cber.co
Review of Colorado Employment Data Through July 2018

Colorado-based Business and Economic Research
Prepared
August 25, 2018

Overview of Analysis

This chartbook provides a series of graphs, charts, discussions, and data that tell the story about the changes in the U.S. and Colorado economies for the first seven months of 2018. It is divided into the two sections listed below. The U.S. economy is slightly stronger than in 2017. The release of the Colorado employment data for July shows that average employment is 72,600 jobs greater than the same period in 2017. At the end of 2017, all Colorado economists projected weaker job growth in 2018. The current level of strong job growth is a pleasant surprise!

U.S. Economy

- ✓ Real Gross Domestic Product and Trade Balance
- ✓ Employment, Unemployment and Labor Force Participation Rate
- ✓ Leading and Coincident Index – U.S. vs. Colorado
- ✓ S&P 500 Performance and Volatility and Crude Oil Prices
- ✓ Mortgage Rates, Construction Spending, and Housing Prices
- ✓ Debt and Savings
- ✓ Inflation, Index for Services and Manufacturing, Retail Sales, and Light Truck and Auto Sales
- ✓ Summary and Outlook

- ✓ Special Feature: Outdoor Recreation Cluster

The Colorado Economy

- ✓ Population
- ✓ Employment, Change in Employment, Unemployment and Change in Labor Force
- ✓ Employment in Strong Growth, Solid Growth, and Volatile Growth Categories
- ✓ Change in Employment in Key Sectors
- ✓ Building Permits and Housing Prices
- ✓ Oil Production, DIA Passengers, and Vehicle Registrations
- ✓ Advanced Technology
- ✓ Summary and Outlook

The complete 2018 cber.co forecast can be found at https://cber.co/economic-forecasts/cber-co-economic-forecast/ http://cber.co/economic-forecasts/

The U.S. Economy

Real Gross Domestic Product and Trade Balance

Quarterly Real GDP Growth Historical United States

Historical annualized real GDP growth by decade was:

- 1990s 3.2% (green line).
- 2000s 1.8% (red line).
- 2010s 2.1% (purple line).

Between 2010 and 2017, the annual real GDP growth ranged from 1.6% to 2.9%.

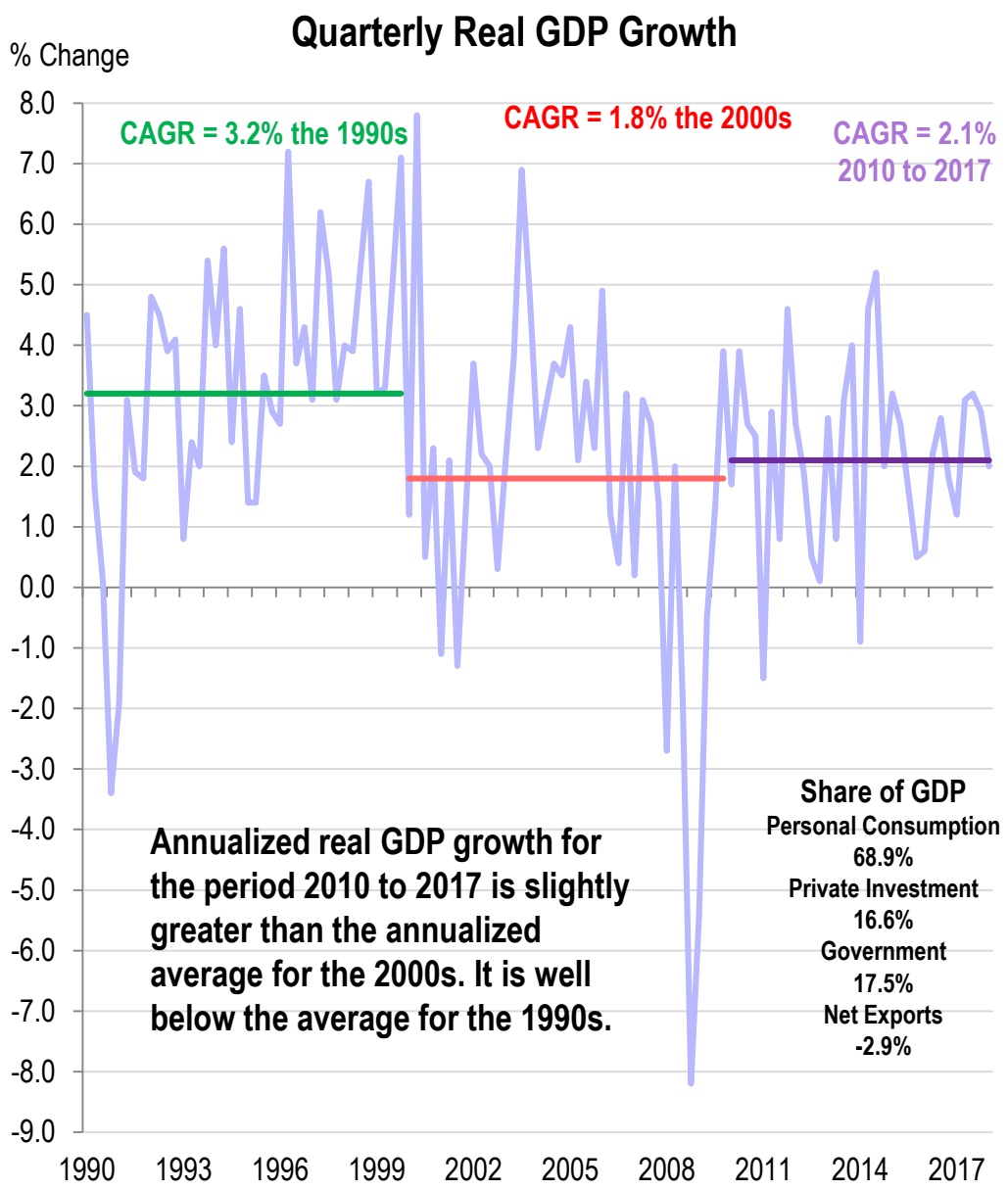
The 2017 rate of growth by quarter was:

- Q1 1.2%
- Q2 3.1%
- Q3 3.2%
- Q4 2.9%.

Annual real GDP growth for 2017 was 2.3%.

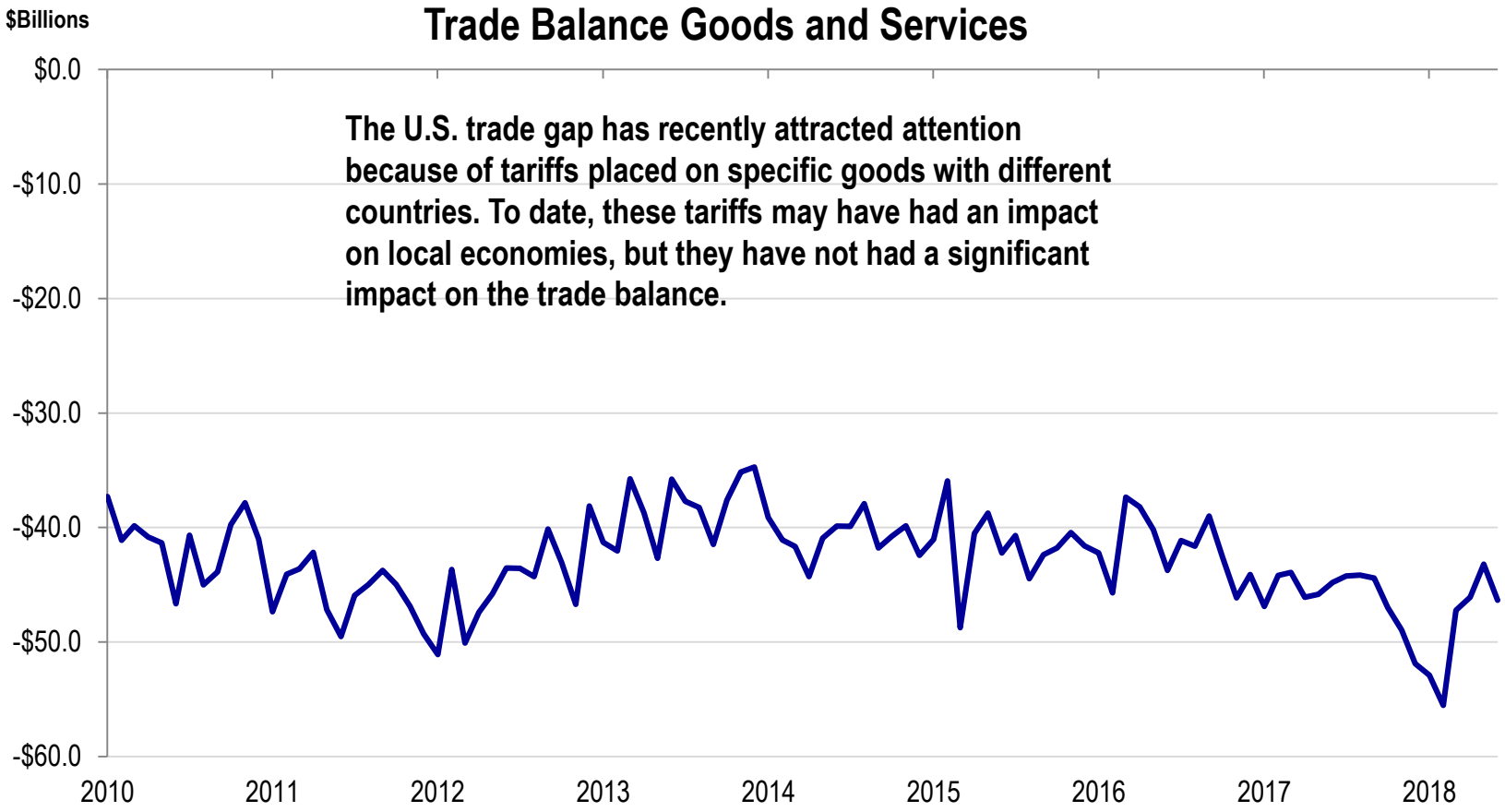
cber.co originally projected the rate of real GDP growth in 2018 would be in the range of 2.3% to 2.7%, with greater upside potential than downside risk.

Q1 2018 real GDP growth was 2.2%, followed by 4.1% in Q2. The Conference Board projects real GDP growth 3.4% in Q3, and 3.2% in Q4. Real GDP growth will taper off to 2.9% in 2019.As usual, growth will be driven by consumer spending.



Source: Bureau of Economic Analysis, The Conference Board, cber.co, Note GDP chained on 2009.

Trade Balance: Goods and Services



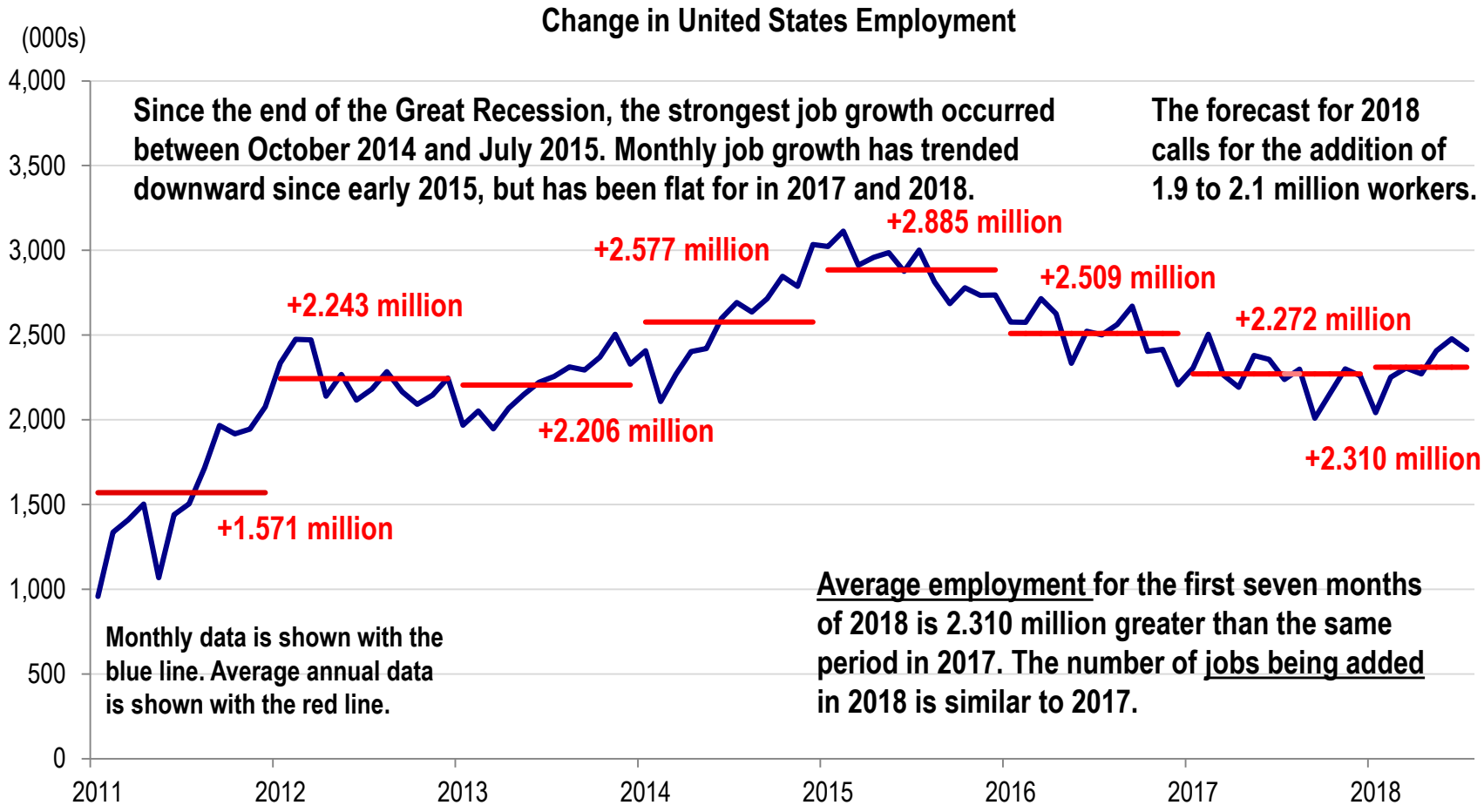
Source: FRED, SA, cber.co.

The U.S. Economy

Employment, Unemployment, and Labor Force Participation Rate

Change in United States Employment

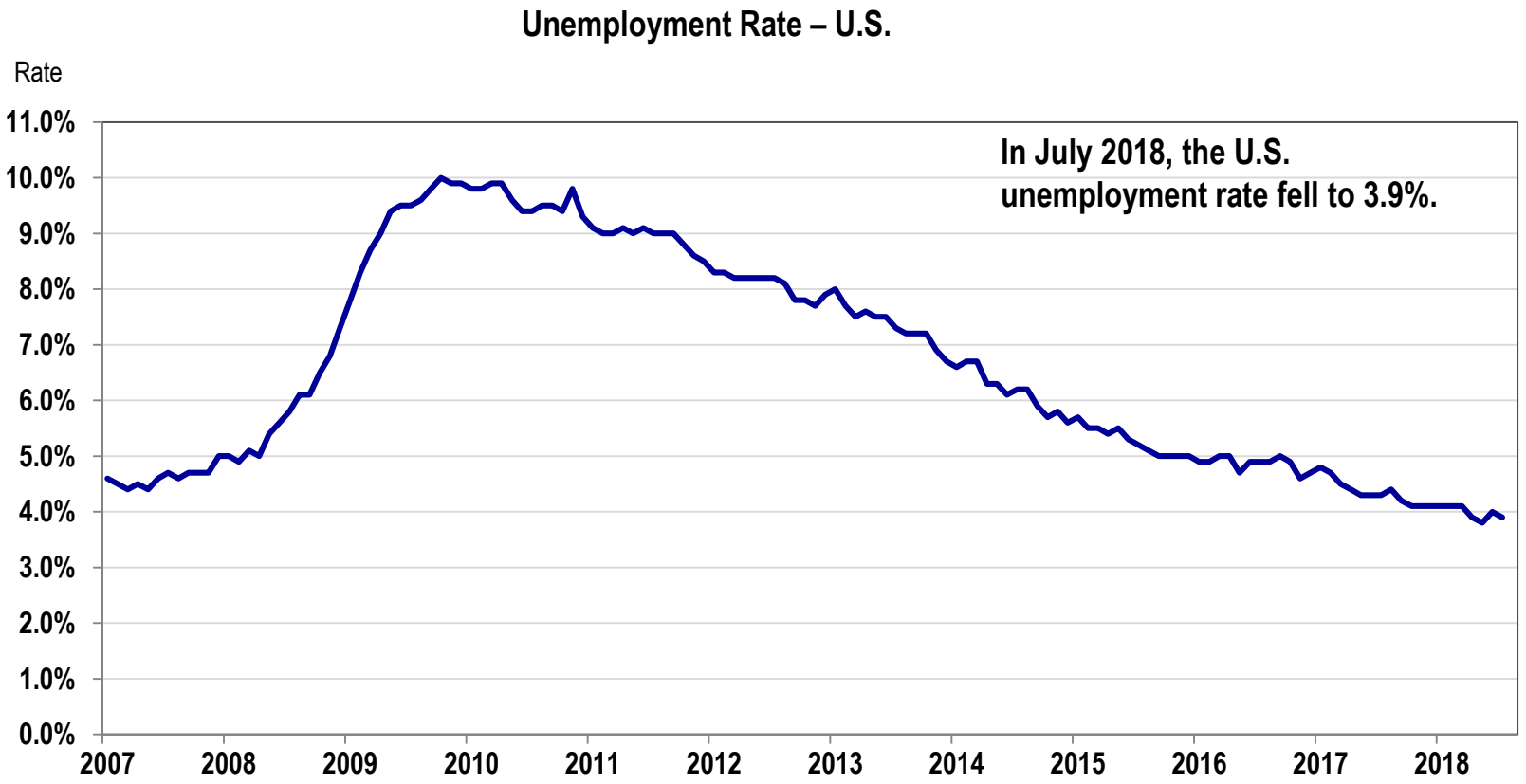
Year-Over-Year



Source: Bureau of Labor Statistics, NSA; cber.co.

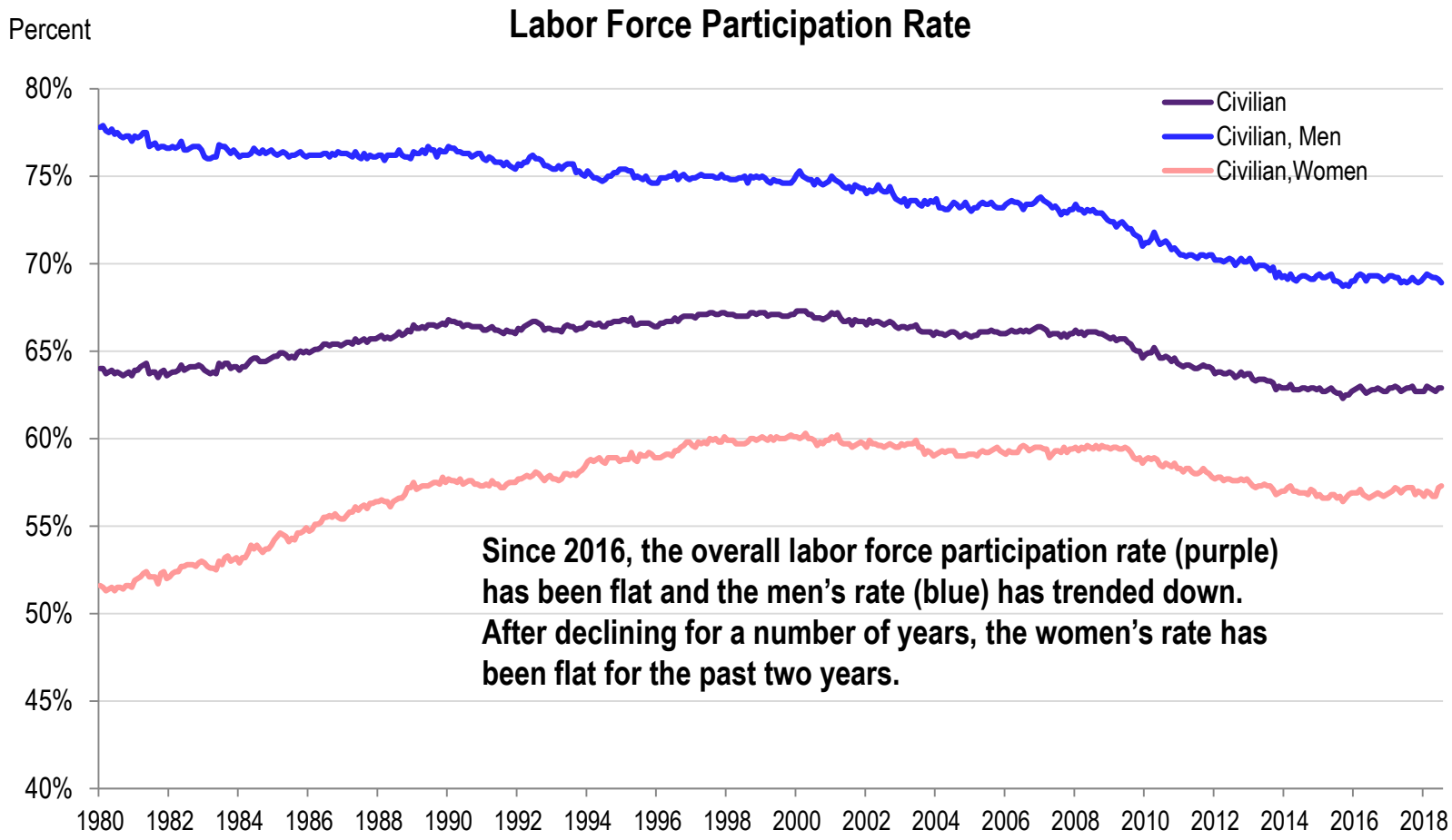
Unemployment Rate

United States



Source: Bureau of Labor Statistics, cber.co.

Civilian Labor Force Participation Rate



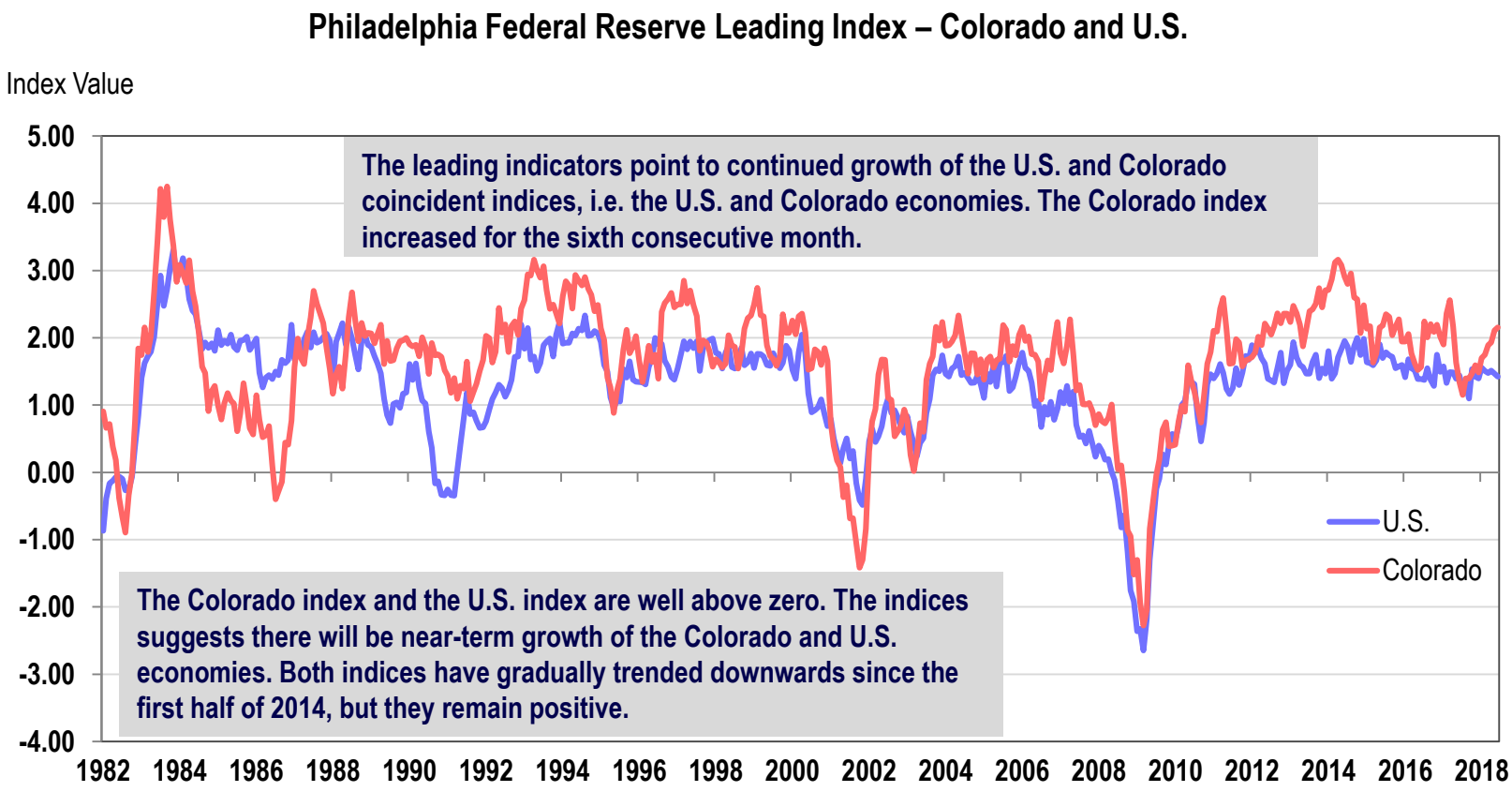
Source: Bureau of Labor Statistics, cber.co.

The U.S. Economy

Leading and Coincident Indices (U.S. and Colorado)

Philadelphia Fed Leading Index

Colorado vs. U.S.

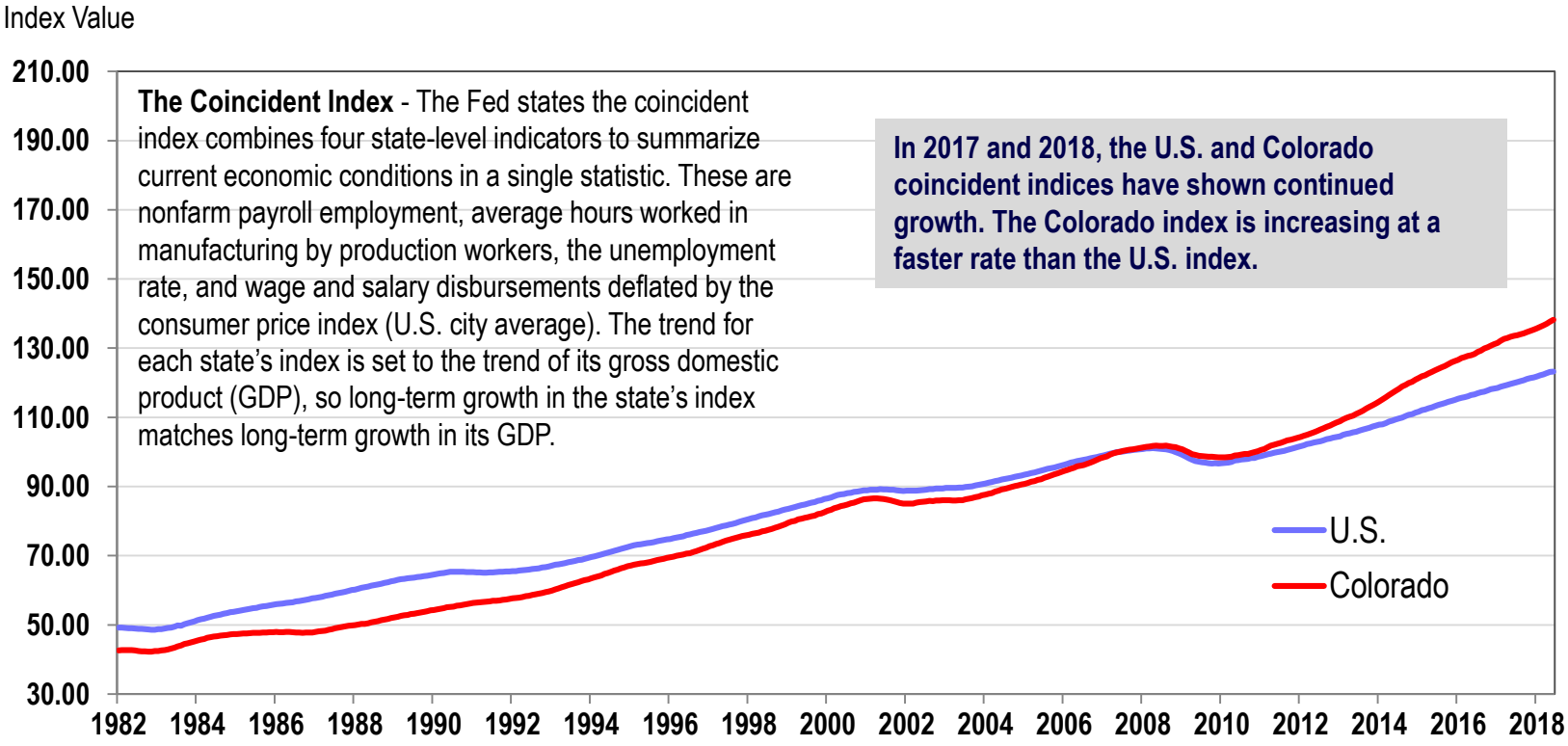


Source: Philadelphia Federal Reserve, cber.co. Note: The leading index predicts the six-month growth rate of the U.S. and state's coincident index.

Philadelphia Fed Coincident Index

Colorado vs. U.S.

Philadelphia Federal Reserve Coincident Index – Colorado and U.S.

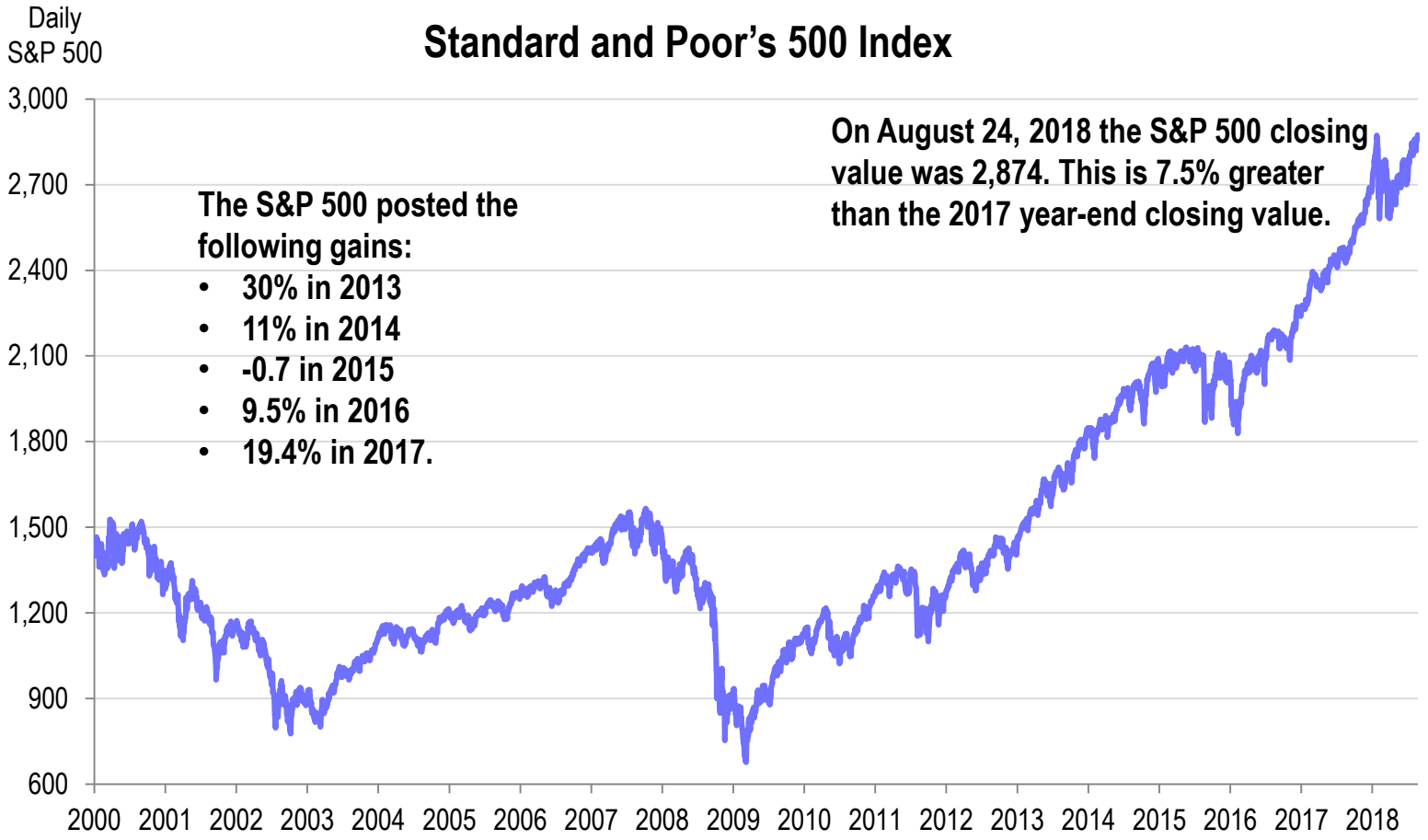


Source: Philadelphia Federal Reserve, cber.co. Note: The leading index predicts the six-month growth rate of the U.S. and state's coincident index.

United States Economy

S&P Performance and Volatility, and Crude Oil Prices

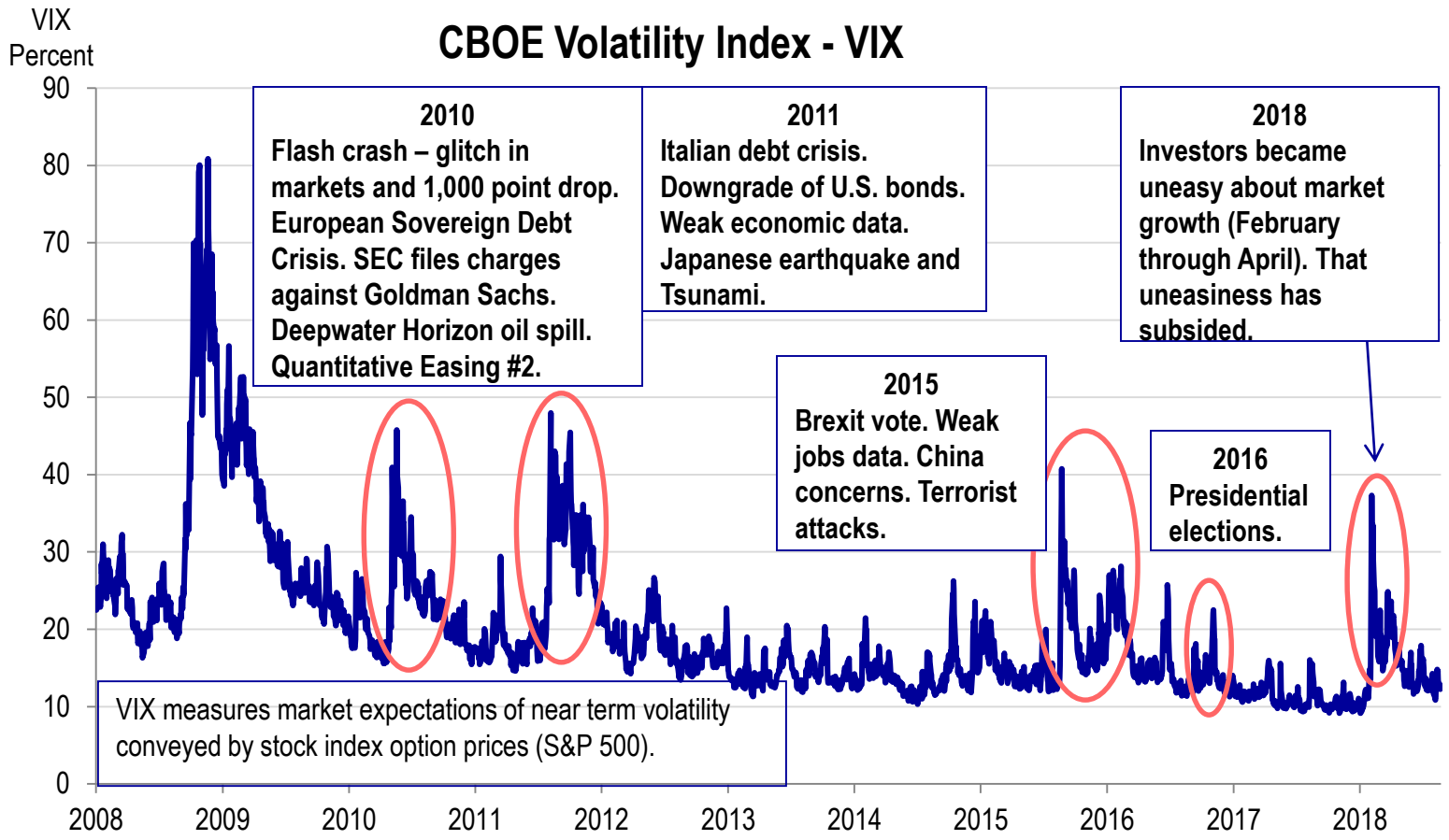
Standard and Poor's 500 Index



Source: FRED, S&P 500, cber.co.

CBOE Volatility Index

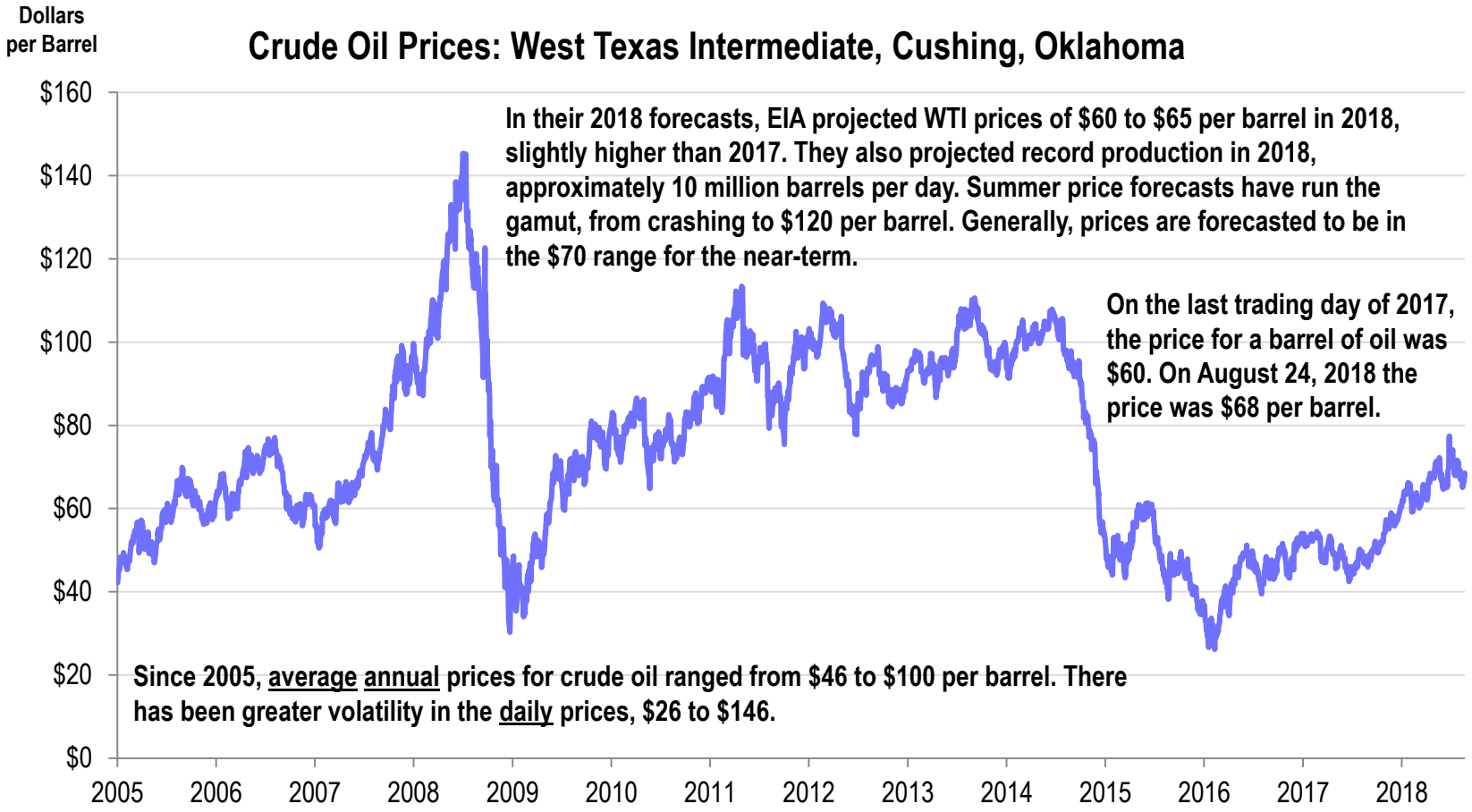
VIX (VIXCLS)



Source: FRED, Chicago Board Options Exchange, cber.co.

Crude Oil Prices

West Texas Intermediate

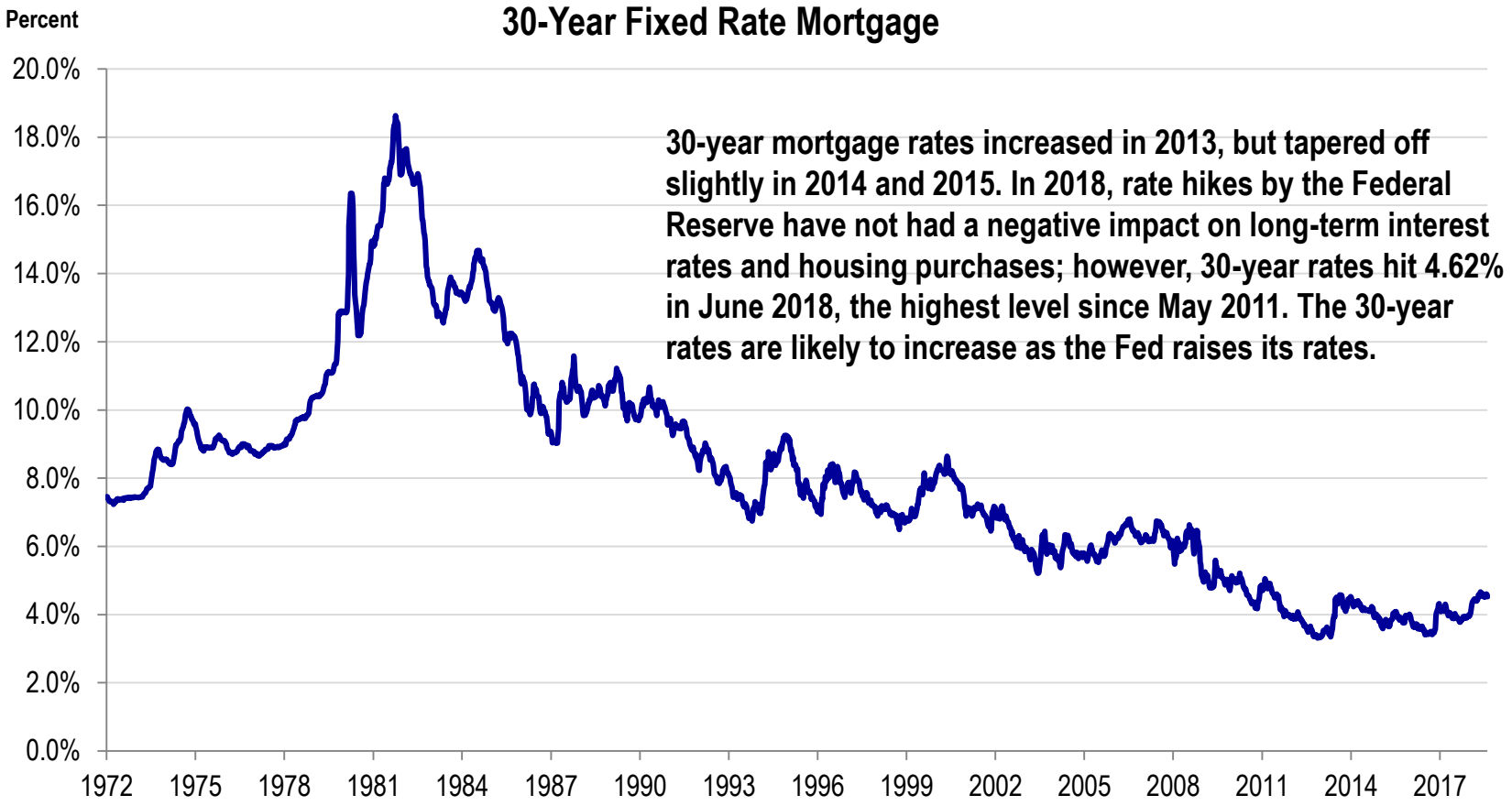


Source: FRED, EIA, cber.co.

The U.S. Economy

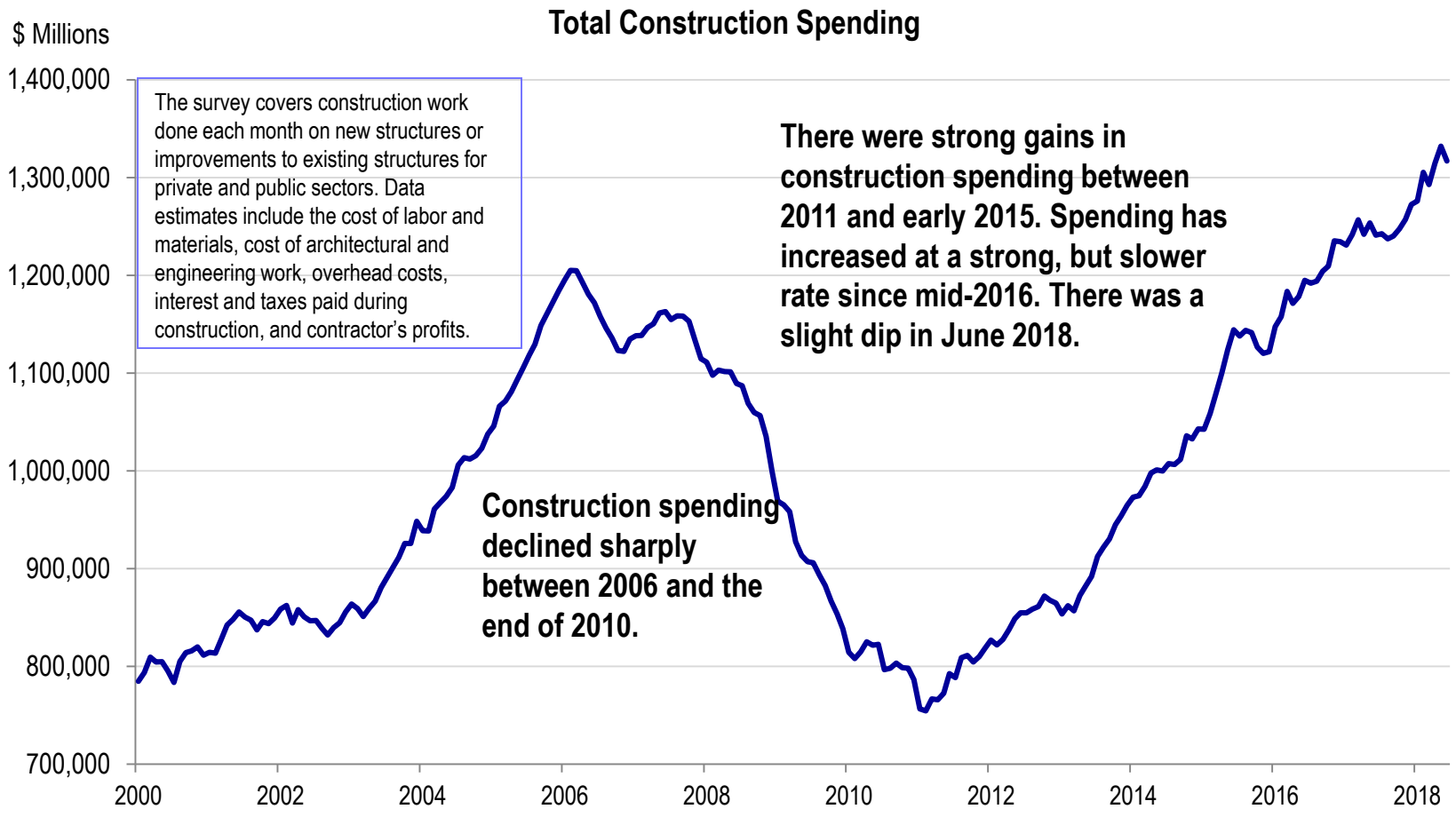
Mortgage Rates, Construction Spending, and Housing Prices

30-Year Fixed Rate Mortgage



Source: FRED, Freddie MAC, cber.co.

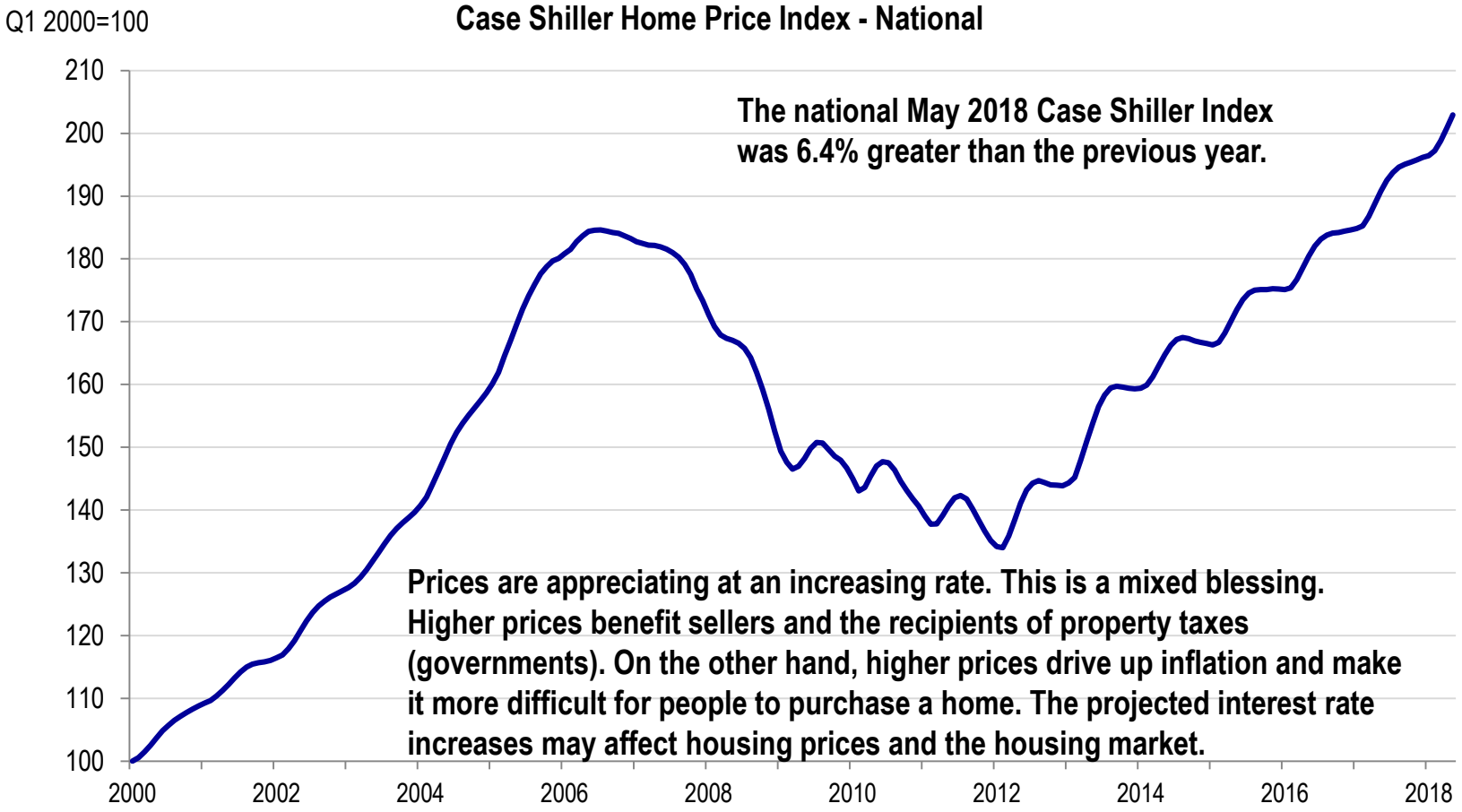
Total U.S. Construction Spending



Source: FRED, Census Bureau, not adjusted for inflation, SAAR, cber.co.

Case Shiller Home Price Index

National Index

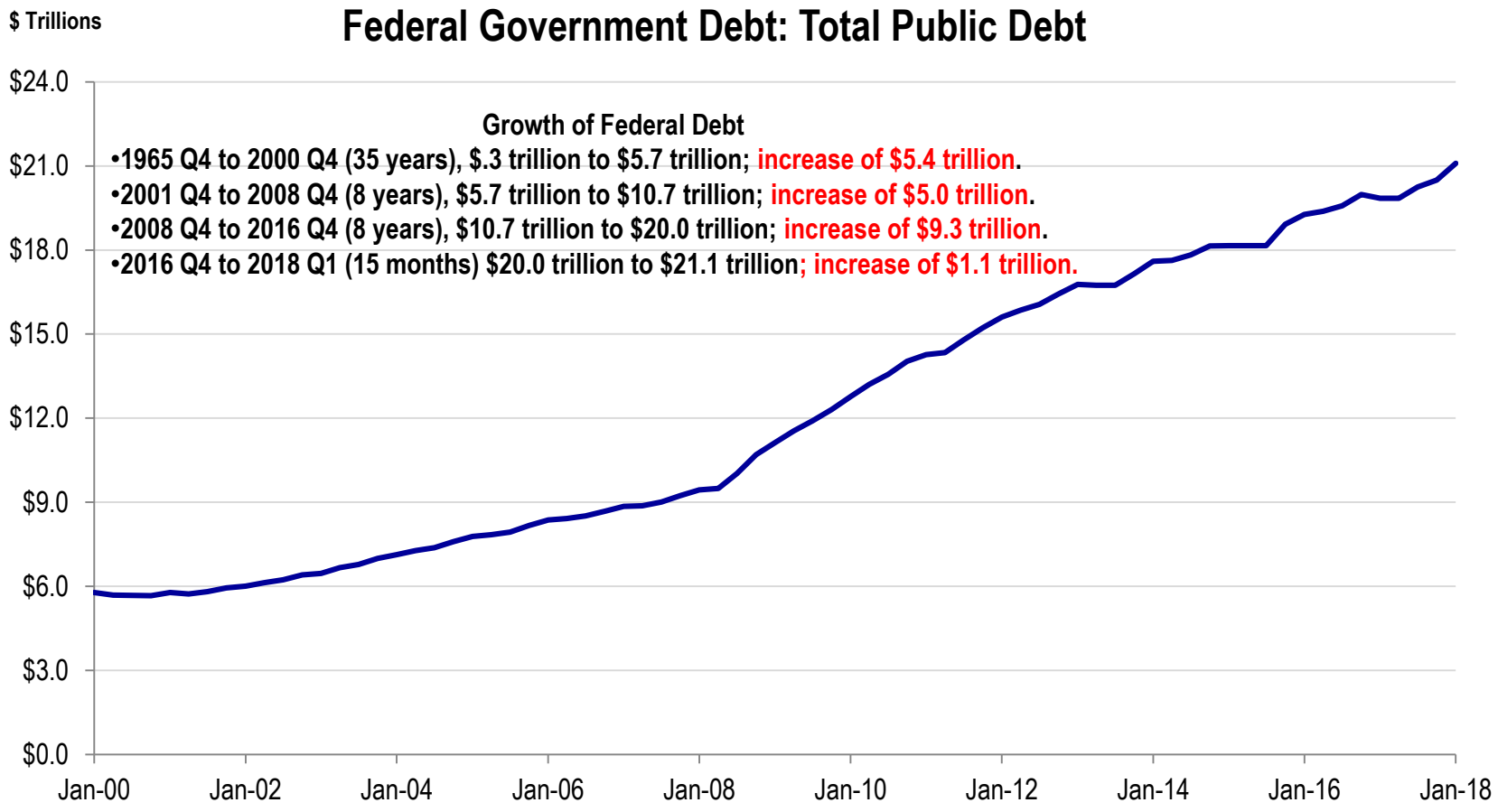


Source: S&P Case-Shiller, cber.co.

The U.S. Economy

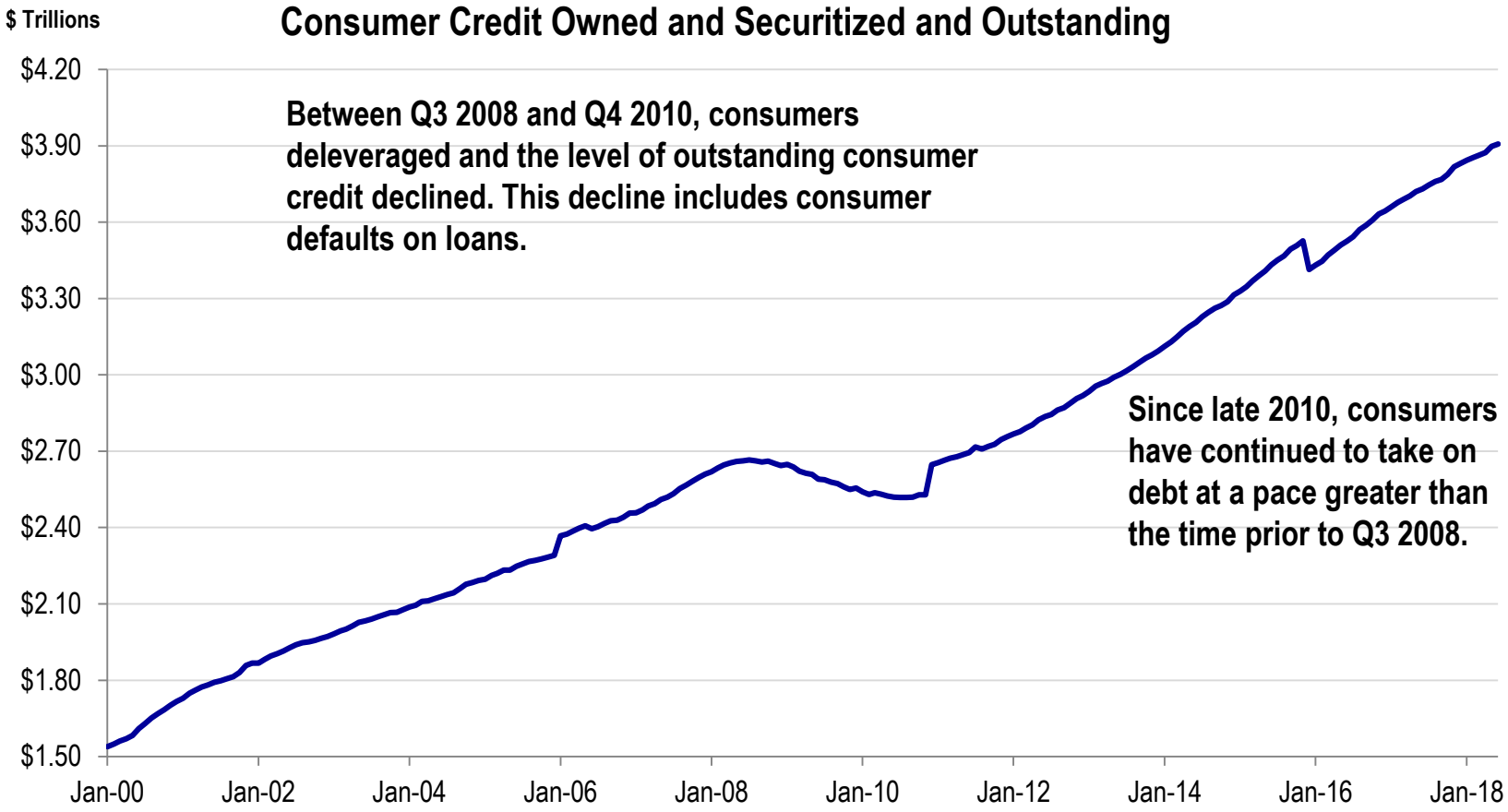
Debt and Savings

U.S. Federal Government Debt



Source: FRED, cber.co.

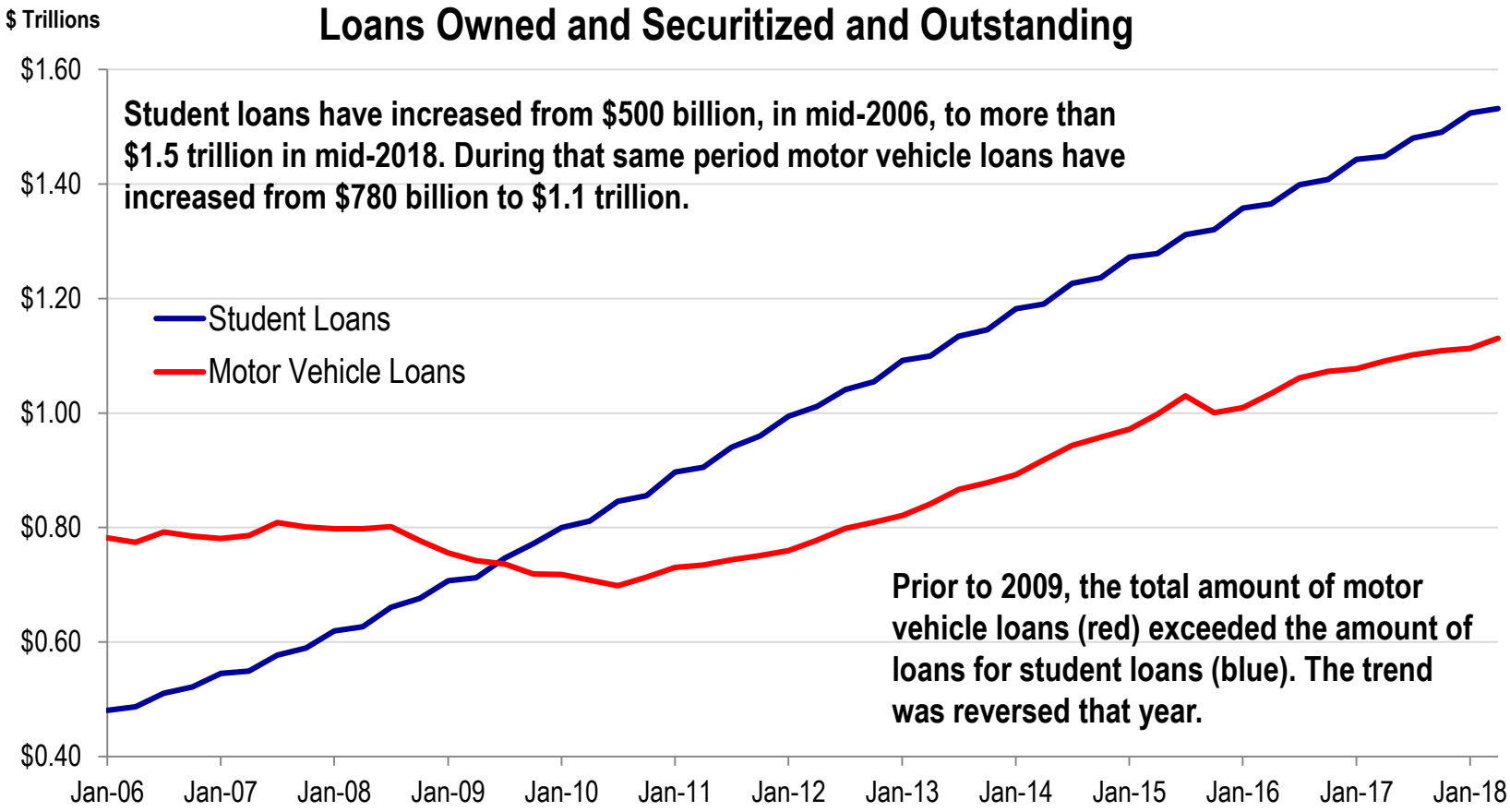
U.S. Consumer Credit Outstanding



Source: FRED, Federal Reserve, G.19, SA.

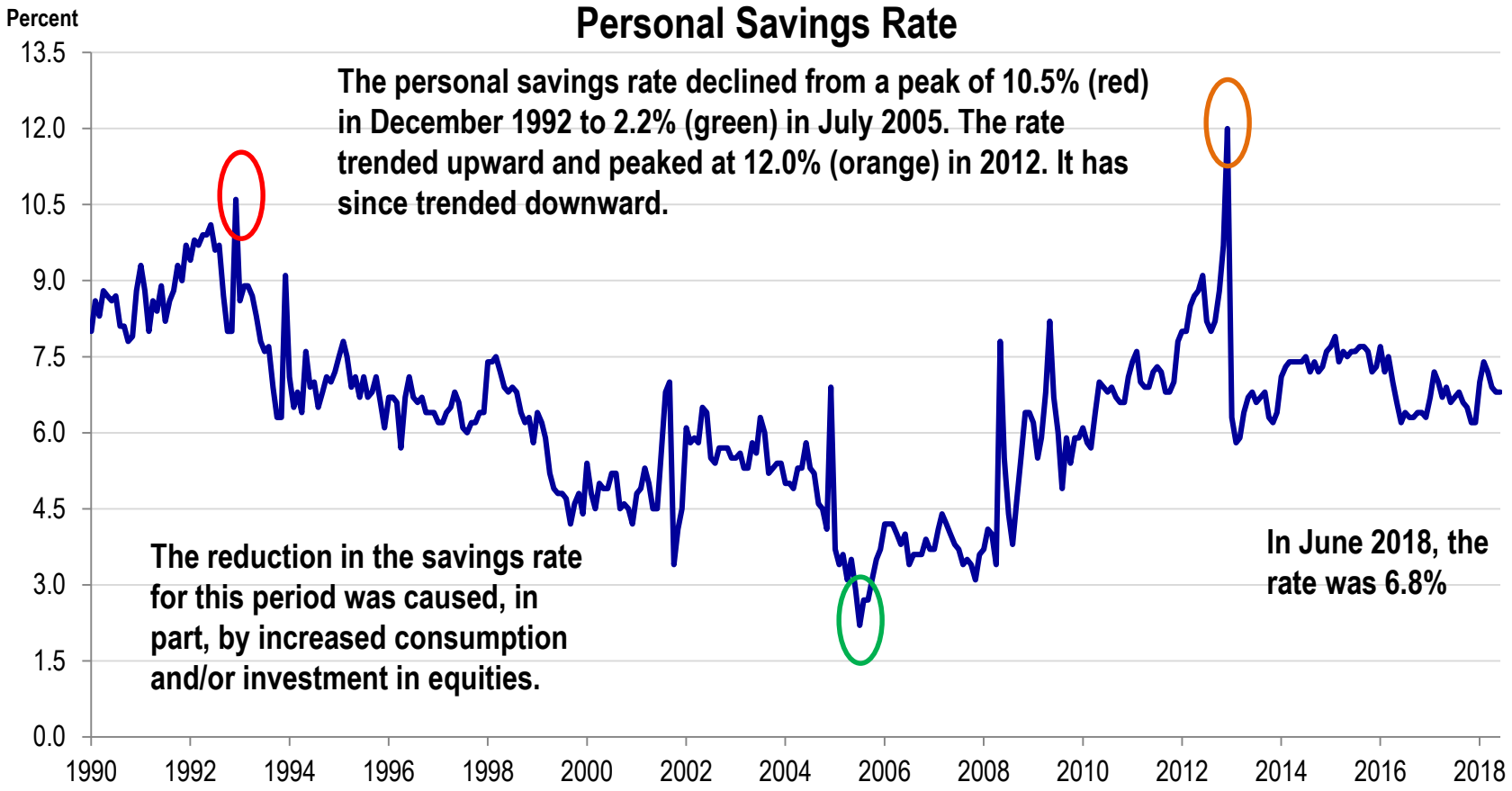
U.S. Loans Outstanding

Student Loans vs. Motor Vehicle Loans



Source: FRED, cber.co.

U.S. Personal Savings Rate



Source: FRED, (PSAVERT), SAAR.

Debt – Reason for Concern!?

The use of debt is often justified if it is responsibly used to make purchases that stimulate consumption and growth.

The use of debt is often criticized if debt service obligations prevent consumption and growth.

Whether or not you believe debt is good for the economy, one thing is for sure – consumer and government debt has increased!

The U.S. Economy

Inflation, Index for Services and Manufacturing, Retail Sales, and Light Truck and Auto Sales

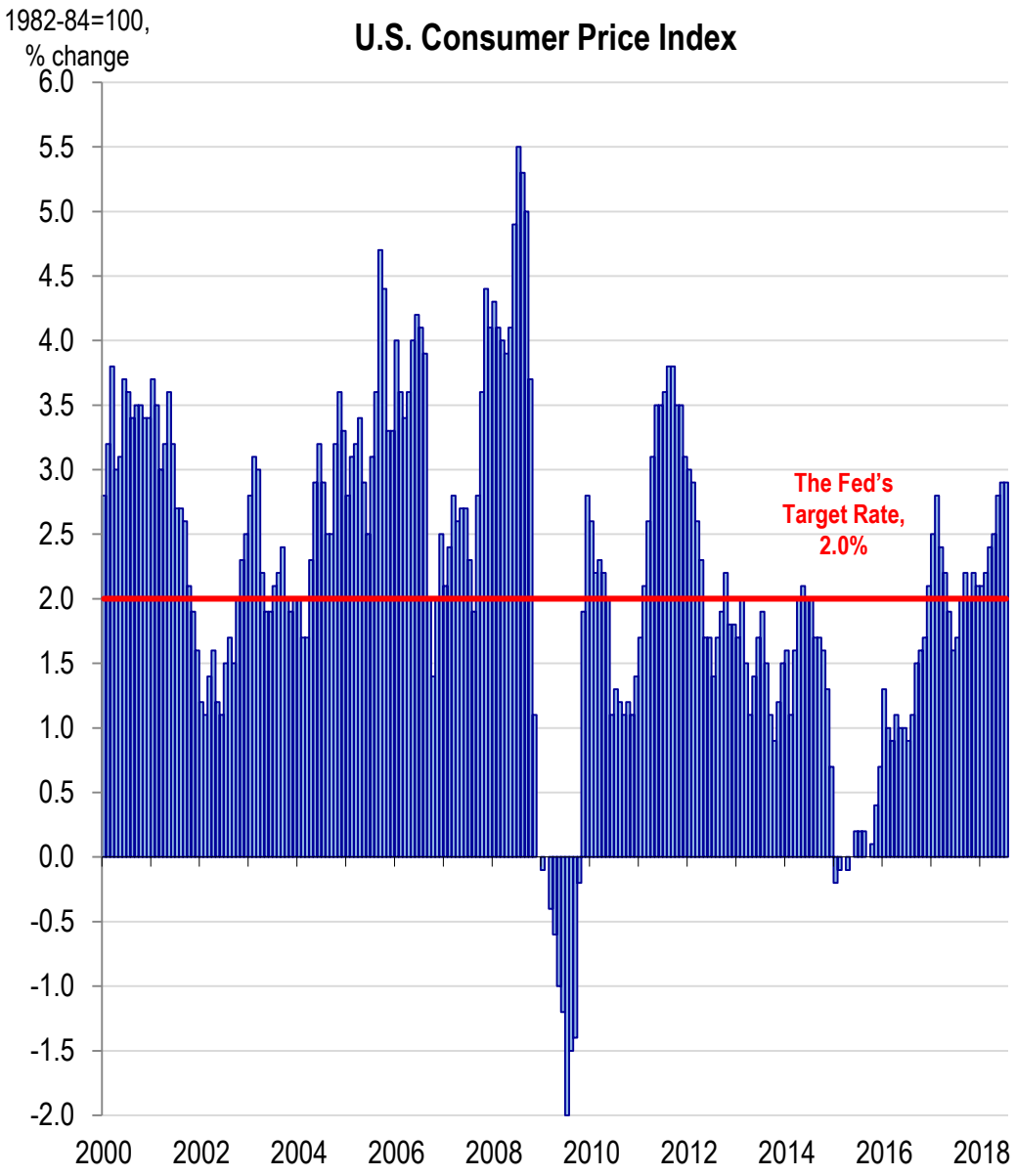
Consumer Price Index (CPI)

U.S. inflation, as measured by the seasonally adjusted CPI, will increase by 2.3% in 2018 (forecast). This is well above the Fed's target rate of 2.0%. Increases in 2018 will be a result of higher interest rates, housing costs, health care costs, and gasoline prices.

The increase in the June and July 2018 CPI rate was 2.9%. The average rate for the first half of the year is 2.5%.

Recent annual rates are:

- 2012 2.1%
- 2013 1.5%
- 2014 1.6%
- 2015 0.1%
- 2016 1.3%
- 2017 2.1%
- 2018 2.3 %.

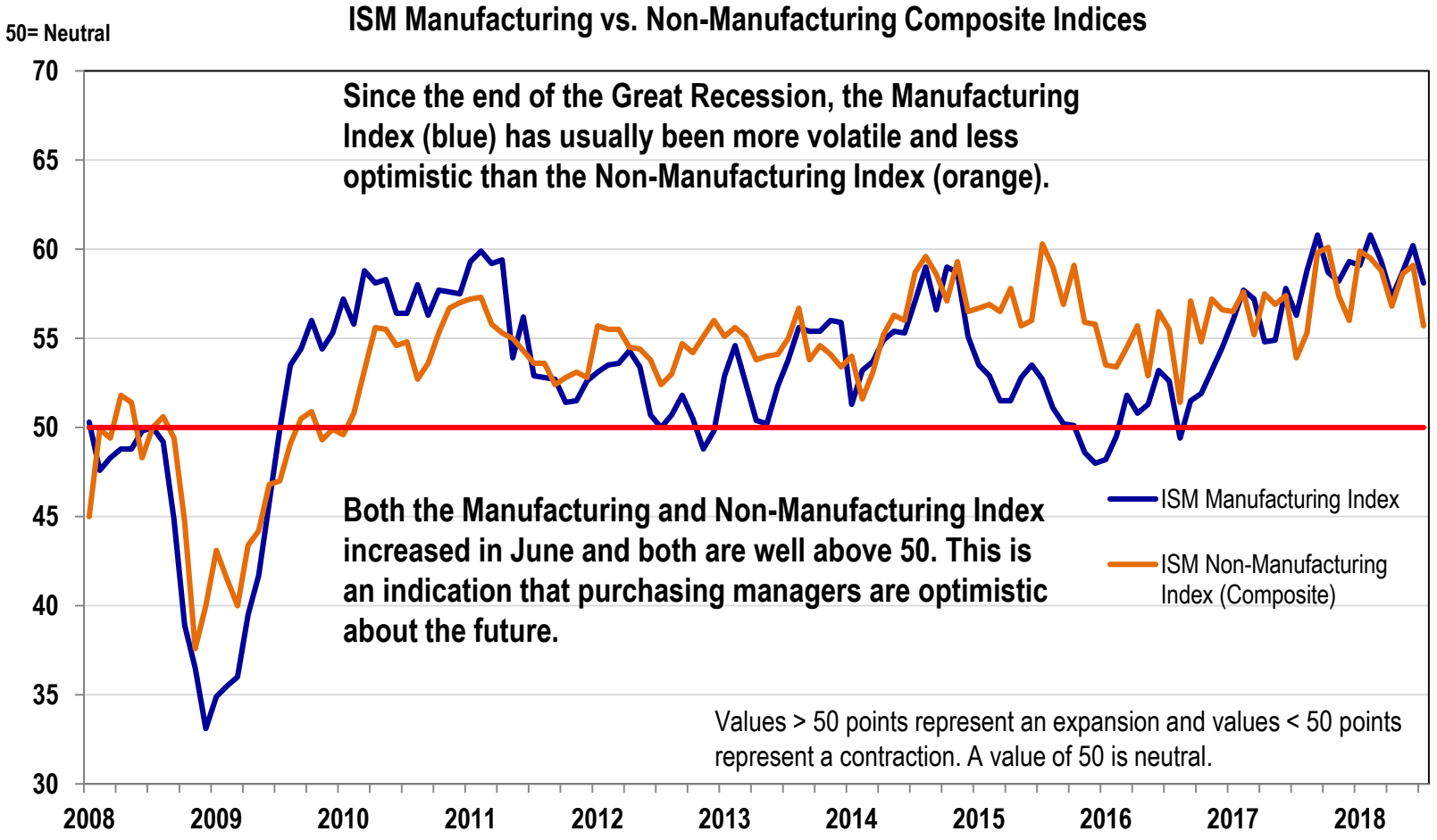


Source: Bureau of Labor Statistics, SA, cber.co.

Note: the Federal Reserve uses the PCE for establishing inflation target rates; the CPI tends to be slightly higher than the CPE.

ISM PMI Composite Indices

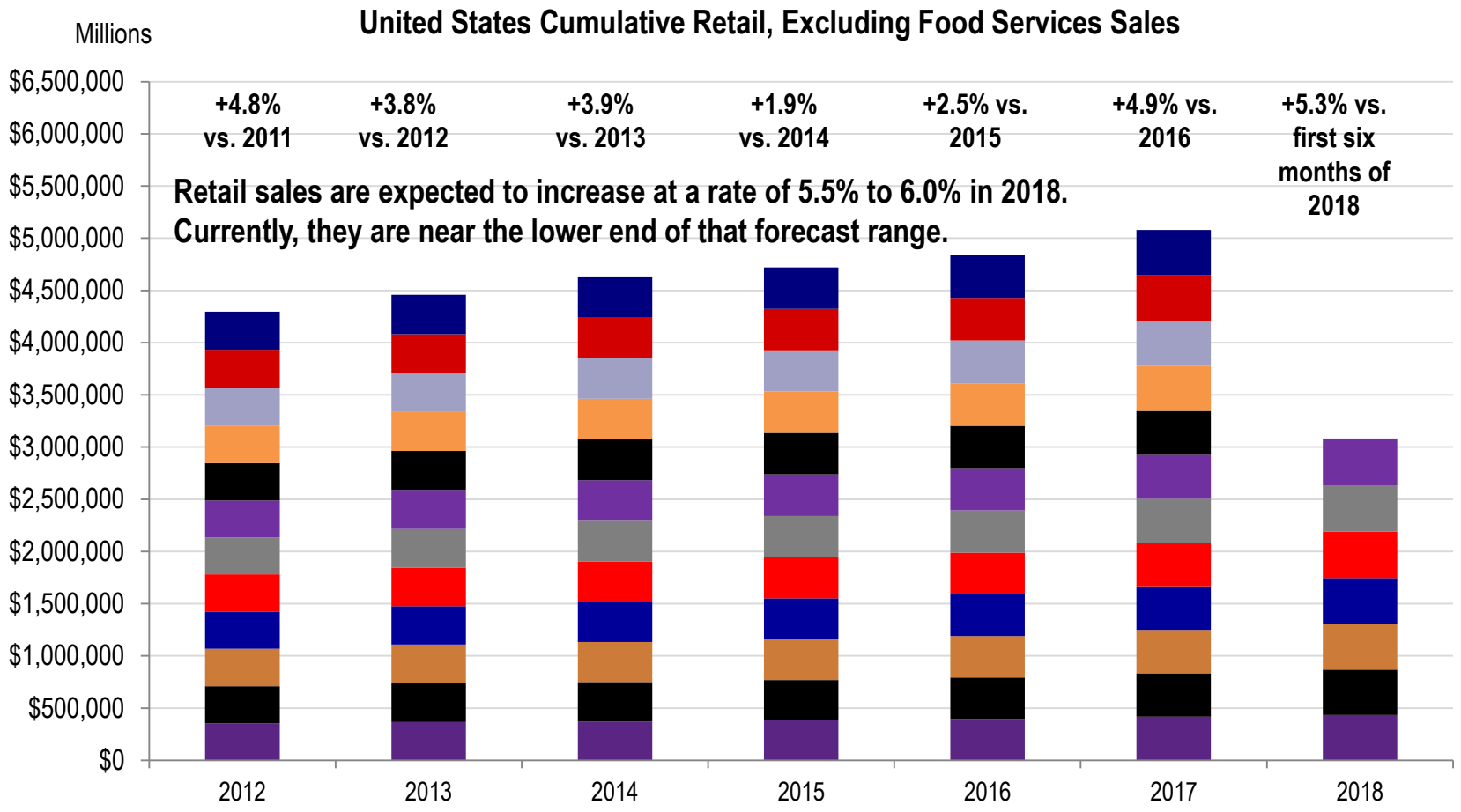
Manufacturing vs. Non-manufacturing



Sources: Institute for Supply Management (ISM), FRED, cber.co.

Cumulative Retail, Excluding Food Services Sales

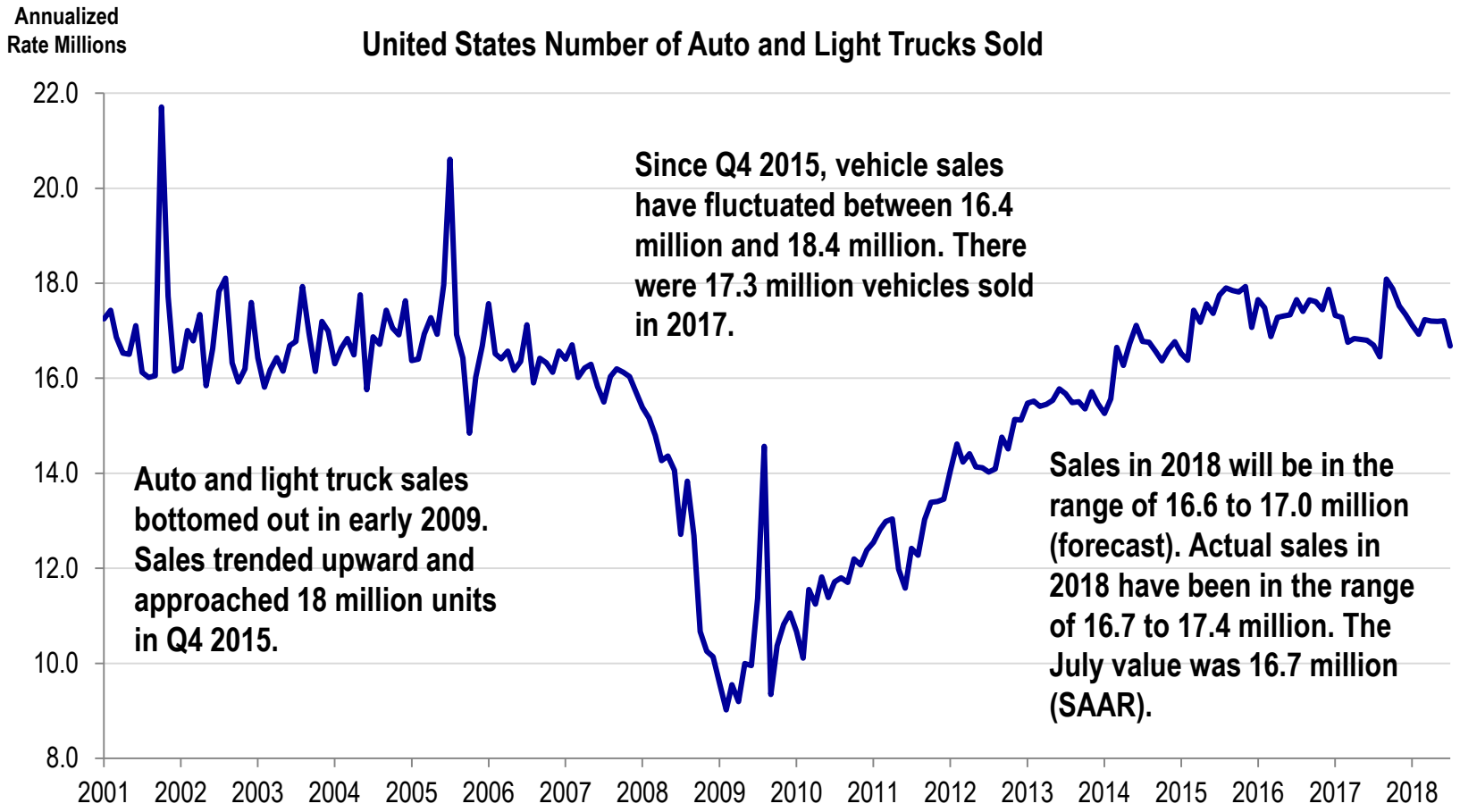
Monthly



Source: U.S. Census Bureau, FRED, cber.co. Note: Data is in descending order with December at the top and January at the bottom, not adjusted for inflation.

U.S. Weekly Auto and Light Truck Sales

Monthly (Annualized Rate Millions)



Source: FRED, BEA, cber.co.
Note: Seasonally Adjusted Annualized Rate.

United States Economy

Summary and Outlook

The United States Economy

Summary and Outlook

Two Optimistic, but Guarded, Perspectives of the U.S. Economy

Federal Reserve

At the recent Federal Reserve meeting in Jackson Hole, Chairman Powell was upbeat about the U.S. economy. He stressed the importance of looking at a different set of metrics in gauging the country's economic strengths and weaknesses, when the economy might change directions, and the factors that would cause that turn.

He indicated the central bank should continue to be diligent in raising interest rates in a manner that does not jeopardize the current expansion.

The Conference Board

Earlier this month, The Conference Board (TCB) issued its August update of the U.S. economy. It indicated that fiscal and monetary policy drove Q2 growth at a rate that is strong compared to the past decade.

As the effects of those policies taper off, TCB expects solid, but decelerating growth in 2019. Additional factors that will cause slower growth include labor shortages, higher interest rates, a weaker global economy, higher costs for goods, and a slower rate of federal spending.

United States Economy

Outdoor Recreation Cluster

Outdoor Recreation Cluster

BEA Satellite Account

ORSA

The Bureau of Economic Analysis recently began analyzing satellite accounts, or clusters, to better understand the growth of the U.S. economy. In February 2018, BEA released U.S. data for the outdoor recreation satellite account (ORSA).

The definition of ORSA was based on input from private sector, government, and academic leaders. The BEA website states the process for establishing ORSA followed other BEA satellite accounts. It divided outdoor recreation activity into two general categories: core and supporting.

Core activities include the production and purchase of goods and services used directly for outdoor recreation, while supporting activities are defined as goods and services that support access to outdoor recreation activities. More specifically, core activities for the ORSA include the production and purchase of gear, equipment, fuel, concessions, maintenance, repair, and fees. Supporting activities include trip expenses, construction, and government expenditures related to outdoor recreation activities.

Key Findings

Key findings from the 2016 ORSA data are provided below. More detailed information is included on the following pages.

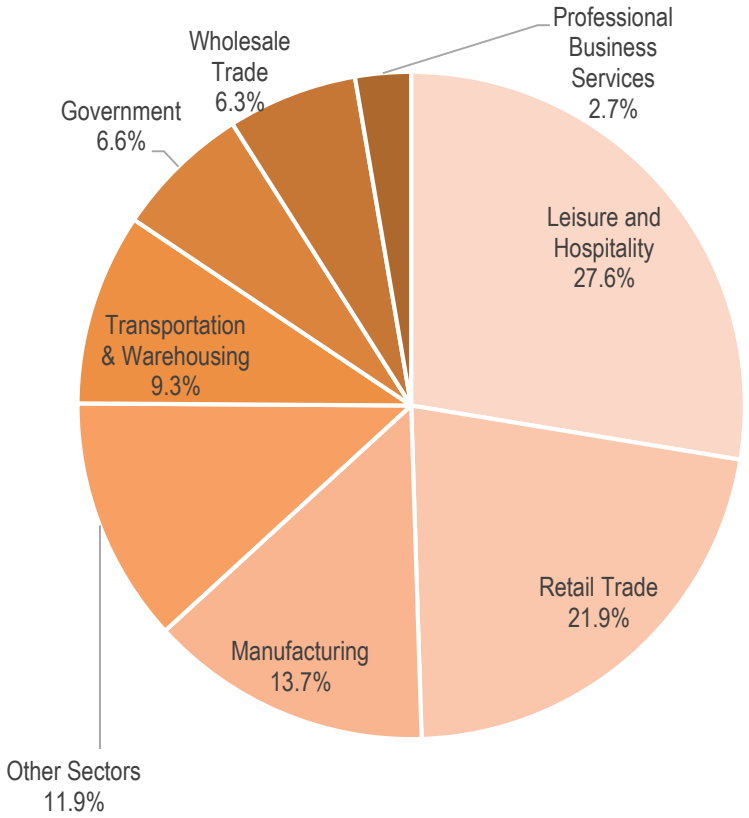
- Outdoor recreation accounted for $373.7 billion in GDP (value added). This is almost 2.0% of current GDP. Almost half of the GDP comes from the hospitality and retail sectors.
- The 2016 gross output is $673.2 billion or 2% of total gross output.
- Total compensation is $203.6 billion. Average compensation per employee is $47,561.
- There are 4,280,000 employees in the cluster. Almost 72% of the employees are in the leisure and hospitality and retail sectors.

Additional information about ORSA can be found at https://www.bea.gov/data/special-topics/outdoor-recreation.

Outdoor Recreation Cluster

U.S. Value Added (GDP)

Percent of Value Added (GDP) by Sector



Source: BEA, cber.co.

ORSA Value Added

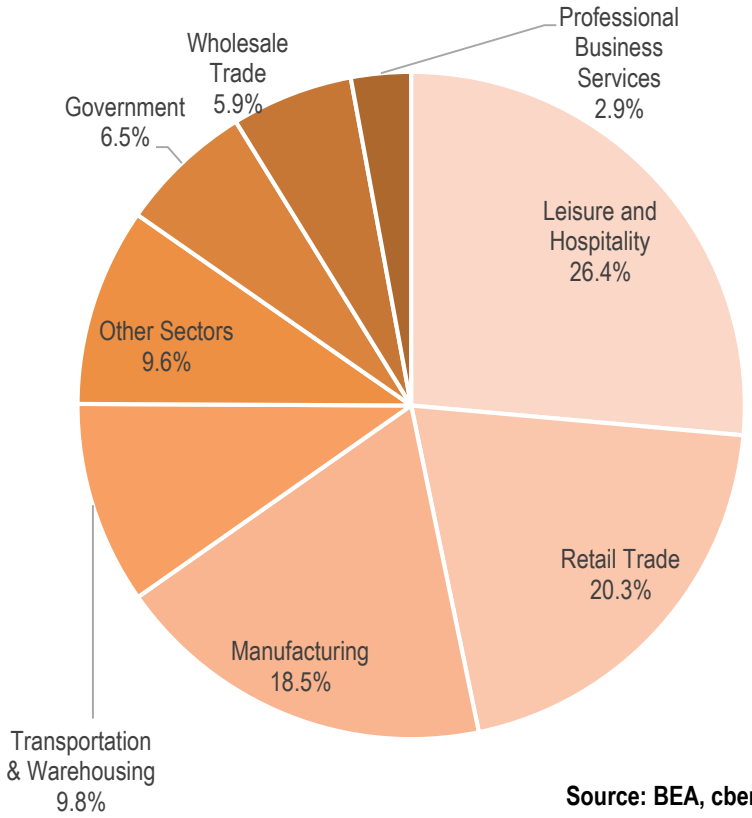
Key points from the ORSA value added analysis are:

- Current 2016 GDP is $373.7 billion or almost 2% of the total GDP. This level of GDP is similar to the total for the management of corporations and enterprises sector.
- Almost half of the value added is in the leisure and hospitality and retail sectors. Manufacturing and transportation account for an additional 23%.
- Other sectors include agriculture, mining, utilities, construction, information, financial activities, management of corporations and enterprises, education and health services, and other services. Combined, these sectors contribute 11.9%. The financial activities sector is the largest of the other sectors (4.5%).

Outdoor Recreation Cluster

U.S. Gross Output

Percent of Gross Output by Sector



Source: BEA, cber.co.

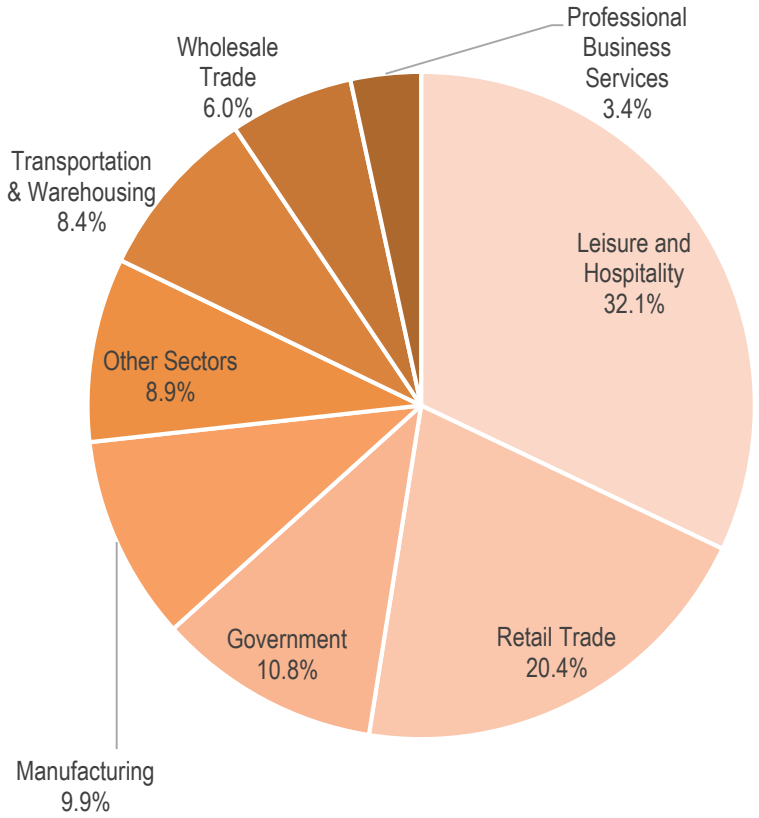
ORSA Gross Output

Key points from the ORSA gross output analysis are:

- The 2016 gross output is $673.2 billion or 2% of total gross output.
- Almost 47% of the gross output is in the leisure and hospitality and retail sectors. An additional 28% is in manufacturing and transportation.
- Other sectors include agriculture, mining, utilities, construction, information, financial activities, management of corporations and enterprises, education and health services, and other services. The other sectors account for 9.6% of gross output. The financial sector is the largest of the other sectors (3.5%).

Outdoor Recreation Cluster
U.S. Compensation

Percent of Compensation by Sector



Source: BEA, cber.co.

ORSA Compensation

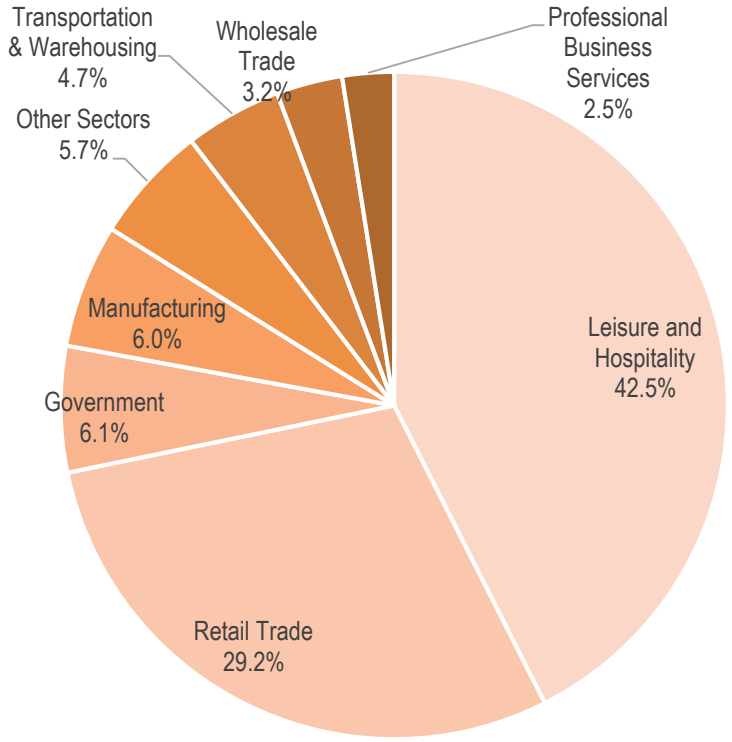
Key points from the ORSA compensation analysis are:

- Total compensation is $203.6 billion. Average cluster compensation per employee is $47,561.
- Almost 53% of the total compensation is in the leisure and hospitality and retail sectors. Average compensation for these sectors is $35,851 (l&h) and $33,211 (retail).
- In addition, about 21% of the total compensation is in the manufacturing and government sectors. Average compensation for these sectors is $78,136 (mfg) and $83,592 (govt).
- Other sectors include agriculture, mining, utilities, construction, information, financial activities, management of corporations and enterprises, education and health services, and other services. The other sectors account for 8.9% of compensation. The construction sector is the largest of these sectors (2.9%).

Outdoor Recreation Cluster

U.S. Number of Employees

Percent of Employees by Sector



Source: BEA, cber.co.

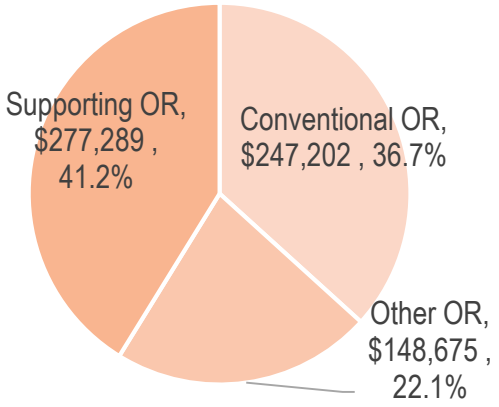
ORSA Number of Employees

Key points from the ORSA employee analysis are:

- There are 4,280,000 employees.
- Almost 72% of the employees are in the leisure and hospitality and retail sectors.
- An additional 12% of the employees are in the government and manufacturing sectors.
- Other sectors include agriculture, mining, utilities, construction, information, financial activities, management of corporations and enterprises, education and health services, and other services.

Outdoor Recreation Cluster

U.S. Gross Output by Activity



Supporting activities account for greater than 40% of output by activity. Trips and travel produce the greatest output of the activities.

Core-Other OR		
$	36,227	Game Areas (including Golf and Tennis)
$	26,489	Guided Tours/Outfitted Travel
$	26,481	Festivals/Sporting Events/Concerts
$	19,227	Amusement Parks/Water Parks
$	17,845	Other Outdoor Recreation Activities
$	8,648	Productive Activities
$	7,729	Field Sports
$	6,029	Multi-use Apparel and Accessories (Other)
✓ $	148,675	Total

Core- Conventional OR		
$	86,601	Multi-use Apparel and Accessories (Conventional)
$	59,378	Motorized Vehicles
$	38,200	Boating/Fishing
$	15,394	Hunting/Shooting/Trapping
$	12,674	Equestrian
$	11,957	Other Conventional Outdoor Recreation Activities
$	7,927	Camping/Climbing/Hiking
$	5,487	Recreational Flying
$	3,313	Bicycling
$	3,310	Skiing
$	2,960	Snowboarding
✓ $	247,202	Total

Supporting OR		
$	230,492	Trips and Travel
$	34,100	Government Expenditures
$	12,697	Construction
✓ $	277,288	Total

Source: BEA, cber.co.

Outdoor Recreation Cluster

U.S. and Colorado

Outdoor recreation is a lifestyle cluster that is a small part of the U.S. and Colorado economies. The cluster is comprised primarily of retail and tourism businesses, but also includes manufacturers of outdoor goods.

The cluster came to the forefront in Colorado this past month, when it was announced that VF Corporation would be moving its headquarters to Colorado. Colorado economic development leaders feel that outdoor recreation manufacturers and corporate headquarters, such as VF Corporation, are a good match for the state.

Stay tuned – later this fall BEA is scheduled to provide additional data on the outdoor recreation cluster.

The Colorado Economy

Population

Colorado Population

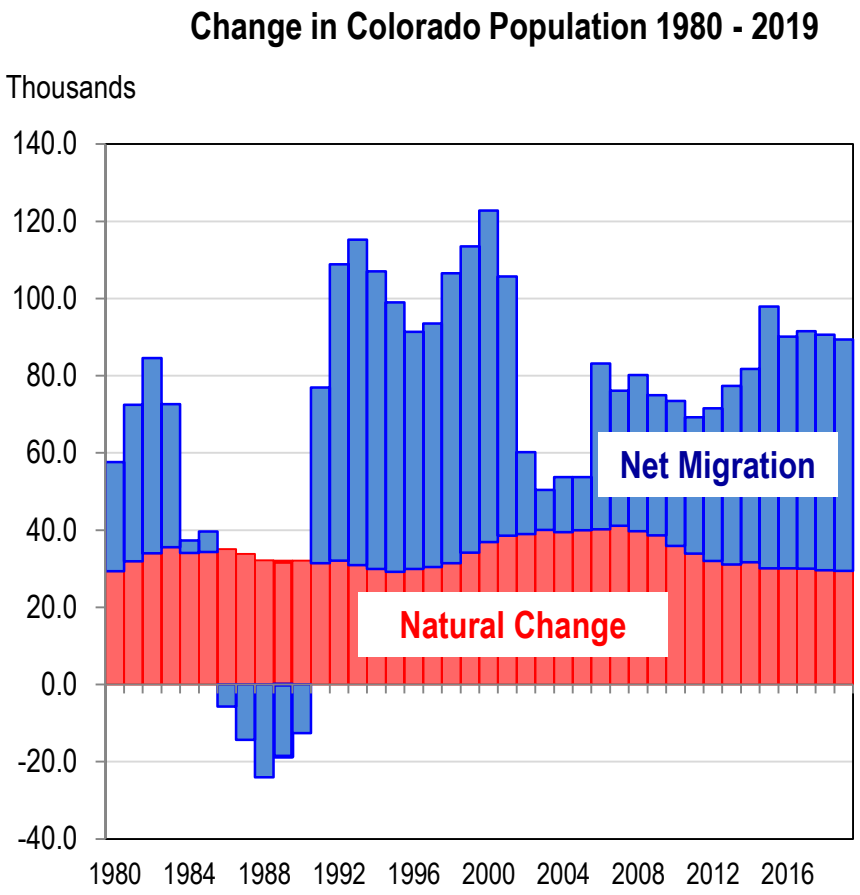
Components of Change

Population increases and decreases are a result of the natural rate of change (births minus deaths) and the change in net migration (people moving into the state minus people moving out of the state).

Over the past 3½ decades the natural rate of change (red bars) varied from a low of 29,145 in 1995 to a peak of 41,124 in 2007. In 2018 it is projected to drop to 29,400. Fertility rates in Colorado have declined and people chose not to have children during the Great Recession.

Changes resulting from net migration (blue bars) are closely tied to the strength of the economy and the change in state employment. For example, there were five years, from 1986 to 1990, when net migration and the change in population were negative. During the past two recessions (2001 and 2007), net migration declined, but did not turn negative. It was difficult for people to move anywhere to escape these downturns.

The Colorado population will increase by about 90,000 for the years 2015 to 2018. In 2018 the state's population will increase by 1.6% to 5,720,280.



Sources: State Demography Office and cber.co.
Colorado-based Business and Economic Research http://cber.co

Colorado Population

Net Migration

Throughout the recovery from the Great Recession, net migration has been the source of many new workers for Colorado. Net migration is projected to decline. In the near-term this will be caused by prospective residents who do not want to deal with high home prices, an infrastructure that has not been properly maintained, and congestion. In the near-term, it will be more difficult for prospective workers to relocate to Colorado.

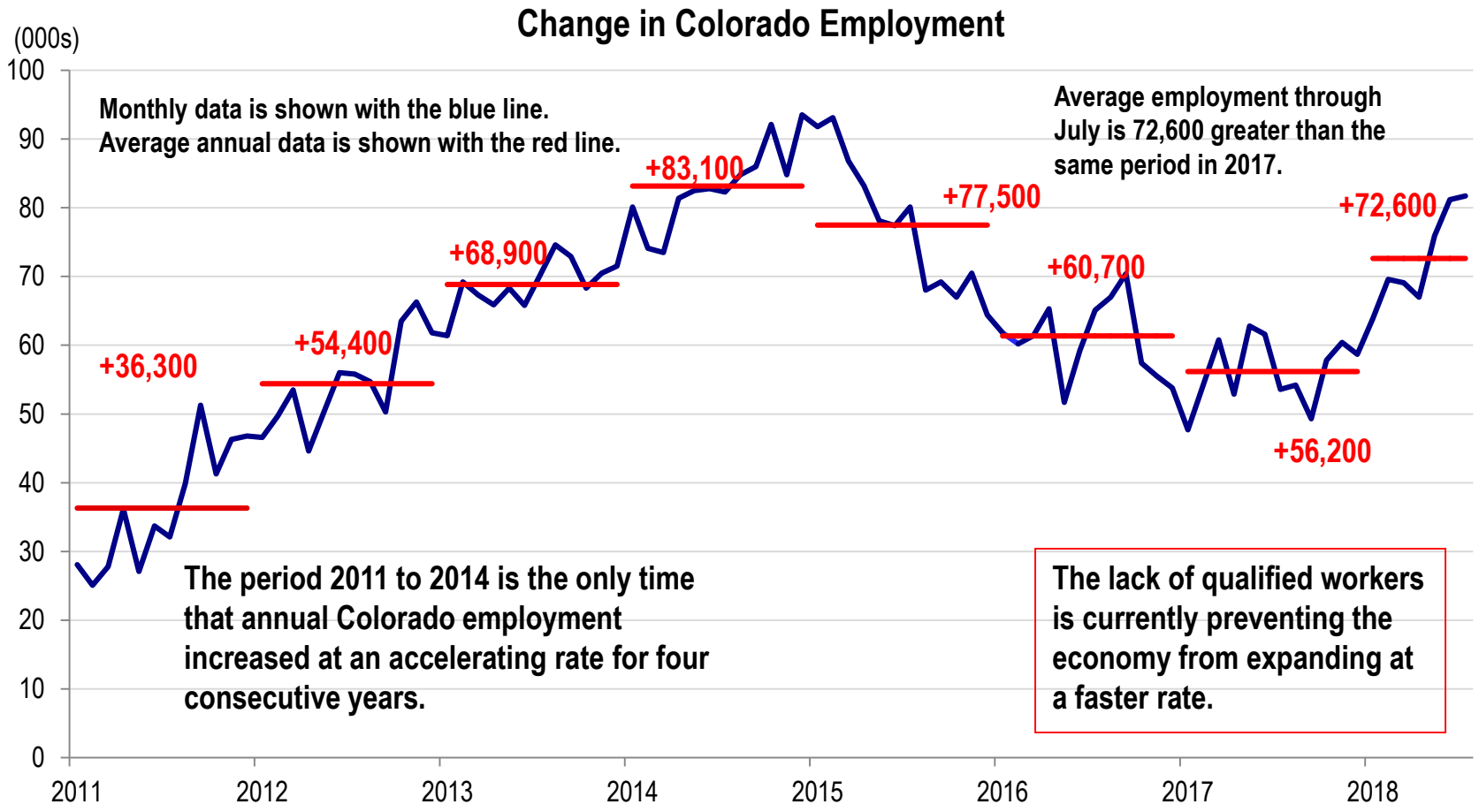
Looking ahead, this will make it necessary for Colorado industry, the work force system, higher education, and K-12 to more effectively provide training and education programs for managers, technicians, laborers, and employees at all levels.

The Colorado Economy

Employment, Change in Employment, Unemployment, and Change in the Size of Labor Force

Change in Colorado Employment

Year Over Year



Source: Bureau of Labor Statistics, NSA, cber.co. Note: Monthly and annual data is YOY.

Change in Colorado Employment

Year-Over-Year

Let's put the June and July 2018 job growth in perspective.

Employment in June 2018 was 81,200 greater than in June 2017.
Employment in July 2018 was 81,700 greater than in July 2017.

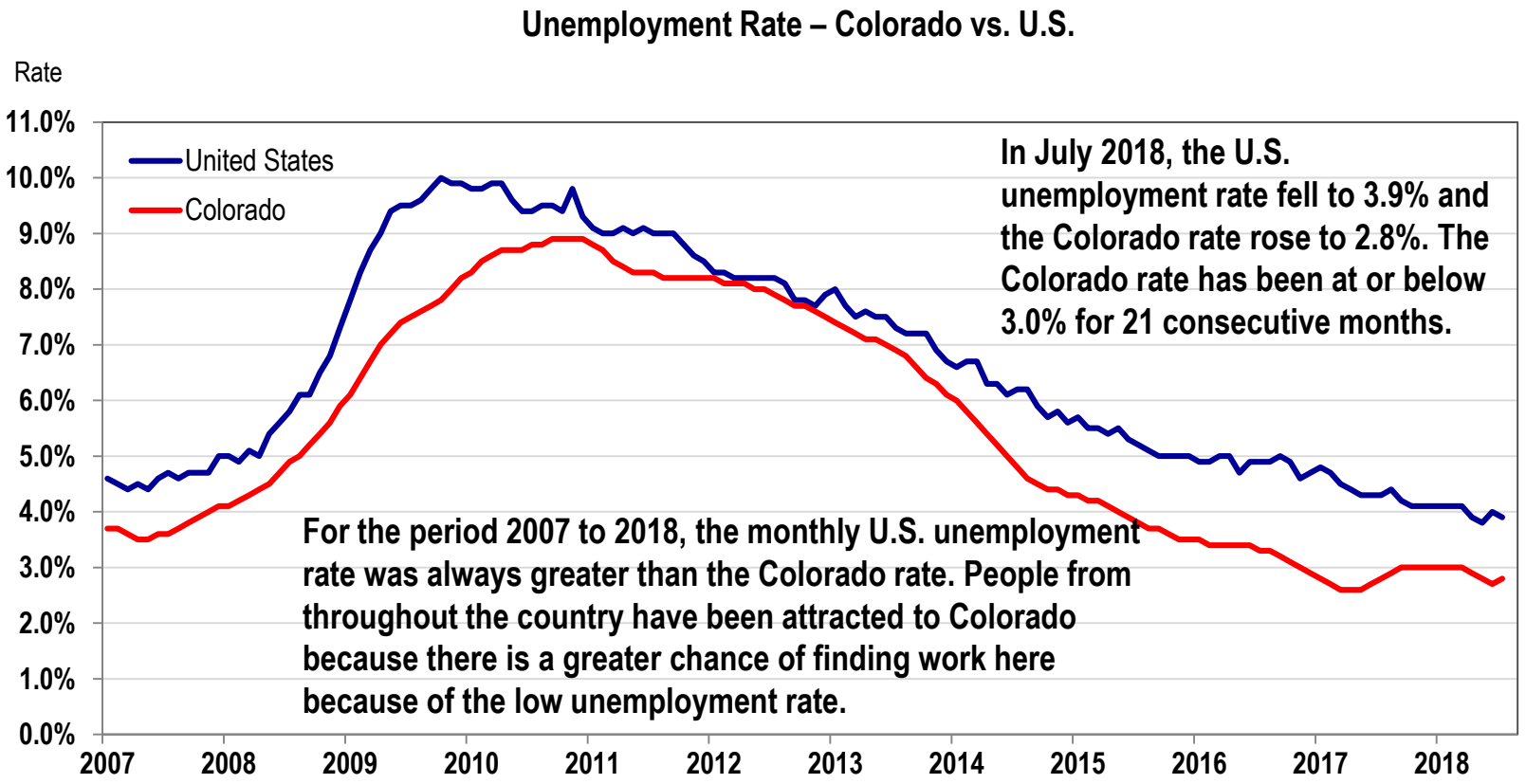
In 2017, average annual job growth was 56,200. There is a big difference between this average and the rate at which jobs have been added in the summer of 2018.

The months of June and July 2018 were ranked 13th and 15th out of 103 months for highest YOY monthly gains since 2010. Colorado employment was greater than 81,700 for each of the 12 months between May 2014 and April 2015. During that period, average employment increased by 87,000.

By comparison, Colorado job growth for June and July 2018 has been exceptionally strong!

Unemployment Rate

Colorado vs. U.S.



Source: Bureau of Labor Statistics, cber.co.

Colorado Unemployment Rate

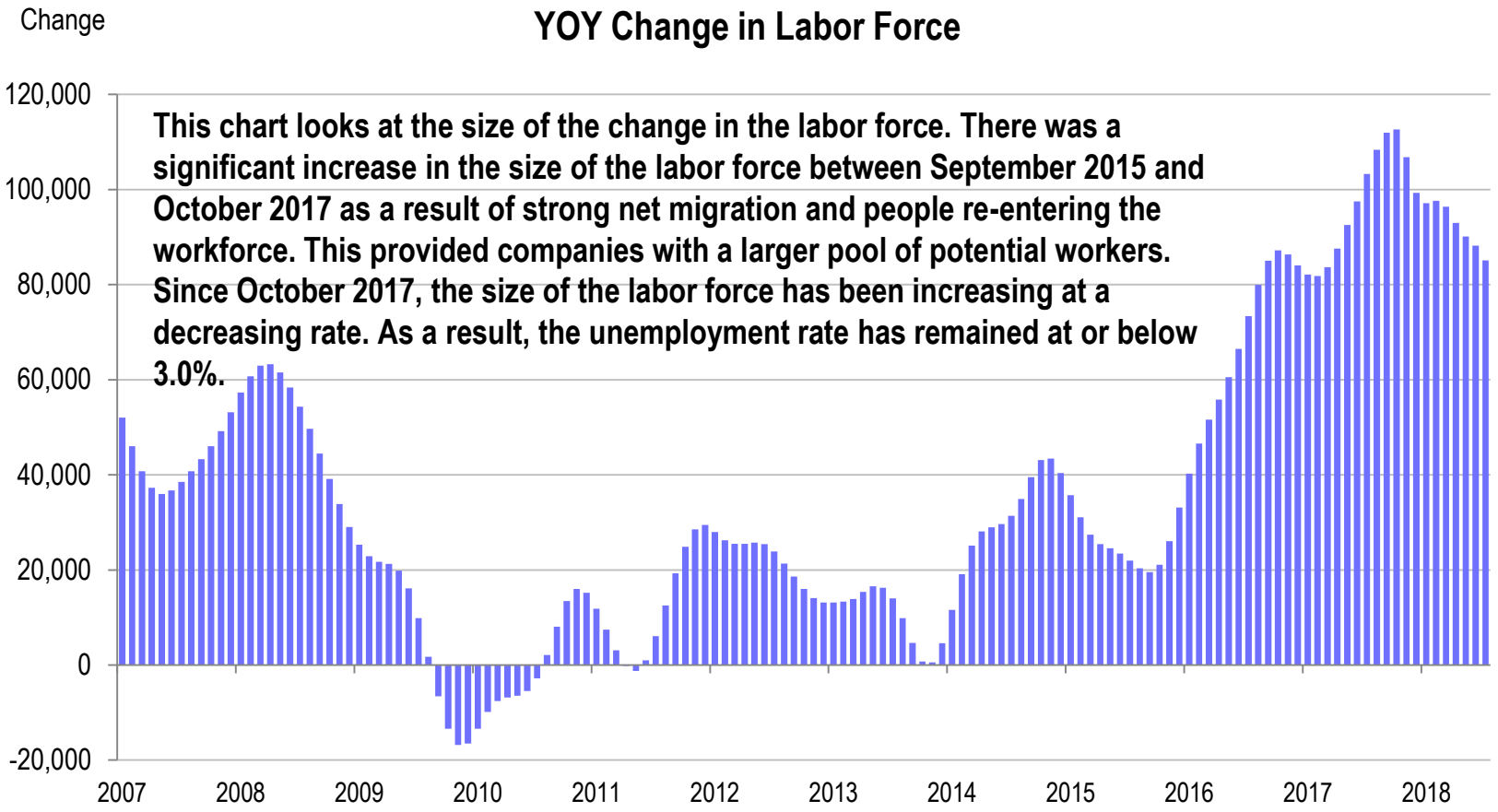
Unemployment will continue to remain low for an extended period. As a result, the economy will continue to perform in an inefficient manner.

There are companies in all sectors of the economy that are not adequately staffed. Unfortunately, their customers often have to deal with poor service and long wait times – in some cases there is even no service.

Given the U.S. unemployment rate of 3.9%, most states are facing similar challenges as Colorado. There are low unemployment rates in key occupations, key industries, and in most geographic areas of the state and U.S.

Just as there was no place to hide from the Great Recession, there is no place to hide from the ill effects of an unemployment rate that is too low. Having said that, it is much better to deal with an unemployment rate that is too low than to deal with one that is too high.

YOY Change in Colorado Labor Force



Source: Bureau of Labor Statistics, LAUS, SA, cber.co.

Colorado Economy

Employment in Strong Growth, Solid Growth, Volatile Categories

Employment

Strong, Solid, and Volatile Growth Categories

One way that cber.co measures the performance of the Colorado economy is to evaluate the change in employment within the strong, solid, and volatile growth categories of NAICS sectors.

The analysis of these categories shows the following:

- The strong growth category is growing at a rate less than the category's historical average since 2010, but greater than the state average. This growth provides a solid foundation for overall expansion of the state economy.
- The solid growth category is growing at a rate slightly above the category's historical average since 2010, but greater than the state average. This growth also provides a solid foundation for overall expansion of the state economy.
- The volatile category is growing at a much stronger rate than normal. The state is enjoying a greater than expected increase in employment because of the number of jobs added in this category. As has been shown in the past, the category will not sustain this level of job growth. Most likely there will be solid, but slower job growth in Q4 2018 and the first half of 2019.

Annual Employment Situation for the Strong Growth Category

For almost three decades the following sectors have been the foundation for consistent growth in Colorado employment.

- Professional, Scientific, and Technical Services
- Management of Companies and Enterprises
- Administrative Services (Not Employment Services)
- Private Education
- Health Care
- Arts, Entertainment, and Recreation
- Other Services.

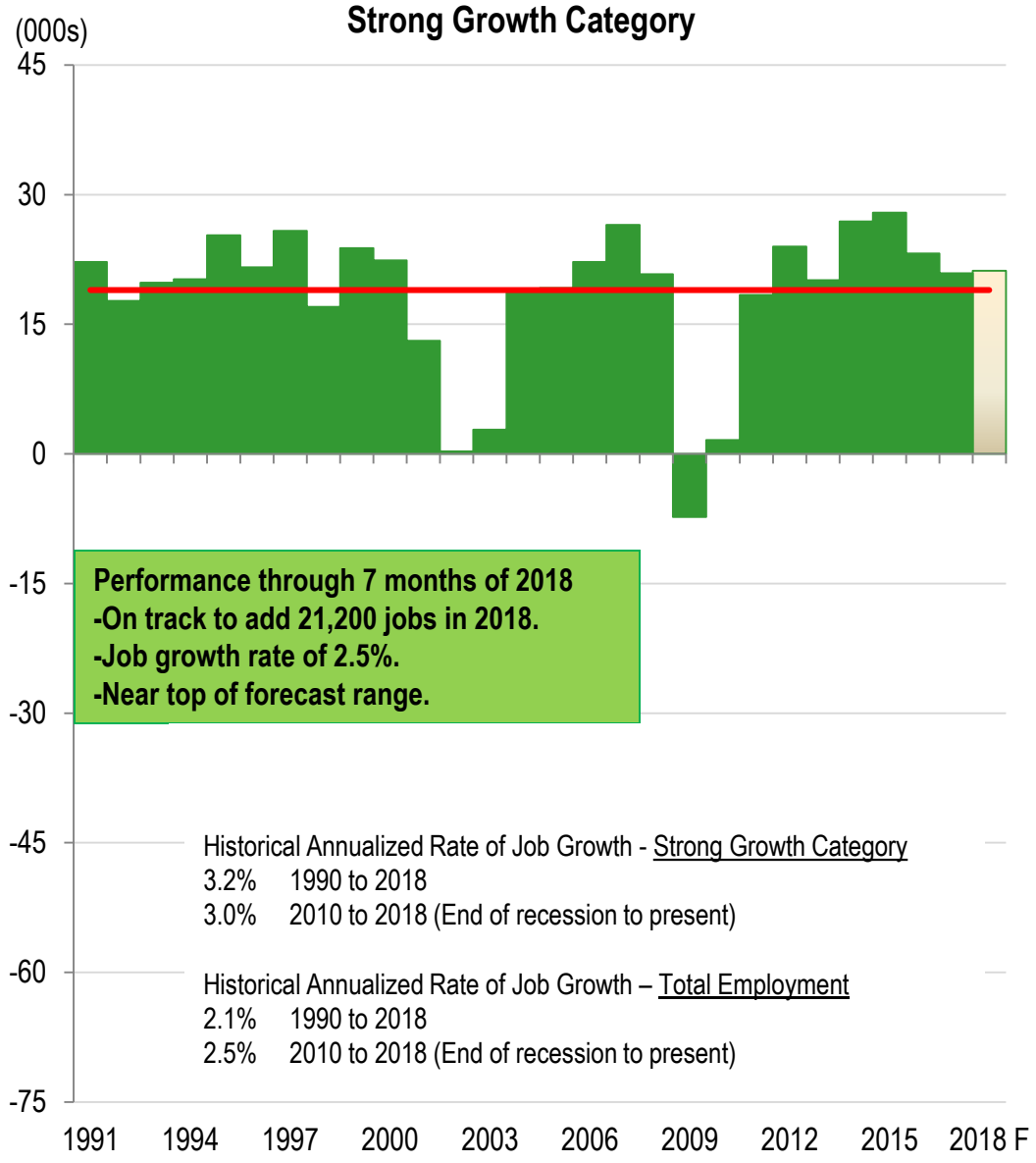
Total employment for this category was:

1997 517,900 workers, 26.2% of total employment

2007 683,800 workers, 29.3% of total employment

2017 863,100 workers, 32.5% of total employment

Forecast - In 2018, between 19,500 and 21,500 workers will be added at a rate of 2.3% to 2.5%. The number of jobs added is slightly less than 2017.



Source: Bureau of Labor Statistics, cber.co.

Annual Employment Situation for the Solid Growth Category

For almost three decades the following sectors generally posted gains. The category posted stronger jobs gains during the 1990s than the 2000s and 2010s.

- Wholesale Trade
- Retail Trade
- State (Not Higher Education)
- Higher Education
- Local (Not K-12 Education)
- K-12 Education
- Accommodations and Food Services

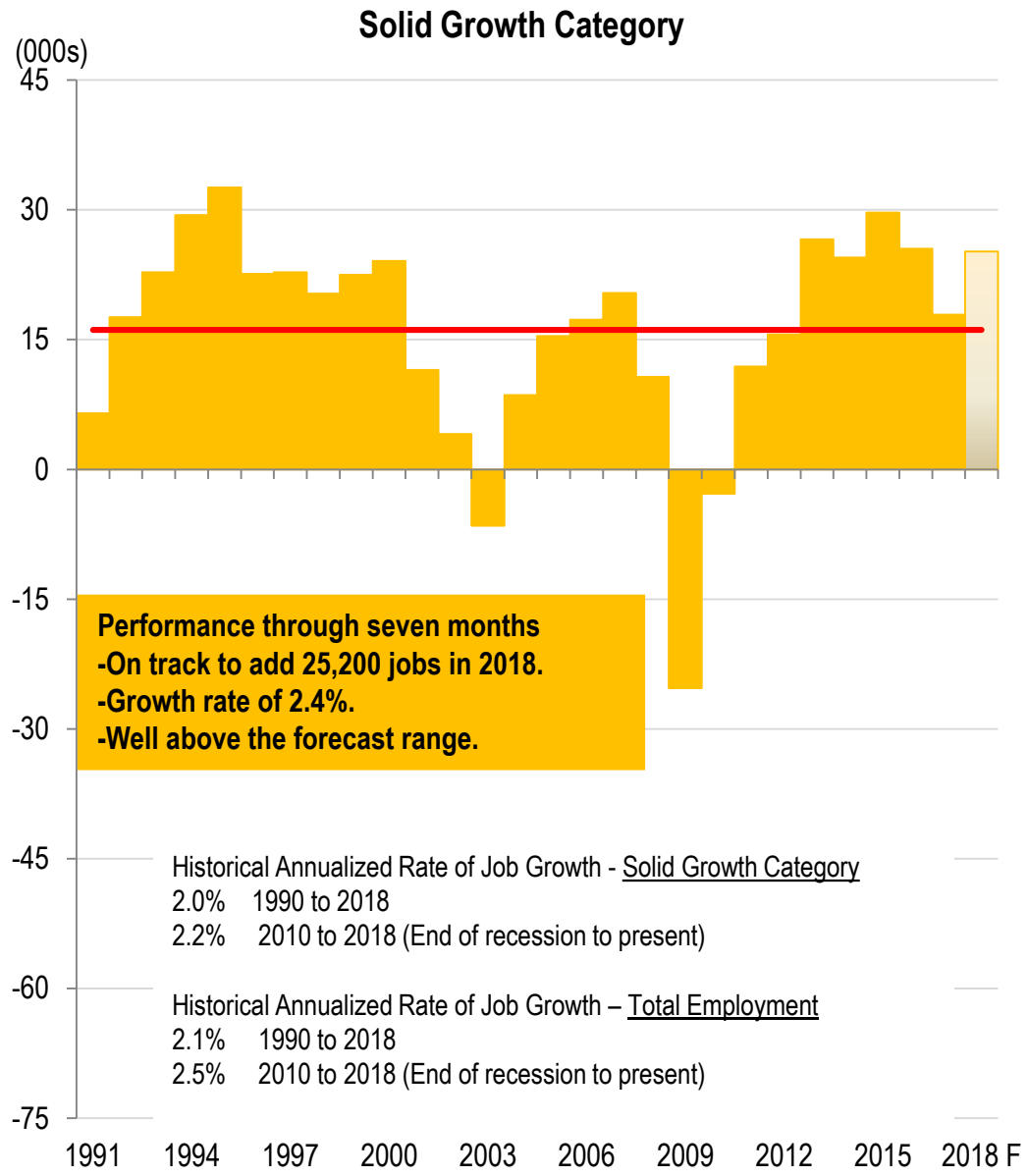
Total employment for this category was:

1997 763,400 workers, 38.6% of total employment

2007 901,100 workers, 38.6% of total employment

2017 1,034,900 workers, 39.0% of total employment

Forecast - In 2018, between 16,000 and 18,000 jobs will be added, at a rate of 1.5% to 1.7%. The number of jobs added is slightly less than 2017.



Source: Bureau of Labor Statistics, cber.co.

Annual Employment Situation for the Volatile Category

Over the past two decades the sectors listed below were the primary source of volatility in total employment.

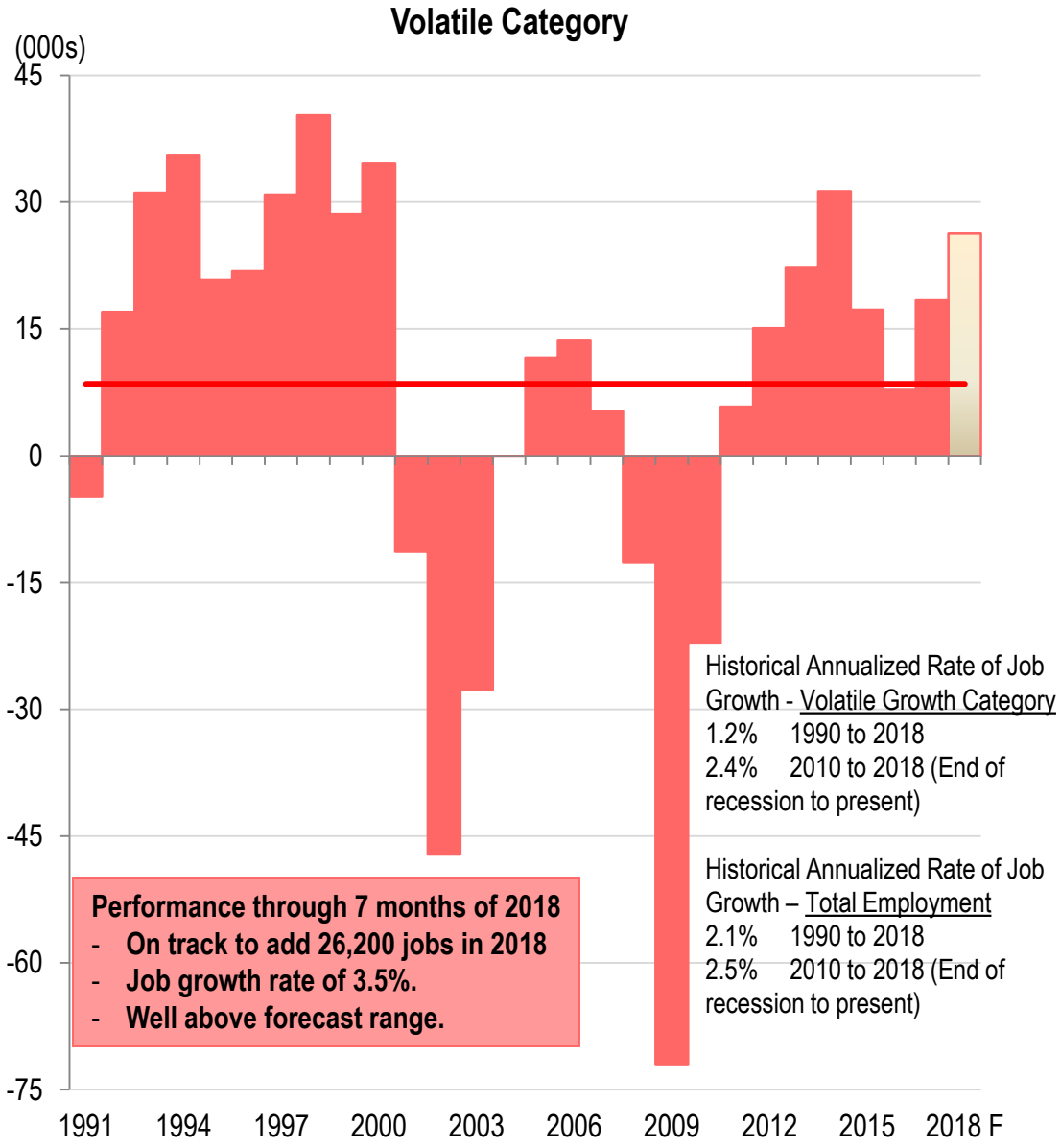
The sectors are:

- Natural Resources and Mining
- Construction
- Manufacturing
- Transportation and Warehousing
- Utilities
- Employment Services
- Financial Activities
- Information
- Federal Government

Total employment for this category was:

1997 698,900 workers, 35.3% of total employment
2007 746,600 workers, 32.0% of total employment
2017 757,600 workers, 28.5% of total employment

Forecast - In 2018 between 15,900 and 17,900 jobs will be added, at a rate of 2.1% to 2.3%. The number of jobs added is slightly less than 2017.



Source: Bureau of Labor Statistics, cber.co.

Employment

Strong, Solid, and Volatile Growth Categories

Key points

- All three categories contribute to the state economy in different ways. Currently, they are all performing stronger than expected.
- The growth of the strong and solid categories provide a solid base of expansion for the overall economy.
- The volatile category is the source of the higher than usual level of expansion in total employment.
- The year over year trend for the solid growth sector is trending up, while it has flattened out for the solid and volatile categories.

Colorado Economy

Change in Employment - Key Sectors

Key Sectors

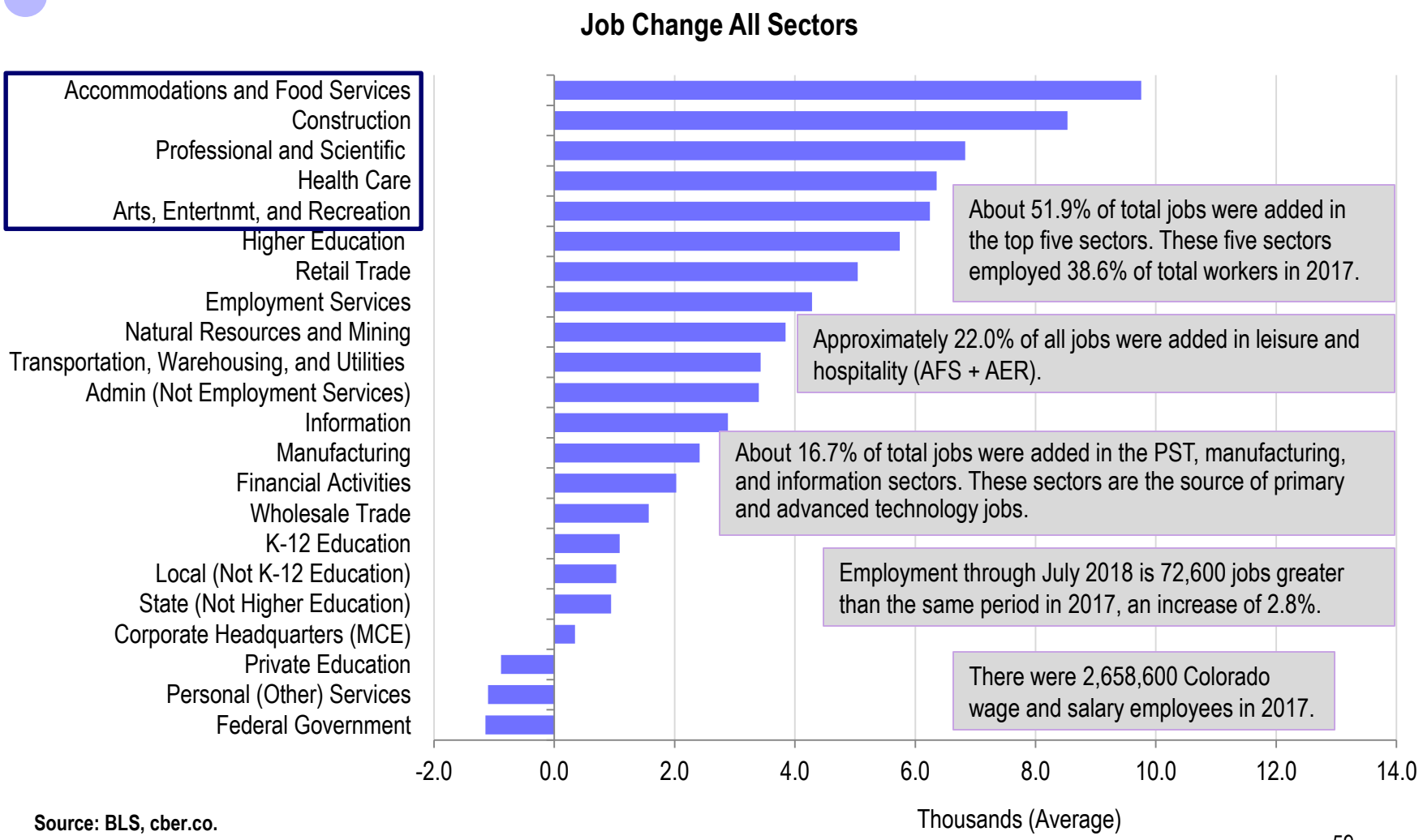
Strong Growth, Solid Growth, and Volatile Categories

The following eight charts show the change in employment for key sectors in the strong growth, solid growth, and volatile categories. The charts show how there is strong job growth in all three categories.

The sectors with green bars are from the strong growth category, sectors with yellow bars are from the solid growth category, and sectors with red bars are from the volatile category.

Change in Employment

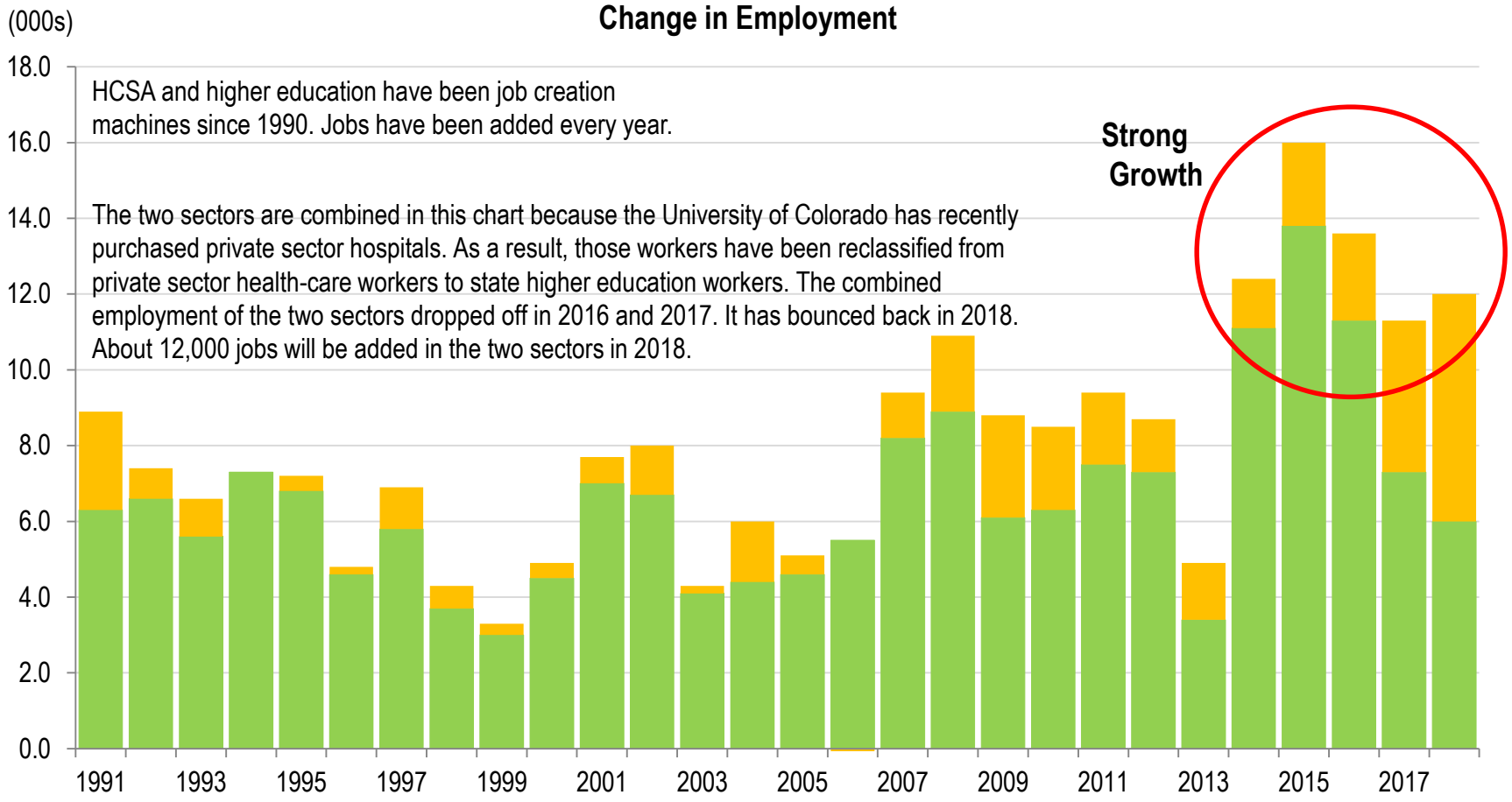
First 7 Months of 2018 vs. Same Period of 2017



Source: BLS, cber.co.

Change in Employment

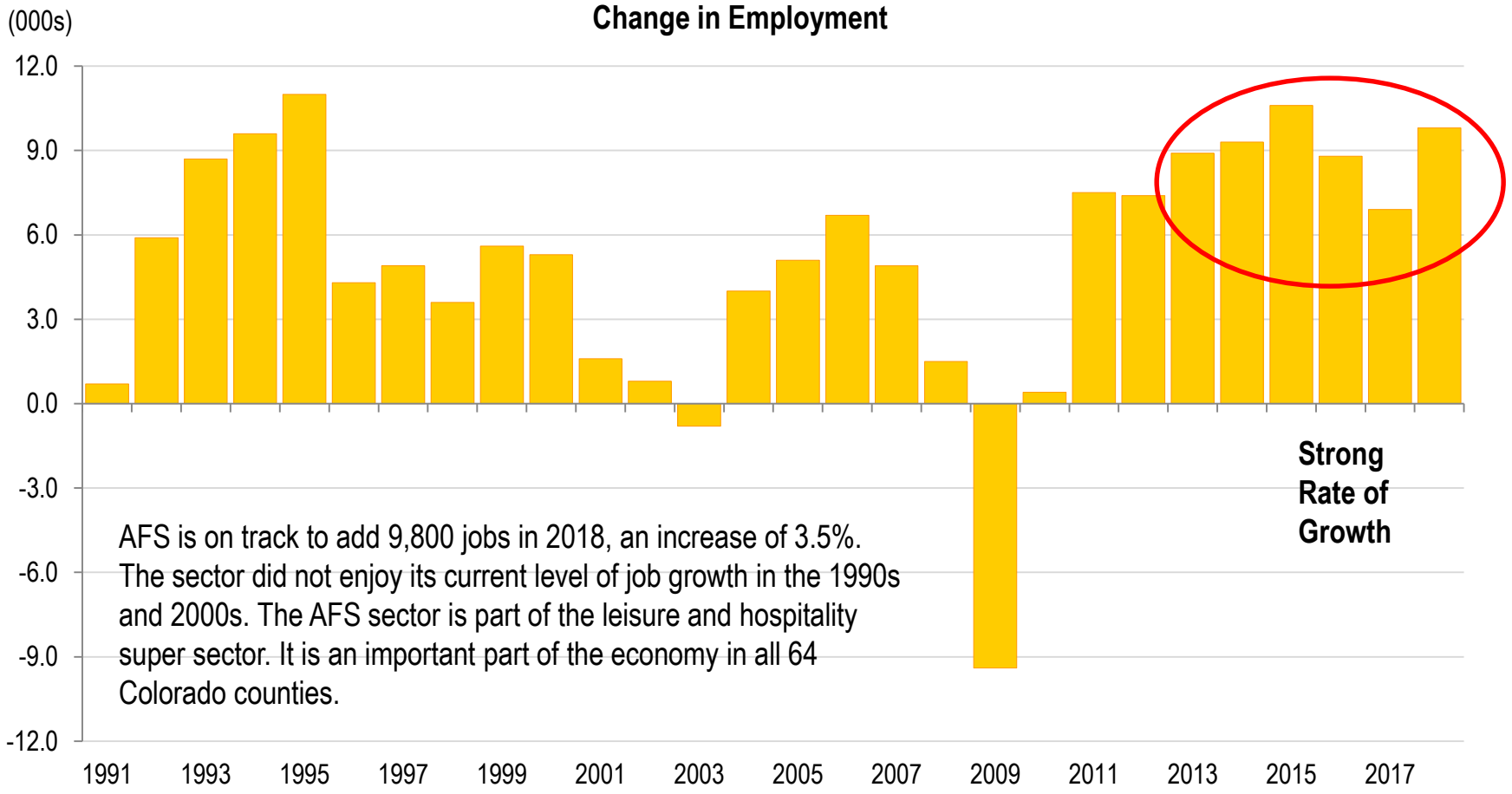
Health Care and Social Assistance and Higher Education



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

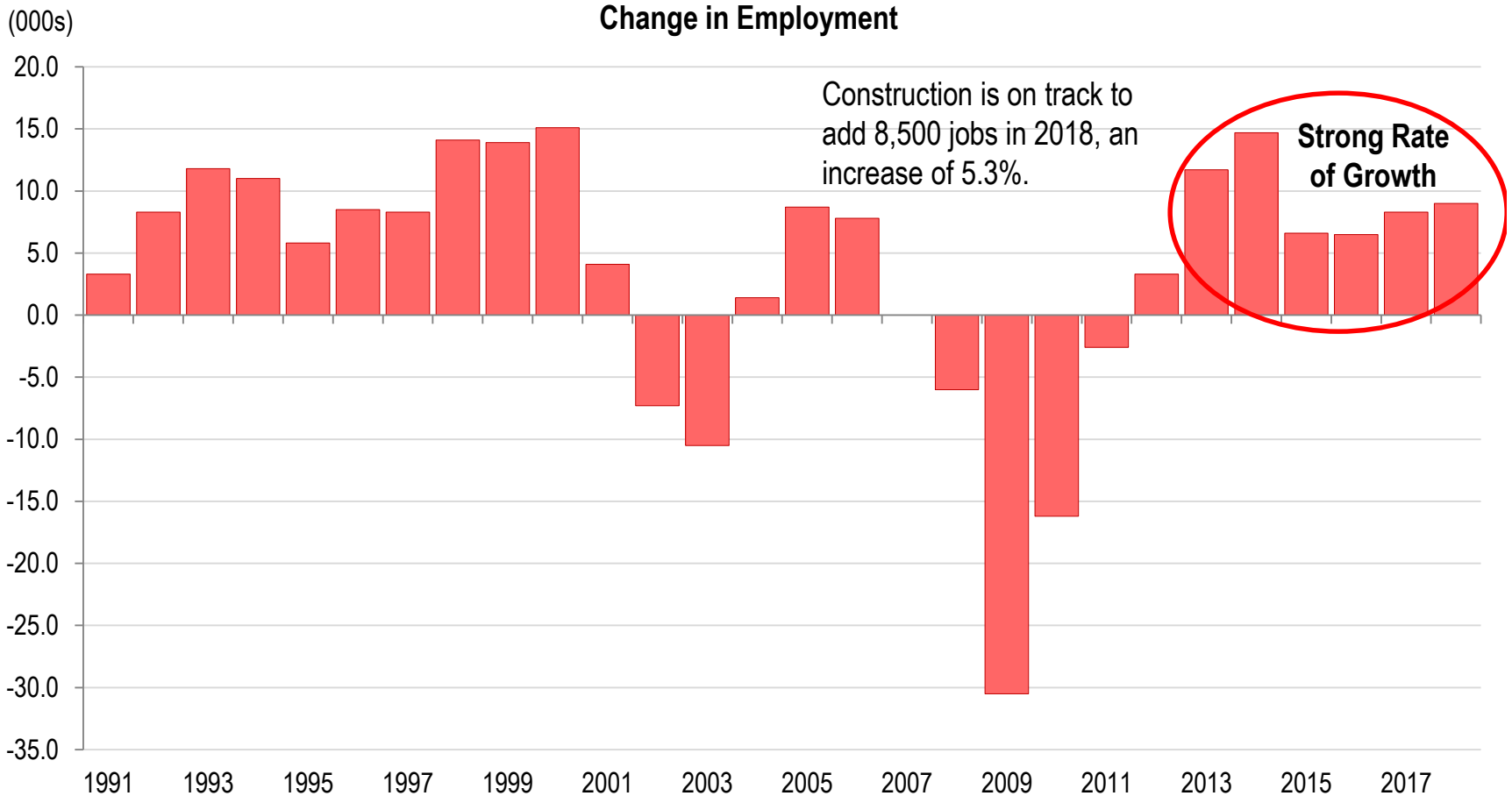
Accommodations and Food Services



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

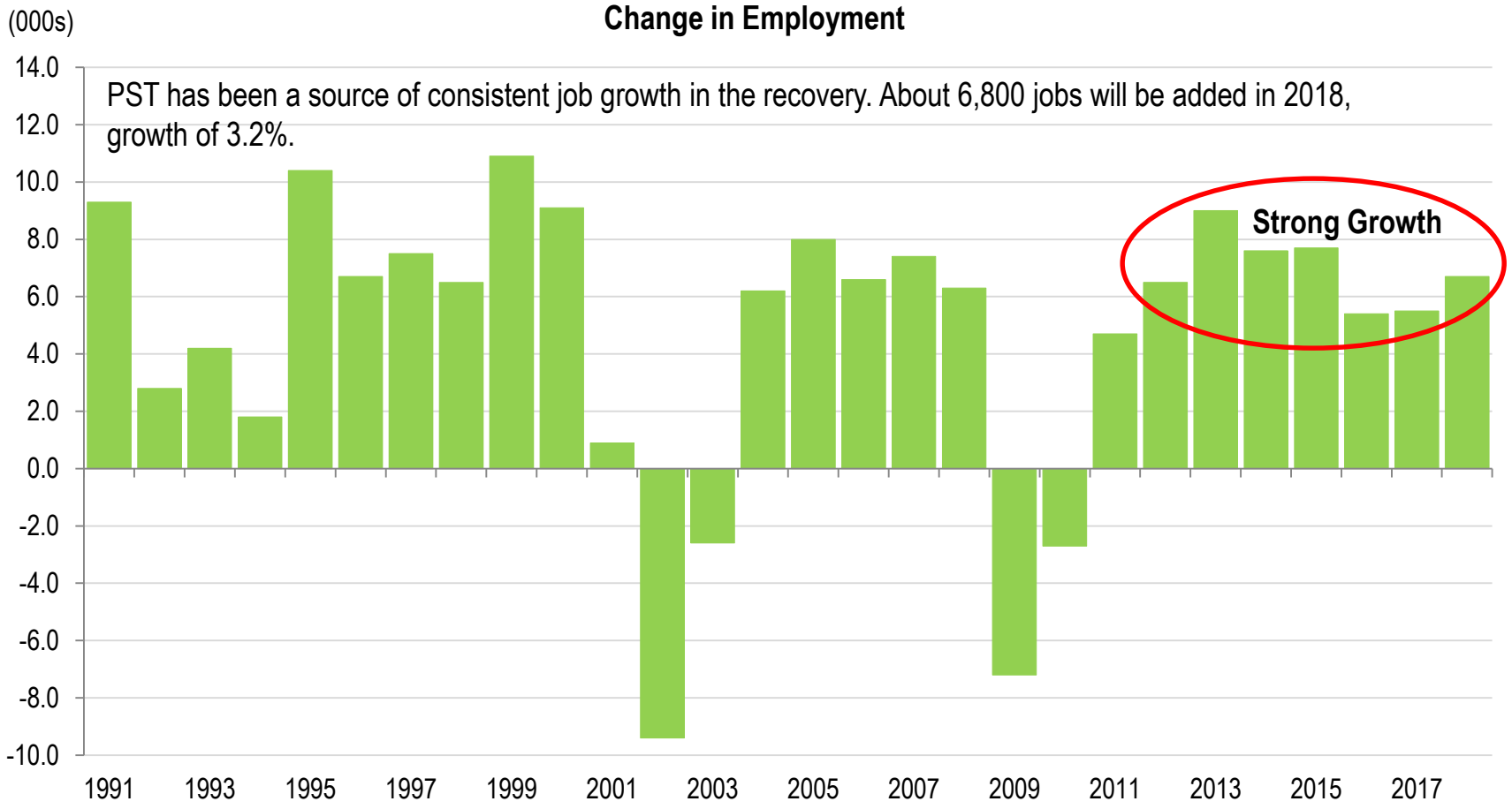
Construction



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

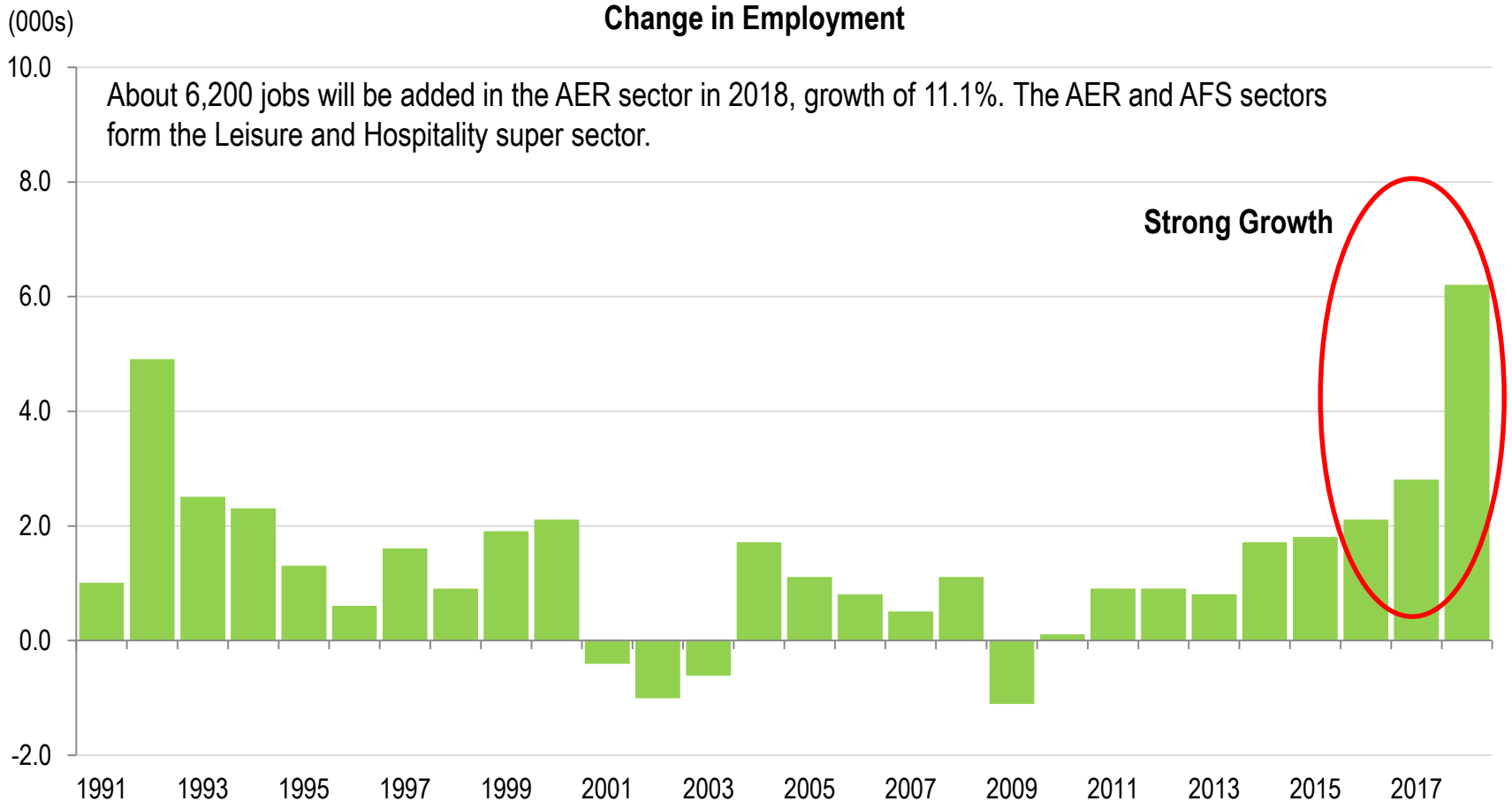
Professional, Scientific, and Technical Services



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

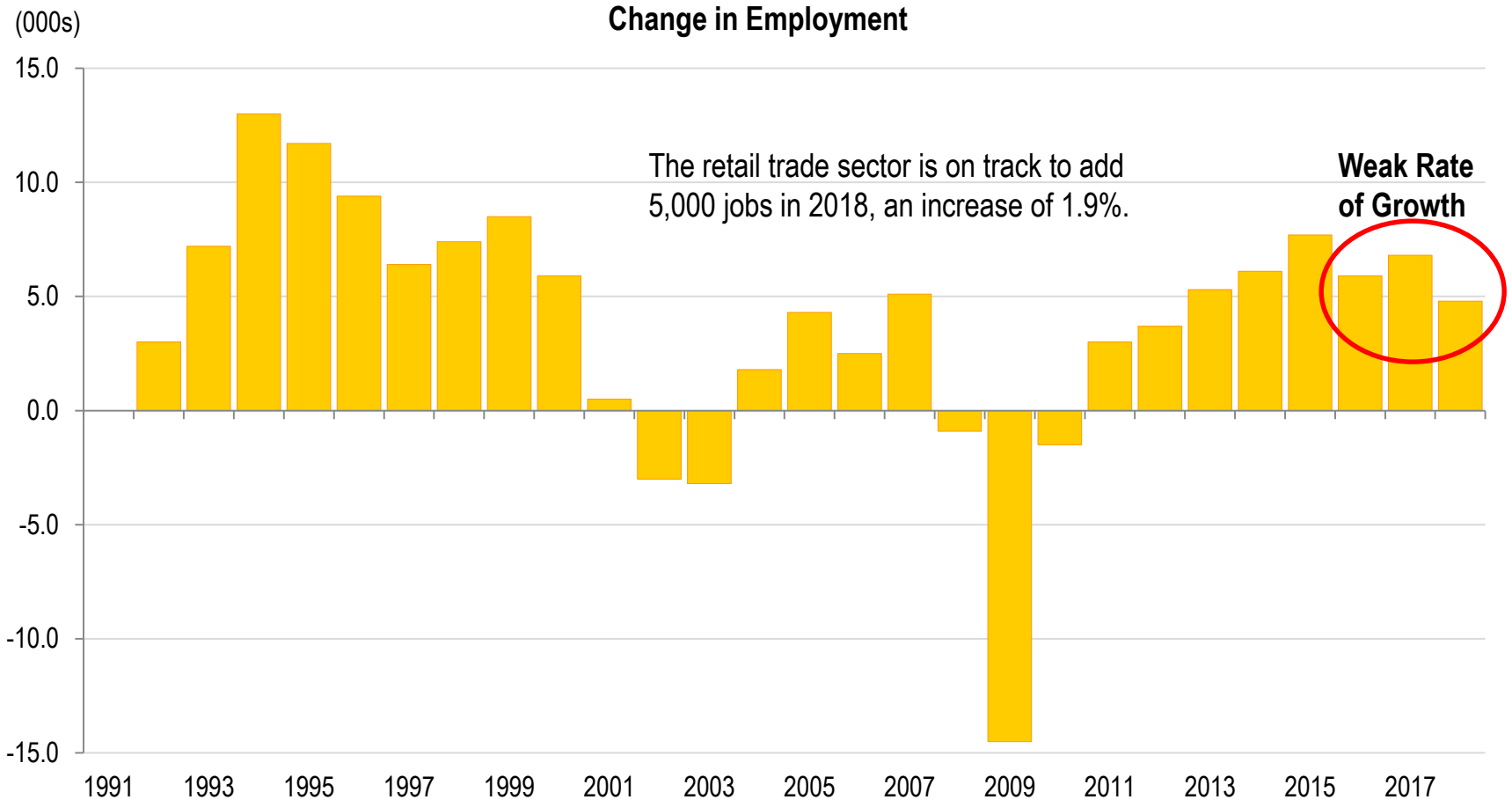
Arts, Entertainment, and Recreation



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

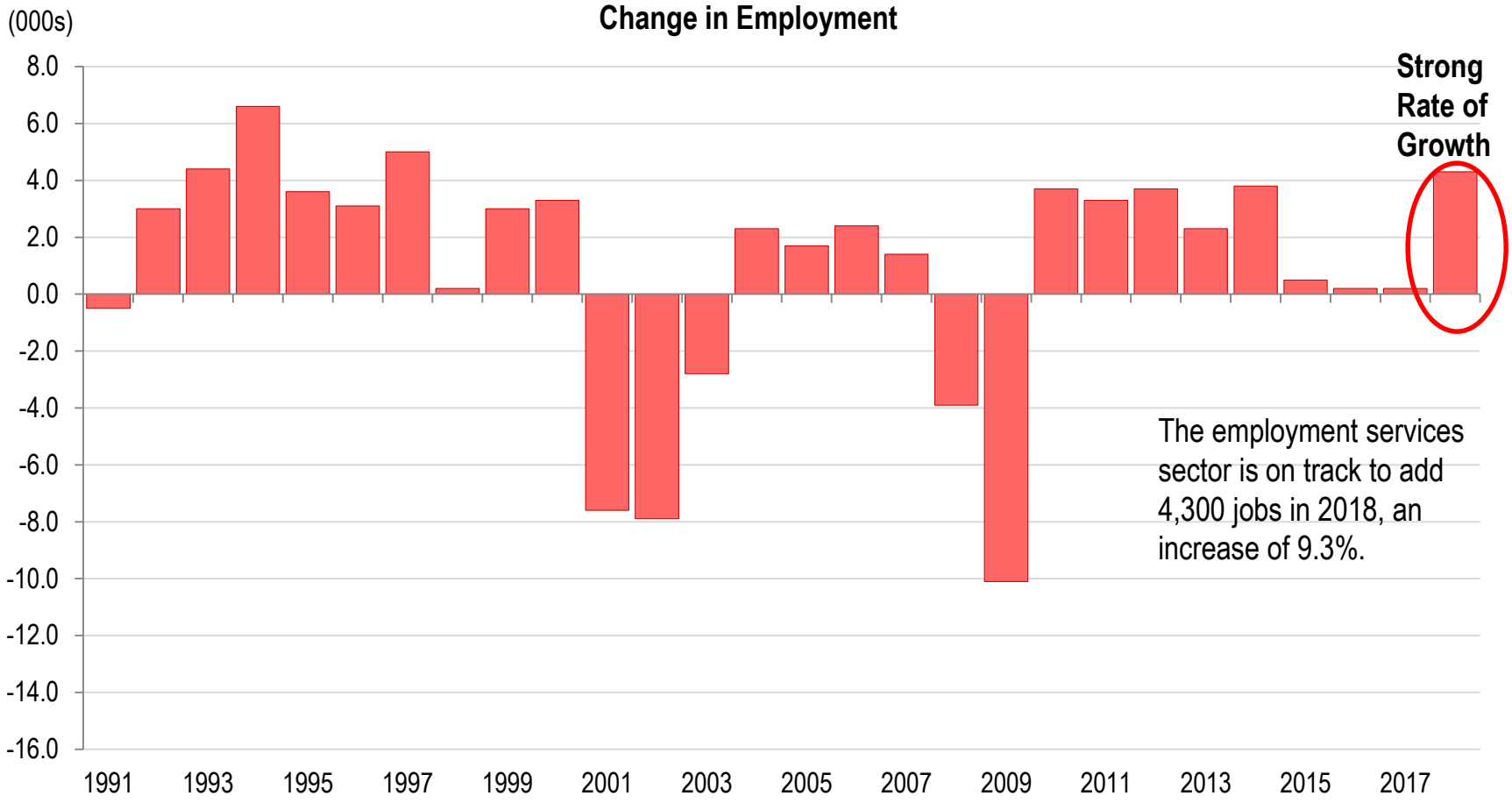
Retail Trade



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

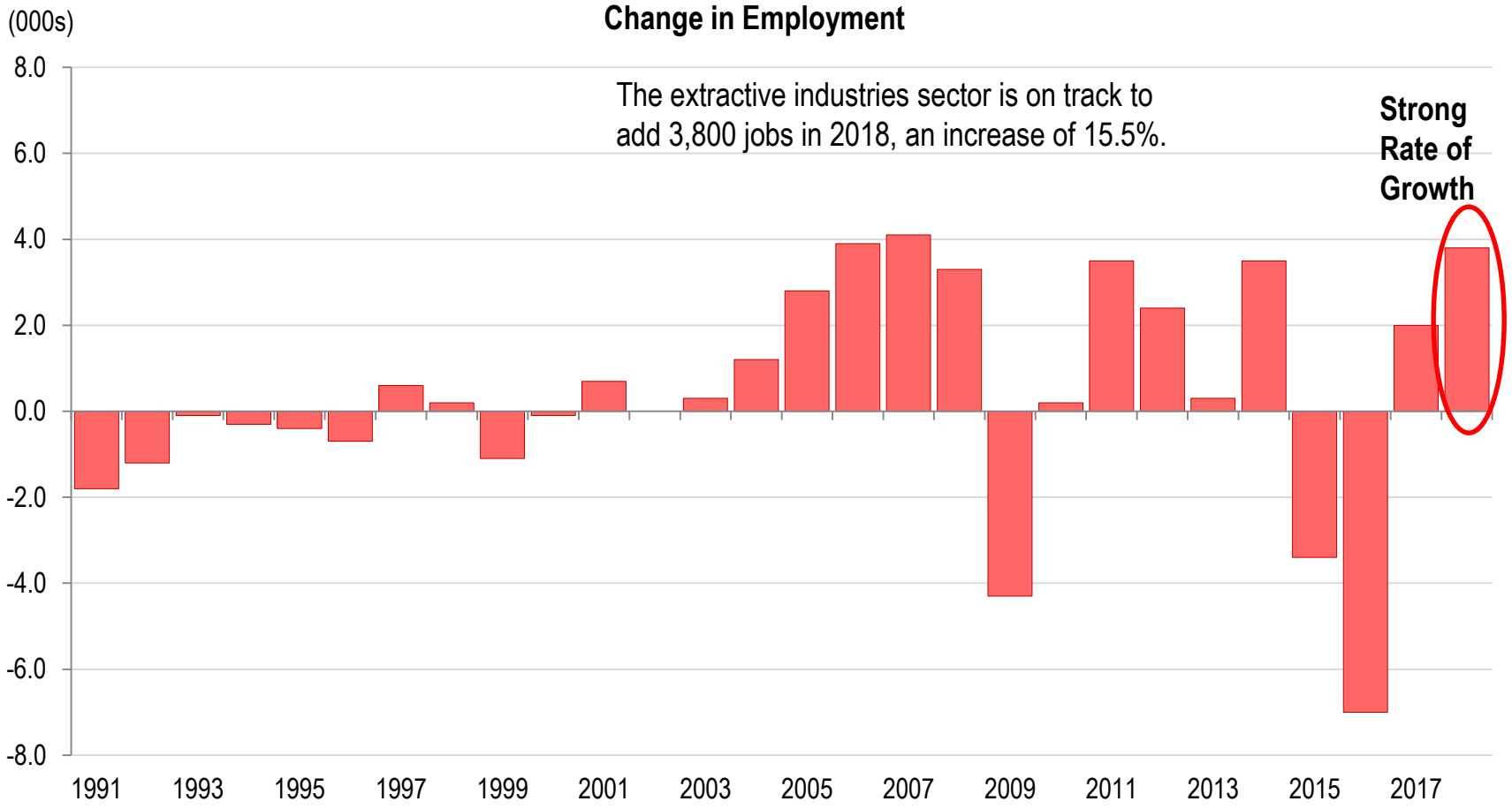
Employment Services



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

Extractive Industries

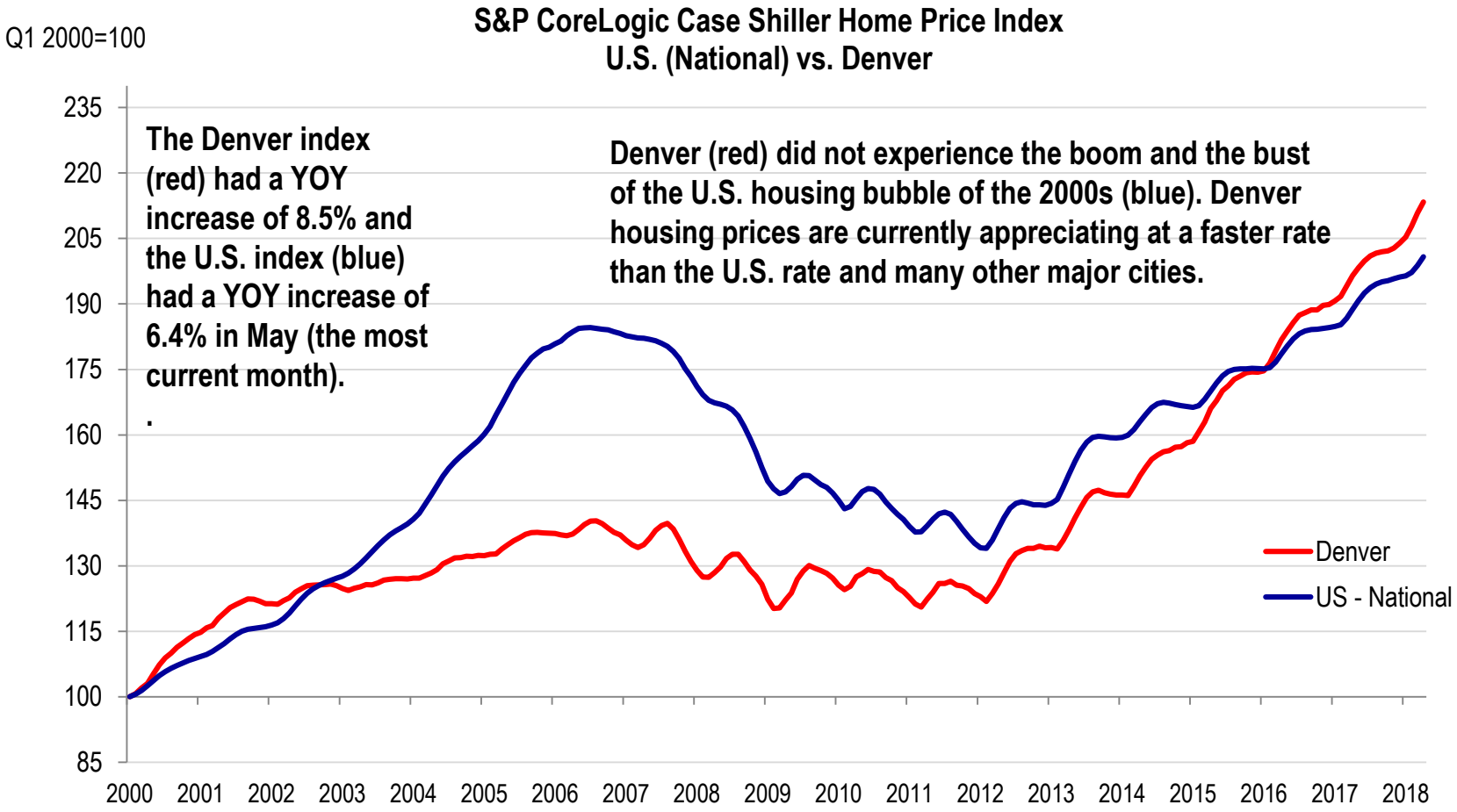


Source: Bureau of Labor Statistics, cber.co.

The Colorado Economy

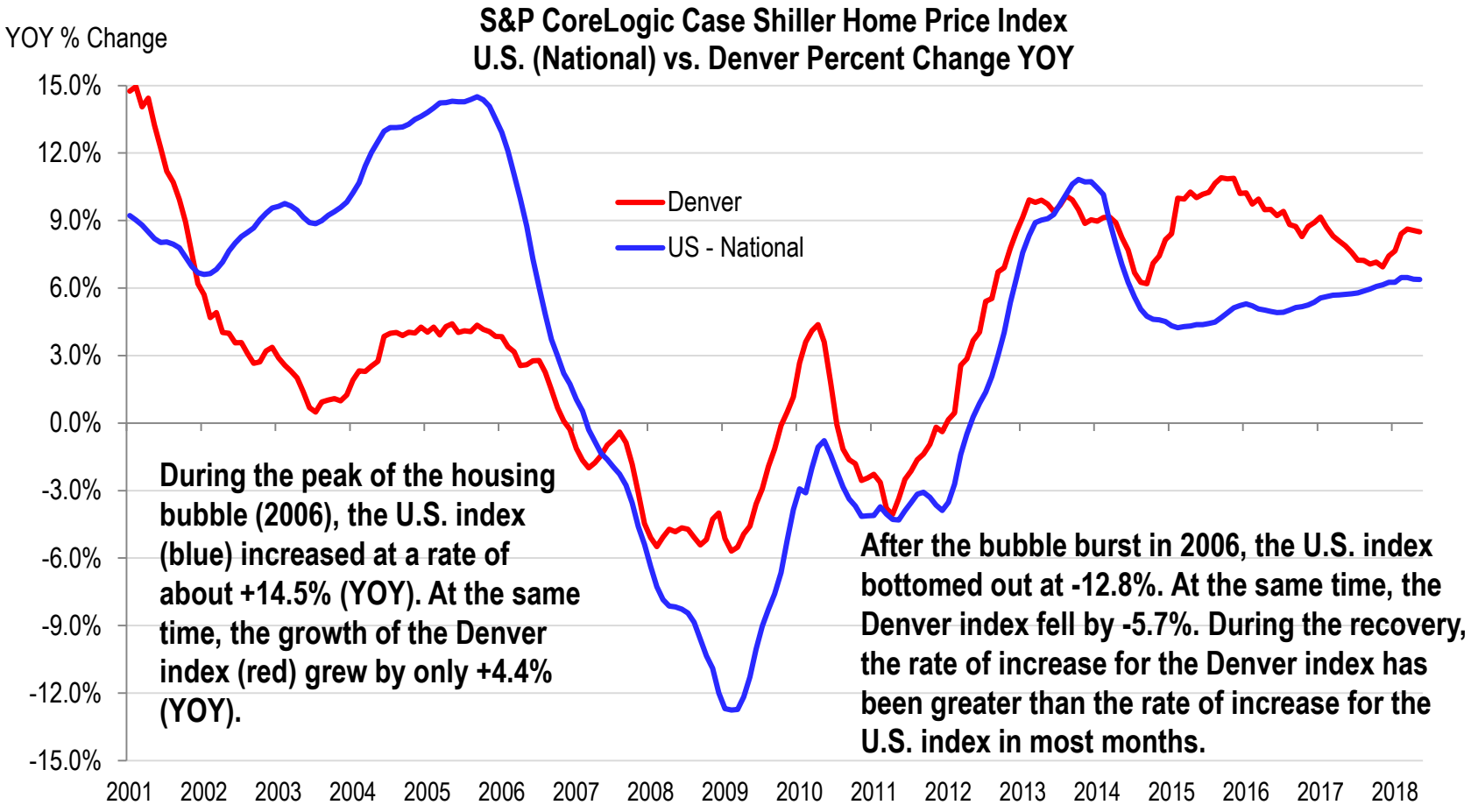
Building Permits and Housing Prices

Case Shiller Home Price Index
National vs. Denver Index Value



Source: S&P Core-Logic Case-Shiller, cber.co.

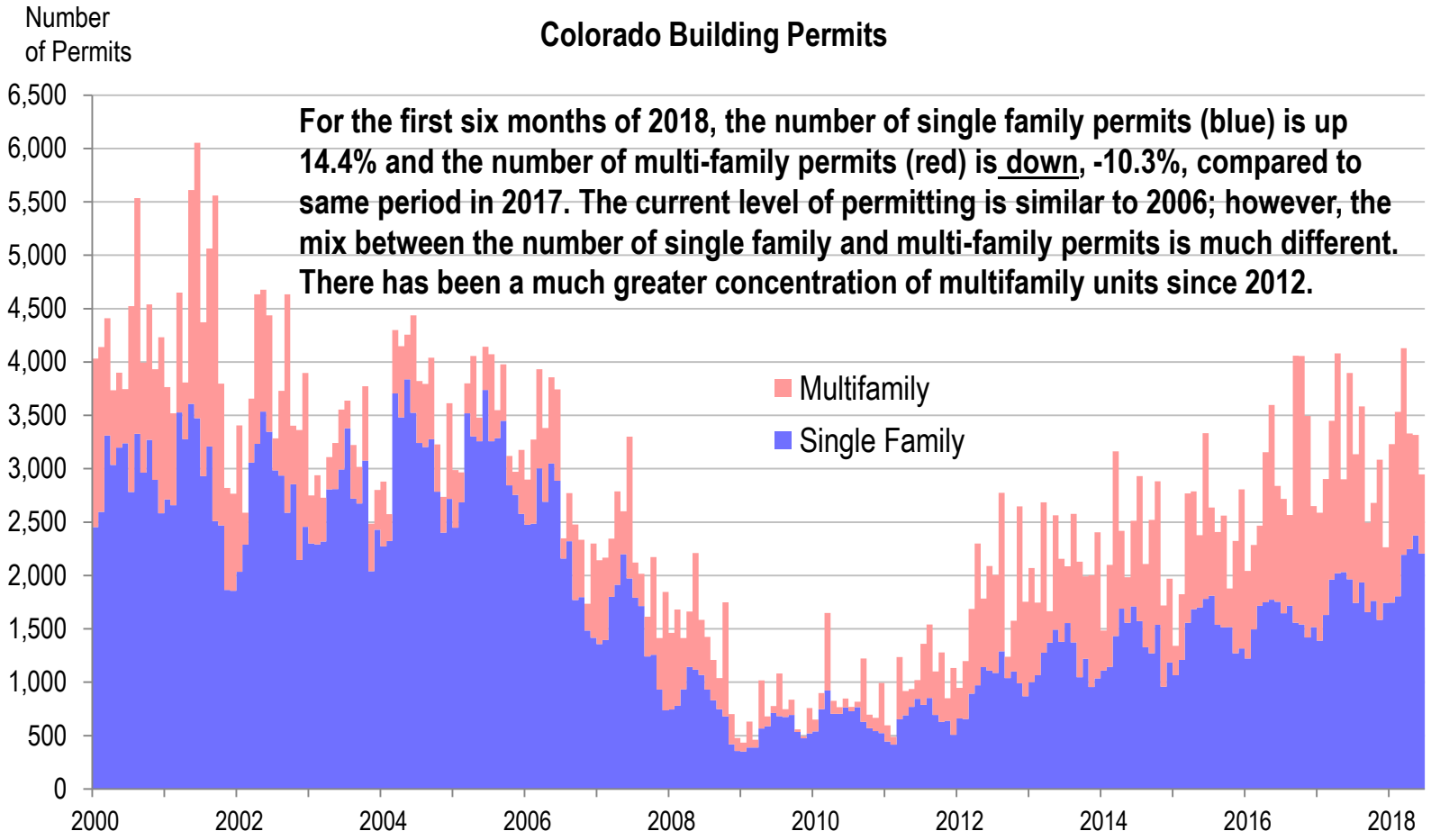
Case Shiller Home Price Index
National vs. Denver Rate of Change



Source: S&P Core-Logic Case-Shiller, cber.co.

Colorado Residential Building Permits

Units



Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co.

Housing

It seems like there is construction everywhere; however, Colorado is adding fewer single and multifamily units than during the early 2000s.

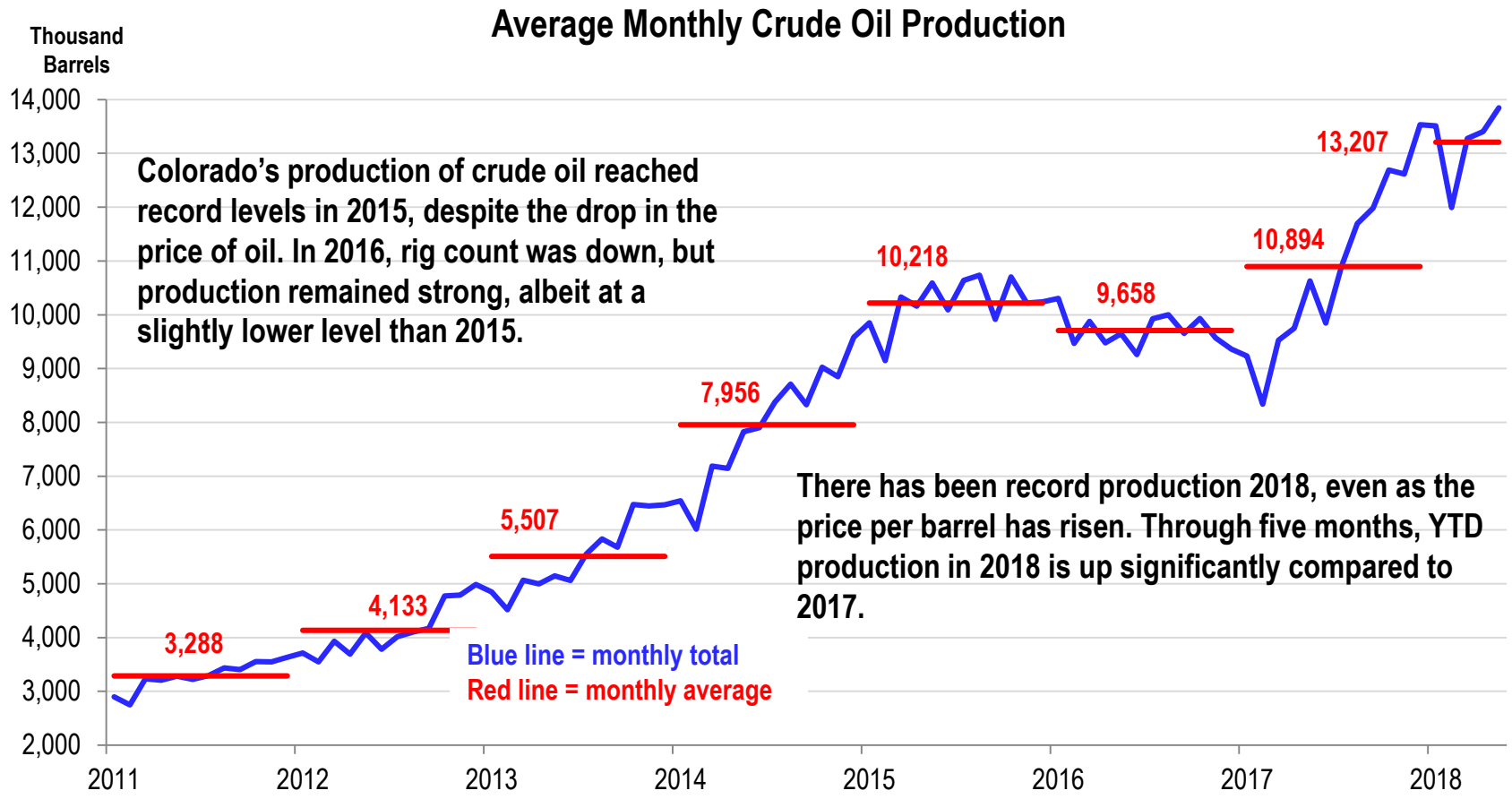
While economists talk about real estate and construction from national and state perspectives, it is also important to talk about real estate and construction from a local perspective.

The demand for houses is based on local demographics, attractions, needs, and the local availability of jobs and transportation. The supply for local housing is based on the cost of local land and materials and local housing policies.

The Colorado Economy

Oil Production, DIA Passengers, and Vehicle Registrations

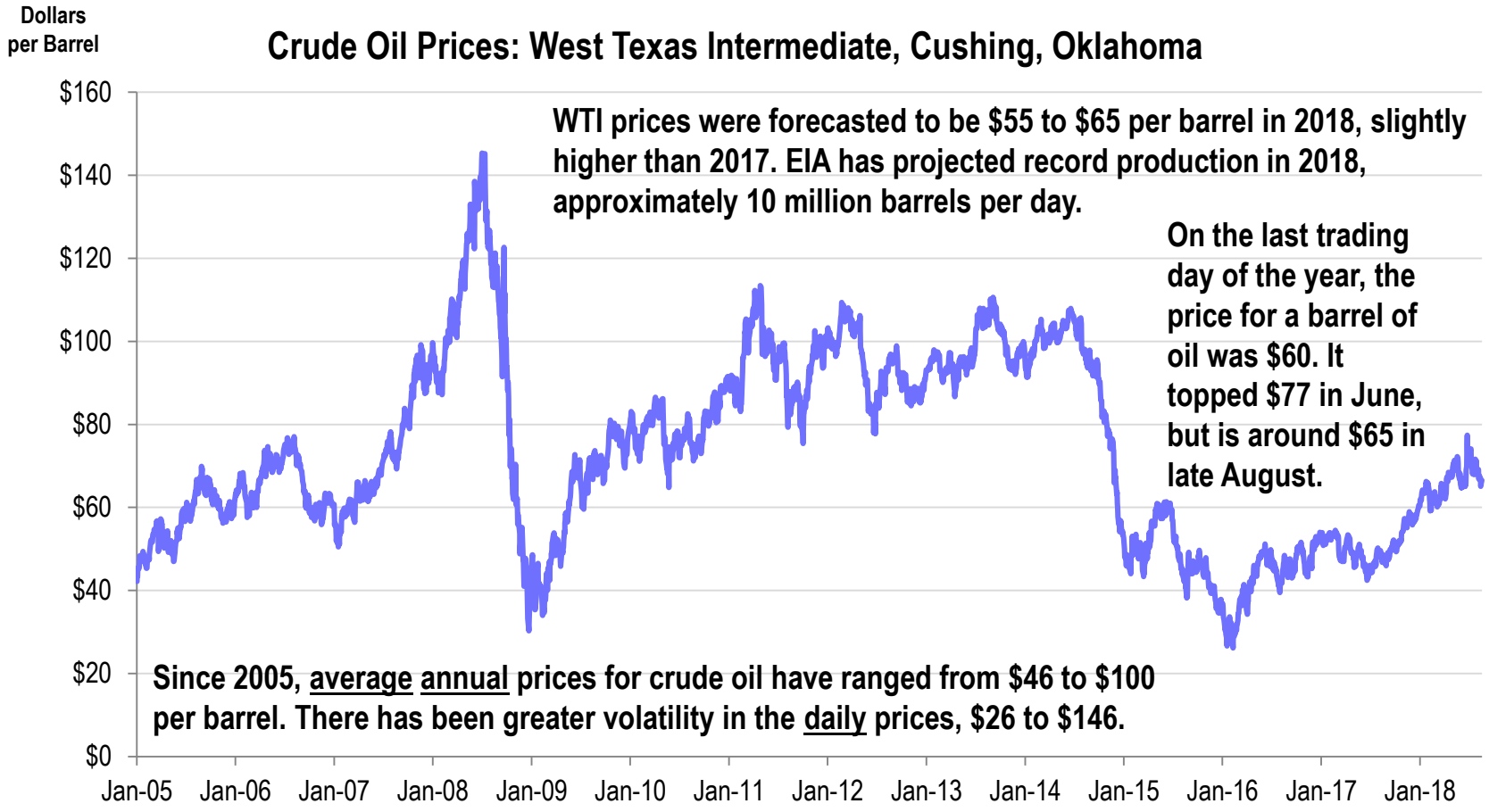
Average Monthly Field Production of Crude Oil
2011 to 2018 (Thousand Barrels)



Source: EIA, cber.co.

Crude Oil Prices

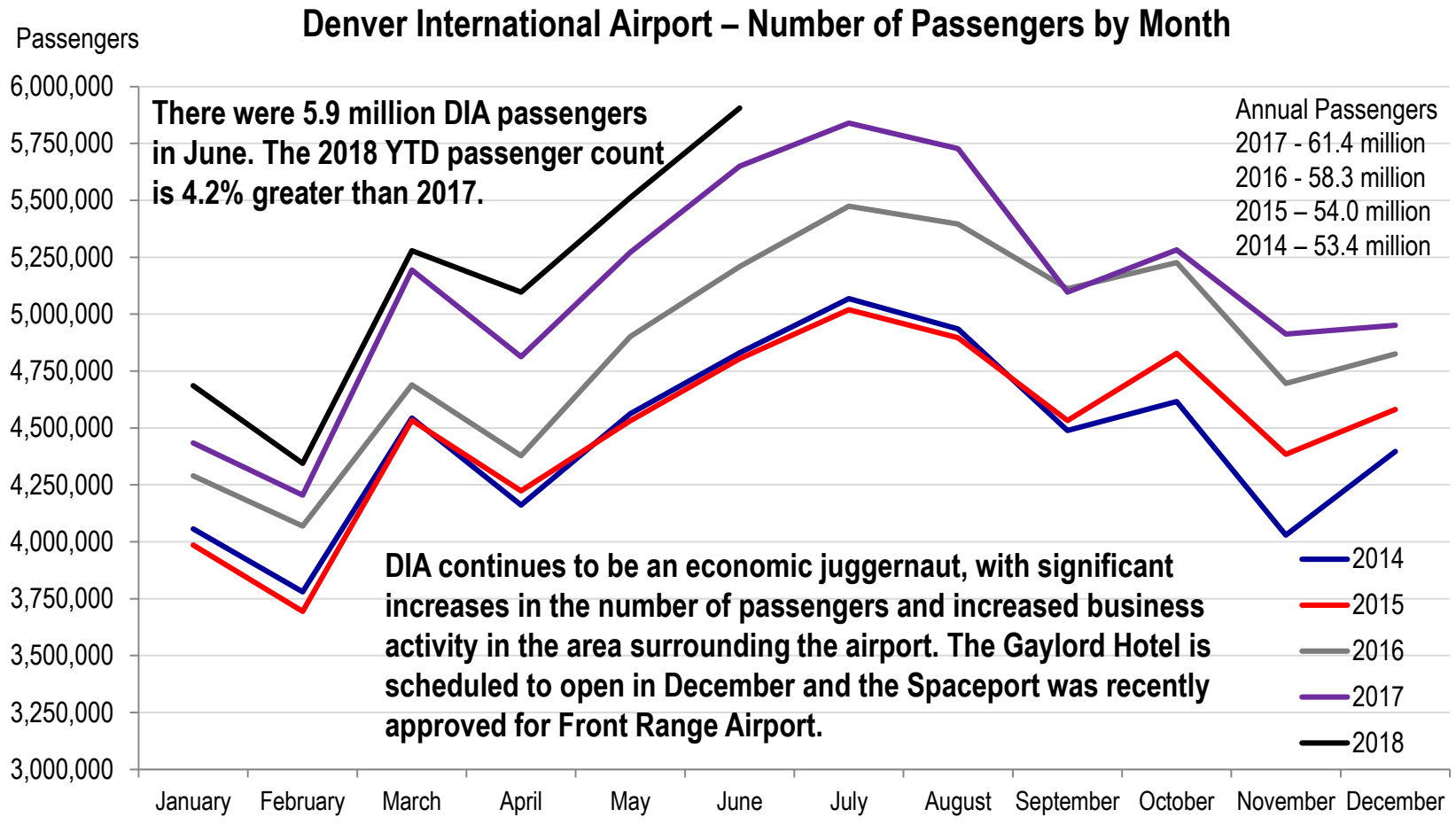
West Texas Intermediate



Source: FRED, EIA, cber.co.

Denver International Airport

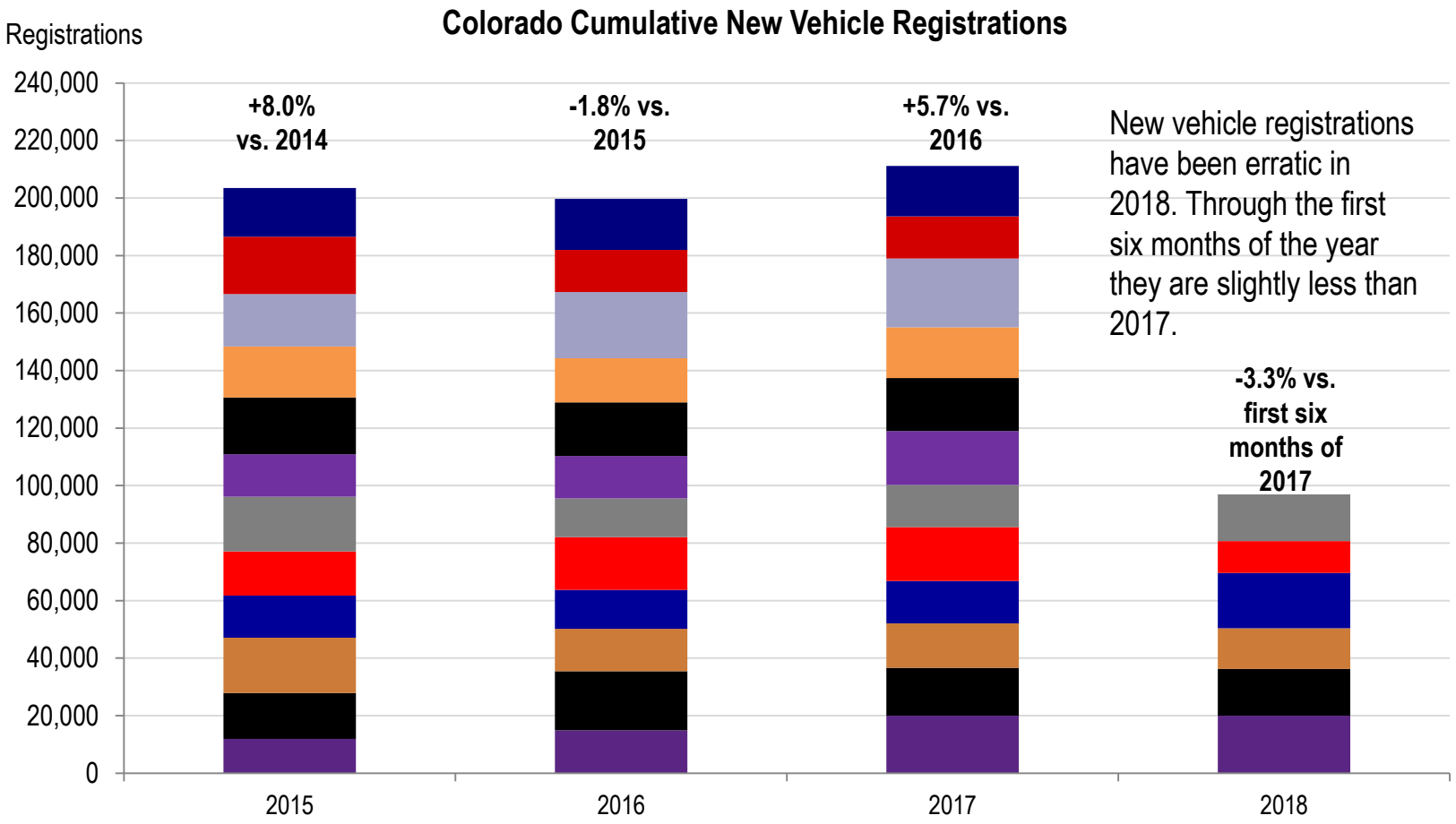
Passengers



Source: FlyDenver.com, cber.co.

Cumulative Colorado New Vehicle Registrations

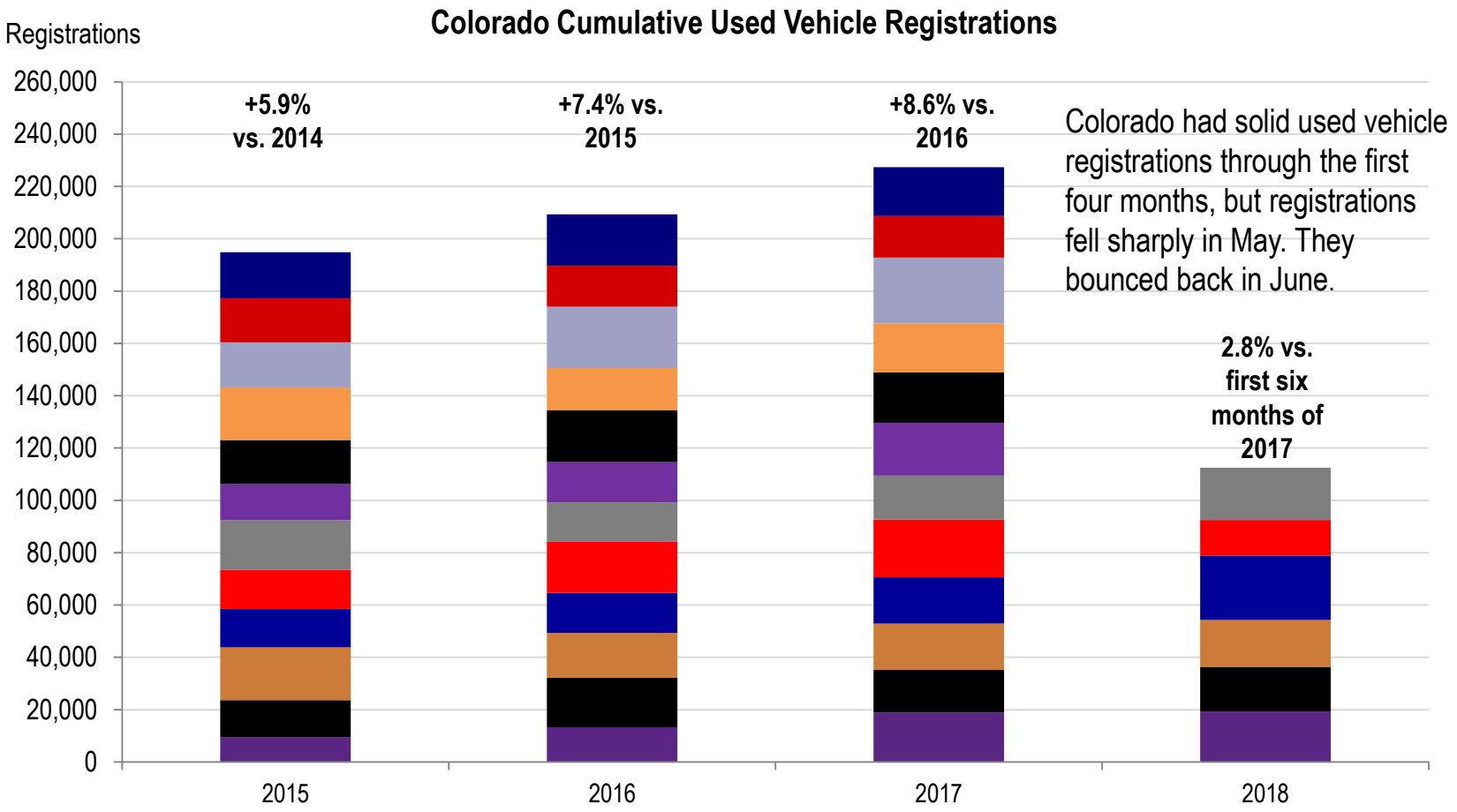
Monthly Registrations



Source: Colorado Auto Dealers Association, cber.co. Note: Data is in descending order with December at the top and January at the bottom, not adjusted for inflation.

Cumulative Colorado Used Vehicle Registrations

Monthly Registrations



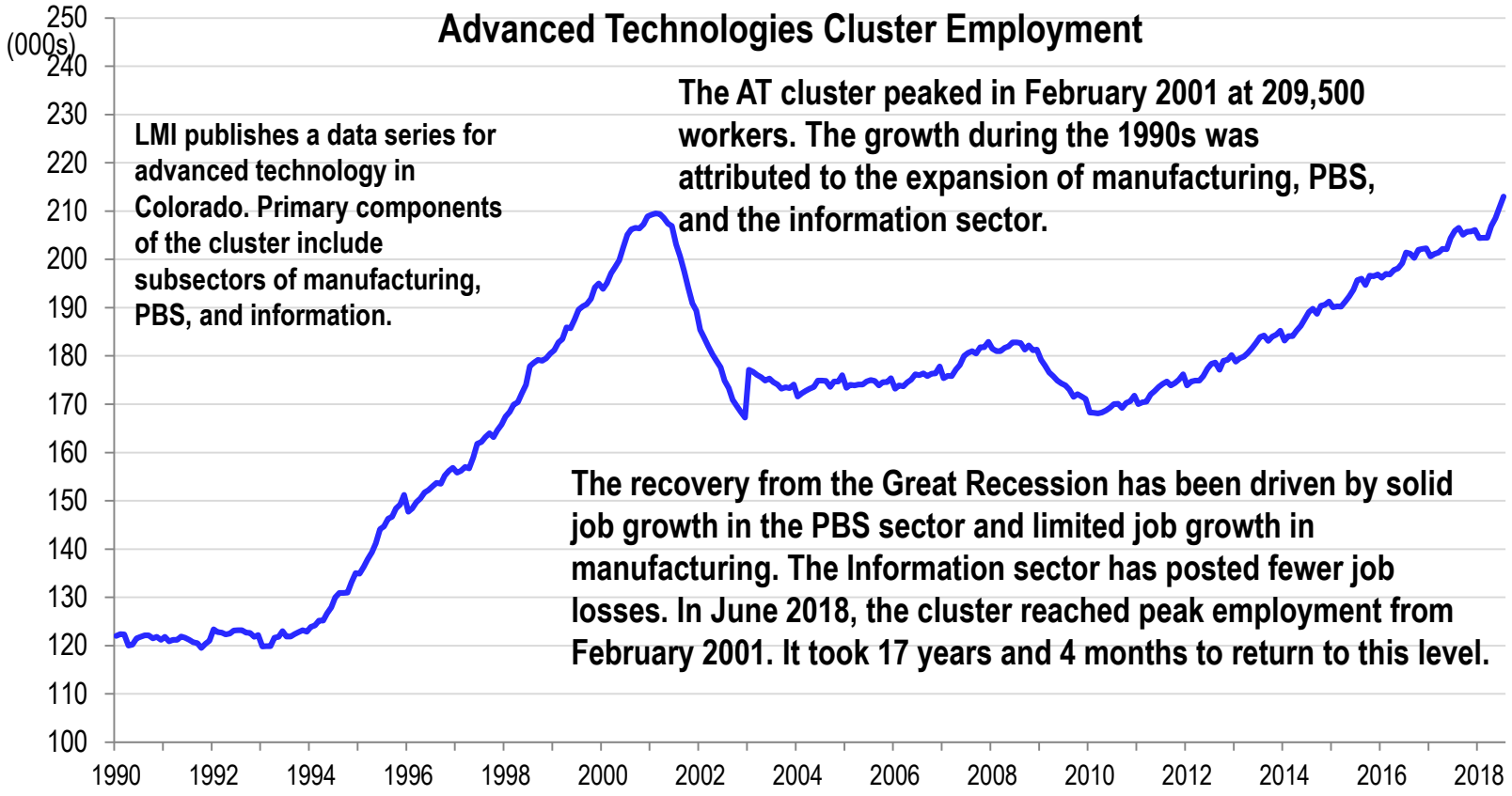
Colorado had solid used vehicle registrations through the first four months, but registrations fell sharply in May. They bounced back in June.

Source: Colorado Auto Dealers Association, cber.co. Note: Data is in descending order with December at the top and January at the bottom, not adjusted for inflation.

The Colorado Economy

Advanced Technology

Advanced Technologies Employment



Source: Labor Market Information, https://www.colmigateway.com/gsipub/index.asp?docid=368, cber.co.

Advanced Technologies

Technology changes quickly…

The online newsletter *Morning Brew* recently published the following quote from a *New York Times* story from 2008 (only 10 years ago).

"Apple has a substantial way to go to catch its competitors. Palm, Microsoft, R.I.M., Nokia, and Symbian have all enticed developers to write software for their smartphone operating systems."

The Colorado Economy
Summary

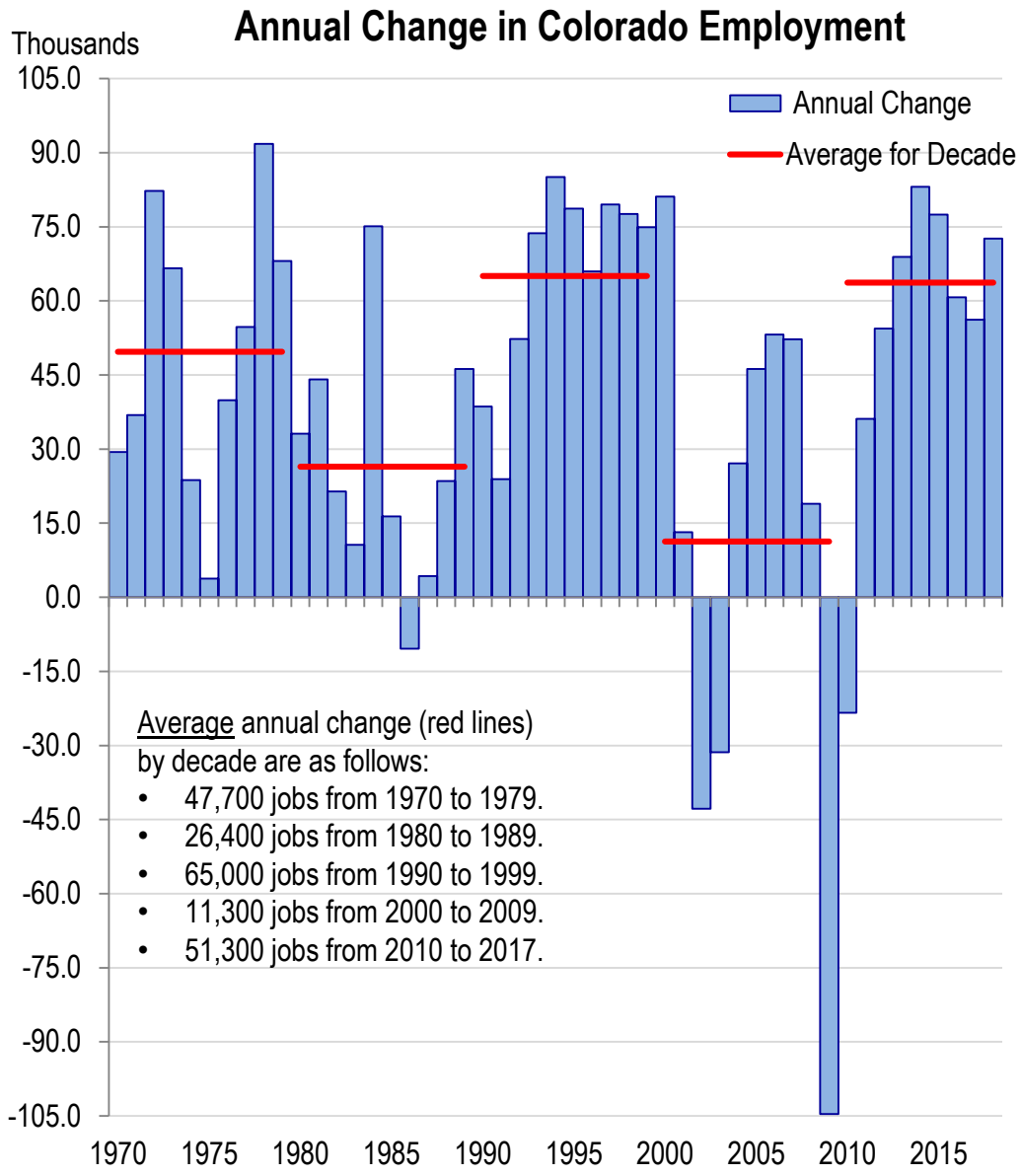
Annual Employment Change in Colorado Employment

Employment for the first seven months of 2018 is 72,600 jobs greater than the same period in 2017. The number of jobs increased at a rate of 2.75%.

The state added 56,200 jobs in 2017 and employment increased by 2.2%.

The cber.co forecast for 2018 called for slightly slower job growth than 2017, in the range of 1.9% to 2.1%. cber.co and all other state economists underestimated the strength of the economy.

On average, employment for the first 9 years of this decade has increased at an average rate of 63,700 jobs per year.



Source: Bureau of Labor Statistics, cber.co.

Summary and Outlook
Colorado

The following summary of the state economy is based on ten numbers. The two numbers in the left column describe the state of the current economy. The eight numbers in the right column are tied to issues that will have an impact on the economy in the months ahead.

Today

81,200 and 81,700
In June and July 2018, Colorado added 81,200 and 81,700 jobs on a YOY basis. These months were ranked 68th and 73rd out of 943 months, or the top 8% of all months, since Colorado employment data has been kept.

That level of job growth indicates the fundamentals are in place for strong economic growth in the short-term.

Looking Ahead

2.8%
The Colorado unemployment rate was 2.8% in July, the 21st consecutive month the unemployment rate was at or below 3.0%. It will be difficult for the state to sustain its current level of job growth given that low rate of unemployment.

11-06-2018
This is the day of the 2018 general election. The campaign ads have begun – Ugh! All indications are the new governor will have a much different set of priorities.

93, 97, 153, 167
In the general election, the four initiatives with these numbers will address key issues for transportation (153 and 167), education (93), and oil and gas well setbacks (97).

cber.co Review of
Colorado Employment Data through July 2018

This analysis is for informational purposes only. Any opinions or interpretations of data are those of the presenter. As such, they do not represent the viewpoints of any group or particular organization.
For further information contact Colorado-based Business and Economic Research (cber.co).

For additional information contact cber.co at cber@cber.co.

ABOUT THE AUTHOR

Gary Horvath has produced annual employment forecasts of the state economy for over 25 years. They have been supplemented by monthly economic updates and indices that track economic performance over the short term. In addition, he has directed three statewide analyses that included reviews of all 64 county economies.

Horvath was the principal investigator for a state and federally funded project to prepare a nanotechnology roadmap for Colorado. As well, he was a co-founder of the Colorado Photonics Industry Association, a trade group for Colorado's Photonics cluster. Horvath has been an active board member of the group since its inception.

Horvath has also served on the Board of Directors for the Economic Development Council of Colorado, Northwest Denver Business Partnership, Adams County Economic Development, and Broomfield Economic Development Corporation. Horvath has also been the lead for the photonics/electronics cluster in OEDIT's early stage and proof of concept grant programs.