WELCOME!

@NARdotRealtor  @NAR_Research

#NARForecastSummit
JOHN SMABY
2019 PRESIDENT
NATIONAL ASSOCIATION OF REALTORS®
Record Jobs

(22 million gained from 2010 ... 2.1 million in 12 months)

In thousands

2000 - 2019

Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan
Super-Low Unemployment Rate of 3.6% in U.S.
Record High Stock Market

(Standard & Poor's 500 Composite Index)
Total Household Net Worth
(Financial and Housing Net Wealth)

In billion $
Wealth: From 2000 to 2016 to 2018

Renters

Homeowners
Homeownership Rate Subpar?
## Home Sales Subpar?

### 2000 versus 2019 comparison

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2019</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Affordability</td>
<td>122</td>
<td>146</td>
<td>Better</td>
</tr>
<tr>
<td>30-year mortgage rate</td>
<td>8%</td>
<td>4%</td>
<td>Better</td>
</tr>
<tr>
<td>Population</td>
<td>282 million</td>
<td>329 million</td>
<td>Better</td>
</tr>
<tr>
<td>Population (16 yrs old and over)</td>
<td>218 million</td>
<td>263 million</td>
<td>Better</td>
</tr>
<tr>
<td>Households</td>
<td>103 million</td>
<td>122 million</td>
<td>Better</td>
</tr>
<tr>
<td>Jobs</td>
<td>132 million</td>
<td>152 million</td>
<td>Better</td>
</tr>
<tr>
<td>Total Home Sales (New + Existing)</td>
<td>6.1 million</td>
<td>5.9 million</td>
<td>Worse</td>
</tr>
</tbody>
</table>
GOVERNMENT POLICY TOWARD HOUSING
NAR Real Estate Summit

Government Policy Towards Housing

Michael Neal
Senior Research Associate
December 11, 2019
Macroeconomic Policies
Direct Impact of Traditional Monetary Policy

Sources: Federal Reserve Board, Freddie Mac
Impact of Tax Cuts and Jobs Act

Number of Mortgages by Size

Number of loans
10,000

Mortgage size (thousands of dollars)

Other Federal Policies – Housing Finance
## Possible Impact of Treasury Administrative Reforms

<table>
<thead>
<tr>
<th>Year</th>
<th>GSE Origination Market Share (%)</th>
<th>Home Sales (new and existing)</th>
<th>Housing Starts (ths.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Status Quo</td>
<td>Treasury reforms</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>45.1</td>
<td>45.1</td>
<td>1,250</td>
</tr>
<tr>
<td>2019</td>
<td>39</td>
<td>39</td>
<td>1,264</td>
</tr>
<tr>
<td>2020</td>
<td>39.4</td>
<td>39.4</td>
<td>1,312</td>
</tr>
<tr>
<td>2021</td>
<td>39.1</td>
<td>22.6</td>
<td>1,691</td>
</tr>
<tr>
<td>2022</td>
<td>38.5</td>
<td>19.1</td>
<td>2,082</td>
</tr>
<tr>
<td>2023</td>
<td>38.3</td>
<td>18.2</td>
<td>2,111</td>
</tr>
<tr>
<td>2024</td>
<td>38.5</td>
<td>18.9</td>
<td>2,055</td>
</tr>
<tr>
<td>2025</td>
<td>38.8</td>
<td>19.3</td>
<td>1,972</td>
</tr>
</tbody>
</table>

### GSE Origination Market Share (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status Quo</td>
<td>45.1</td>
<td>39</td>
<td>39.4</td>
<td>39.1</td>
<td>38.5</td>
<td>38.3</td>
<td>38.5</td>
<td>38.8</td>
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<td>Treasury reforms</td>
<td>45.1</td>
<td>39</td>
<td>39.4</td>
<td>22.6</td>
<td>19.1</td>
<td>18.2</td>
<td>18.9</td>
<td>19.3</td>
</tr>
<tr>
<td>Difference</td>
<td>-16.5</td>
<td>-19.4</td>
<td>-20.1</td>
<td>-19.6</td>
<td>-19.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Home Sales (new and existing)

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status Quo</td>
<td>5,956</td>
<td>5,991</td>
<td>6,011</td>
<td>6,428</td>
<td>6,707</td>
<td>6,856</td>
<td>7,026</td>
<td>7,071</td>
</tr>
<tr>
<td>Treasury reforms</td>
<td>5,956</td>
<td>5,991</td>
<td>6,001</td>
<td>6,239</td>
<td>6,464</td>
<td>6,594</td>
<td>6,766</td>
<td>6,814</td>
</tr>
<tr>
<td>Difference</td>
<td>-189</td>
<td>-243</td>
<td>-262</td>
<td>-260</td>
<td>-257</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Housing Starts (ths.)

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
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</thead>
<tbody>
<tr>
<td>Status Quo</td>
<td>1,250</td>
<td>1,264</td>
<td>1,312</td>
<td>1,691</td>
<td>2,082</td>
<td>2,111</td>
<td>2,055</td>
<td>1,972</td>
</tr>
<tr>
<td>Treasury reforms</td>
<td>1,250</td>
<td>1,264</td>
<td>1,312</td>
<td>1,621</td>
<td>1,978</td>
<td>1,996</td>
<td>1,937</td>
<td>1,857</td>
</tr>
<tr>
<td>Difference</td>
<td>-70</td>
<td>-104</td>
<td>-115</td>
<td>-118</td>
<td>-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Urban Institute and Moodys.
(Largely) State and Local Policies
Impact of Regulatory Costs

<table>
<thead>
<tr>
<th>Source: NAHB.</th>
<th>Lower Quartile</th>
<th>During Construction</th>
<th>During Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on...</td>
<td>11.9%</td>
<td>4.0%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact on...</th>
<th>Average</th>
<th>During Construction</th>
<th>During Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on...</td>
<td>24.3%</td>
<td>14.6%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact on...</th>
<th>Upper Quartile</th>
<th>During Construction</th>
<th>During Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on...</td>
<td>31.5%</td>
<td>18.8%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>
Not Enough For-Sale Inventory to Meet Potential Renter Demand

1983-1988 Average: 11 Renters per available home

1992-2002 Average: 16 Renters per available home

2006-2008 Average: 10 Renters per available home

2013-2019 Average: 22 Renters per available home

Source: NAR, Census Bureau and Department of Housing and Urban Development.
Stay connected to our research

- Subscribe to our bi-monthly Newsletter or email blast: Email spardo@urban.org or go to our web page, scroll down and sign-up.

- Download our monthly Housing Finance at-a-glance Chartbooks

- Follow me on Twitter: @mneal_econ

- Contact me by e-mail: mneal@urban.org

- Check the Housing Finance Policy Center website regularly: www.urban.org/center/hfpc
Government Policy towards Housing
Edward Pinto (pintoedward1@gmail.com)
AEI Housing Center
AEI.org/housing
December 11, 2019

Link to AEI National and Metro Housing Market Indicators to obtain metro reports
Link to AEI Mortgage Risk Interactive to create your own risk charts
Link to AEI State of the Nation's Housing Market, which provides local housing data
Link to House Prices and Supply Interactive with house price appreciation and supply data

We grant permission to reuse this presentation, as long as you cite as the source:
AEI Housing Center, www.aei.org/housing.
In October 2019, overheating of the low price tier continued (right panel). HPA in the low price tier was 5.2% year-over-year (yoy). In both the low-medium and medium-high tiers, HPA was 4.0% and 4.1%, respectively. HPA in the high tier (about 7% of the market) was a more modest 2.5%.

Note: Data for October 2019 are preliminary. Price tiers are set at the metro level and are defined as follows: Low: all sales at or below the 40th percentile of FHA sales prices; Low-Medium: all sales at or below the 80th percentile of FHA sales prices; Medium-High: all sales at or below the 125% of the GSE loan limit; and High: all other sales. HPAs are smoothed around the times of FHFA loan limit changes.

Source: AEI Housing Center, [www.AEI.org/housing](http://www.AEI.org/housing).
Supply-Demand Imbalance Greatest in the Two Lowest Price Tiers

Inventories remain historically tight at the lower end, continuing the strong seller’s market, which implies that house prices will continue to increase much faster than incomes, thereby worsening affordability.

Note: Data are for 2,288 counties representing approximately 95% of sales. Source: AEI Housing Center, www.AEI.org/housing, and Zillow.
Entry-Level Home Sales Share Continues to Drop

At lowest October level (54.3%) for data series. Entry-level buyers continue to struggle, notwithstanding lower rates.
Purchase Loans with Total DTI Greater than 43%

Despite the general seasonal decline in the DTI > 43 share that begins around January, this year’s decline has been more pronounced. While this year’s decline also coincides with a massive rate drop, some agencies (esp. FHA and Fannie) have announced their intent to reduce their share of high DTI loans or risk layering. Time will tell whether this trend is a sustainable one.

Note: Data pertain to purchase loans for primary owner-occupied properties. Data for the portfolio line come from LLMA and McDash after removing duplicative loans. The data are weighted by loan amount buckets and origination year using HMDA weights. The portfolio series is not shown for the most recent months to allow sufficient time for portfolio lenders to sell loans to the GSEs.

Source: AEI Housing Center, www.AEI.org/housing, CoreLogic, and Black Knight.
GSE Purchase Loan Share with a DTI > 43%

After growing to 31% and 27%, respectively, Fannie and Freddie have begun to shrink their share of loans with a DTI > 43%. With the Qualified Mortgage Patch set to expire in January 2021, the GSEs only need to slightly accelerate their current rate of shrinking this segment to meet the January 2021 sunset date.

Note: Data for September 2019 are preliminary.
Source: AEI Housing Center, www.AEI.org/housing.
The GSEs’ share of loans with combined loan-to-value (CLTV) ratios greater than 95% has risen dramatically, esp. for Fannie. In 2014 both agencies were forced by their regulator to aggressively reenter this market. This increased competition with FHA and promoted greater risk taking. This trend now appears to have reversed. If the FHFA were to revert to the policy that limited the GSEs to a maximum CLTV of 95%, this would help de-risk their footprint and establish a bright line between the GSEs and FHA. Their competition unnecessarily drives up home prices and puts taxpayers at risk.

Note: Data for September 2019 are preliminary.
Source: AEI Housing Center, www.AEI.org/housing.
Risk layering occurs when at least three risk factors are present at origination. Risk factors include: Credit score < 660, DTI > 43, CLTV > 95%, and 30 year loan term. The number of risk layered loans rose dramatically beginning in 2017 as FHFA pushed the GSEs towards higher DTIs. Fortunately, due to the reduction in high DTI shares, this trend has begun to reverse.

Note: Risk layering is defined as having at least 3 of 4 of the following features: Credit score < 660, DTI > 43, CLTV > 95%, 30 year loan term. Data for September 2019 are preliminary.

Source: AEI Housing Center, www.AEI.org/housing.
The FHFA Director has set as a goal the de-risking of the GSEs’ footprint. High risk loans (those with an MRI greater than or equal to a 12% stressed default rate) currently account for 21% of their August footprint and could be eliminated. The GSEs’ high risk loans are about evenly split between purchase loans and refis. The biggest risk drivers are purchase loans with CLTVs > 95%, DTIs > 43%, and refis.
What would happen to loans after the Patch expires and FHA limits its DTIs to 50?

2018 FHA Purchase Counts:
Total of 728 Thousand Loans

- DTI ≤ 50%: 75%
- DTI > 50%: 27%

2018 Conventional Purchase Counts:
Total of 2.487 million Loans

- DTI ≤ 43%: 78%
- DTI > 43%: 22%

Note: Data are for primary owner-occupied loans. Portfolio loans are calculated by taking the difference in loan totals from HMDA 2018 for conventional loans and AEI’s National Mortgage Risk Index for GSE loans. Conventional loans with missing DTIs are assumed to have the same distribution of DTI > 43% as the rest of the population. Source: AEI Housing Center, www.aei.org/housing.
GOVERNMENT POLICY TOWARD HOUSING
Issues Affecting the Residential and Nonresidential Markets

Kermit Baker
Joint Center for Housing Studies, and The American Institute of Architects

NAR Real Estate Forecast Summit
December 11, 2019
Key residential and nonres. issues

Housing affordability problem is growing.

Older Americans lack accessible housing options.

New building activity being replaced by retrofits.
Nationally, house prices have fully recovered from the housing crash.

CoreLogic national house price index (NSA, Jan. 2000=100)

Notes: Index includes single family attached and detached structures. Data accessed on 10/16/19. Source: CoreLogic, National House Price Index (HPI).
However, prices typically have been rising faster than incomes, pushing up house price-to-income ratios in many large metro areas.

Ratio of existing single-family house prices to household income

Notes: Data are for 25 largest metros ranked by population in the 2017 American Community Survey. Ratio is calculated as part of Zillow’s quarterly Affordability Indices and compares the median price of homes to the median level of household income in a given area. Source: Zillow Price-to-Income Ratio Q2 2019, https://www.zillow.com/research/data/.
Only a small share of homes have basic accessibility features that may be required for those with mobility challenges.

Share of housing units nationally by structure type (percent)

- **Single Floor Living**
- **No Step Entrance**
- **Extra Wide Halls/Doors**
- **Combination of Single Floor Living, No Step Entrance, and Extra Wide Halls & Doors**

Since 1980, nonresidential building construction has averaged 1.3 billion square feet per year.

Nonresidential building construction, billions of square feet

Source: Dodge Data and Analytics
Work on existing facilities has been a growing share of design activity

Renovations, rehabilitations, additions, and historic preservation as percent of firm building design billings

Source: AIA Firm Survey Report, various years.
BREAK

15 MINUTES
LESLIE ROUDA SMITH
FIRST VICE PRESIDENT
NATIONAL ASSOCIATION OF REALTORS®
REGIONAL VARIATIONS
Current Housing Market Conditions in Florida

Brad O’Connor, Ph.D.
Chief Economist
## Florida Population, Annual, 1980-2019

### Fastest Growing Metros, 2010 to 2018

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Pop. Chg. 2010-2018</th>
<th>US Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Villages</td>
<td>38%</td>
<td>1</td>
</tr>
<tr>
<td>Cape Coral-Fort Myers</td>
<td>22%</td>
<td>7</td>
</tr>
<tr>
<td>Orlando-Kissimmee-Sanford</td>
<td>21%</td>
<td>9</td>
</tr>
<tr>
<td>Crestview-Fort Walton Beach-Destin</td>
<td>18%</td>
<td>18</td>
</tr>
<tr>
<td>Naples-Immokalee-Marco Island</td>
<td>18%</td>
<td>19</td>
</tr>
<tr>
<td>Lakeland-Winter Haven</td>
<td>18%</td>
<td>20</td>
</tr>
<tr>
<td>North Port-Sarasota-Bradenton</td>
<td>17%</td>
<td>25</td>
</tr>
<tr>
<td>Punta Gorda</td>
<td>16%</td>
<td>33</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>14%</td>
<td>43</td>
</tr>
<tr>
<td>Sebastian-Vero Beach</td>
<td>14%</td>
<td>44</td>
</tr>
<tr>
<td>Port St. Lucie</td>
<td>14%</td>
<td>45</td>
</tr>
<tr>
<td>Tampa-St. Petersburg-Clearwater</td>
<td>13%</td>
<td>50</td>
</tr>
</tbody>
</table>

Produced by Florida Realtors® Research with data provided by the Univ. of Fla. Bureau of Economic and Business Research and the US Bureau of the Census
Employment Growth

Monthly, Year-over-Year Percent Change, All (Non-Farm) Employees, Jan. 2010 - Oct. 2019

Produced by Florida Realtors® Research with data provided by the U.S. Bureau of Labor Statistics; Sept. 2017 & 2018 omitted due to Hurricane Irma
Closed Sales
YTD 2019 (through Oct.), Pct. Chg. from 2018
Existing Homes, Statewide

Single-Family: +4.3%
Condo/Townhouse: -1.9%
All Residential Types: +2.4%
As of Oct. 31, 2019, Pct. Chg. from 2018

Existing Homes, Statewide

Single-Family: -7.0%
Condo/Townhouse: -3.7%
All Residential Types: -5.7%
Median Sale Price and Est. Monthly Mortgage Payment


Median Sale Price and Est. Monthly Payment

Produced by Florida Realtors® Research with data provided by Florida's multiple listing services and Freddie Mac
Visit floridarealtors.org/research

Email research@floridarealtors.org
REGIONAL VARIATIONS
Regional Comparisons: Texas Economy & Housing

Dr. James P. Gaines
Chief Economist
recenter.tamu.edu
2010-2018 Employment Growth
(Jobs & Percent Increase)

<table>
<thead>
<tr>
<th>State</th>
<th>Jobs</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>1,609,400</td>
<td>22.4%</td>
</tr>
<tr>
<td>Texas</td>
<td>2,128,800</td>
<td>20.5%</td>
</tr>
<tr>
<td>California</td>
<td>2,899,500</td>
<td>20.3%</td>
</tr>
<tr>
<td>Washington</td>
<td>569,800</td>
<td>20.1%</td>
</tr>
<tr>
<td>Arizona</td>
<td>470,900</td>
<td>19.7%</td>
</tr>
<tr>
<td>Virginia</td>
<td>355,000</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Sources: BLS/Haver Analytics; Real Estate Center at Texas A&M University
Sources: Texas Workforce Commission, Real Estate Center at Texas A&M University
2010-2018 Population Growth
Top 10 by Number of People

<table>
<thead>
<tr>
<th>State</th>
<th>Population Growth</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>13.7%</td>
<td>3,459,166</td>
</tr>
<tr>
<td>Florida</td>
<td>13.0%</td>
<td>2,453,540</td>
</tr>
<tr>
<td>California</td>
<td>6.0%</td>
<td>2,236,142</td>
</tr>
<tr>
<td>North Carolina</td>
<td>8.8%</td>
<td>809,327</td>
</tr>
<tr>
<td>Georgia</td>
<td>8.3%</td>
<td>807,665</td>
</tr>
<tr>
<td>Washington</td>
<td>11.8%</td>
<td>792,689</td>
</tr>
<tr>
<td>Arizona</td>
<td>11.9%</td>
<td>763,872</td>
</tr>
<tr>
<td>Colorado</td>
<td>12.8%</td>
<td>647,283</td>
</tr>
<tr>
<td>Virginia</td>
<td>6.2%</td>
<td>494,005</td>
</tr>
<tr>
<td>South Carolina</td>
<td>9.7%</td>
<td>448,471</td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau; Real Estate Center at Texas A&M University
Texas Population 1910-2050

2018 Population Projection

From 1970 to 2010 (40 years), Texas added ~14 million people

From 2010 to 2050 (40 years), Texas will probably add ~22 million people (revised)

Sources: U.S. Census Bureau, Texas State Data Center 2018 Population Projections; Real Estate Center at Texas A&M University
Annual Texas Home Sales & Prices

Source: TAR Data Relevance Program; Real Estate Center at Texas A&M University
Median Home Price Index
Jan. 2007=100, SA

Source: NAR; State Associations of Realtors®; Washington RE Center; Real Estate Center at Texas A&M University
Median Home Price in Selected States

Source: NAR; State Associations of Realtors®; Washington RE Center; Real Estate Center at Texas A&M University
Texas SF Building Permits: Not Nearly Enough

1990-2018 average 97,342/year

Source: US Census Bureau, Real Estate Center at Texas A&M
Regional Comparisons: Texas Economy & Housing

Dr. James P. Gaines
Chief Economist
recenter.tamu.edu
REGIONAL VARIATIONS
California 2020 Housing Market Update

December 11, 2019
Leslie Appleton-Young
Chief Economist + SVP
California Association of REALTORS®
California October 2019 Sales and Price Report

Sales down at the bottom and top ends of the market

Oct. 2019
$605,280
+6.0% YTY

Median Home Price

Unsold Inventory Index
3.0 months
Oct. 2018: 3.6 months

Supply improved only at the upper end of the market
California Home Sales - Flat for 9 years

California, October 2019 Sales: 404,240 Units, -2.6% YTD, 1.9% YTY

SERIES: Sales of Existing Single Family Homes
SOURCE: CALIFORNIA ASSOCIATION OF REALTORS®
California Home Prices: High with gains moderating

California, October 2019: $605,280, -0.1% MTM, 6.0% YTY

SERIES: Median Price of Existing Single Family Homes
SOURCE: CALIFORNIA ASSOCIATION OF REALTORS®
Unsold Inventory: Tight is the new normal

October 2018: 3.6 Months; October 2019: 3.0 Months

SERIES: Unsold Inventory Index of Existing Single Family Homes
SOURCE: CALIFORNIA ASSOCIATION OF REALTORS®
Problem – CA has more of everything, except...
Reality: By 2025 CA will be a majority renter state

**CA Homeownership Rate**
Eastward Ho!
Thank You
REGIONAL VARIATIONS
Looking Ahead: Housing Market Trends & Conditions in Virginia

NAR Real Estate Forecast Summit

Lisa Sturtevant, PhD
Chief Economist
Virginia REALTORS®

December 11, 2019
Virginia Existing Home Sales

January - October

Source: Virginia REALTORS®
Virginia Home Price Trends
Median Sales Prices ($), January - October

Source: Virginia REALTORS®
Inventory
End of October

Source: Virginia REALTORS®

<table>
<thead>
<tr>
<th>Year</th>
<th>Inventory</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>59,168</td>
<td>-3%</td>
</tr>
<tr>
<td>2015</td>
<td>57,362</td>
<td>-11%</td>
</tr>
<tr>
<td>2016</td>
<td>51,091</td>
<td>-13%</td>
</tr>
<tr>
<td>2017</td>
<td>44,552</td>
<td>-5%</td>
</tr>
<tr>
<td>2018</td>
<td>42,315</td>
<td>-20%</td>
</tr>
<tr>
<td>2019</td>
<td>34,032</td>
<td></td>
</tr>
</tbody>
</table>
2020 Employment & Housing Outlook for Virginia

- 47,840 net new jobs (+1.2%)
- 35,450 new home starts (+8.9%)
- 129,343 home sales (+3.0%)
- Median home price $308,819 (+4.6%)
NAR Real Estate Forecast Summit

Consensus Forecast and Top 10 Markets

Lawrence Yun, PhD
NAR Chief Economist and Senior Vice President, Research
NATIONAL ASSOCIATION OF REALTORS®
December 11, 2019
CONSENSUS FORECAST

The 2019 NAR Real Estate Forecast Summit consensus forecasts for 2020 and 2021 are calculated as the averages (means) of the responses of 14 economic and housing market experts who participated as panelists at the National Association of REALTORS® Real Estate Forecast Summit on December 11, 2019. Respondents are anonymous. The survey was conducted during December 2-5, 2019. The 2019 figures are the latest available data as of the time of the survey.

Panel 1: Policy and Issues

Alanna McCargo, Urban Institute
Edward Pinto, AEI Housing Center
Kermit Baker, Harvard University

Panel 2: Regional Differences

Brad O’Connor, Florida REALTORS®
James Gaines, Real Estate Center, Texas A&M
Leslie Appleton-Young, California Association of REALTORS®
Lisa Sturtevant, Virginia REALTORS®

Panel 3: Commercial Real Estate

Calvin Schnure, NAREIT
Greg Willett, RealPage, Inc.
Jim Costello, Real Capital Analytics
KC Conway, CCIM Chief Economist, University of Alabama

Panel 4: Sectors and Trade Groups

Danielle Hale, Realtor.com
Jim Chessen, American Bankers Association
Mike Frantantoni, Mortgage Bankers Association
Danushka Nanayakkara-Skillington, NAHB
Slower Growth

29% Probability of a Recession in 2020

GDP Growth

2019 A: 2.1
2020F: 2.0
2021F: 1.9
Slightly Higher Unemployment Rate

But Below 4%

Unemployment Rate

- 2019 A: 3.6
- 2020F: 3.7
- 2021F: 3.9
69% Expect No Change in Fed Funds Rate in 2020

Do you expect the Federal Operations Market Committee to change the federal funds rate in 2020?

- 0% Increase
- 69% No change
- 31% Decrease
Modest Increase in Mortgage Rates to 4%

30-Year Fixed Mortgage Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 A</td>
<td>3.7</td>
</tr>
<tr>
<td>2020F</td>
<td>3.8</td>
</tr>
<tr>
<td>2021F</td>
<td>4.0</td>
</tr>
</tbody>
</table>
60,000 More Housing Starts in 2021

Housing Starts Forecast (Single Family and Multi-Family Units), Millions

- 2019 A: 1.31
- 2020F: 1.31
- 2021F: 1.37
Slower Home Price Growth

Home Price Change (Year-Over-Year)

- 2019 A: 5.0%
- 2020F: 3.6%
- 2021F: 3.5%
But Faster Rent Growth

Apartment Rents

- 2019 A: 3.3
- 2020F: 3.8
- 2021F: 3.6
Commercial Prices to Increase at Moderate Pace

Commercial Price Change (Year-Over-Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>Price Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 A</td>
<td>4.2</td>
</tr>
<tr>
<td>2020F</td>
<td>3.6</td>
</tr>
<tr>
<td>2021F</td>
<td>3.4</td>
</tr>
</tbody>
</table>
Top 10 Outperforming Markets

Metro Areas NAR Expects Home Price Appreciation to Outpace in the Next 3 to 5 Years

Expect No Change in Fed Funds Rate in 2020

Unemployment But Below 4%

NAR identified the top 10 markets taking into account:

- Domestic migration into the area
- Housing affordability for new residents
- Consistent job growth outperforming the national average
- Age structure of the population
- Attractiveness for retirees
- Home price appreciation
TOP 10 OUTPERFORMING MARKETS
METRO AREAS NAR EXPECTS HOME PRICE APPRECIATION TO OUTPACE IN THE NEXT 3 TO 5 YEARS

NAR identified the top metro areas taking into account a myriad of variables, including domestic migration into the area, housing affordability for new residents, consistent job growth outperforming the national average, age structure of the population, attractiveness for retirees, and the area’s home price appreciation.
Top 10 Outperforming Markets

Metro Areas NAR Expects Home Price Appreciation to Outpace in the Next 3 to 5 Years

Expect No Change in Fed Funds Rate in 2020

Unemployment But Below 4%
LUNCH BREAK

55 MINUTES
APARTMENT & COMMERCIAL REAL ESTATE
Apartment and Commercial Real Estate Markets

December 11, 2019
Calvin Schnure
SVP, Research & Economic Analysis
Apartment Markets
Demand for apartments exceeds even the high level of new supply

Source: CoStar, Nareit

Apartment Supply and Demand

Trailing four quarters,
Thousands of units

Completions (sign reversed)
Net Absorption
Excess net absorption

Source: CoStar, Nareit
Housing Starts and Population Trends
There has been a shortfall of construction by as much as 4 million units.
CRE Markets

Demand and supply are in rough balance across most property markets

Net absorption less completions as share of existing stock

Excess Demand

- Apartment
- Office
- Retail
- Industrial

Source: CoStar, Nareit
Rent Growth
Rent growth has slowed, except apartments

![Rent Growth Chart]

Source: CoStar, Nareit
Surprise! Commercial real estate markets got a second wind in 2019

Source: CoStar, Nareit
Contact

If you have any questions, please contact

**Calvin Schnure**
SVP, Research & Economic Analysis
202-739-9434
cschnure@nareit.com

**Nareit**
1875 I Street, NW, Suite 600
Washington, D.C. 20006-5413
reit.com
APARTMENT & COMMERCIAL REAL ESTATE
K.C. Conway currently serves as CCIM’s Chief Economist and as the Director of Research and Corporate Engagement at the Alabama Center for Real Estate housed with the University of Alabama’s Culverhouse College of Commerce.

K.C. is a proud graduate of Emory University. Professionally, he has amassed more than 30 years of experience in commercial real estate as an appraiser, lender, credit officer and economist. He is recognized as a Counselor of Real Estate (CRE) and Member of the Appraisal Institute (MAI). Conway is also a prolific speaker, addressing more than 750 industry, regulatory and academic bodies in the last decade. Throughout his career, Conway has been recognized for accurately forecasting real estate trends and changing market conditions across the United States.

At the Alabama Center for Real Estate, Conway manages the research division’s market trends publications and creates new organic and collaborative research initiatives while also serving as its ambassador to corporate real estate entities. The heart of the center is advancing relationships by providing servant leadership with a passionate, adaptable and humble spirit.

K.C. Conway, MAI, CRE
Dir. of Research – ACRE R.E. Center
CCIM Chief Economist / https://www.ccim.com/resources/commercial-real-estate-insights-series/?gmSsoPc=1
KCConway@Culverhouse.ua.edu / http://www.acre.culverhouse.ua.edu

A.K.A
“The Red-Shoe Economist”
The Best Futurist Ever!

Yogi Berra had a Quote to put Anything in Perspective.
What’s behind this Economy? **Disruptive Technologies**

Source: Future Thinking Canvas Frank Diana
Know What You Don’t Know

It starts with a change in focus from the Glass is half-full or half-empty to Who controls the pitcher (The Pitcher Influences)

Tariffs & Trade War
Congress & USMCA
Energy – Independence, Demand, Prices,
2020 Elections – Senate (GA)
Manufacturing & Freight Recession
C-RE Capital – Debt (The FED) & Equity
“Self-Inflicted” Corp. Missteps (Boeing, Under Armour, etc.
BREXIT 2019 and FLEXIT US 2021

Tariffs & Trade Uncertainty
The FED, Monetary Policy, Inverted Yield Curve
It’s an “ED” thing: “Economic Data Dependent Dysfunction”

Consumer Confidence
NFIB Small Bus. Optimism
REIT Returns – All about Yield
Corporate Earnings - AMEX, WD-40, WalMart, Target, and yes Home Depot if you look beneath the 10(Q) …
Home Depot is investing CapEx in e-Commerce for long term and still finding efficiencies to meet profit expectations.
Forecasting R.E. Cycles w/o Yogi Requires
Weather Forecasting Skills like Interpreting “Economic Clouds”

- Which clouds/economic metrics are the **innocuous cloud** formations?
- Which clouds/measures are the **cumulus types** that foretell the approach of threatening storms.
Innocuous vs. Cumulus Clouds: What Cloud Type/Eco Metrics Determine a Recession?

National Bureau of Eco. Research (NBER) “4 Big Indicators”

- Non-Farm Employment
- Industrial Production
- Real Retail Sales
- Real Personal Income

While simplistic, these are dated with too much emphasis on industrial production and retail sales.

An updated profile of the U.S. economy is needed to reflect the:

1. Importance of small business activity over industrial production (more robotic & less labor intensive than prior recessions)
2. Consumer spending over physical retail sales
3. Intermodal rail traffic
4. Growth in logistics employment as an alternative to the industrial production measure
5. Importance of corporate earnings
6. Loan performance metrics (DQT %)

The Red-Shoe Economist’s “Modern 8” Indicators

1. ADP and LinkedIn Employment Measures (BLS-L=BS)
2. Forward-Looking Employment Metrics: JOLTS (more job openings than U-3) & spread between workforce expansion (new entrants 110k+-) and actual net job growth (150k/mo.)
3. NFIB Small Business Optimism Index: Readings above 100 are predictive of small business growth and hiring.
4. Corporate Earnings: As goes corporate earnings goes, CapEx spending, hiring, and wage growth = 3 quarters > expectations
   “Self Inflicted 20” like Boeing do not make the U.S. economy
5. Rail Traffic / Emphasis on Intermodal Container Activity: As goes rail traffic goes U.S. eco. (Freight Recession 7 mos decline).
6. Consumer Spending/Optimism: Consumers spend less on goods today and more on services.
7. Interest Rates and Lending Activity: Low and accommodative lending tends to increase business investment and consumer $.
8. CMBS Loan Delinquency: Continuing to decline to lower levels post-2009 Financial Crisis (2.51% 3Q19).
Know What You Don’t Know - GDP: Translate GDP LOCAL

- A 2020 or 2021 recession will NOT play out uniformly across all regions of the U.S.
- Know your region’s exposures and risks tied to various industries:
  - ALMA & SC = Autos & Tariffs
  - NC & GA = Banking (STI/BB&T)
  - The Plains = Energy & AG
  - Great Lakes = GM strike
  - West & Mtn Region = Tech, Tourism, Mining & Where’s the STEM – w/o Cannabis issues? Colo unwinding in favor of TX, UT and AZ

NC, FL, and GA are NOT autos and energy and less AG. It’s professional businesses, financial services (SunTrust & BBT merger win for NC and loss for GA), and tech & logistics (What the OTIF). Could Atlanta & Richmond Fed consolidate to MIA or Charlotte NC? AL, SC & TN have risks with both auto and airplane manufacturing.

UT GDP out-pacing all major Western State Economies except TX.

Salt Lake City is the affordable Austin.

+3% to >4% GDP in TX, the Plains & Rocky Mountain West > SE

Why?
✓ Energy,
✓ Tech flow from West Coast
✓ Taxes (SALT) & Affordability
Know What You Don’t Know

Translate Local Data: Job Growth a 5-Yr Look

TABLE 1: TOP STATES FOR EMPLOYMENT GROWTH
Ranked by % Change: 2013 - 2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nevada</td>
<td>1,160,115</td>
<td>1,370,984</td>
<td>210,869</td>
<td>18.2%</td>
</tr>
<tr>
<td>2</td>
<td>Utah</td>
<td>1,254,582</td>
<td>1,478,814</td>
<td>224,232</td>
<td>17.9%</td>
</tr>
<tr>
<td>3</td>
<td>Idaho</td>
<td>630,228</td>
<td>780,815</td>
<td>150,587</td>
<td>23.8%</td>
</tr>
<tr>
<td>4</td>
<td>Florida</td>
<td>7,518,448</td>
<td>8,699,480</td>
<td>1,181,032</td>
<td>15.7%</td>
</tr>
<tr>
<td>5</td>
<td>Colorado</td>
<td>2,335,803</td>
<td>2,673,688</td>
<td>337,885</td>
<td>14.5%</td>
</tr>
<tr>
<td>6</td>
<td>Oregon</td>
<td>1,678,726</td>
<td>1,919,918</td>
<td>241,192</td>
<td>14.4%</td>
</tr>
<tr>
<td>7</td>
<td>Washington</td>
<td>2,960,123</td>
<td>3,374,998</td>
<td>414,875</td>
<td>14.0%</td>
</tr>
<tr>
<td>8</td>
<td>Arizona</td>
<td>2,488,009</td>
<td>2,825,960</td>
<td>337,971</td>
<td>13.6%</td>
</tr>
<tr>
<td>9</td>
<td>South Carolina</td>
<td>1,846,611</td>
<td>2,092,971</td>
<td>246,360</td>
<td>13.3%</td>
</tr>
<tr>
<td>10</td>
<td>Georgia</td>
<td>3,918,085</td>
<td>4,430,043</td>
<td>511,958</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

Utah #2 (+18%)

Florida #4 +15.7%
(Try growing Big at >10%)

South Carolina #9 +13.3%

Georgia #10 +13.1%

Texas #11 +12%

North Carolina & Tennessee #12 tie +11%

Ports / Logisics

West-Coast still double-digits, but knocked off top perch by Utah & FL. (SALT)

Why?
- AFFORDABILITY
- STEM Workforce
- TECH
- Logistics
- Cannabis Revolt
Housing Affordability: Opportunity or Risk (LIHTC assault)?
Affordable, but ... NOT quite a SF-Home; CA at Crisis Point; DC is Innovating

Affordability gone too far, but not far-fetched😊

Parking lots are the new solution to the homelessness crisis in cities — but they're also part of the problem

Los Angeles Curbs Homelessness with Safe, Overnight Parking Lots

Parking lots, subsidies fill breach

The California Assembly has passed a bill that would require every community college in the state to provide a safe parking lot where homeless students can sleep in their cars overnight. Massachusetts, meanwhile, launched a pilot project this year that enables students at four community colleges to live in campus housing at nearby four-year universities.

https://www.usatoday.com/story/money/2019/06/10/homelessness-among-college-students-growing-crisis/3747117002/?utm_source=Alabama+Center+for+Real+Estate&utm_campaign=5bb6c42062-EMAIL_CAMPAIGN_2019_05_31_03_38_COPY_01&utm_medium=email&utm_term=0_4c31a9273e-5bb6c42062-35222455
Housing Affordability showing up in Green Street CPPI

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Index Value</th>
<th>Change in Commercial Property Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Past Month</td>
</tr>
<tr>
<td>All Property</td>
<td>134.8</td>
<td>1%</td>
</tr>
<tr>
<td>Core Sector</td>
<td>134.1</td>
<td>1%</td>
</tr>
<tr>
<td>Apartment</td>
<td>151.3</td>
<td>2%</td>
</tr>
<tr>
<td>Industrial</td>
<td>160.6</td>
<td>2%</td>
</tr>
<tr>
<td>Mall</td>
<td>107.4</td>
<td>0%</td>
</tr>
<tr>
<td>Office</td>
<td>116.8</td>
<td>0%</td>
</tr>
<tr>
<td>Strip Retail</td>
<td>111.5</td>
<td>0%</td>
</tr>
<tr>
<td>Health Care</td>
<td>141.8</td>
<td>0%</td>
</tr>
<tr>
<td>Lodging</td>
<td>109.2</td>
<td>0%</td>
</tr>
<tr>
<td>Manufactured Home Park</td>
<td>230.2</td>
<td>2%</td>
</tr>
<tr>
<td>Net Lease</td>
<td>99.0</td>
<td>0%</td>
</tr>
<tr>
<td>Self-Storage</td>
<td>186.7</td>
<td>0%</td>
</tr>
<tr>
<td>Student Housing</td>
<td>155.3</td>
<td>0%</td>
</tr>
</tbody>
</table>

Manufactured Housing leads all Property Types by a long-shot at +20% YOY (Nov ‘19 Gr-St-Adv CPPI)

https://www.greenstreetadvisors.com/insights/CPPI

Key Attributes of Green Street’s Commercial Property Price Index

- **Institutional Quality**: The index is based on Green Street’s frequently updated estimates of price appreciation of the property portfolios owned by the REITs in its U.S. coverage universe. It is driven by the NAV models maintained by the research team, which, in turn, are driven primarily by changes in market cap rates and NOI growth prospects. Since REITs own high-quality properties, the index measures the value of institutional-quality commercial real estate.

- **Timeliness**: Other indices, based on either closed transactions or formal appraisals, reflect market prices from several months earlier. Also, the Green Street index value for a given month is released within days of month-end, whereas other indices have a sizable lag.
The Big Story 2019 and Beyond will be 
Logistics & Convergence of Retail & Industrial R.E.

1. The E-commerce economy will drive on-line retail sales to 20 percent of total sales by 2022. Using Black Friday 2018 on-line sales of a record $6.2+ billion (up 20% over 2017) as a proxy, the ratio of logistics related leasing will rise from its current level of 20 percent of total industrial leasing to 50-55 percent over the next 5 years. As annual on-line retail activity grows by a mid-teens to twenty percent rate, expands into more merchandise categories - such as grocery, pharmacy, and big-and-bulky

From “Shop & Take Home”
to “Order Online and Deliver to me.”
This white paper is not another examination into the demise of retail, because in the immortal words of Mark Twain, “The reports of [its] death are greatly exaggerated.”

Nor is it another foretelling of how the use of retail stores is morphing from a place to shop to something experiential. Retail has always been experiential.

5 Predictions for the Future of Retail

Prediction #1: As Online Continues to Grow, Retail Reimagines Itself

Prediction #2: More Co-Retailing Pops Up in Hospitality

Prediction #3: E-Commerce Goes the Extra Last-Mile


Prediction #5: Nothing Is Certain Except Death and Property Taxes

And new metrics and data like OTIF and inline store closings/openings
What the OTIF?
OTIF is a new metric in the logistics industry being used by retailers like Walmart and Kraft-Heinz to measure logistics performance. It will play into warehouse and e-commerce fulfillment site selection and serve as the measure of success in the online grocery battle.

OTIF went mainstream as a supply chain metric around August 2017 when Walmart began evaluating suppliers by their score and penalizing those that couldn’t comply by assessing fines up to 3 percent of the value of the shipment. In 2018, Walmart started imposing this 3 percent penalty on the value of shipments if an OTIF measure of 85 percent or greater wasn’t achieved. In 2019, that benchmark increased to 87 percent.

The Red-Shoe Economist forecasts OTIF will be an embedded variable in all warehouse site selection for e-commerce and logistics companies within two years.

And don’t be surprised if you see an OTIF of 90 percent as the standard among large retailers by 2025.
BOB GOLDBERG

CHIEF EXECUTIVE OFFICER
NATIONAL ASSOCIATION OF REALTORS®
Annual Home Sales
(Flat line at 6 million for 4 years)
Monthly Home Sales from 2016
(combined existing and new at annualized rate)

In thousand units
Rising Home Price means Rising Real Estate Wealth

(Total Asset – Outstanding Mortgage)
MARKET OUTLOOK: DIFFERENCE & COMMONALITY
Housing and Economic Outlook 2020

Presented by Danielle Hale, Chief Economist
Home sellers will remain on the sideline, but millennials are on the move.

- **Mortgage Rates by End of Year**: 3.88%
- **Average Median Home Price**: 0.8%
- **Existing Home Sales**: 1.8%
- **Homeownership Rate**: 64.6%
- **Single Family Housing Starts**: 6.0%

Source: realtor.com 2020 Economic Forecast
INVENTORY OUTLOOK

SUPPLY

Inventory shortages prevail

Gen X & boomers hold onto their homes

DEMAND

Affordability is a key factor

50% of all home purchase mortgages by millennials

Source: realtor.com 2020 Economic Forecast
IMPLICATIONS FOR
BUYERS & SELLERS

For Buyers?
A mixed bag

MORE OPPORTUNITIES
New construction grows, home prices flatten.
Interest rates remain attractive.

BUYERS LOOK FOR THE RIGHT MARKETS
Will flock to markets with low barriers to entry.

MARCO POLO?
Qualifying for a home could be easier,
but finding one could be harder.

For Sellers?
Revised expectations

THE PRICE NEEDS TO BE RIGHT
Sellers will need more patience, and a
thoughtful approach to pricing.

AFFORDABLE HOMES WILL MOVE
Upper-tier housing will soften,
incentives more frequent.

HALFTIME ADJUSTMENTS?
Savvy sellers who adjust to local market
conditions will benefit
from steady demand.
MILLENNIAL MYTHBUSTERS

MYTH VS REALITY

All Millennials want tiny hip apartments near avocado toast central

Millennials want 1800 sqft single family homes in the suburbs just as much

If it’s not walkable, Millennials won’t look at it

Millennials are driving their kids to school, daycares and good elementaries

Millennials are drowned in student debt and can’t afford housing

Their down payments are larger than ever, and for some, their savings are peaking

Millennials can’t compete against other generations

They will take more mortgages than Boomers and GenXers combined in Spring 2020

Millennials want a recession to hit hard so that home prices come down to earth

They feel the same way about the next recession as other generations; welcome a correction but root for the economy

Source: realtor.com 2020 Economic Forecast
Thank you

Economic Research
realtor.com®

@RDC_Economics

Access market data, research, and presentations at Realtor.com/research

Subscribe to our mailing list to receive monthly updates and notifications on the latest data and research.

Email Address
Subscribe
MARKET OUTLOOK: DIFFERENCE & COMMONALITY
Five Drivers of Change

1) Consumer Health Strong
2) Business Sentiment Weak
3) Trade Uncertainty Bites
4) Global GDP Slowdown
5) Fed Rates on Hold
Job Growth Driven by Top MSAs

Source: Federal Deposit Insurance Corporation
Large Mortgages and Booming Metro Areas

Source: S&P Global
Housing Prices Outpacing Wage Growth

Source: U.S. Census Bureau, U.S. Bureau of Labor Statistics
Banking Industry Very Healthy

1) Strong Growth in Loans In All Major Categories
2) 99.8% Banks are Well Capitalized
3) Asset Quality is Very Good
4) Fewest Problem Banks (55) Since 2007
5) Industry Consolidation Continues
Economic and Mortgage Market Outlook

Prepared for Real Estate Forecast Summit 2019

Presented by:

Mike Fratantoni
Mortgage Bankers Association
Forecast of Originations Volume: Refi Wave is Here

Mortgage Originations History and Forecast

Source: MBA Forecast
## MBA Forecast: Slowing Growth, Job Market Weakening

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP Growth</strong></td>
<td>2.5%</td>
<td>2.1%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Inflation</strong></td>
<td>2.4%</td>
<td>1.8%</td>
<td>1.9%</td>
<td>1.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td><strong>Unemployment</strong></td>
<td>3.9%</td>
<td>3.7%</td>
<td>4.1%</td>
<td>4.2%</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Fed Funds</strong></td>
<td>2.375%</td>
<td>1.625%</td>
<td>1.625%</td>
<td>1.875%</td>
<td>2.125%</td>
</tr>
<tr>
<td><strong>10-year Treasury</strong></td>
<td>3.0%</td>
<td>1.8%</td>
<td>1.9%</td>
<td>2.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td><strong>30-year Mortgage</strong></td>
<td>4.8%</td>
<td>3.6%</td>
<td>3.7%</td>
<td>3.8%</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>New home sales (000s)</strong></td>
<td>617</td>
<td>675</td>
<td>704</td>
<td>743</td>
<td>766</td>
</tr>
<tr>
<td><strong>Existing home sales (000s)</strong></td>
<td>5,341</td>
<td>5,415</td>
<td>5,556</td>
<td>5,699</td>
<td>5,913</td>
</tr>
<tr>
<td><strong>Purchase originations ($B)</strong></td>
<td>1,209</td>
<td>1,270</td>
<td>1,290</td>
<td>1,325</td>
<td>1,370</td>
</tr>
<tr>
<td><strong>Refi originations ($B)</strong></td>
<td>467</td>
<td>793</td>
<td>599</td>
<td>432</td>
<td>429</td>
</tr>
<tr>
<td><strong>Total originations ($B)</strong></td>
<td>1,677</td>
<td>2,063</td>
<td>1,889</td>
<td>1,757</td>
<td>1,799</td>
</tr>
</tbody>
</table>

Source: MBA Forecast
Interest Rate Volatility Is High

Treasury Volatility Index and 10 Year Rate

Source: CBOE, Treasury
Younger Households Increase Homeownership

Homeownership Rate by Age

Source: Census
First Time Home Buyers Borrowing More

Chart of the Week: December 6, 2019
Average Loan Size to First-Time Homebuyers by State ($)

Source: Fannie Mae, Freddie Mac
Contact Information and MBA Resources

Mike Fratantoni, Ph.D
Chief Economist & Senior Vice President | Research and Industry Technology
(202) 557-2935
mfratantoni@mba.org

MBA Research:  
www.mba.org/research

RIHA:  
www.housingamerica.org
Banking Industry Very Healthy

1) Strong Growth in Loans In All Major Categories
2) 99.8% Banks are Well Capitalized
3) Asset Quality is Very Good
4) Fewest Problem Banks (55) Since 2007
5) Industry Consolidation Continues

MARKET OUTLOOK:
DIFFERENCE & COMMONALITY
Headwinds for Housing Supply

NAR Real Estate Forecast Summit
December 11, 2019

Danushka Nanayakkara,
NAHB AVP, Forecasting and Analysis
Housing Affordability – NAHB/Wells Fargo HOI

Source: NAHB/Wells Fargo Housing Opportunity Index.
The number of open construction positions = 338,000 in September 2019

Source: U.S. Bureau of Labor Statistics (BLS)
Median Lot Value and Size

Lot size declining --- lot value increasing

Source: 2018 Survey of Construction (SOC) and NAHB Economics Estimates.
Regulatory Costs Rising – Up 29% Over Last 5 Years

Total effect of building codes, land use, environmental and other rules

Regulatory Costs as a Share of Home Price

- Lower Quartile: 14.0%*
  - During Construction: 4.0%
  - During Development: 7.9%

- Average: 24.3%
  - During Construction: 9.7%
  - During Development: 14.6%

- Upper Quartile: 30.3%
  - During Construction: 12.7%
  - During Development: 18.8%

* For quartiles, construction and development costs do not sum to the total.
Source: NAHB/Wells Fargo HMI survey, assumptions described in the Appendix.
Limited growth as economy slows

**Source:** U.S. Census Bureau (BOC) and NAHB forecast
Thank you

Questions?

dnanayakkara@nahb.org
THANK YOU!

@NARdot:Realtor  @NAR_Research
#NARForecastSummit