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# Colorado Economy and Employment Data Through September 2017

Colorado-based Business and Economic Research  
Prepared  
October 27, 2017

# Overview of Economic Review

This chartbook provides a series of charts, graphs, and discussions that review the Colorado wage and salary employment data published by the Bureau of Labor Statistics. Based on data through September, Colorado employment is on track to add 49,600 jobs this year. Most likely that understates actual job growth. The unemployment rate of 2.5% indicates there is a lack of qualified workers in most industries. It is a deterrent to stronger job and real GDP growth.

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## U.S. Economy

- The Economy Through September 2017.
- The United States Economy.
  - Leading Index and Real GDP.
  - Employment and Unemployment Rate.
  - S&P 500 and Equity Volatility.
  - Manufacturing, Non-manufacturing, Retail Trade, Auto Sales, and CPI.

## The Colorado Economy

- Population; Employment; Colorado Unemployment Rate; Unemployment by MSA and Select Counties, Rate of Job Growth vs. Unemployment Rate.
  - Employment in Strong Growth, Solid Growth, Volatile Categories.
  - Key Sectors and Trends to Watch.
    - Extractive Industries
    - Construction, Housing Prices
    - Retail Trade, New and Used Car Registrations, DIA Passenger Traffic, Transportation.
  - Amazon and the National Football League.
  - Revisions.
  - Summary.
- 

The complete 2017 cber.co forecast can be found at <http://cber.co/economic-forecasts/>

# The Economy Through September 2017

## United States

From an economic perspective, very little has changed over the past couple of months and that is okay!

- The Fed is optimistic about the U.S economy.
- The Q3 real GDP rate was 3.0%.
- The U.S. Leading Index is up.
- YTD retail sales are up 4.4%.
- Auto sales were strong in September, 18.4 million.
- Y-O-Y housing prices for the U.S. continue to increase (5.9%),
- The S&P 500 is up 14.8%; the VIX shows little volatility.
- The unemployment rate is 4.2%.
- Purchasing managers are optimistic about the future (manufacturing and non-manufacturing).
- The U.S. is on track to add 2.1 million jobs in 2017.

Despite uneasiness caused by North Korea and political unrest in the U.S., economic growth remains solid.

## Colorado

If only there were enough qualified workers to fill the vacant jobs, the state would be experiencing much stronger job growth.

### The Good News

- Construction permits are solid.
- Housing prices are increasing at a decreasing rate.
- Auto sales are strong.
- Retail trade outlook is positive.
- DIA passenger traffic is up.
- Moderate job growth.

### The Best News

- Activity on the streets is positive.

### Areas to Watch

- The Colorado CPI is higher than the U.S. rate.
- Prices for a barrel of oil continue to be flat.
- The Colorado Leading Index is up.
- Employment data may be understated.



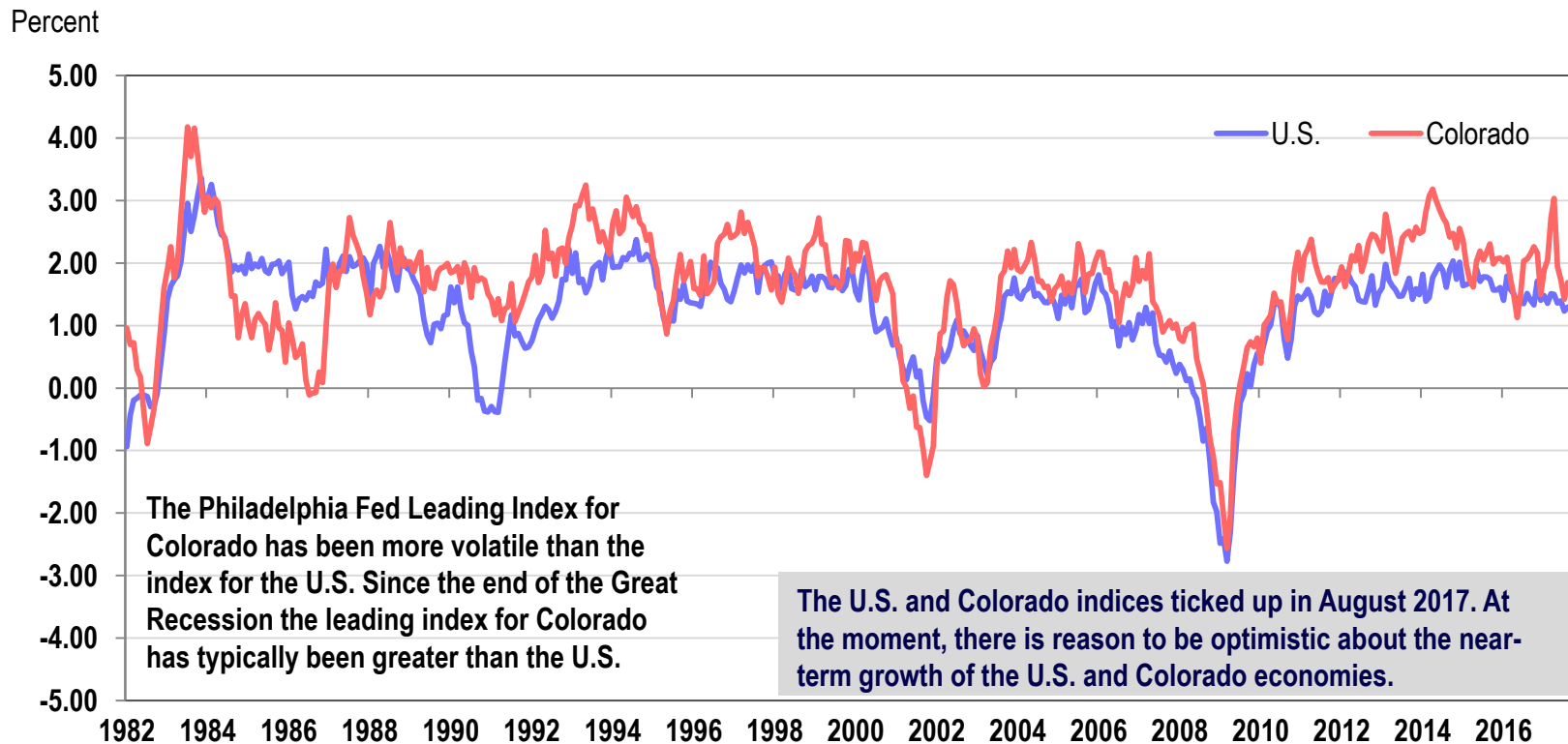
# The U.S. Economy

## Leading Index and Real GDP

# Leading Index

## Colorado vs. United States

Philadelphia Federal Reserve Leading Index - Colorado vs. U.S.



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

# Quarterly Real GDP Growth United States

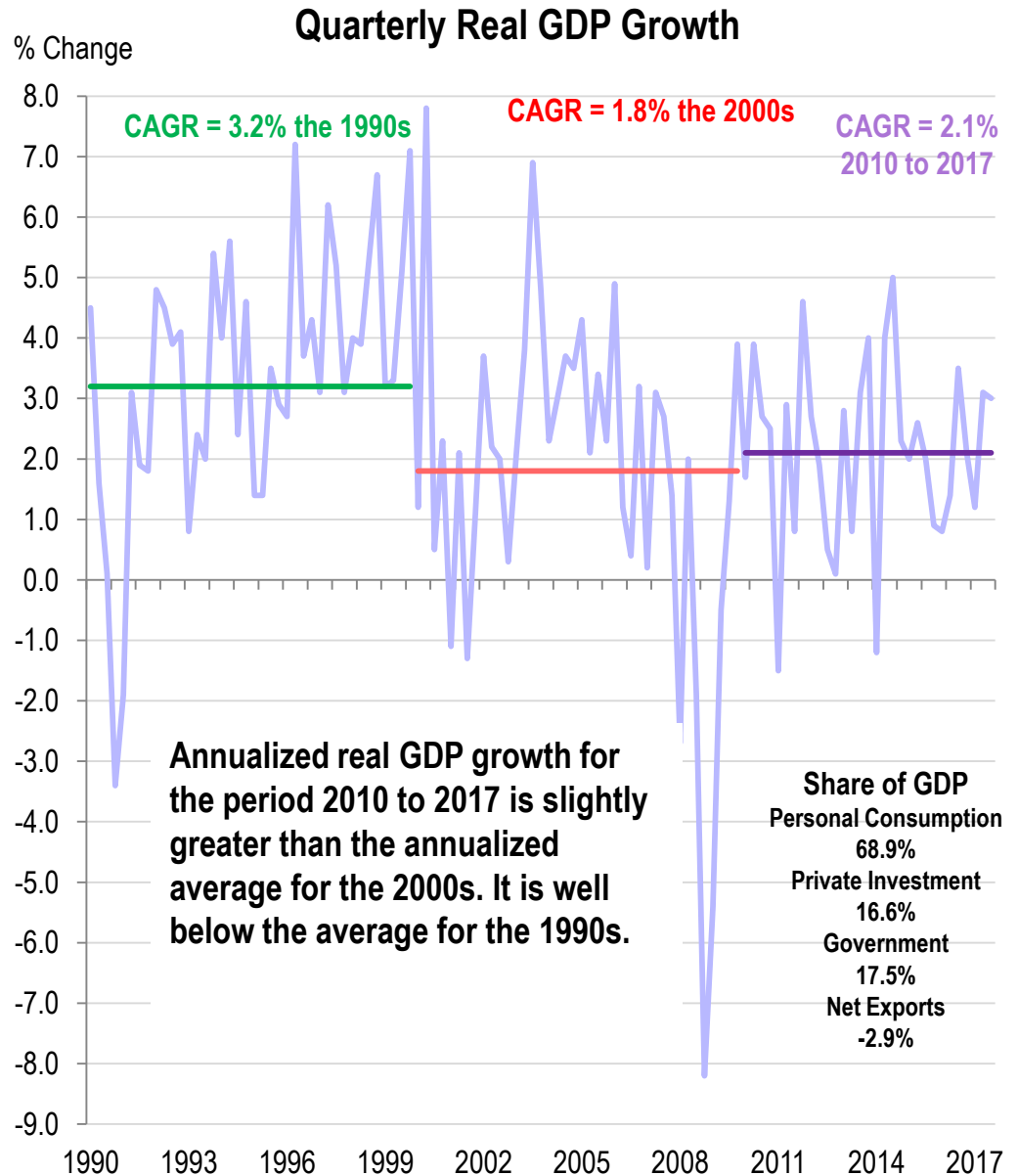
Historical annualized real GDP growth is:

- 1990s 3.2% (green line).
- 2000s 1.8% (red line).
- 2010 to 2017 2.1% (purple line).

The advance estimate for Q3 real GDP growth was 3.0%. The third estimate for Q2 was bumped up to 3.1% and the final estimate for Q1 is 1.2%.

Real GDP growth for recent years was:

- 2010 2.5%
- 2011 1.6%
- 2012 2.2%
- 2013 1.7%
- 2014 2.4%
- 2015 2.6%
- 2016 1.6%
- 2017 2.1% to 2.5% projected.



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

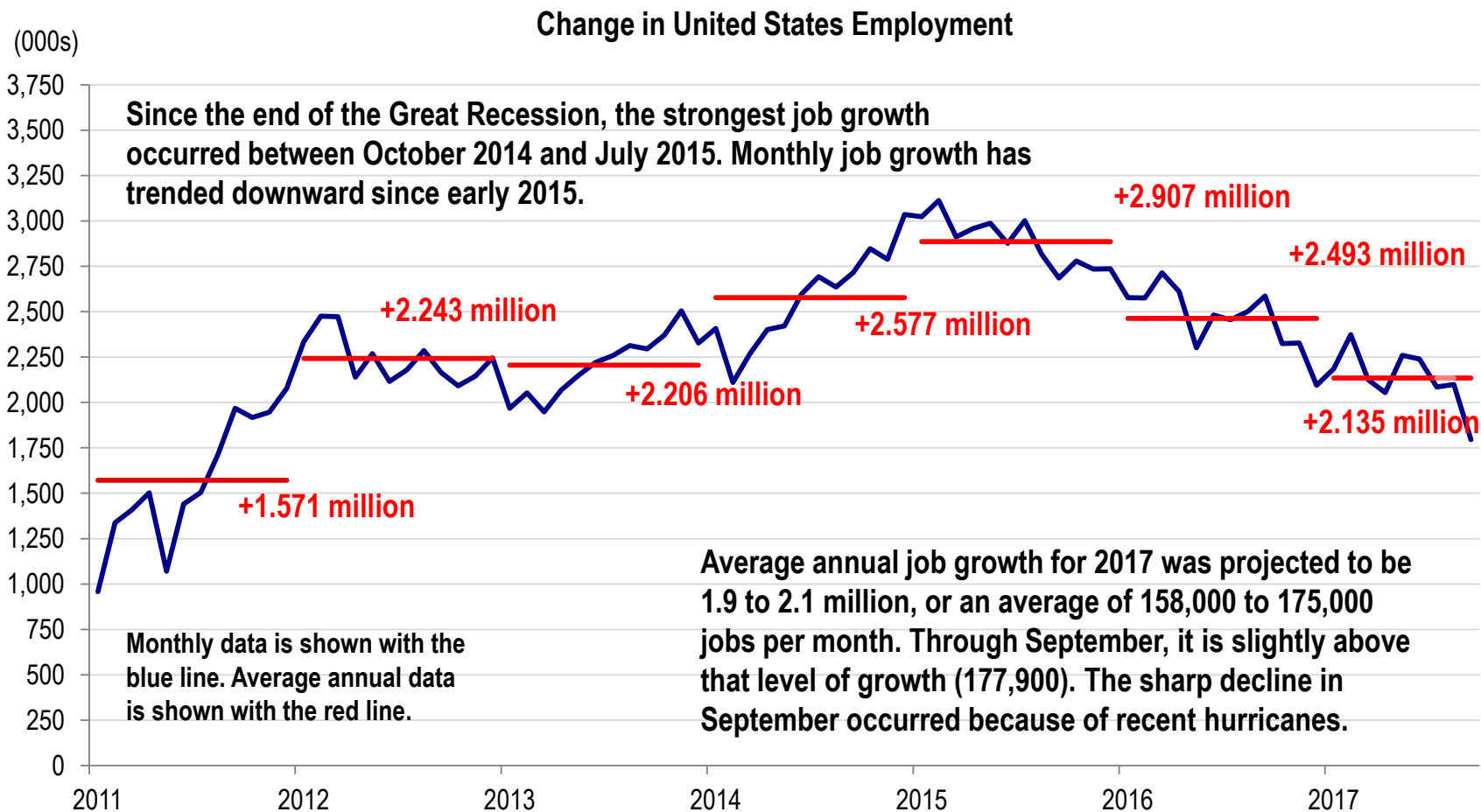


# The U.S. Economy

## Employment and Unemployment Rate

# Change in United States Employment

## Year-Over-Year

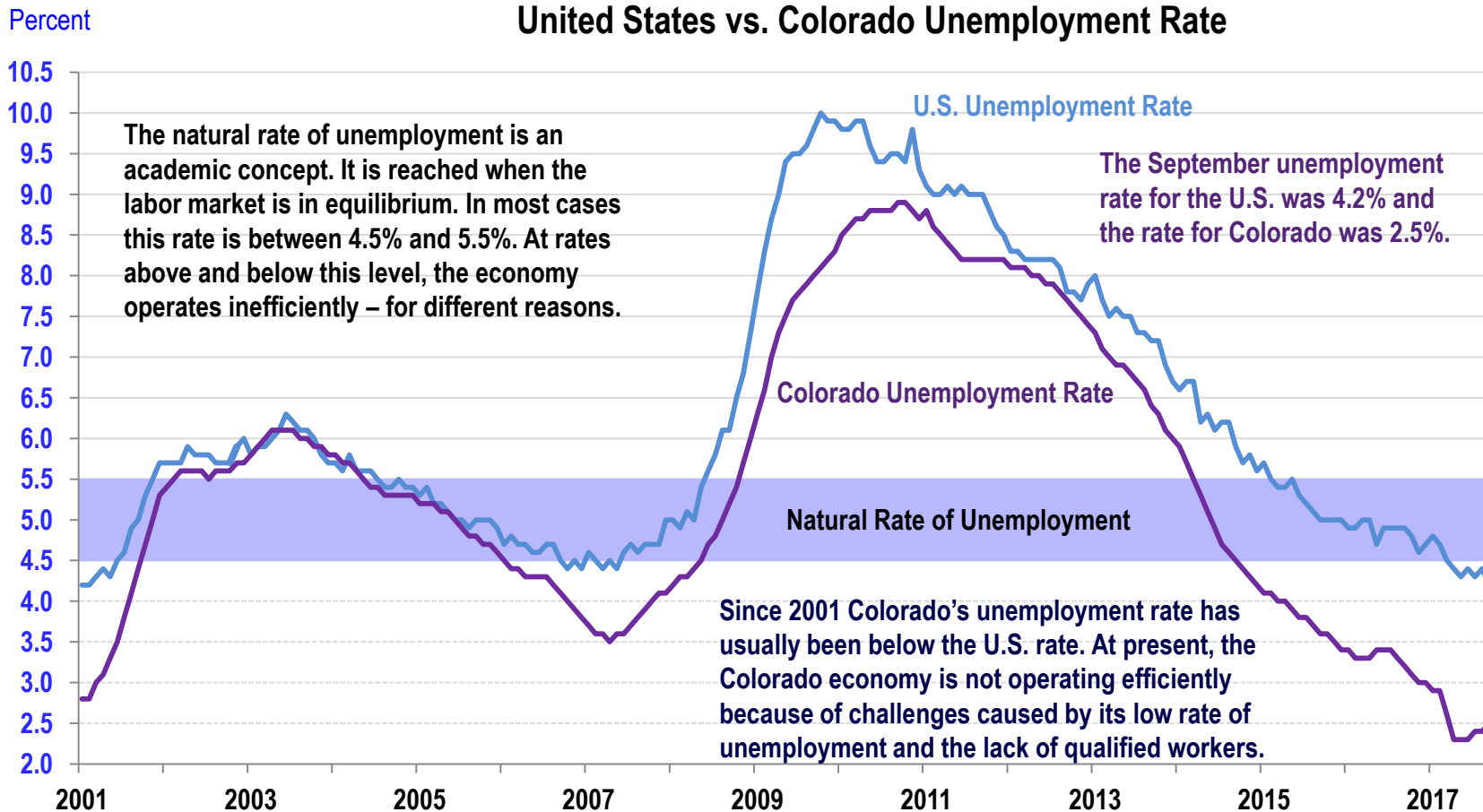


Source: Bureau of Labor Statistics, NSA; cber.co.



# Unemployment Rate

## United States vs. Colorado



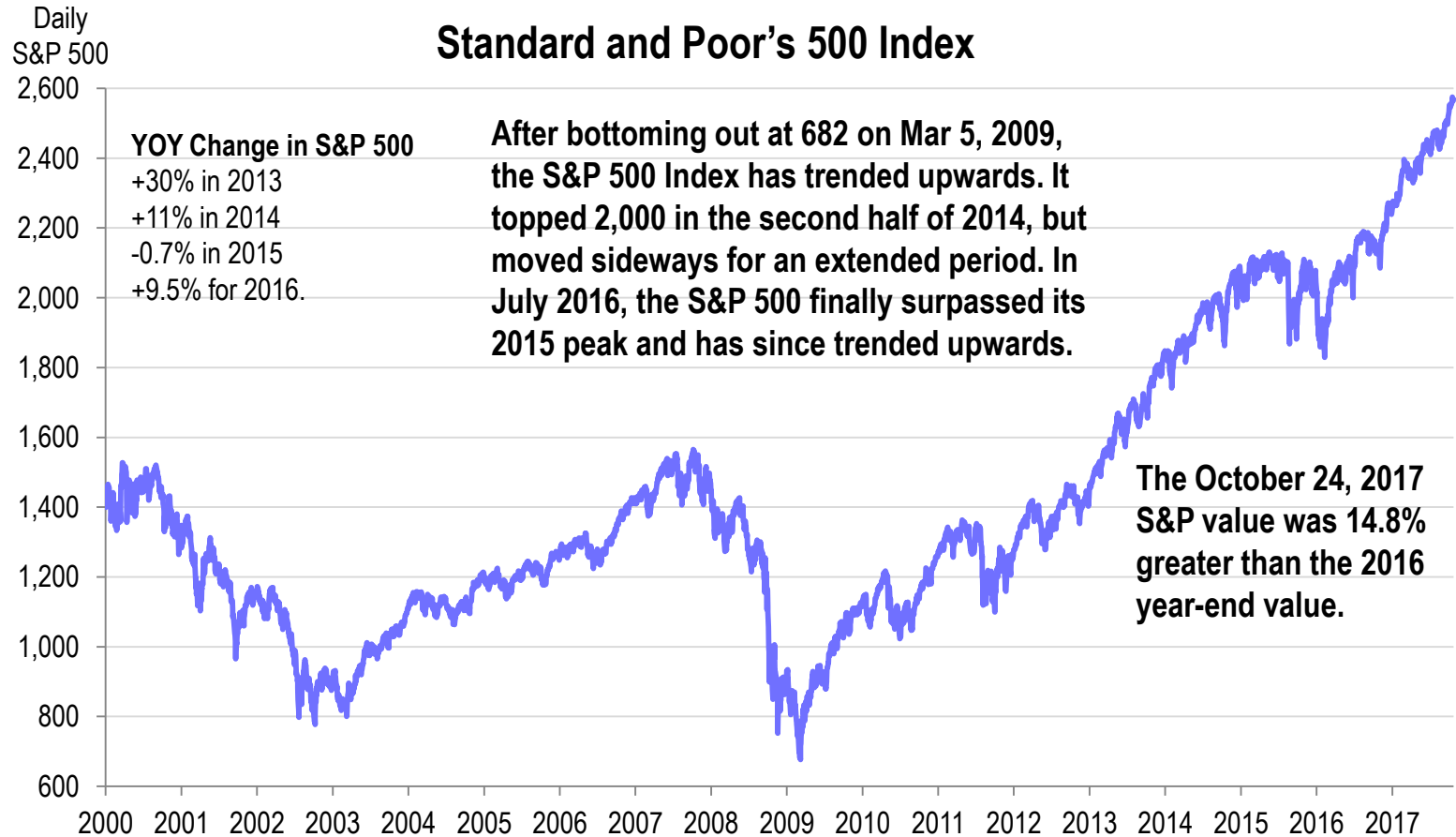
Source: Bureau of Labor Statistics, SA, cber.co.



# The U.S. Economy

## S&P 500 and Equity Volatility

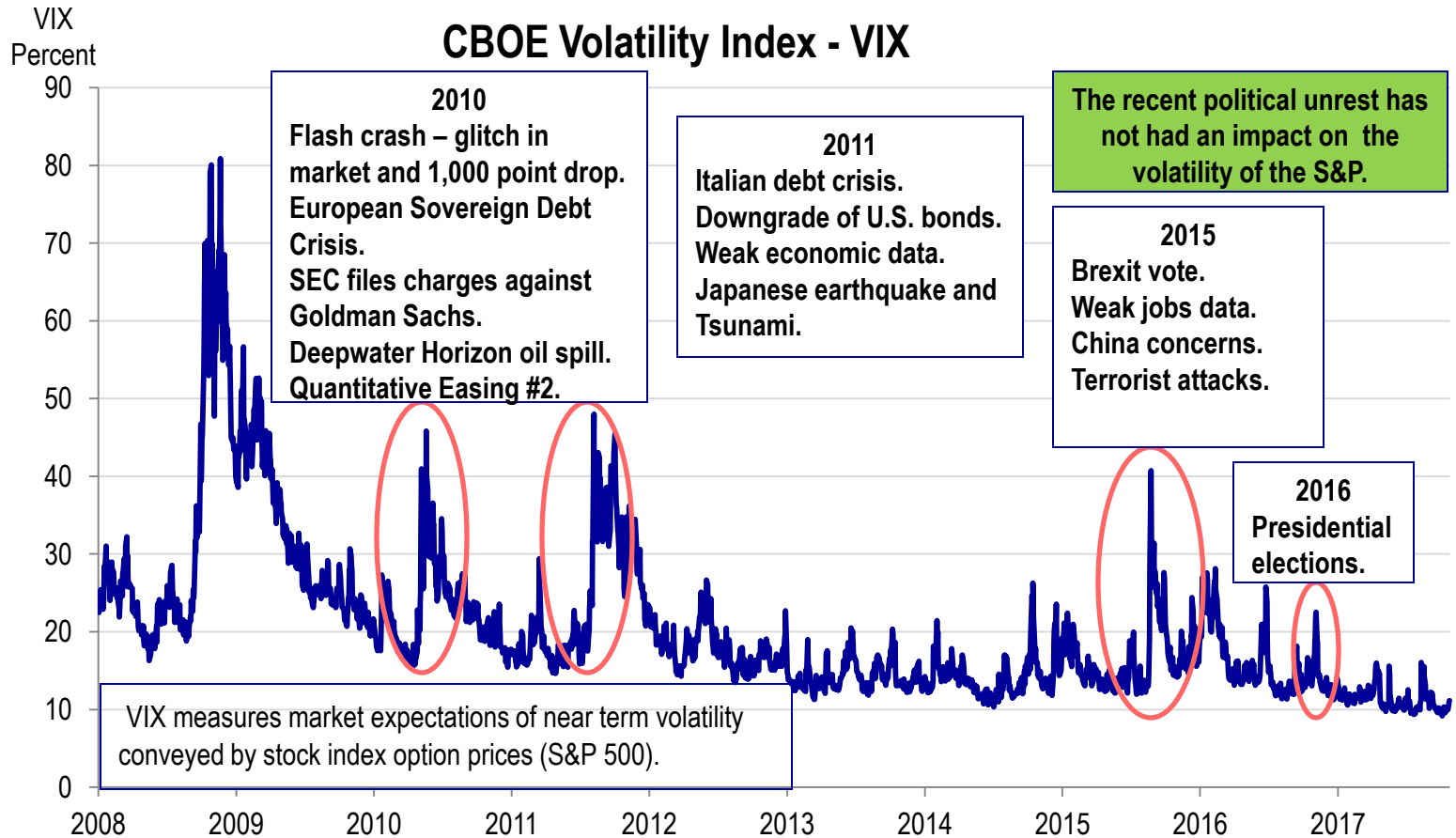
# Standard and Poor's 500 Index



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

# CBOE Volatility Index

VIX (VIXCLS)



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

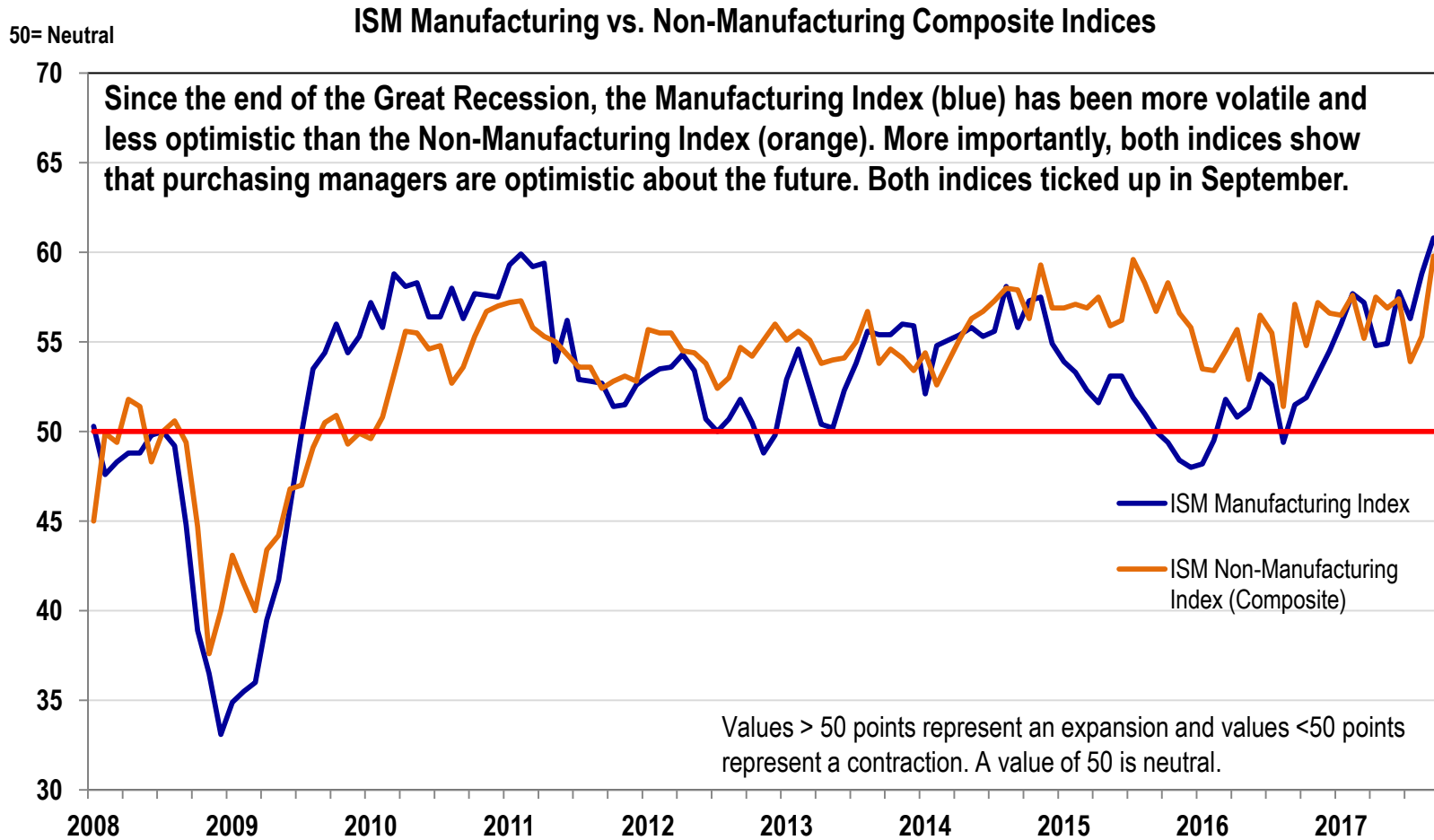


# The U.S. Economy

Manufacturing, Non-Manufacturing, Retail Trade Sales, Auto Sales, and CPI

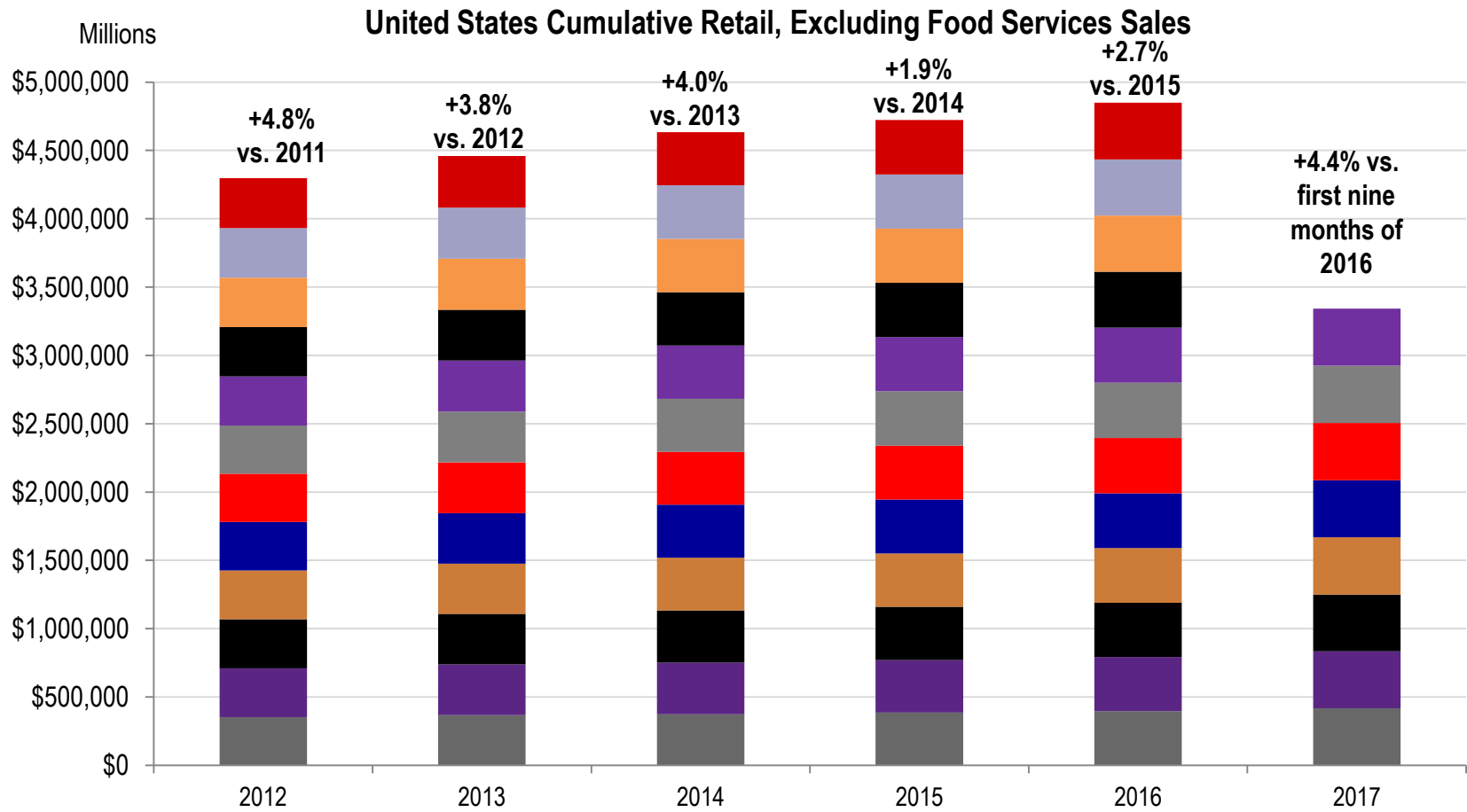
# ISM PMI Composite Indices

## Manufacturing vs. Non-manufacturing



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

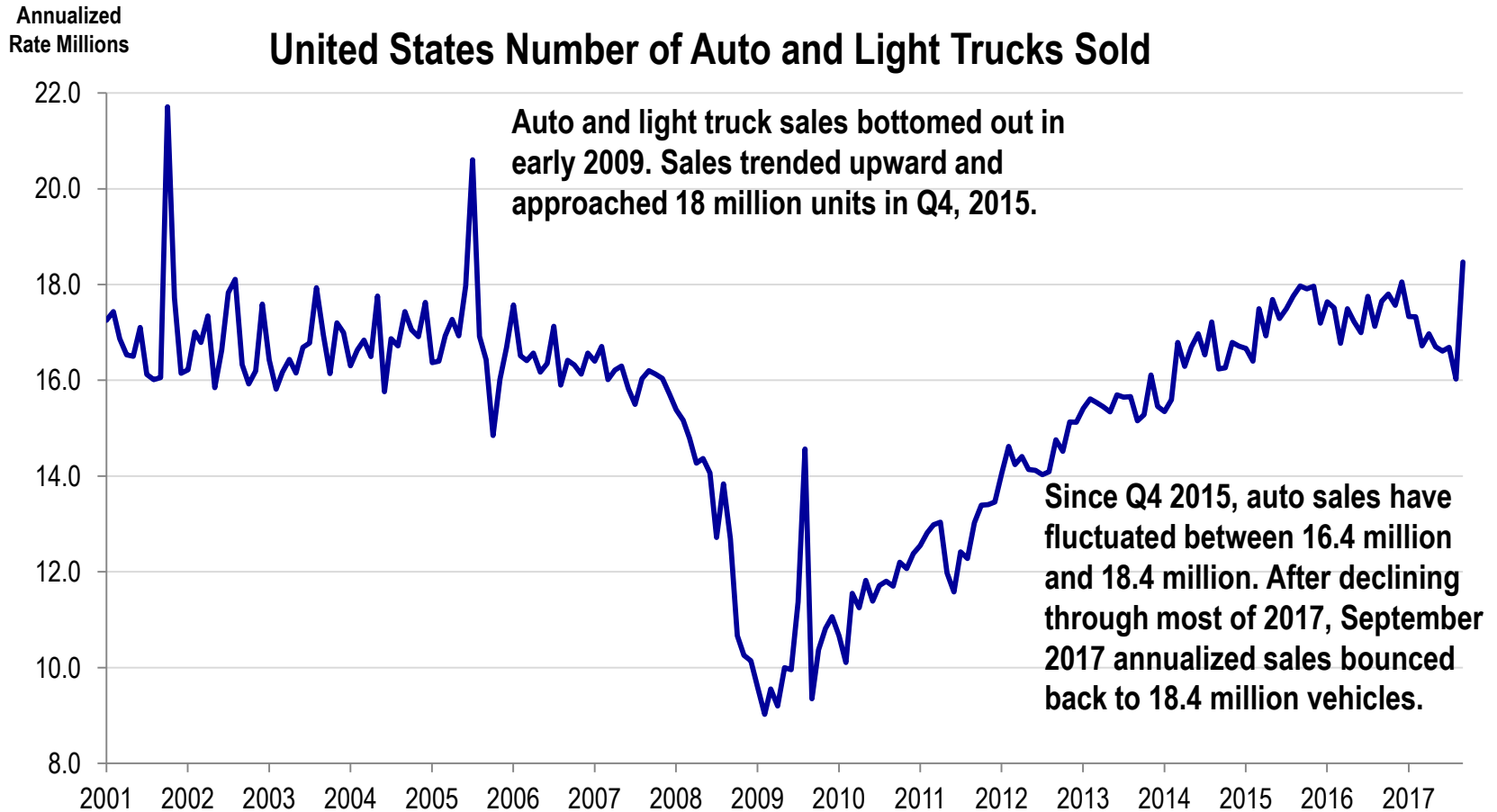
# Cumulative Retail, Excluding Food Services Sales



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



Source: FRED, BEA, cber.co.

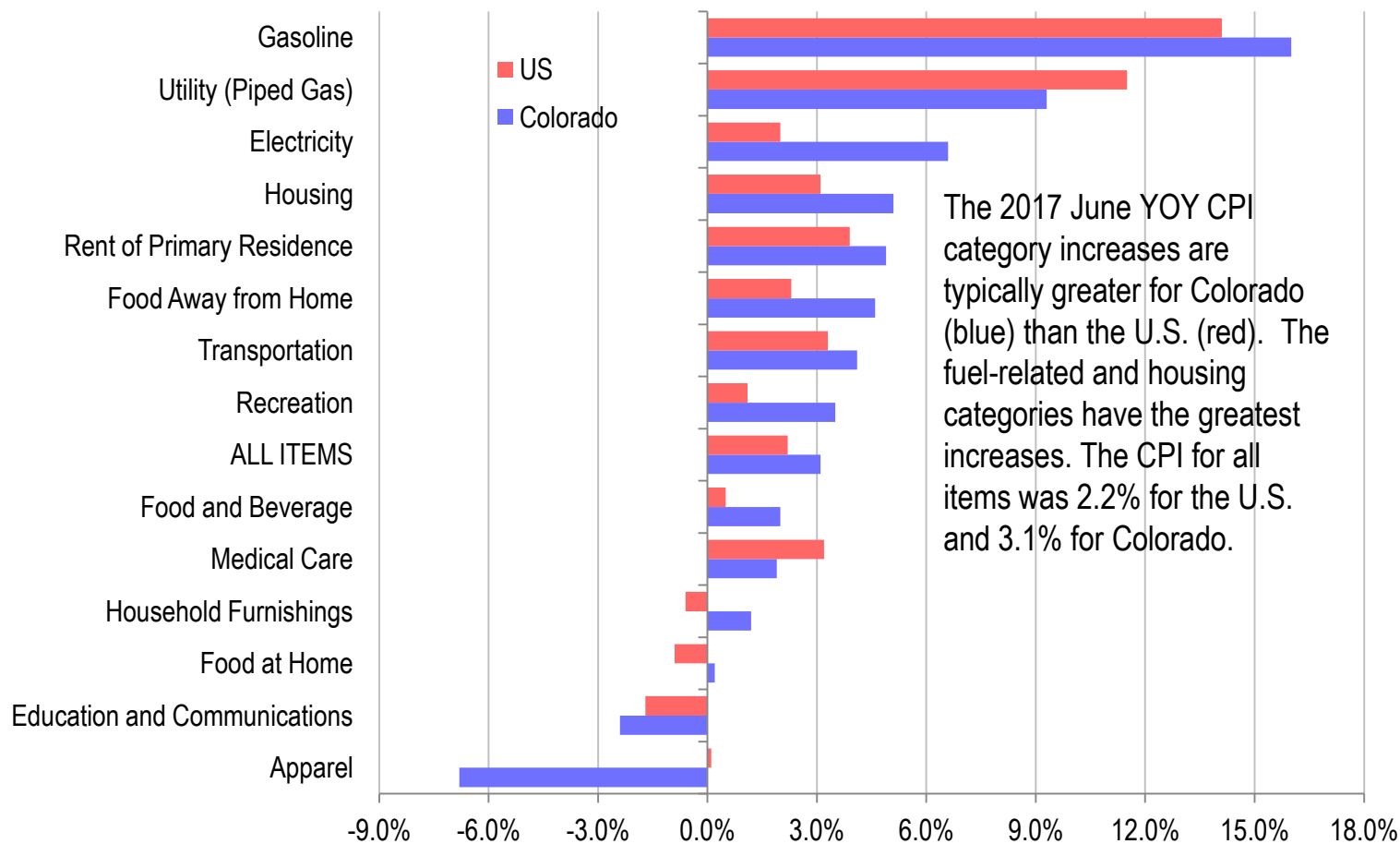
Note: Seasonally Adjusted Annualized Rate.

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# Consumer Price Index

## U.S. vs. Colorado H1 2017 vs. H1 2016 (Sorted by Colorado)



Source: Bureau of Labor Statistics, [cber.co](http://cber.co).

Colorado-based Business and Economic Research <http://cber.co>



# The Colorado Economy

Population, Employment, Colorado Unemployment, Unemployment by MSA, Unemployment by Select Counties, Rate of Job Growth vs. Unemployment Rate

# Colorado Population

## Components of Change

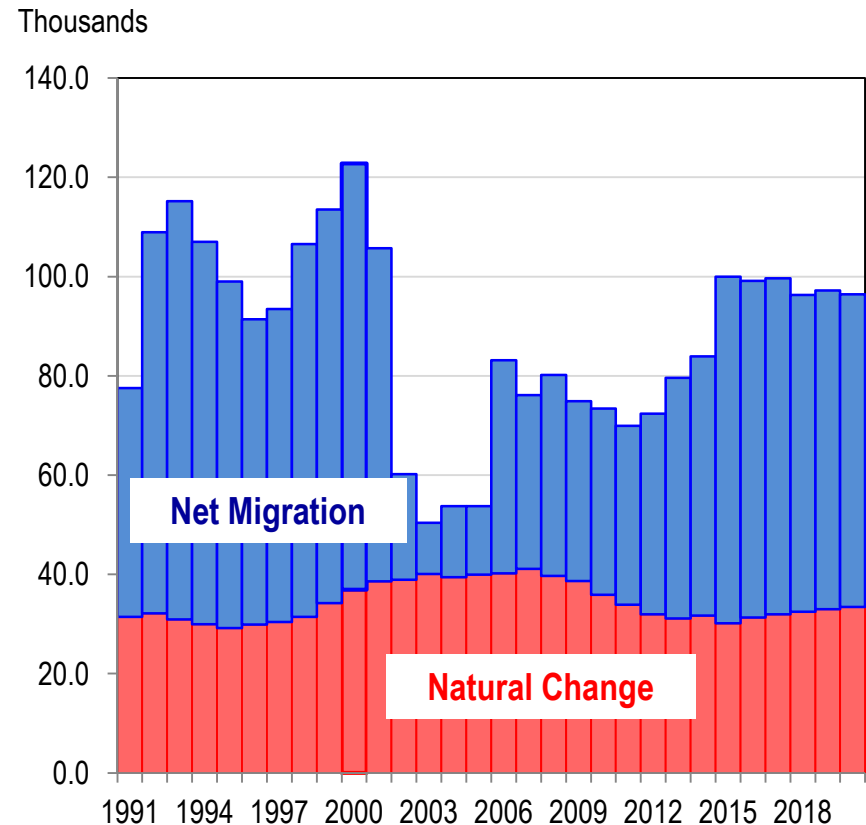
The population increases and decreases are a result of the natural rate of change (births minus deaths) and the change in net migration (people moving into the state minus people moving out of the state).

Over the past 2½ 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. For the past 10 years it has been slightly above 30,000.

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 was negative (not shown on this chart). More people moved out of state than moved into the state to escape a regional recession. During the past two recessions, net migration declined, but did not turn negative. It was difficult for people to move anywhere to escape the downturn.

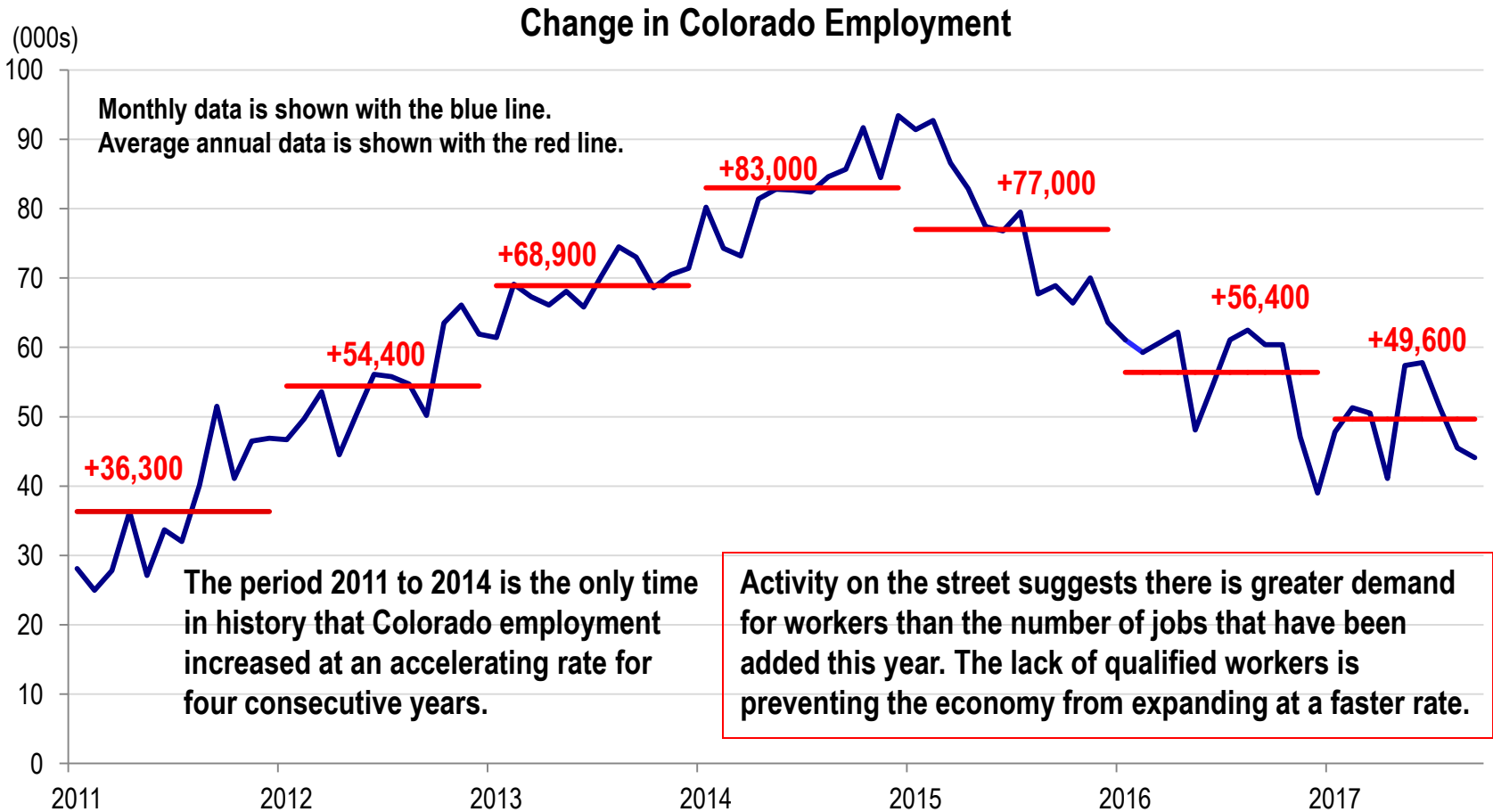
The Colorado population will increase by about 100,000 in 2015, 2016, and 2017. In 2017 the state's population will increase by 1.8% to 5.655,405.

Change in Colorado Population 1991 - 2016



# Change in Colorado Employment

## Year-Over-Year



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



# Unemployment Rate

## Colorado

Colorado's unemployment rate has dropped to record lows. From 2015 to the present, there have been 22 consecutive months when the unemployment rate was below 3.5%. The rate has been below 2.5% for six consecutive months during that period.

Prior to 2017, there were 31 consecutive months during 1998 to 2001 when the unemployment rate was below 3.5%. Unlike the current situation, the unemployment rate did not drop below 2.5% during that period.

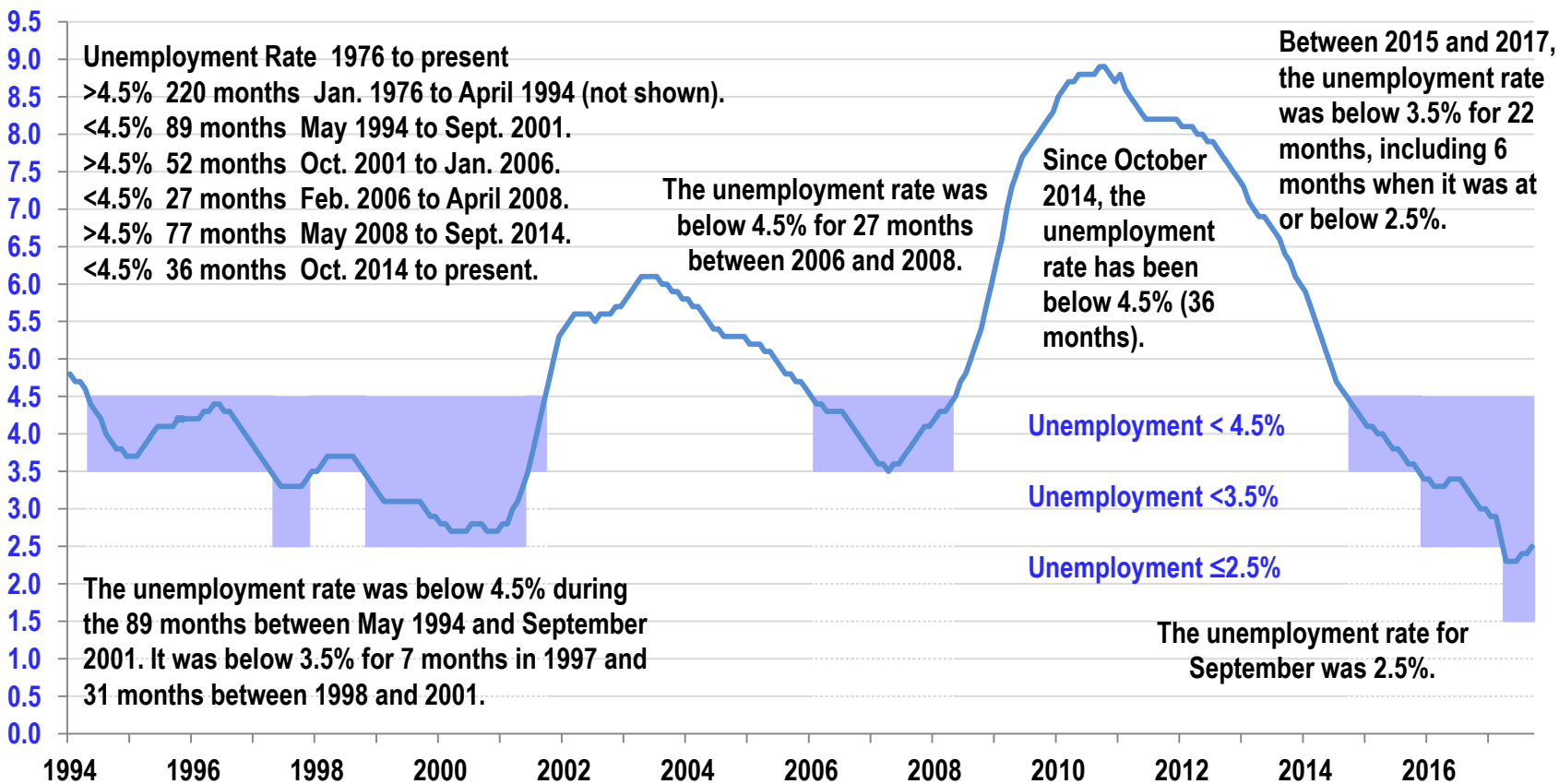
Over the past year, developers and business leaders have announced aggressive development plans for the Front Range. Currently, the supply of qualified workers does not meet the labor needs of employers. This mismatch is likely to get worse in the months ahead, particularly with the need for construction workers as a result of hurricanes in Texas, Florida, Puerto Rico, and the Virgin Isles.

# Unemployment Rate

## Colorado

Percent

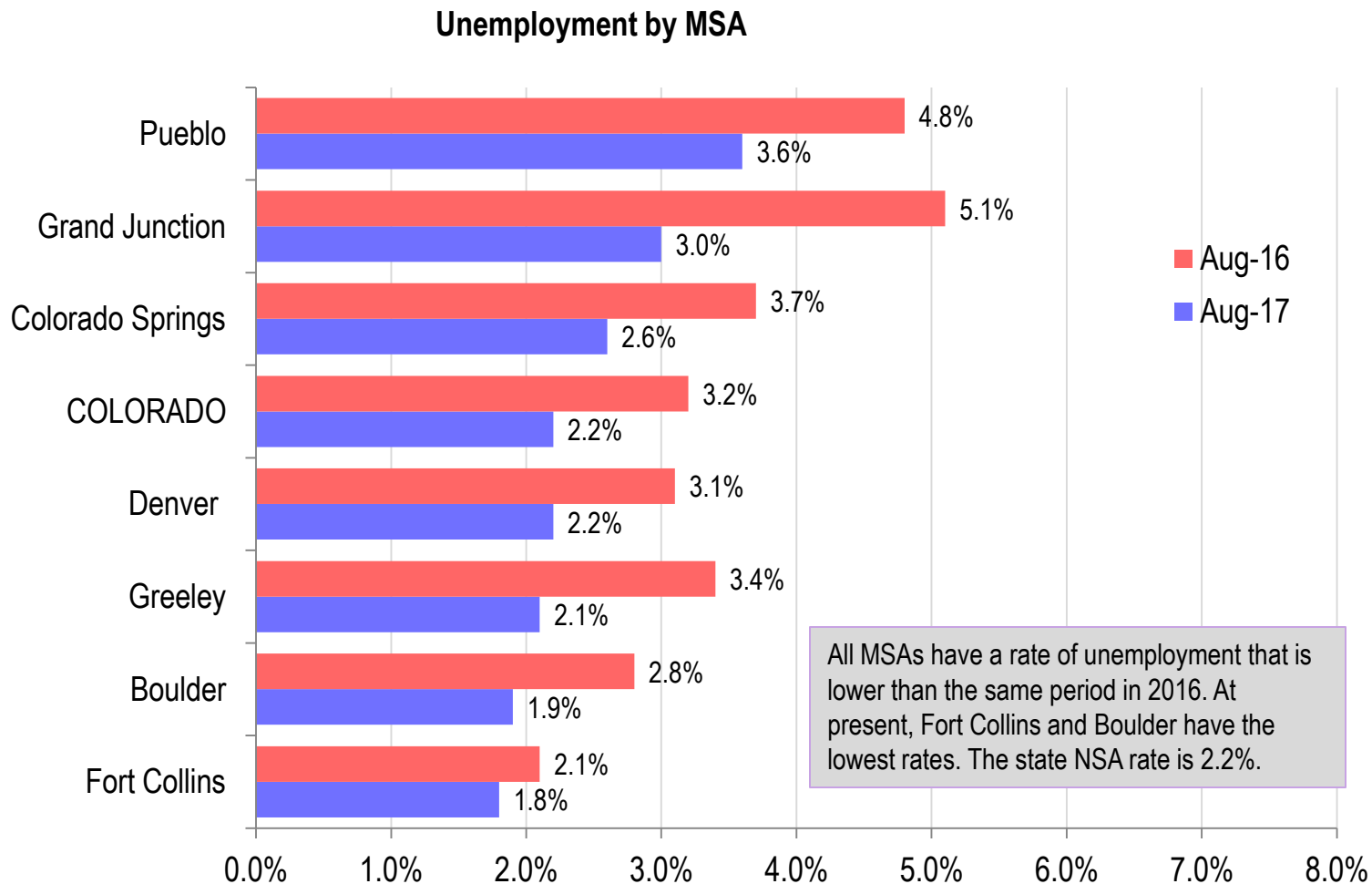
### Colorado Unemployment Rate



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

# Unemployment by MSA

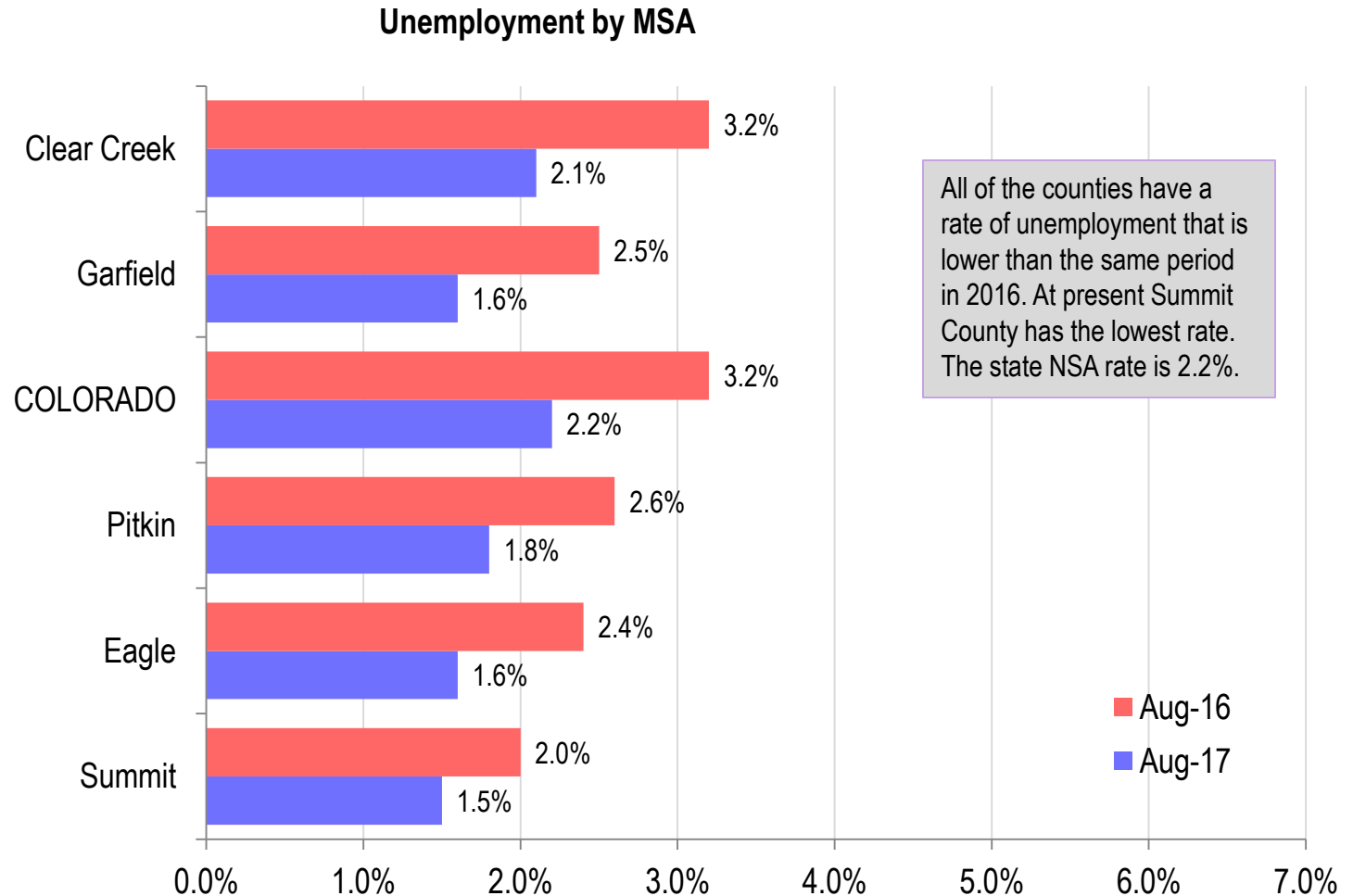
## 2016 vs. 2017



Source: Bureau of Labor Statistics, NSA, cber.co. Note: MSA unemployment lags by two months and is reported only on a non-seasonally adjusted basis.

# Unemployment by County (I-70)

2016 vs. 2017



Source: Bureau of Labor Statistics, NSA, cber.co. Note: MSA unemployment lags by two months and is reported only on a non-seasonally adjusted basis.



# ● U.S. Rate of Job Growth vs. Unemployment Rate

## ● States and District of Columbia

### ●

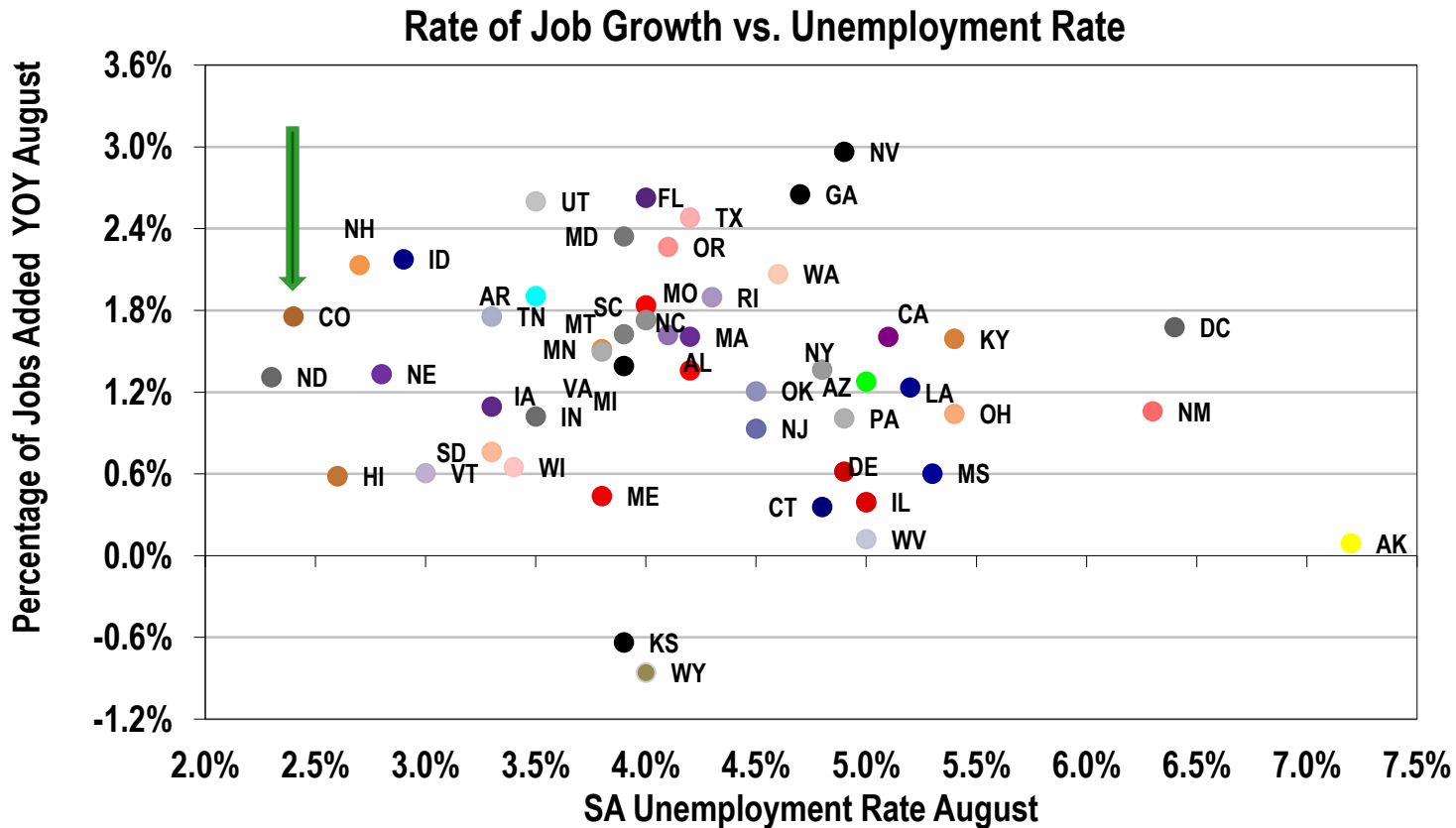
The chart on the following page was constructed after a discussion with Tim Sheesley, Chief Economist for Xcel Energy.

It plots the unemployment rate for August against the percentage change in YOY employment (August 2017 vs. August 2016). The bubble representing Colorado can be seen on the left side of the chart, under the arrow. The state had an unemployment rate of 2.5% and job growth of 1.8%. As expected, all of the states with higher growth rates than Colorado have higher unemployment rates than Colorado.

This suggests that Colorado's job growth is constrained by the low unemployment rate. In fact, North Dakota, the only state to the left of Colorado, has a lower unemployment rate and a much lower rate of job growth.

The states with the most efficient economies are Florida, Georgia, Nevada, Texas, and Utah. They have unemployment rates between 3.5% and 4.9% and YOY job growth rates of 2.5% to 3.0%.

# Rate of Job Growth vs. Unemployment Rate States and District of Columbia



Source: Bureau of Labor Statistics, cber.co.

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# Colorado Economy

Employment in Strong Growth, Solid Growth, Volatile Categories

# Change in Employment Summary of Strong, Solid, and Volatile Growth Categories

**Strong Growth Category – 22,600 jobs added, 2.7% growth rate.**

Health care and professional, business, and personal (other) services are the major sectors.

**Solid Growth Category – 19,100 jobs added, 1.9% growth rate.**

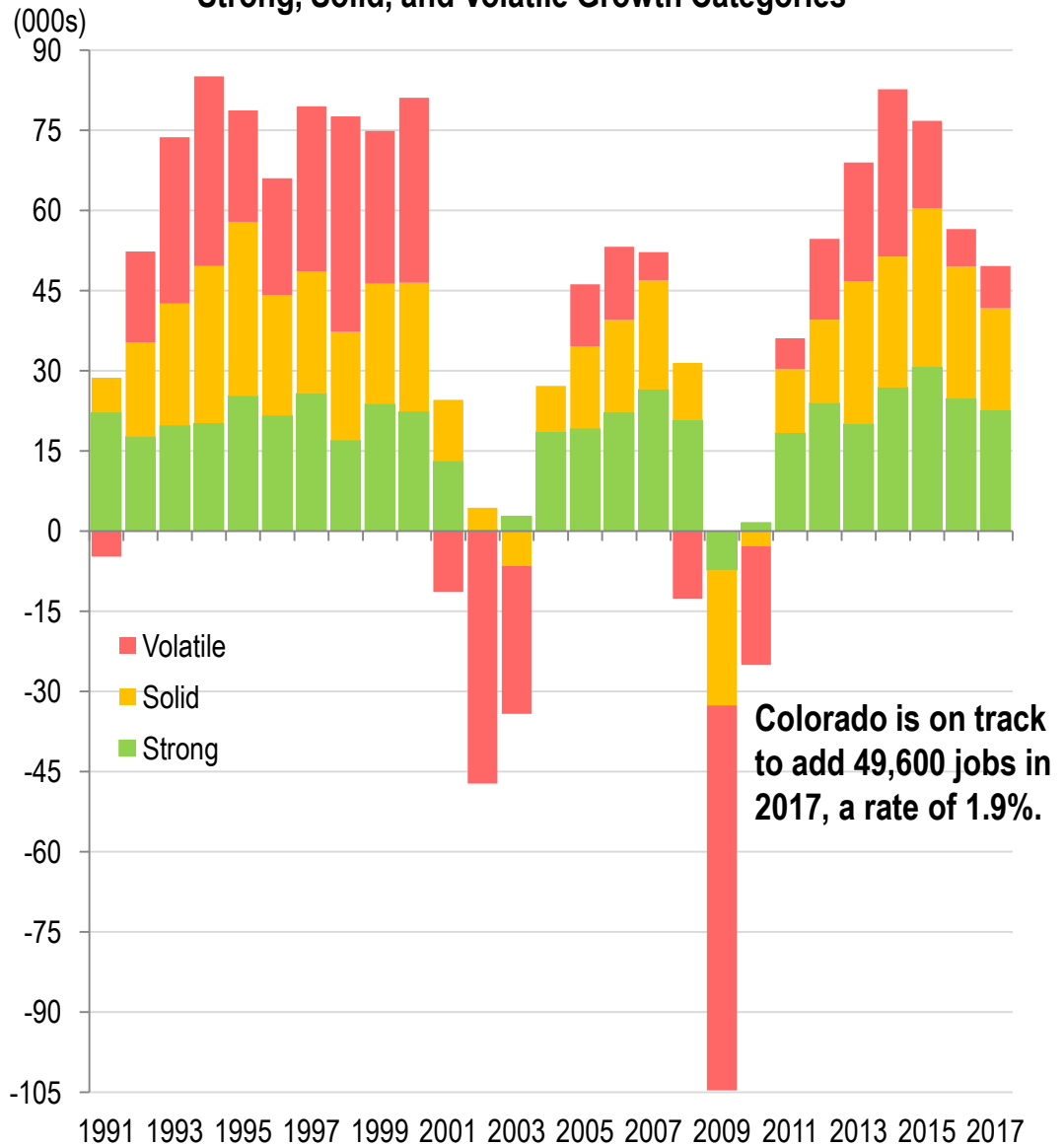
Accommodations and food services, trade, and state and local government are the major sectors.

**Volatile Category – 7,900 jobs added 1.1% growth rate.**

Boom or bust industries – such as the extractive industries, manufacturing, information.

Colorado is on track to add **49,600 jobs** in 2017, a rate of **1.9%**, based on employment data through September.

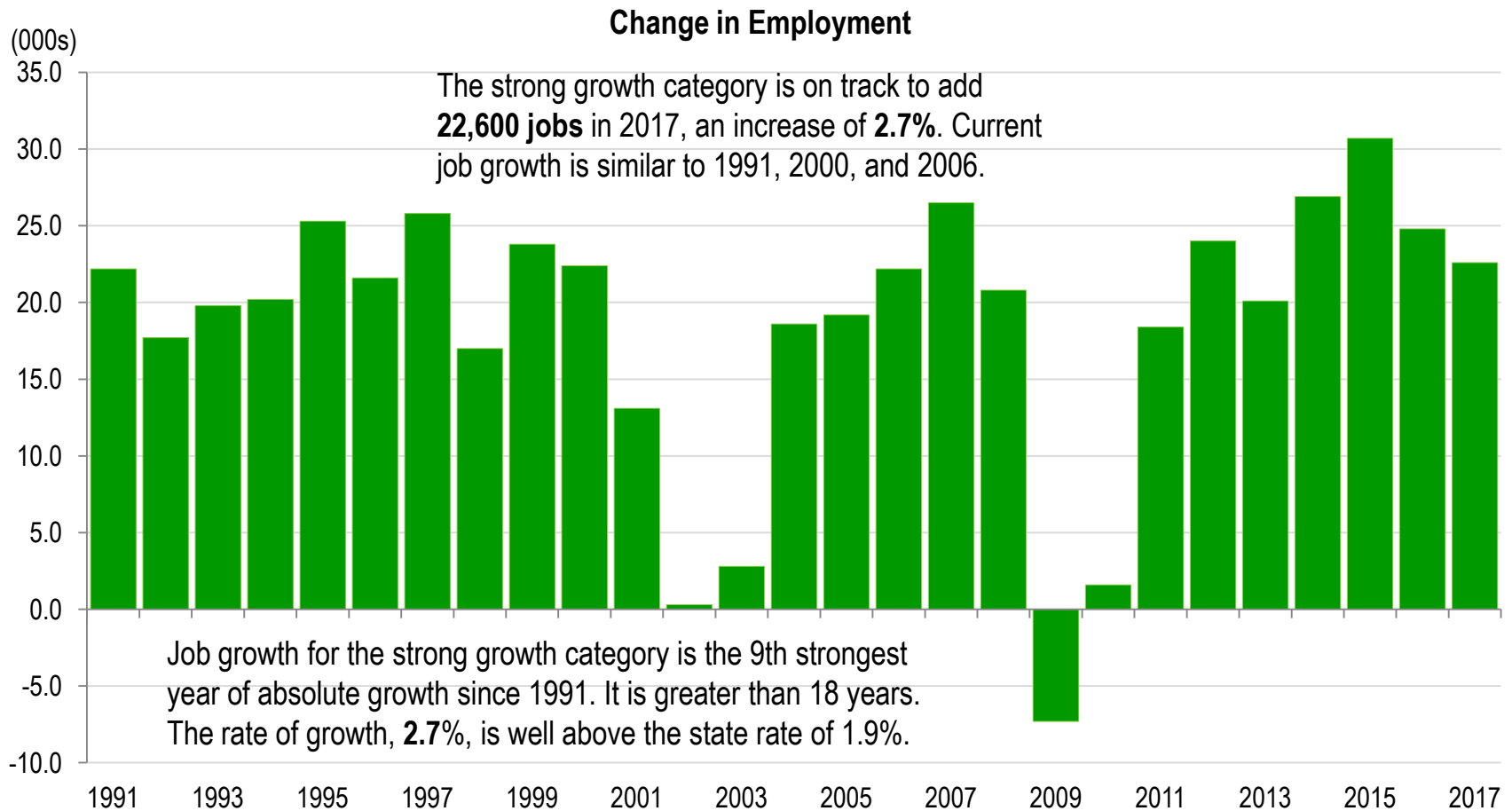
**Strong, Solid, and Volatile Growth Categories**



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

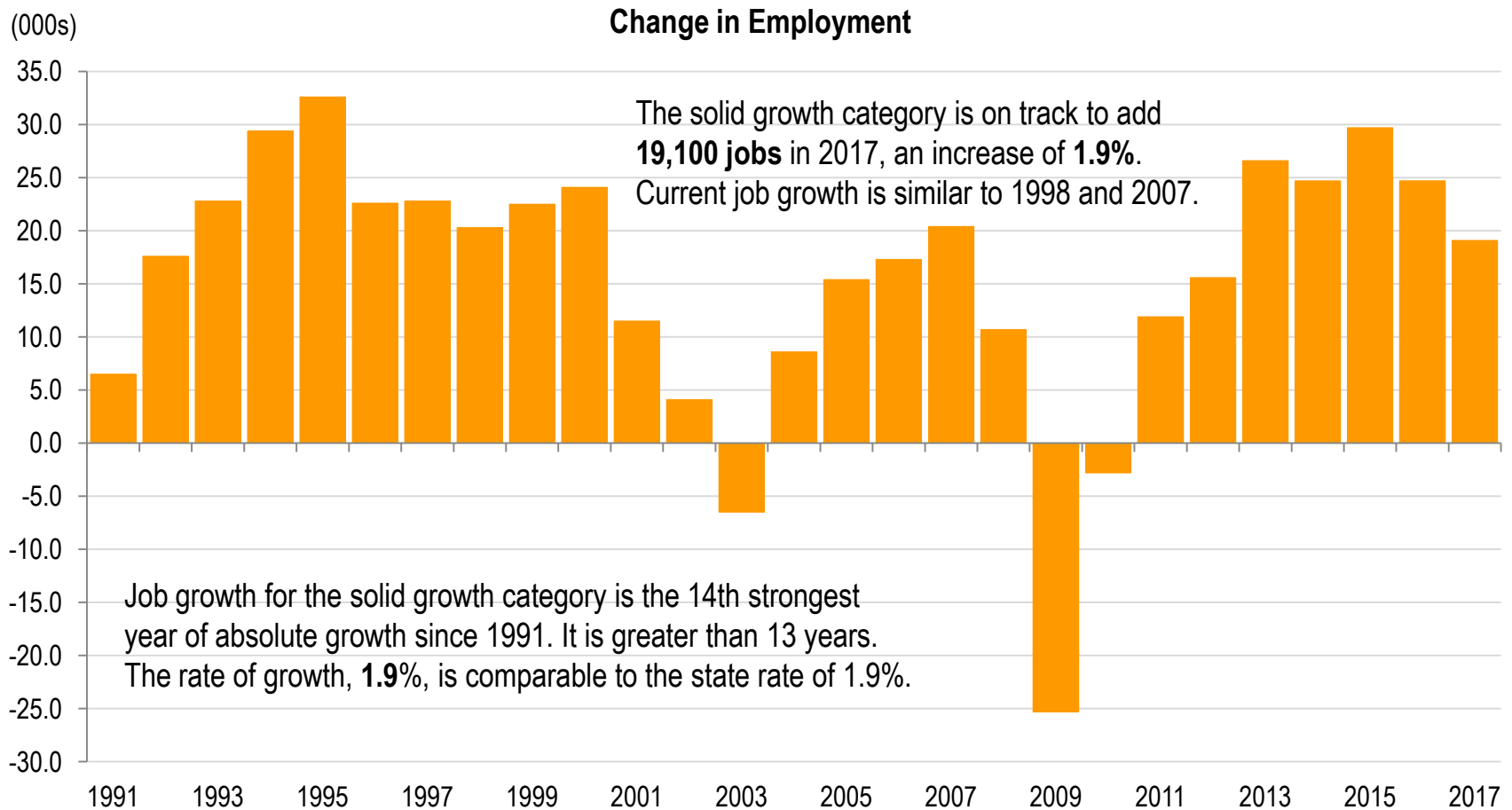
## Strong Growth Category



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

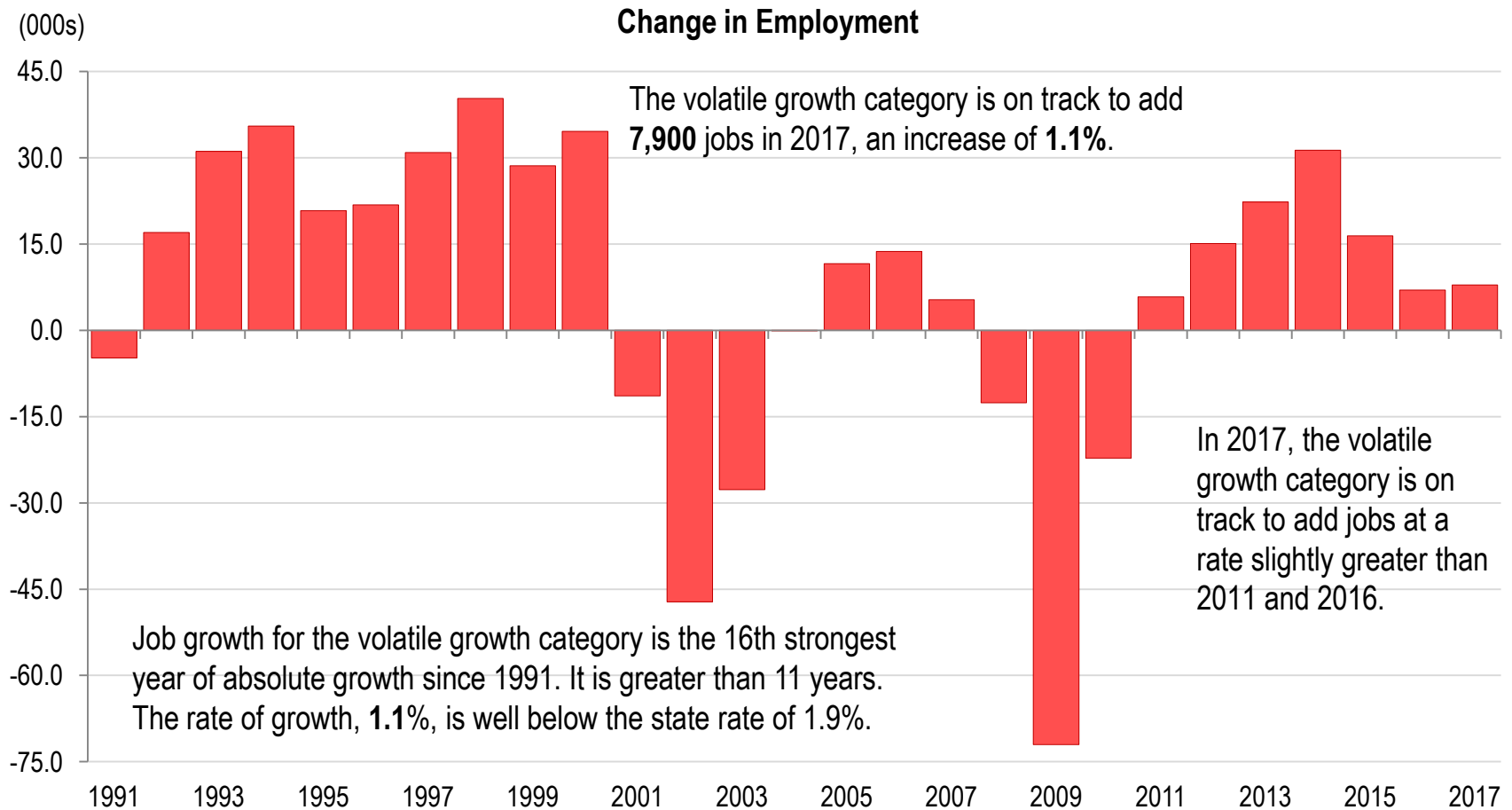
## Solid Growth Category



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

## Volatile Growth Category



Source: Bureau of Labor Statistics, cber.co.

# Six Industries That Are Important to Employment Growth for Different Reasons

The following six charts look at two sectors from each of the strong growth, solid growth, and volatile job categories that are contributing significant job growth. Combined, these sectors are responsible for 69% of the jobs added in 2017.

## Strong Growth Category

- Healthcare
- Professional, Scientific, and Technical Services

Total 30% of jobs added, or 15,100 jobs.

## Solid Growth Category

- Accommodations and Food Services
- Retail

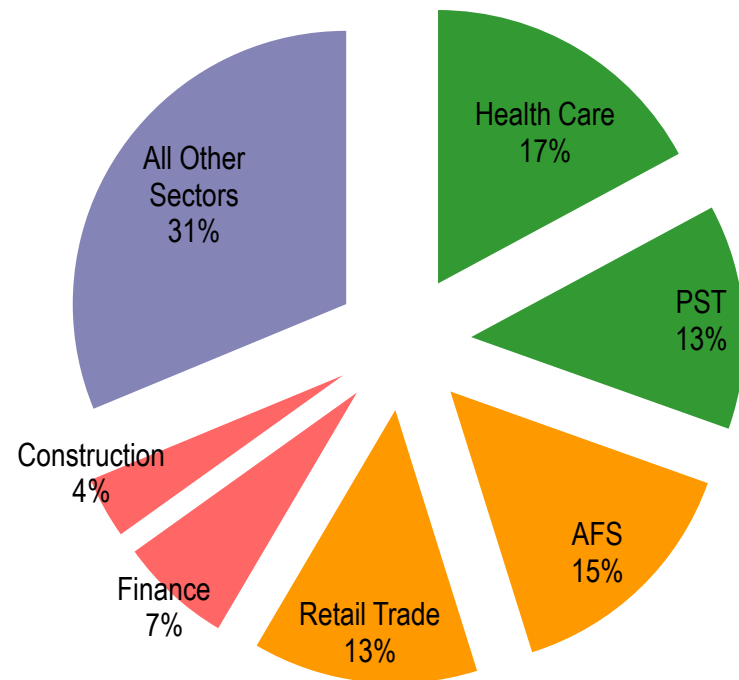
Total 28% of jobs added, or 13,900 jobs.

## Volatile Category

- Financial Activities
- Construction

Total 11% of jobs added, or 5,100 jobs added.

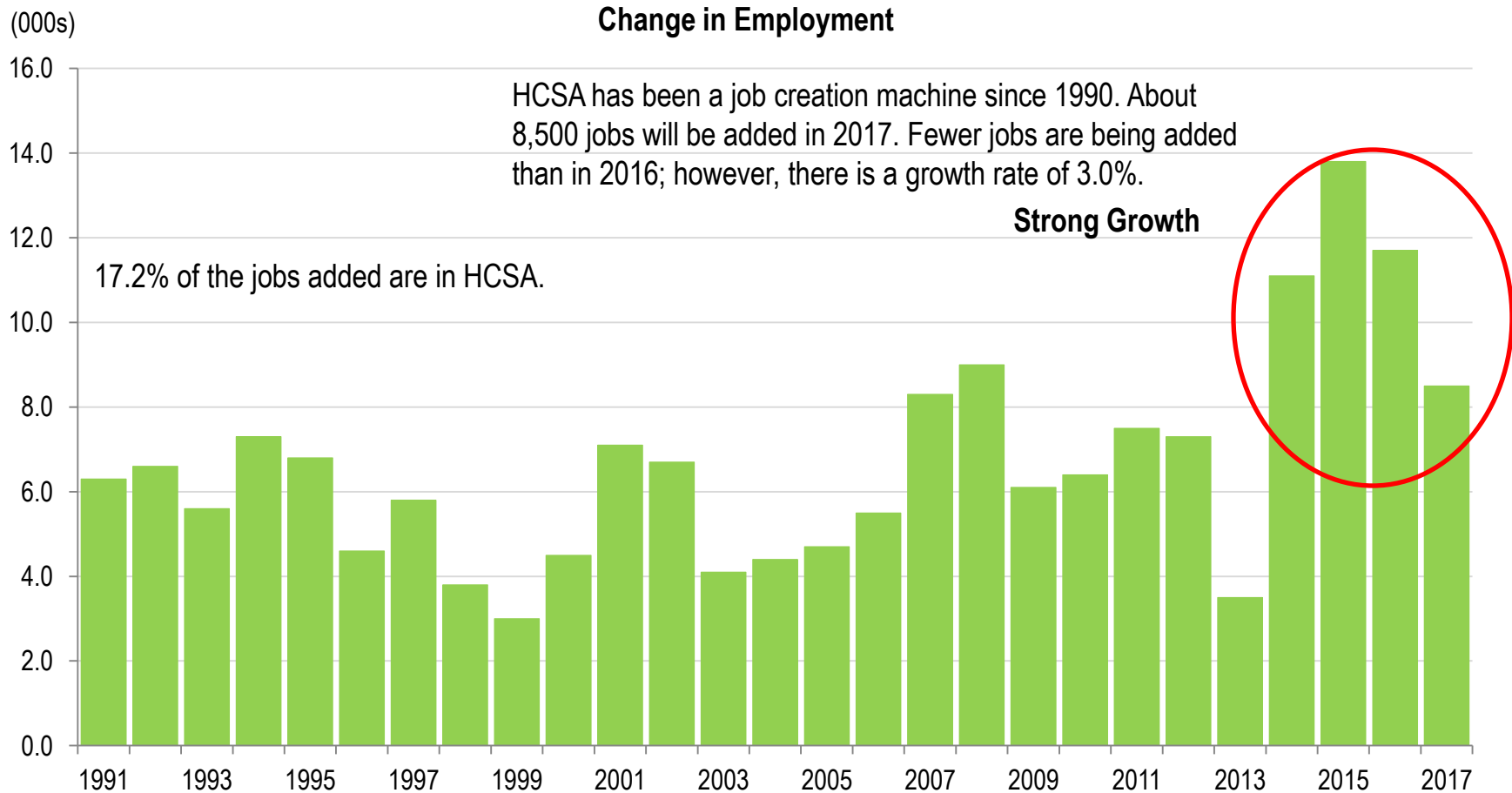
Top Sectors by Category





# Change in Employment

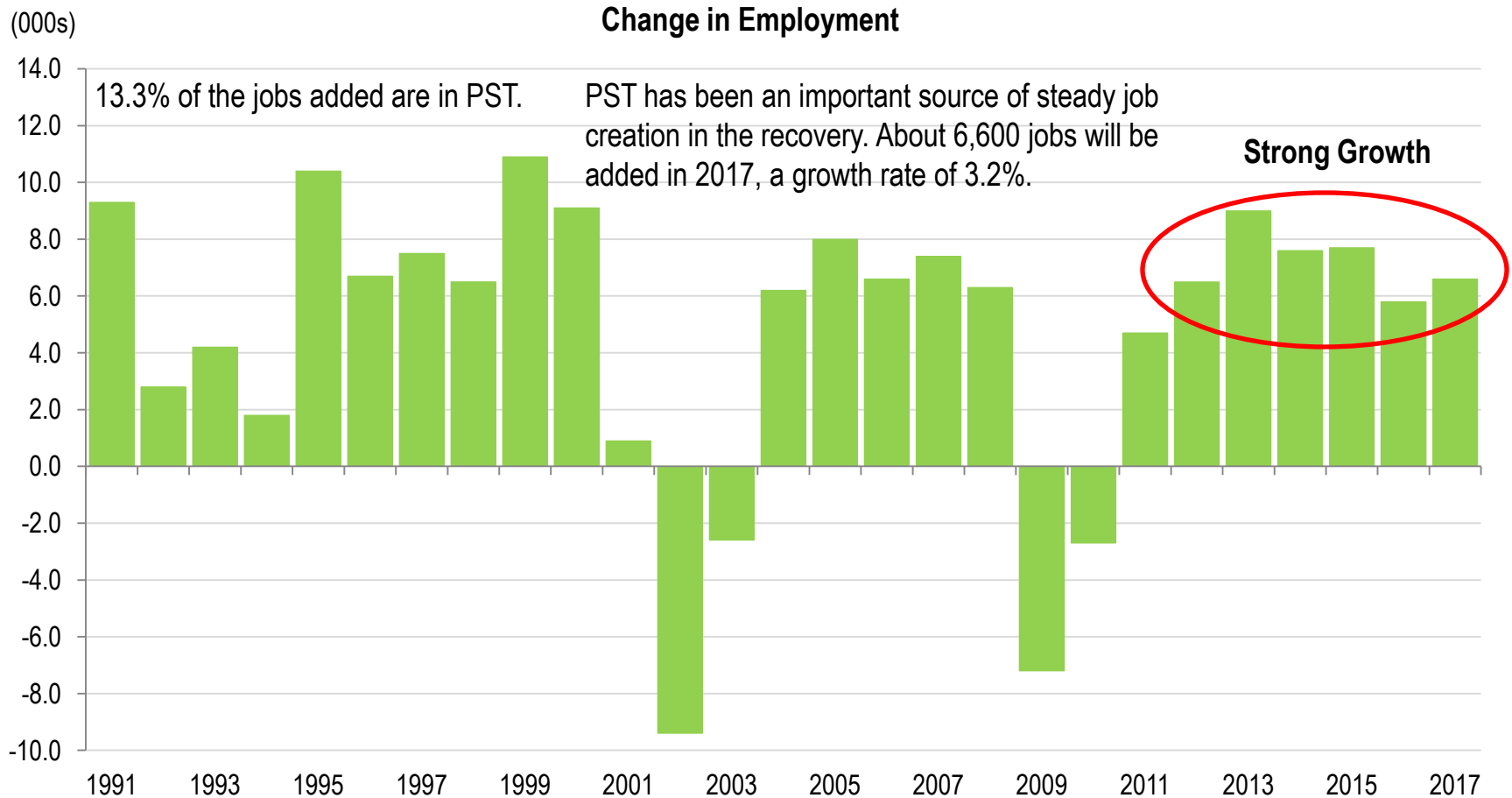
## Health Care and Social Assistance



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

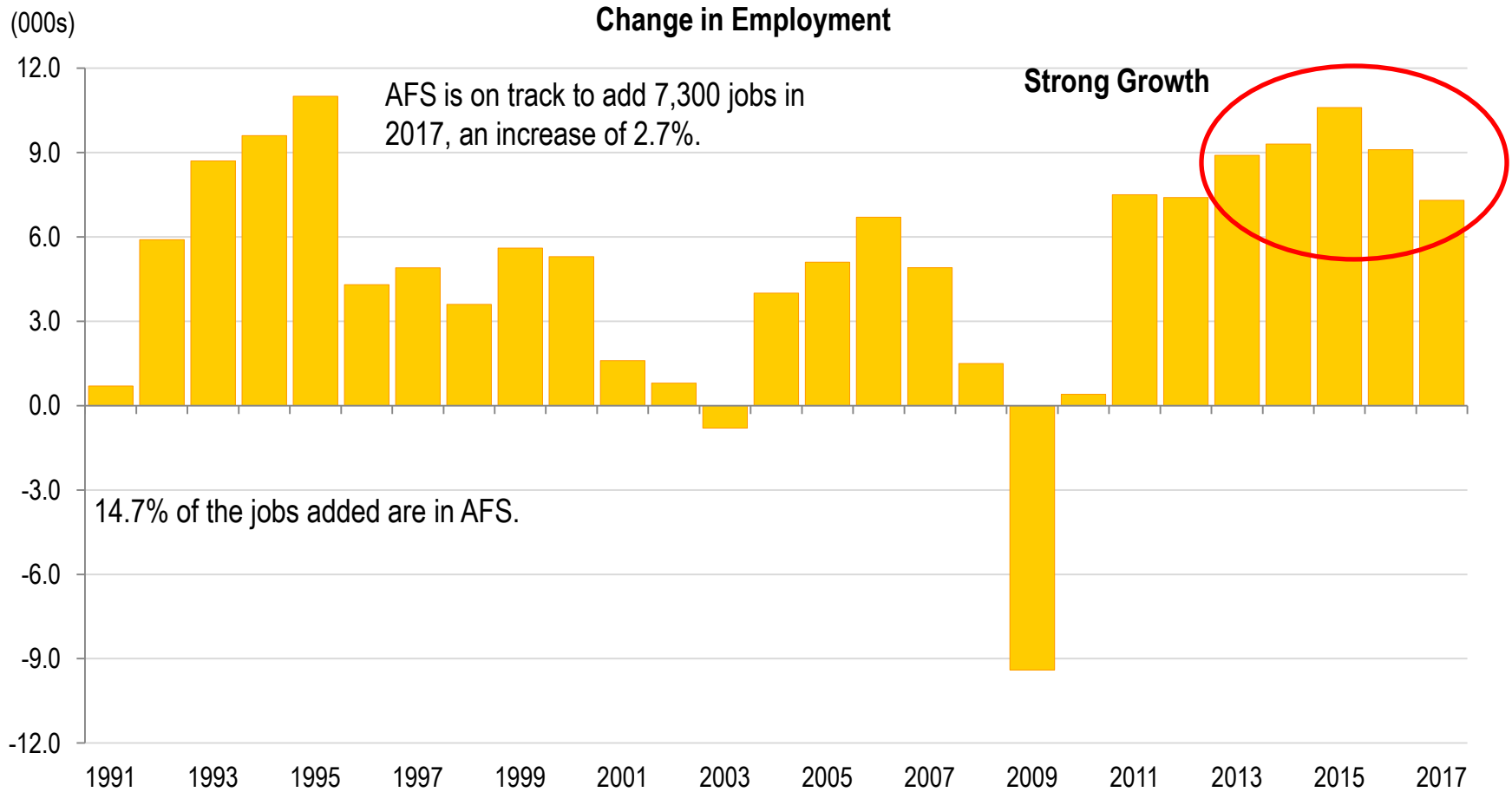
## Professional, Scientific, and Technical Services



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

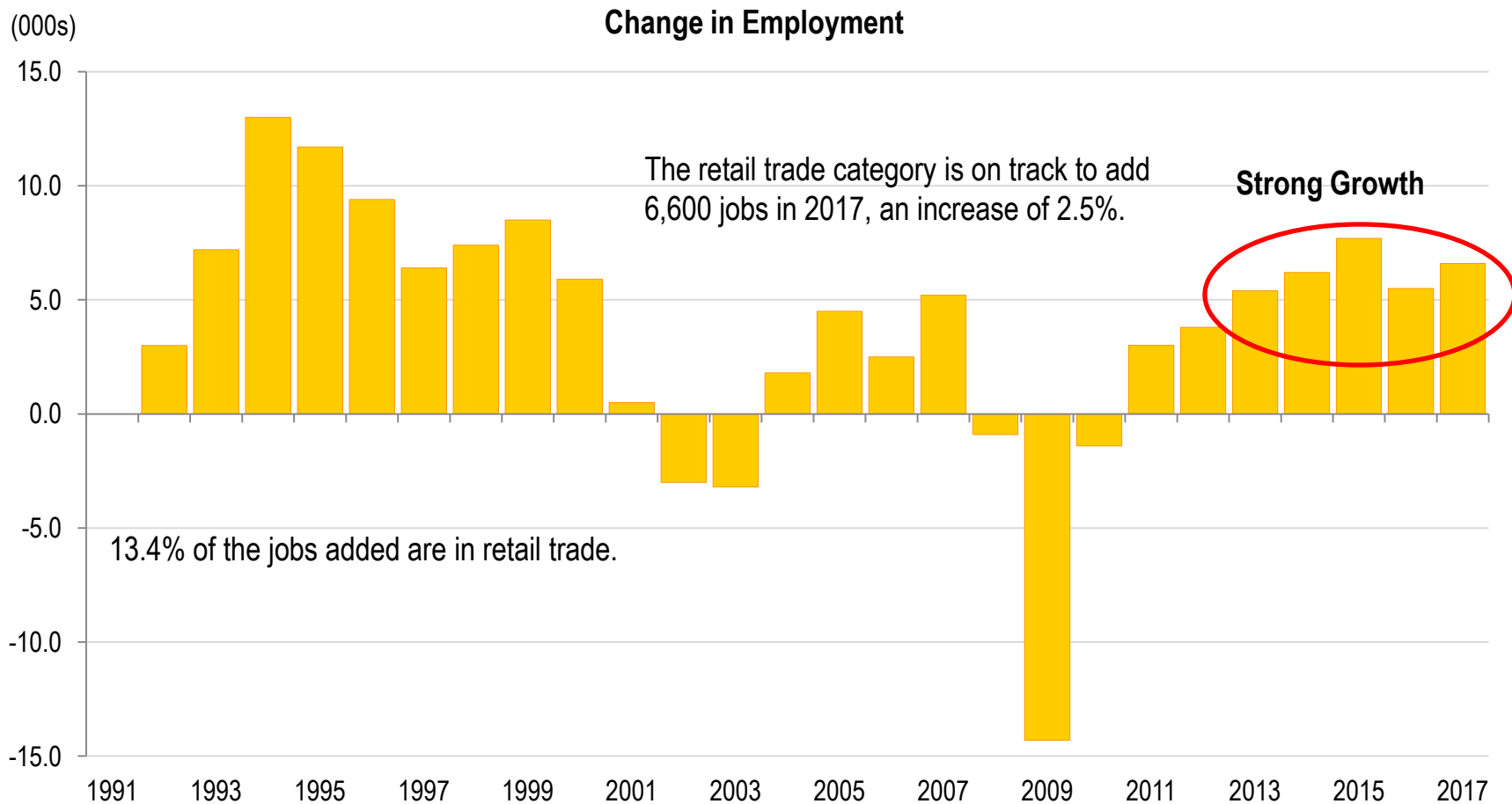
## Accommodations and Food Services



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

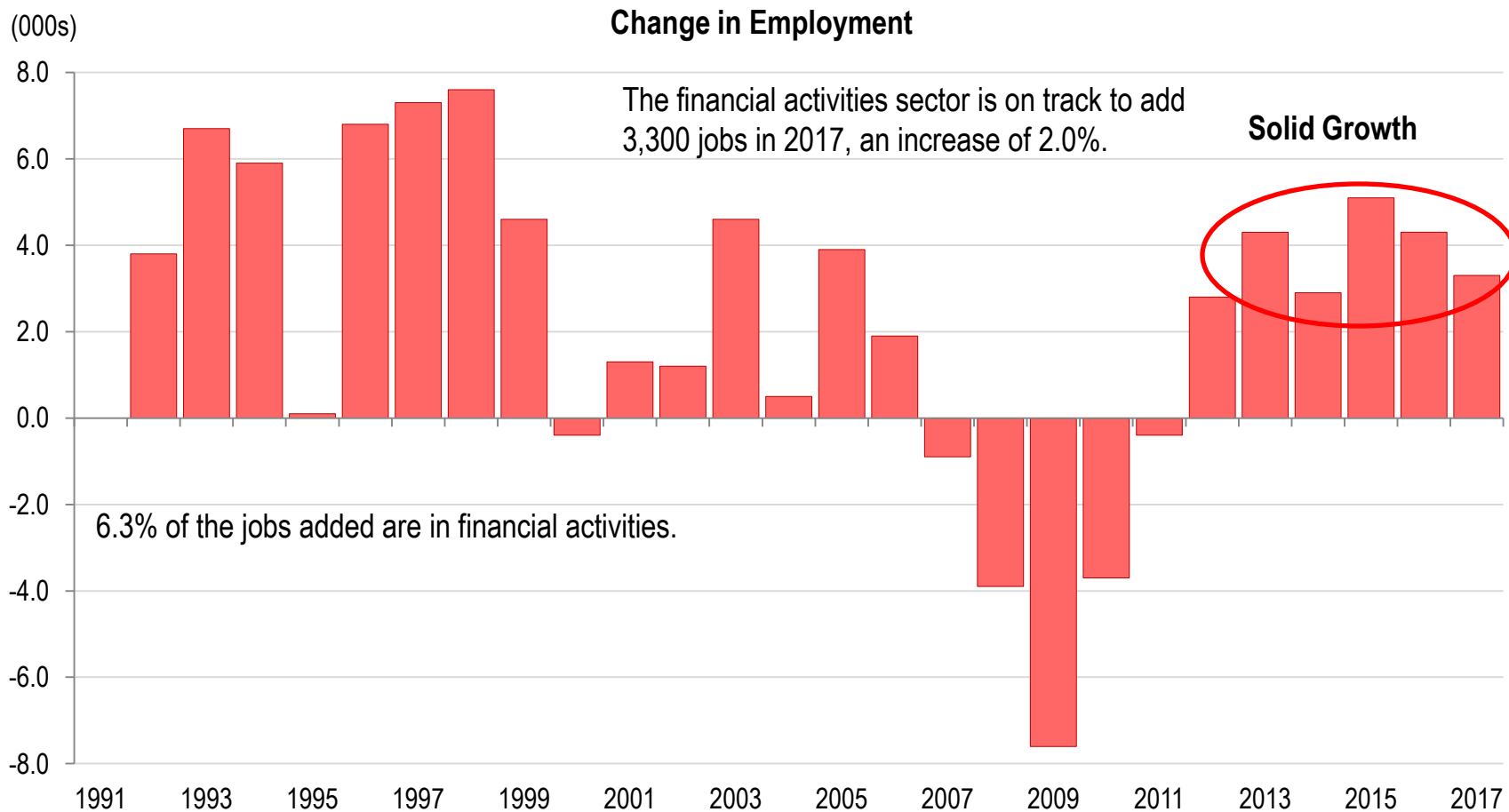
## Retail Trade



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

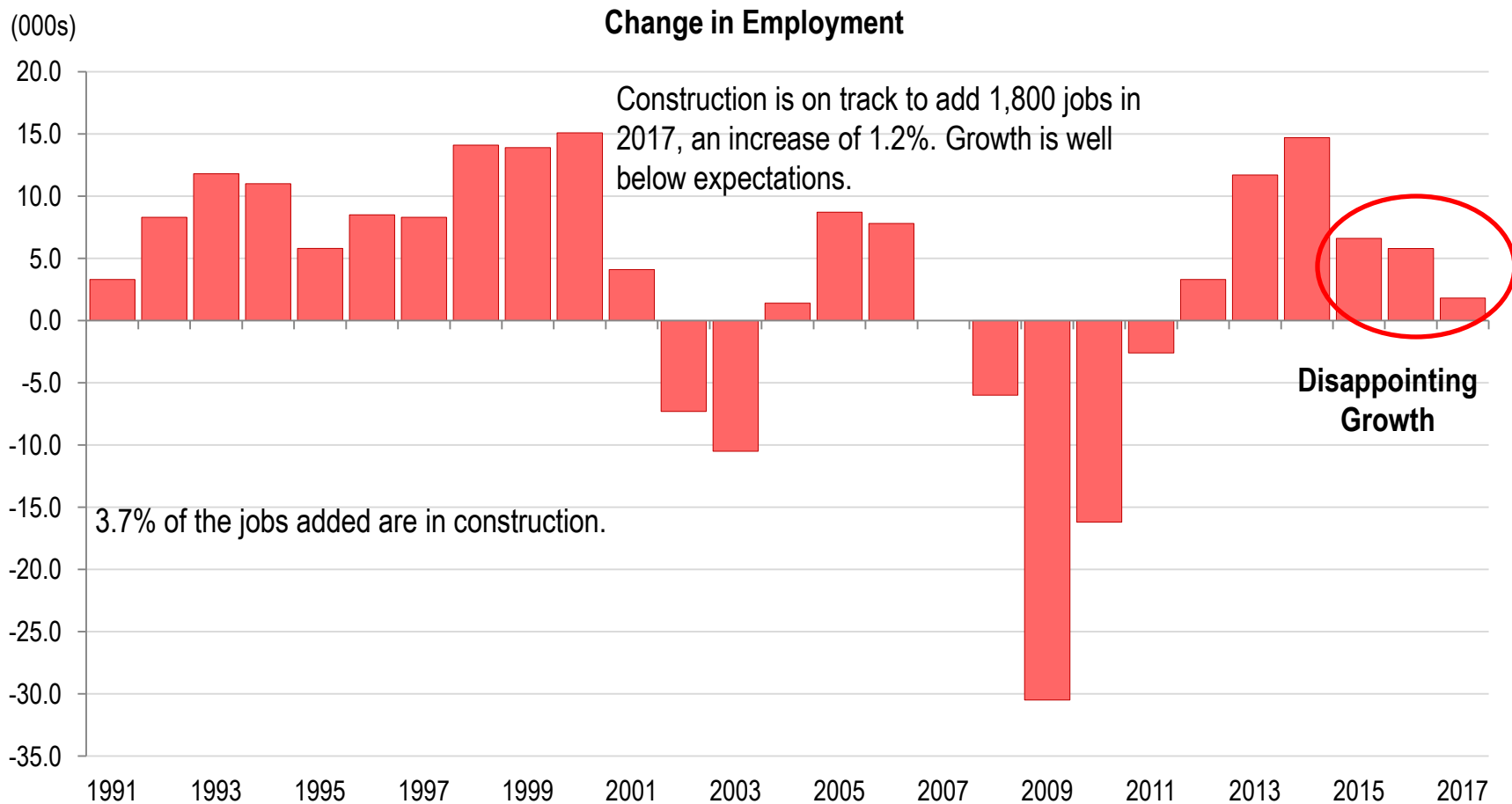
## Financial Activities



Source: Bureau of Labor Statistics, cber.co.

# Change in Employment

## Construction



Source: Bureau of Labor Statistics, cber.co.



# Colorado Economy

## Key Sectors and Trends to Watch

# Key Sectors and Trends to Watch

Within the three categories of employment (strong growth, solid growth, and volatile) there are key sectors and sources of economic activity that drive changes in the state economy. This section looks at “trends to watch” in those categories.

- Extractive industries – prices, rig count, and production.
- Construction – permits and valuation.
- Housing prices – appreciation rates.
- Retail trade – sales.
- Auto sales - new and used car registrations.
- DIA – passenger traffic.
- Transportation.



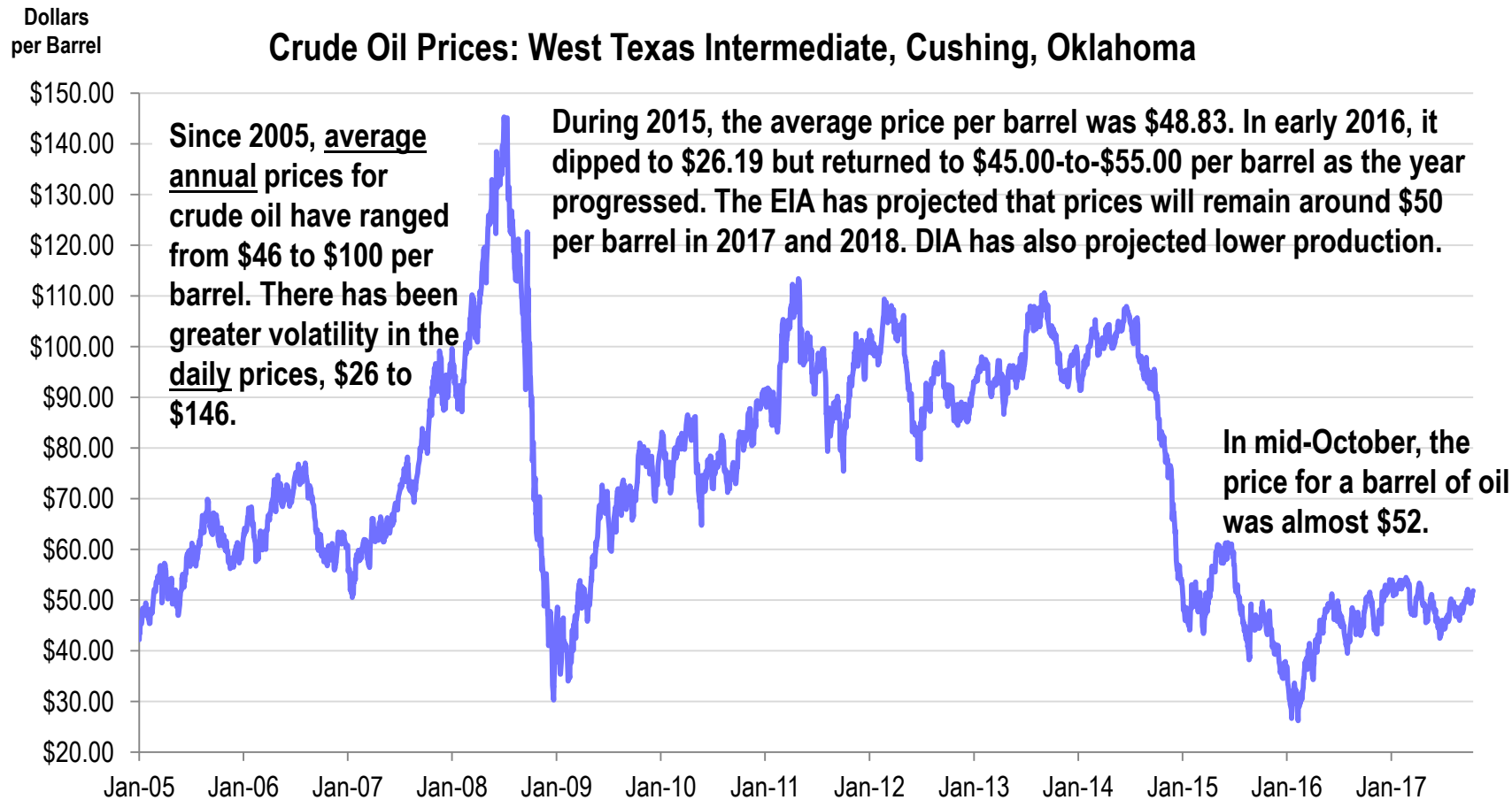
# ● Key Sectors and Trends to Watch

● Extractive Industries – Prices, Rig Count, Production

●

# Crude Oil Prices

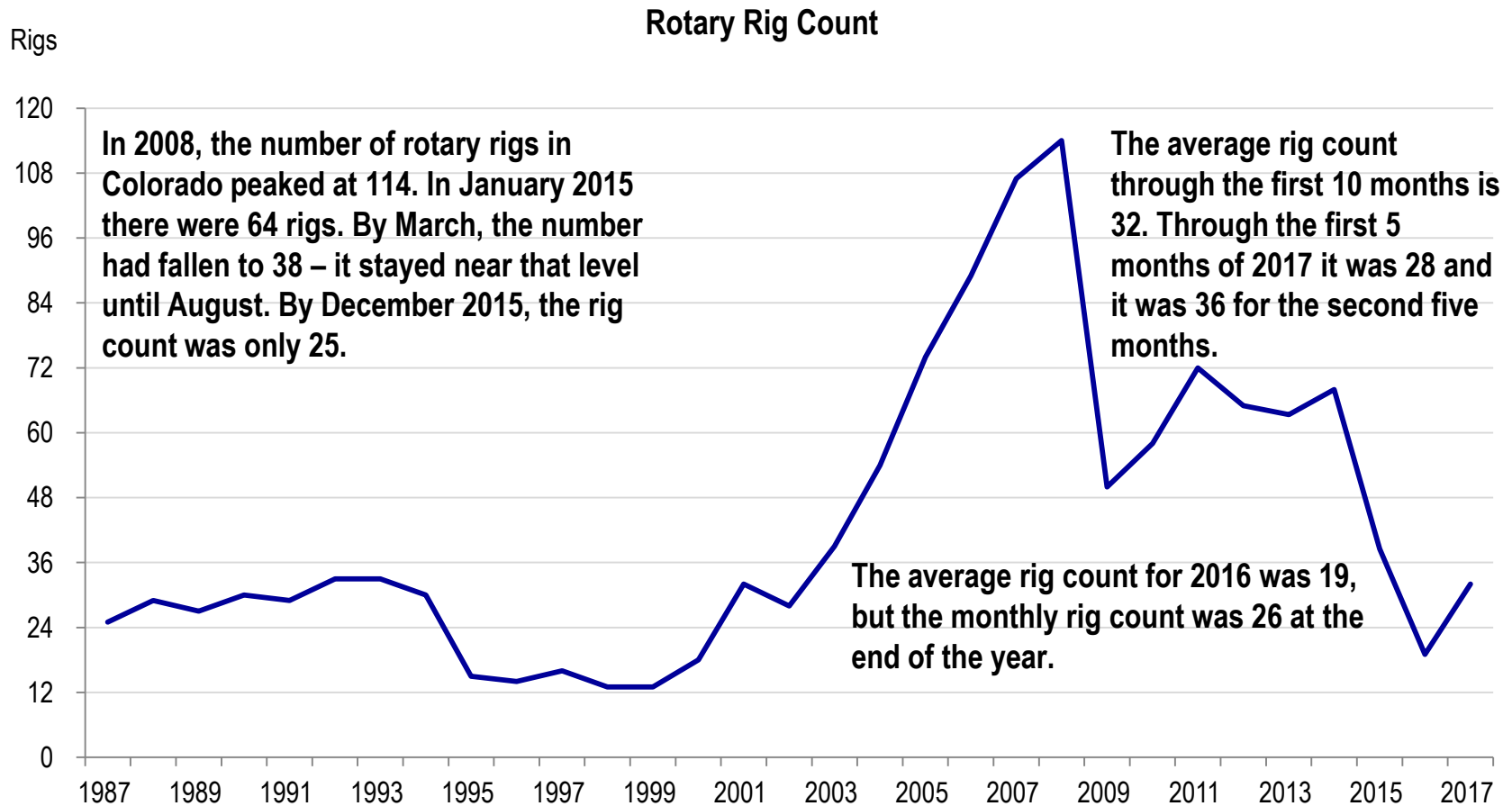
## West Texas Intermediate



Source: FRED, EIA, cber.co.

# Colorado Annual Rotary Rig Count

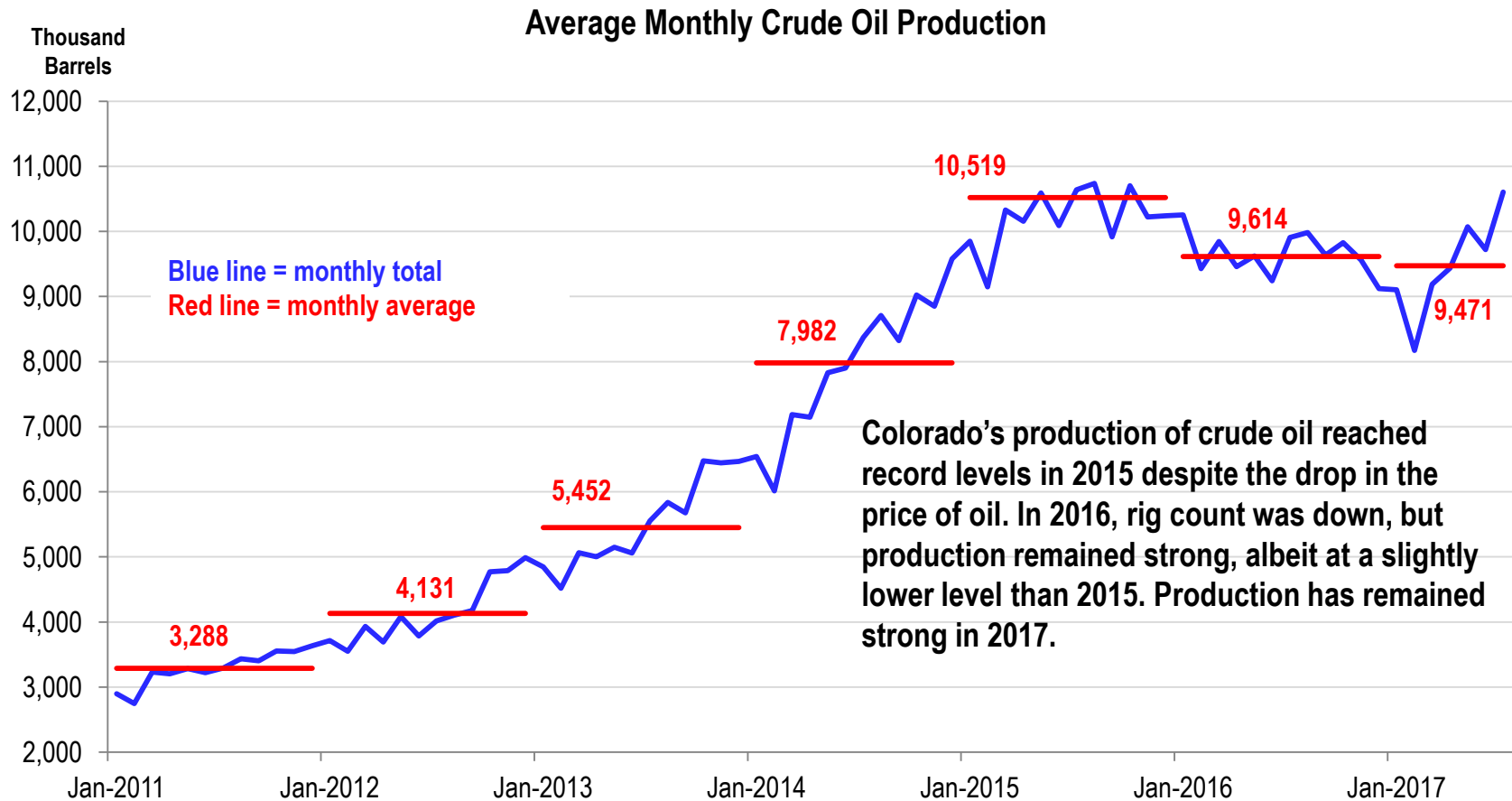
## 1987 to 2017



Source: Baker-Hughes, cber.co.

# Average Monthly Colorado Crude Oil Production

## 2011 to 2017 (Thousand Barrels)



Source: EIA, cber.co.

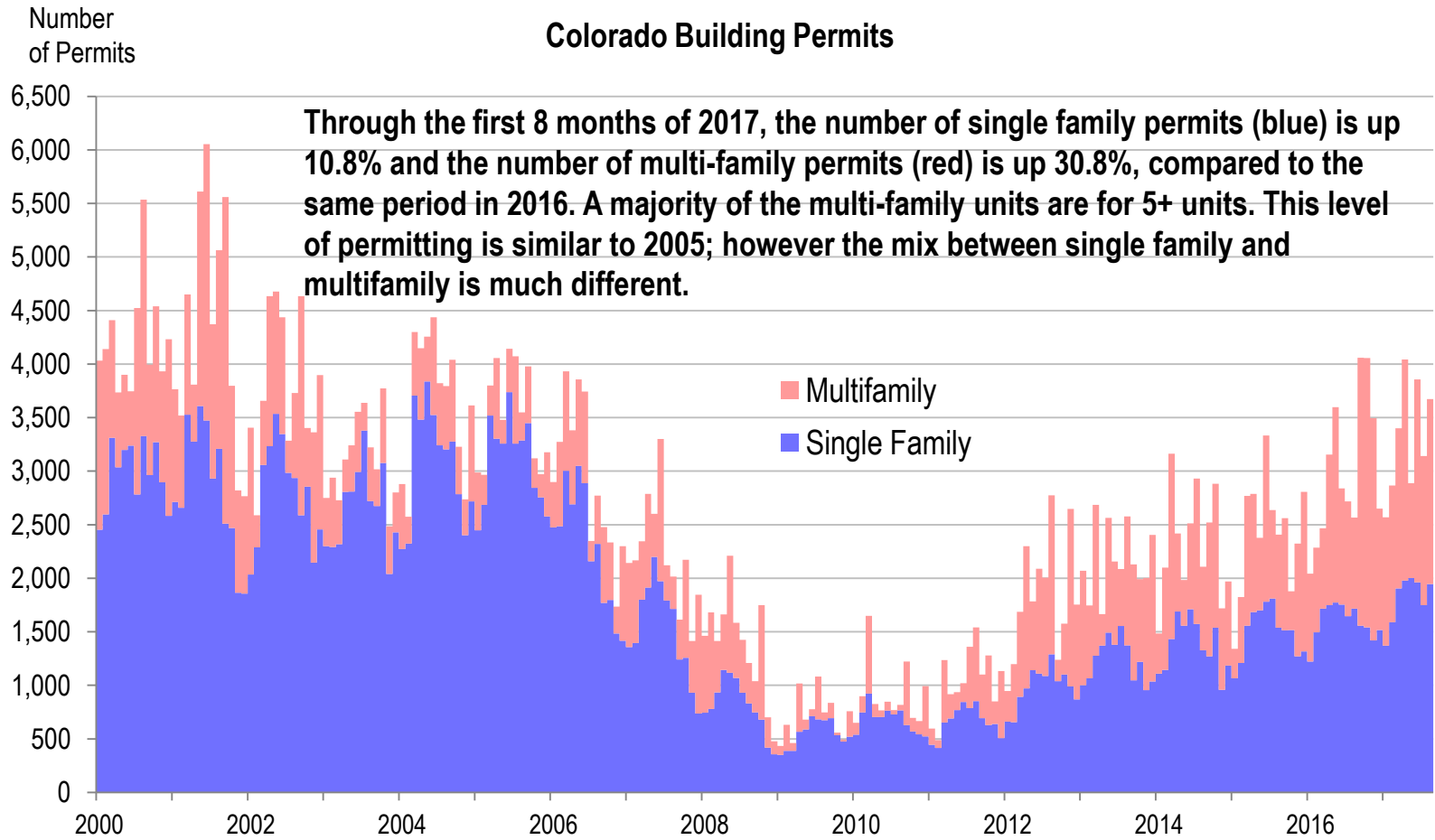
Colorado-based Business and Economic Research <http://cber.co>



# Key Sectors and Trends to Watch

Construction and Housing

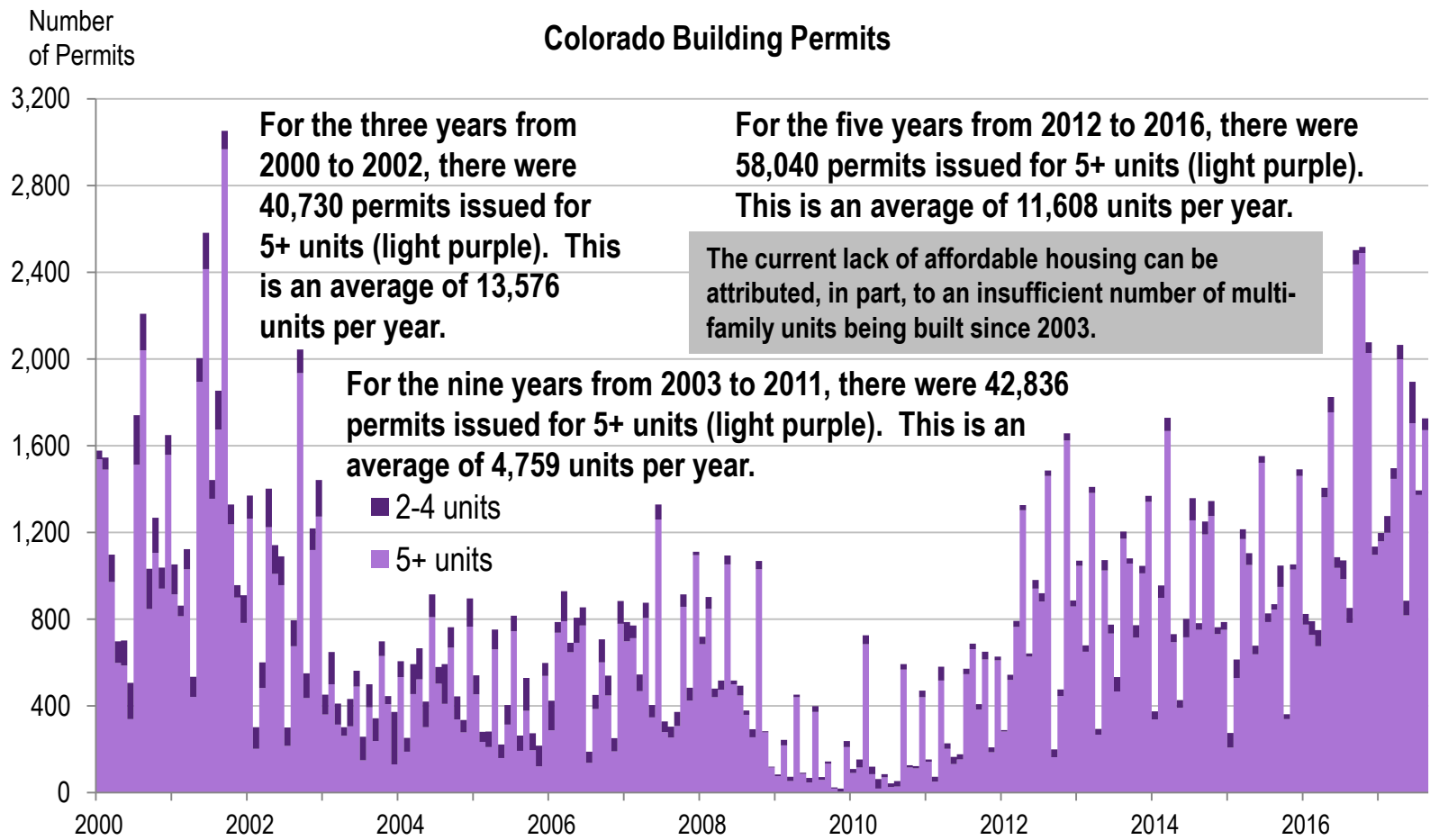
# Colorado Residential Building Permits - Units



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

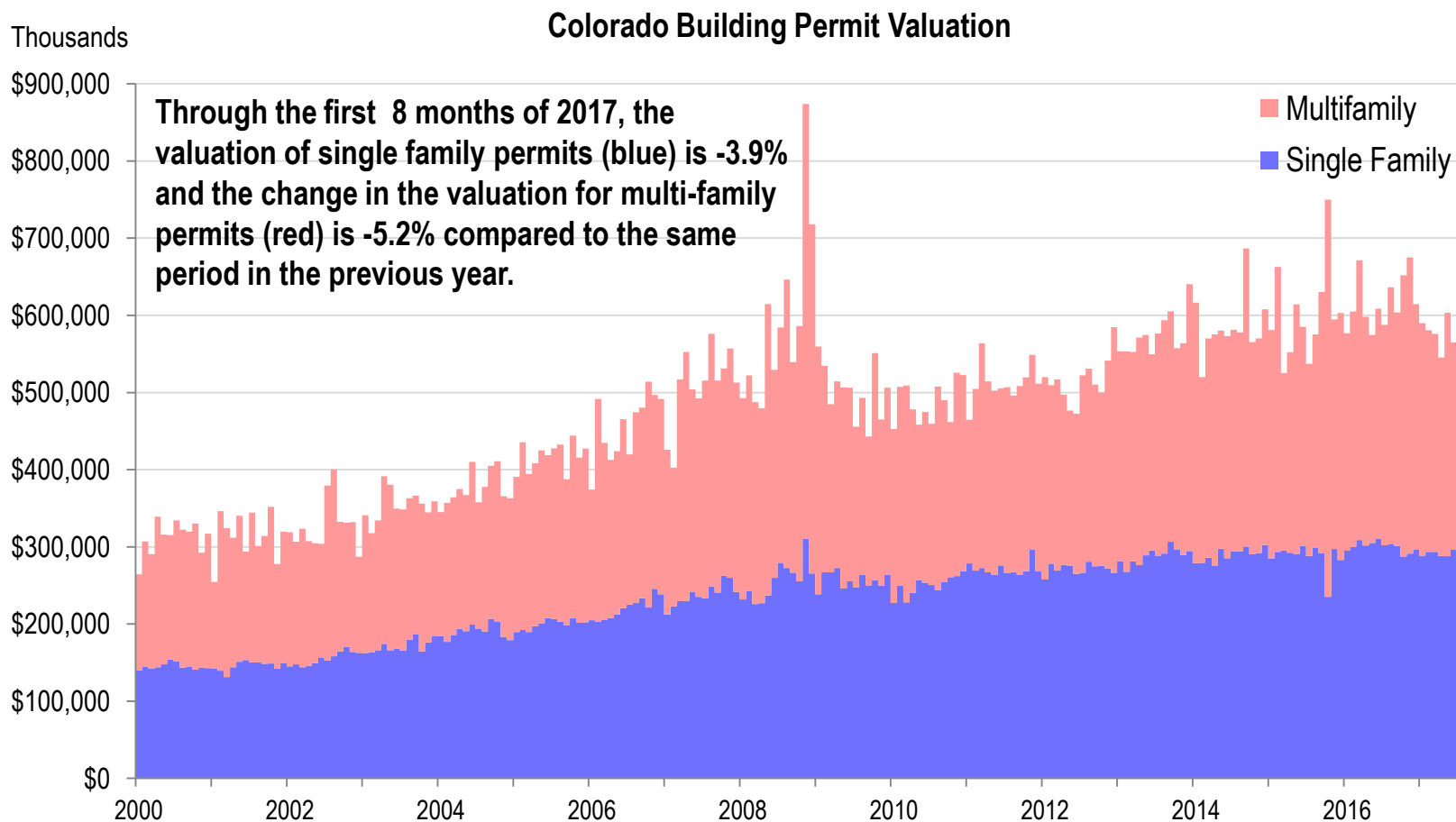
# Colorado Residential Building Permits – Units

## Lack of Construction Contributes to Lack of Supply



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

# Colorado Residential Building Permits - Valuation

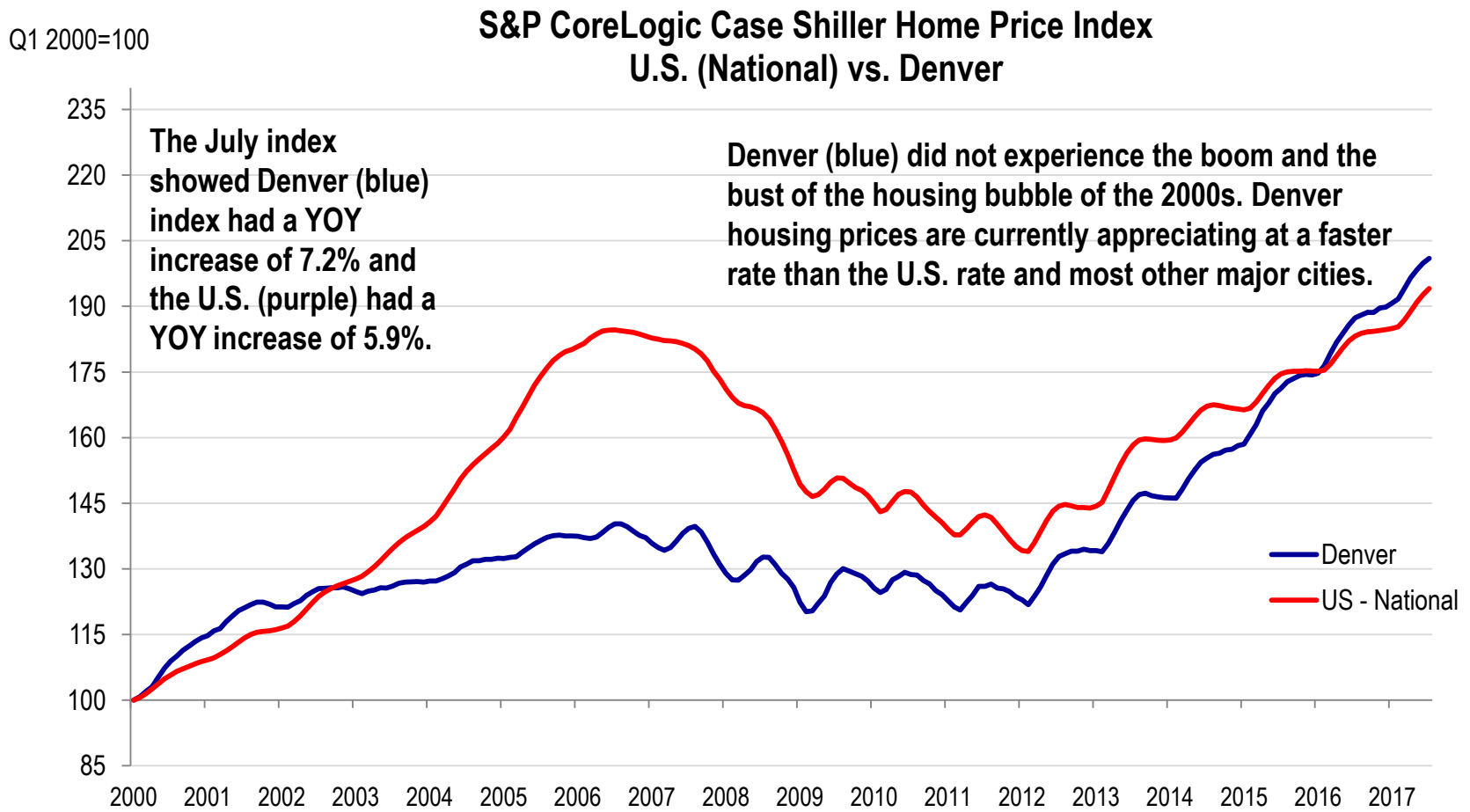


Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co. Note: Not adjusted for inflation.



# Case Shiller Home Price Index

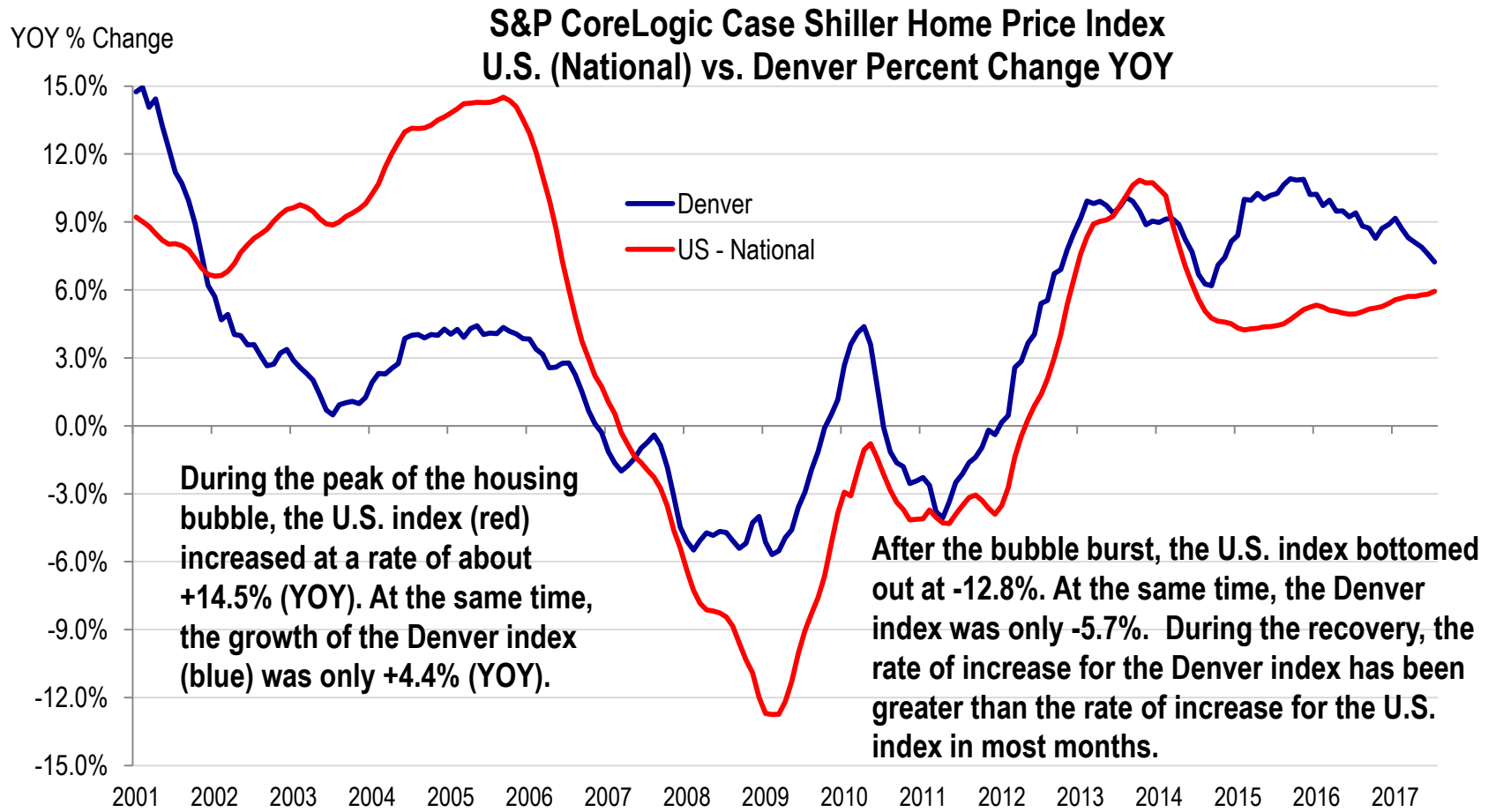
## National vs. Denver Index Value



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

# Case Shiller Home Price Index

## National vs. Denver YOY Rate of Change



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

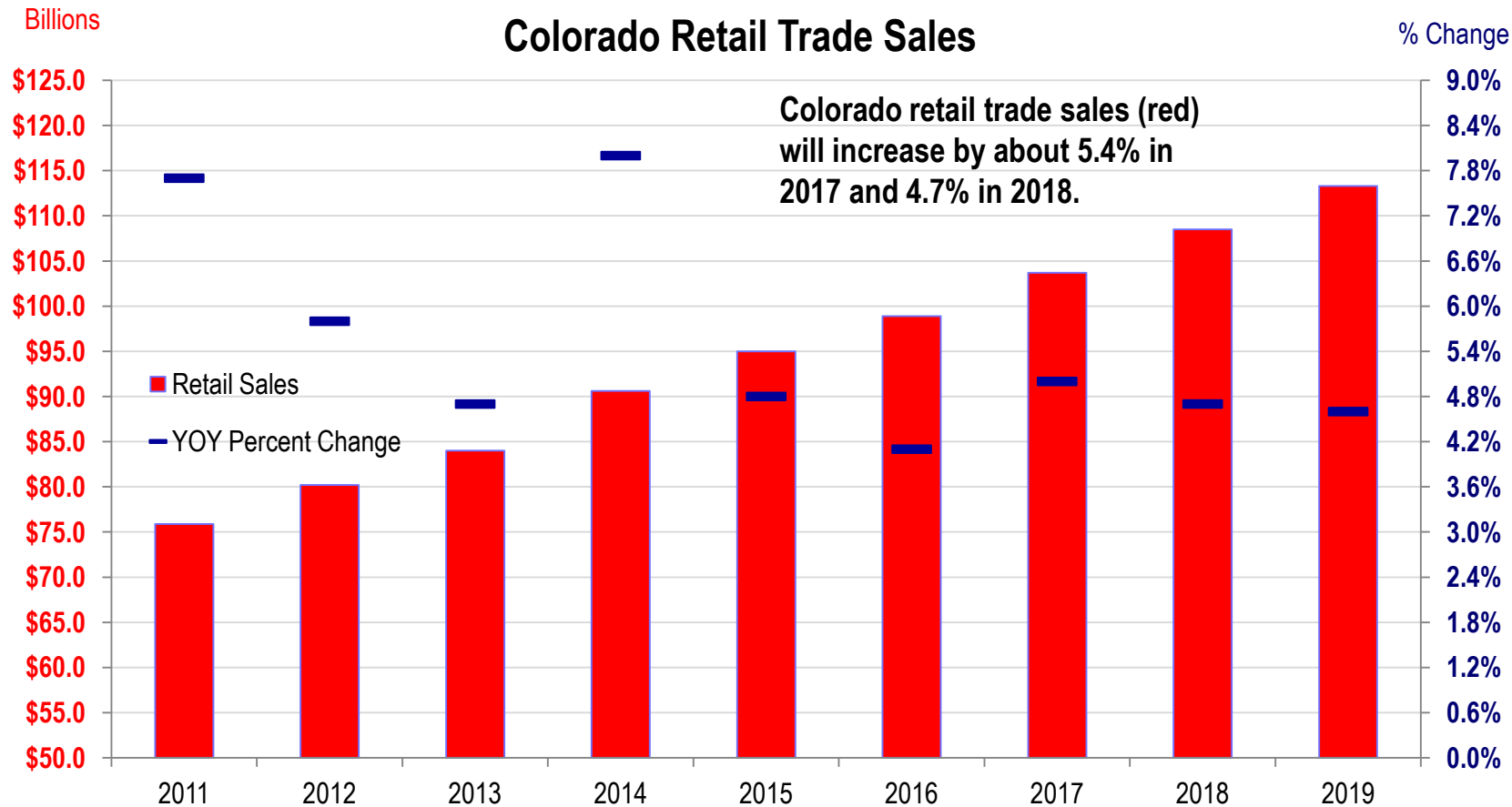


# Key Sectors and Trends to Watch

Retail Trade Sales, New and Used Car Registrations, and DIA Passengers

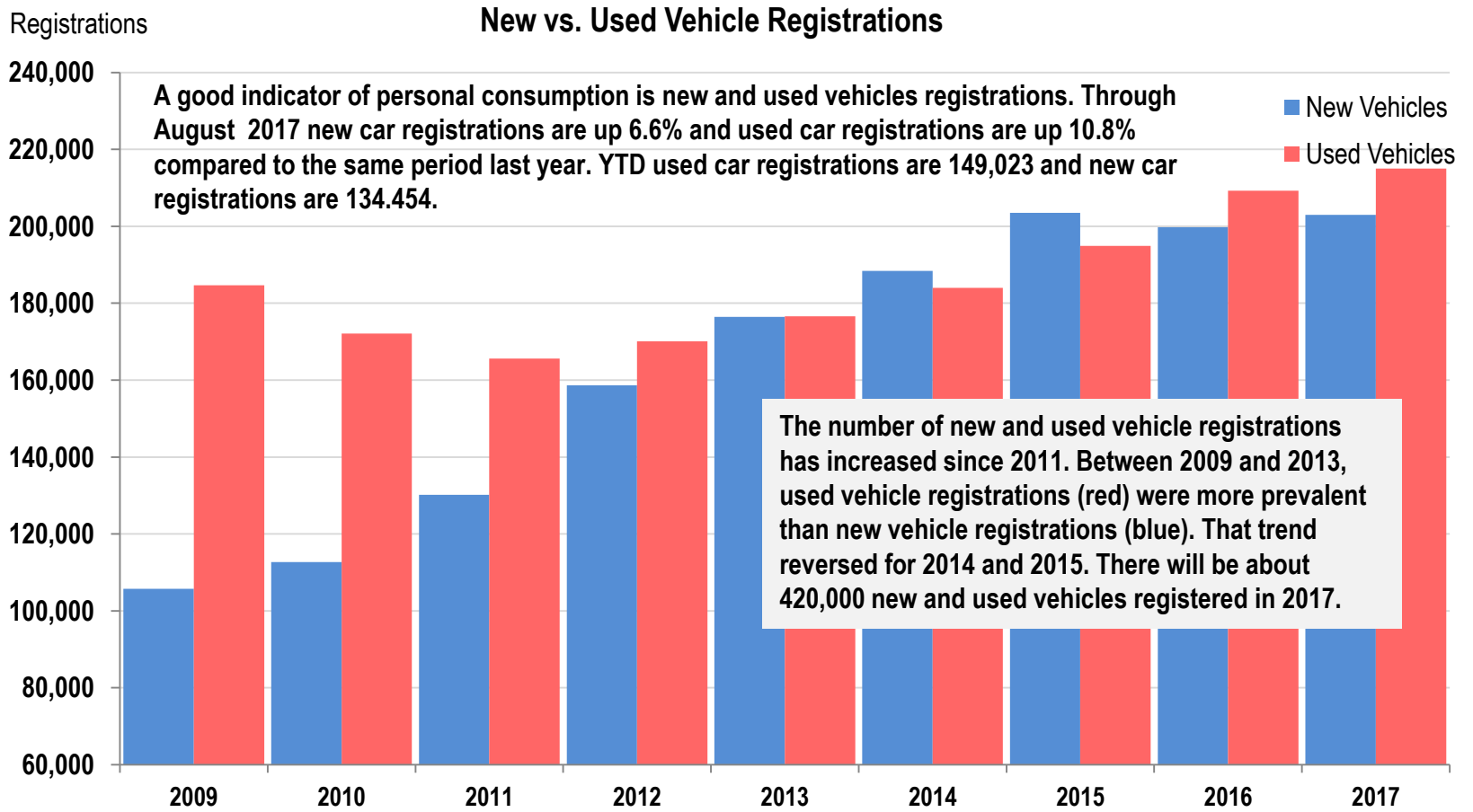
# Colorado Retail Trade Sales

## Sales and YOY Percent Change



Source: Based on data provided by OSPB and Colorado Legislative Council. Sales include retail sales as defined by the Department of Revenue, plus food and beverage.

# Colorado New and Used Vehicle Registrations



Source: Colorado Auto Dealers Association, cber.co.

# DIA Passengers

## Up, Up, and Away



Source: flydenver.com, cber.co.

# Key Sectors and Trends to Watch

## Transportation

There are no graphs or charts in this section, simply quotes from an article written by Cathy Proctor, “*Hickenlooper Warns Colorado’s Economy Could Choke on Congestion*,” published by the Denver Business Journal on October 23rd. The brief excerpts from the article succinctly sum up the transportation challenge facing Colorado. It is easy to identify the problem. Finding a solution to the problem will be much more difficult.

Governor Hickenlooper stated that Colorado has invested in the state’s infrastructure and education in the past, and seen it pay off in the form of a booming economy and low unemployment.

But “transportation has been a prickly problem” for the state and one marked by a divide between urban and rural legislators, he said.

But the basic facts remain the same: Colorado’s roads and highways are aging and the state’s gasoline tax, 22 cents per gallon, hasn’t been raised since 1992.

“We’ve gained 800,000 people in the last decade and yet ... we’re spending less now than we spent in 2007. If you have growth and a funding problem — you have trouble,” Hickenlooper said, adding that CDOT has \$9 billion worth of needed projects, but doesn’t have the money to pay for them.

One way to slow down a growing economy “is to tie up everyone in congestion.”

Some people will leave, because they don’t want to put up with traffic problems, Hickenlooper said.

And for the businesses that stay, efficiencies drop when employees “are forced to take an extra hour of their day to just negotiate their way to or from their work. That creates frustration and creates diminished performance,” Hickenlooper said.

**How can Colorado fund its additions and upgrades to its transportation infrastructure?**



# The Colorado Economy

Amazon and the NFL



# Amazon and the NFL

For the past six weeks, the headlines have been dominated by the Amazon proposal for HQ2 and the latest controversy to hit the National Football League.

This section touches briefly on both topics because Amazon has facilities in Colorado and the Denver Broncos are fan favorites and one of the most successful teams in the NFL.

## The Amazon Proposal

The discussion about Amazon addresses the following:

- Contents of the RFP for HQ2.
- How Colorado will fare in the bidder's war.
- How Colorado should move forward when the winner is announced.

## Are You Ready for Some Football?

The discussion about professional football addresses the following:

- High school football participation– the feeder system for professional football.
- Changes in the fan base for professional football.
- Percentage of seats filled and average attendance.
- What the data means.

# ● The Amazon Proposal

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# Amazon

## 238 cities responded

Denver is one of 238 cities that responded to a RFP to be the home of a second Amazon headquarters. This slide includes key points from the RFP grouped into two categories. The RFP, which was published by the *New York Times*, is available at <http://cber.co/economic-updates/>.

### Would it be a good business decision for Amazon to move to Denver?

#### Contents of RFP

- How easy is it to attract and retain strong technical talent?
- What incentives will be offered?
- Are there big thinkers in the local communities?
- How innovative, creative, and collaborative are Colorado business and government leaders?
- Are elected officials eager and willing to work with the company?
- Does Colorado have a stable and business-friendly environment?
- Does the state have a strong economy?
- Does Colorado have excellent universities?
- Are there enough hotel rooms to house Amazon visitors in a year (233,000 room nights)?
- How is Denver's connectivity?

### Would the employees like living in Denver?

#### Contents of RFP

- What is it like to live in Denver? How good are the recreational opportunities and cultural activities? How is the weather?
- Is there an inclusive atmosphere?
- What is the commute time? How congested is the traffic during rush hour?
- How good is the mass transit system?
- How easy is it to get out of town?
- What is the cost of living and inflation rate?
- What housing options are available near the potential headquarters? How reasonable are housing prices?
- What is Denver's crime rate?

**It is clear that Amazon is interested in doing what is best for the company and its employees. An important question that Colorado and other bidders must ask is, "Why would Amazon be good for our community?"**



# Amazon

## How Will Denver Fare?

### Pros

Denver will be seriously considered for the following reasons:

1. Economic and business leaders work well together.
2. Strong and diverse state economy.
3. Excellent mix of arts and culture, sports, and activity.
4. Great quality of life.
5. It is easy to get out of town.
6. Ample hotel rooms – tourist economy.

### Cons

Denver is not likely to be selected for the following reasons:

1. Colorado has a talented workforce, but there are not enough talented workers to meet Amazon's needs.
2. Colorado has become an expensive place to live, especially housing.
3. Colorado's universities are strong in science and engineering, but second or third tier in business and computer sciences.
4. Our transportation infrastructure and international air connections are improving, but they are not sufficient.
5. Connectivity in Denver is not adequate.
6. Denver's may be centrally located for some companies, but it may not be for Amazon.

**Undoubtedly, Colorado leaders put together a proposal that will represent the state well. Colorado has come a long way since Tony Kornheiser called Denver a cow town on Monday Night Football; however, it is not ready for prime time - yet. Amazon HQ2 would be a boost to the state economy. It will be a blessing in disguise when Amazon chooses another state for their second headquarters.**



# Amazon

## Moving Forward

The Amazon proposal has given Colorado's business, government, and economic development leaders a chance to tell the state's story and draw attention to its many assets. The state will benefit from this exposure.

This is a great opportunity for the state's leaders to more succinctly identify Colorado's strengths, distinctive competencies, and limitations that keep us from being a more prolific center of commerce. The next step is to take action to protect and maintain Colorado's strengths, improve its weaknesses, and show how Coloradans can continue to work together to adapt to a changing world.

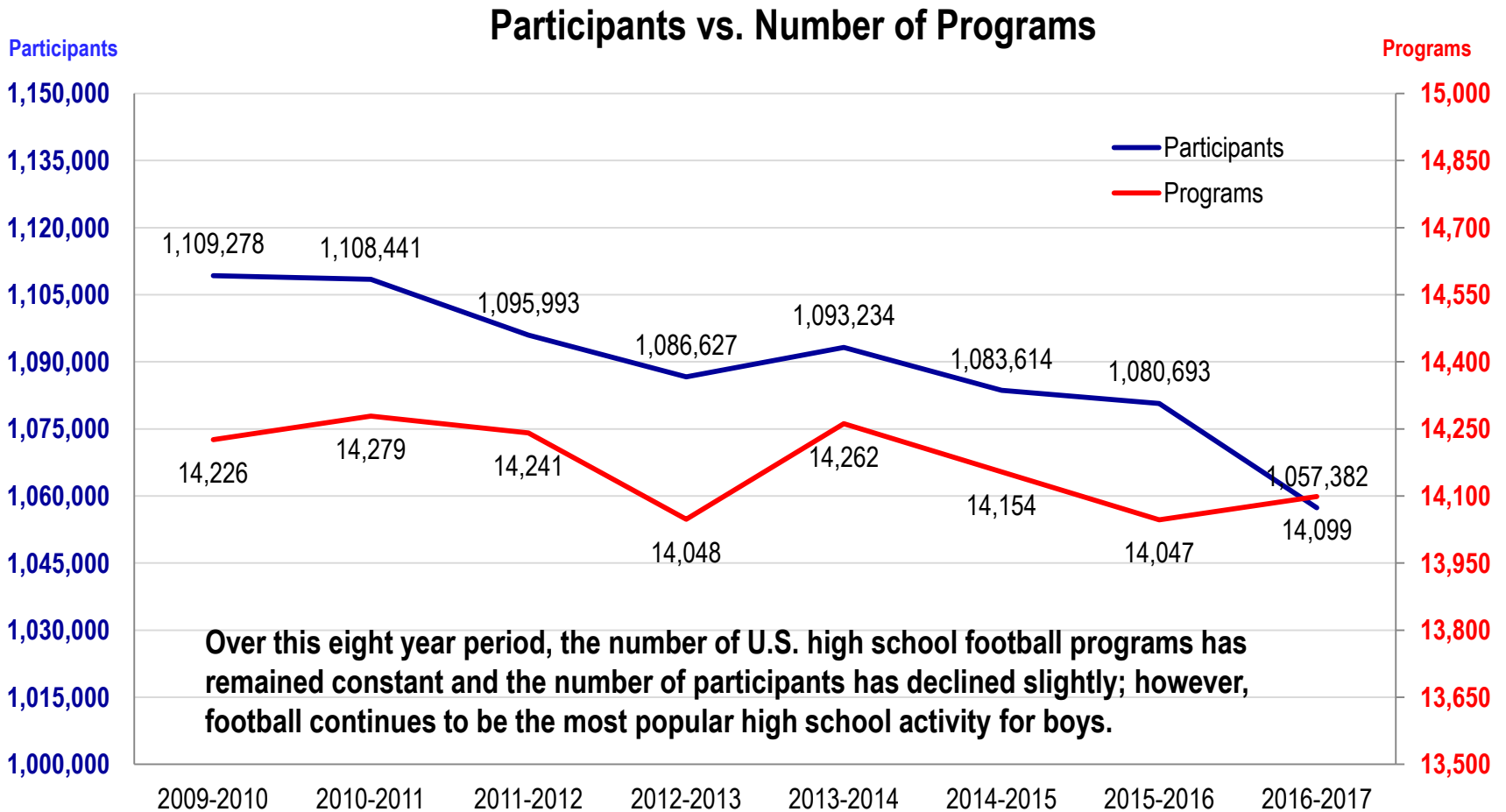
When this is done, Colorado will have to put itself in a position to attract companies that are a better fit for the state than Amazon.

# ● Are You Ready for Some Football?

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# U.S. High School Football – The Feeder System

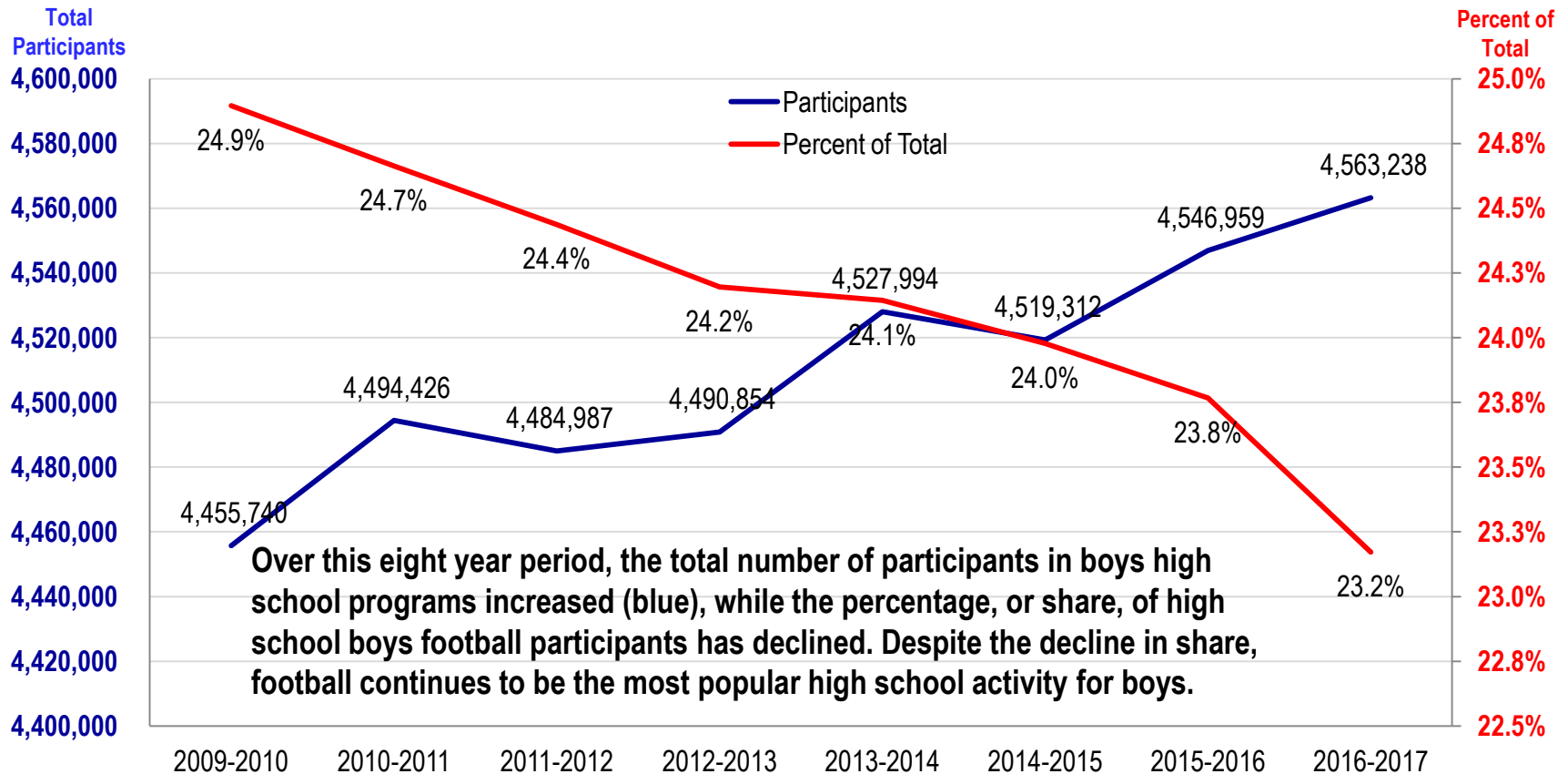
## Boys Participants vs. Number of Programs



Source: NFHS, Boys Participants, 11 player teams only.

- U.S. High School Football – the Feeder System
- Total Boys Participants vs. Football as a Percent of Total

**Total Boys Participants vs. Football as a Percentage of Total Boys Participants**

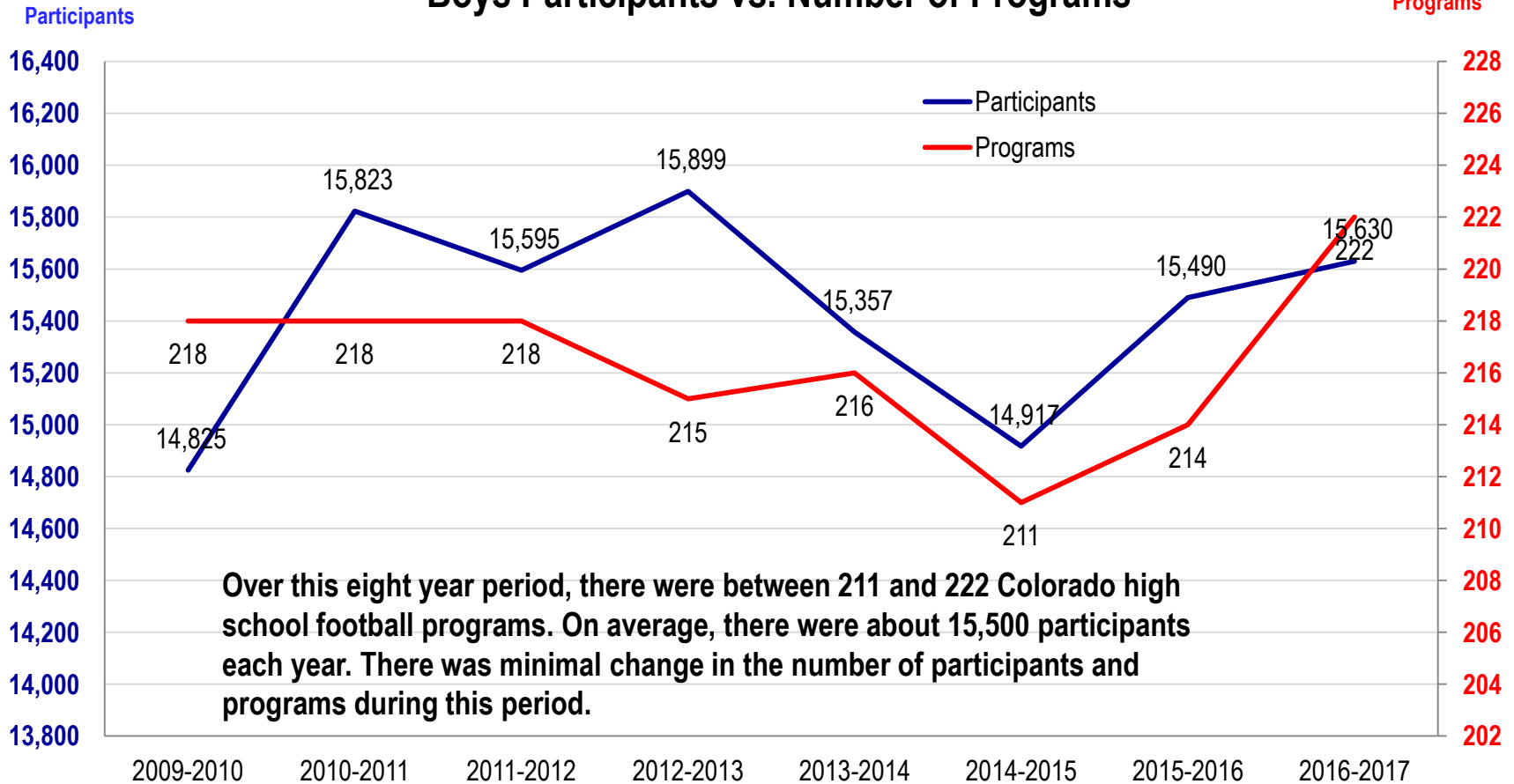


Source: NFHS, Boys Participants, 11 player teams only.



- Colorado High School Football – The Feeder System
- Boys Participants vs. Number of Programs
- 

**Boys Participants vs. Number of Programs**

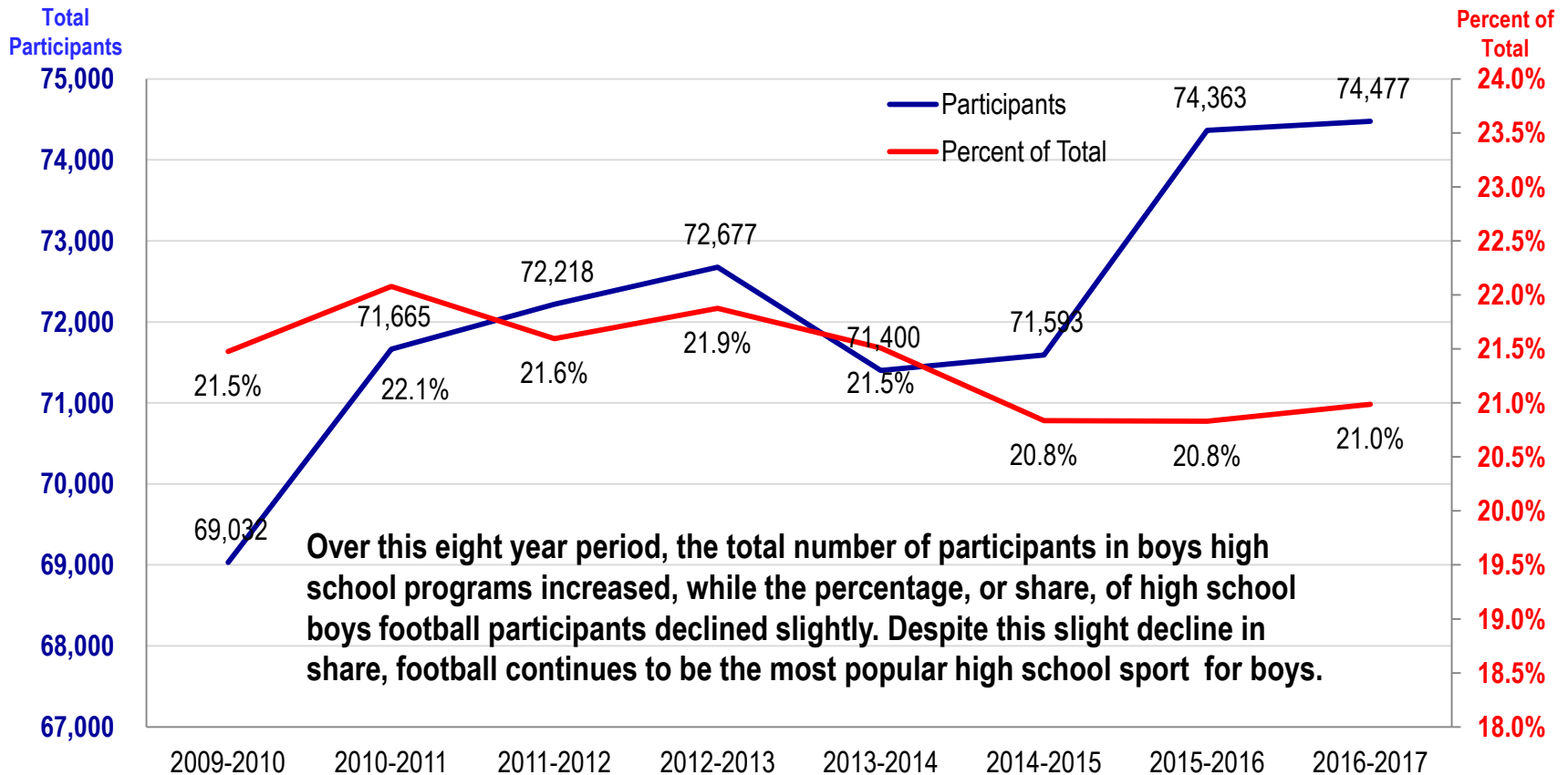


Source: NFHS, Boys Participants, 11 player teams only.

# Colorado High School Football- The Feeder System

## Total Boys Participants vs. Football as a Percent of Total

Total Boys Participants vs. Football as a Percentage of Total Boys Participants



Source: NFHS, Boys Participants, 11 player teams only.

# National Football League

## Are you a Sports Fan or Not?

### Gallup Poll Shows Decline in Interest in NFL

On October 13<sup>th</sup>, 2017, Gallup released results from a poll it conducted that measured the number of U.S. adults who were fans of nine sports. This information was compared to a similar poll conducted in 2012 (see adjacent chart).

The most notable changes were in Olympic sports and professional football. Olympic sports posted a decline of 12 percentage points, although the Olympics were held in London in 2012, but Olympics were not held in 2017. Professional football dropped 10 percentage points in 2017.

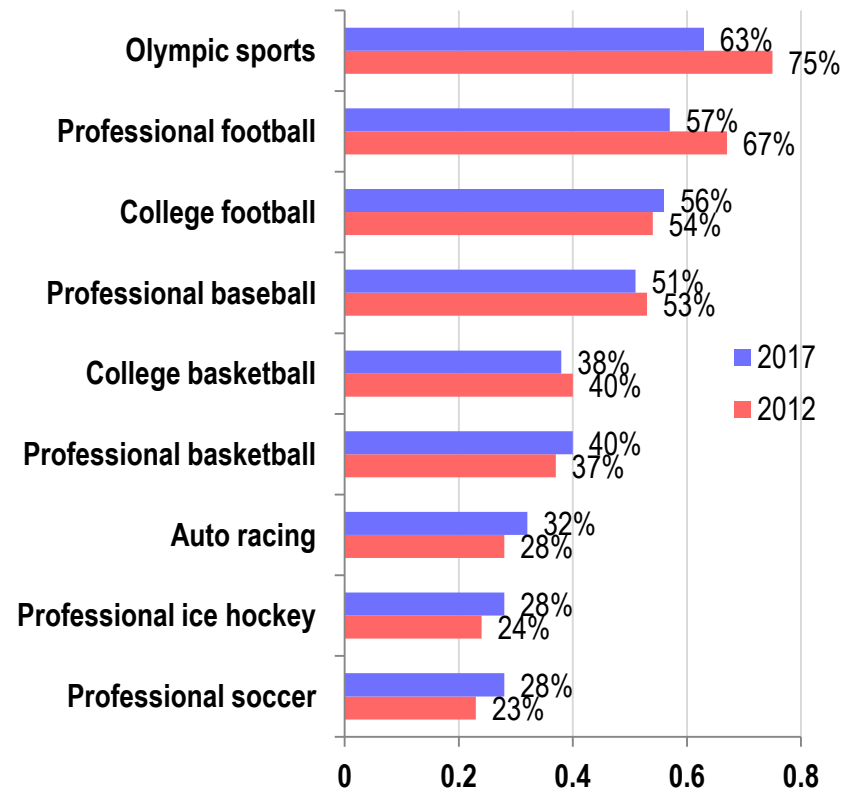
There was actually a slight increase in 2017 for college football. This suggests the decline in the number of professional football fans relates to issues with the NFL rather than concerns about the sport of football.

Additional demographic results are included in charts on the following pages.

Source: Gallup.

Colorado-based Business and Economic Research <http://cber.co>

### Are you a Sports Fan of the Following Sports?



# National Football League

## A Political Football?

### A Political Football?

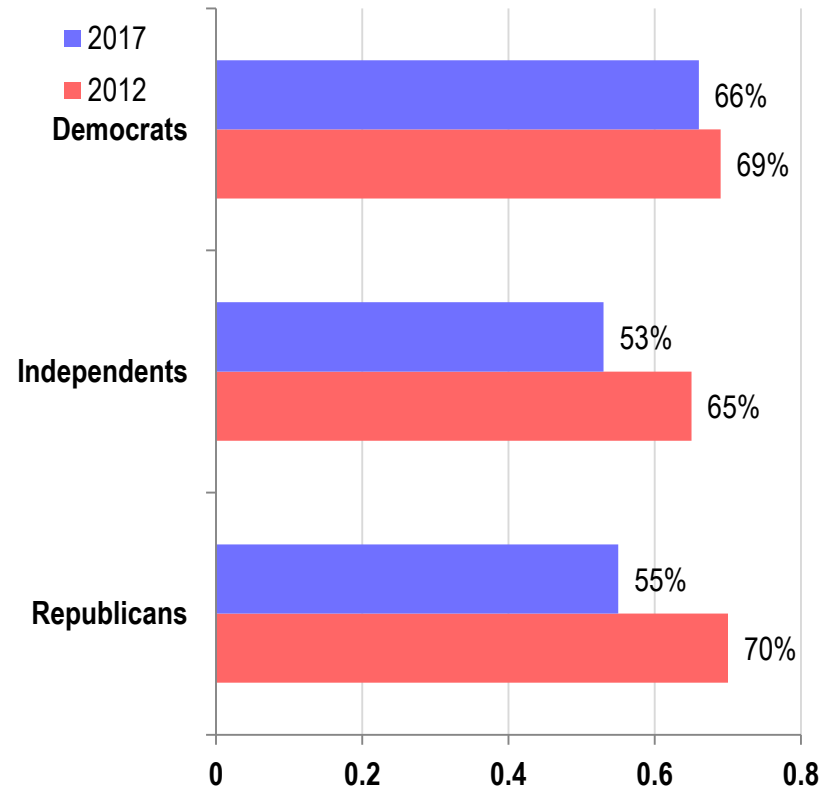
There were significant declines in 2017 for the self-identified professional football fan base for Republicans and Independents. The decline was minimal for Democrats.

Gallup also noted that, “Over the same time period, Republicans' affinity for college football has not declined (60% in 2012 and 64% currently). The percentages of Independents and Democrats who are college football fans were also essentially unchanged.”

Source: Gallup.

Colorado-based Business and Economic Research <http://cber.co>

### Are you a Fan of the Professional Football?



# National Football League

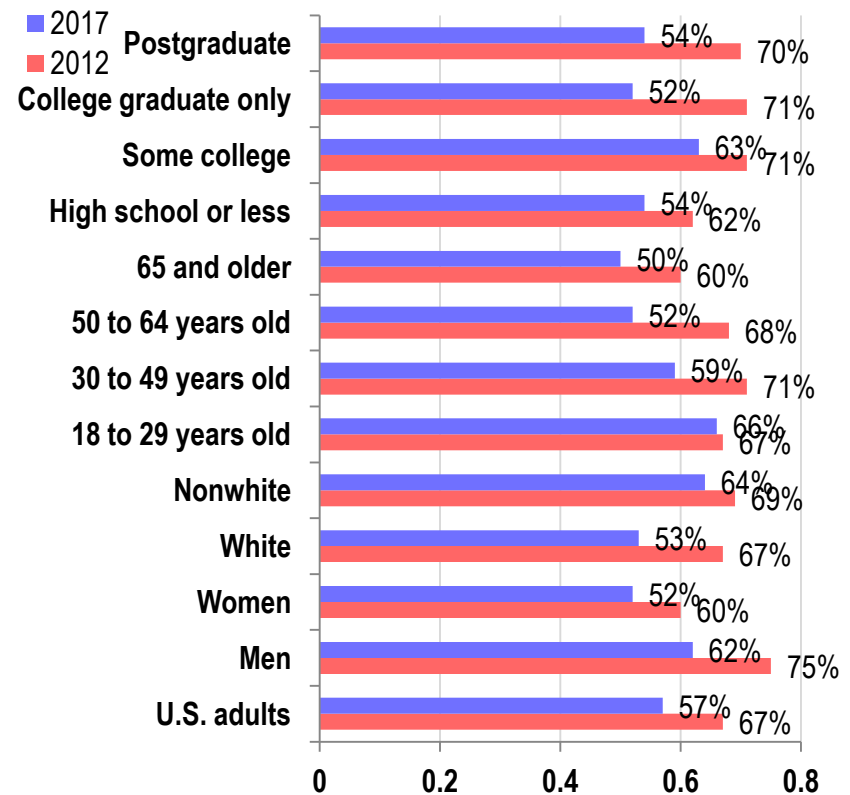
## Are you a Fan of Professional Football Based on Your Demographics?

### Changes in Pro Football Fans (Demographics)

When compared to the 2012 results, there was a decline in 2017 across all of the demographic categories measured.

There was a minimal decline in 18 to 29 year olds and a slightly larger decline in nonwhites. The greatest declines were among men, older Americans, and people with at least a college degree.

### All Categories Show a Decline



Source: Gallup.

Colorado-based Business and Economic Research <http://cber.co>

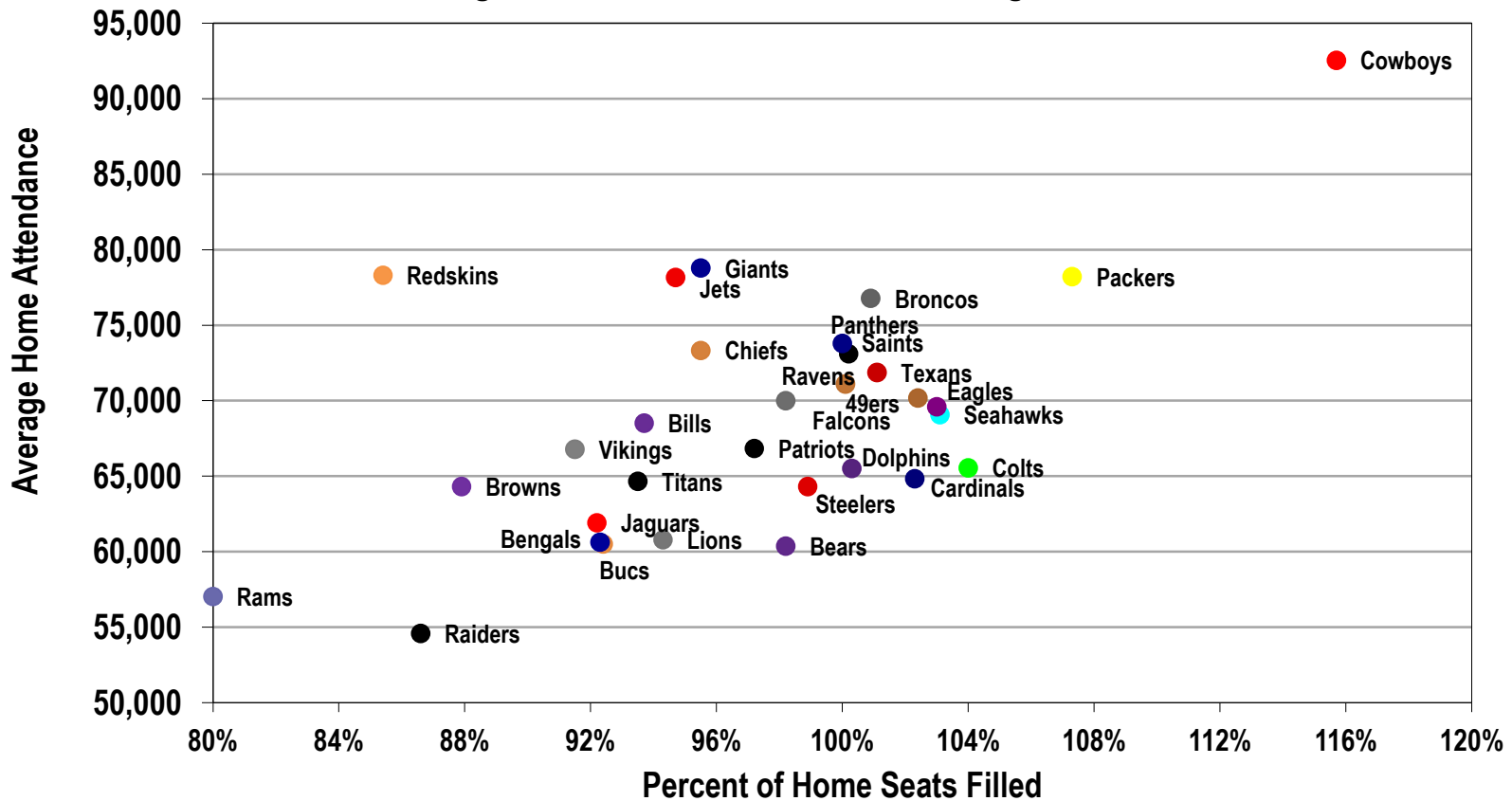
- NFL Average Home Attendance vs. “Seats Filled”
- 2016 Season
- 

The chart on the next page compares the average home attendance and percentage of “seats filled” for 31 of the NFL teams. The Chargers were not included because they are using a temporary stadium.

The subsequent page provides a limited summary of the data illustrated in the chart. This analysis illustrates that attendance is more likely to decline than increase for many NFL owners.

# NFL Average Home Attendance vs. "Seats Filled" 2016 Season

NFL Average Home Attendance vs. Percentage of Seats Filled



Source: ESPN.

Note: The Chargers are not listed because they are transitioning to a new stadium.

Colorado-based Business and Economic Research <http://cber.co>

# NFL Average Home Attendance vs. Percentage of "Seats Filled" 2016 Season

## Average Home Attendance

Only Dallas has average annual attendance greater than 90,000.

The following 11 teams have average annual home attendance greater than 70,000: NY Giants, Washington, Green Bay, NY Jets, Denver, Carolina, Kansas City, New Orleans, Houston, Baltimore, and San Francisco.

The following 8 teams have average annual attendance between 65,000 and 69,999: Atlanta, Philadelphia, Seattle, Buffalo, New England, Minnesota, Indianapolis, and Miami.

The following 9 teams have average annual home attendance between 60,000 and 64,999: Arizona, Tennessee, Pittsburgh, Cleveland, Jacksonville, Detroit, Tampa Bay, Cincinnati, and Chicago.

Los Angeles Rams and Oakland have average annual attendance less than 60,000.

The Los Angeles Chargers are not included.

## Percentage of Home "Seats Filled"

The following 13 teams have more than 100% of their "seats filled": Dallas, Green Bay, Indianapolis, Seattle, Philadelphia, San Francisco, Arizona, Houston, Denver, Miami, New Orleans, Baltimore, and Carolina.

The following 14 teams have between 90% and 99.9% of their seats filled: Pittsburgh, Atlanta, Chicago, New England, Kansas City, NY Giants, NY Jets, Detroit, Buffalo, Tennessee, Cincinnati, Tampa Bay, Jacksonville, and Minnesota.

The following 4 teams have less than 90% of their seats filled: Cleveland, Oakland, Washington, and Los Angeles.

The Los Angeles Chargers are not included.

There are 3 teams that average 75,000 more in attendance that have more than 100% of their "seats filled": Dallas, Denver, and Green Bay.



# National Football League

## What Does This Data Mean?

The NFL is a behemoth. At the moment, it is too big to fail.

The business model and definition of competitiveness for professional football is different from most industries. For example, Coca Cola would love to eliminate Pepsi and vice versa. In the NFL, the Broncos love to beat the Raiders, but they want the Raiders to remain competitive so they can sell tickets, t-shirts, and parking spots. Even though both teams are fighting to win, their primary objective is to sell the “NFL product”.

According to Forbes (*NFL Losing Viewers At Alarming Rate But Faces Limits On Its Response* by Brian Goff), the NFL has lost 20% to 25% of its viewership in less than two years, but it still has the highest viewership and revenue of any sports league. There are a variety of reasons for the downturn such as the protest of the national anthem, lawsuits, concussions, rule changes, domestic abuse and other off-the-field problems. In addition there is customer fatigue and increased competition from technology substitutes and other leisure activities.

For at least a decade, owners have had an “attendance problem.” In some cases, owners are struggling to get season ticket holders to actually attend home games. The stadium experience does not match the game experience at home. The beer and parking are cheaper at home and the line to the bathroom is shorter.

Because it has been difficult to get tickets for some teams, owners have increased their revenue stream by improving the team experience through special events. Revenue from those streams may be maxed out.

In some cases, stadiums are sold out. In these situations, attendance is more likely to decline than increase.

Currently high school football, part of the feeder system for professional football, is losing market share to other sports, yet it remains the #1 sport among high school boy athletes.

Pro basketball and baseball had downturns. They survived and fans returned. During the interim, the small businesses (restaurants, vendors, etc.) that indirectly benefit from the NFL suffered the most. The NFL will see a reduction in viewership and ticket sales, but it will remain strong.

# ● Projected Revisions to Colorado 2017 Employment

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# Wage and Salary Employment Revisions

## The Process

In March of 2018 the BLS will release its Benchmark revisions to the Wage and Salary Employment data series. The update will be based on QCEW data for the first three quarters of 2017.

In late August 2017, Colorado Labor Market Information released its initial projections for revisions of the first half of 2017. This update was based on QCEW data for Q1 2017.

The adjacent column includes cber.co estimates for 2017 based on the recent LMI update. Five Supersectors are understated, two will see no change, and three sectors are overstated.

The bottom line is that the current employment data will be revised upwards by 8,000 to 8,400 jobs next March. Information on the subsequent page shows these new estimates will bring greater balance between the strong growth, solid growth, and volatile categories. The updates more closely reflect the activity on the streets.

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## Projected Revisions (000s) by Supersector

### Understated Supersectors

Extractive Industries 1.6 to 2.0

Construction 4.9 to 5.3

Manufacturing .7 to 1.1

EHS 0 to .4

LHS 0 to .4

Government 4.6 to 5.0

Between 12,800 and 13,200 additional jobs will be added.

### No Change

Information

Financial Activities

### Overstated Supersectors

TTU -1.1 to -1.5

PBS -.6 to -1.0

Other Services -2.5 to -2.9

Between 4,600 and 5,000 jobs will be subtracted.

### Projected Revisions

Between 8,000 and 8,400 total jobs will be added.

## Current and Projected Change in Employment Summary of Strong, Solid, and Volatile Growth Categories (2017)

### Strong Growth Category

**Current – 22,600 jobs added, +2.7%**

**Projected - 20,000 jobs added, +2.4%**

Health care and professional, business, and personal (other) services are the major sectors.

### Solid Growth Category

**Current - 19,100 jobs added, 1.9%**

**Projected - 22,800 jobs added, +2.2%**

Accommodations and food services, trade, and state and local government are the major sectors.

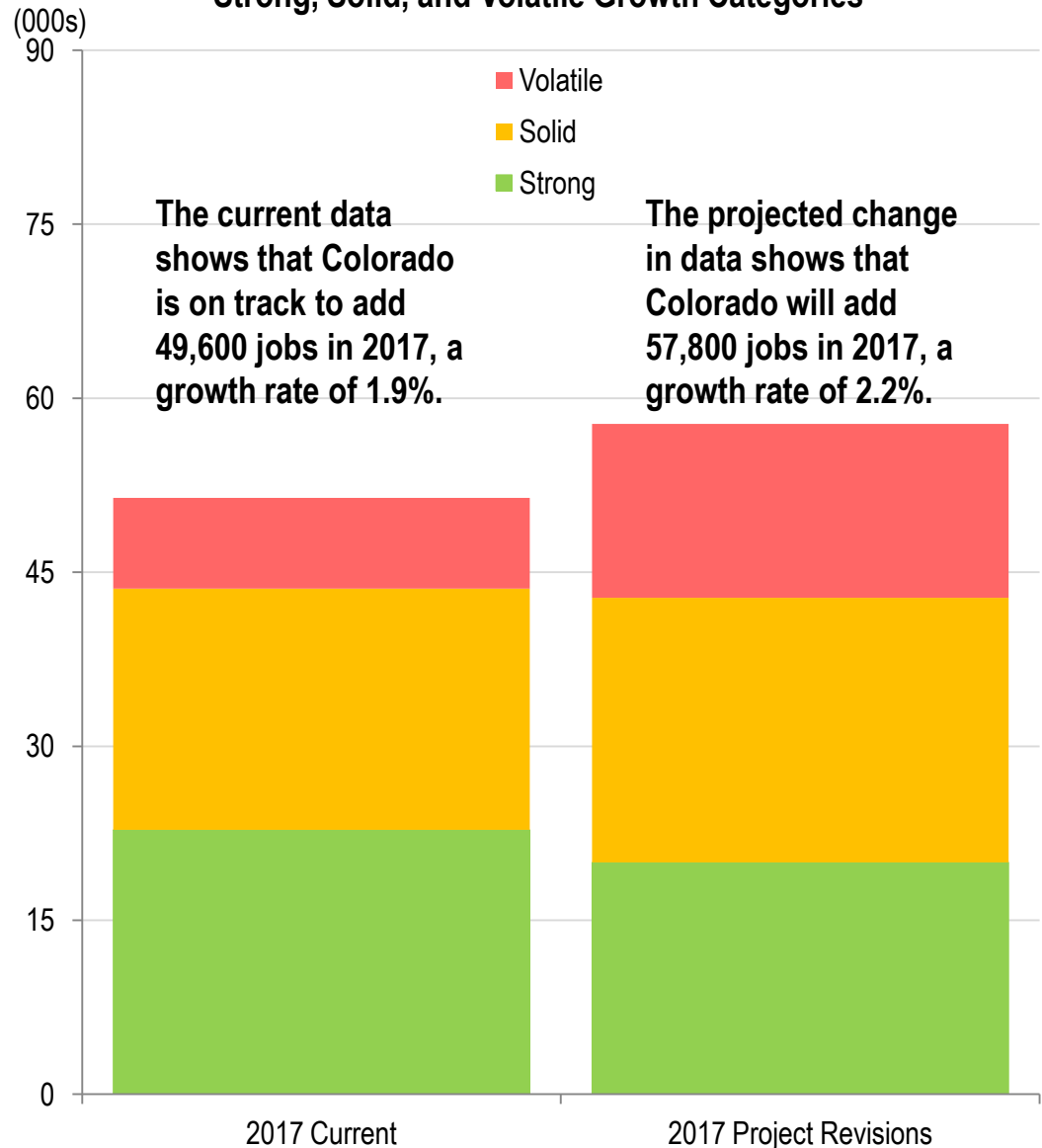
### Volatile Category

**Current – 7,900 jobs added, 1.1%**

**Projected – 15,000 jobs added, 2.0%**

Boom or bust industries – such as the extractive industries, manufacturing, information.

## Strong, Solid, and Volatile Growth Categories



Source: Bureau of Labor Statistics, cber.co.



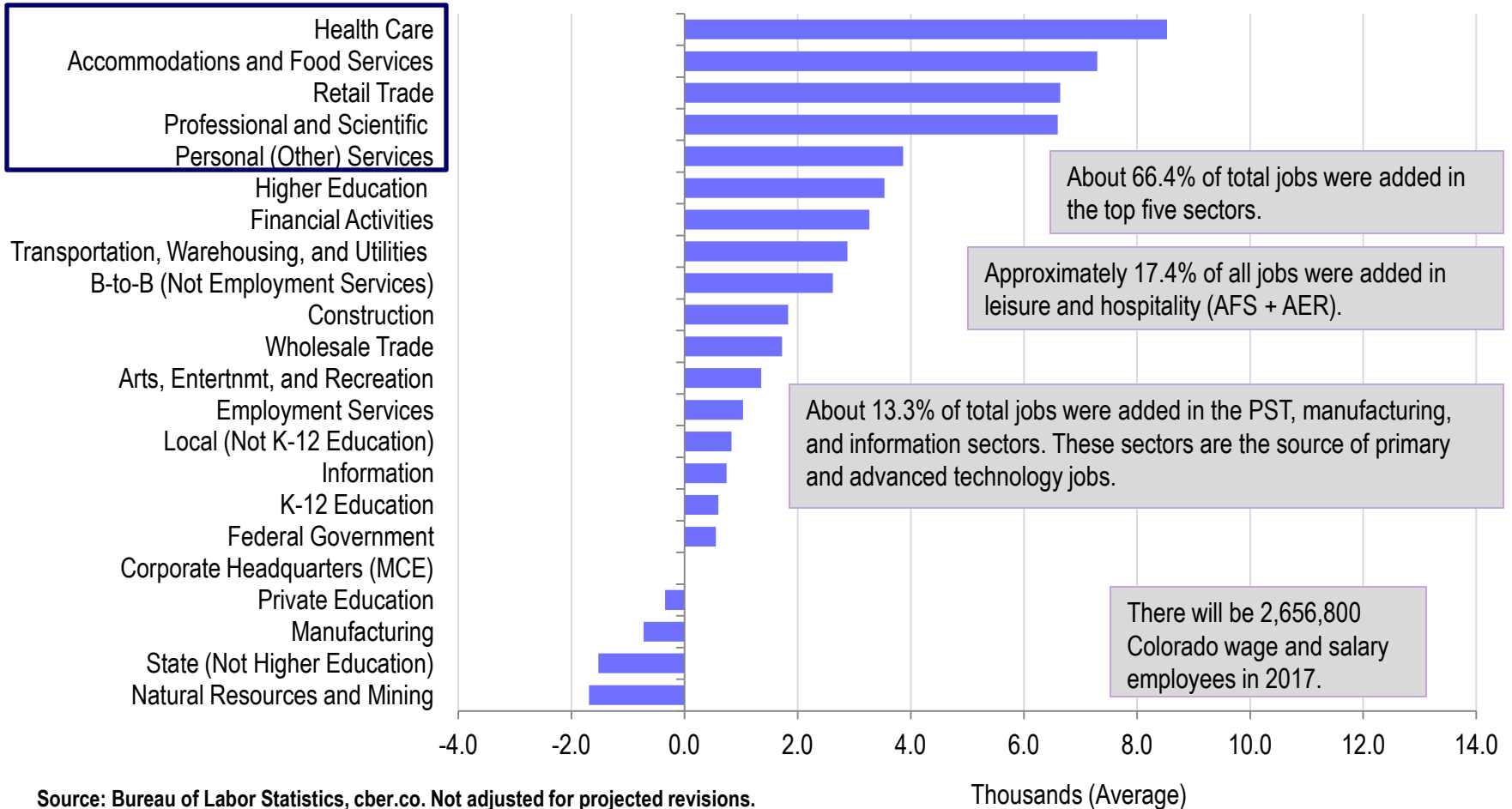
# The Colorado Economy

## Summary

# Job Changes

## 2017 YTD Through September

Job Change All Sectors



Source: Bureau of Labor Statistics, cber.co. Not adjusted for projected revisions.

Thousands (Average)

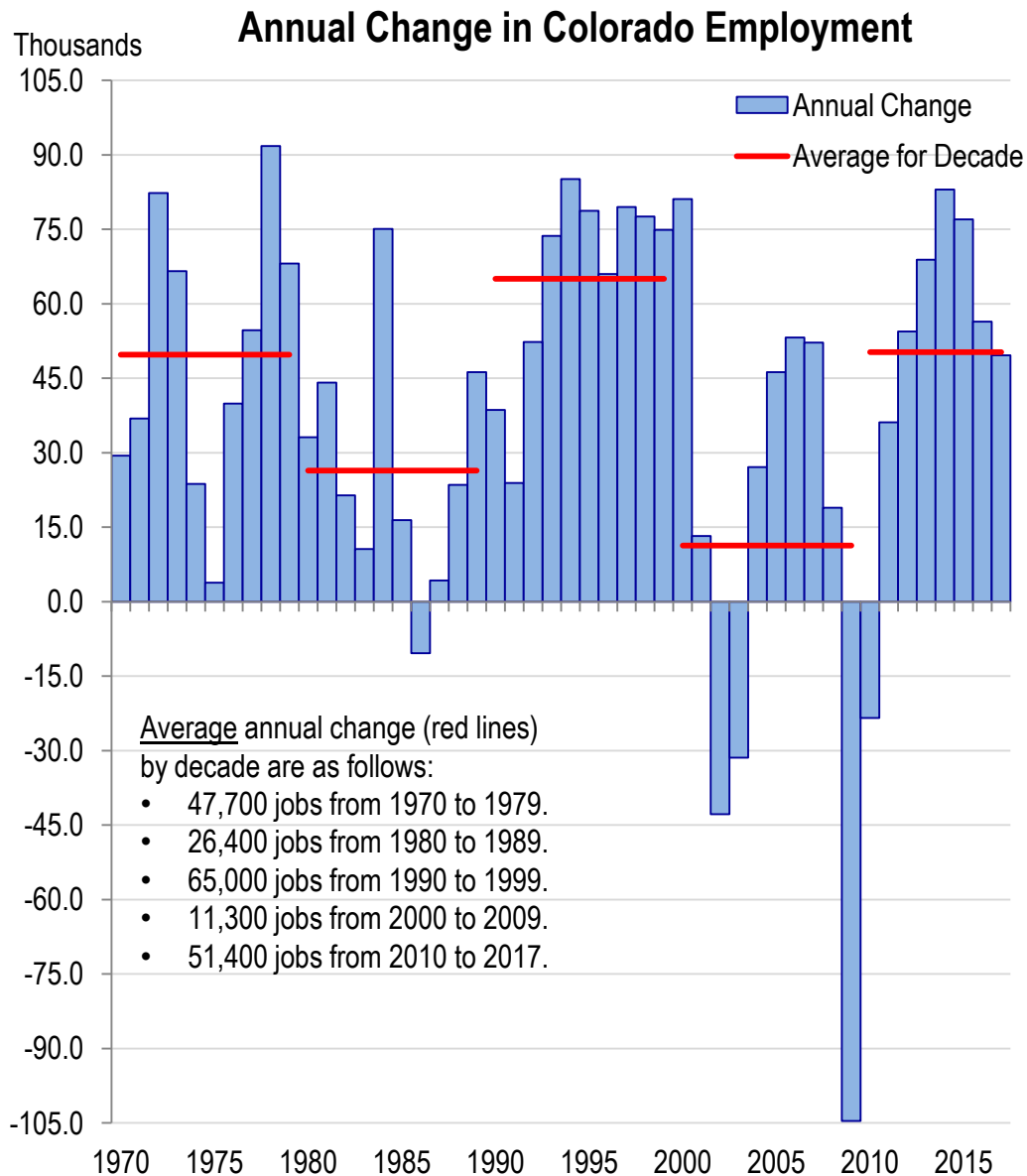
# Annual Employment Change in Colorado

For the first 8 years of this decade (2010 to 2017), Colorado added an average of 50,250 jobs.

Colorado added 77,000 jobs in 2015 and 56,400 jobs in 2016.

The current data indicates the state is on track to add 49,600 jobs in 2017. Reports from the Labor Market Information suggest that 2017 job growth might be understated by as much as 8,000 to 8,400 workers.

The low unemployment rate has created a lack of qualified workers. This shortage is preventing the economy from expanding at a faster rate.



Source: Bureau of Labor Statistics, cber.co. Not adjusted for projected revisions.



## Review of Colorado Economy and Employment Data Through September 2017

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.

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For additional information contact cber.co at [cber@cber.co](mailto:cber@cber.co).

### ABOUT THE AUTHOR

Gary Horvath has produce 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.

In addition, 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, which is part of OEDIT’s early stage and proof of concept programs.