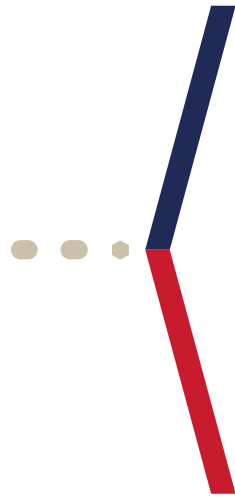


Economic and Housing Outlook After Tax Reform

HBA of the Sioux Empire
May 17, 2018

Robert Dietz, Ph.D.
NAHB Chief Economist





Home Building Economic Impact

What is the Economic Impact of Home Building

NAHB impact developed in 1996

More than 800 studies, including for universities and affordable housing groups

2002: adapted for Low-Income Housing Tax Credit rental developments

2005: adapted for remodeling analysis

What is the Economic Impact of Home Building?

Study of Sioux Falls, SD

- Lincoln County
- McCook County
- Minnehaha County
- Turner County

100 single-family homes and 100 multifamily homes

Local Economic Impact of Single-family Home Building

1st - Construction phase

- Jobs, Materials, Fees, Taxes

2nd - Ripple effect from construction phase

- Wages spent in local economy

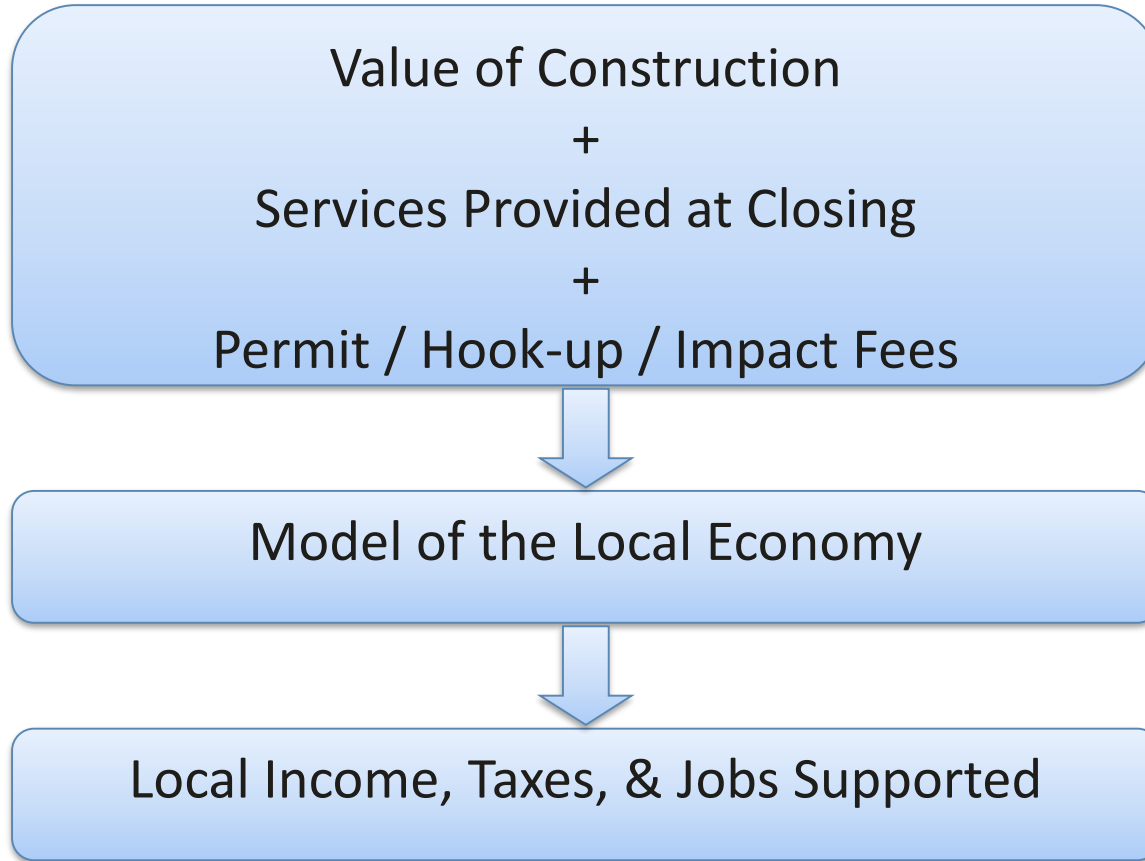
3rd - Occupancy phase

- Earnings spent in the local economy

Assumptions of the Model

<u>Inputs To Model</u>	<u>Single-family</u>
Average house price:	\$266,900
Average raw lot cost:	\$15,511
Permit/impact fees:	\$7,061
Annual property taxes:	\$3,765

Phase I -- CONSTRUCTION



FIRST YEAR IMPACT: Single-family Construction – 100 Homes

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$14,560,000	\$4,929,700	\$9,630,200	\$1,128,900	203

INCLUDING:

 \$706,100 permit and impact fees

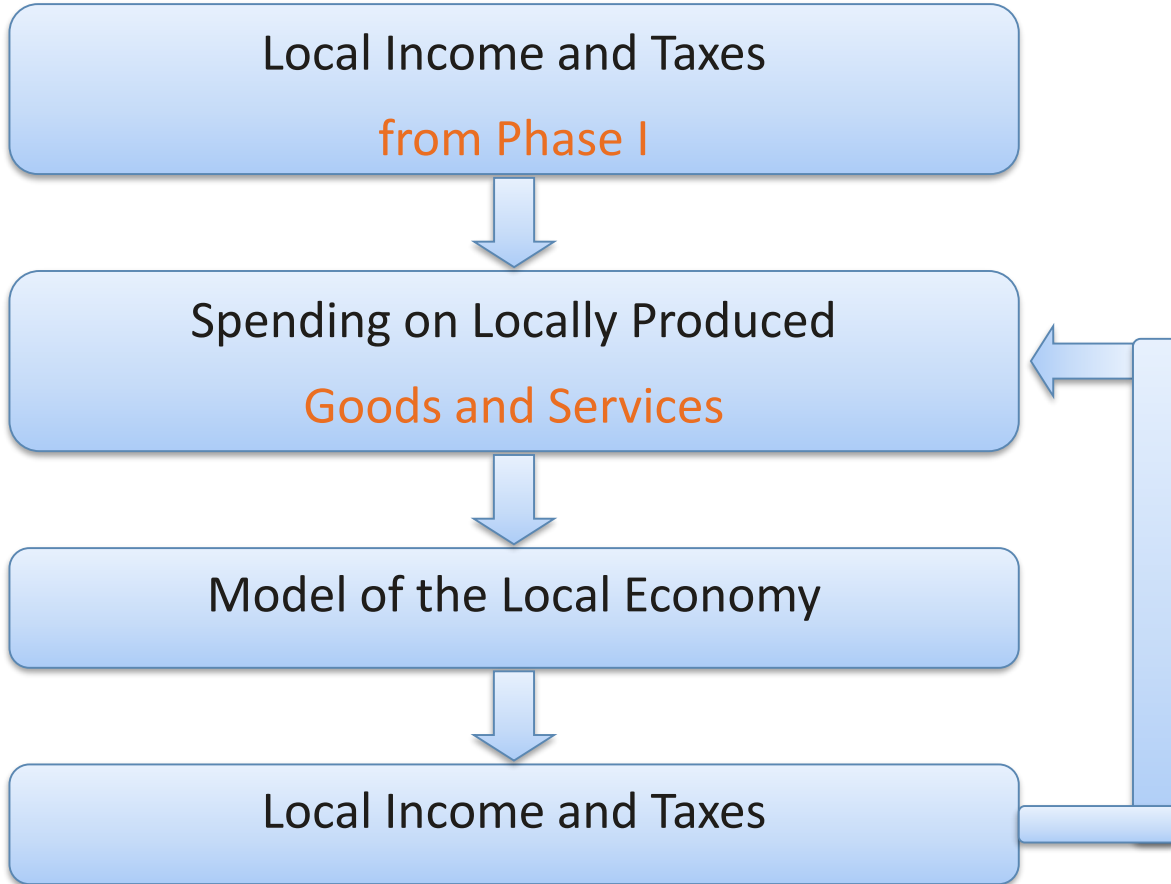
151 jobs in Construction

28 jobs in Wholesale and Retail Trade

12 jobs in Business and Professional Services

* One job represents enough work to keep one worker employed full-time for a year.

Phase II -- RIPPLE



FIRST YEAR IMPACT: Single-Family Ripple

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$6,826,000	\$1,539,400	\$5,286,000	\$716,400	131

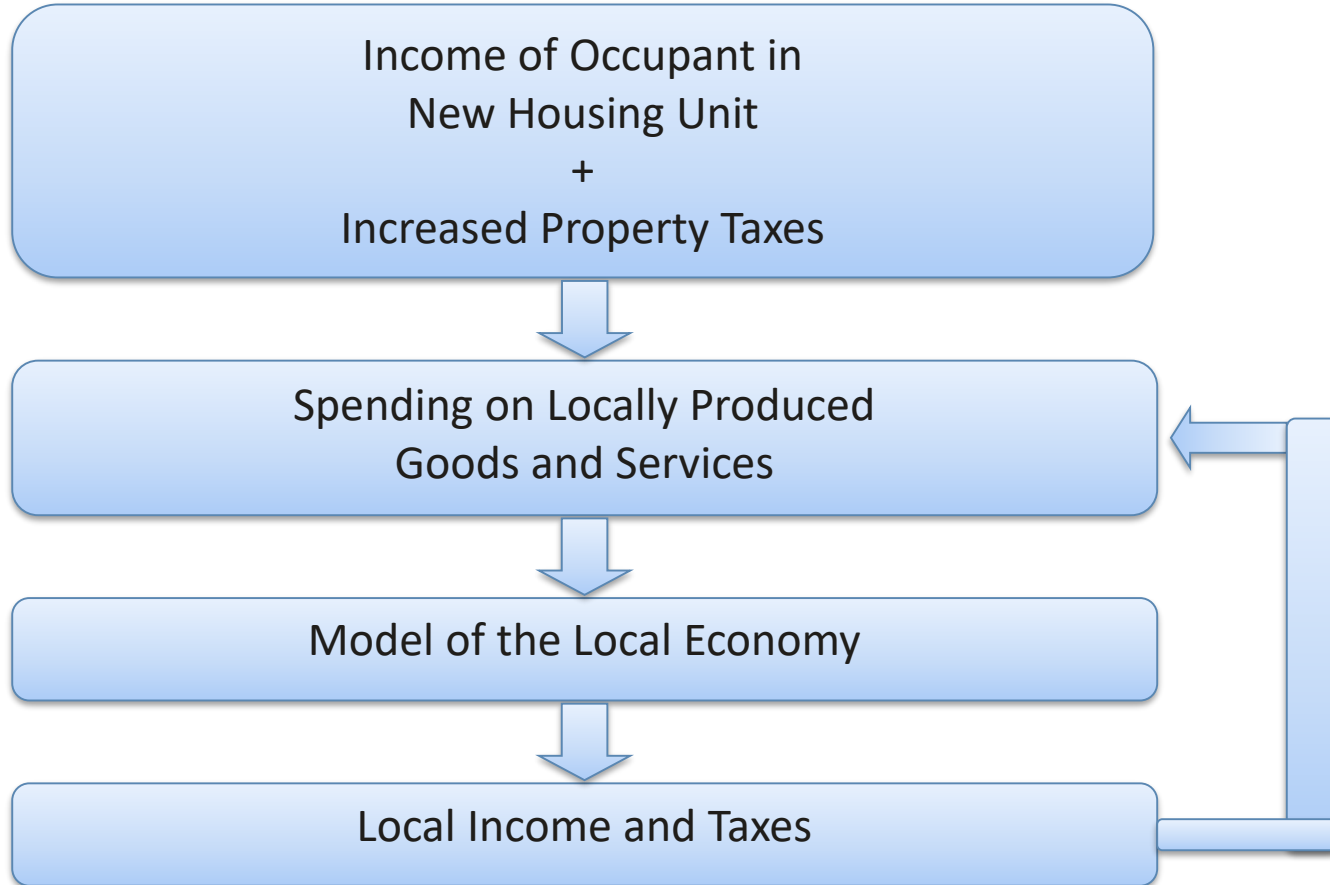
INCLUDING:

30 jobs in Wholesale and Retail Trade

18 jobs in Health, Education and Social Services

18 jobs in Eating and Drinking Places

Phase III -- OCCUPANCY



ONGOING Single-Family -- ANNUAL EFFECT

Local Income	Local Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$3,851,700	\$877,000	\$2,974,400	\$838,700	75

INCLUDING:

\$354,600 property tax

18 jobs in Wholesale and Retail Trade

12 jobs in Eating and Drinking Places

10 jobs in Health, Education and Social Services

New Homes Require

Fire and police protection

Garbage collection

Parks and recreational opportunities

Roads

Correctional facilities

Primary and secondary education

Etc.

Data: Local and Federal Government

Required Current Expenses

Total Annual Local Government Expenses per Housing Unit

	Single-Family
Education	\$1,735
Police Protection	\$400
Fire Protection	\$234
Corrections	\$135
Streets and Highways	\$206
Water Supply	\$121
Sewerage	\$48
Health Services	\$110
Recreation and Culture	\$359
Other General Government	\$478
Electric Utilities	\$55
Gas Utilities	\$5
Public Transit	\$18
Other Government Enterprises	\$16
Total	\$3,921

Required Capital per Unit

Local Government Capital per Housing Unit

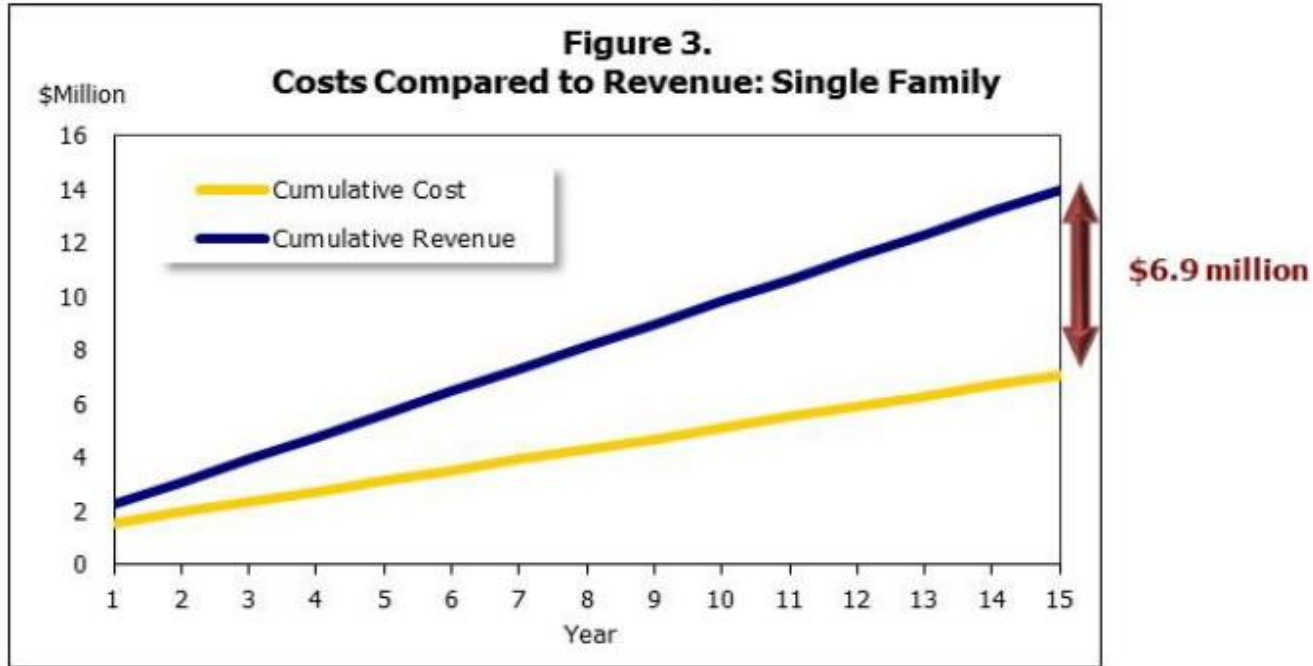
	Single-Family
Schools	\$7,307
Hospitals	\$51
Other Buildings	\$1,354
Highways and streets	\$2,557
Conservation & development	\$4
Sewer systems	\$1,256
Water supply	\$222
Other structures	\$208
Equipment	\$248
Total	\$13,208

Net Economic Impact Estimates

100 Single-Family Homes (333 Phase I and II jobs, 75 Phase III jobs)

\$14.0 million in revenue; \$7.1 million in costs

\$6.9 million in net revenue

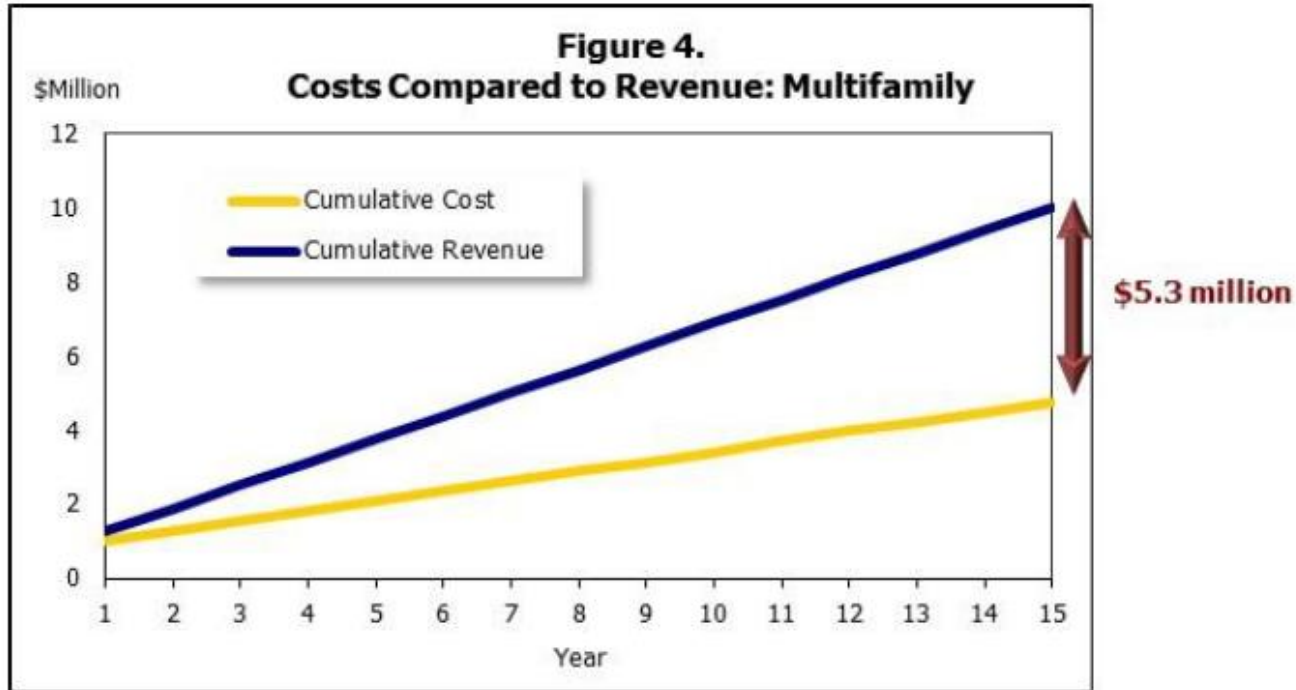


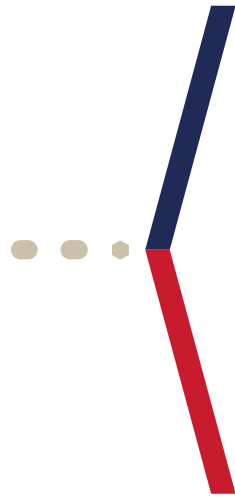
Net Economic Impact Estimates

100 Multifamily Homes (228 Phase I and II jobs, 69 Phase III jobs)

\$10.0 million in revenue; \$4.7 million in costs

\$5.3 million in net revenue

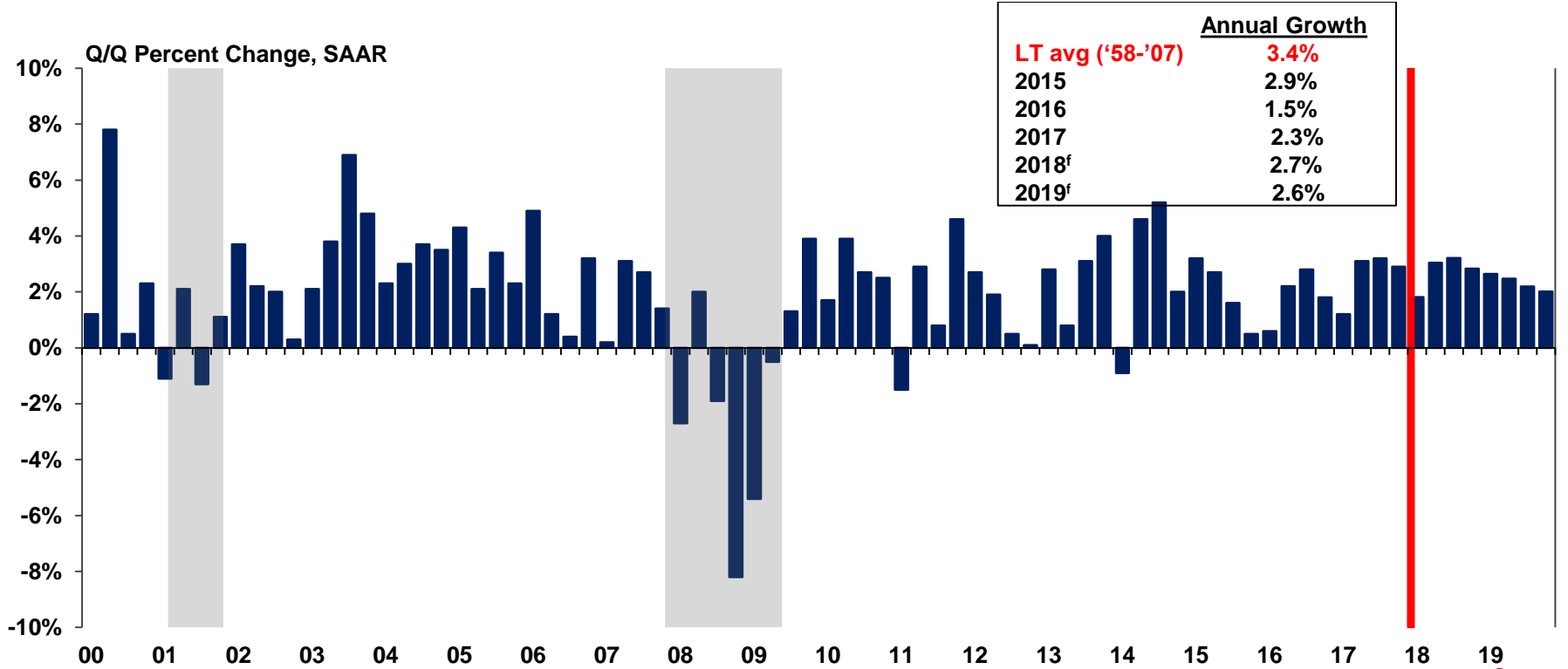




Macro View

GDP Growth

Stronger growth expected post-tax reform

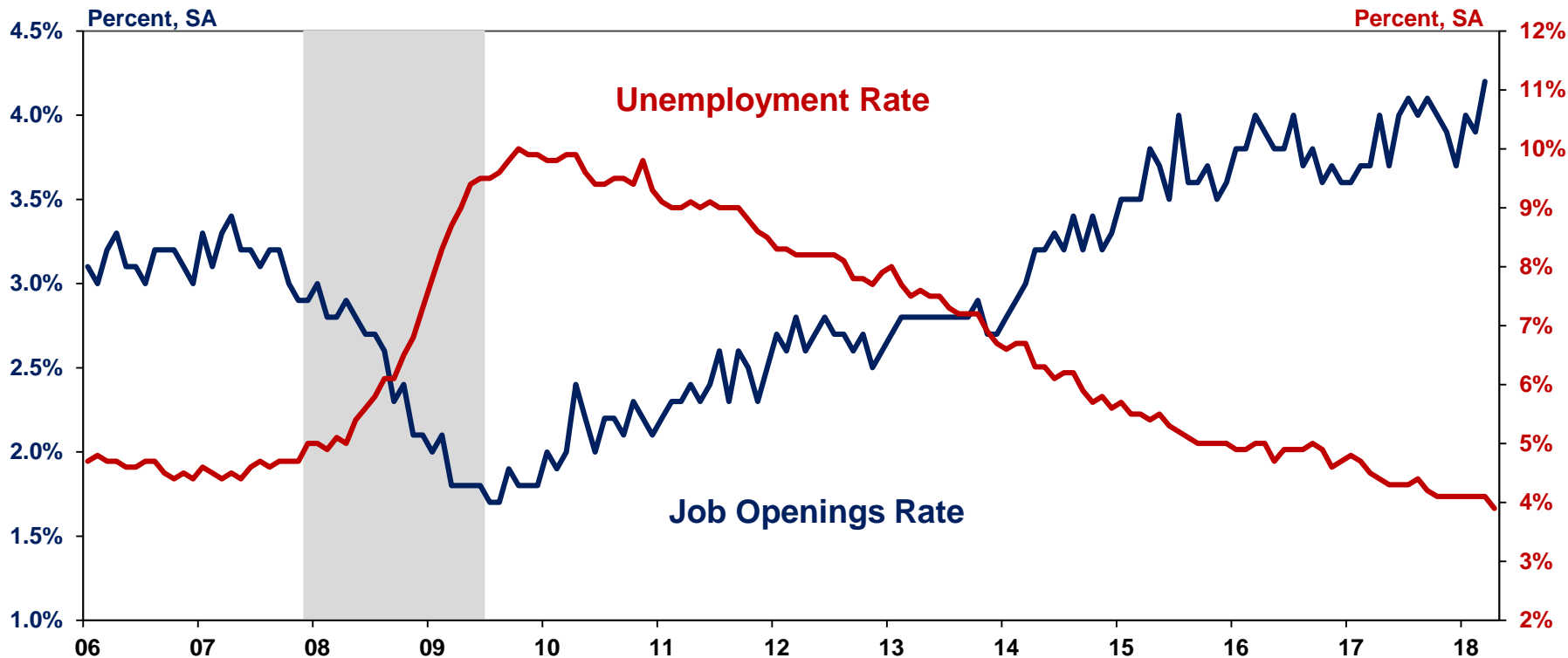


Source: U.S. Bureau of Economic Analysis (BEA).



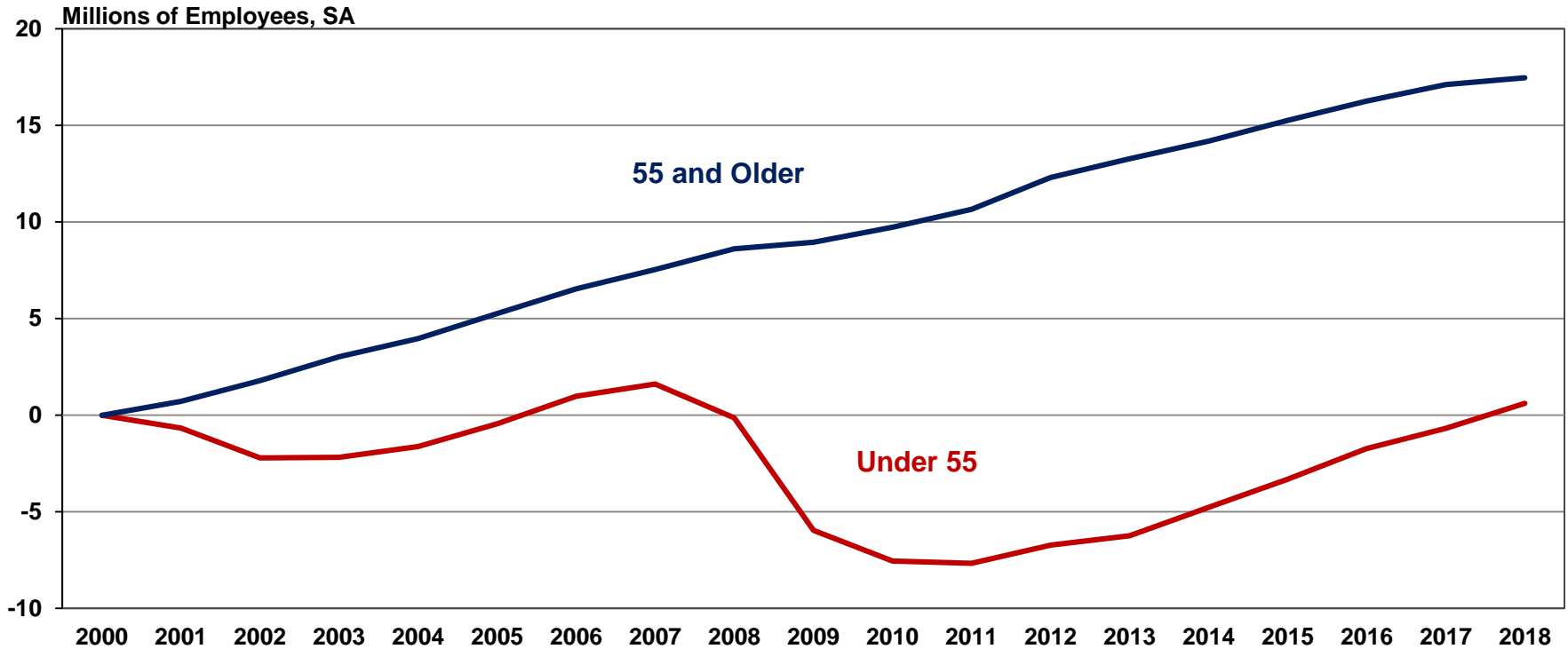
Tight Labor Market

How low can unemployment go?



Source: U.S. Bureau of Labor Statistics (BLS).

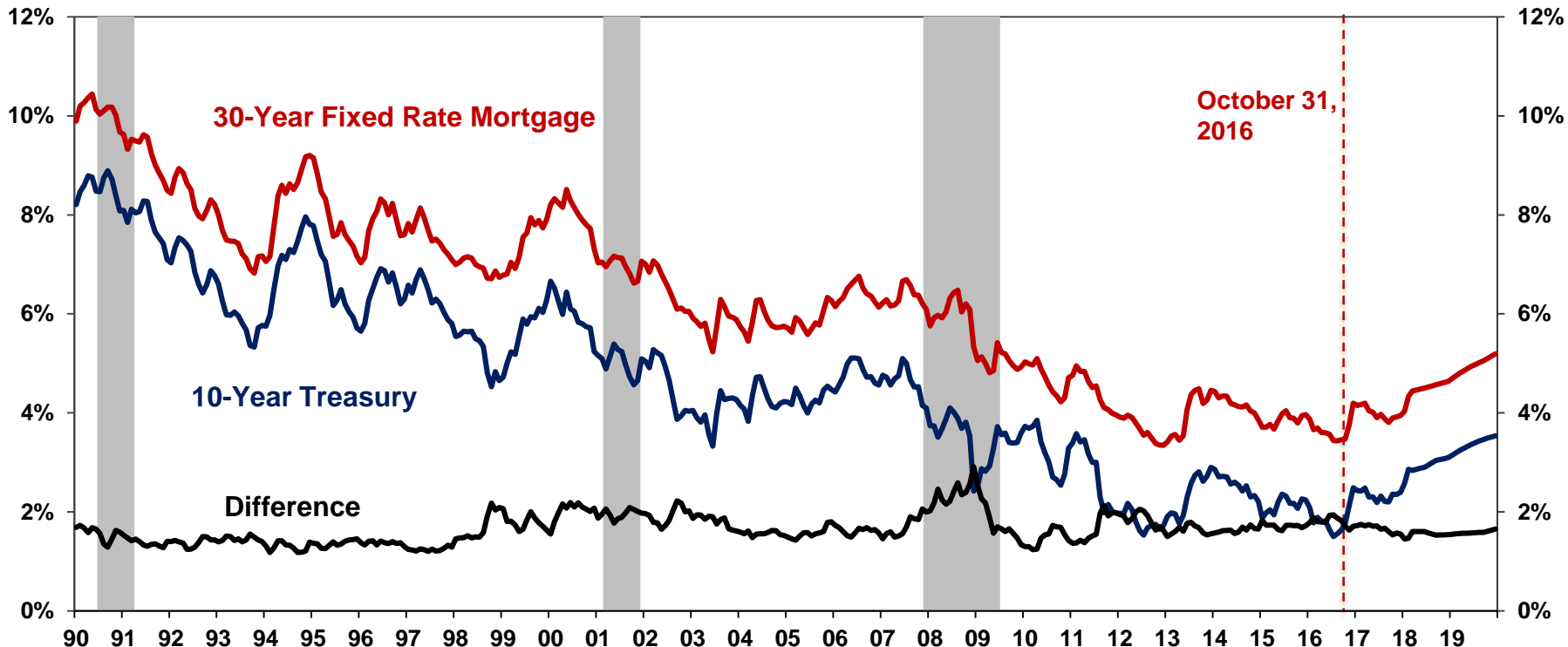
Cumulative Change in Employment by Age Group



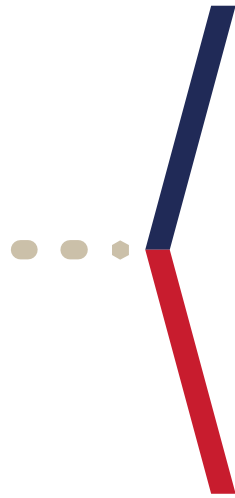
Source: Bureau of Labor Statistics.

30-Year Fixed Rate and 10-Year Treasury

Rates will rise due to Fed policy and tight labor markets

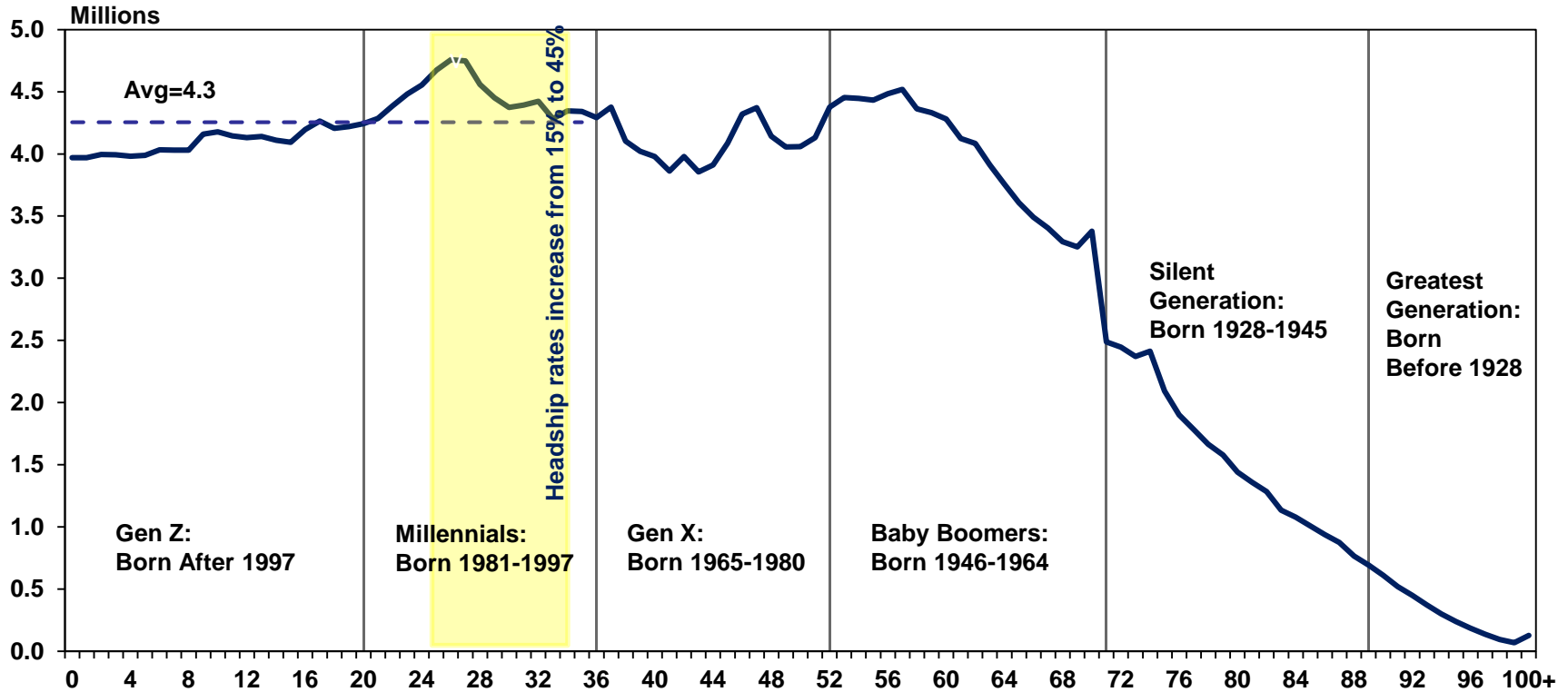


Source: NAHB forecast and Federal Reserve and Freddie Mac data.



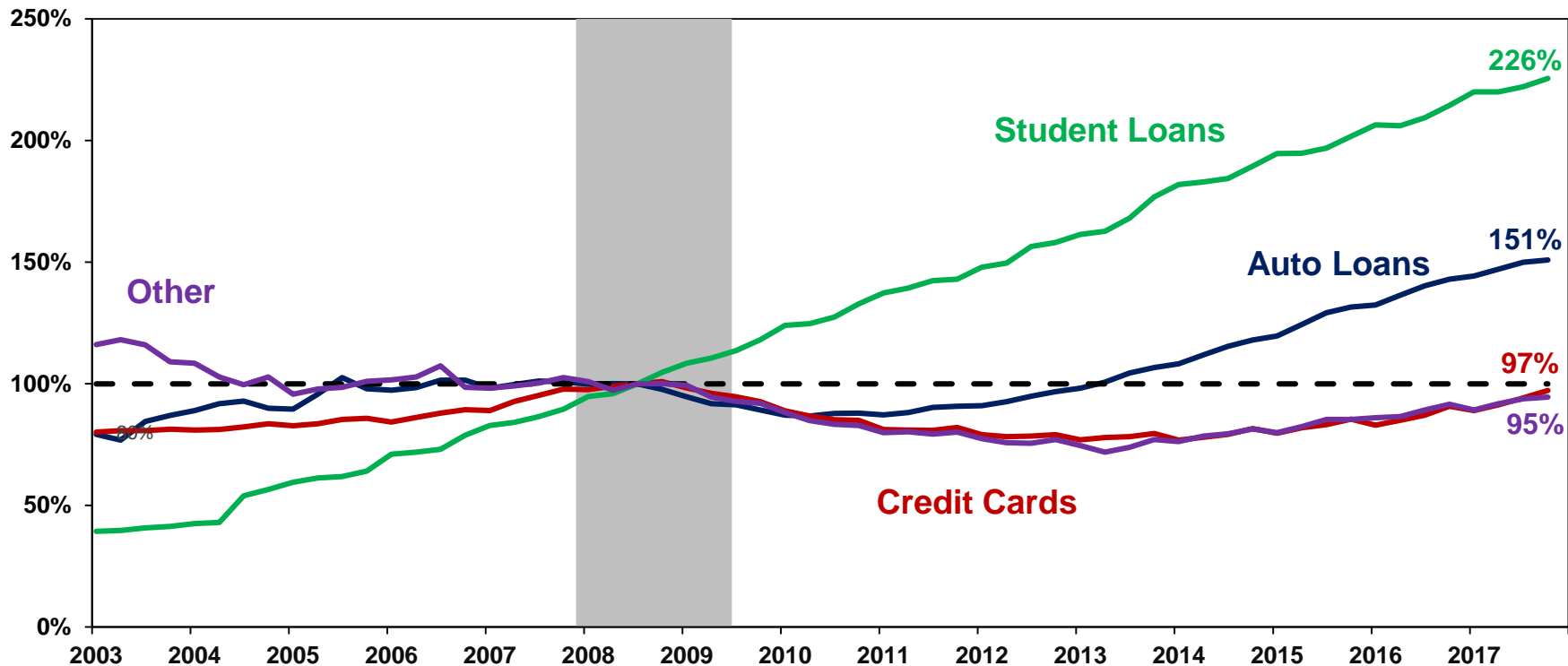
Housing Demand

Rising Population Entering Housing Demand Years: 2017



Consumer Debt

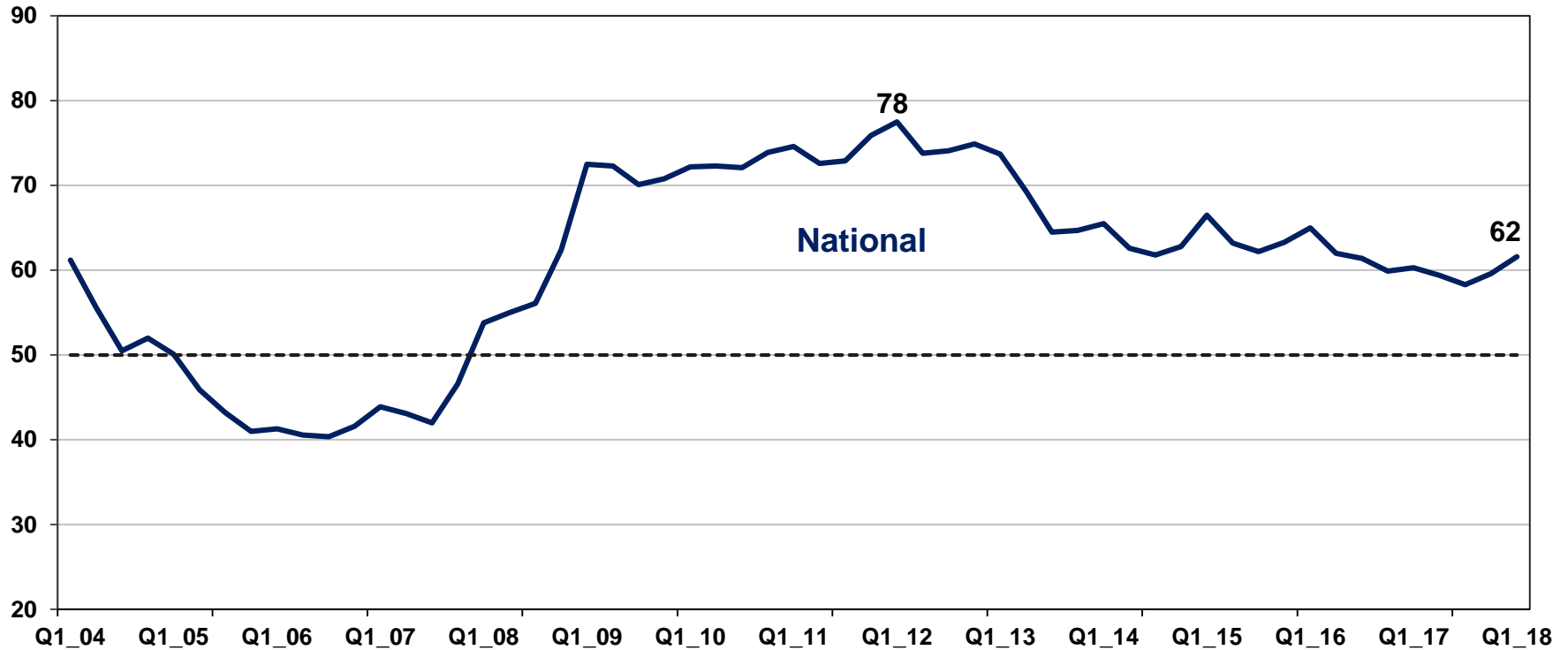
Rise in student and auto loans



Source: Federal Reserve Bank of New York.

Housing Affordability

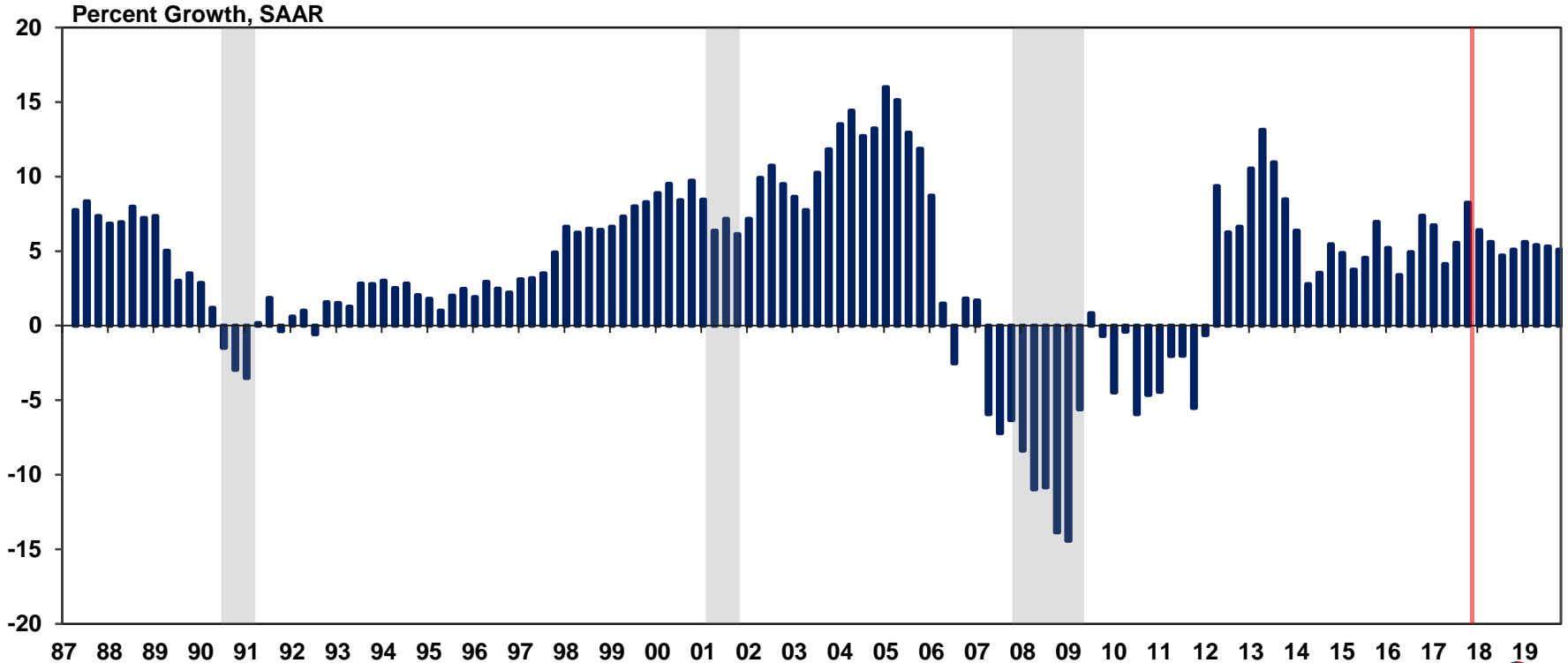
Affordability declining



Source: NAHB/Wells Fargo Housing Opportunity Index.

S&P/Case-Shiller National US Home Price Index

Prices growing faster than income



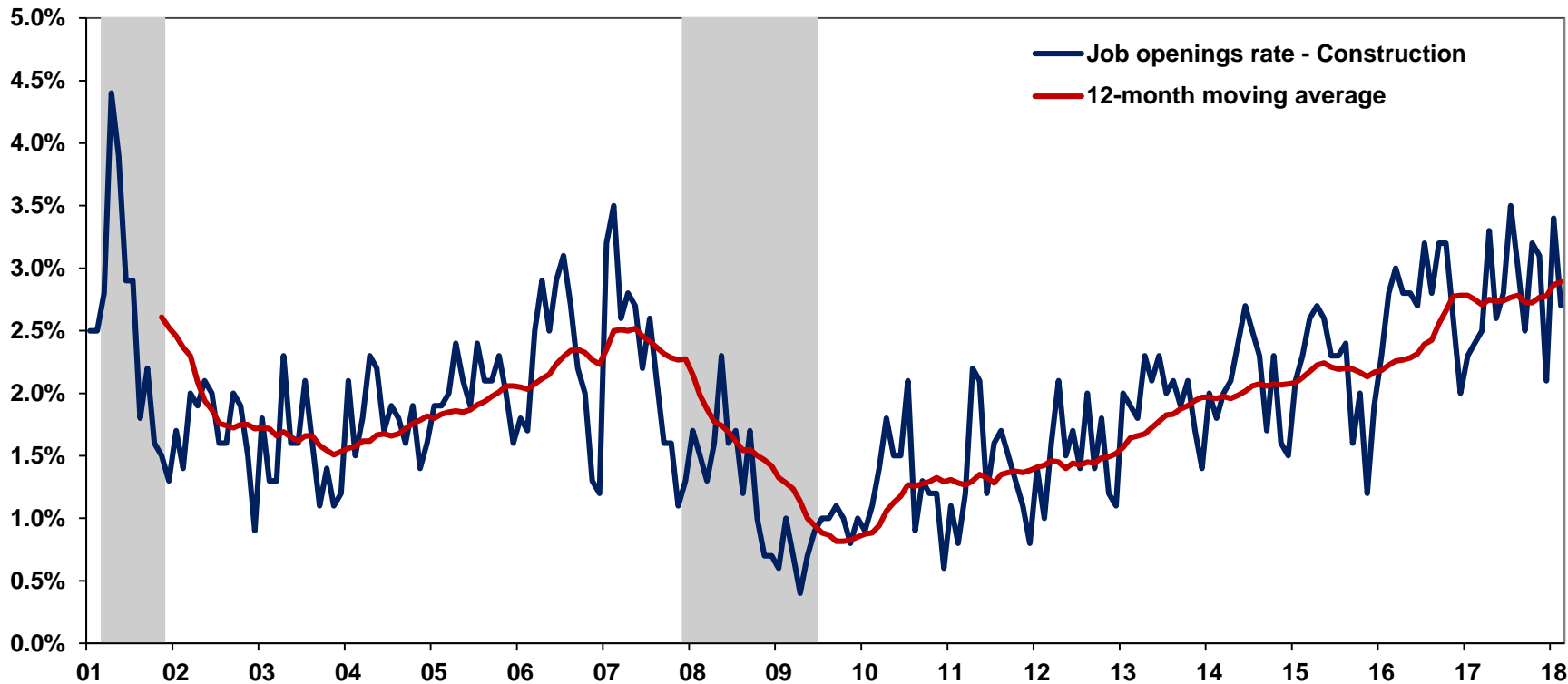
Source: NAHB forecast and S&P Dow Jones Indices LLC; CoreLogic, Inc..



Supply-Side Headwinds

Labor

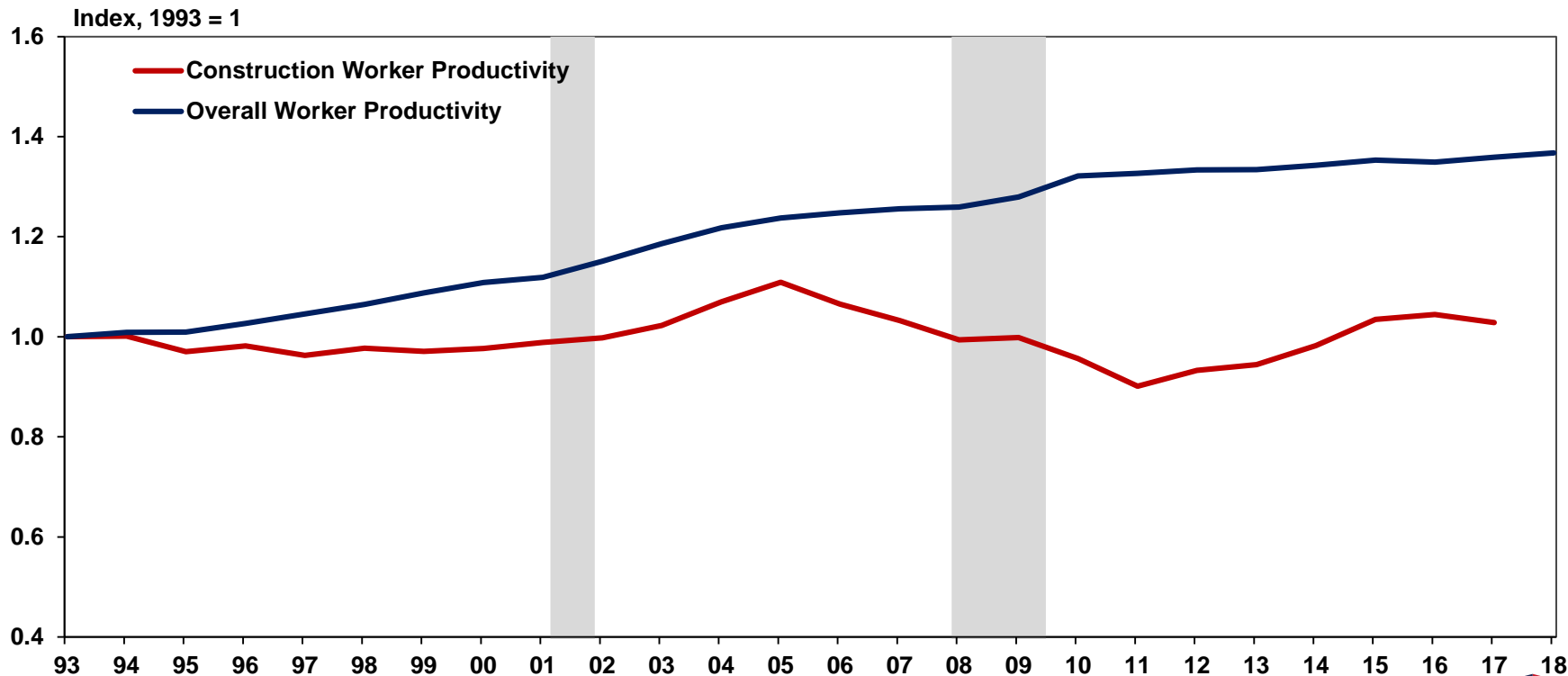
Elevated count of unfilled construction jobs



Source: U.S. Bureau of Labor Statistics (BLS).

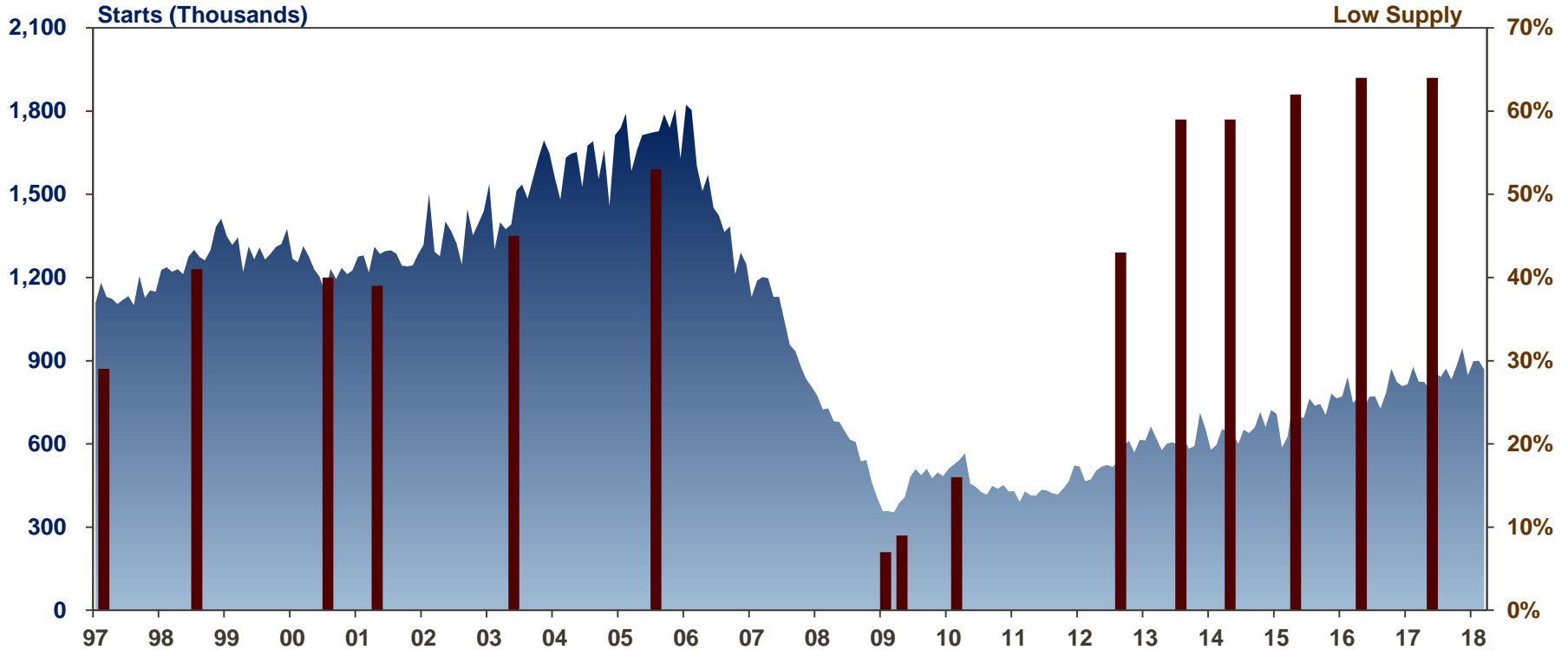
Construction Sector Productivity

Lagging overall economy



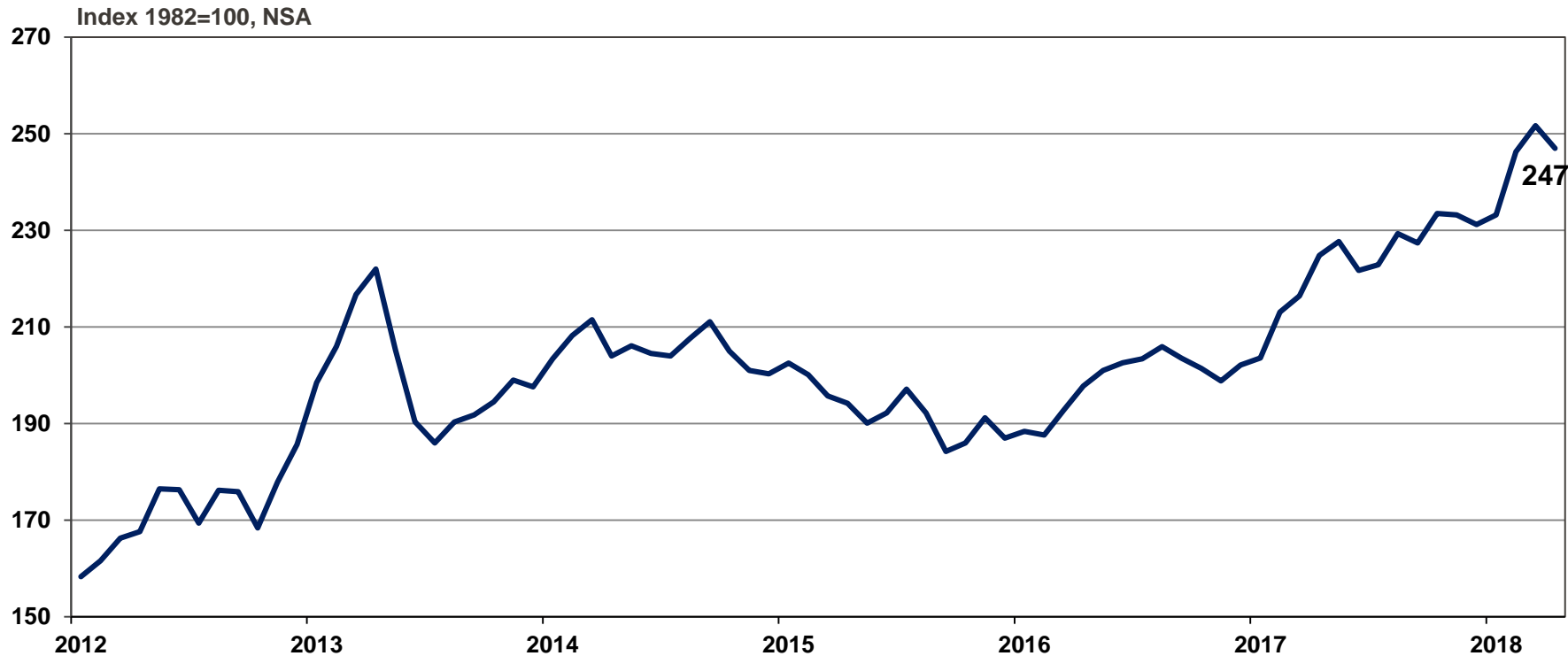
Lots

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



Building Materials – Softwood Lumber

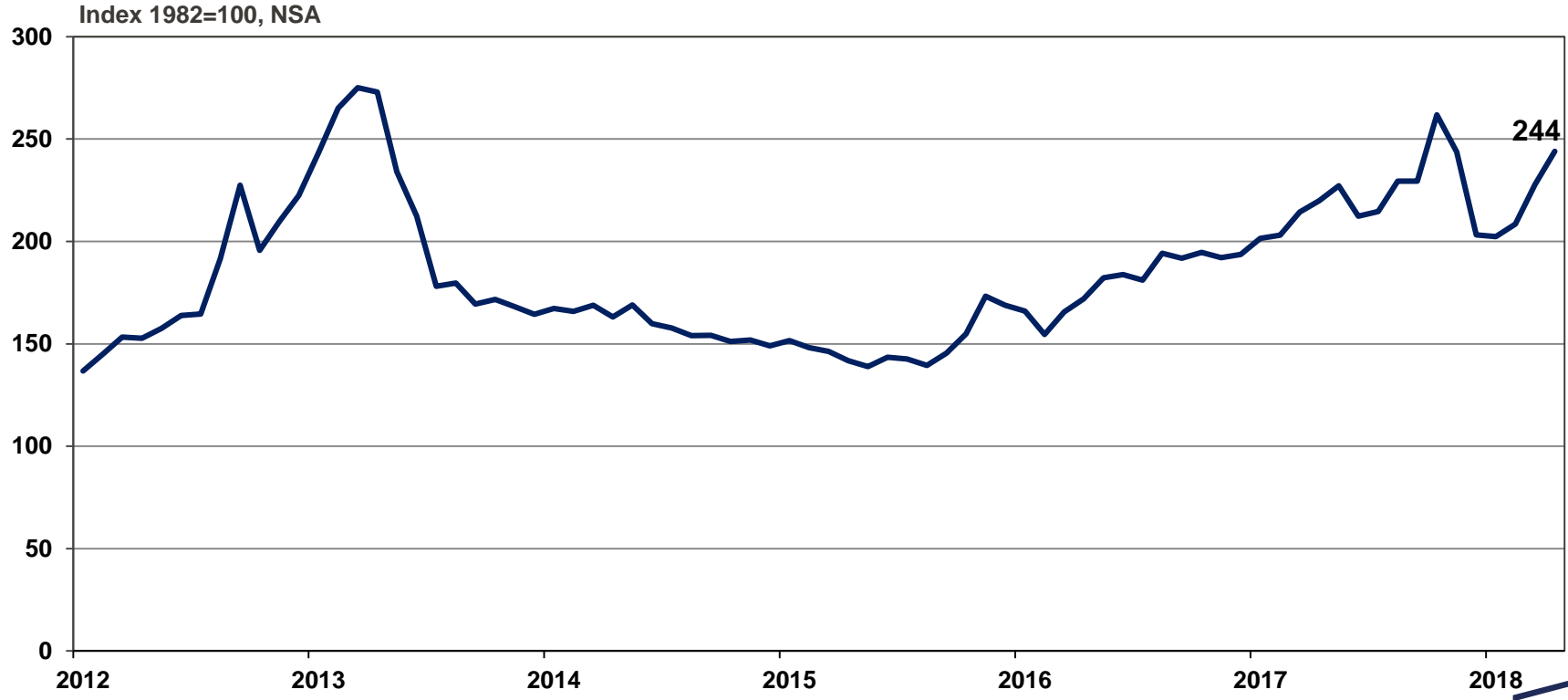
Since January 2017, Random Lengths Framing Composite Price Index up 47%



Source: U.S. Bureau of Labor Statistics (BLS).

Building Materials – OSB

Since January 2017, OSB increased 21.1%

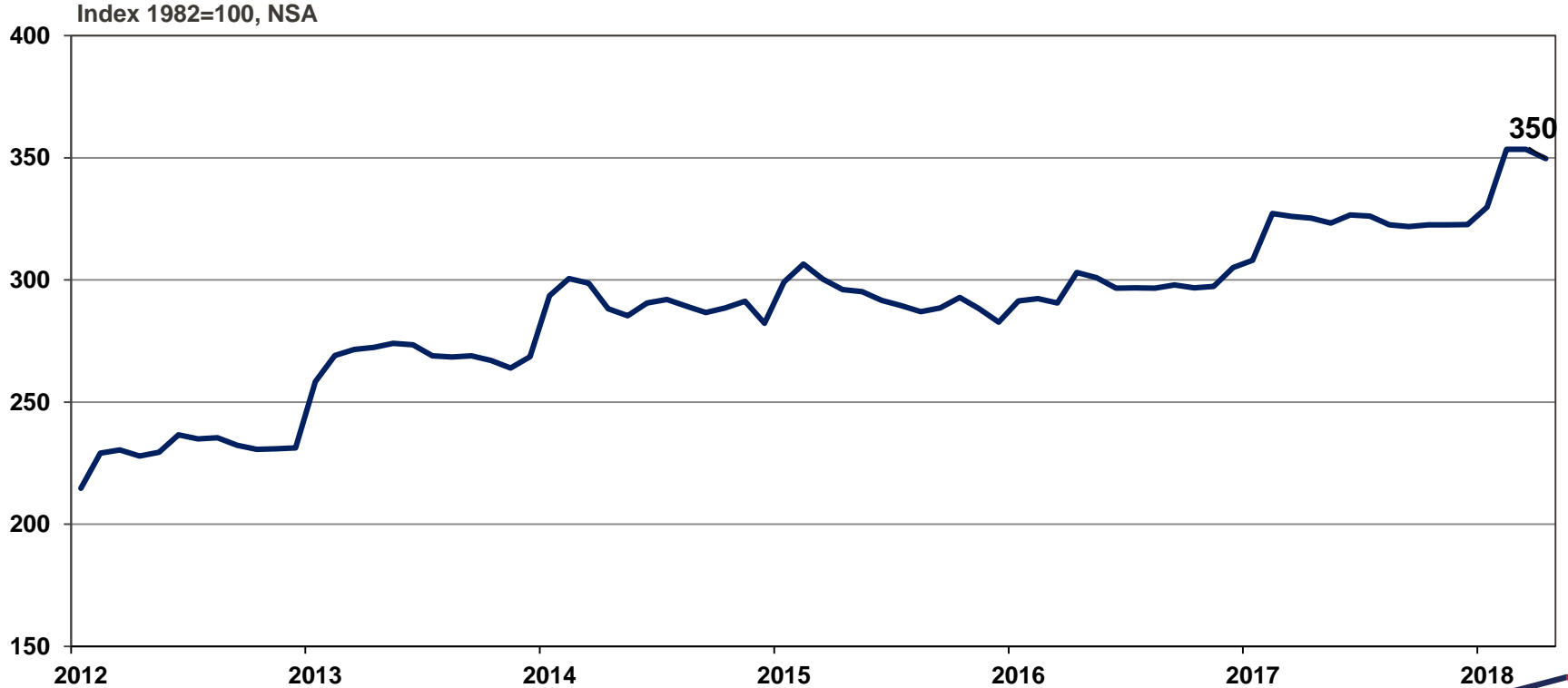


Source: U.S. Bureau of Labor Statistics (BLS).



Building Materials – Gypsum

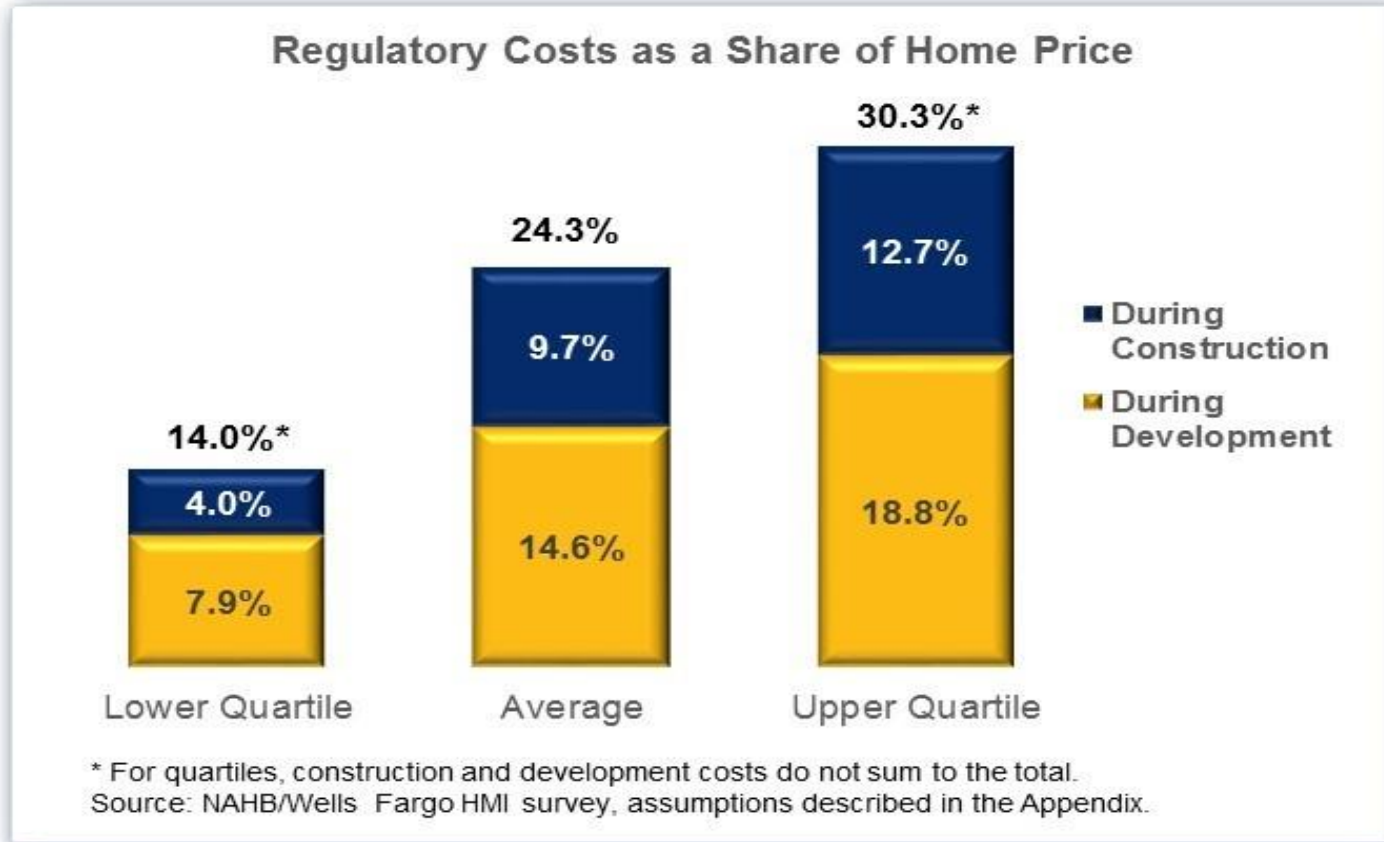
Since January 2017, gypsum products increased 13.5%



Source: U.S. Bureau of Labor Statistics (BLS).

Regulatory Costs Rising – Up 29% Over Last 5 Years

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



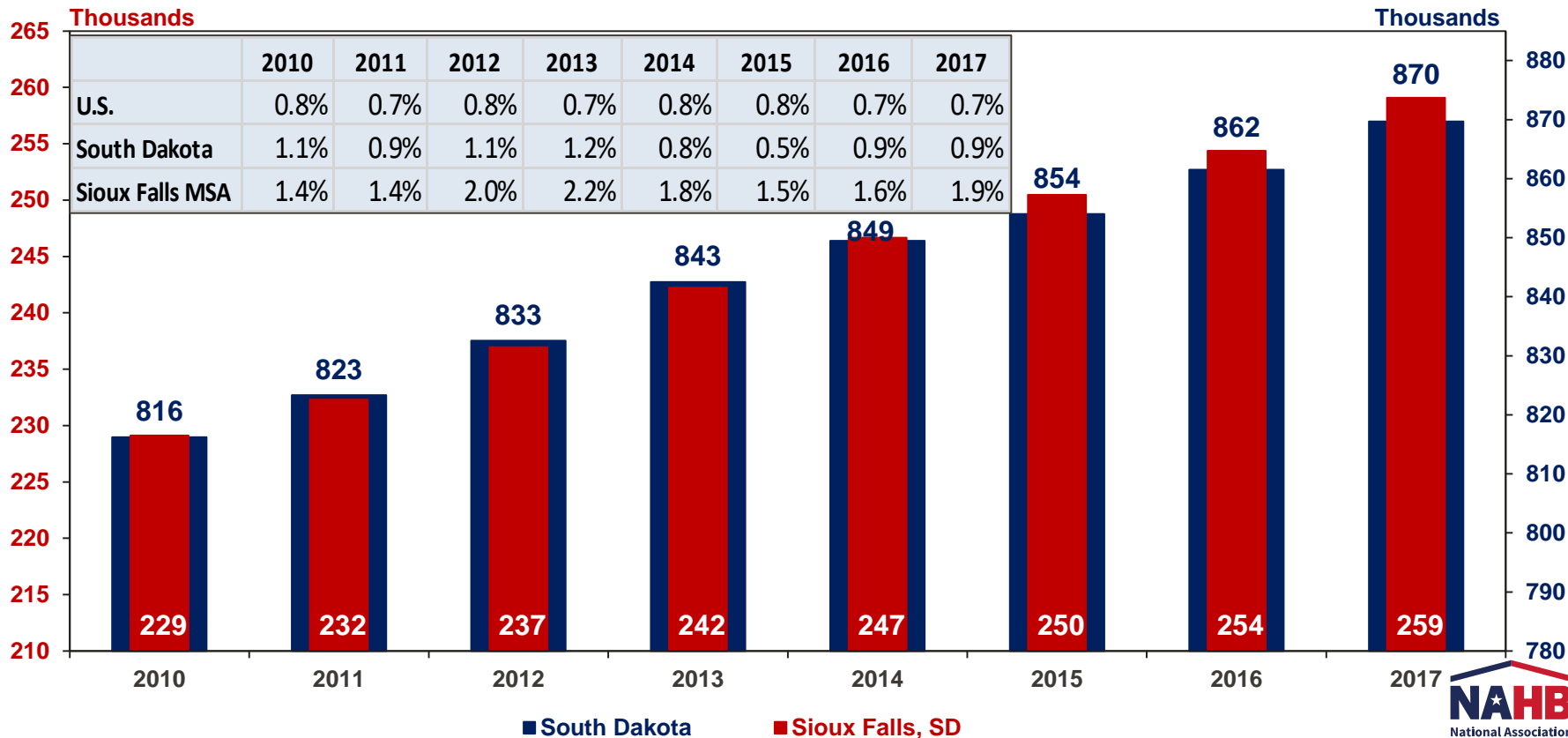


A Local Look



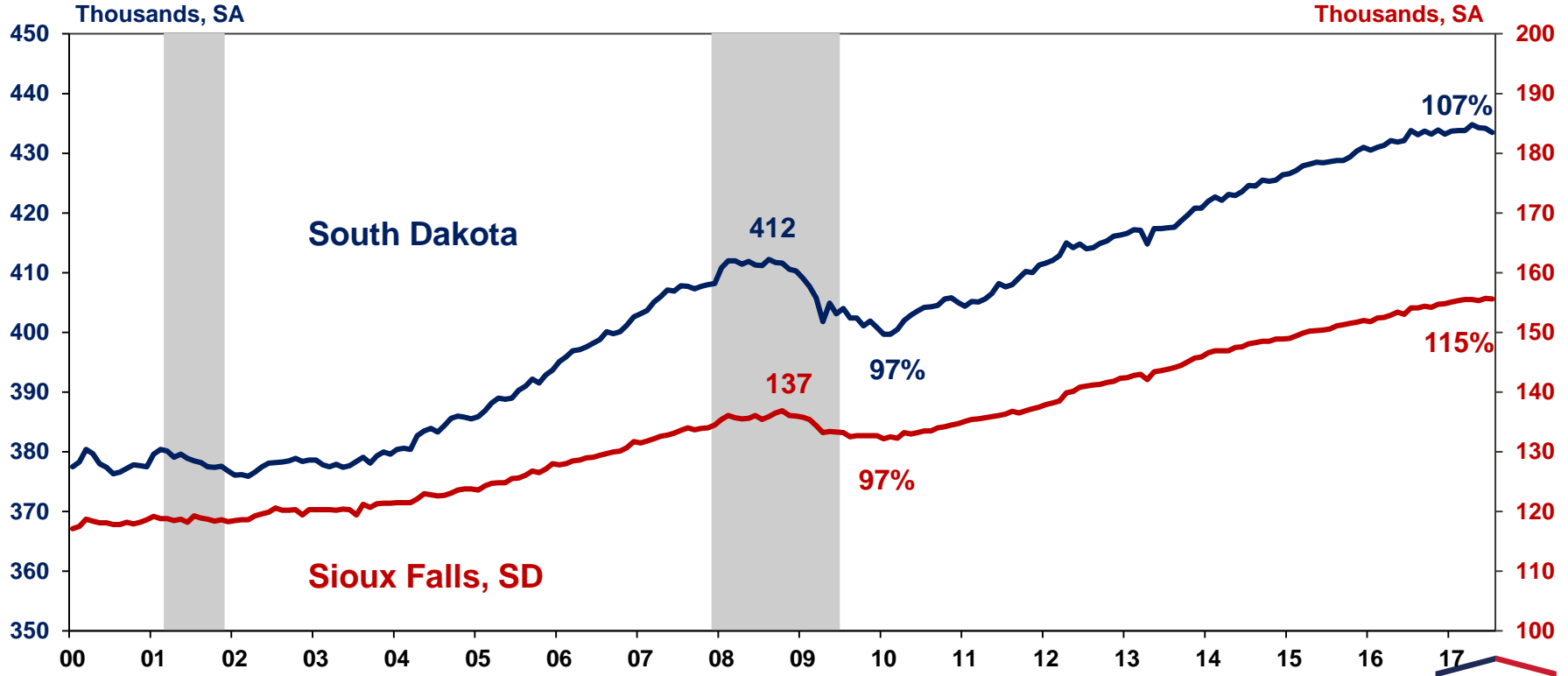
Population Growth

Sioux Falls MSA population grew faster than statewide rates



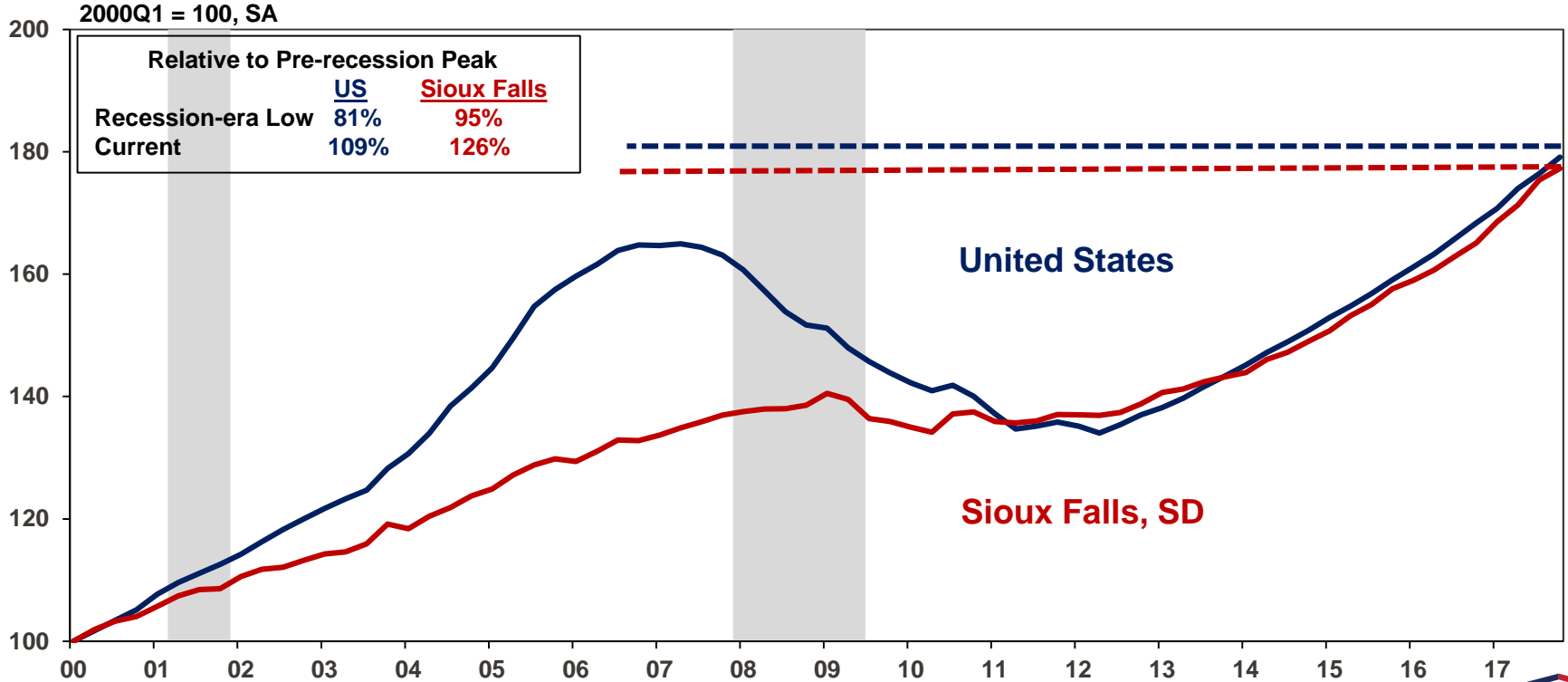
Payroll Employment

Sioux Falls MSA above pre-recession peak



Existing House Price Index

Sioux Falls MSA above pre-recession peak



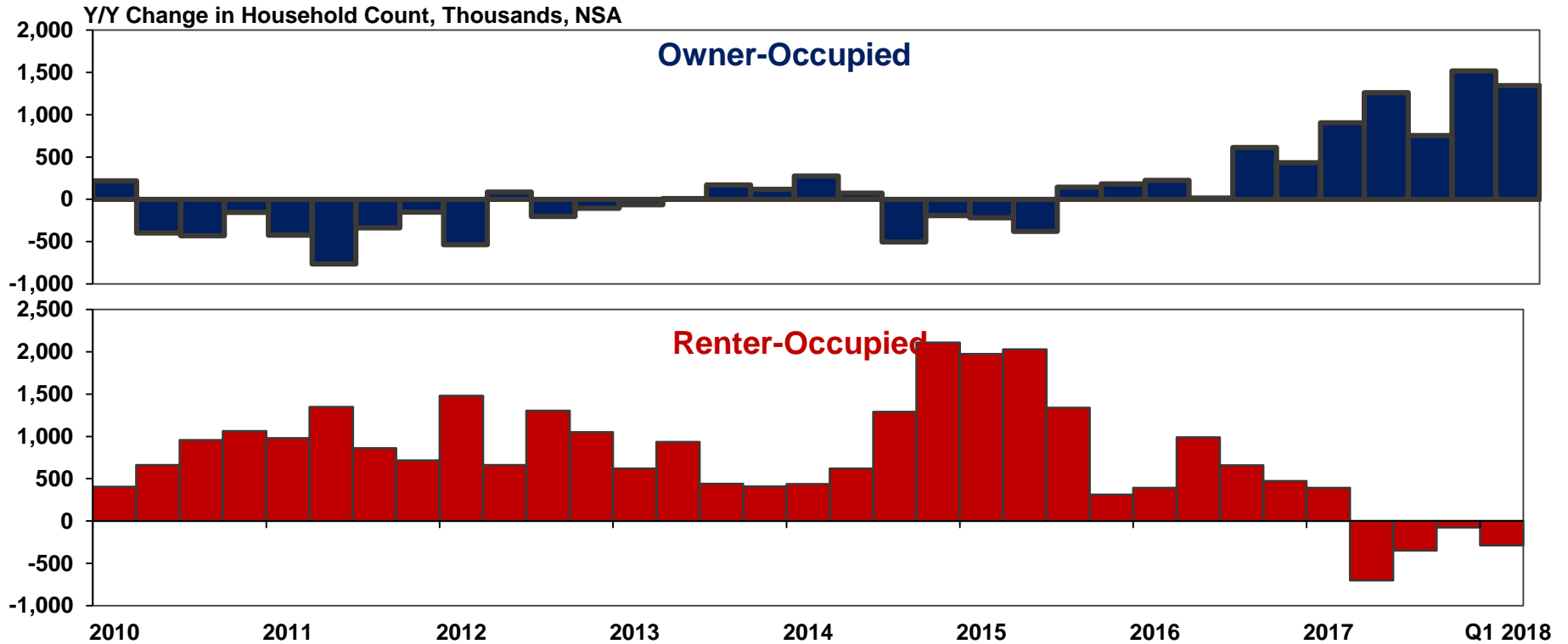


Forecasts



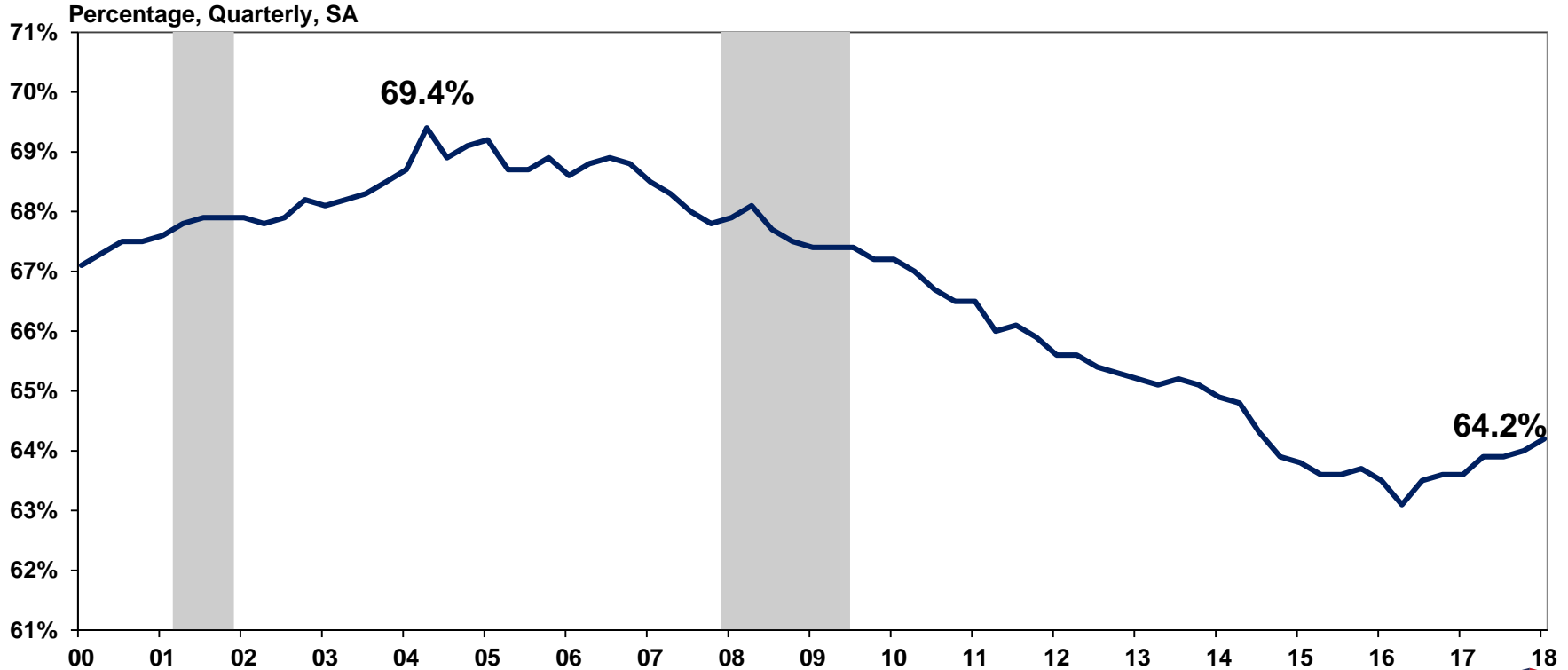
Household Formation

Demand for home ownership strengthening



Source: U.S. Census Bureau (BOC): Housing Vacancies & Homeownership.

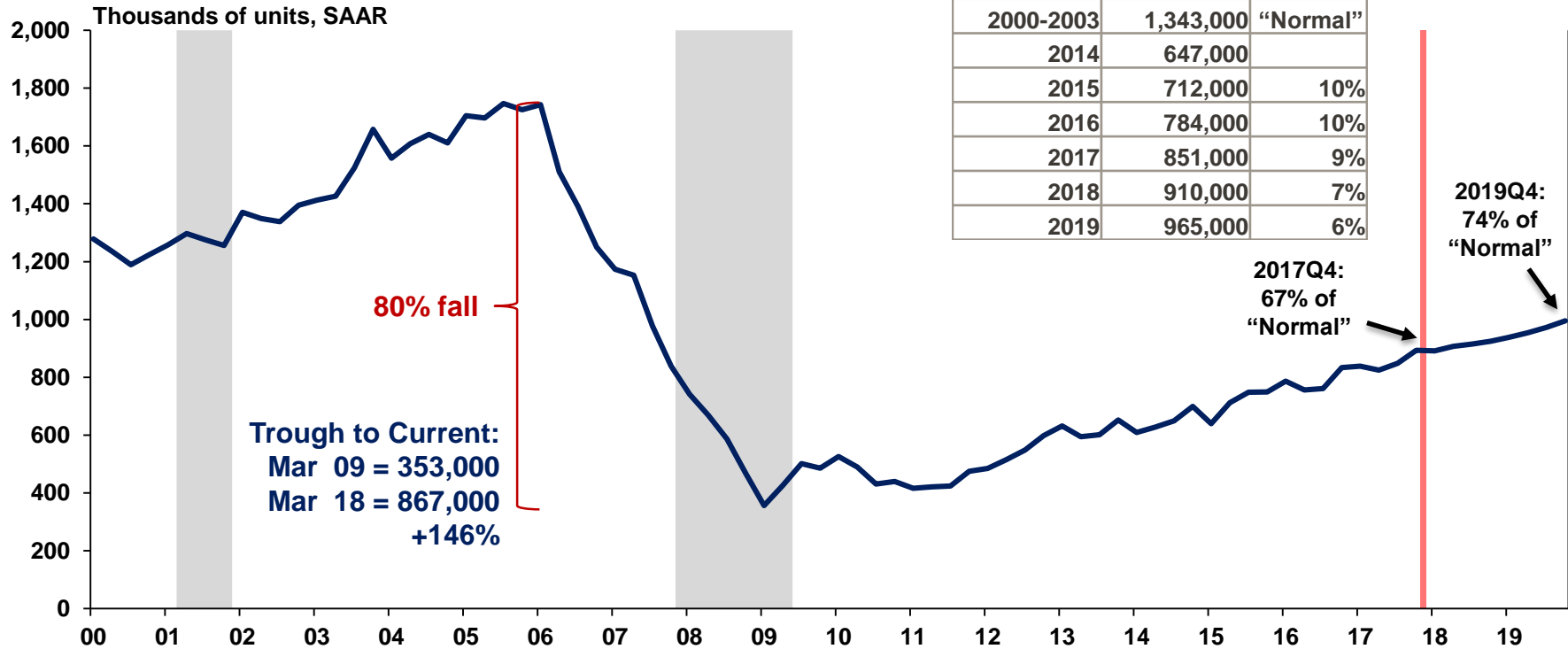
Homeownership Rate



Source: U.S. Census Bureau (BOC): Housing Vacancies & Homeownership.

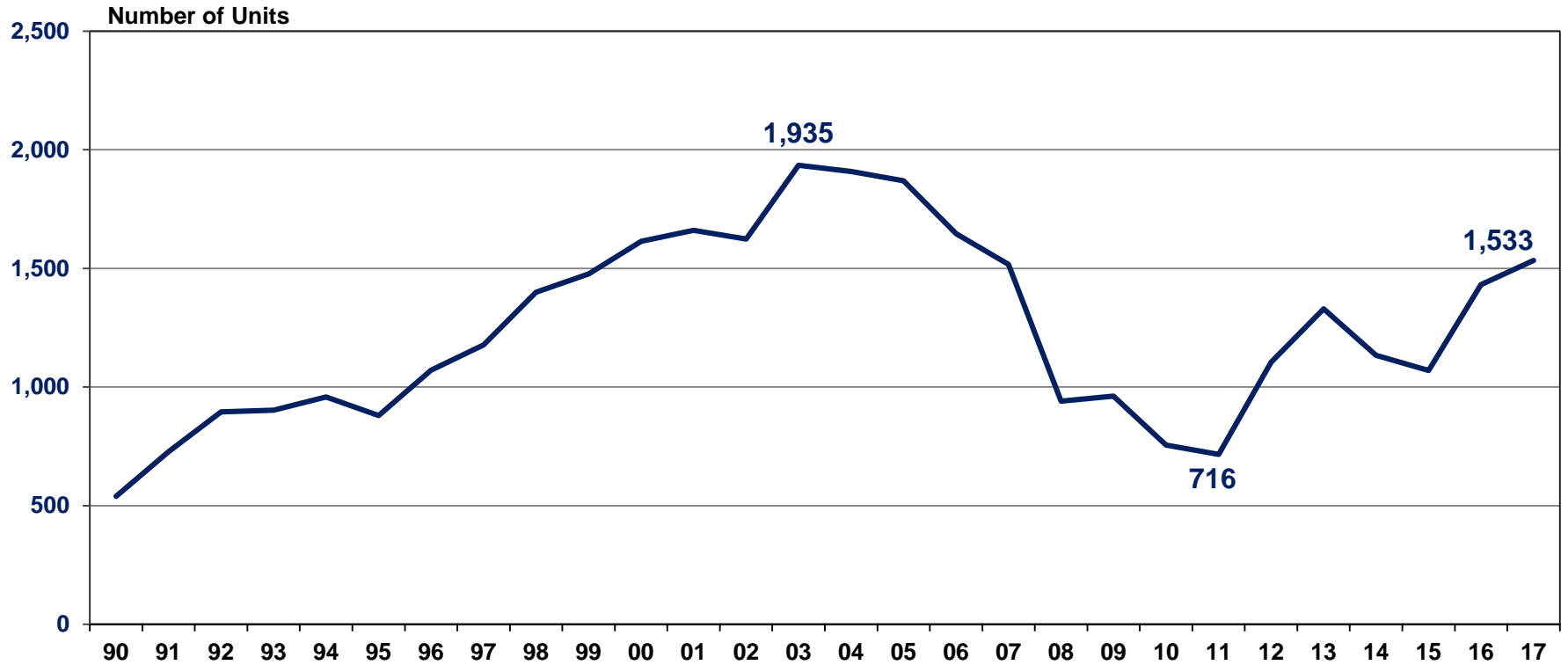
Single-Family Starts

Growth ahead



Source: Census Bureau and NAHB forecast.

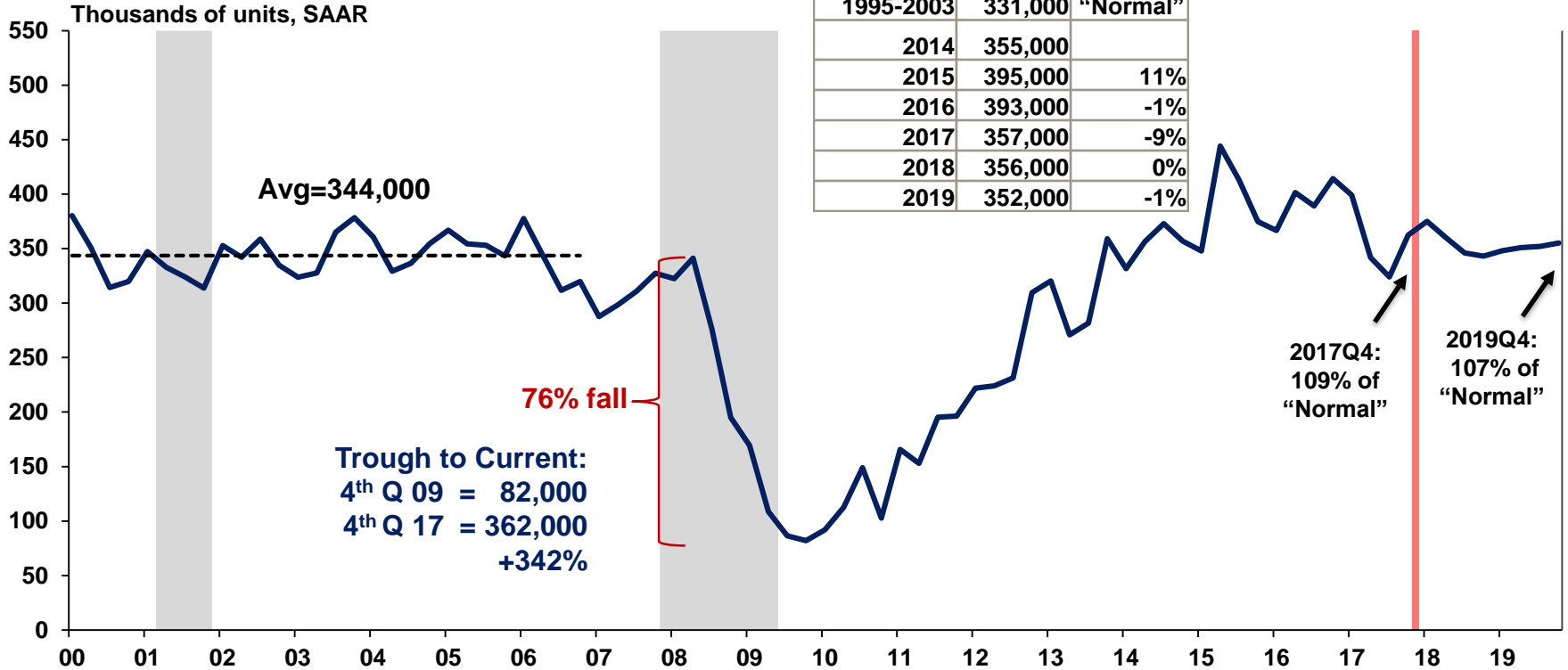
Single-Family Building Permits – Sioux Falls MSA



Source: U.S. Census Bureau (BOC).

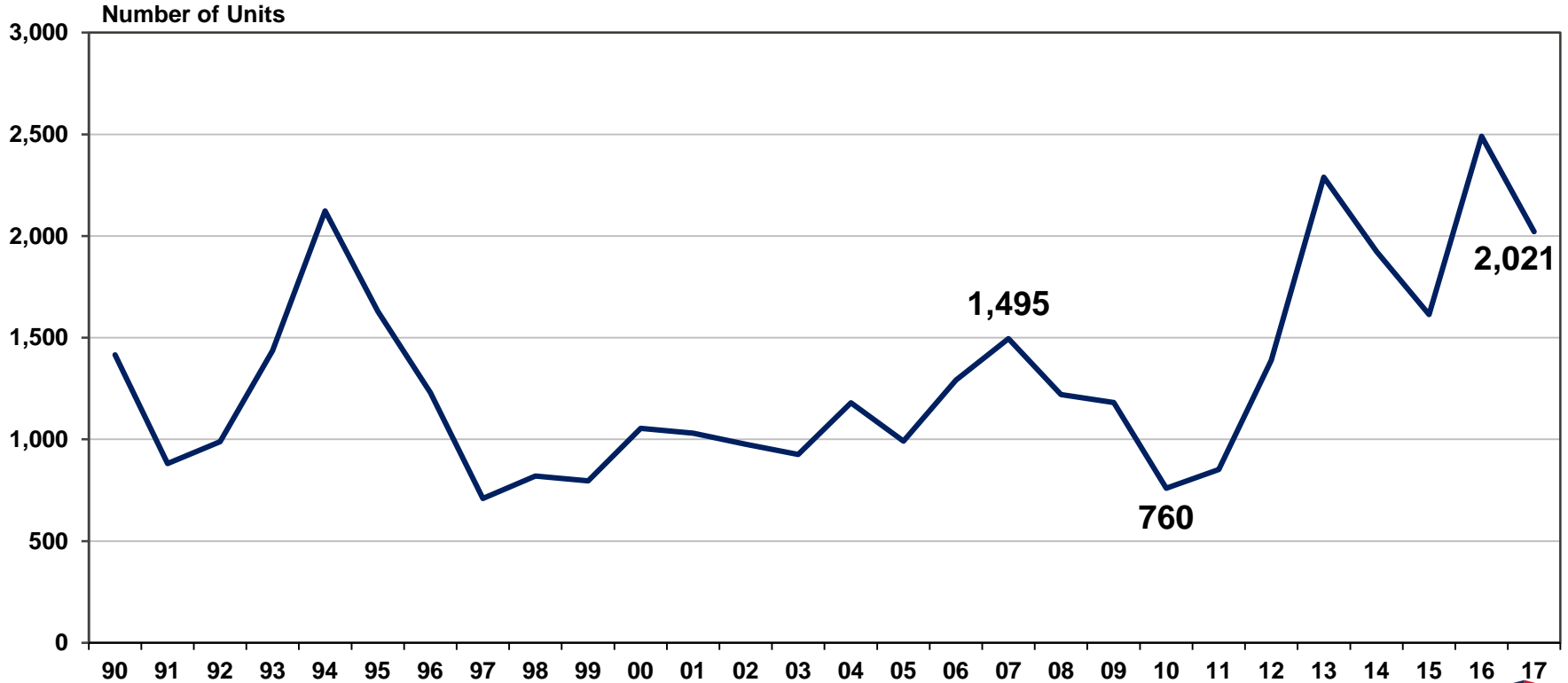
Multifamily Housing Starts

Leveling off



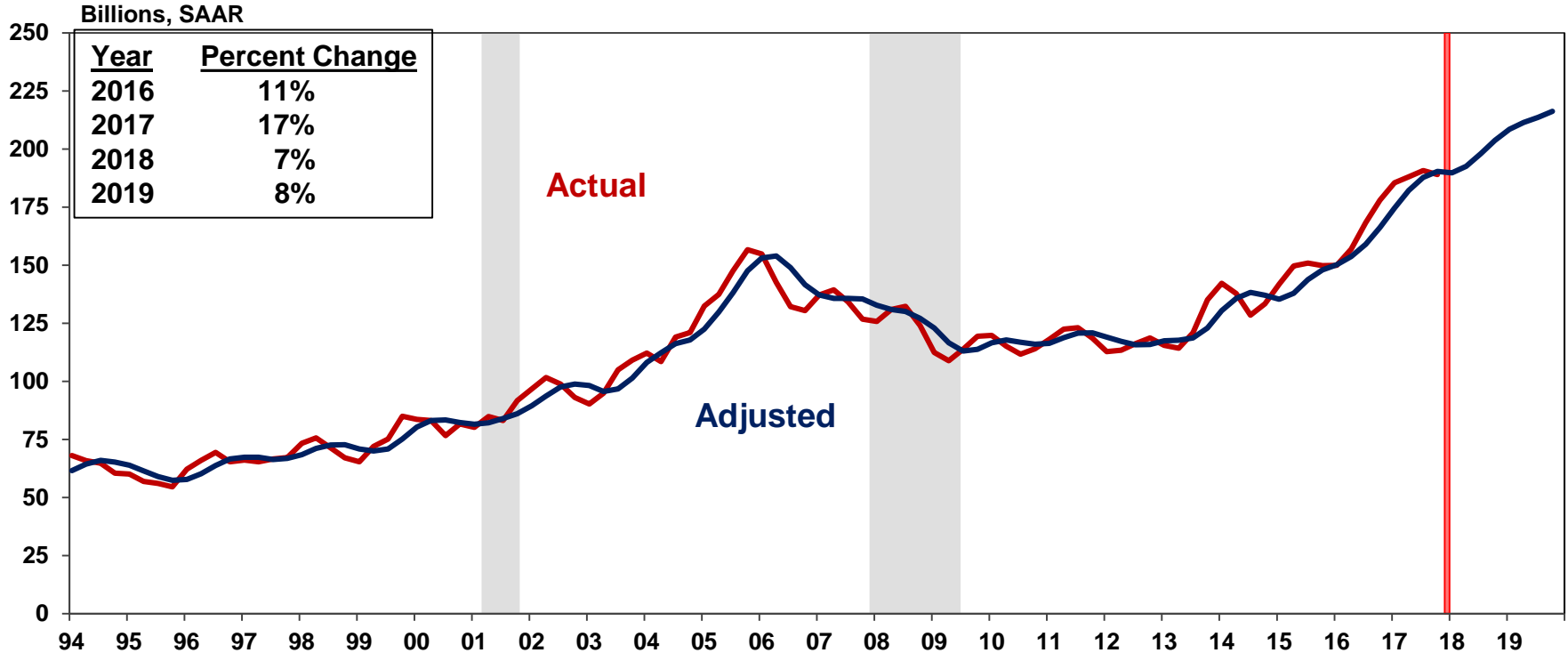
Source: Census Bureau and NAHB forecast

Multifamily Building Permits – Sioux Falls MSA



Residential Remodeling

Strong market conditions



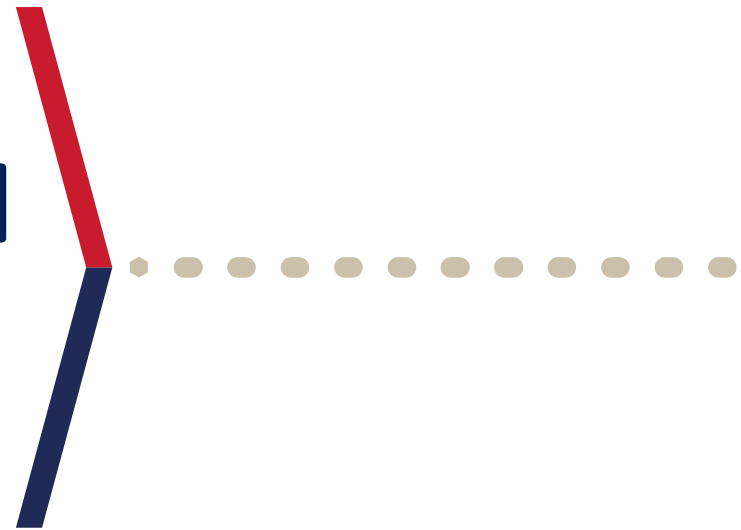
Source: Census Bureau and NAHB forecast.

Thank you

Questions?

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