

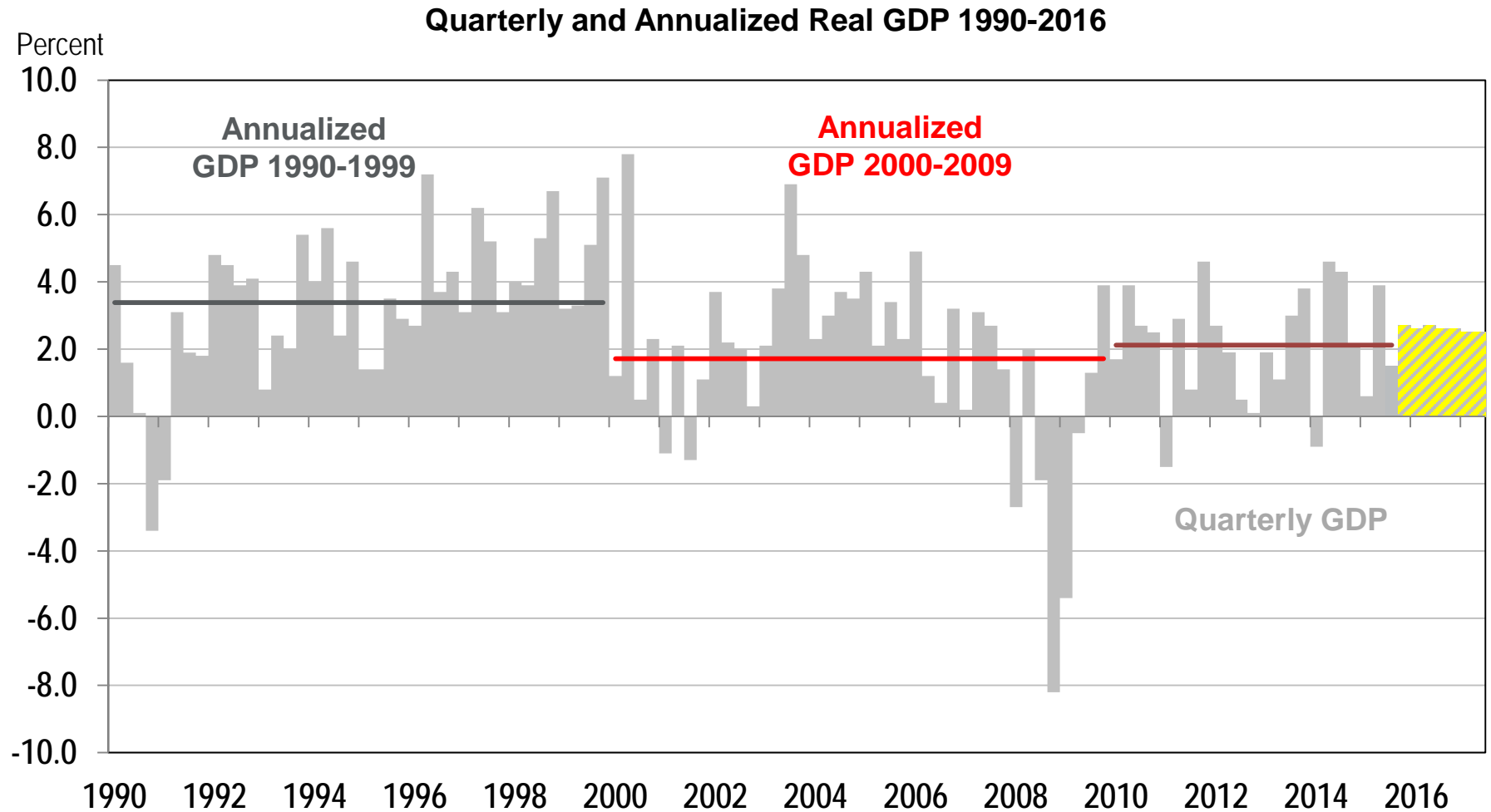
# 2016 Outlook: Headwinds or Tailwinds?



Brian Lewandowski  
Associate Director  
Business Research Division  
Leeds School of Business



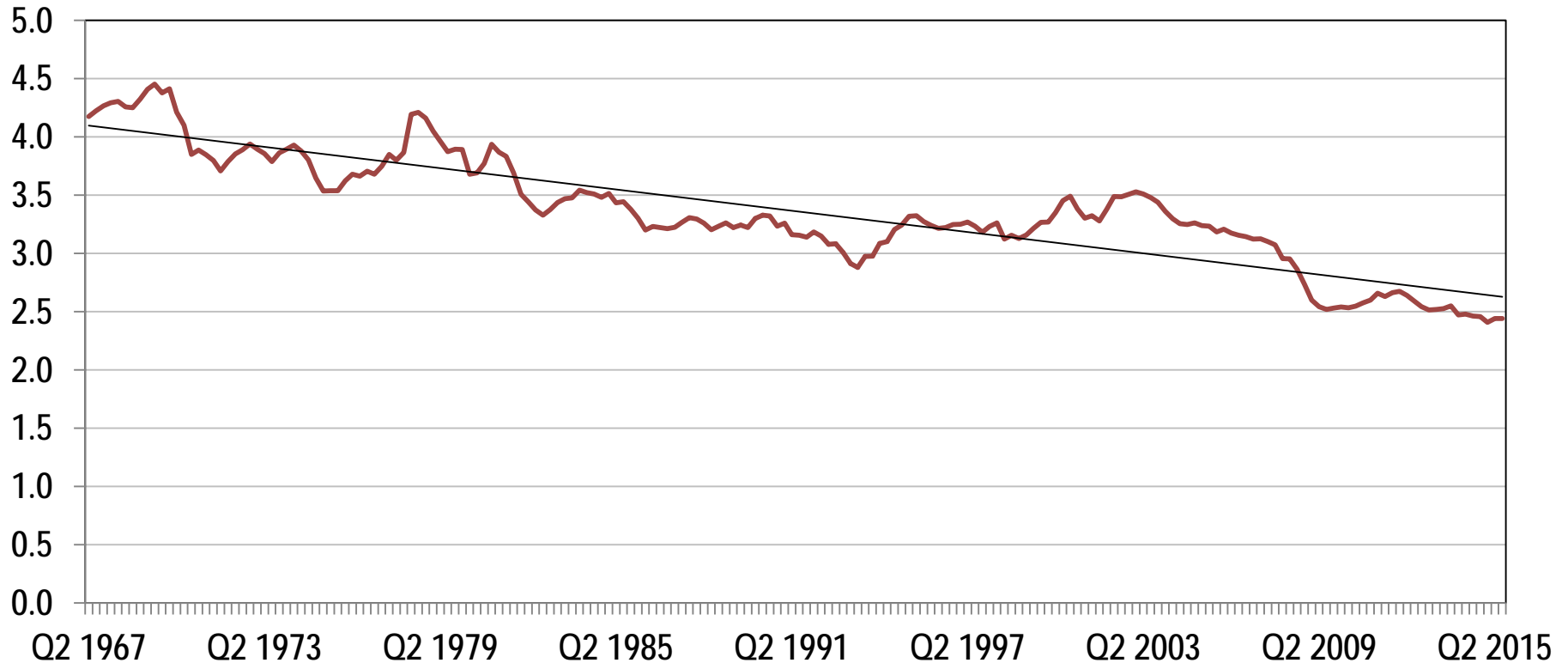
# Real GDP Growth



Sources: Bureau of Economic Analysis and Consensus Forecasts.

# Long Term GDP Growth Trend

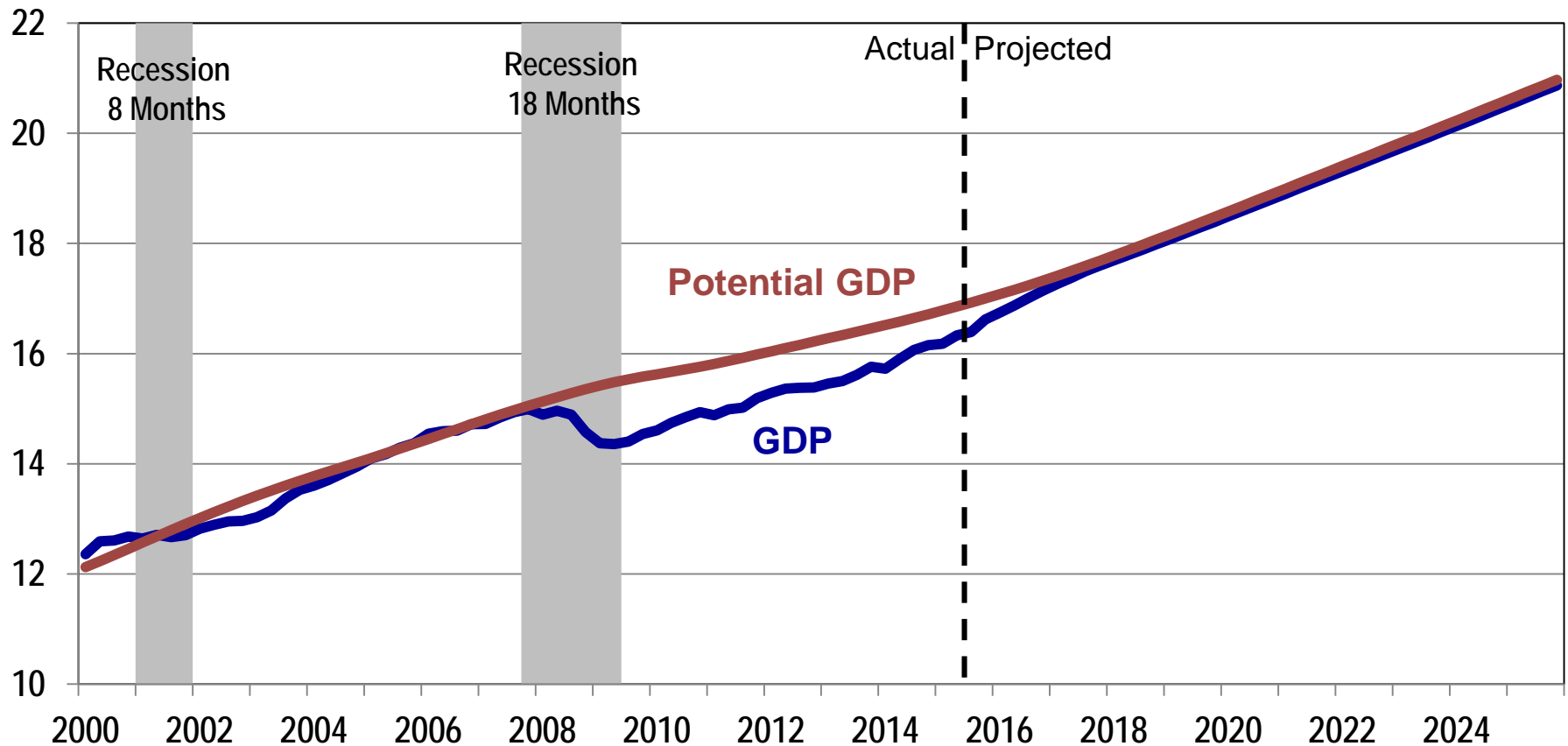
20-Year Quarterly Moving  
Average



Sources: Bureau of Economic Analysis and Consensus Forecasts.

# GDP and Potential GDP

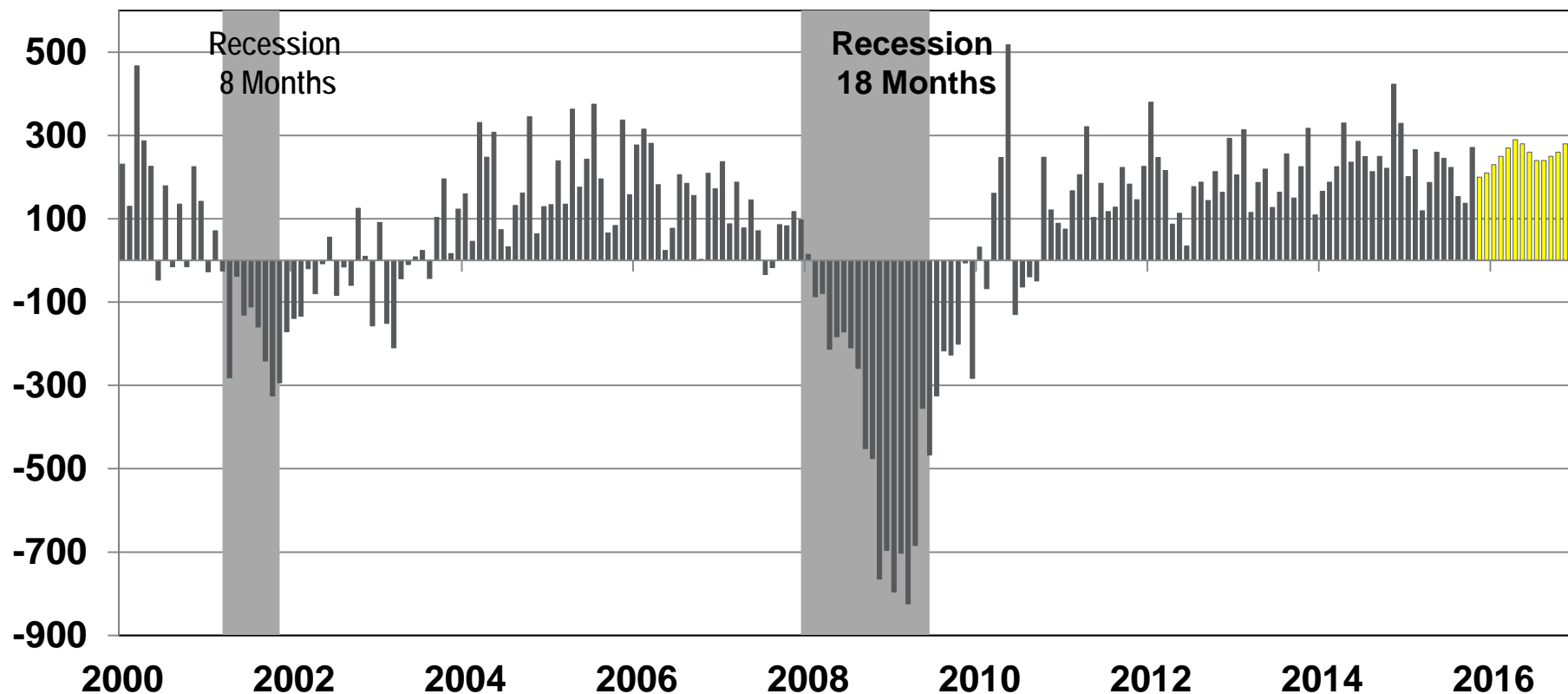
Trillions, USD



Source: Congressional Budget Office, Budget and Economic Outlook, Fiscal Years 2015 to 2025.

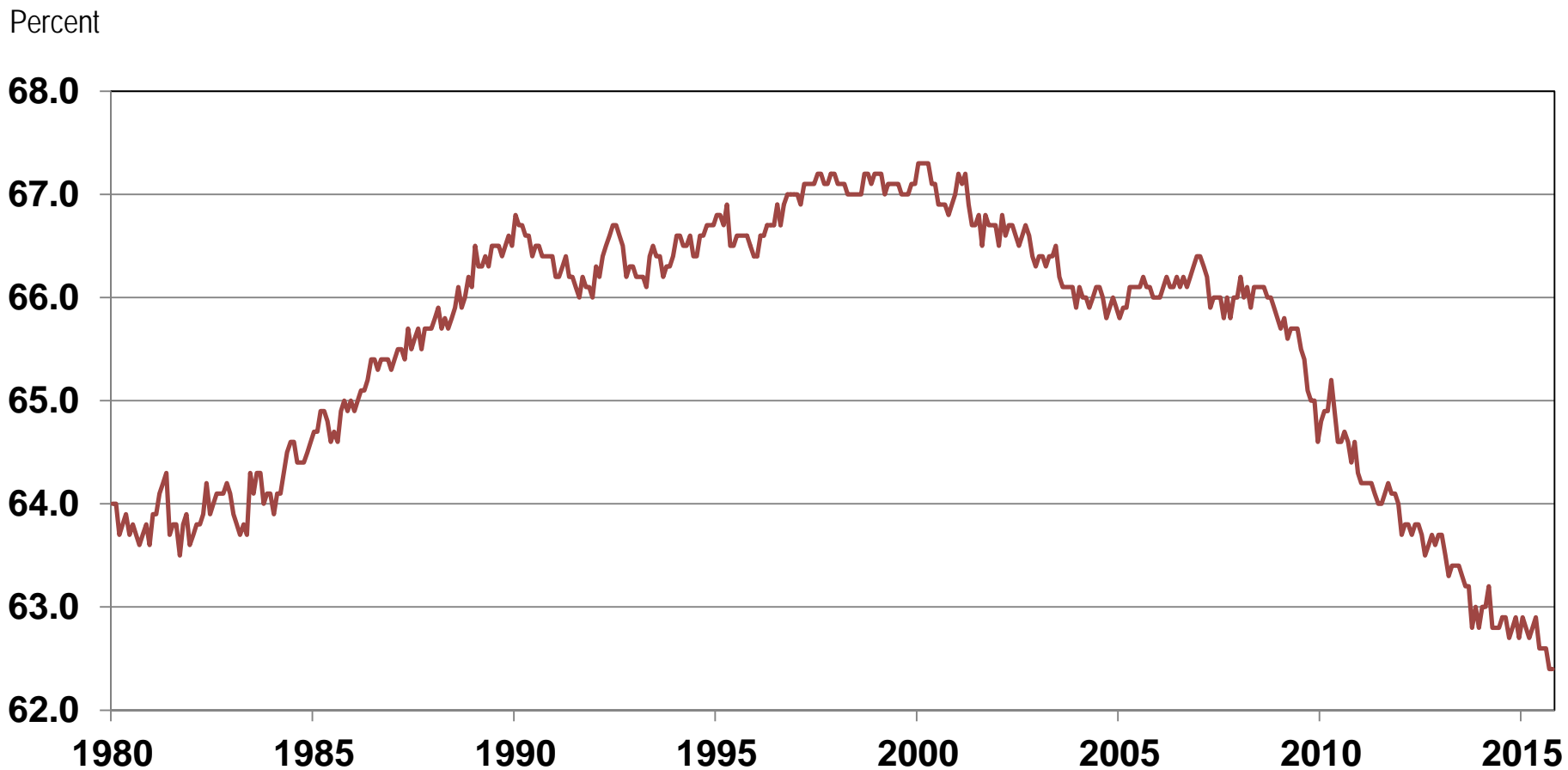
# National Employment

Thousands, Month-over-Month



Sources: Bureau of Labor Statistics (Seasonally Adjusted), National Bureau of Economic Research, and NABE Outlook.

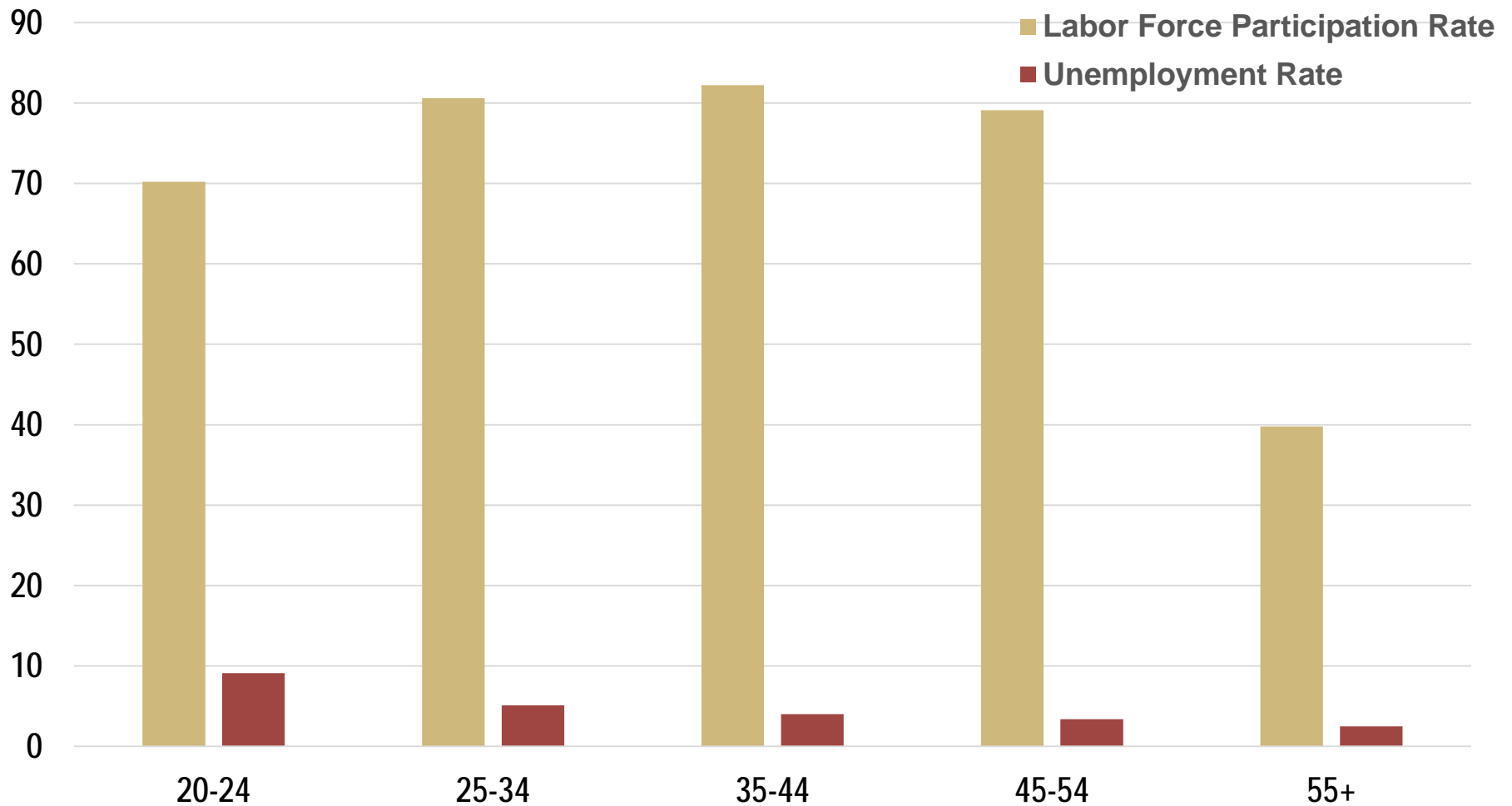
# Labor Force Participation Rate



Sources: Bureau of Labor Statistics (Seasonally Adjusted), National Bureau of Economic Research, and NABE Outlook.

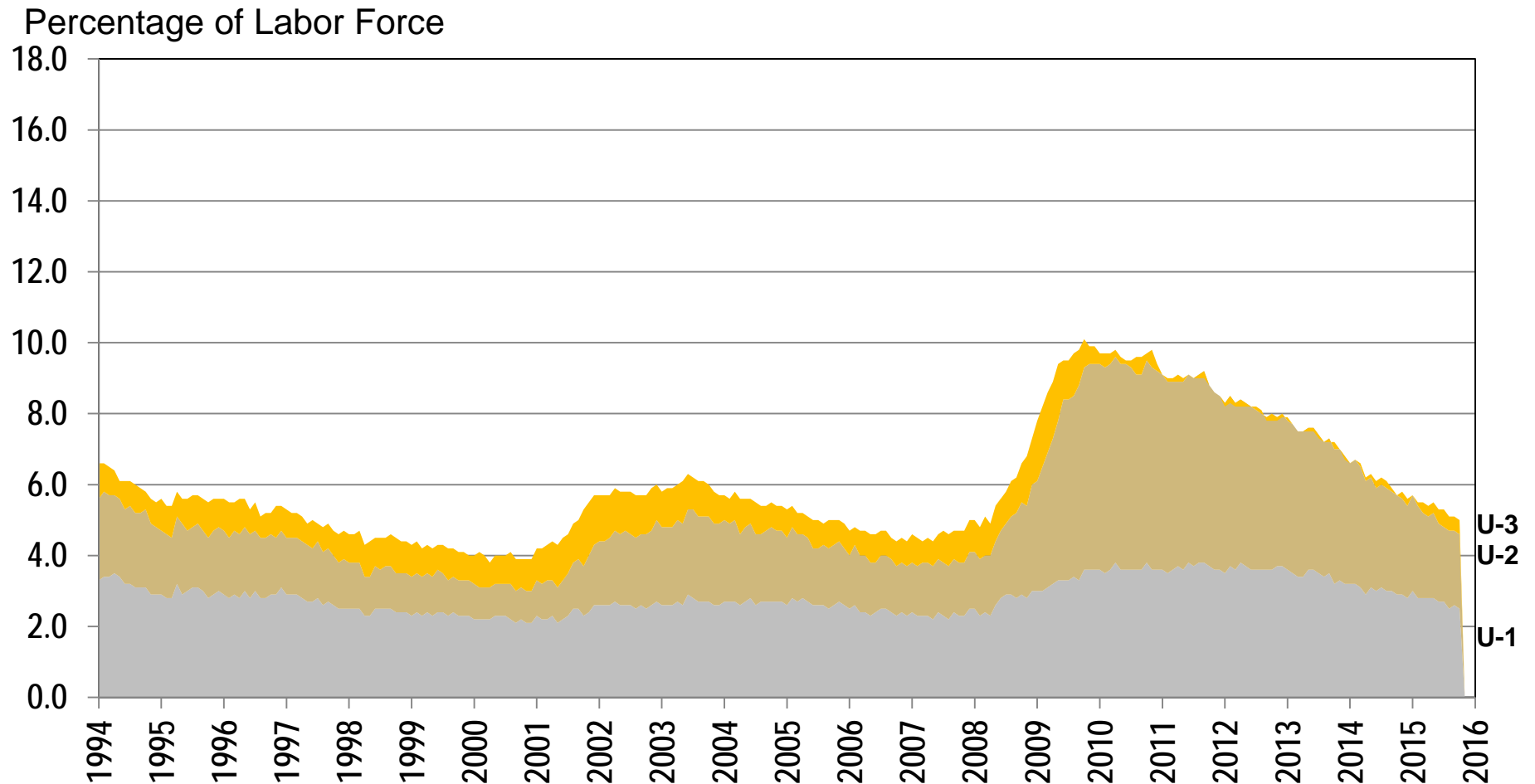
# Labor Force and Unemployment Rate

National by Age Cohort October 2015



Source: Bureau of Labor Statistics, Current Population Survey (CPS).

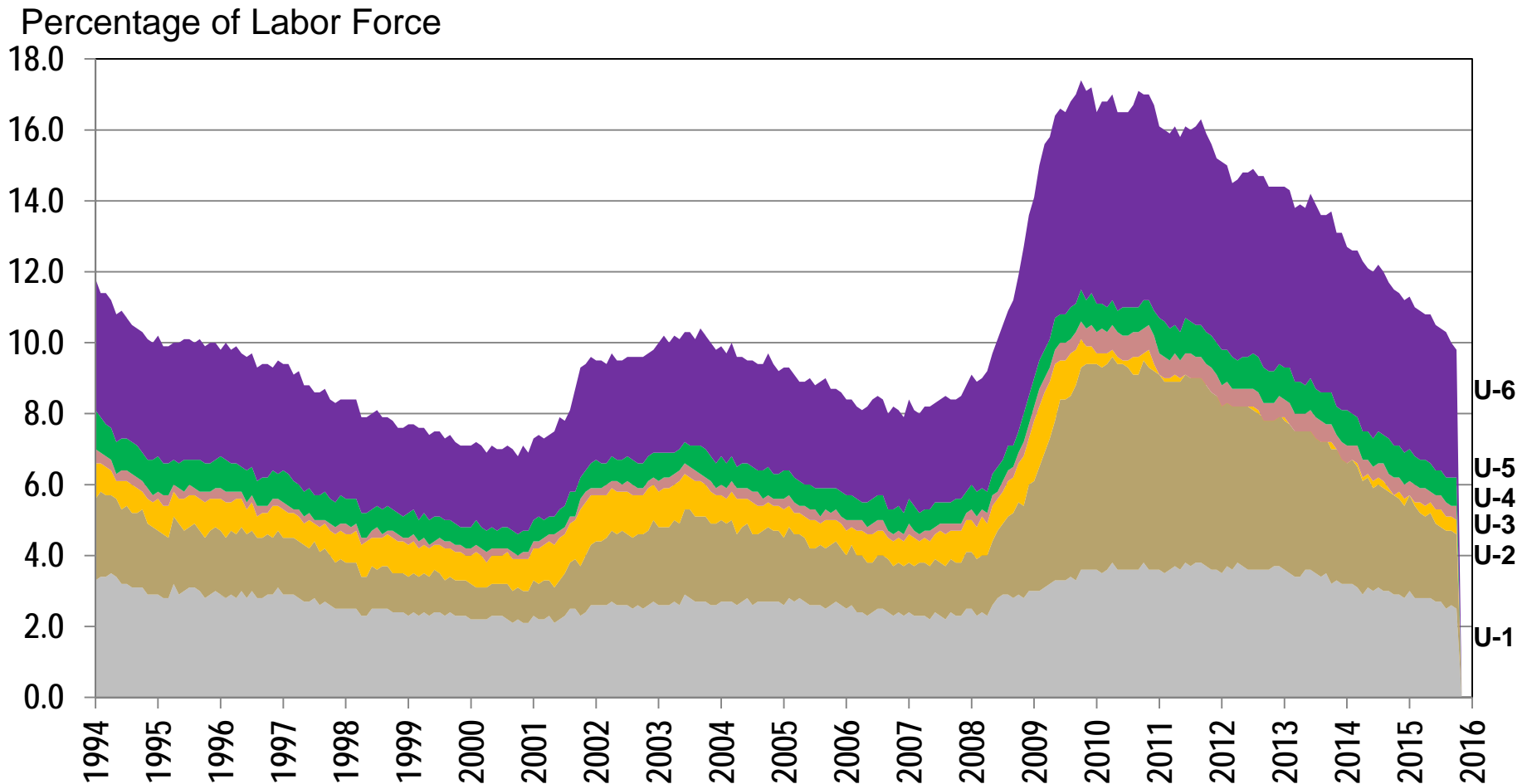
# Unemployment Rate



Source: Bureau of Labor Statistics (Seasonally Adjusted).



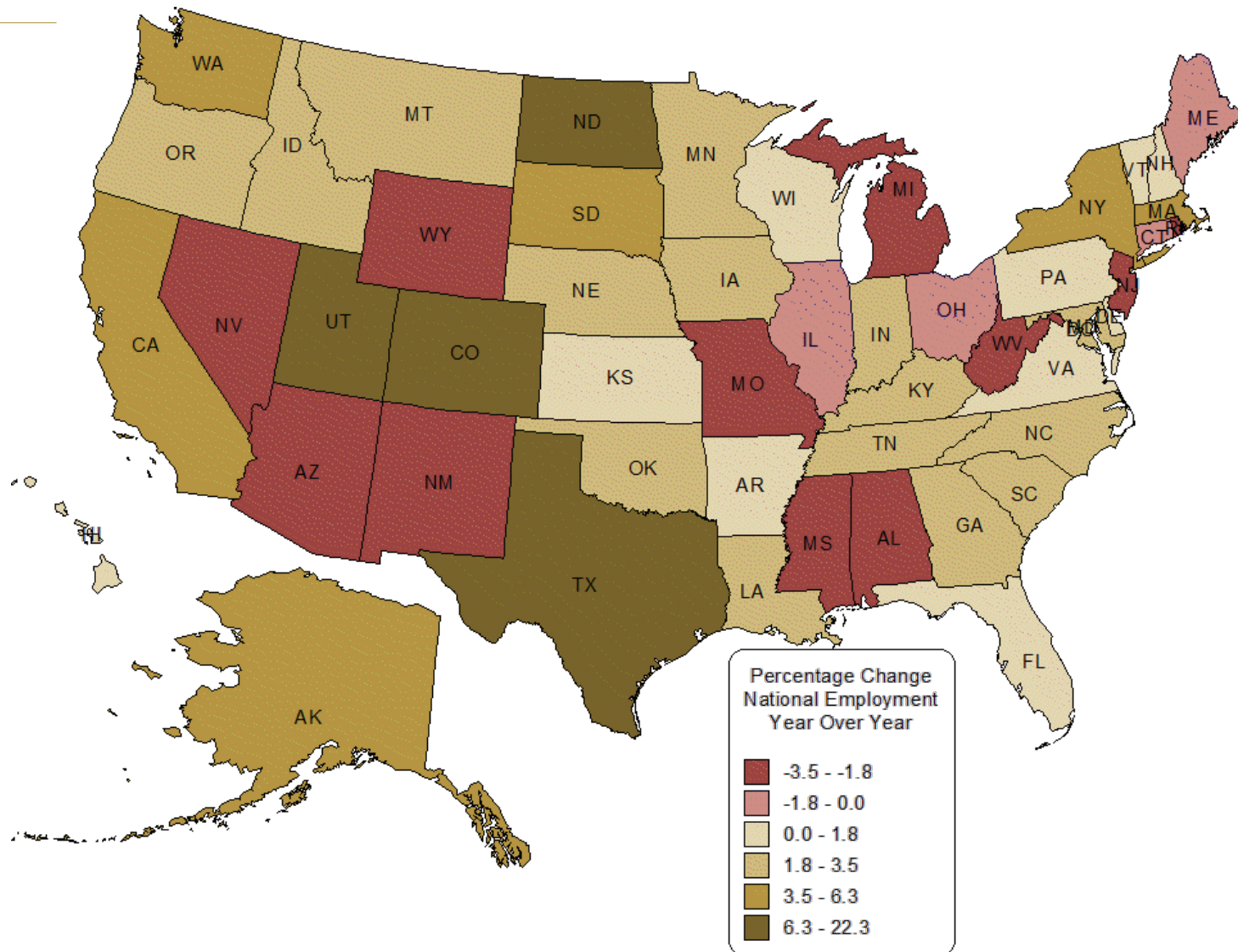
# Labor Underutilization



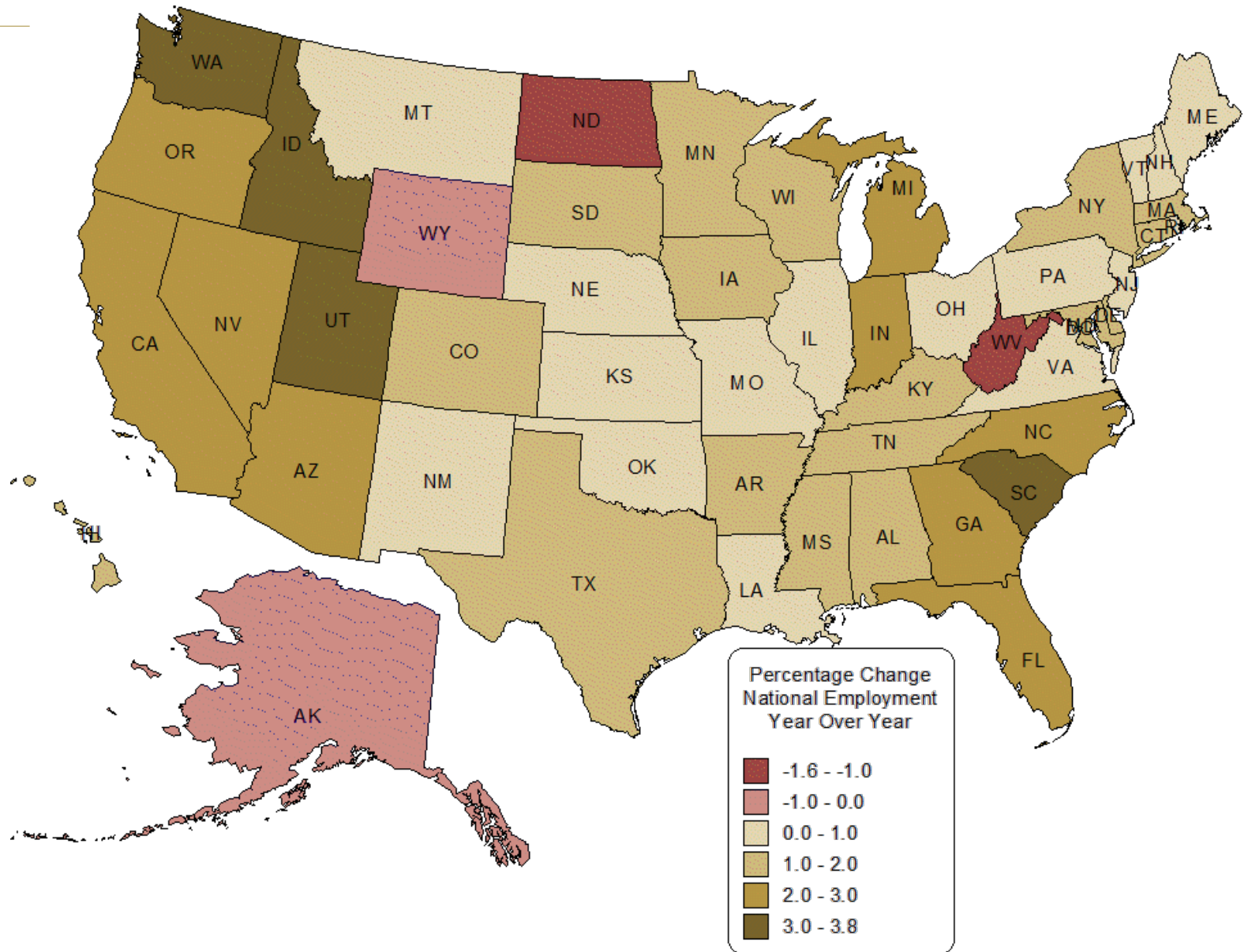
Source: Bureau of Labor Statistics (Seasonally Adjusted).

# State Employment Growth

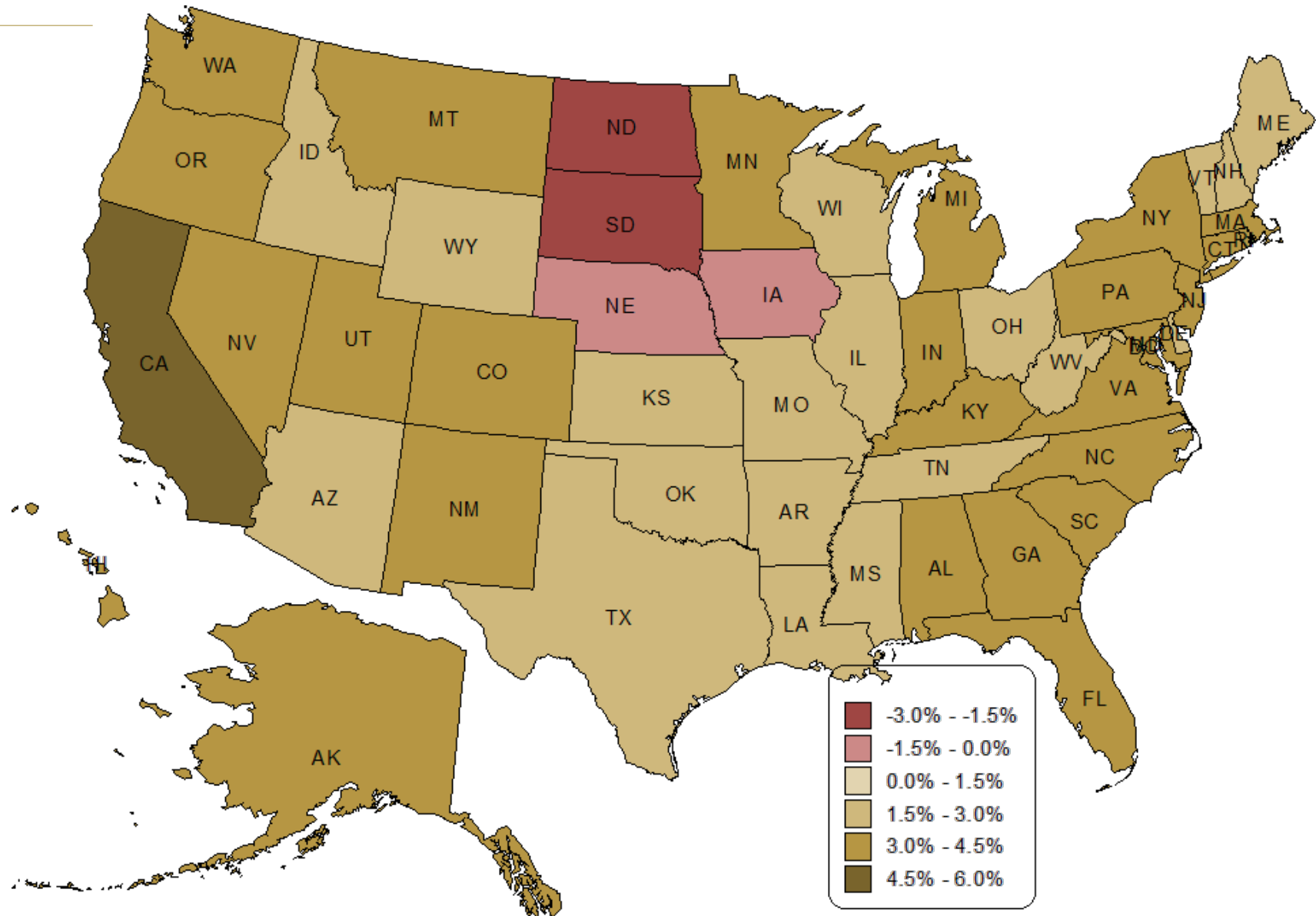
Pre-Recession Peak to September 2015



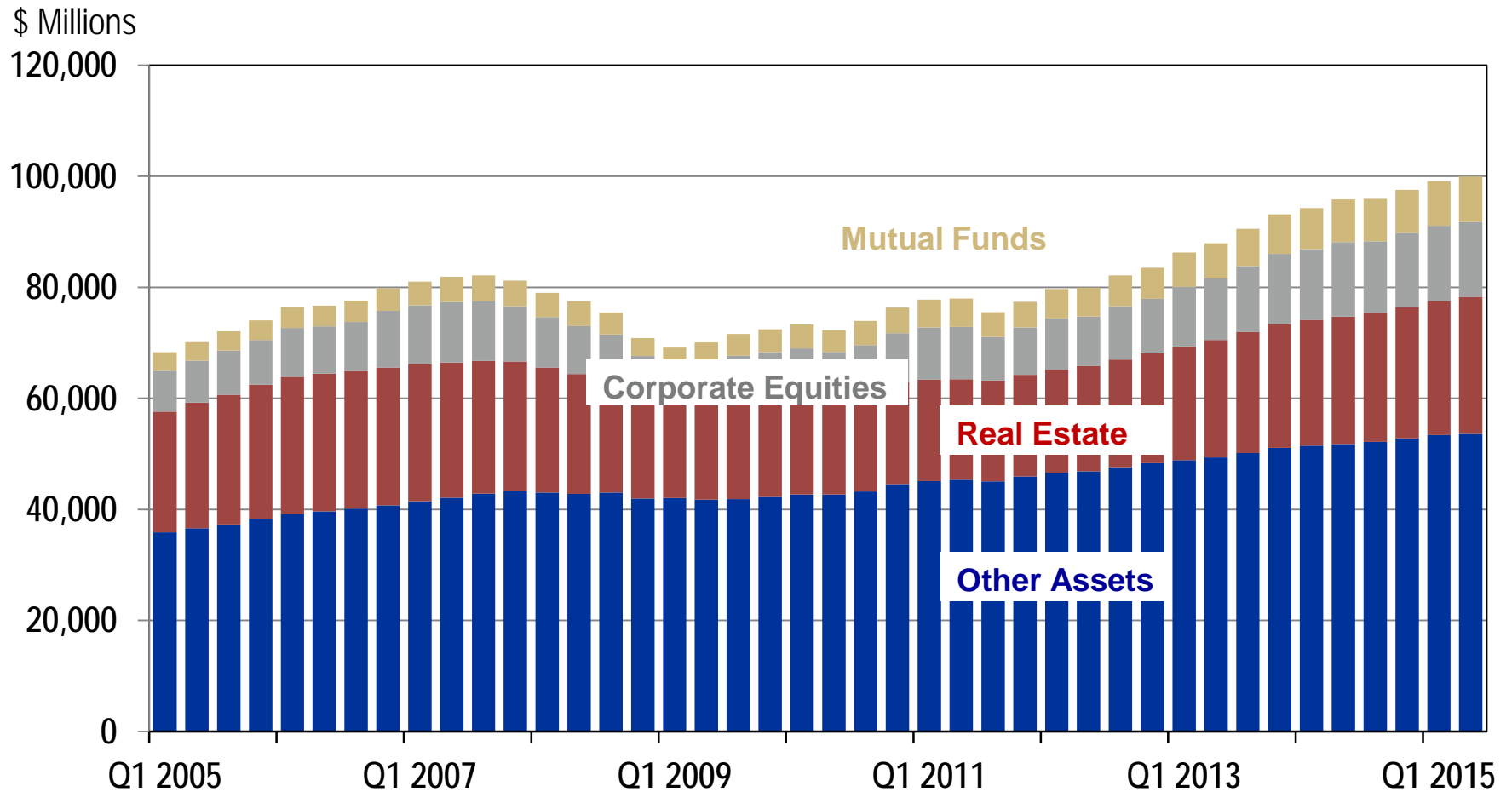
# Year-over-Year Growth



# Personal Income Growth, Q2 2014-Q2 2015



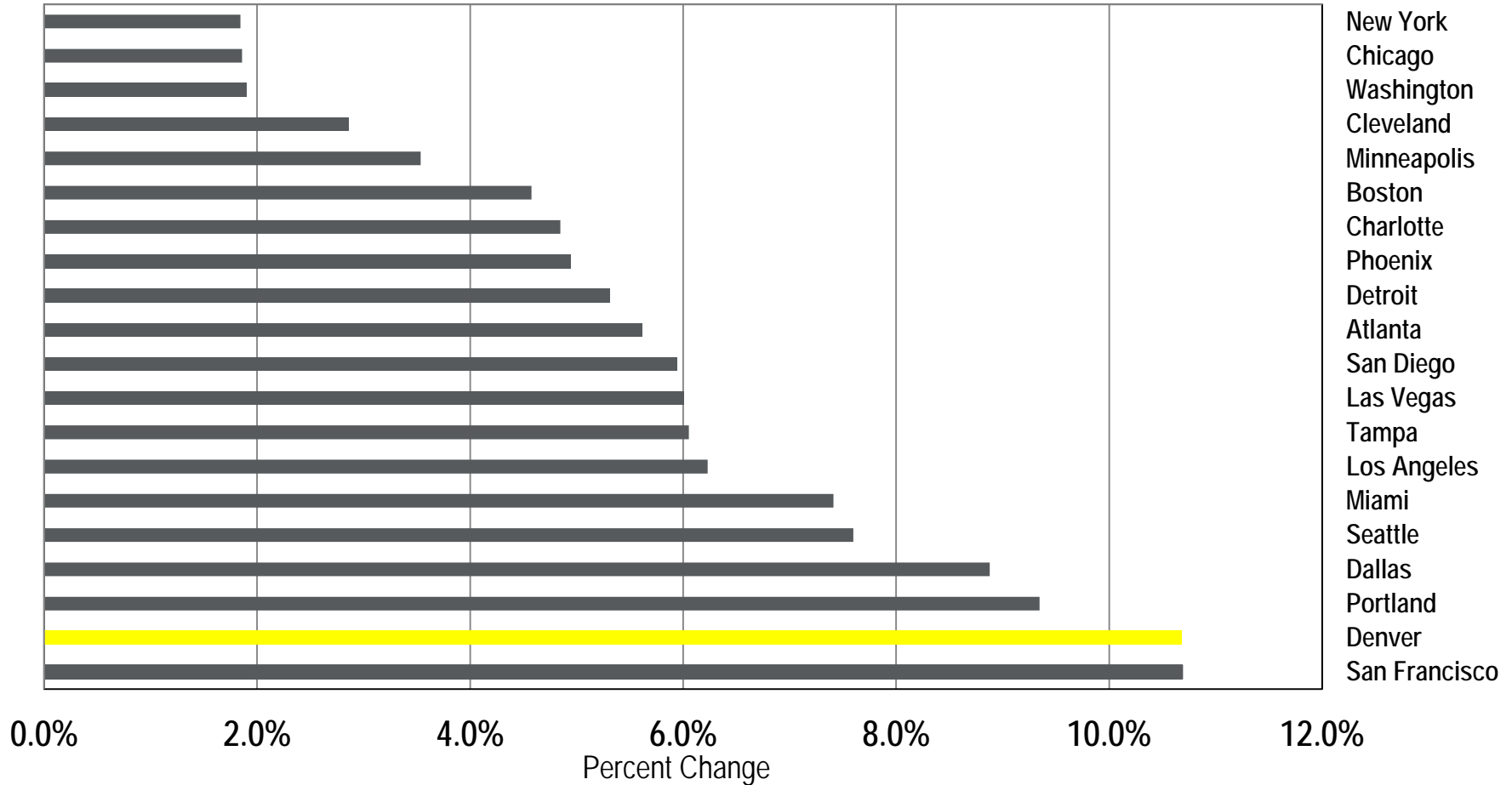
# Household Wealth



Source: Federal Reserve Board, Balance Sheet of Households and Nonprofit Organizations (B100) (Not Seasonally Adjusted).

# S&P/Case-Shiller Home Price Indices

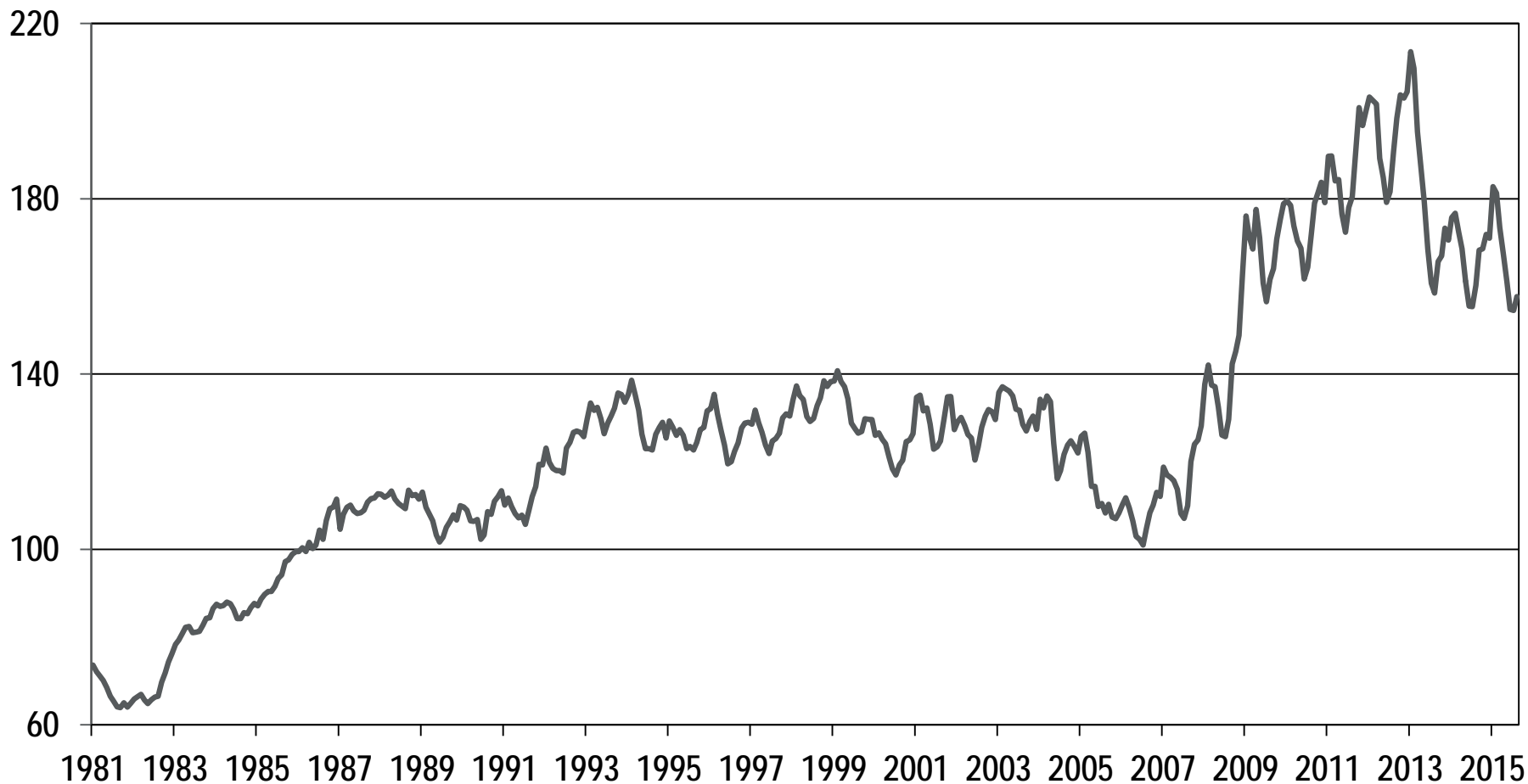
August 2015



Source: Standard & Poor's (Not Seasonally Adjusted).

# Housing Affordability Index

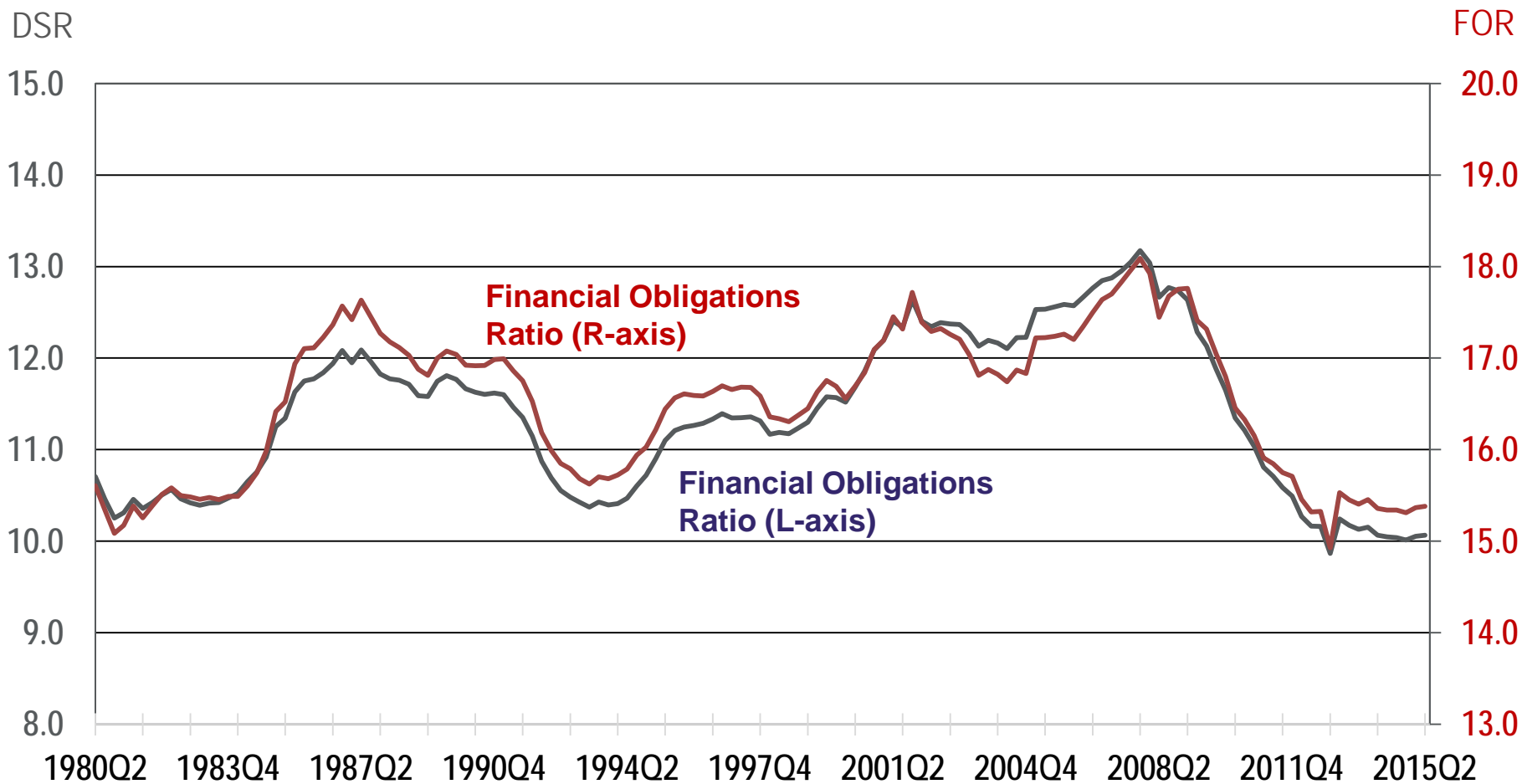
Composite Index



Source: National Association of Realtors.

# Household Debt Burden

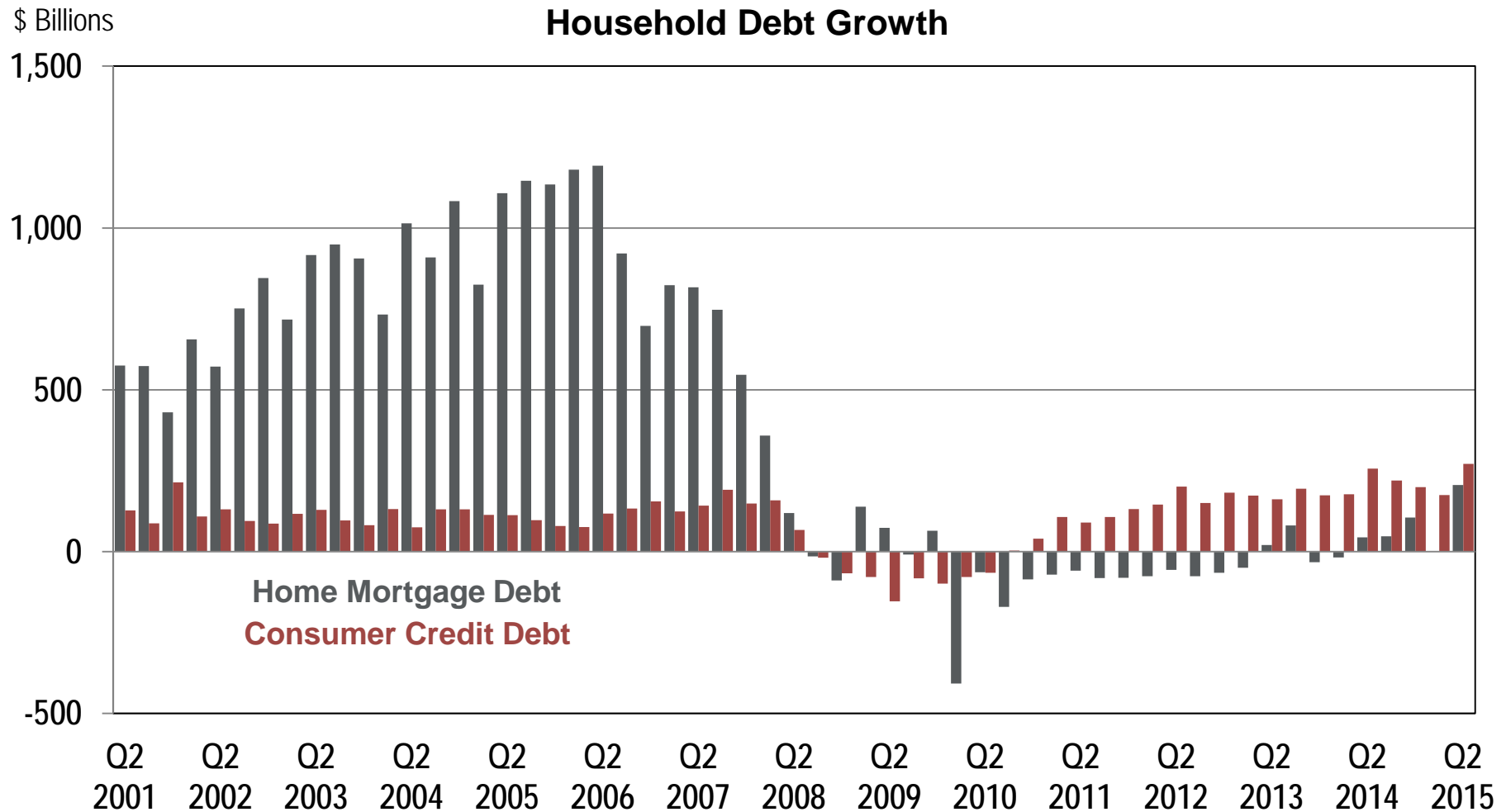
Percent of Disposable Income



Source: Federal Reserve, Household Debt Service and Obligations Ratios.



# Household Debt Growth

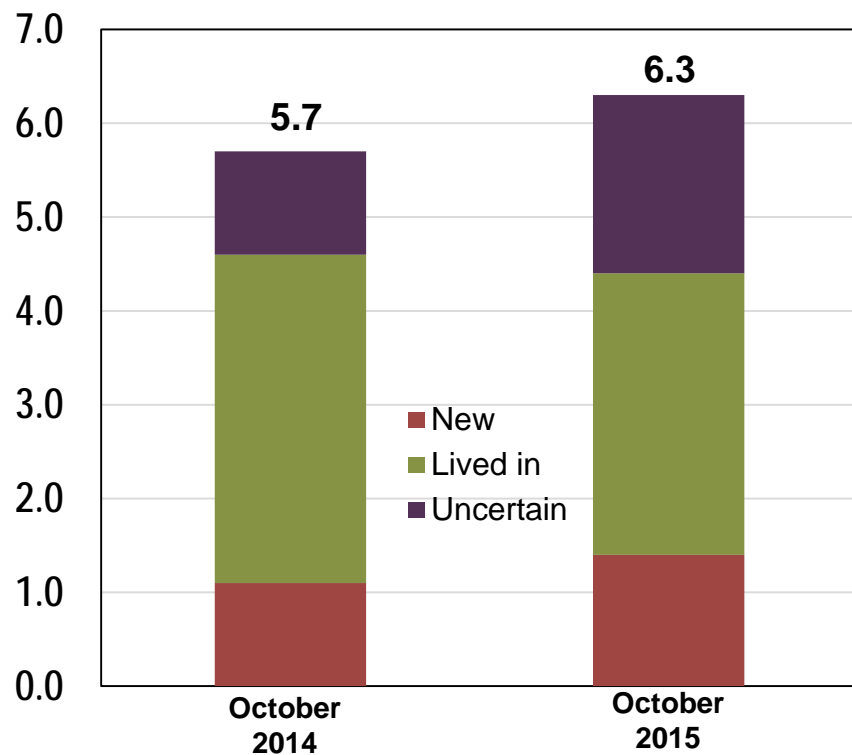


Source: U.S. Flow of Funds Account, Z.1 data release.

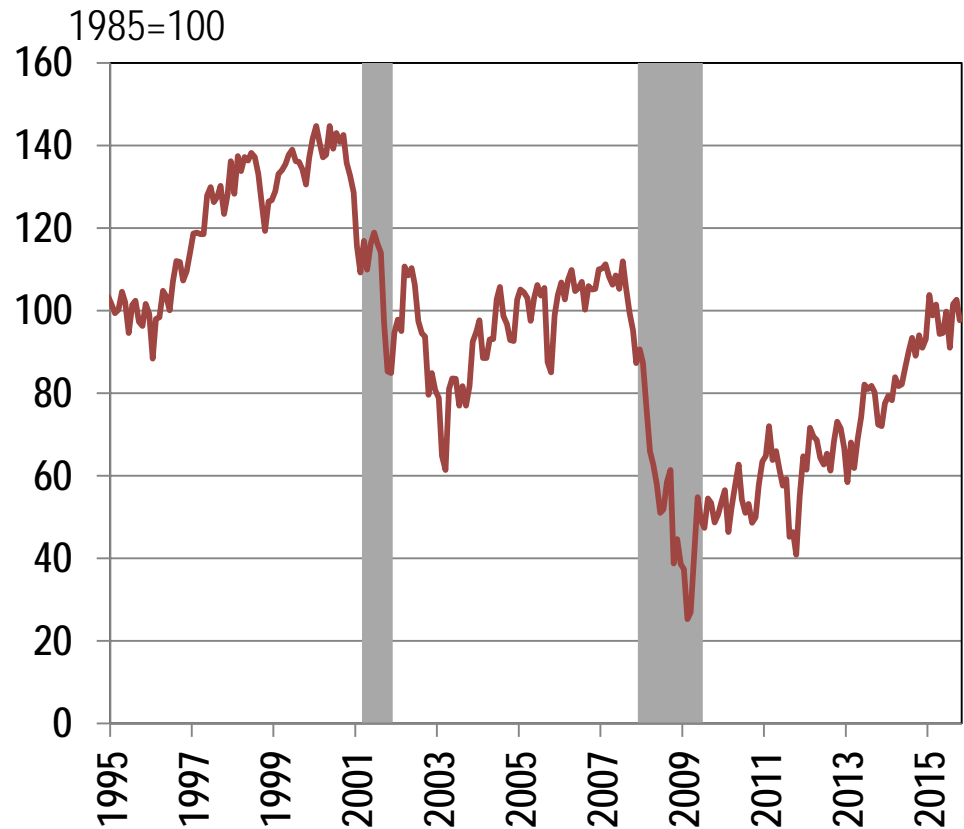
# Index of Consumer Confidence

## Housing

Plans to buy a home in the next 6 months



National Confidence

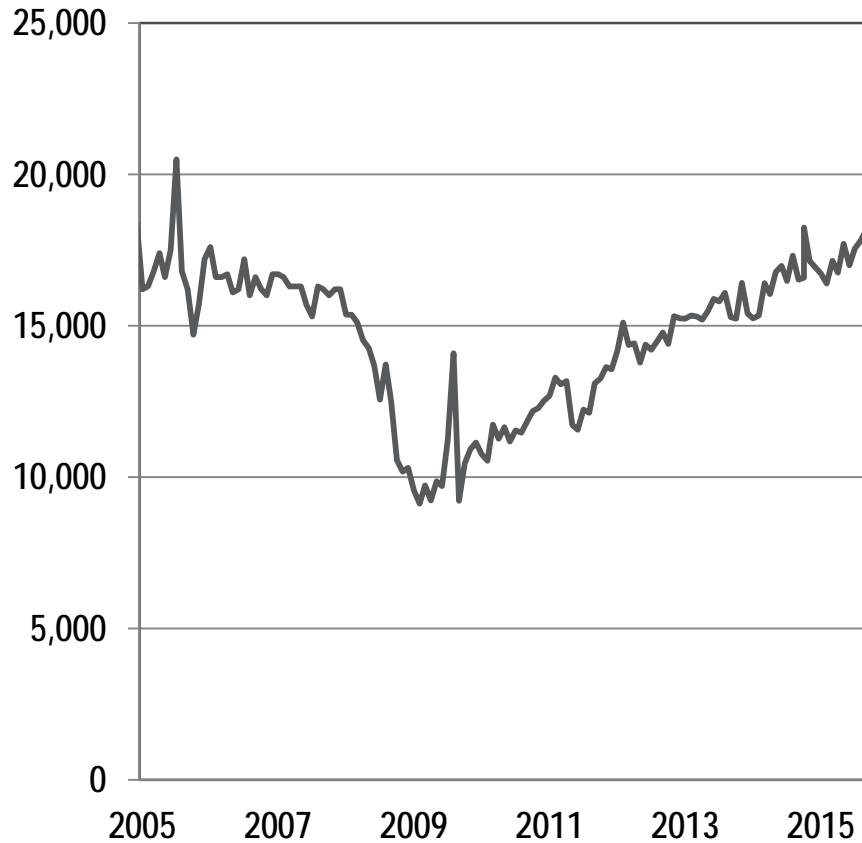


Sources: The Conference Board and National Bureau of Economic Research.

# Vehicle Sales and Retail Sales

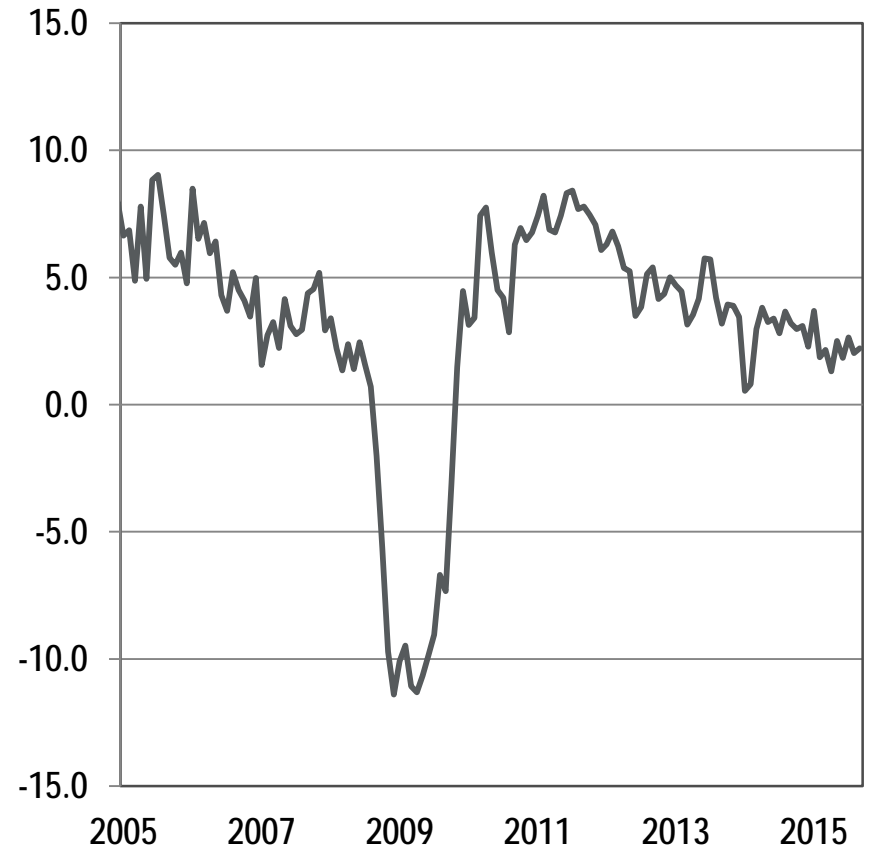
## Vehicle Sales

Thousands, SAAR



## Retail and Food Services Sales

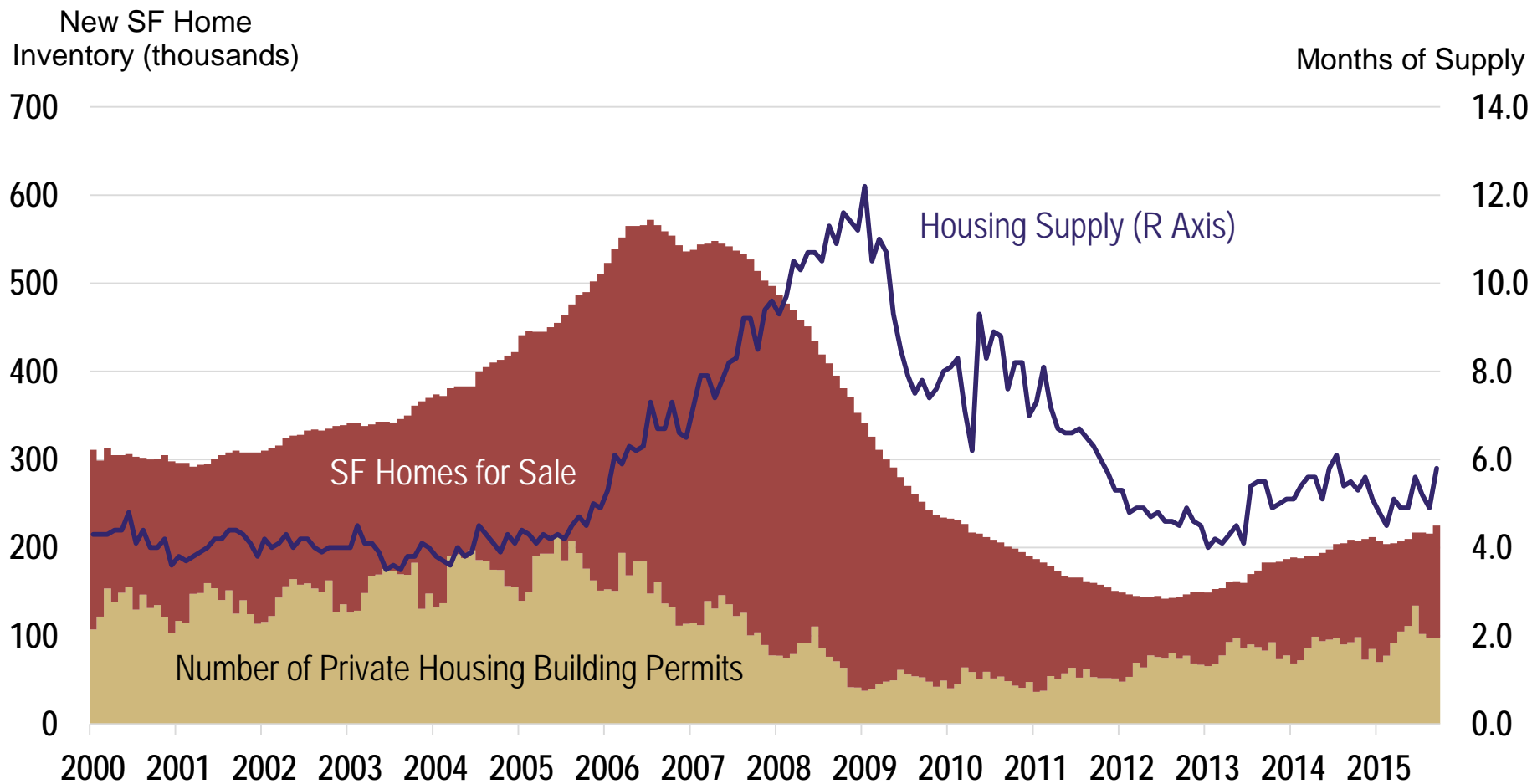
YOY, Percentage Change



Sources: Seasonally Adjusted Annual Rate, Autodata Corp., Motor Intelligence, U.S. Census Bureau.

# U.S. Housing

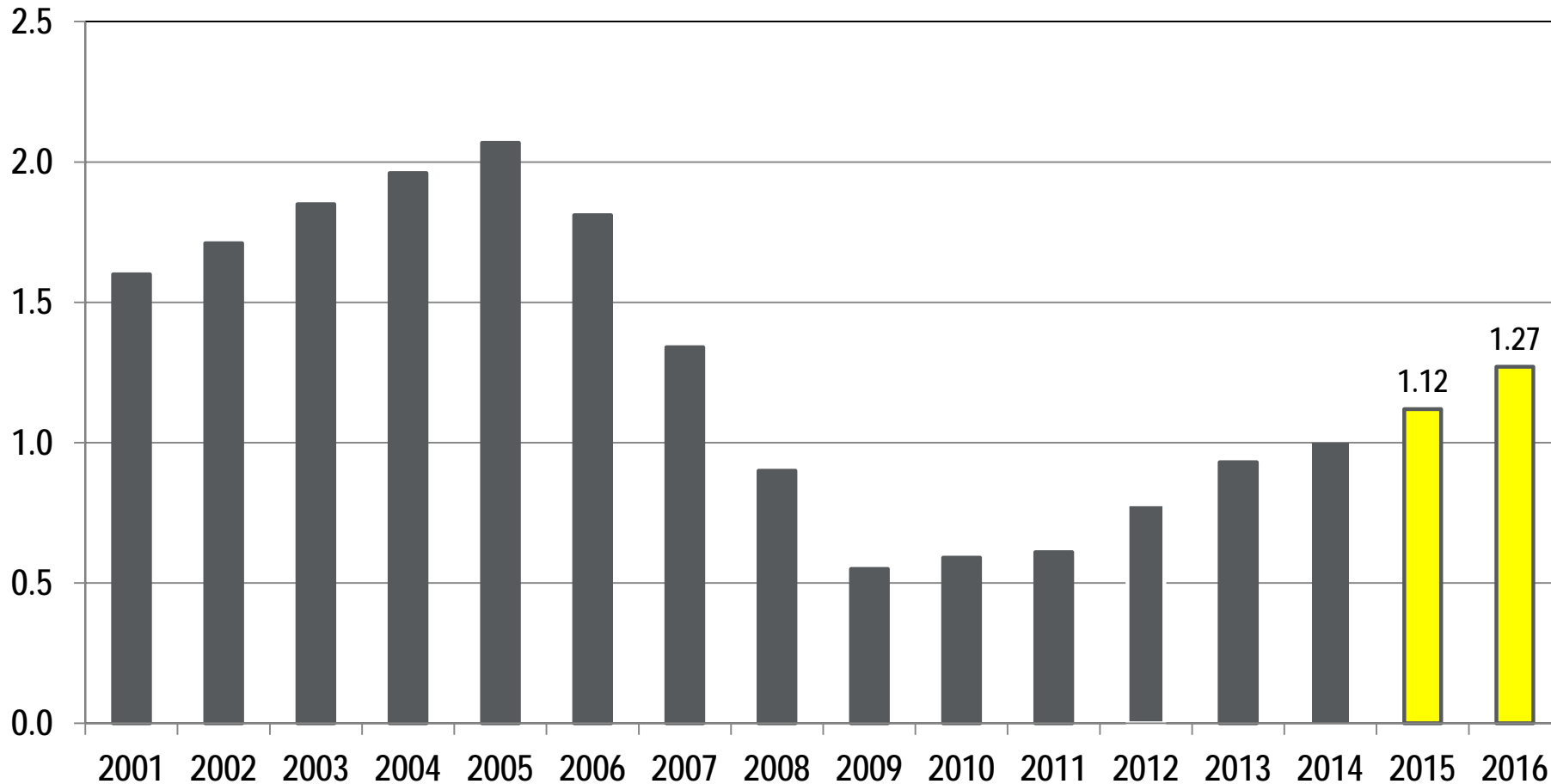
## Supply, Inventory, and Permits



Source: New Houses Sold and For Sale, U.S. Census Bureau.

# National Housing Starts

Millions



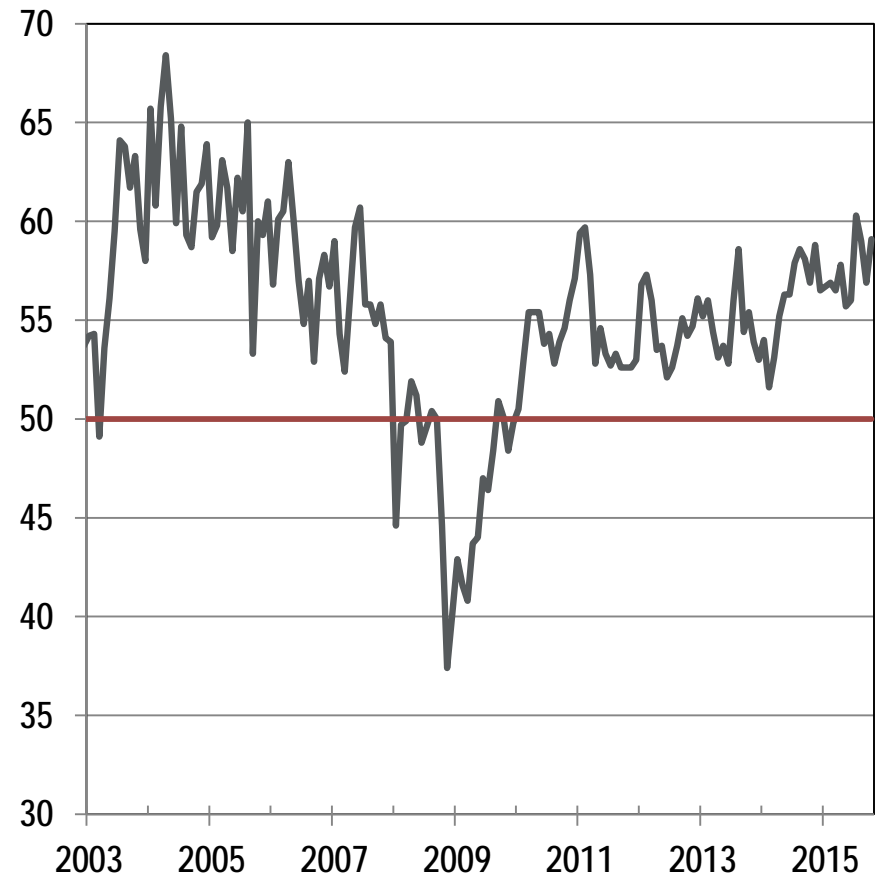
Sources: U.S. Census Bureau and Consensus Forecasts.

# ISM Indices

## ISM Manufacturing Index



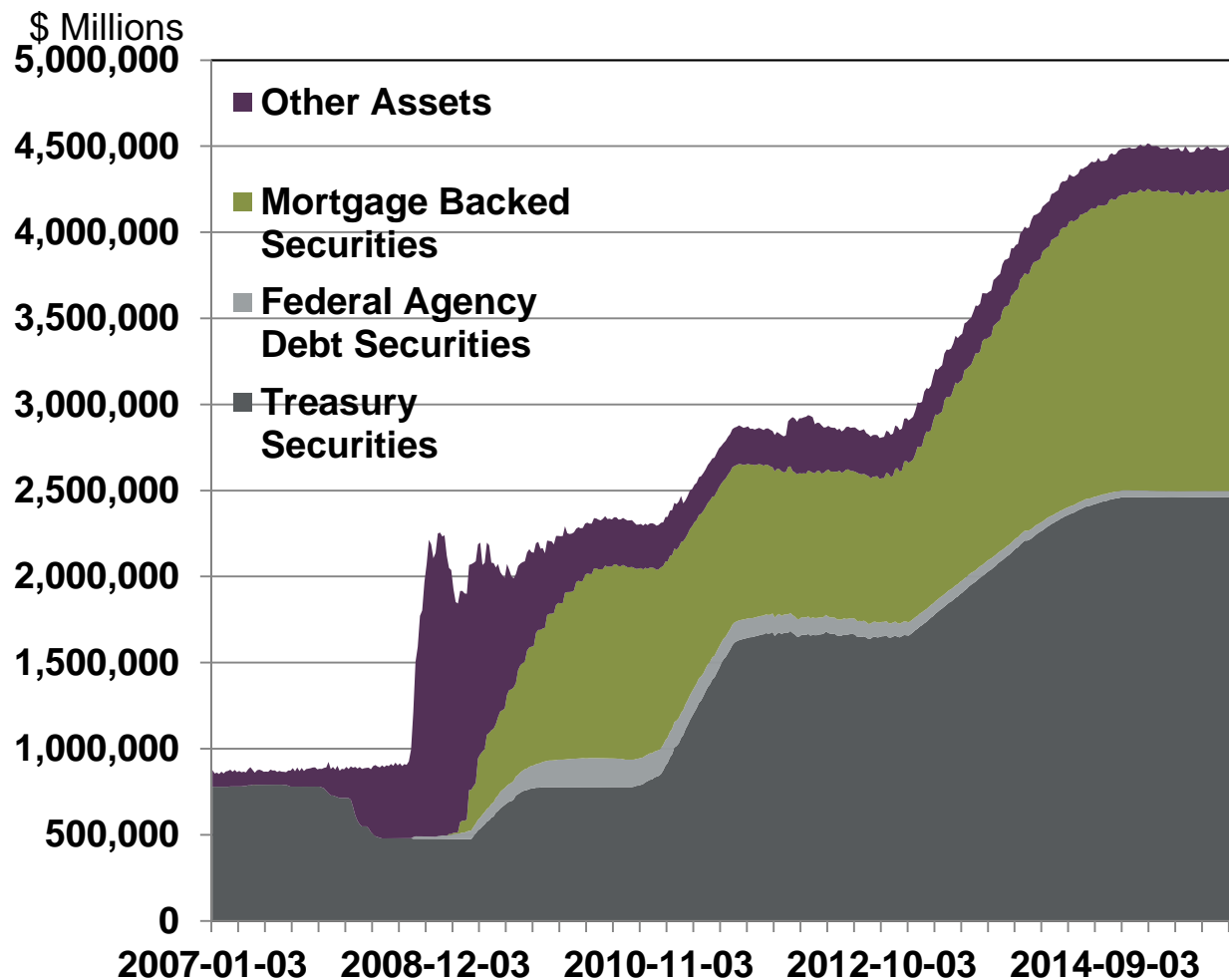
## ISM Non-Manufacturing Index



Source: Institute for Supply Management (ISM).

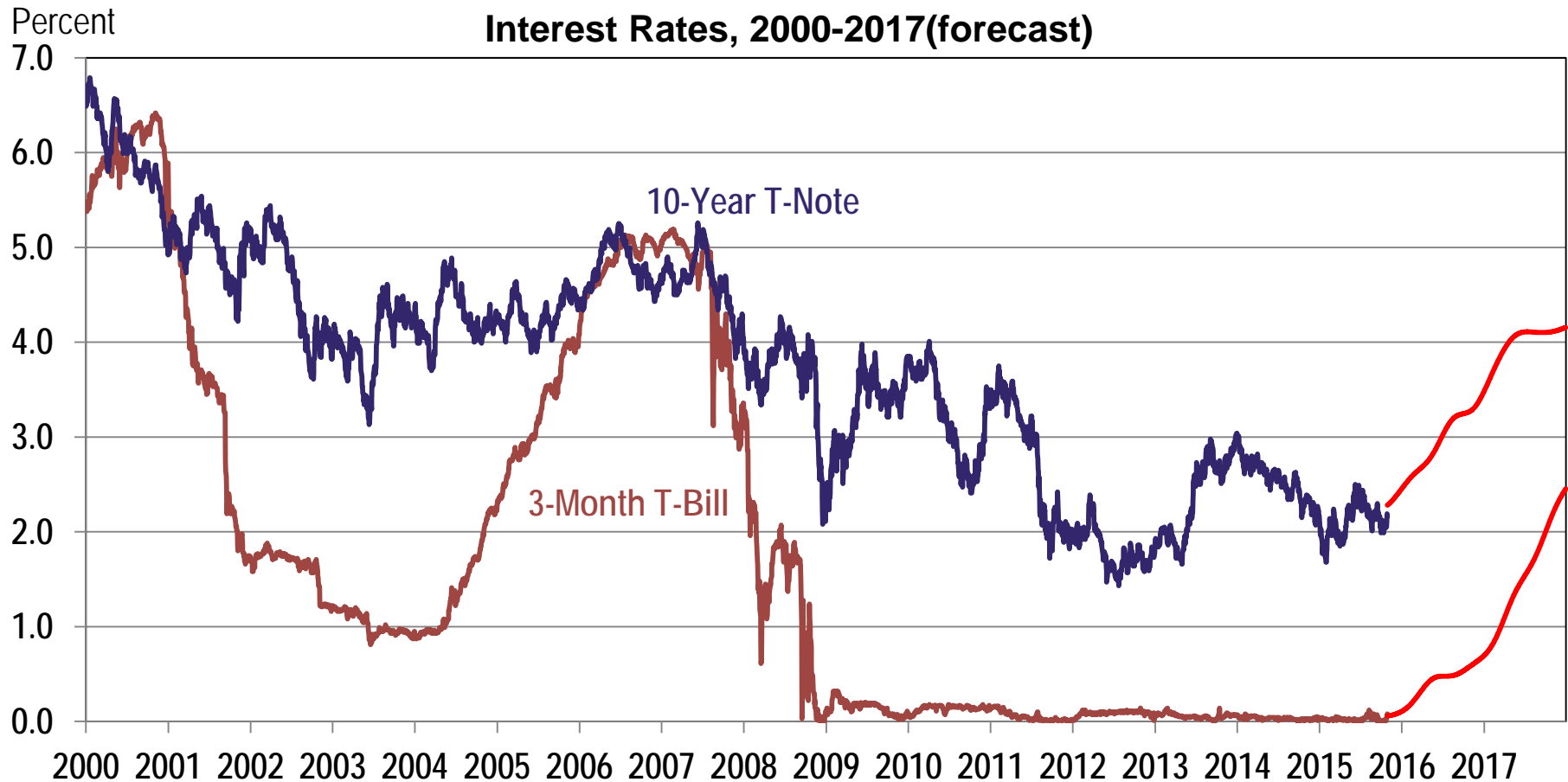
# The FED

- QE 1
- QE 2
- Fed promises near zero interest rates until mid-2013, 2014, 2015, 2016, 2017?
- Large balance sheet
- Key Rate Change in December?



Source: Federal Reserve Balance Sheet.

# Interest Rates



Source: Federal Reserve and Moody's Analytics.



# The Colorado Economy

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(Ed Andrieski)



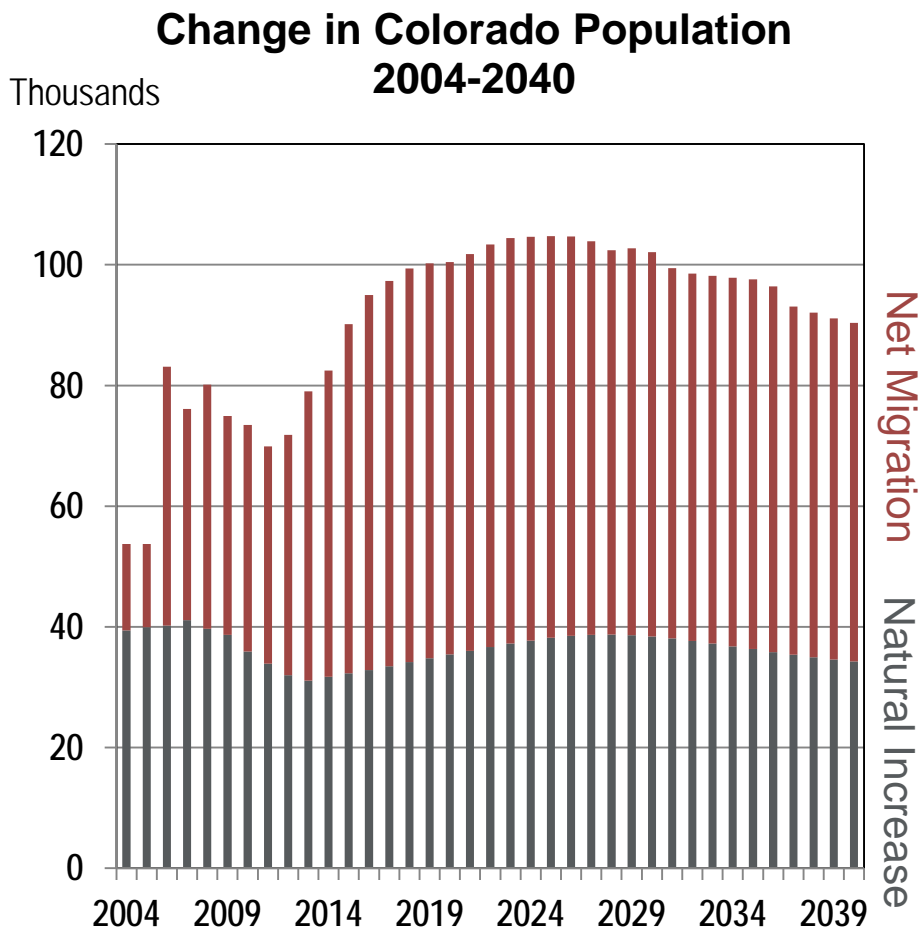
(Cameron Redwine)

# Colorado Rankings

Metric	1-Year	3-Year	5-Year	10-Year
Real GDP Growth	5	3	9	9
Employment Growth	21	6	5	5
Population Growth	4	3	4	6
Personal Income Growth	7	1	3	9
PCPI Growth	9	12	23	29
PCPI	14	16	13	12
Average Annual Pay Growth	8	16	20	20
Average Annual Pay	13	12	12	12
Unemployment Rate	13	27	29	22
Labor Force Growth	38	17	12	7
FHFA Home Price Index	1	5	6	4

Data Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, U.S. Census Bureau, Federal Housing Finance Agency, and the Colorado State Demography Office. BRD calculations. Note: 1-year, 3-year, and 5-year are based on the compound annual growth rate.

# Change in Population



Source: Colorado Demography Office.

**4th-fastest state for percentage growth**

**8th-fastest state for absolute growth**

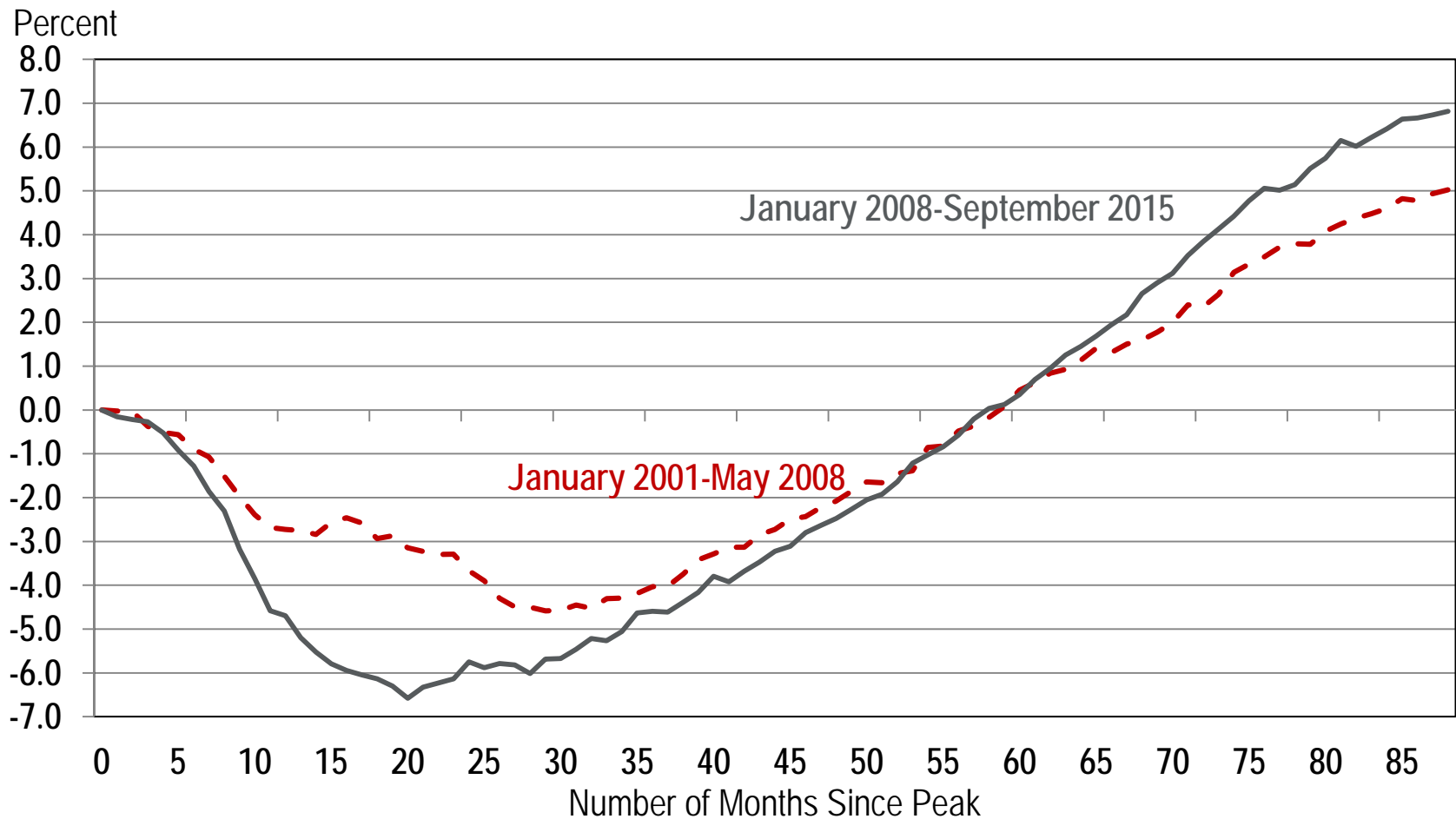
**22nd-most populated state in nation**

**Continued net migration into the state**

**83% of population along Front Range**

# Colorado Employment

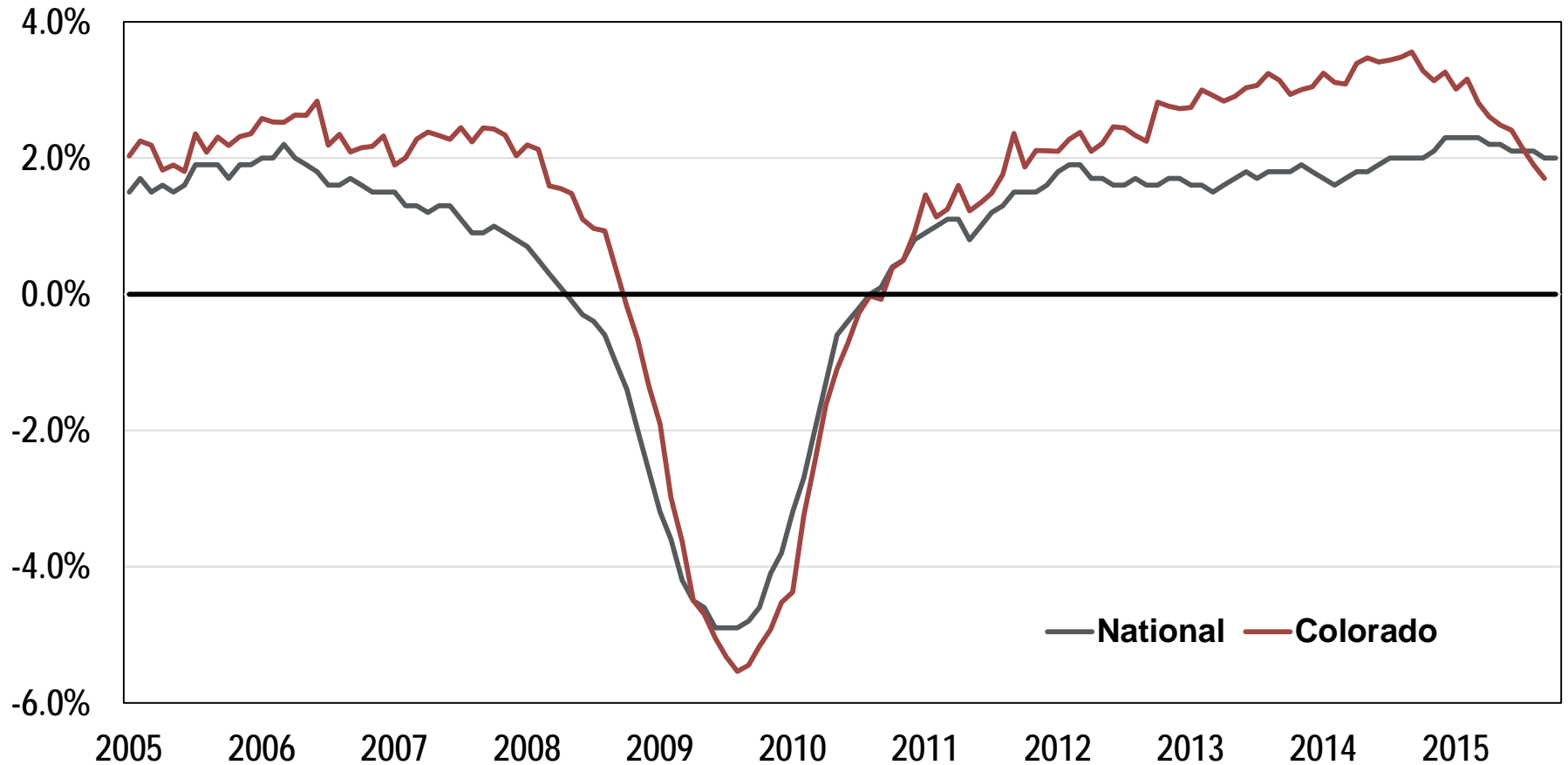
## Months to Recovery



Source: Bureau of Labor Statistics (Seasonally Adjusted).

# National and Colorado Job Growth

Year-over-Year Employment Percent Change

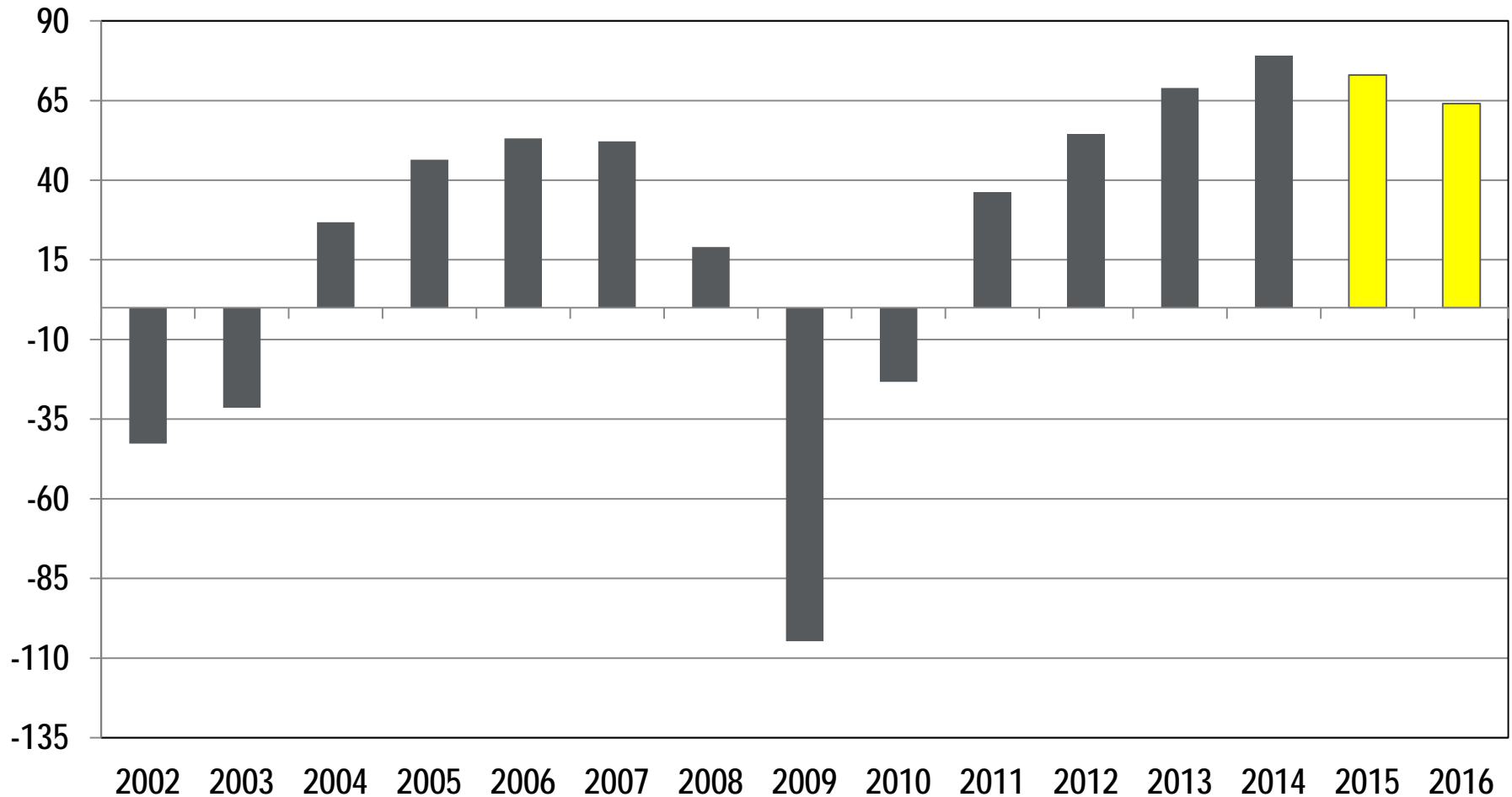


Source: Bureau of Labor Statistics, CES.

# Colorado Employment

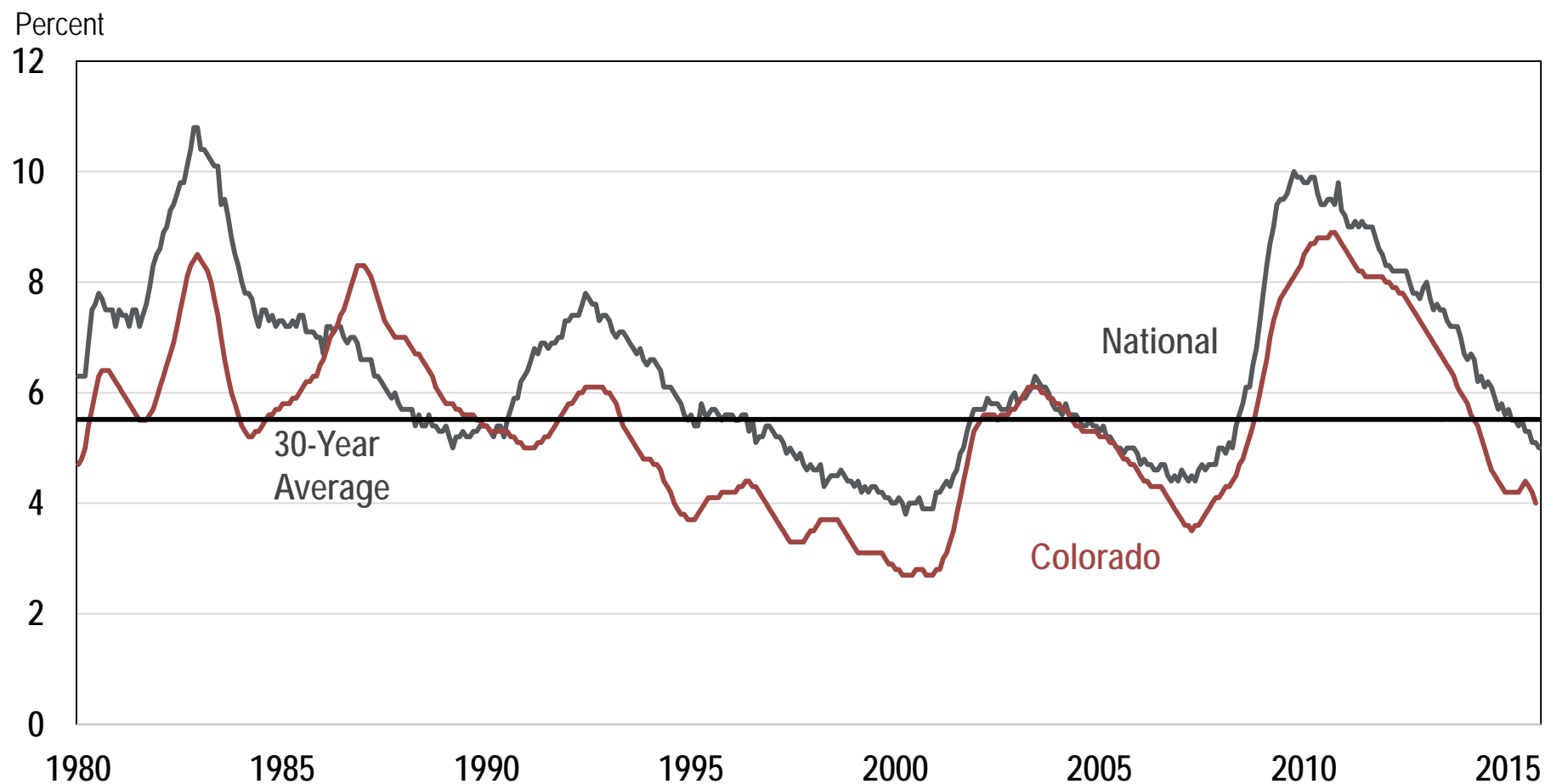
## Workers Added 2002-2016 (Projected)

Thousands



Sources: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

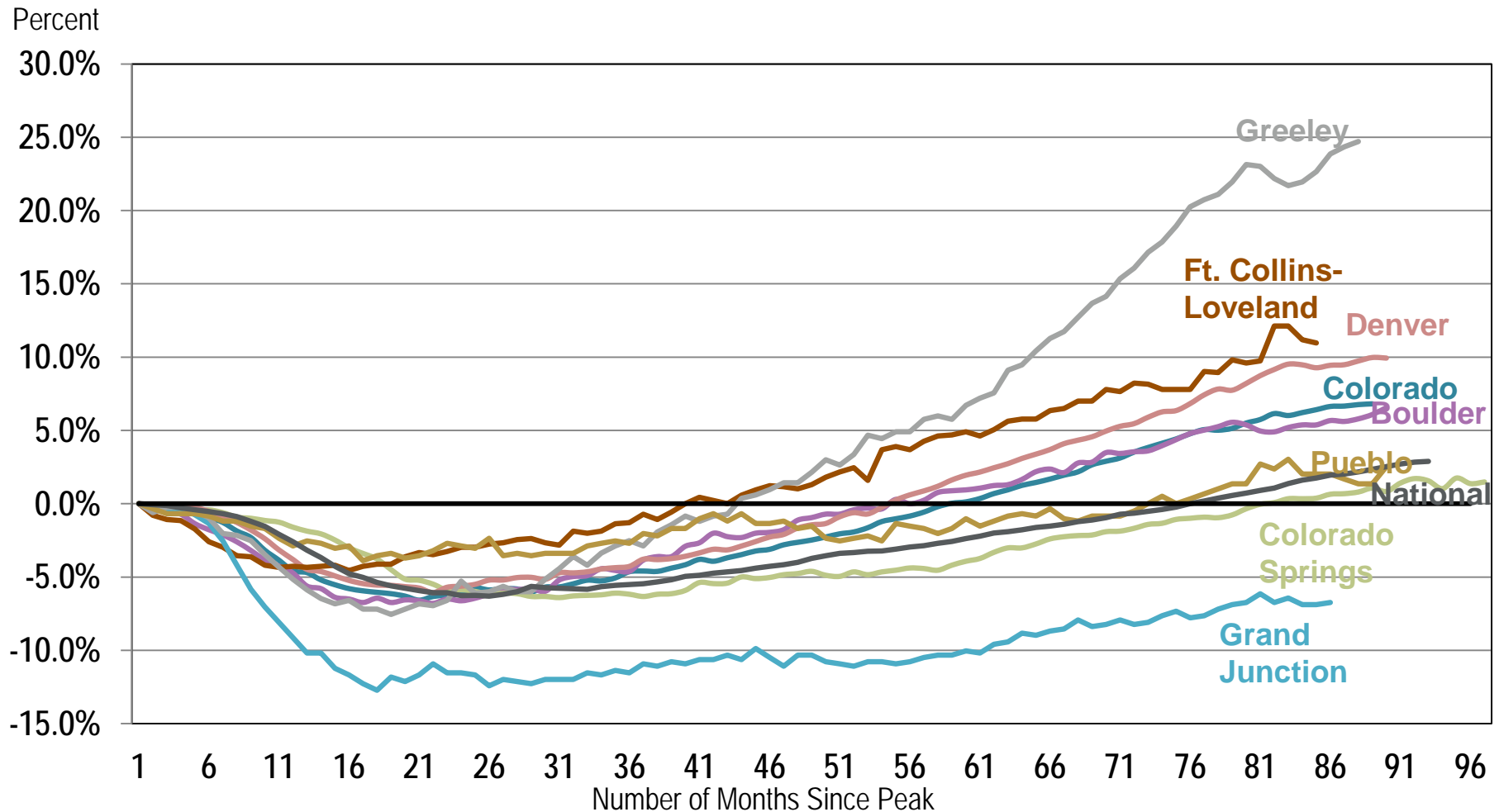
# Unemployment Rate



Source: Bureau of Labor Statistics, CES.

# Employment Recovery

National, State, and Local

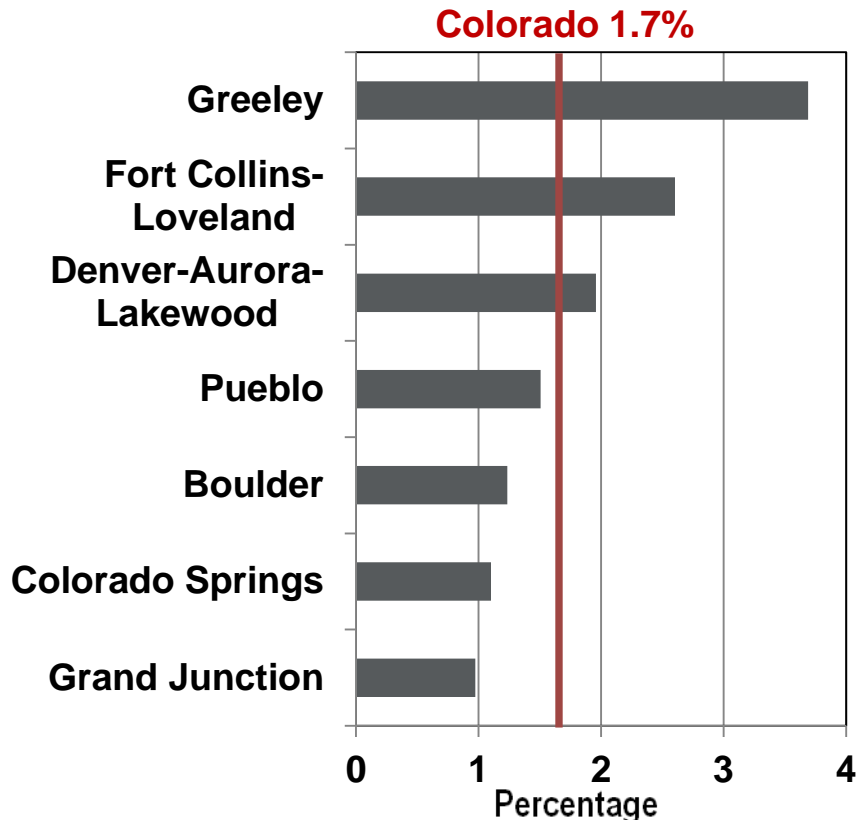


Source: Bureau of Labor Statistics (Seasonally Adjusted).

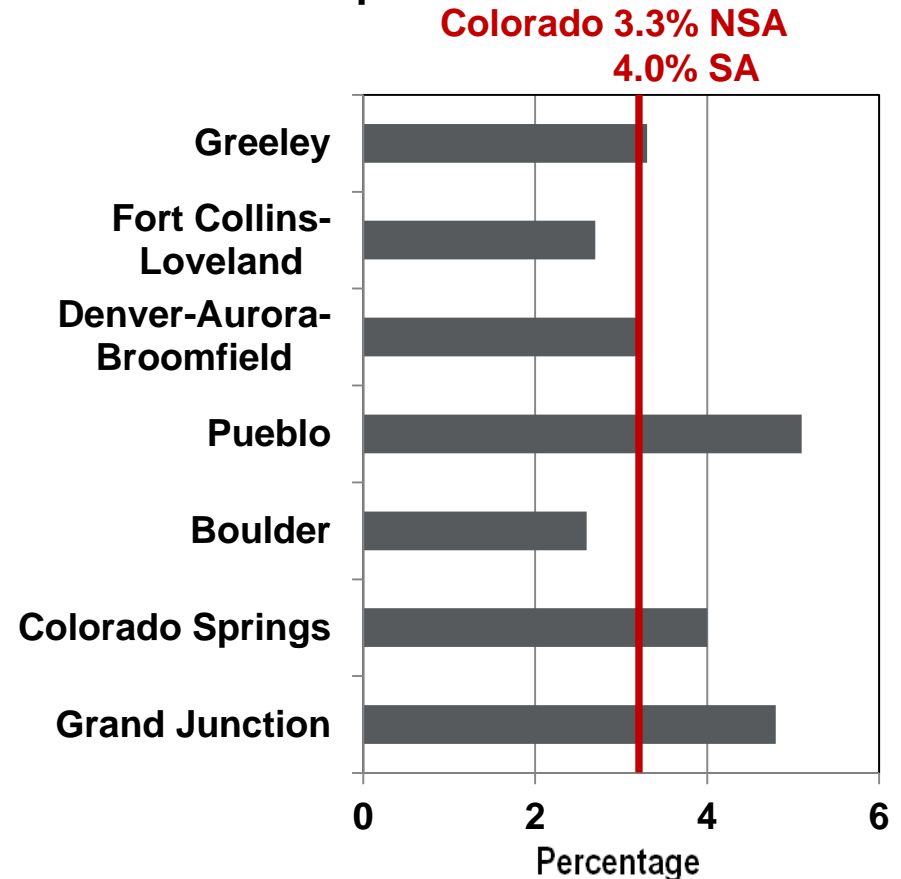


# Regional Employment Growth and Unemployment

Employment Growth Rate,  
September 2015 YoY



Unemployment Rate  
September 2015

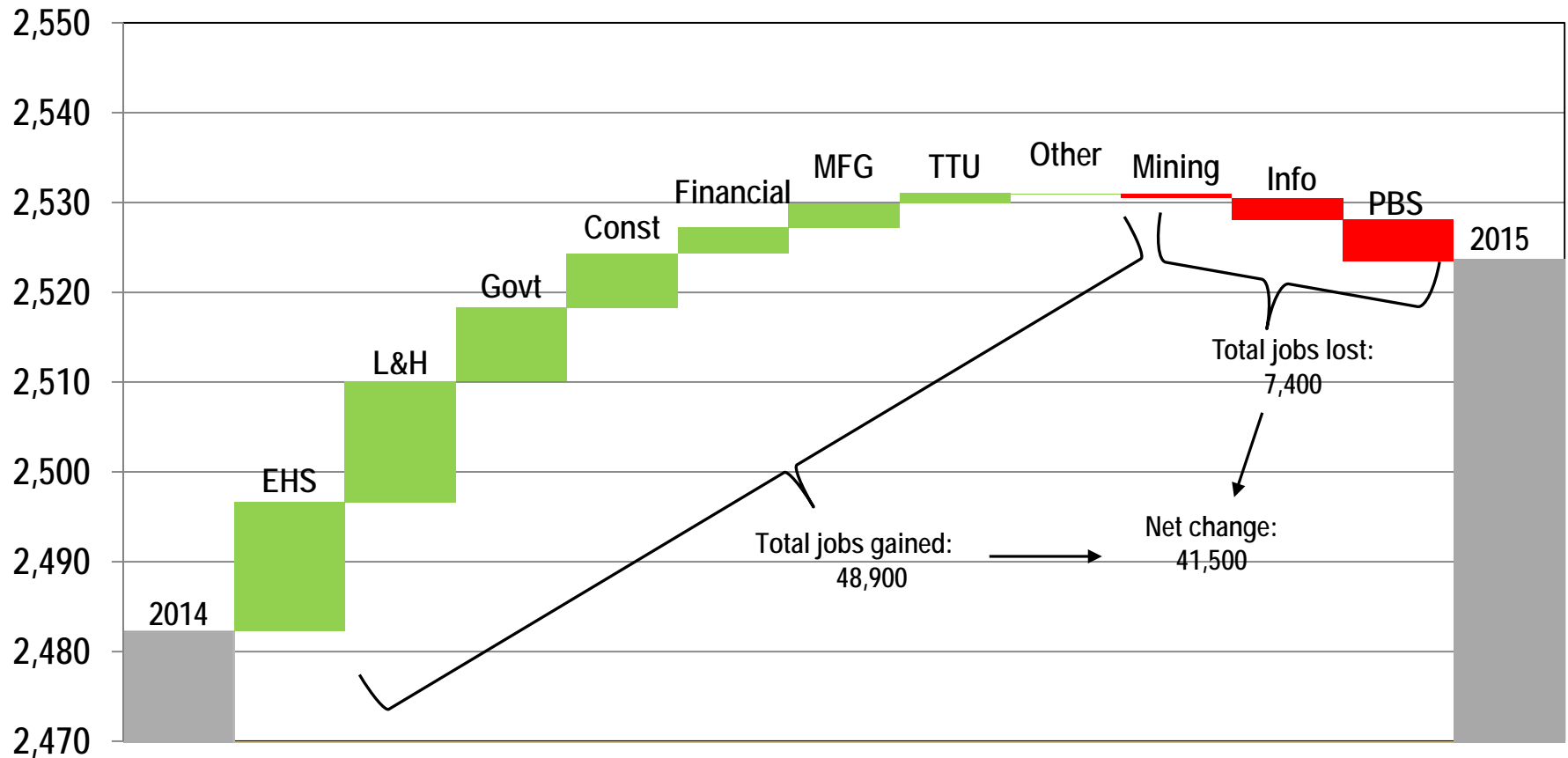


Source: Bureau of Labor Statistics, Current Employment Statistics.

# Colorado Industry Growth

September 2014 – September 2015

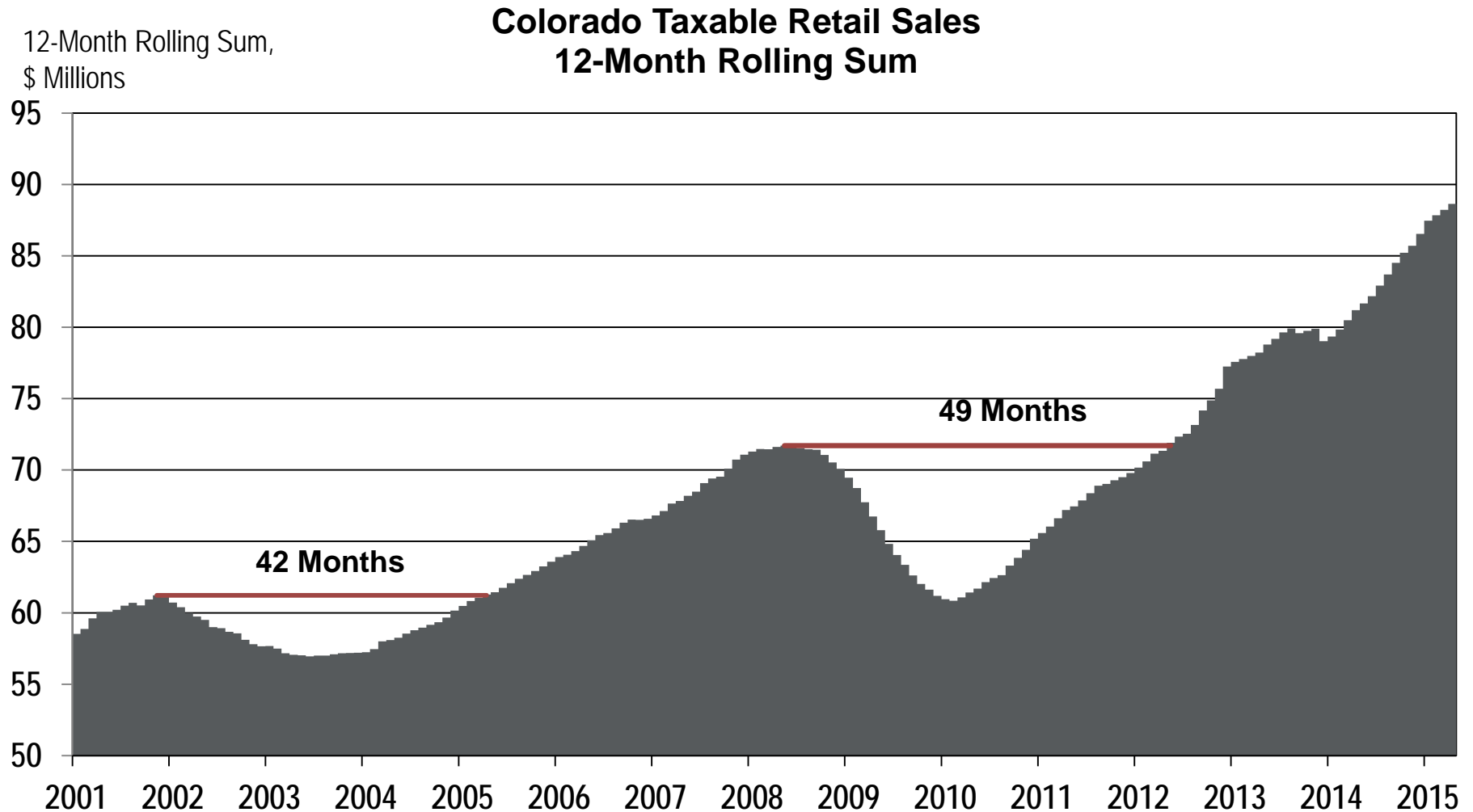
Employment in Thousands



Source: Bureau of Labor Statistics, Current Employment Statistics (SA).

# Colorado Taxable Retail Sales

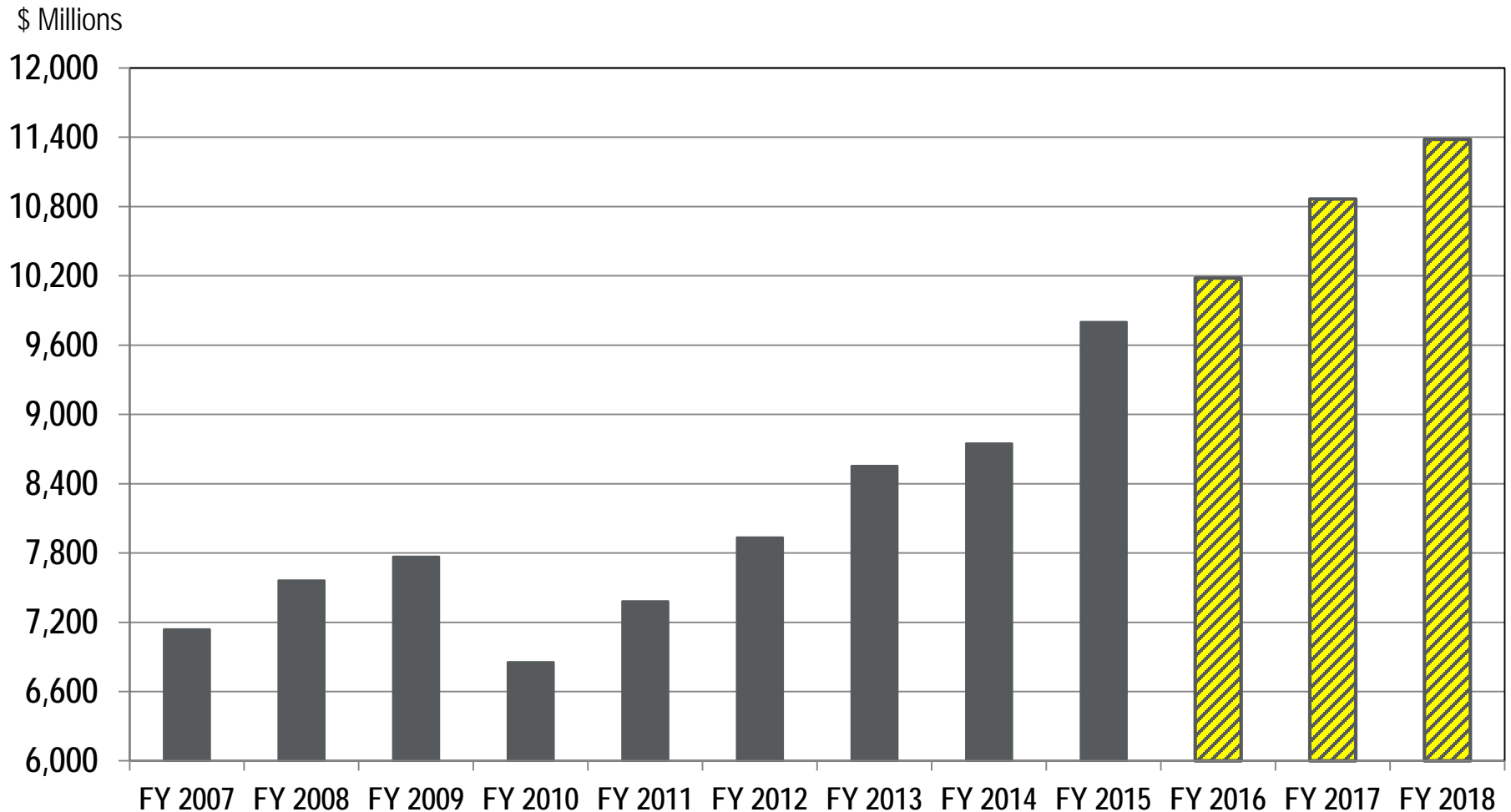
## 12-Month Rolling Sum



Sources: Colorado Department of Revenue and Colorado Business Economic Outlook Committee.

# Colorado General Fund

Gross Revenue (excluding reserves, diversions, and transfers)



Source: Colorado Office of State Planning and Budgeting, excluding reserves, diversions, and transfers, December 2014.

# Housing and Construction

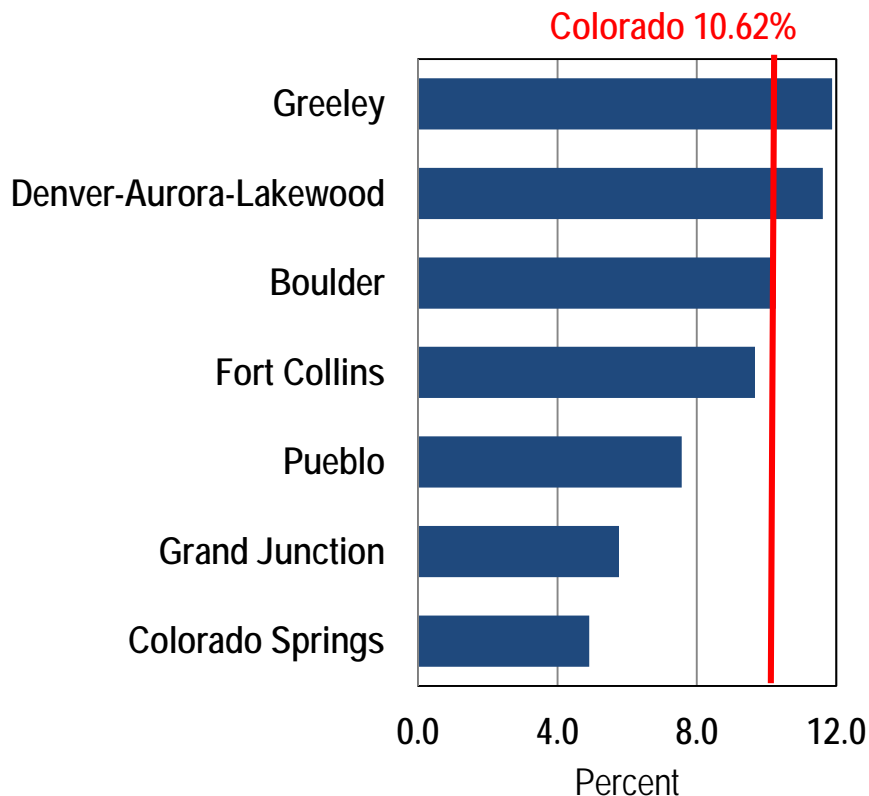
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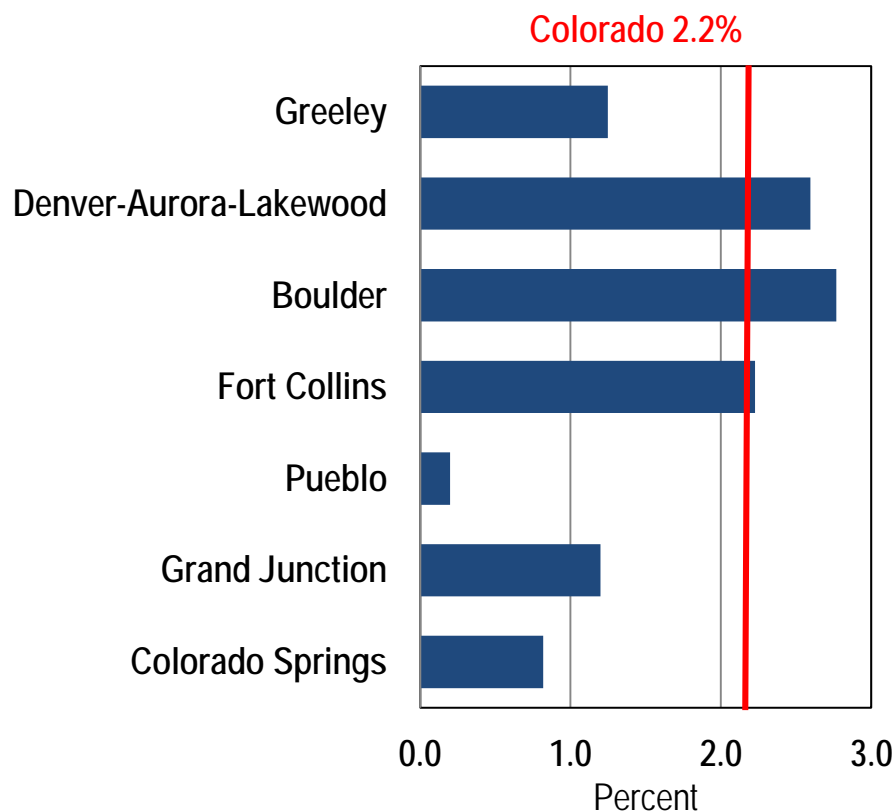
# Federal Housing Finance Agency (FHFA)

## House Price Index

**Federal Housing Finance Agency  
Home Prices by MSA  
Q2 2014 – Q2 2015**



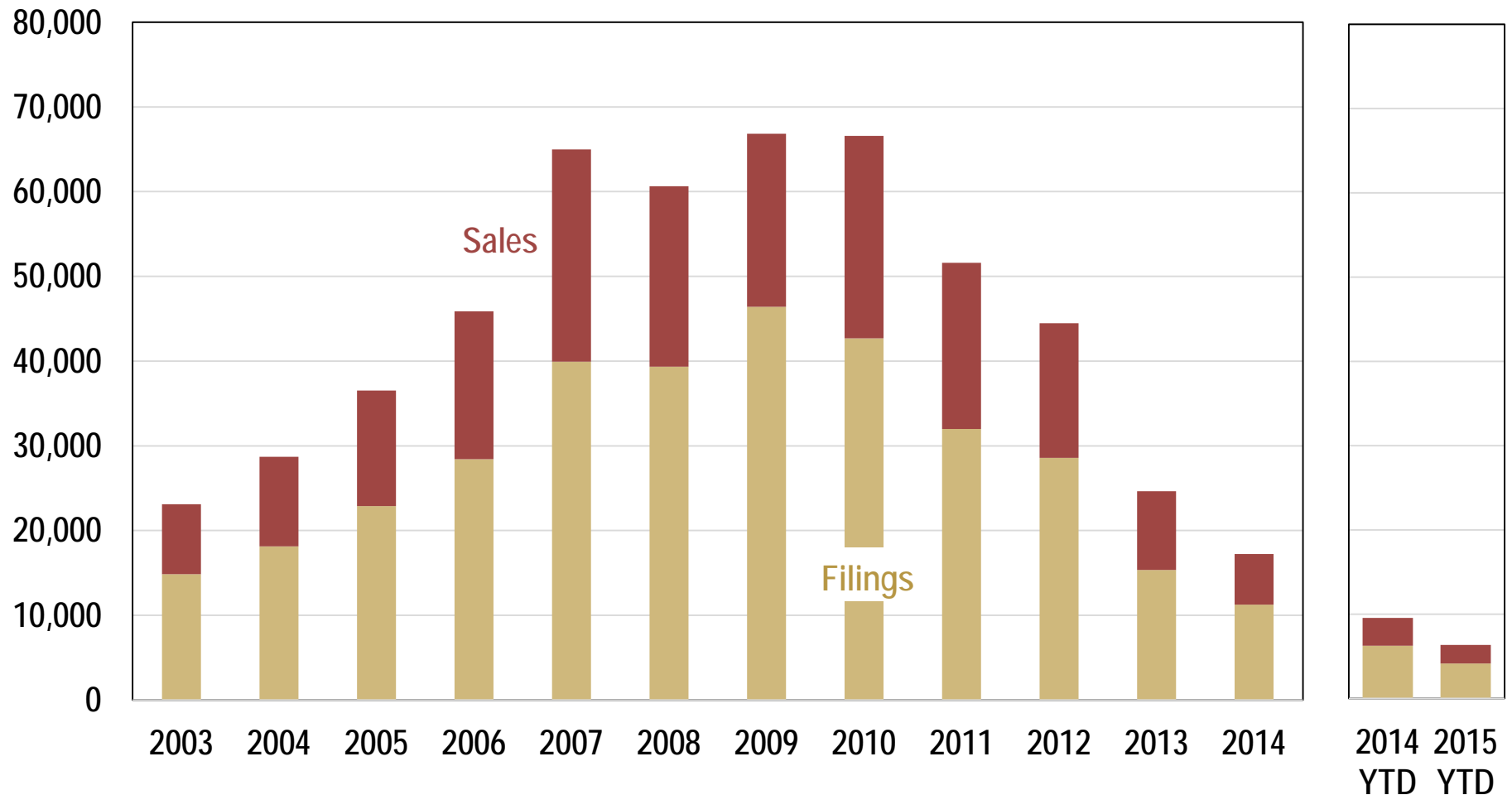
**Federal Housing Finance Agency  
Home Prices by MSA  
CAGR Q2 2005 – Q2 2015**



Source: Federal Housing Finance Agency, All Transactions Indexes.

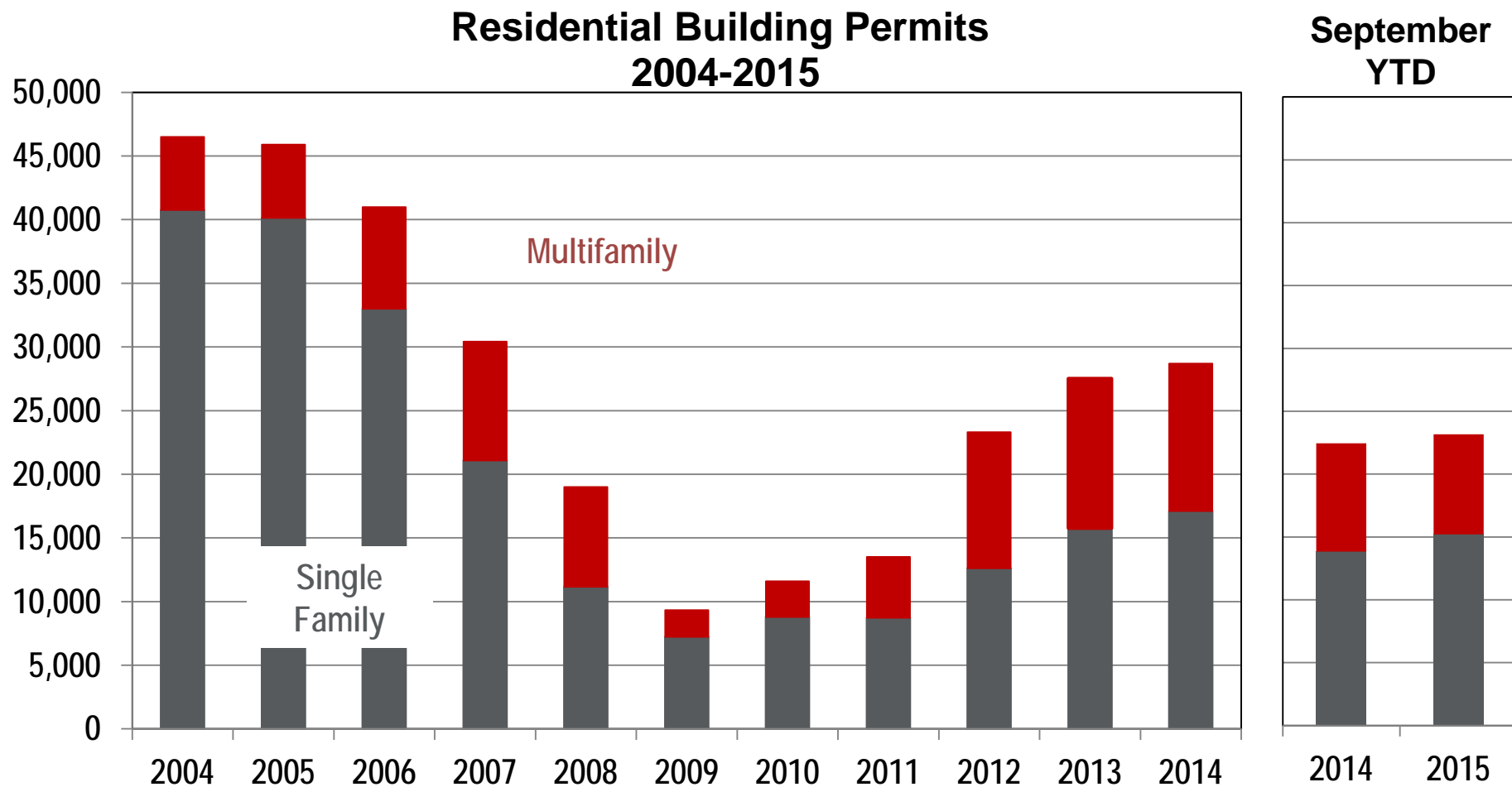
# Colorado Foreclosures

## 2003-2015



Source: Colorado Division of Housing

# Residential Building Permits

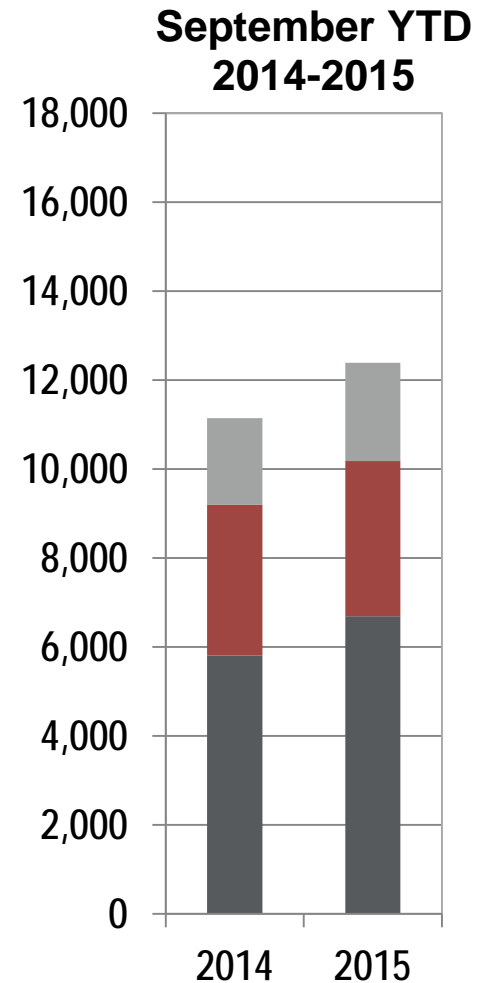
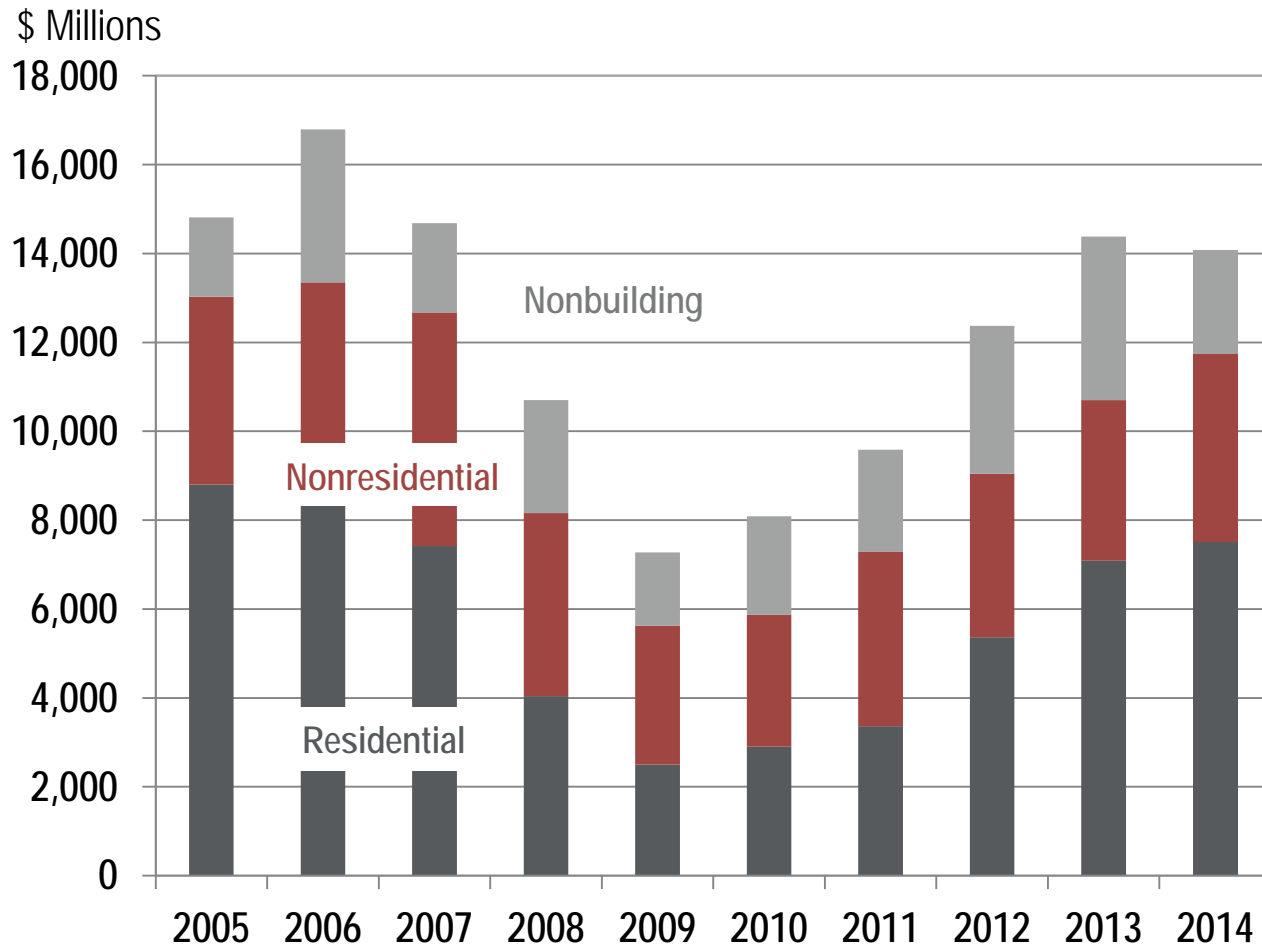


Sources: U.S. Census Bureau.



# Value of Construction

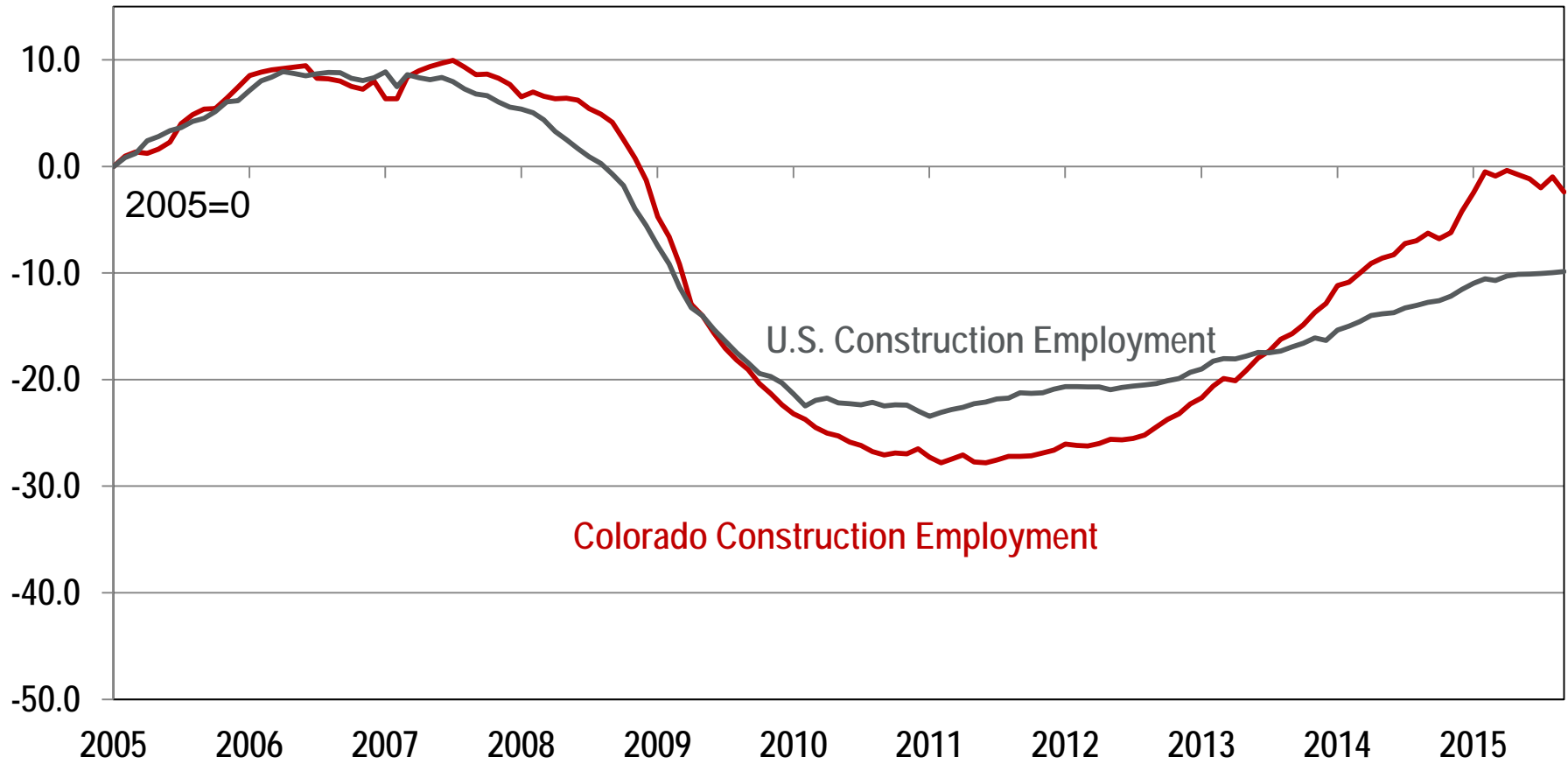
## Colorado 2005-2014



Source: McGraw-Hill Construction.

# 10-Year Construction Employment

Colorado vs. National Indexed Growth



Source: Bureau of Labor Statistics

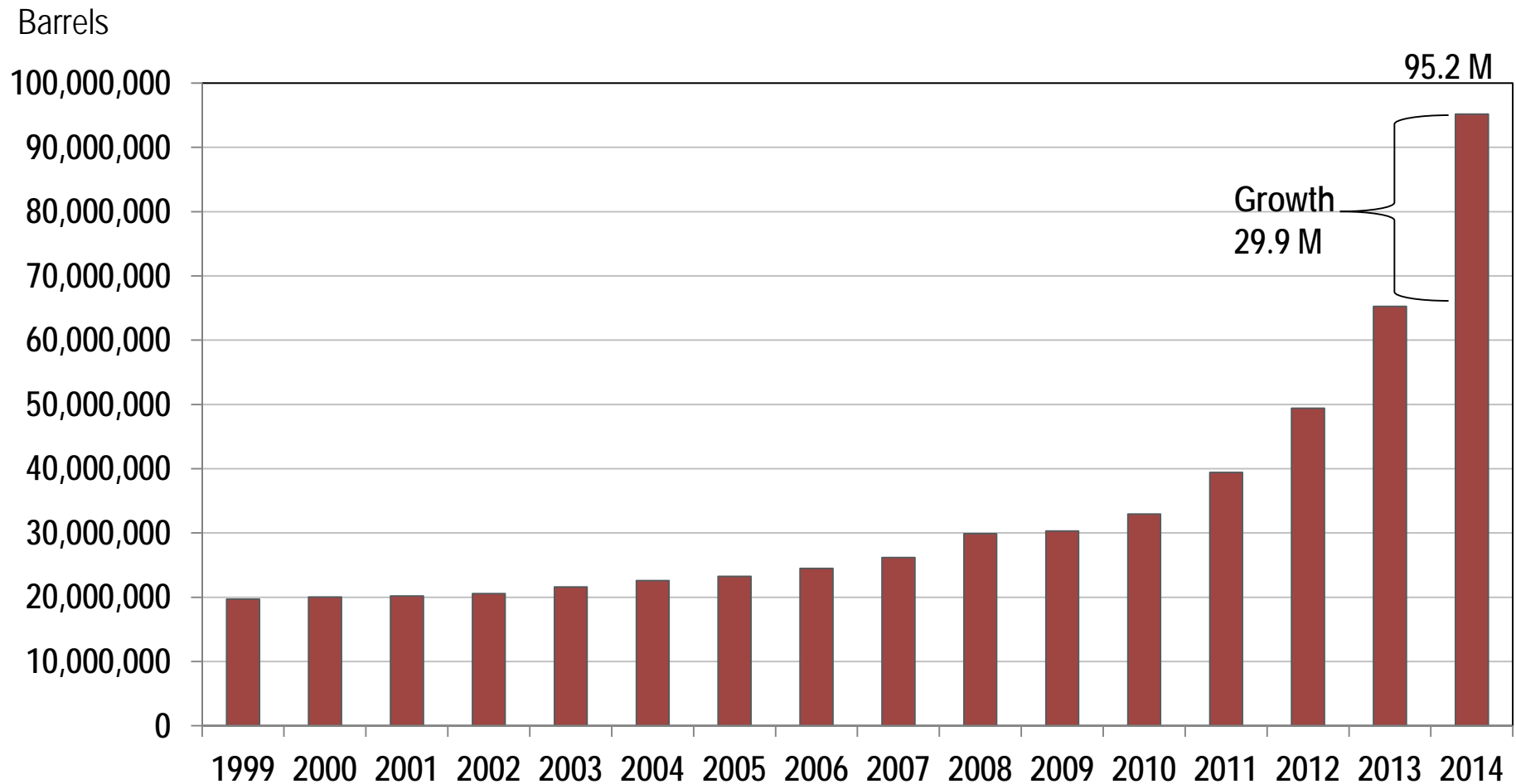
# WTI Oil Price

Dollars per Barrel



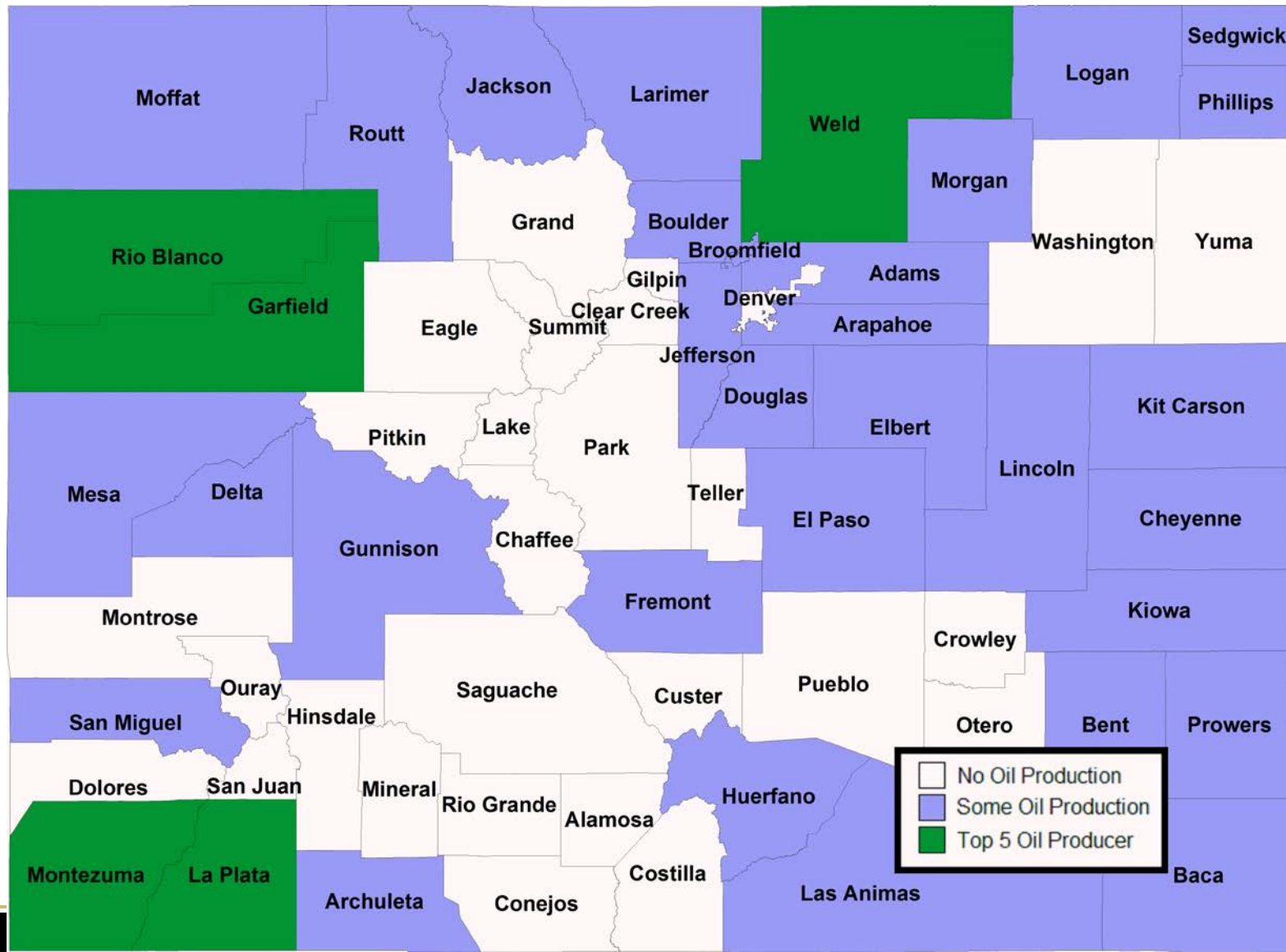
Source: Energy Information Association (EIA), Cushing, OK WTI Spot Price FOB.

# Colorado Oil Production



Source: Colorado Oil and Gas Conservation Commission.

# Concentration of Taxable Production







# Thank You

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