>Oakland, CA</td>
<td>$1,994</td>
<td>62%</td>
</tr>
<tr>
<td>6</td>
<td>Austin, TX</td>
<td>$1,151</td>
<td>57%</td>
</tr>
<tr>
<td>7</td>
<td>Seattle, WA</td>
<td>$1,356</td>
<td>57%</td>
</tr>
<tr>
<td>8</td>
<td>Houston, TX</td>
<td>$1,015</td>
<td>48%</td>
</tr>
<tr>
<td>9</td>
<td>San Antonio, TX</td>
<td>$899</td>
<td>43%</td>
</tr>
<tr>
<td>10</td>
<td>Dallas, TX</td>
<td>$1,014</td>
<td>43%</td>
</tr>
<tr>
<td>--</td>
<td>U.S. Average</td>
<td>$1,243</td>
<td>32%</td>
</tr>
</tbody>
</table>
RENT GROWTH: 2005 TO 2015

* Through November
JOB GAINS DRIVE RENT GROWTH

Total Employment (Millions)

* Through November
POPULATION GROWTH: 2005 TO 2015

San Francisco San Jose Denver/Boulder Portland Oakland Austin Seattle Houston San Antonio Dallas

20-34 Year Olds
+183,000 +246,000 +514,000 +316,000 +337,000 +538,000 +520,000 +1,323,000 +453,000 +857,000

Total Population
+246,000 +316,000 +514,000 +337,000 +538,000 +520,000 +1,323,000 +453,000 +857,000
<table>
<thead>
<tr>
<th>Rank</th>
<th>Market</th>
<th>Total Apartments, Q4 15</th>
<th>10-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Austin, TX</td>
<td>213,842</td>
<td>37.4%</td>
</tr>
<tr>
<td>2</td>
<td>San Antonio, TX</td>
<td>177,031</td>
<td>33.1%</td>
</tr>
<tr>
<td>3</td>
<td>Raleigh/Durham, NC</td>
<td>146,019</td>
<td>29.7%</td>
</tr>
<tr>
<td>4</td>
<td>Charlotte, NC-SC</td>
<td>155,767</td>
<td>28.4%</td>
</tr>
<tr>
<td>5</td>
<td>Houston, TX</td>
<td>630,706</td>
<td>21.1%</td>
</tr>
<tr>
<td>6</td>
<td>Salt Lake City, UT</td>
<td>117,945</td>
<td>18.2%</td>
</tr>
<tr>
<td>7</td>
<td>Dallas, TX</td>
<td>526,257</td>
<td>17.5%</td>
</tr>
<tr>
<td>8</td>
<td>Nashville, TN</td>
<td>126,022</td>
<td>17.4%</td>
</tr>
<tr>
<td>9</td>
<td>Denver/Boulder, CO</td>
<td>295,438</td>
<td>15.8%</td>
</tr>
<tr>
<td>10</td>
<td>Washington, DC-VA-MD</td>
<td>572,941</td>
<td>15.3%</td>
</tr>
<tr>
<td></td>
<td>U.S. Core 100 Markets</td>
<td>17,387,476</td>
<td>10.5%</td>
</tr>
</tbody>
</table>
SUPPLY GROWTH, HOUSEHOLD FORMATION AND JOB GROWTH
HIGH SUPPLY LEVELS DID NOT SLOW CLASS A RENTS

10-Year, Average Annual Class A Rent Growth in Highest-Supply Submarkets*

*submarkets with inventory growth exceeding parent metro’s average
### Older Apartments Are Buffered From New Product

#### Rank Market Q4 15 Rent Gap, Pre-2006 Units vs. Newer Units 10-Year Rent Change, Pre-2006 Units (Same-Store)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Market</th>
<th>Q4 15 Rent Gap, Pre-2006 Units vs. Newer Units</th>
<th>10-Year Rent Change, Pre-2006 Units (Same-Store)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Austin, TX</td>
<td>-33.9%</td>
<td>44.5%</td>
</tr>
<tr>
<td>2</td>
<td>San Antonio, TX</td>
<td>-41.1%</td>
<td>28.8%</td>
</tr>
<tr>
<td>3</td>
<td>Raleigh/Durham, NC</td>
<td>-30.1%</td>
<td>27.3%</td>
</tr>
<tr>
<td>4</td>
<td>Charlotte, NC-SC</td>
<td>-33.1%</td>
<td>30.5%</td>
</tr>
<tr>
<td>5</td>
<td>Houston, TX</td>
<td>-52.4%</td>
<td>32.1%</td>
</tr>
<tr>
<td>6</td>
<td>Salt Lake City, UT</td>
<td>-20.6%</td>
<td>34.1%</td>
</tr>
<tr>
<td>7</td>
<td>Dallas, TX</td>
<td>-50.4%</td>
<td>31.3%</td>
</tr>
<tr>
<td>8</td>
<td>Nashville, TN</td>
<td>-31.9%</td>
<td>37.5%</td>
</tr>
<tr>
<td>9</td>
<td>Denver/Boulder, CO</td>
<td>-35.4%</td>
<td>63.4%</td>
</tr>
<tr>
<td>10</td>
<td>Washington, DC-VA-MD</td>
<td>-39.1%</td>
<td>27.2%</td>
</tr>
<tr>
<td>--</td>
<td>U.S. Average</td>
<td>-38.7%</td>
<td>29.9%</td>
</tr>
</tbody>
</table>
HARD-HIT MARKETS ON RECOVERY PATH: MIAMI

Median Single-Family Home Price (000s)

Average Apartment Effective Rent

* Through 3Q

NMHC
HARD-HIT MARKETS ON RECOVERY PATH: SACRAMENTO

Median Single-Family Home Price (000s)

Average Apartment Effective Rent

* Through 3Q
HARD-HIT MARKETS ON RECOVERY PATH: LAS VEGAS

Median Single-Family Home Price (000s)

-31%

+80%

2000 2005 2010 2015*

Average Apartment Effective Rent

-2%

+15%

2000 2005 2010 2015*

* Through 3Q
IDENTITY CHANGE MARKETS: ATLANTA

Net Employment Change

- Atlanta, GA
- Peer SE/TX Markets
- U.S. Top 50 Average

Apartment Inventory Growth

- Atlanta, GA
- Peer SE/TX Markets
- U.S. Top 50 Average
IDENTITY CHANGE MARKETS: LOS ANGELES


- Gross Metro Product
- Population: Ages 20-34
- Median Household Income
- Unemployment Rate
- Total Employment

L.A. Rent Growth Relative to U.S.
Identity Change Markets: Boston

Change in Boston vs. U.S., 2005-2015

- Total Employment
- Unemployment Rate
- Median Household Income
- Population: Ages 20-34
- Gross Metro Product

Boston Rent Growth Relative to U.S.
WHAT IS NOT CHANGING TO THE DEGREE PERCEIVED

Reported Rent-to-Income Ratios

*prior to sale  **based on leases tracked by RealPage software