The Single-Family Outlook and its Impact on Multifamily

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HOME VALUES, INVENTORY AND SALES
US HOME VALUES CONTINUE STEADY RECOVERY

![Graph showing US home values recovery from 2001 to 2015. The graph indicates a peak at $196,100 in 2007, a trough at $120,000 in 2009, and a current value at $183,500 in 2015. The peak-to-trough decline was -22.5%, peak-to-current decline was -6.8%, and trough-to-current increase was 20.7%.](image)
BUT RATE OF APPRECIATION HAS BEEN SLOWING

Source: Zillow (February 2016)
DENVER, DALLAS, PORTLAND & SF HAVE SEEN BIGGEST ANNUAL GAINS IN HOME VALUES...

Source: Zillow (February 2016)
...AND SUPPLY: NATIONAL INVENTORY CONTINUES TO DECREASE

Peak-to-current: -39%
Year-over-Year: -7.8%

Source: Zillow (February 2016)
MORE TOP TIER HOMES AVAILABLE FOR SALE

Seasonally Adjusted Data
Source: Zillow (February 2016)
HOMES LISTED FOR SALE ARE SELLING MORE QUICKLY THAN IN THE PAST FEW YEARS

Source: Zillow (February 2016)
NEW HOME SALES STILL LAGGING

![Graph showing New Home Sales and Existing Home Sales](image-url)
TOP 5 CAUSES OF SLOWER THAN EXPECTED PACE OF NEW HOME CONSTRUCTION

1. High land costs/lack of parcels to develop in desirable locations
2. High labor costs/skilled construction labor shortages
3. Demand for single family homes is overstated in the news
4. Low builder profit margins for entry-level homes
5. High regulatory costs

Source: Zillow Home Price Expectations Survey
BIGGER HOME, SMALLER LOTS

Percent Change in Median Home Size and Median Lot Size Since June 1999

Notes: Centered 6-month moving average.
NEGATIVE EQUITY
NEGATIVE EQUITY IS STEADILY DECLINING

Source: Zillow (2015 Q4)
THE U.S. NEGATIVE EQUITY RATE HAS FALLEN TO 13.1%, BUT REMAINS MUCH HIGHER IN SOME AREAS

Source: Zillow (2015 Q4)
MORTGAGE RATES AND FINANCING
MORTGAGE RATES ARE HOVERING NEAR ALL TIME LOWS

Source: Zillow Mortgages
ALL-CASH PURCHASES MAKE UP A LARGE PART OF THE MARKET IN FLORIDA, OHIO AND DETROIT
MORTGAGE AND RENTAL AFFORDABILITY
NATIONWIDE, THE SHARE OF INCOME SPENT ON A MORTGAGE PAYMENT IS WELL BELOW HISTORIC NORMS

1985-1999 Average: 24%

2015 Q4: 15%

Source: Zillow (2015 Q4)
# Mortgage Affordability in the Largest Metros

Source: Zillow (2015 Q4)

<table>
<thead>
<tr>
<th>Region</th>
<th>Mortgage Affordability 1985 – 2000</th>
<th>Forecasted at 5% Rates</th>
<th>Forecasted at 6% Rates</th>
<th>Forecasted at 7% Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>15%</td>
<td>21%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>14%</td>
<td>23%</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td>Los Angeles, CA</td>
<td>40%</td>
<td>35%</td>
<td>46%</td>
<td>51%</td>
</tr>
<tr>
<td>New York, NY</td>
<td>25%</td>
<td>31%</td>
<td>29%</td>
<td>32%</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>41%</td>
<td>37%</td>
<td>48%</td>
<td>54%</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>17%</td>
<td>23%</td>
<td>19%</td>
<td>22%</td>
</tr>
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Source: Zillow (2015 Q4)
NATIONWIDE, THE SHARE OF INCOME SPENT ON A RENTAL PAYMENT IS WELL ABOVE HISTORIC NORMS

Source: Zillow (2015 Q3)

- 1985-1999 Average: 24%
- 2015 Q4: 30%
RENTAL AFFORDABILITY IS LOWER THAN IT HAS EVER BEEN IN MANY MARKETS

Source: Zillow (2015 Q3)
RENTS CONTINUE TO GROW, ALBEIT AT A SLOWER PACE

Source: Zillow (February 2016)
SAN FRANCISCO IS STILL SEEING DOUBLE DIGIT ANNUAL RENT GAINS

Source: Zillow (February 2016)
SHARE OF SINGLE-FAMILY RESIDENCES THAT ARE RENTALS
INCOME BY TIER

- All
- Top Tier
- Bottom Tier
DEMOGRAPHIC TRENDS
MILLENNIALS HAVE POSITIVE VIEWS OF HOMEOWNERSHIP

<table>
<thead>
<tr>
<th></th>
<th>Owning a home is necessary to live the good life and the American Dream</th>
<th>Owning a home is necessary to be a respected member of society</th>
<th>Owning provides a person more freedom</th>
<th>Buying a home is the best long term investment a person can make</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td>18-34</td>
<td>35-49</td>
<td>50-64</td>
<td>65+</td>
</tr>
<tr>
<td>18-34</td>
<td>67%</td>
<td>57%</td>
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Source: Zillow Housing Confidence Index
DOUBLING UP IS A COMMON STRATEGY TO COPE WITH INCREASINGLY EXPENSIVE HOUSING COSTS

Source: Zillow analysis of U.S. Census Bureau Decennial Census and ACS data, IPUMS
SINCE 2005, NEWLY FORMED HOUSEHOLDS HAVE TENDED TO RENT

Source: Zillow analysis of U.S. Census Bureau CPS Survey data 1995-2014, IPUMS
COMPARING FIRST-TIME BUYERS NOW AND THEN (EARLY 1970s)

1970-1974

• Rented on average for 2.6 years before buying
• Were 30.6 years of age
• Households included 3 people
• Purchased a home worth $87k in today’s dollars
• Income was $53k in today’s dollars

2010-2013

• Rent on average for 6 years before buying
• Are 32.5 years of age
• Households include just 2 people, so no children yet
• Purchased a home worth $140k in today’s dollars
• Income is $54k in today’s dollars

Source: Zillow analysis of University of Michigan Panel Survey of Income Dynamics
CONDOS MAKE UP MORE THAN 40% OF FIRST-TIME HOME PURCHASES, COMPARED TO 28% IN 2001

Source: Zillow analysis of Fannie Mae Single-Family Loan performance credit data
URBAN, SUBURBAN, AND RURAL HOME VALUES OVER TIME

Home Values

Annual Home Value Appreciation

Average Home Value

- $280K
- $260K
- $240K
- $220K
- $200K
- $180K
- $160K
- $140K
- $120K
- $100K
- $80K
- $60K
- $40K
- $20K

Average Home Appreciation Year over Year

- 18%
- 16%
- 14%
- 12%
- 10%
- 8%
- 6%
- 4%
- 2%
- 0%
- -2%
- -4%
- -6%
- -8%
- -10%
- -12%


Rural Suburban Urban

Zillow
EXPERTS EXPECT HOMEOWNERSHIP RATE TO RISE SLIGHTLY

The national homeownership rate had been falling steadily over the past several years.

On average, experts polled by Zillow say they expect the homeownership rate to rise to 63.7% by 2020.
THE BREAKEVEN HORIZON

Metros with the Longest Breakevens
1. Honolulu, HI: 6 years
2. Washington, DC: 4.5 years
3. Los Angeles, CA: 4.1 years
4. Stamford, CT: 4.1 years
5. Lancaster, PA: 4 years

Metros with the Shortest Breakevens
1. Memphis, TN: 1.1 years
2. Syracuse, NY: 1.2 years
3. Dallas, Texas: 1.3 years
4. Jackson, MS: 1.3 years
5. Columbia, SC: 1.3 years
WHEN ZILLOW ASKED HUNDREDS OF CURRENT RENTERS WHY THEY DON’T OWN, THEY SAID...

Income affordability (53%):
• Because I can’t afford the maintenance, taxes and monthly payments of homeownership (18%)
• Because I can’t qualify for a home loan (16%)
• Because I don’t have a down payment saved for a home (13%)
• Because I receive government assistance with my rent (6%)

Lifestyle/preferences (26%):
• I simply prefer to rent (20%)
• I could afford to buy a home, but not the size or style or location that I would want (4%)
• I like the amenities in my rental community/complex (2%)

Uncertainty (15%):
• I’m not certain how long I will live here, and/or I’m only living here for a short time (14%)
• I recently sold my home and have not yet found another to buy (1%)
OUTLOOK
HOME VALUE GROWTH IS EXPECTED TO SLOW FURTHER OVER THE NEXT YEAR

Source: Zillow (February 2016)
RENTAL GROWTH IS ALSO EXPECTED TO SLOW

Source: Zillow (February 2016)
FIND MORE ON WWW.ZILLOW.COM/RESEARCH

- Local market reports
- Real estate trends
- Housing affordability
- Forecasting

...and more
ALL ABOUT ZILLOW
Zillow Group Traffic & Usage

- In Q4, nearly 124 million average monthly unique users visited Zillow Group’s consumer brands.
- 30 million rental visitors come to Zillow Group’s rental sites and apps each month.

Mobile Facts

- Most of Zillow Group’s traffic comes from mobile. For example, 2/3 of Zillow’s usage occurs on a mobile device; on weekends it’s more than 70%. In January, more than half a billion homes were viewed on Zillow Mobile – that’s 238 homes per second.

Data & User Generated Content

- 4 out of 5 U.S. homes have been viewed on Zillow.
- Zillow has data on more than 110 million U.S. homes, with Zestimates and Rent Zestimates on more than 100 million U.S. homes.
- More than 61 million homes on Zillow have been updated by our community of users.
THE BASICS OF VALUING HOMES

Data from multiple sources

- Physical attributes
- Tax assessments
- Prior sale prices

Models trained with recently sold data

CLEANING

Identifying only valid, arms-length transactions

TRAINING

Models applied to all homes every day