Rising Population Entering Housing Demand Years: 2017

Millions

- **Avg=4.3**
- **Headship rates increase from 15% to 45%**
- **Silent Generation: Born 1928-1945**
- **Greatest Generation: Born Before 1928**
- **Gen Z: Born After 1997**
- **Millennials: Born 1981-1997**
- **Gen X: Born 1965-1980**
- **Baby Boomers: Born 1946-1964**

NAHB - National Association of Home Builders
Share of Young Adults Living with Parents

Almost doubled

Housing Affordability – NAHB/Wells Fargo HOI

Source: NAHB/Wells Fargo Housing Opportunity Index.
Supply-Side Factors
Labor
Elevated count of unfilled construction jobs

Building Materials – Lumber Prices

Since January 2017, lumber prices decreased 5%; 63% at peak

$ per thousand board feet

Source: NAHB Analysis; Random Lengths Composite Index.
Lots

Housing Starts (Area) and Low/Very Low Lot Supply (bars)

Source: Census Bureau and NAHB/Wells Fargo HMI survey.
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.
### Government Regulations as a Share of Multifamily Development Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Lower Quartile</th>
<th>Average</th>
<th>Upper Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost increases from changes to building codes over the past 10 years</td>
<td>32.1%</td>
<td>7.1%</td>
<td>42.6%*</td>
</tr>
<tr>
<td>Development requirements that go beyond the ordinary</td>
<td>7.0%</td>
<td>5.9%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Fees charged when building construction is authorized</td>
<td>5.9%</td>
<td>5.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Fees charged when building construction is authorized</td>
<td>4.0%</td>
<td>5.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Cost of applying for zoning approval</td>
<td>3.9%</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Other (non-refundable) fees charged when site work begins</td>
<td>4.2%</td>
<td>2.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Cost of complying with OSHA requirements</td>
<td>2.3%</td>
<td>7.3%</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>4.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * For quartiles, all types of costs do not sum to the total.
Source: NAHB/Wells Fargo HMI survey.
Construction Outlook
Single-Family Starts

Slowing growth ahead

Thousands of units, SAAR

Source: U.S. Census Bureau (BOC) and NAHB Forecast.
Typical New Home Size

Decline after market shift

Square Feet

Source: U.S. Census Bureau (BOC).
Townhouse Market Expanding

Source: U.S. Census Bureau (BOC).
Multifamily Housing Starts
Leveling off

Thousands of units, SAAR

Avg=344,000

Trough to Current:
4th Q 09 = 82,000
3rd Q 18 = 347,000 +324%

76% fall

2018Q3: 105% of “Normal”
2020Q4: 109% of “Normal”

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

Questions?
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eyeonhousing.org
housingeconomics.com
Household Formation

Demand for home ownership strengthening

Y/Y Change in Household Count, Thousands, NSA

Owner-Occupied

Renter-Occupied

Source: U.S. Census Bureau (BOC): Housing Vacancies & Homeownership.
Interest Rates – Increases Ahead

Source: U.S. Board of Governors of the Federal Reserve System (FRB) and NAHB forecast.