



# Review of the Colorado Economy Analysis of First Ten Months of 2014

Colorado-based Business and Economic Research

November 21, 2014



# Overview

**On average, Colorado has added 64,900 jobs through the first ten months of 2014 compared to the same period last year. Professional Business Services and Tourism have been the top Super Sectors for job growth in Colorado. When the BLS revises the CES data series in March 2015, employment for 2014 will likely exceed 70,000. The 2014 cber.co forecast was for job growth of 68,000 to 74,000.**

## Top Sectors

The following sectors were the top contributors to job growth in Colorado:

- Accommodations and Food Services.
- Health Care.
- Professional, Scientific, and Technical Services.
- Construction.
- Retail Trade.
- Administrative (B-to-B) excluding Employment Services.

These 6 sectors accounted for 81.5% of job growth for the state.

The 2014 cber.co forecast can be found at <http://cber.co/economic-forecasts/cber-co-economic-forecast/>.

## Contents of this Overview

This analysis is divided into the following sections.

- U.S. Economy.
- Colorado Employment and Unemployment.
- Change in Colorado Employment by Performance Category.
- Questions and Answers
- Total Jobs Added.
- Appendix.



# U.S. Economy

# Real US GDP Growth Quarterly

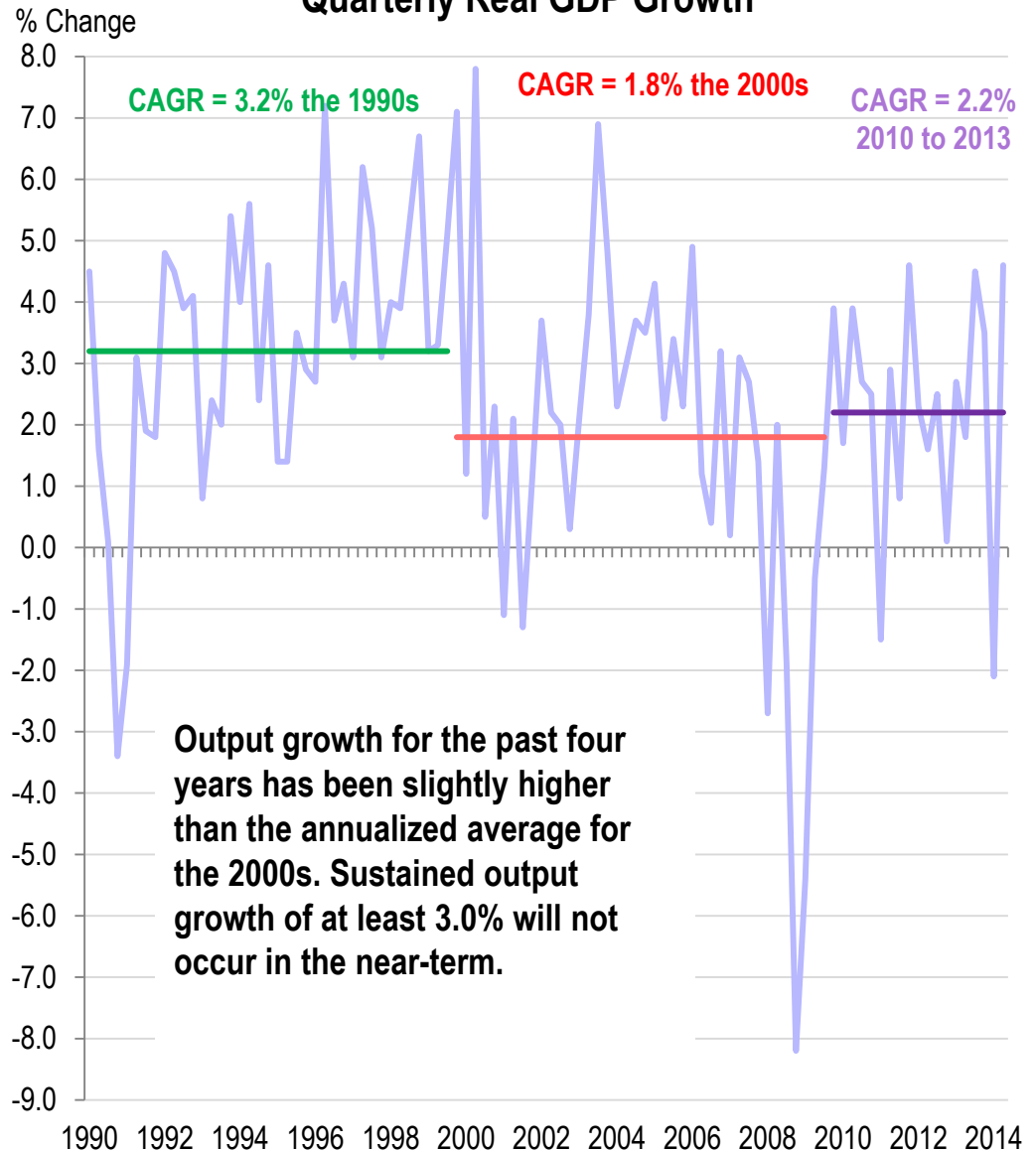
Initial forecasts for 2015 point to real output expansion of 2.5%, a slight increase over 2014.

Annualized real GDP growth for the 1990s was 3.2% (green line). It was 1.8% for the 2000s (red line). It has been 2.2% from 2010 to 2013 (purple line).

After posting annualized growth of 1.9% in 2013, the rate of growth for 2014 is projected to be 2.3%.

The third estimate for Q3 showed an increase of 4.6%. Real GDP growth for 2013 was 3.5%. That will likely be revised downwards on concerns that consumer spending was solid, but weaker than expected, housing was below expectations, and government spending grew because of military spending (this type of spending is very volatile).

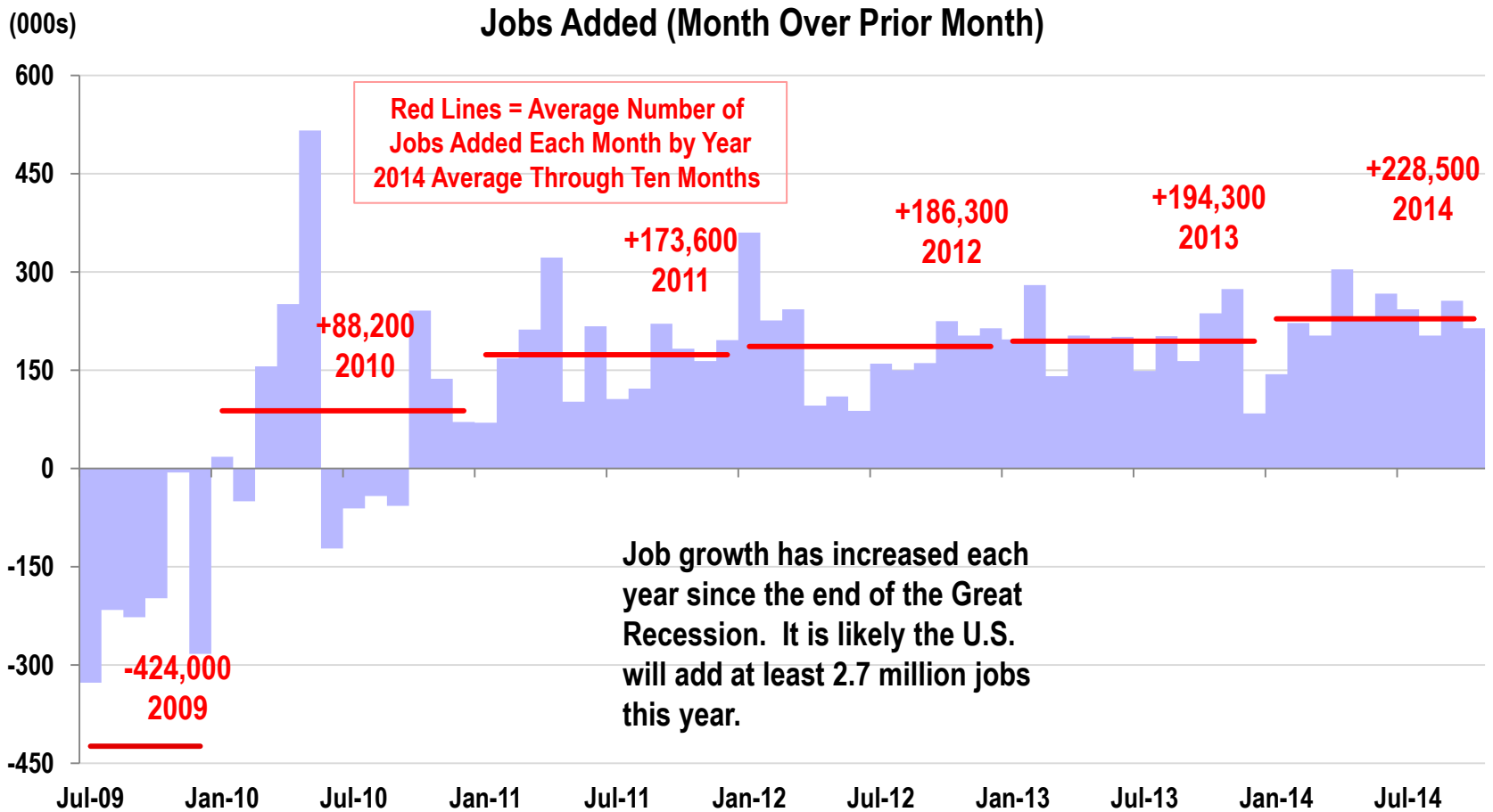
## Quarterly Real GDP Growth



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

# U.S. Employment Situation

## From End of Recession to Current



Source: Bureau of Labor Statistics, SA.

# U.S. Unemployment Rate and Number of Unemployed

The unemployment story is similar to last month, and the month before, etc. That is good news.

The number of unemployed has slowly trended downward since peaking in late 2010. At the end of October the total number of unemployed (red) was below 9.0 million.

The October 2014 ending total is 2.3 million above the low point in 2007 and 6.4 million below the high point in 2009.

At the end of October 2014, the unemployment rate (blue) was 5.8%. This compares to 7.2% one year ago.

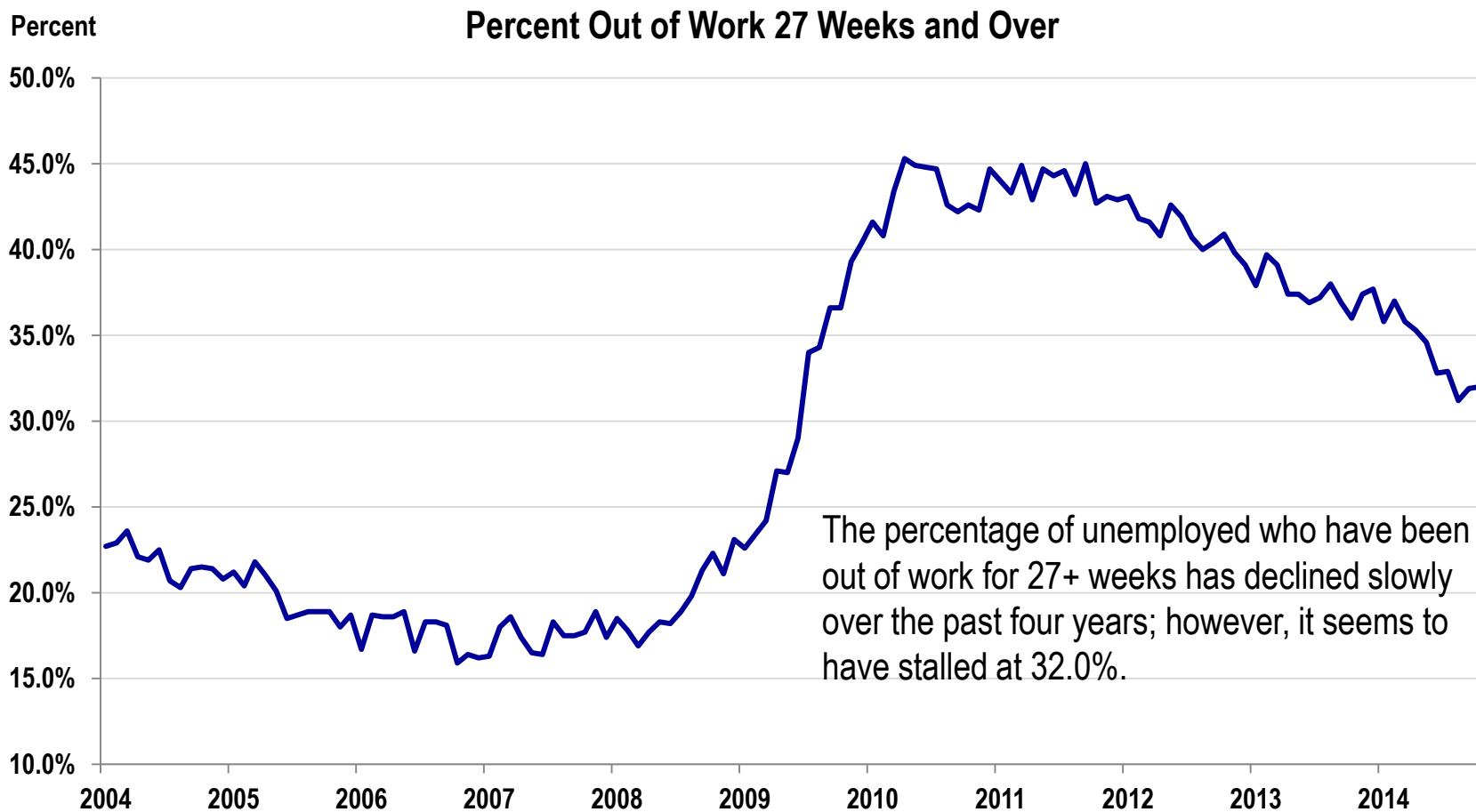
Despite the fact that the unemployment rate is 5.8%, there is an increasing shortage of trained workers in key sectors and occupations.

## Unemployment Rate and Number of Unemployed



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

# Percent of Total Unemployed Who Have Been Out of Work for 27 Weeks and Over



Source: Bureau of Labor Statistics, SA LNS13025703

● New Private Housing Units  
Authorized by Building  
Permits – In Structures with  
1 Unit

The number of monthly single family permits tumbled from almost 1.8 million in September 2005 to just over 300,000 in January 2009.

The number of permits has doubled since bottoming out, but remains at levels last seen in 1991.

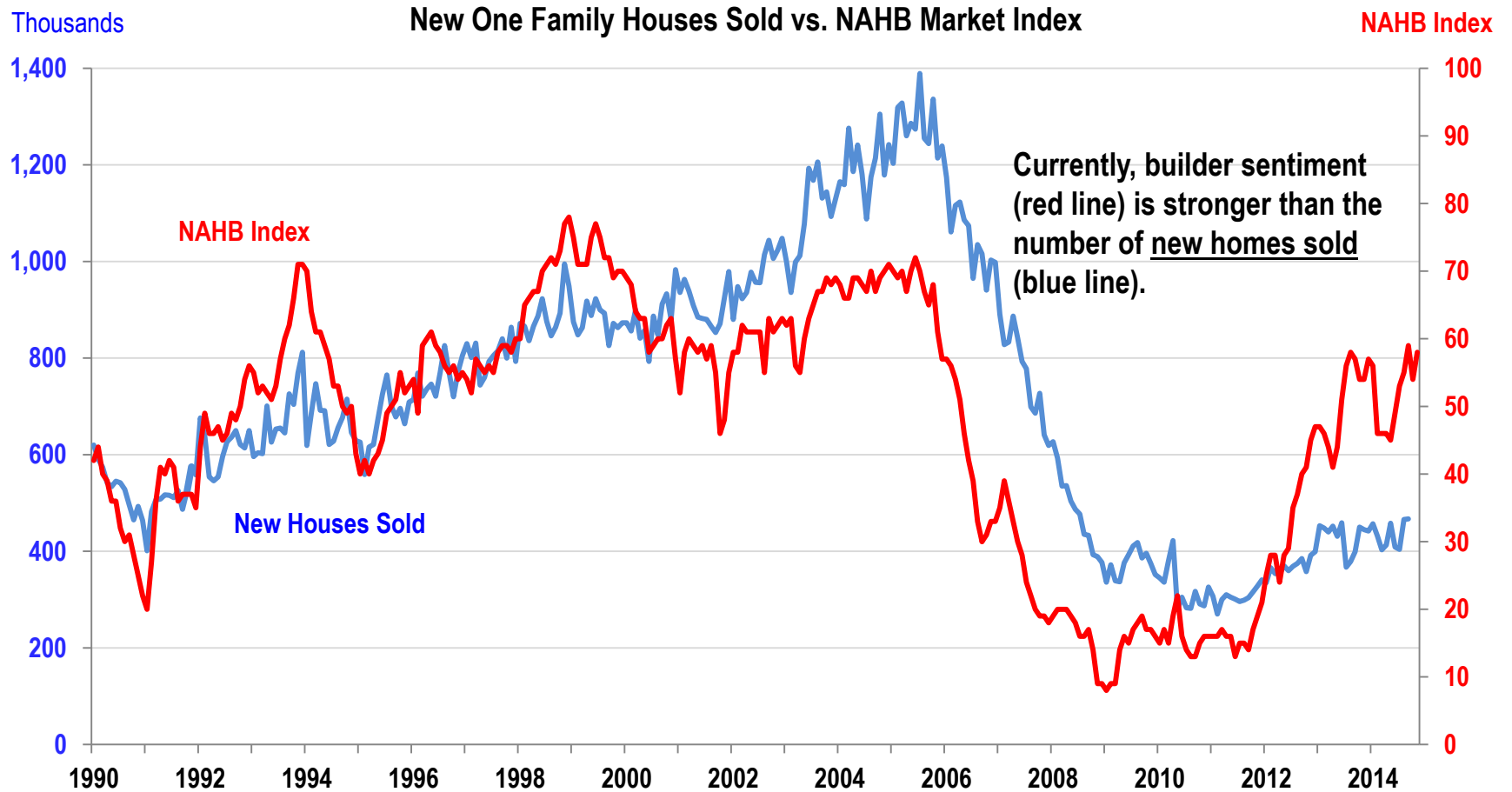
For the past year, the number of permits issued has been flat.



Source: FRED, Census Bureau SA.

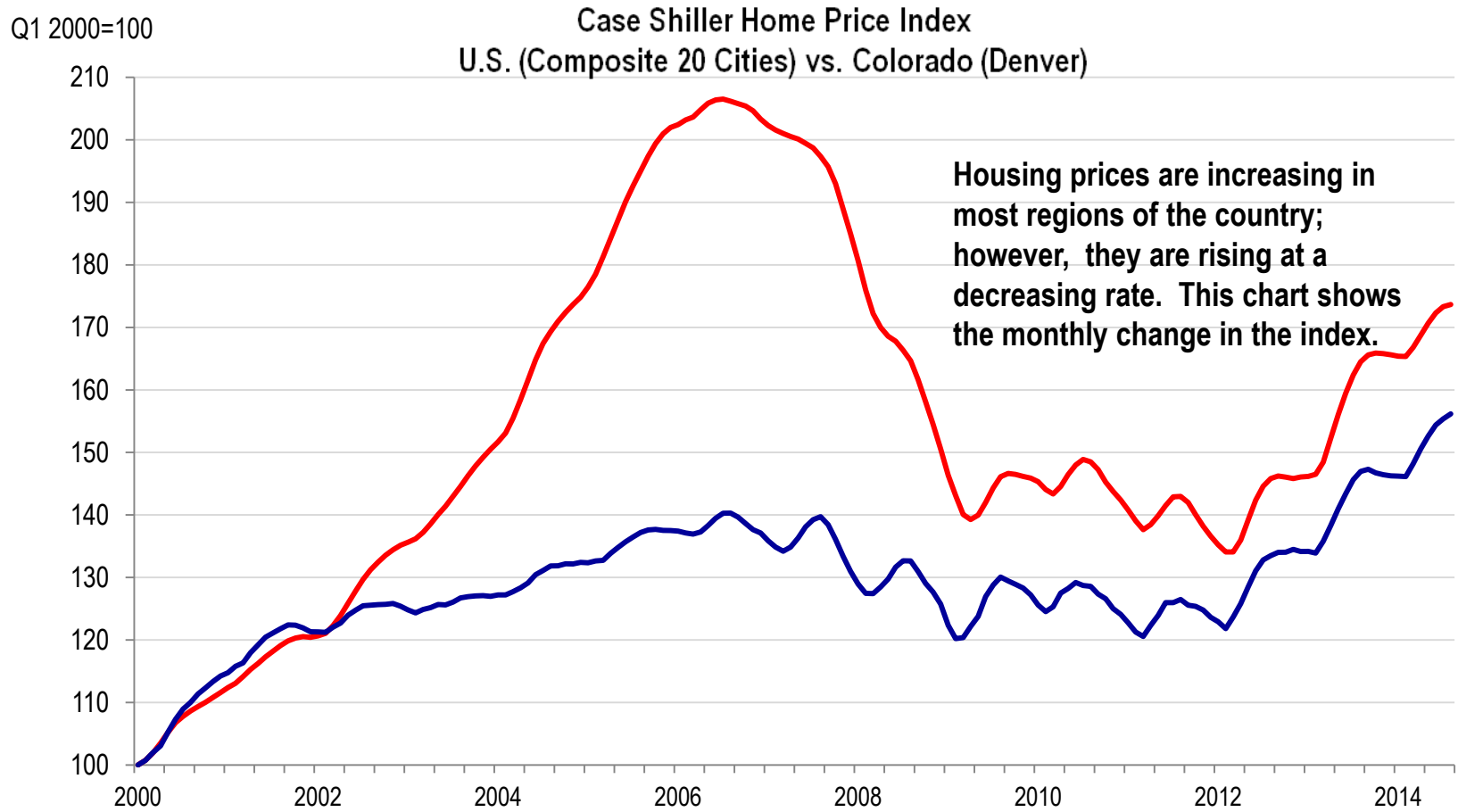


# New One Family Houses Sold vs. NAHB Market Index



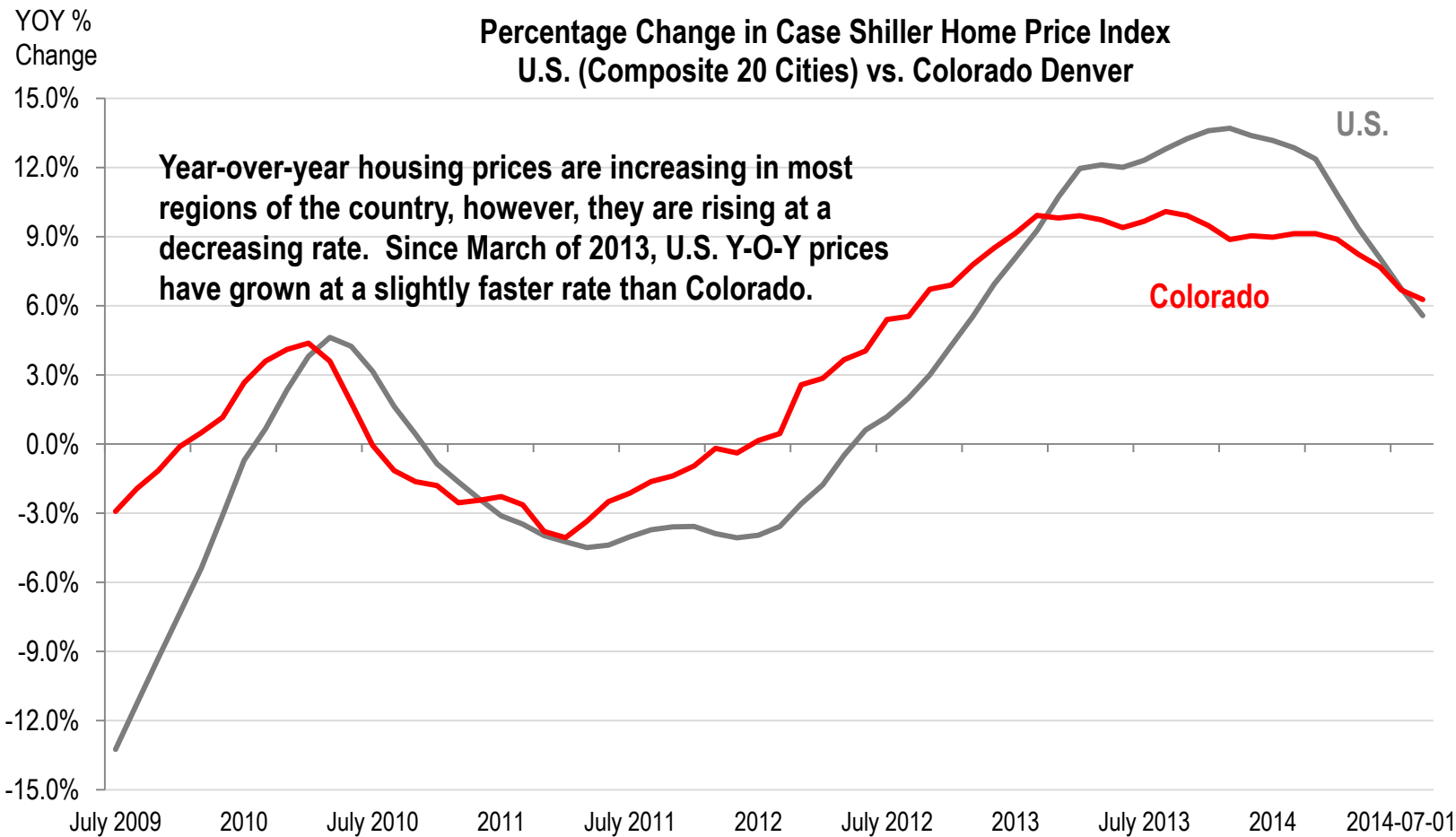
Source: FRED, Census Bureau SA., NAHB.

# U.S. Housing Prices – Case Shiller Composite 20 Cities



Source: S&P Case-Shiller, FRED.

# Percentage Change in Housing Prices Since the End of the Recession



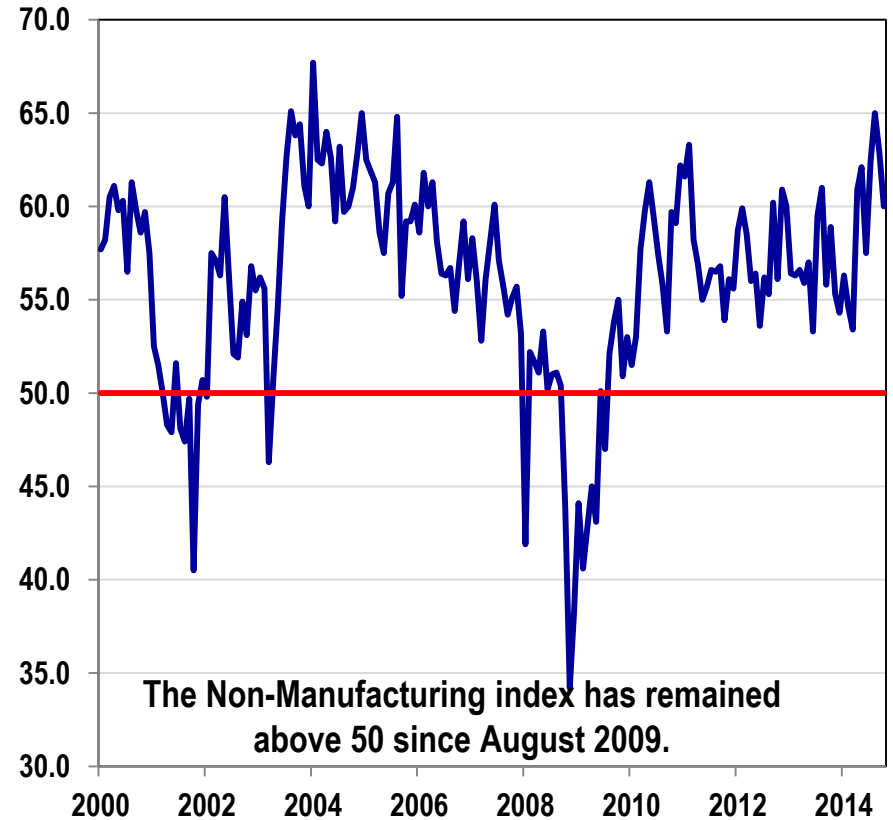
Source: S&P Case-Shiller, cber.co.

# ISM Purchasing Managers Indices

### ISM Manufacturing Index



### ISM Non-Manufacturing Business Activity Index



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

# Summary of U.S. Economy Through October 2014

**The U.S. economy is on track to add 2.5+ million jobs this year with real GDP growth of 2.3%.**

## **International**

- Real global output for 2015 is expected to grow between 3.4% and 3.6%. In other words, the current rate of growth is expected to continue.
- The Japanese economy is in a recession.
- The European economy continues to be soft.
- Softness in these and other mature economies could negatively possibly impact Colorado exporters.
- There are lots of challenges facing the world – Ebola, ISIS, Russia, Ukraine.

## **Employment, Unemployment, Work Force**

- Employment remains strong, an average of 228,500 jobs have been added each month through ten months.
- The unemployment rate and the number of unemployed continue to trend downward
- The number of unemployed and long-term unemployed is a source of concern.
- Weak wage growth continues to be an issue.
- Critical labor shortages are developing in many occupations.

## **U.S. Output**

- Real U.S. GDP growth for the year will be about 2.3%. It will increase at a slightly higher rate in 2015.
- Consumers remain optimistic. Spending during the holiday season is expected to be stronger than 2013.

## **Construction and Home Prices**

- The sale of new homes over the past year has been flat.
- The number of single family building permits issued over the past year has been flat. Builder sentiment is up and multi-family activity is strong in many areas.
- Housing prices are continuing to increase at a diminishing rate.

## **Services, Manufacturing, and Policy**

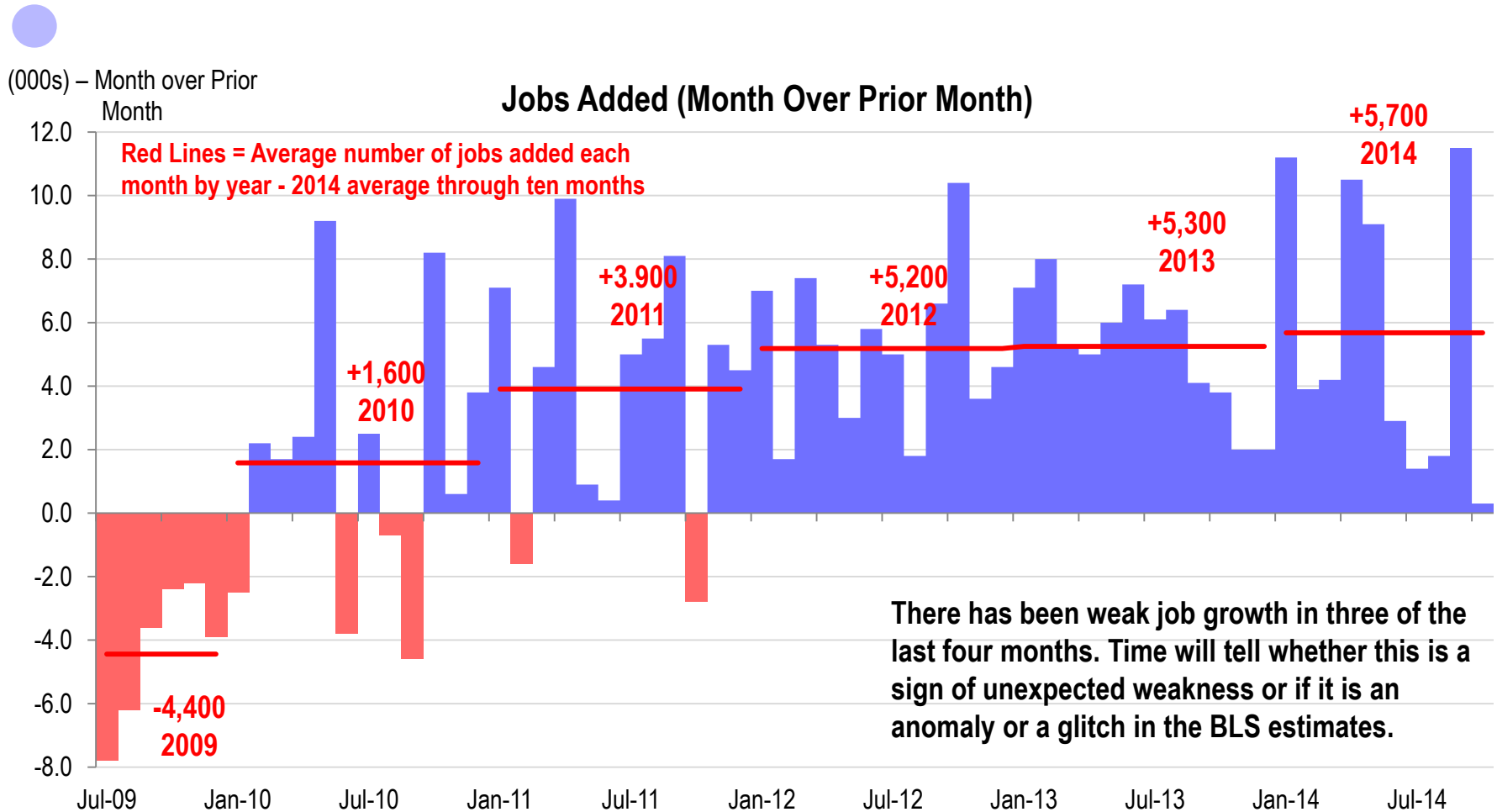
- Both manufacturing and services purchasing managers remain optimistic.
- The political landscape has changed. It has started off on a contentious note and will likely continue down that path.



# Colorado Employment and Unemployment

# Colorado Employment Situation

## From End of Great Recession Through Last Month



Source: Bureau of Labor Statistics, SA.

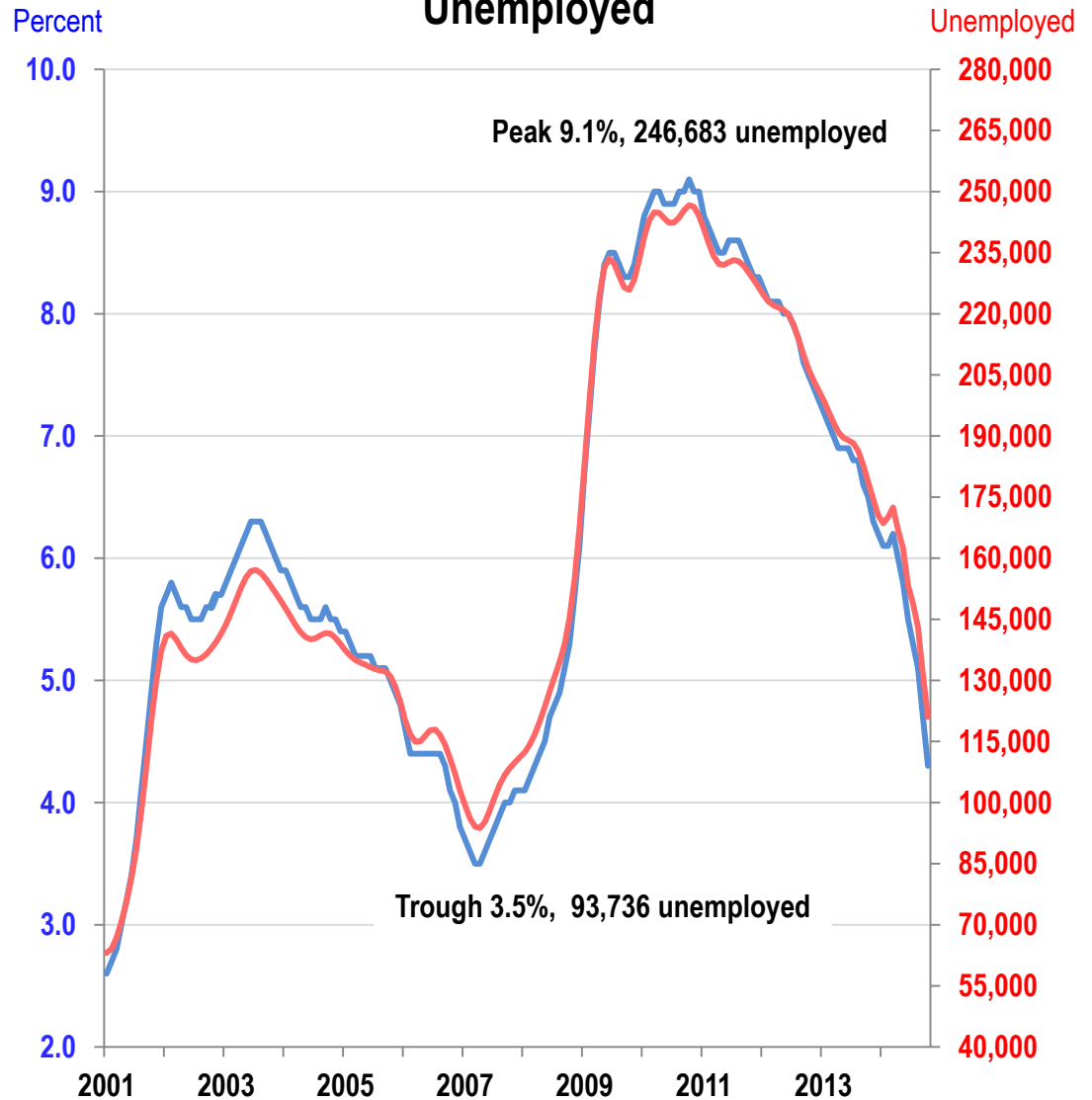
## Colorado Unemployment Rate and Number of Unemployed

The number of unemployed has slowly trended downward since peaking in late 2010. In October 2014, the total number of unemployed workers (red) declined to 120,972. The total number of unemployed is 27,236 greater than the trough in April 2007 and 125,711 less than the peak in October 2010.

There is a shortage of trained workers in key sectors and occupations. The October 2014 unemployment rate (blue) was 4.3%, down from 6.5% in October 2013.

The October rate for Colorado was 1.5 percentage points lower than the U.S. rate of 5.8%.

## Unemployment Rate and Number Unemployed



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





# Change in Colorado Employment by Performance Category

# Overview of Job Creation by Performance Category

Twenty-two sectors are classified into one of three categories based on their past performance:

- Strong growth.
- Solid growth.
- Volatile.

The following charts look at the change in jobs for these three categories for the first ten months of 2014 vs. the same period in 2013.

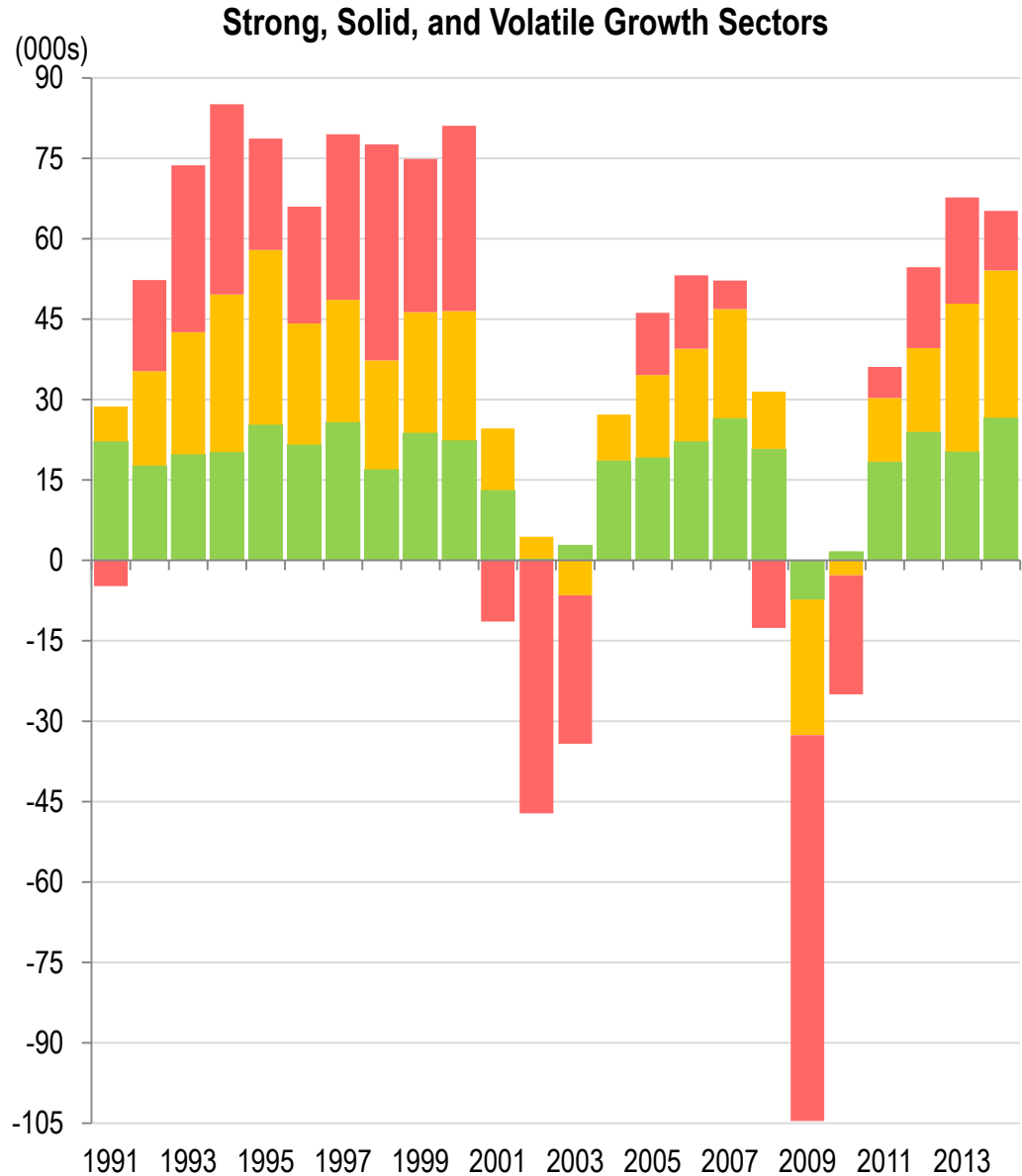
## Summary of Strong, Solid, and Volatile Growth Sectors

The Strong Growth Category of sectors (green) has performed consistently over time. The category has added jobs as expected in 2014. The larger sectors (Health Care, PST, and B-to-B, excluding Temp. Services) have grown at a rate faster than the state.

The Solid Growth Category of sectors (yellow) has been more volatile than usual. In 2014, this group of sectors has performed stronger than anticipated. AFS and K-12 Education have grown at a faster rate than the state.

Finally, the Volatile Category of sectors (red) has underperformed this year. This group of sectors has been weak since 1999. Construction, Employment Services, and the Extractive sectors have expanded at a faster rate than the overall state average.

Note: 2014 data is likely to be revised upwards when BLS makes its revisions in March 2015.



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

## Annual Employment Situation for Strong Growth Sectors

Over the past two decades the following sectors have been the foundation of consistent growth in Colorado employment.

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

Total employment for this category was:

1993 425,000 workers, 25.4% of total employment

2003 597,300 workers, 27.7% of total employment

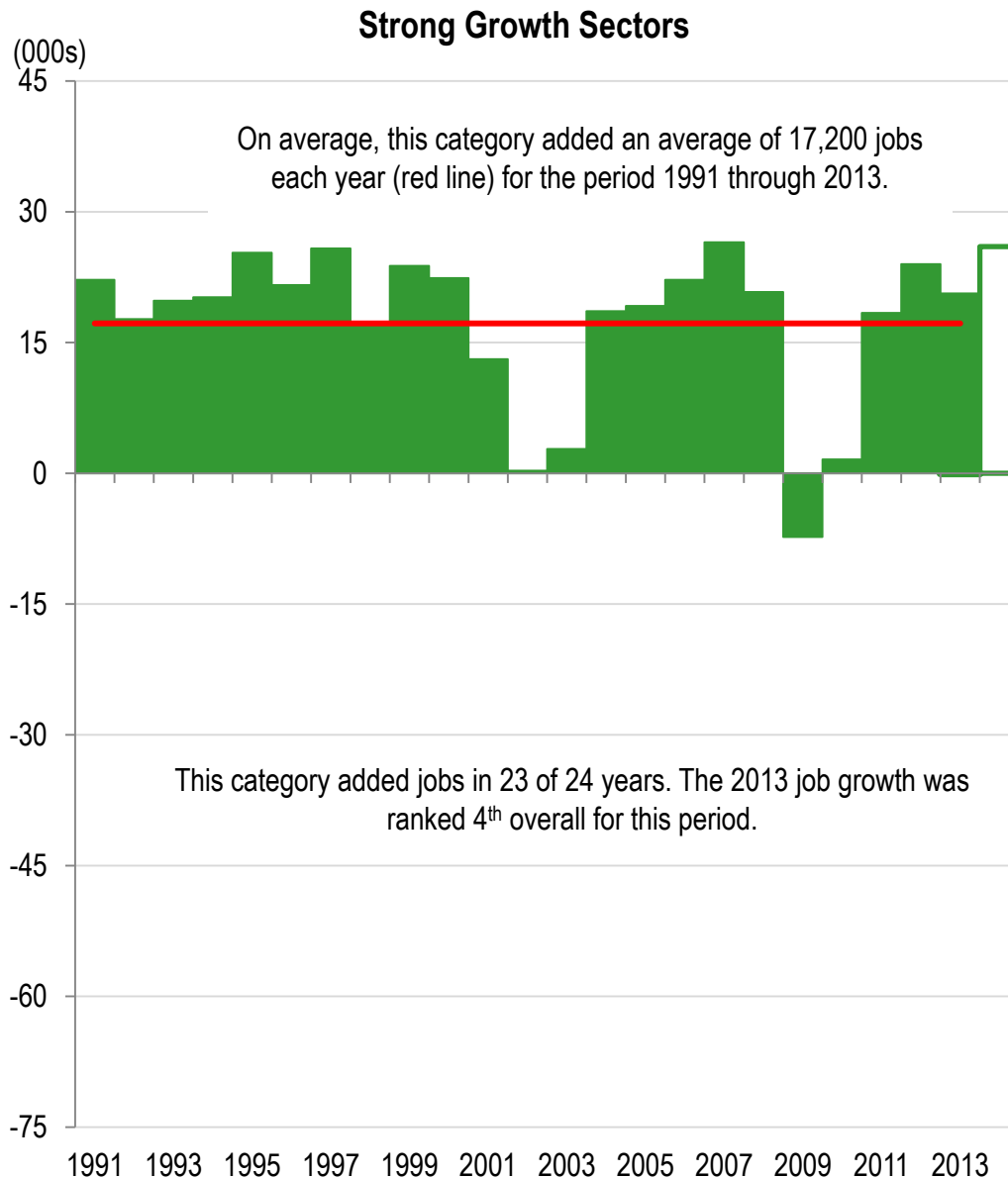
2013 761,600 workers, 32.0% of total employment.

Growth of this category in 2014 will be comparable to the stronger years during the past two decades.

Between 24,000 and 28,000 workers will be added at a rate of 3.3% to 3.5%.

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

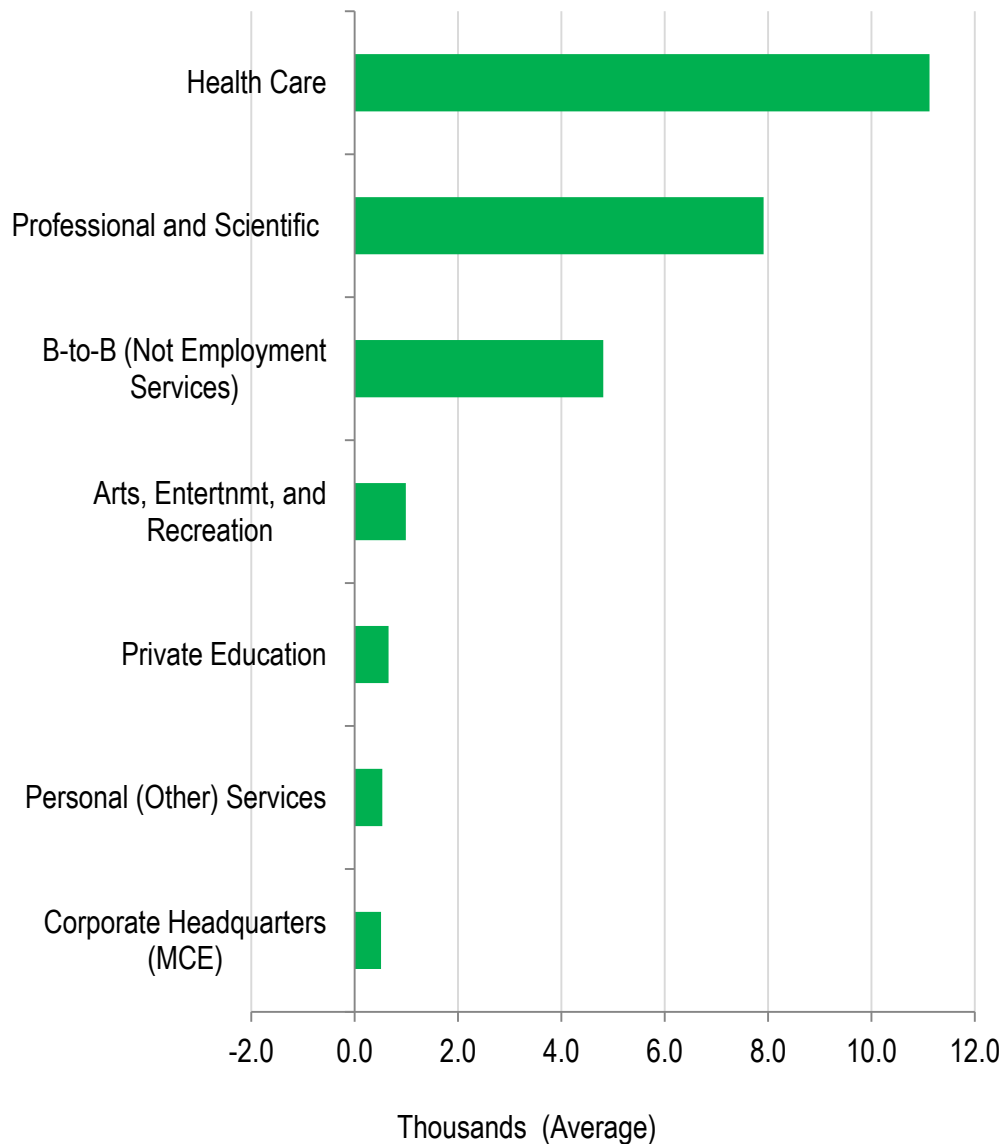
Colorado-based Business and Economic Research  
<http://cber.co>



## Solid Growth Sectors

### Job Change Through Ten Months 2014 vs. 2013

- Through the first ten months of 2014 this group of industries added 26,500 jobs compared to the same period in 2013.
- This category was projected to add 24,000 to 28,000 jobs for the year. To date, its performance is near the midpoint of the projected range.
- In 2013, these sectors accounted for 43.9% of total job gains and 32.0% of total employees.
- For the first ten months, the sectors in this category with the strongest job growth were:
  - Health Care
  - Professional and Scientific and Technical Services.
  - Administrative (B-to-B) excluding Employment Services.



Source: Bureau of Labor Statistics.

# Annual Employment Situation for Solid Growth Sectors

Over the past two decades the following sectors usually added jobs. As a group their job gains were stronger during the 1990s than the 2000s.

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

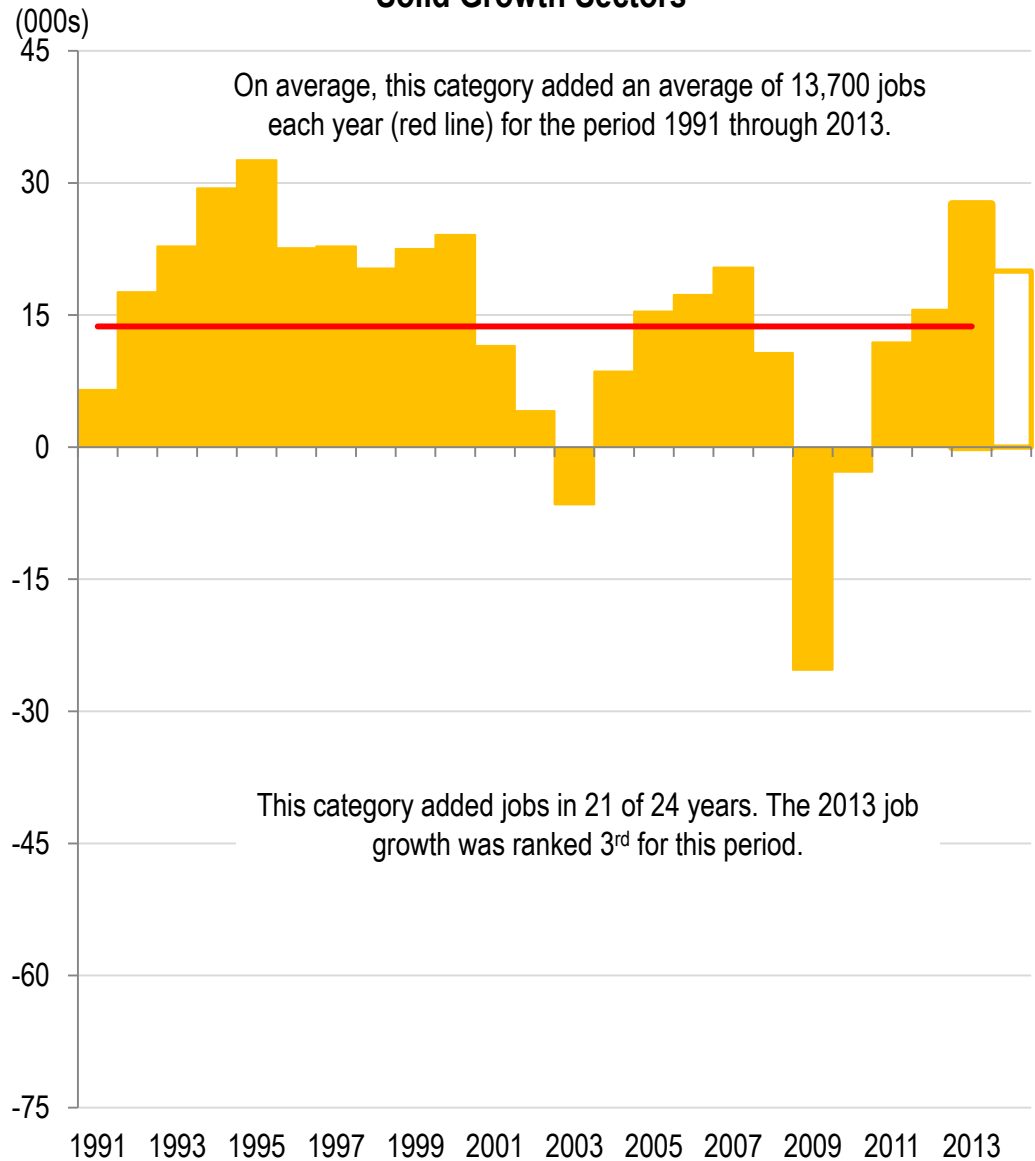
Employment in some of these sectors has remained flat during most of the past decade.

Total employment for this category was:

1993 656,000 workers, 39.3% of total employment  
 2003 839,400 workers, 39.0% of total employment  
 2013 938,800 workers, 39.4% of total employment

Growth of this category in 2014 will be slightly above average for the past two decades. Between 18,000 and 22,000 jobs will be added at a rate of 2.0% to 2.2%.

## Solid Growth Sectors

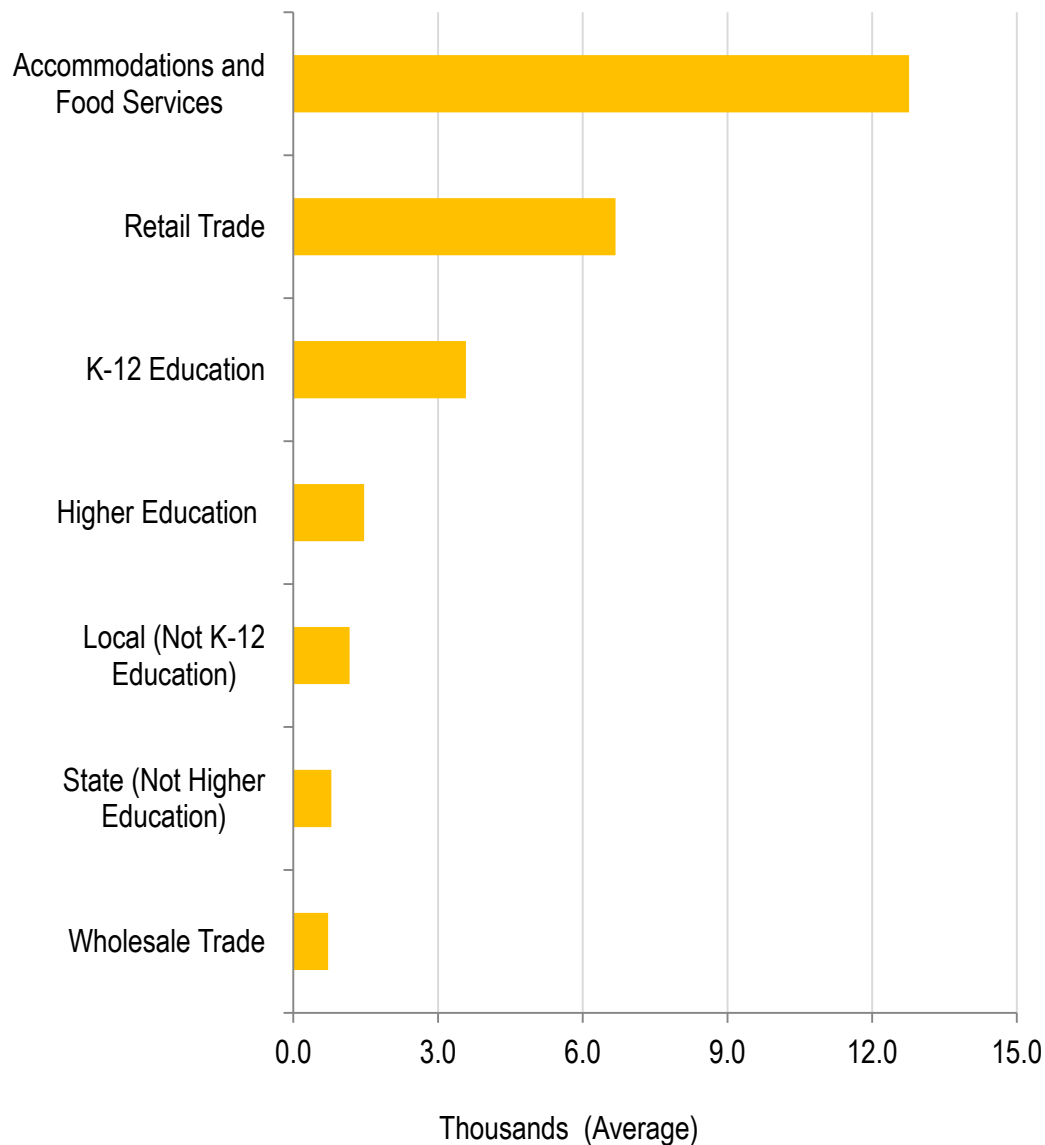


Source: Bureau of Labor Statistics, cber.co.

## Solid Growth Sectors

- Through October 2014 this group of industries added 27,200 jobs compared to the same period in 2013.
- This category was projected to add 18,000 to 22,000 jobs for the year. To date, its performance is much stronger than anticipated.
- These sectors accounted for 28.5% of total job gains and 39.4% of total employees in 2013.
- A majority of the growth has occurred in the Accommodations and Food Services and Retail Trade sectors. K-12 education has rebounded and higher education continues to be a consistent job creation machine.

Job Change Through Ten Months  
2014 vs. 2013



Source: Bureau of Labor Statistics.

# Annual Employment Situation for Volatile Growth Sectors

Over the past two decades the sectors listed below were the source of volatility.

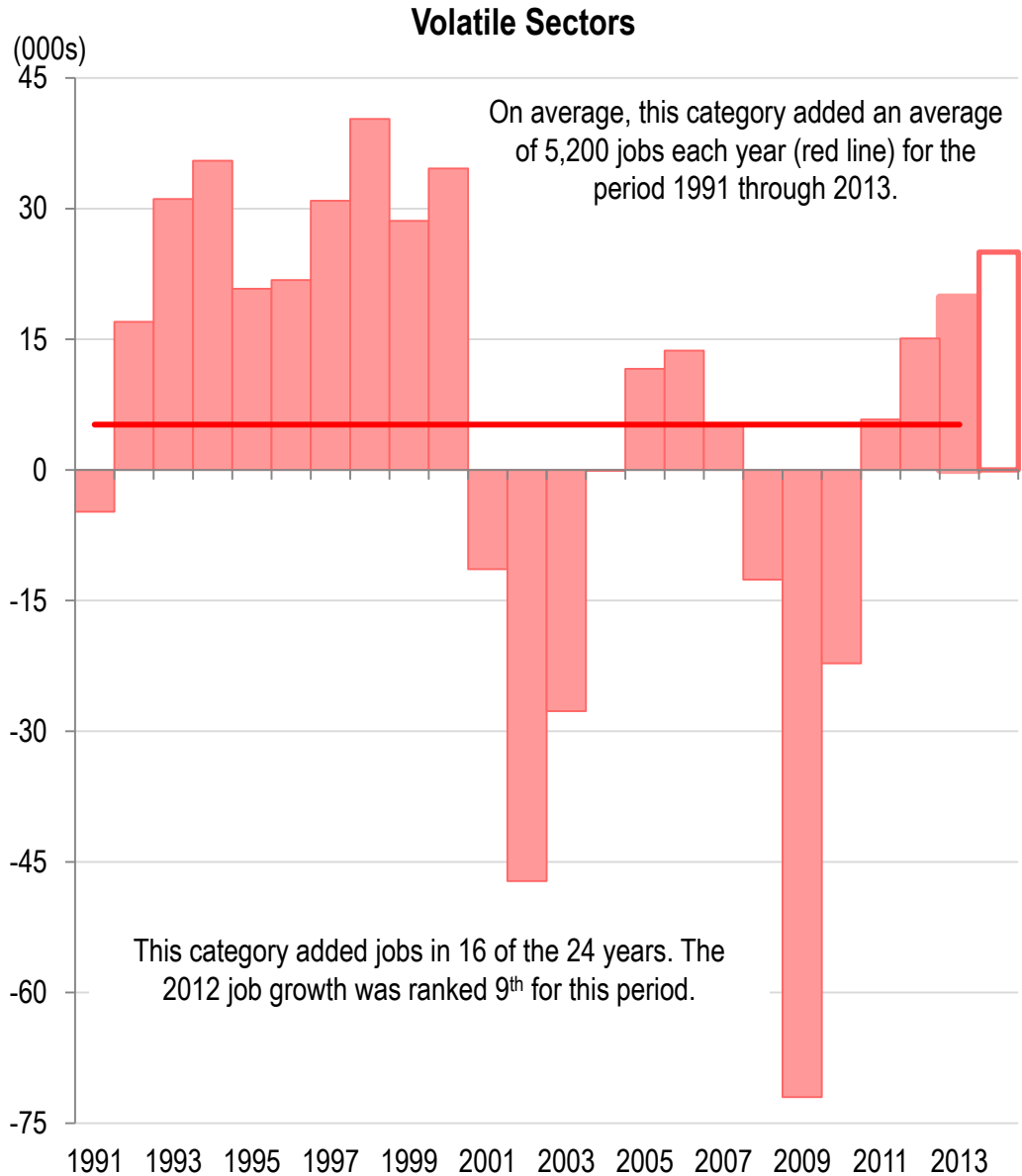
The sectors are:

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

Total employment for this category was:

1993 589,900 workers, 35.3% of total employment  
 2003 716,100 workers, 33.3% of total employment  
 2013 680,500 workers, 28.6% of total employment.

In 2014 this category will add between 23,000 and 27,000 jobs at a rate of 3.6% to 3.8%. Growth in this category will be the strongest since 1999.



Source: Bureau of Labor Statistics, cber.co.



## ● Volatile Sectors

- Through October 2014 this group of industries added 11,200 jobs compared to the same period in 2013.
- This category was projected to add 23,000 to 27,000 jobs for the year. To date, its performance is significantly weaker than anticipated.
- In 2013 these sectors accounted for 27.6% of total job gains and 28.6% of total employees.
- Construction is the leader in job creation. Most other sectors are adding jobs at a slower rate than anticipated. While the extractive industries have only added 2,900 direct jobs, they are responsible for the addition of a number of indirect jobs and sole proprietorships.

## Job Change Through Ten Months 2013 vs. 2014



Source: Bureau of Labor Statistics.



# Questions and Answers

# Question and Answers

Since last month's report, the following questions were raised by members of the media, public and private business leaders, economic developers, and other economists.

This section addresses these questions:

- How much are Colorado wages increasing?
- What is the probability of a recession?
- How much have gasoline and oil prices declined?
- Will the Grinch visit Colorado this Christmas?
- How volatile has the Dow Jones Industrial Average been?
- What is Colorado's most recent top-ten state ranking? (Hint: Green beans).

# ● Question and Answers

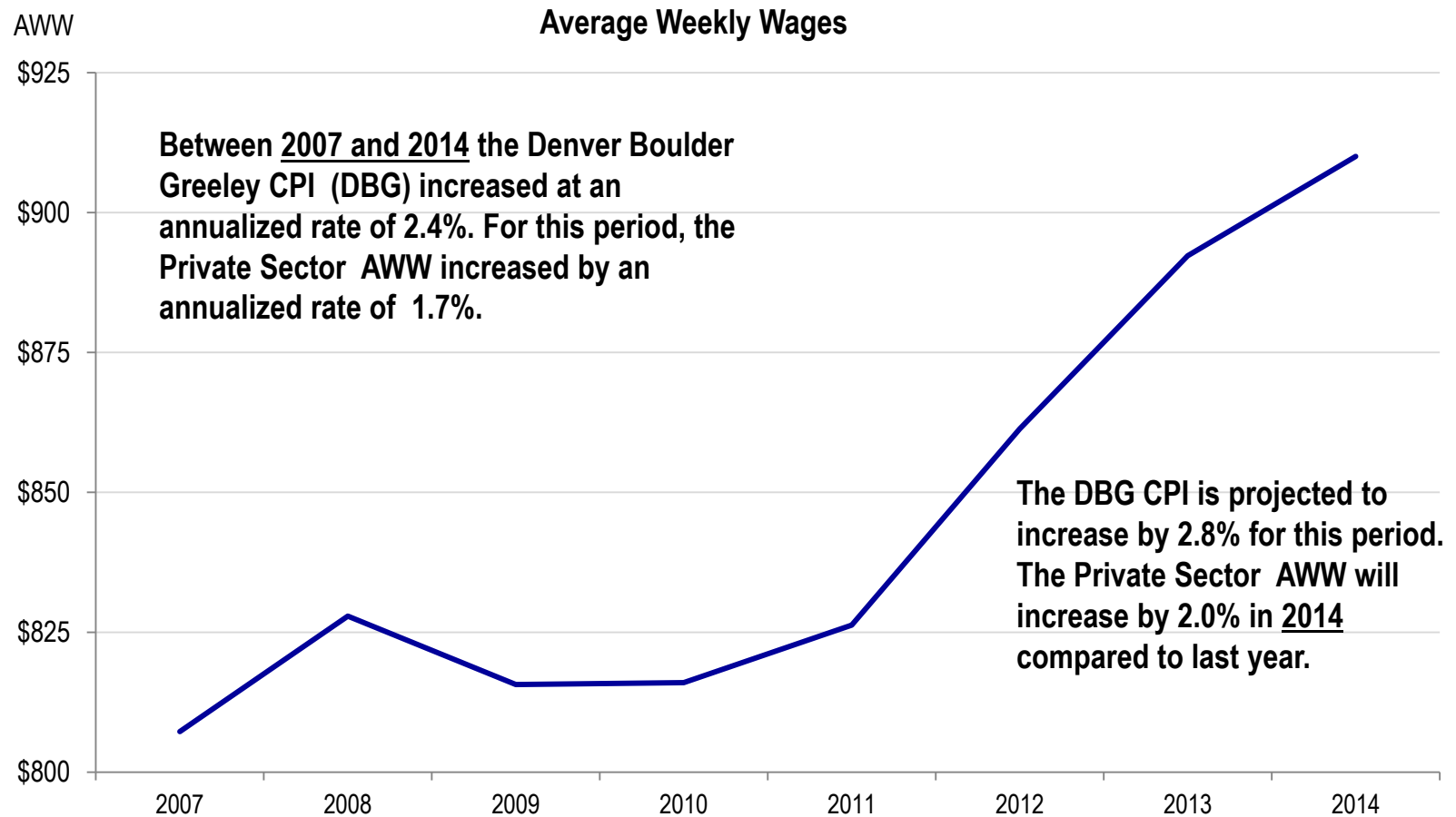
## ● Wage Increases

### ●

How much are Colorado wages increasing?

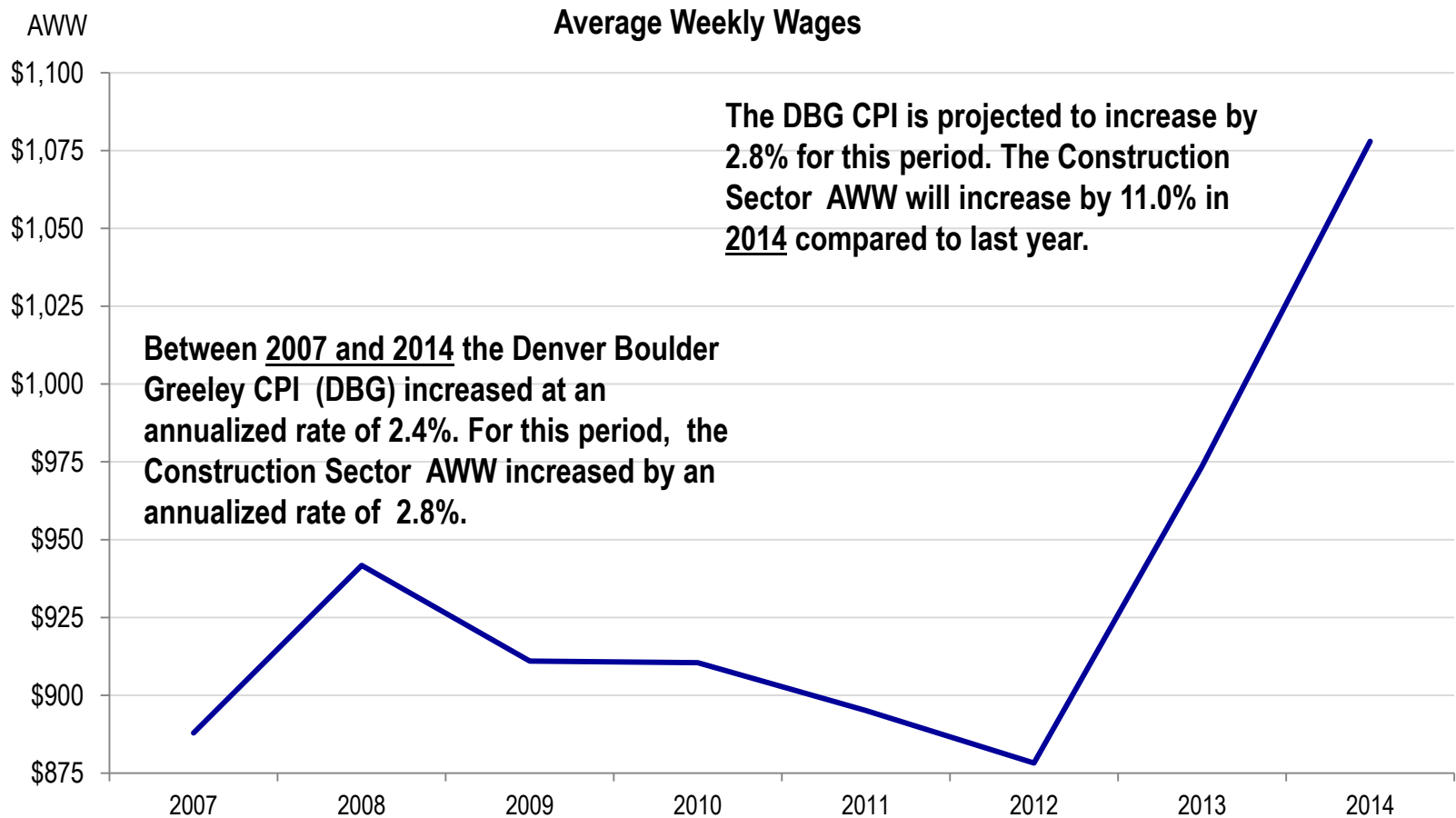
Wages are increasing in some sectors; however, overall wages have not kept up with the rate of inflation!

# Colorado Average Weekly Wages Private Sector



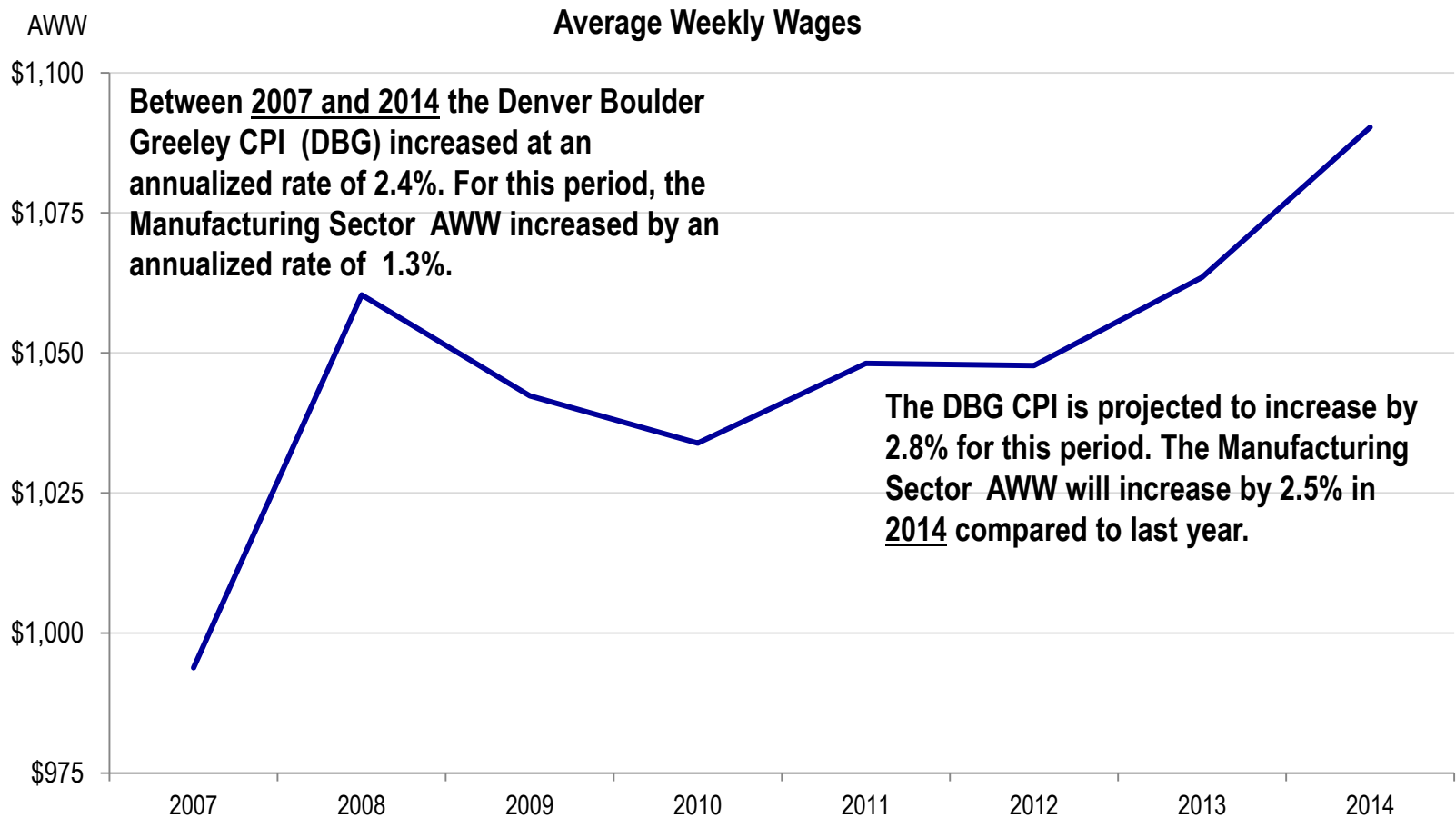
Source: Bureau of Labor Statistics.

# Colorado Average Weekly Wages Construction Sector



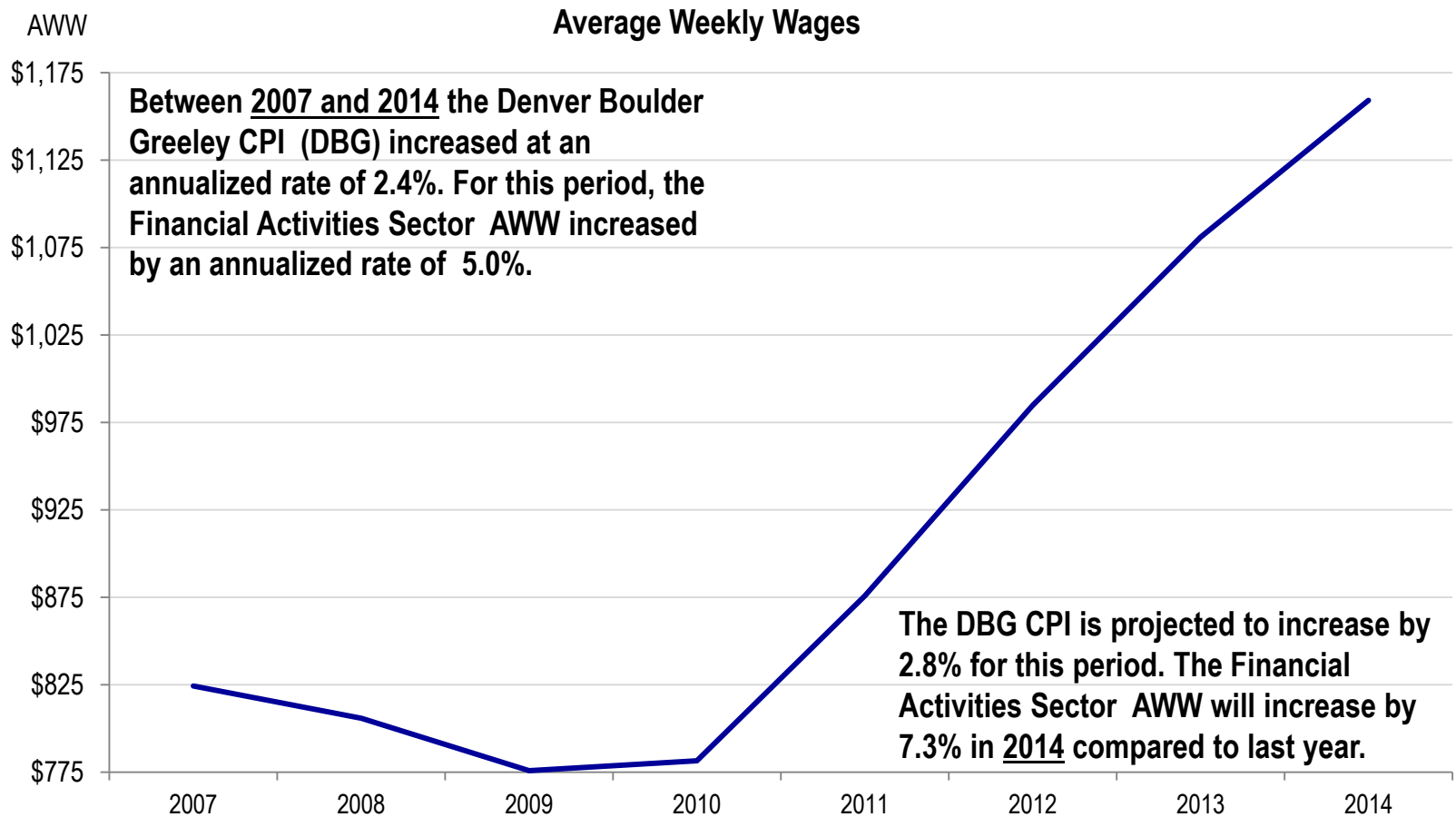
Source: Bureau of Labor Statistics.

# Colorado Average Weekly Wages Manufacturing Sector



Source: Bureau of Labor Statistics.

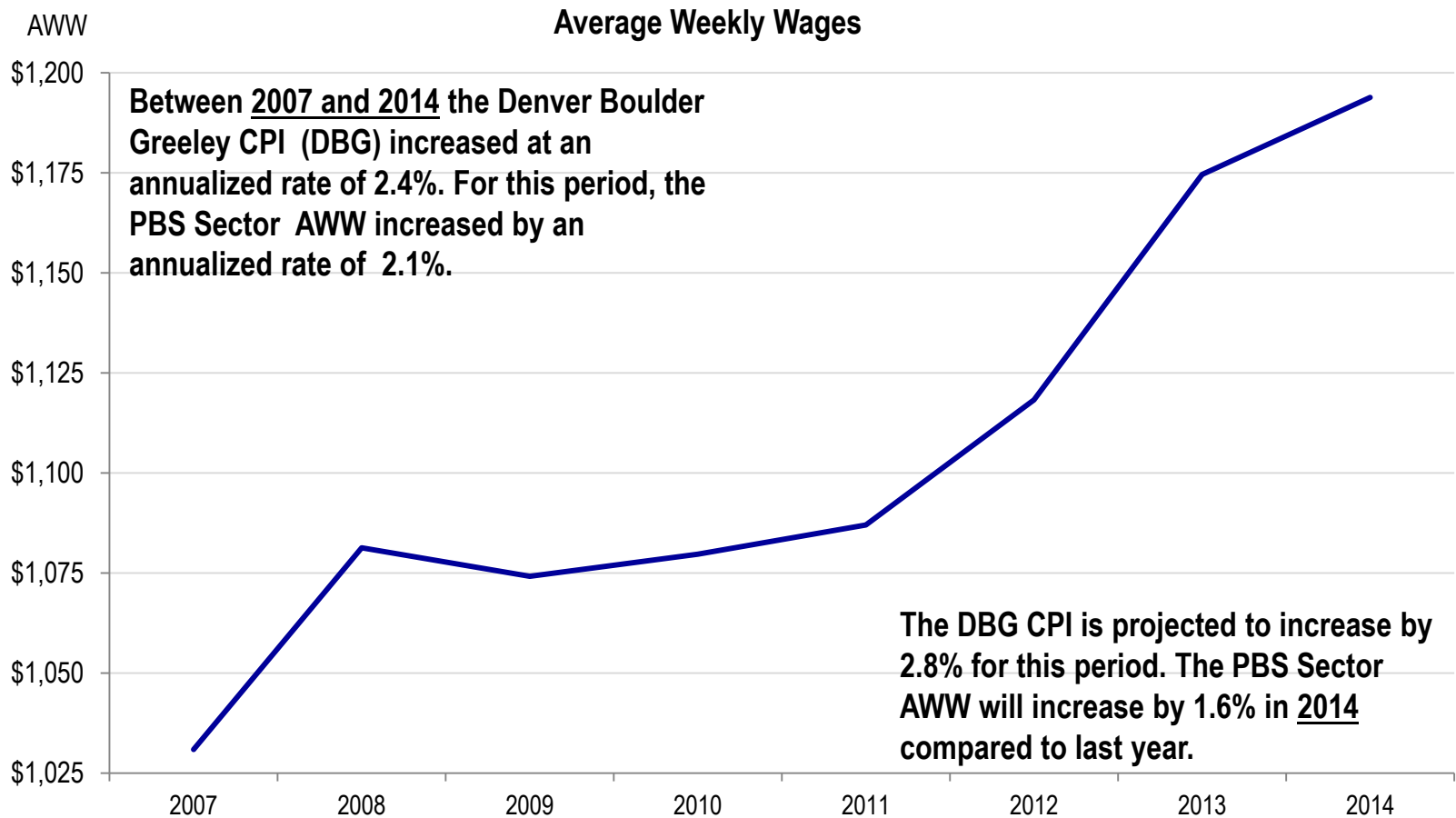
# Colorado Average Weekly Wages Financial Activities Sector



Source: Bureau of Labor Statistics.

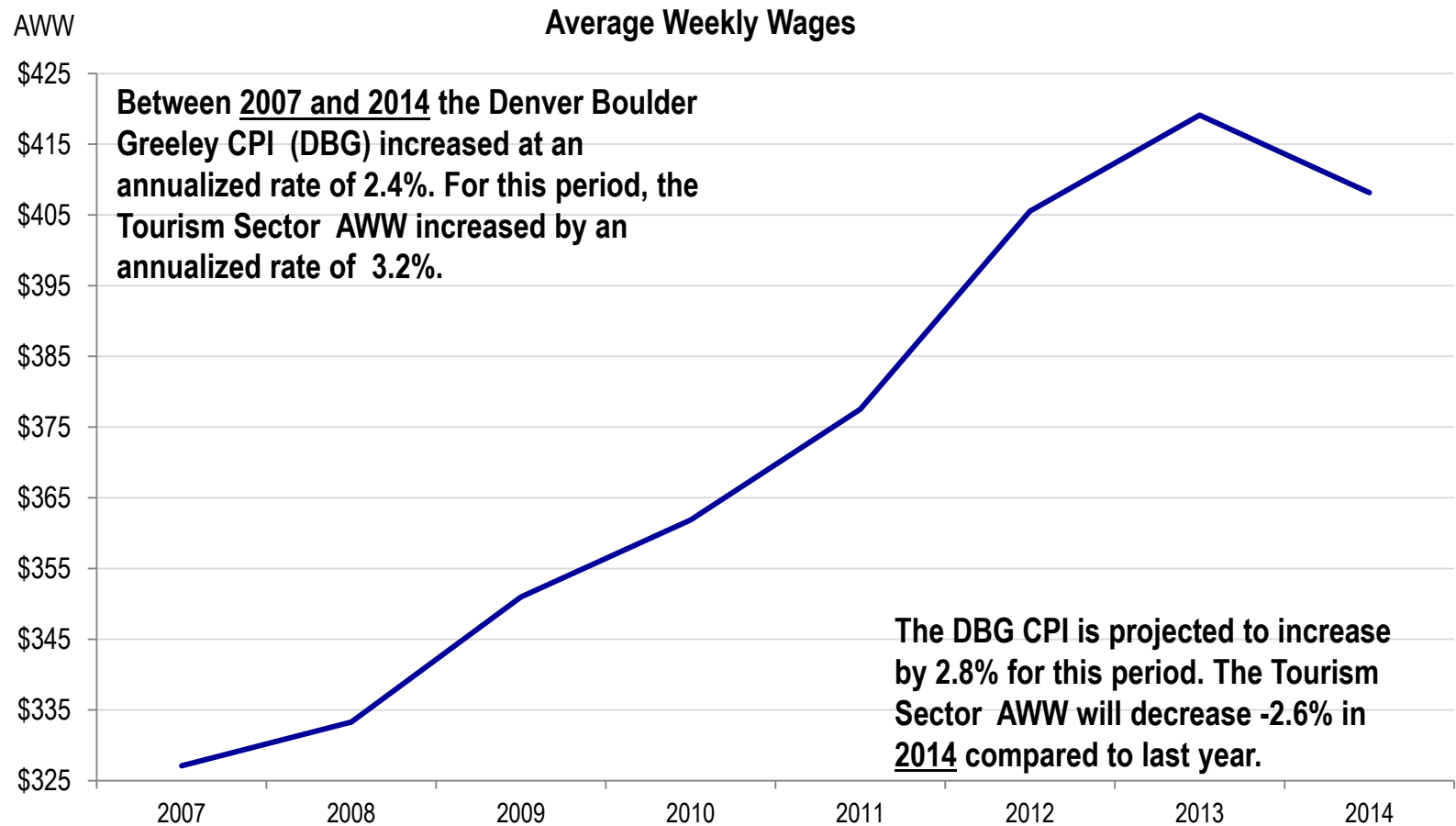


# Colorado Average Weekly Wages Professional Business Services (PBS) Sector



Source: Bureau of Labor Statistics.

# Colorado Average Weekly Wages Leisure and Hospitality (Tourism) Sector



Source: Bureau of Labor Statistics.



# Colorado Average Weekly Wages

## Estimated Average Weekly Wages for 2014

Between 2007 and 2014 the Denver Boulder Greeley CPI (DBG) increased at an annualized rate of 2.4%. For this period, the Private Sector AWW increased by an annualized rate of 1.7%. The DBG CPI is projected to increase by 2.8% in 2014 compared to last year. The Private Sector AWW will increase by 2.0% during this period.

### The Good News

Wages in the Construction and Financial Activities Sectors outpaced the overall average change for the private sector and the rate of inflation.

#### Construction AWW

- 2.8% annualized growth 2007 to 2014
- 11.0% growth 2013 to 2014

#### Financial Activities AWW

- 5.0% annualized growth 2007 to 2014
- 7.3% growth 2013 to 2014

### The Not So Good News

Wages in the Manufacturing and Professional Business Services (PBS) were below the overall average change for the private sector and the rate of inflation.

#### Manufacturing AWW

- 1.3% annualized growth 2007 to 2014
- 2.5% growth 2013 to 2014

#### PBS AWW

- 2.1% annualized growth 2007 to 2014
- 1.6% growth 2013 to 2014

#### Tourism

- 3.2% annualized growth 2007 to 2014
- -2.6% growth 2013 to 2014
- Note: Slightly fewer tourism hours worked per week in 2014.

# The R Word

## What is the Probability of a Recession?

The R word isn't a pleasant topic; however, recessions are like forest fires. They are painful, yet they are cleansing. If they don't cut too deep, they create the potential for stronger growth in the future. Recessions are a mixed blessing. (Only economists and opportunistic people see value in a recession.) So, when is the next recession?

### The Good News

Jeremy Piger at the University of Oregon has developed a model for predicting the likelihood of a recession. He states that, three consecutive months of smoothed probabilities above 80% has been a reliable signal of the start of a new recession, while three consecutive months of smoothed probabilities below 20% has been a reliable signal of the start of a new expansion.

Based on Piger's model a recession is not likely in the near-term.

### The Not-So-Good News

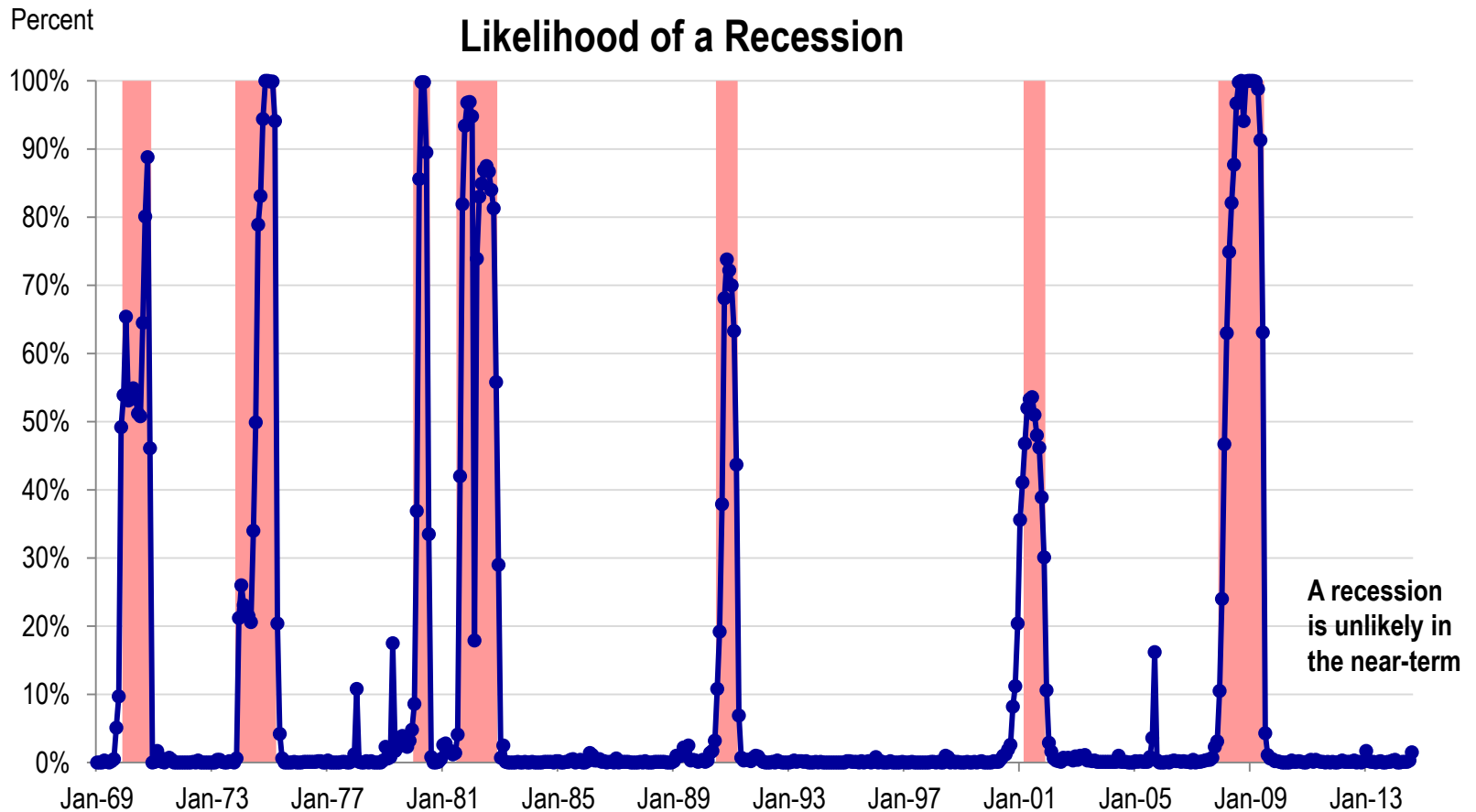
In November, 66 months have passed since the end of the last recession. The length of recoveries longer than the current one follow:

- 6/38 to 2/45 80 months
- 2/61 to 12/69 106 months
- 11/82 to 7/90 92 months
- 3/91 to 3/01 120 months

From a historical perspective, there is a reasonable chance the U.S. will experience a recession before the end of Governor Hickenlooper's final term.

# The R Word

## What is the Probability of a Recession?



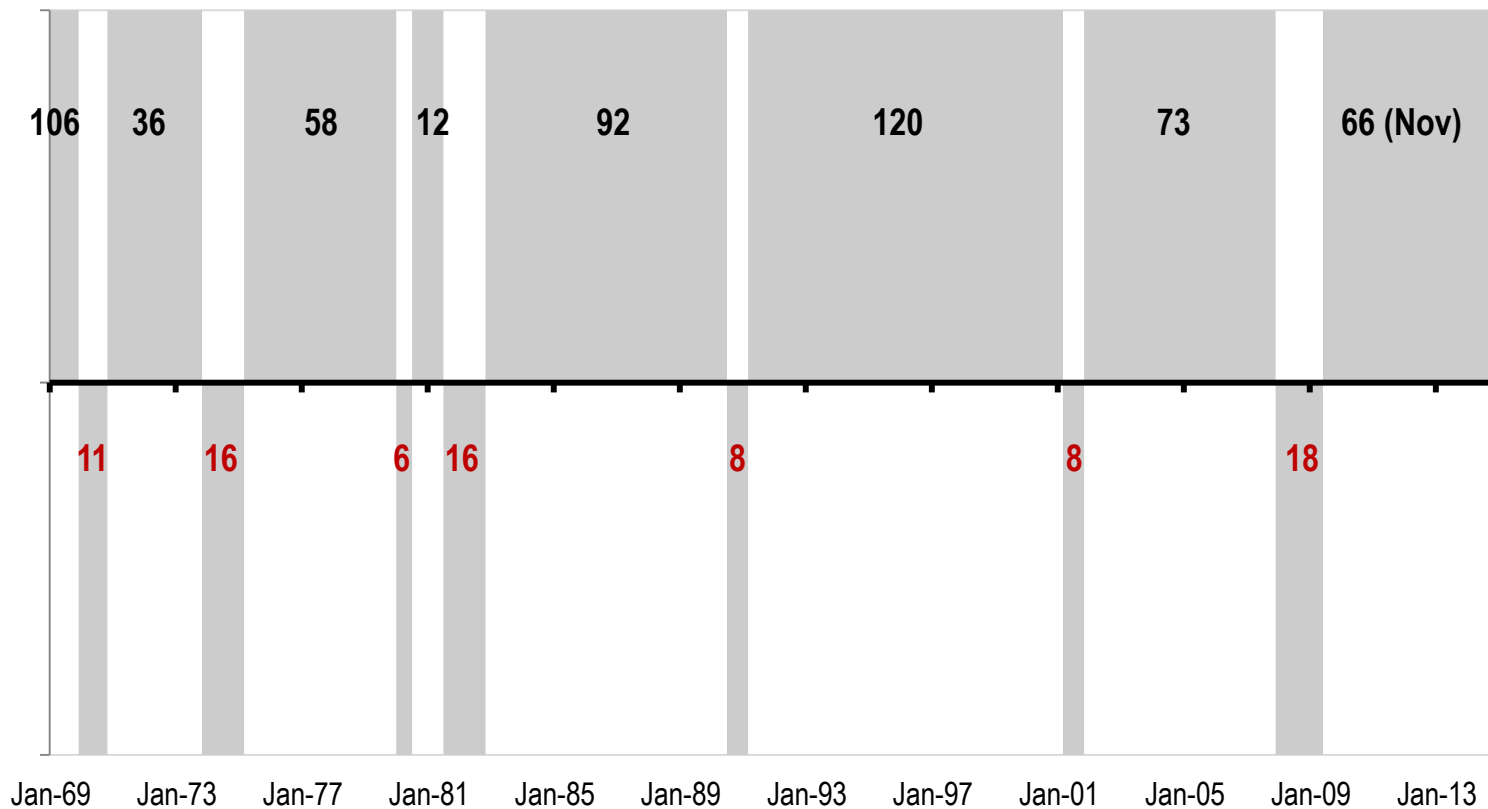
Source: FRED, Jeremy Pflger.



# The R Word

## The Next Recession – Coming Sooner than you Want

Lengths of Recessions and Recoveries (Months)



Source: NBER.

**Red Numbers = Peak to Trough.**  
**Black Numbers = Previous Trough to this Peak.**

# Oil and Gas Prices

## How Much Have Gasoline and Oil Prices Declined?

Over the past two years the price of gasoline has slowly declined in the U.S. and Colorado. At this point, the impact in gas prices is primarily psychological even though prices have dropped below \$3.00 per gallon in some locations. The difference in total prices paid for 2014 compared to last year are negligible.

Over the past five months the price of West Texas crude has declined, which may lead to continued lowering of gasoline prices in the future.

# Oil and Gas Prices

## How Much Lower are Gas and Oil Prices?

Over the past two years the price of gasoline has declined in Colorado and the U.S. Prices have dropped below \$3.00 per gallon in some locations; however, the difference in total consumption for 2014 will be similar to 2013. Over the past five months the price of West Texas crude has declined.

### **The Good News**

At some point lower gas prices may allow consumers to spend money elsewhere. At the moment, there is not a significant difference between total 2014 gasoline expenditures compared to 2013.

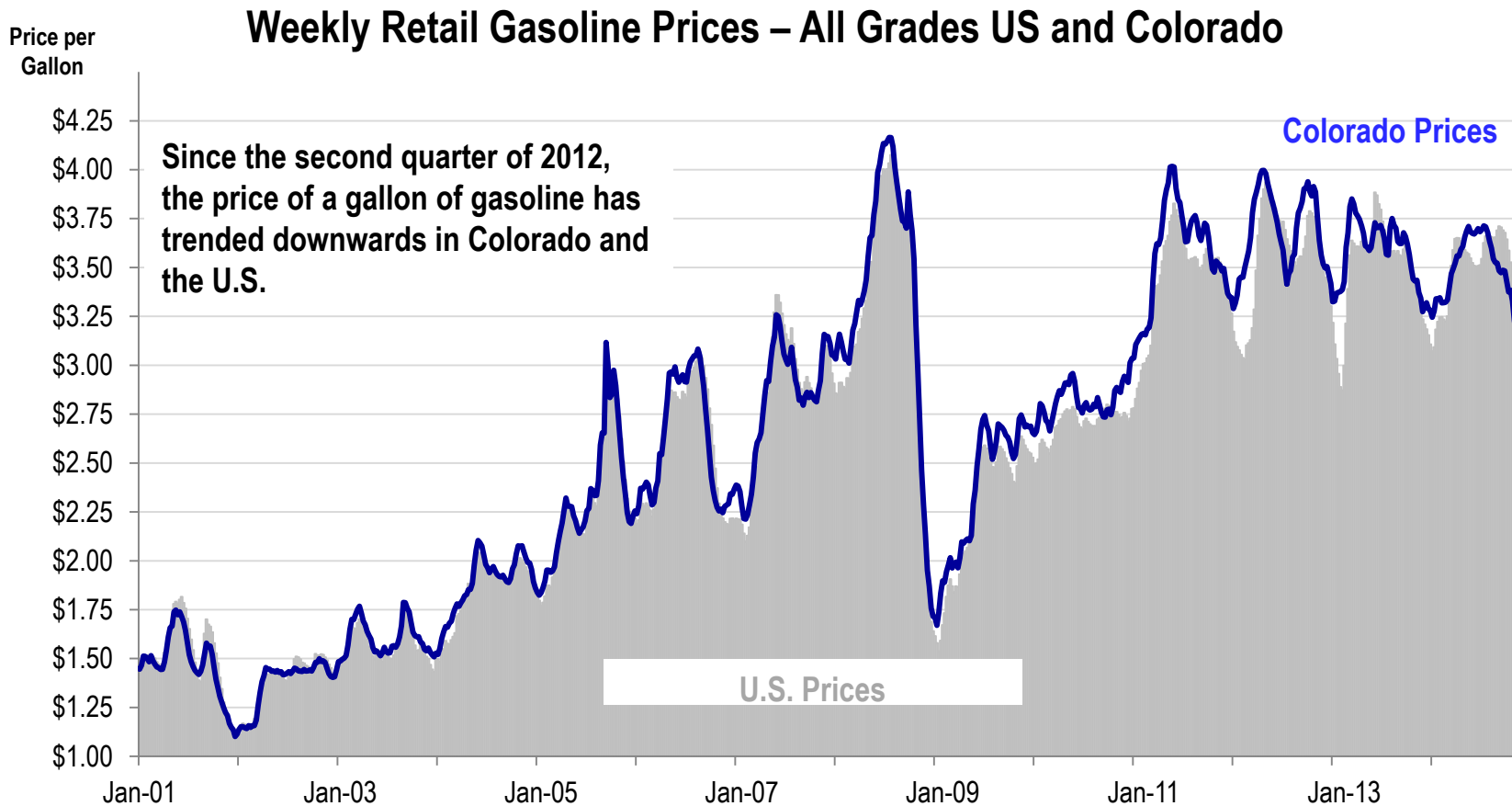
### **The Not So Good News**

Typically, the impact of lower oil and gas prices on the state is negative. In other words, consumers will benefit; however, state coffers will not be as full because tax collections will be lower.

That's the tricky thing about economics. There is always a winner and a loser.



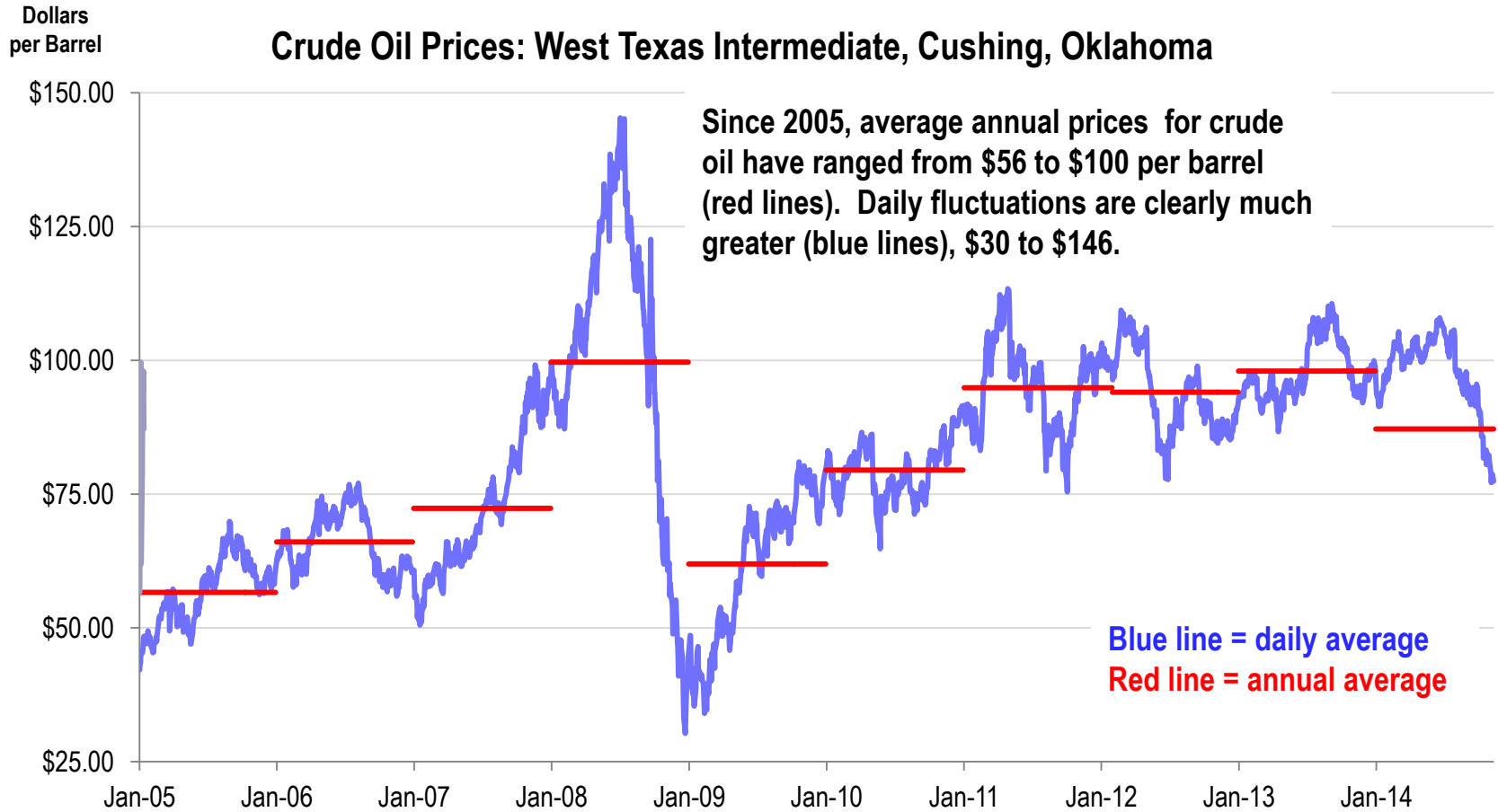
# Weekly Gas Prices



Source: EIA.

# Crude Oil Prices

## West Texas Intermediate



Source: FRED, EIA.

# Question and Answers

## Holiday Sales

- Will the Grinch visit Colorado this Christmas?



# Will the Grinch Visit Colorado This Holiday Season?

## U.S. Retail Trade Sales

Over the past decade consumers have become accustomed to deep discounting during the holiday season. Despite an outlook for a brisk holiday season, there will likely be a sufficient number of markdowns and bargain basement deals.

The National Retail Federation expects holiday sales to increase by 4.1% compared to 3.1% last year. Over the past 10 years, average holiday growth has been about 2.9%. Sales in November and December (excluding autos, gasoline, and restaurant sales) represent about 19.2% of the annual total.

Nationally, up to 800,000 workers will be hired on a seasonal basis for November and December. Online sales will increase by 8% to 11%.

This is a hot topic!

**NOTHING HAS CHANGED SINCE LAST MONTH!**

**The Grinch will not visit Colorado retailers this Christmas!**



The optimistic expectations for national retail sales bode well for Colorado. The Colorado Legislative Council and the Office of State Planning and Budgeting expect Colorado's 2014 annual retail sales to be 6.0% greater than last year. Given the strength of the state economy, holiday sales should easily exceed the national projected growth rate of 4.1%

Colorado average retail trade employment in November and December is about 10,000 workers greater than the average for the other 10 months of the year. A similar increase in retail employment should be expected in 2014.

# Question and Answers

## Changes in DJIA and DJIA Volatility

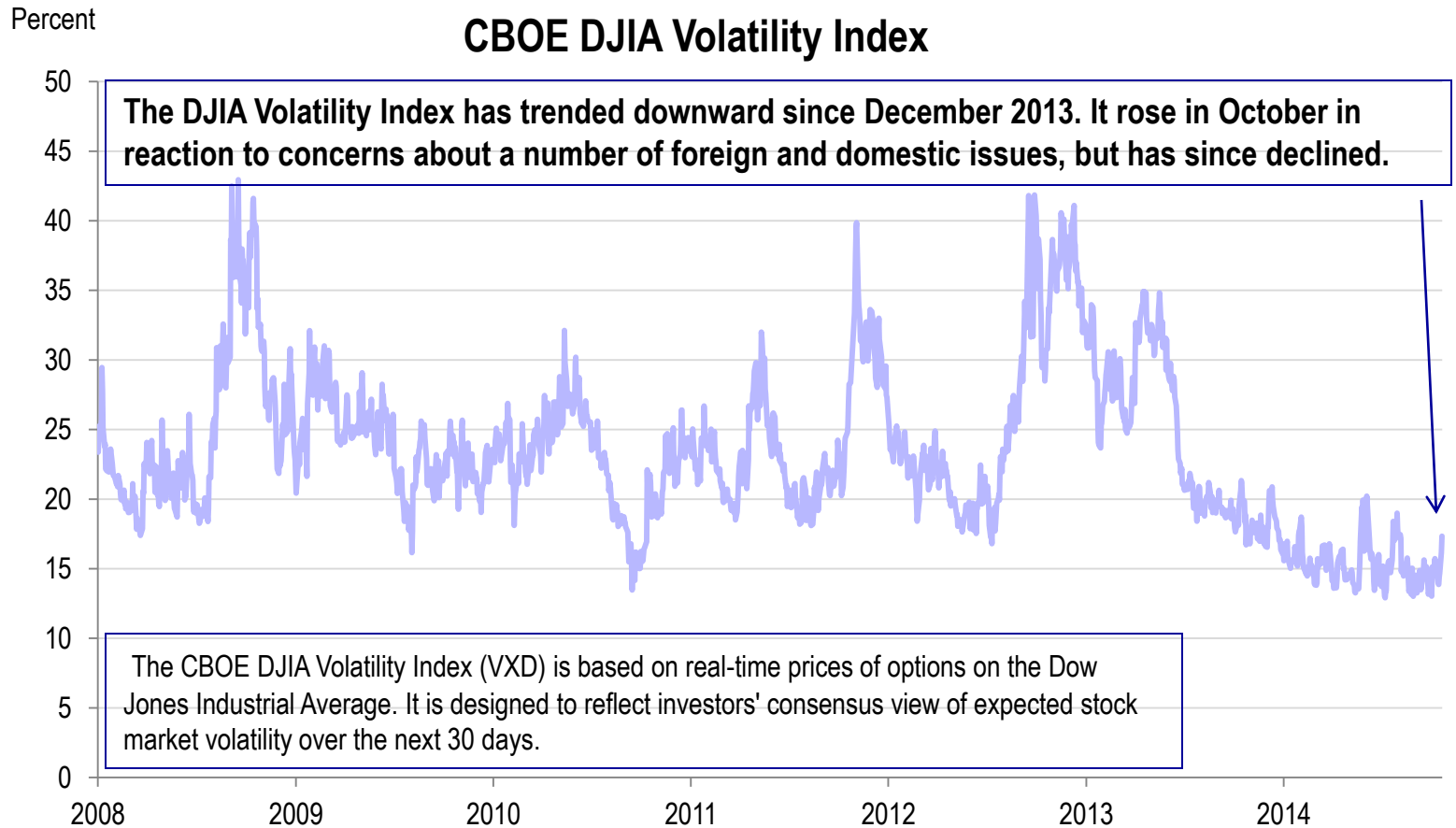
How volatile has the DJIA been?

On a short-term basis, the movement of the DJIA during 2014 has been a wild ride. On December 31, the DJIA closed at 16,504. During the first 11 ½ months the DJIA reached a low of 15,373 and a high of 17,653, a range of 2,280 points.

The CBOE DJIA Volatility Index (VXD) is based on real-time prices of options on the Dow Jones Industrial Average. It is designed to reflect investors' consensus view of expected stock market volatility over the next 30 days.

# How Volatile has the DJIA Been?

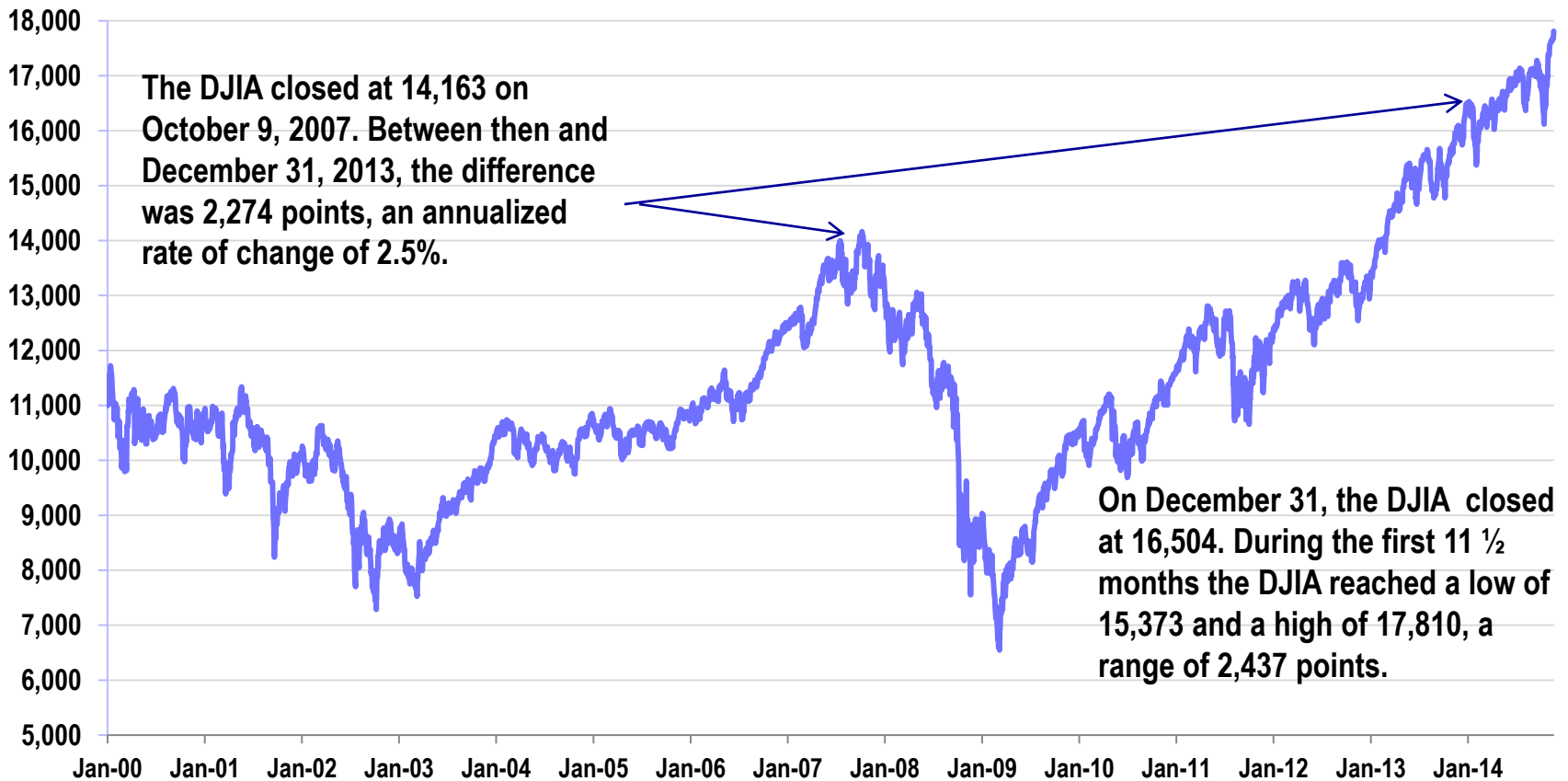
## CBOE DJIA Volatility Index - (VXDCLS)



Source: FRED, CBOE.

# Dow Jones Industrial Average 2000 to 2014

Dow Jones Industrial Average

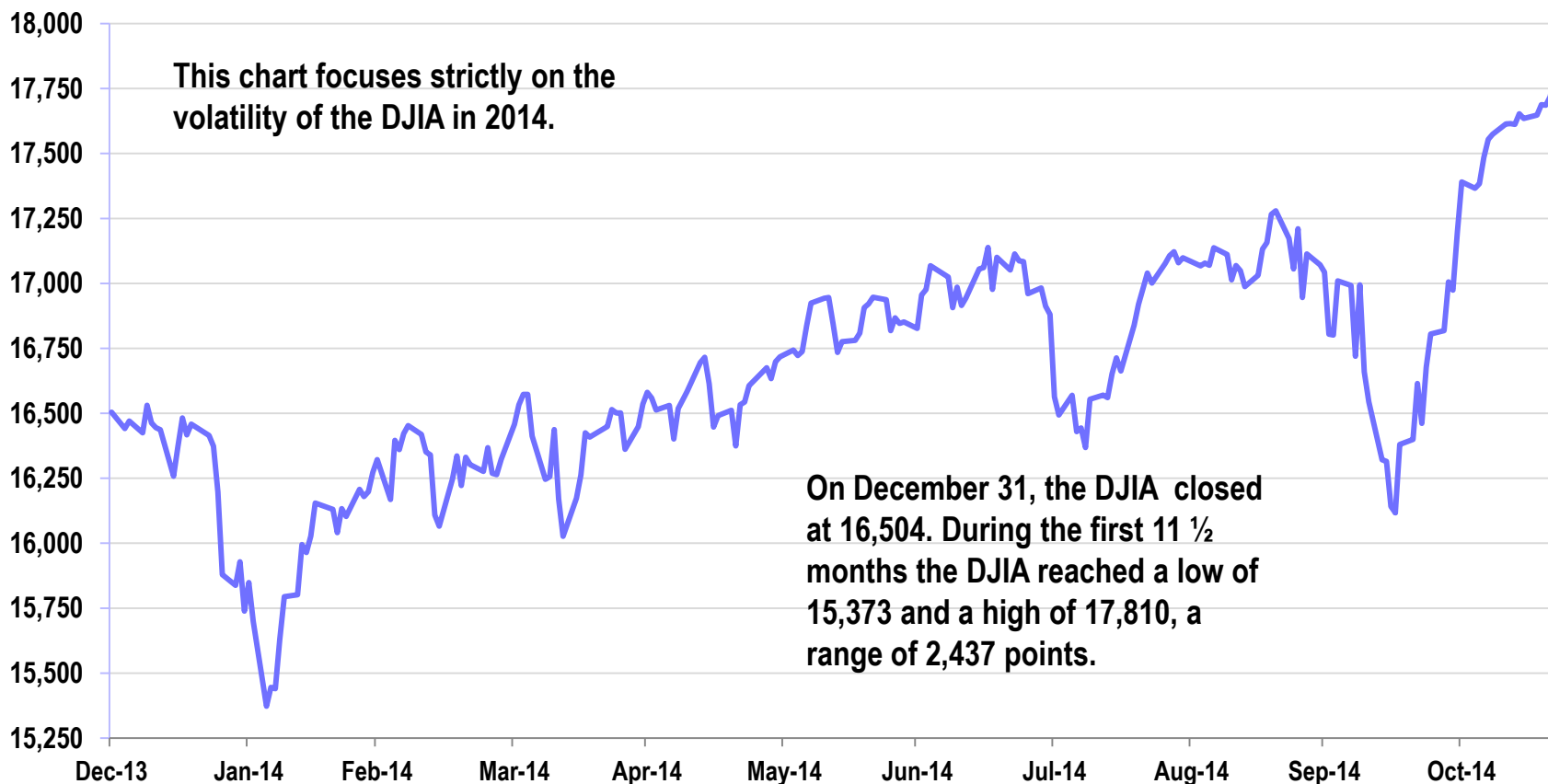


Source: FRED, DJIA.

# Dow Jones Industrial Average

## Volatility of DJIA in 2014

Dow Jones Industrial Average



Source: FRED, DJIA.



# Question and Answers

## Colorado Rankings – Green Beans

What is Colorado's most recent top 10 ranking?

Last month cber.co talked about how state rankings are produced because they have high entertainment value, they can be used for bragging rights, and they can be used for creating taglines to promote causes. As well, they are a valuable tool for strategic planning.

Last month Colorado gained notoriety because of Boulder led the nation in toilets per capita. This month the state's claim to fame is a result of its love for the Jolly Green Giant and his green bean casserole.



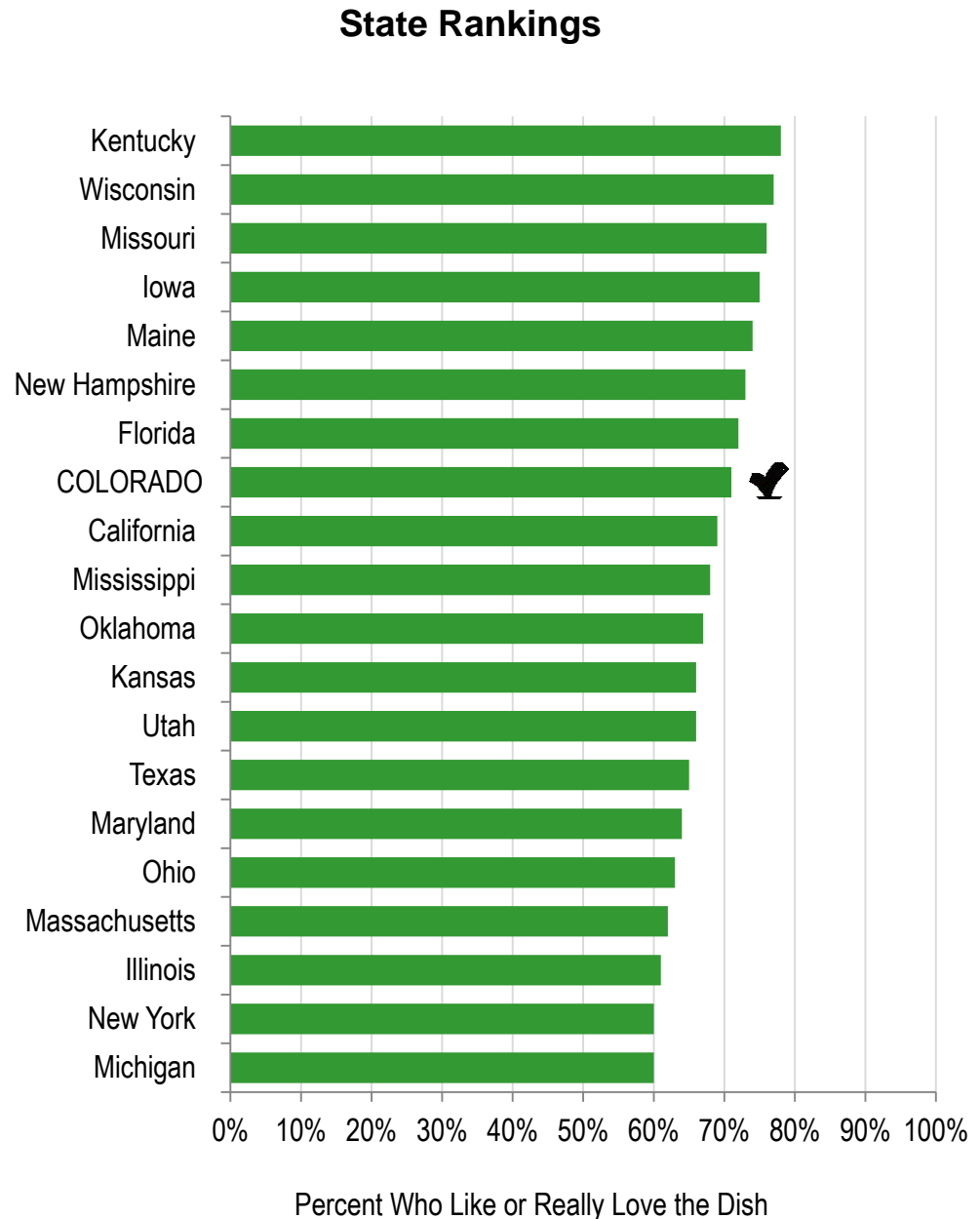
## State Rankings for Love of Green Bean Casserole

10News.net in Sacramento reported that the Del Monte Green Bean Index has been released. It is a study of 1,500 Americans and it rates their fondness of the All-American Thanksgiving classic – the green bean casserole.

Colorado was ranked 8<sup>th</sup>. Seventy-eight percent of Coloradans approve the dish.

Like most rankings, this data was produced to promote a cause. In this case the purpose was to sell green beans as part of your Thanksgiving meal.

Note: State rankings of any type should be viewed with caution and used in an appropriate manner.



Source: 10News.net.



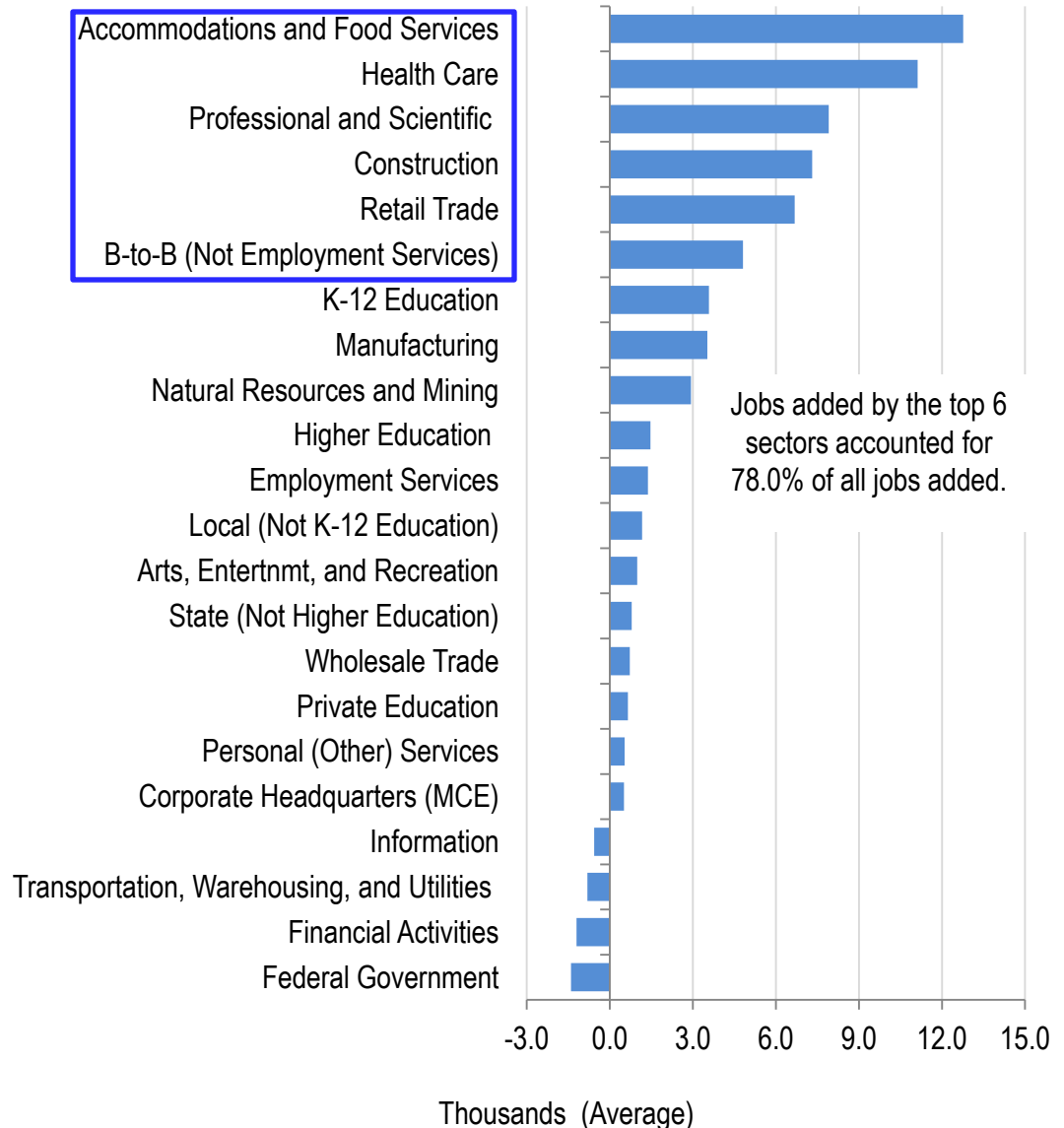
# Total Jobs Added

## Change in Employment for All Sectors - First Ten Months of 2014 vs. the Same Period in 2013

There were 64,900 more jobs in the first ten months of 2014 than the same period in 2013, an increase of 2.7%.

- Growth was led by the following sectors: Accommodations and Food Services (AFS); Health Care, Professional, Scientific, and Technical Services (PST); and Construction.
- Professional Business Services was the Super Sector that added the highest number of jobs followed by Tourism .

### Job Change Through 9 Months 2013 vs. 2014



Source: Bureau of Labor Statistics, cber.co.

## Summary of Job Growth for Colorado MSAs - First Ten Months of 2013 v 2014

Greeley had the highest rate of job growth for the first ten months of 2014 compared to the same period in 2013. The rates of growth were:

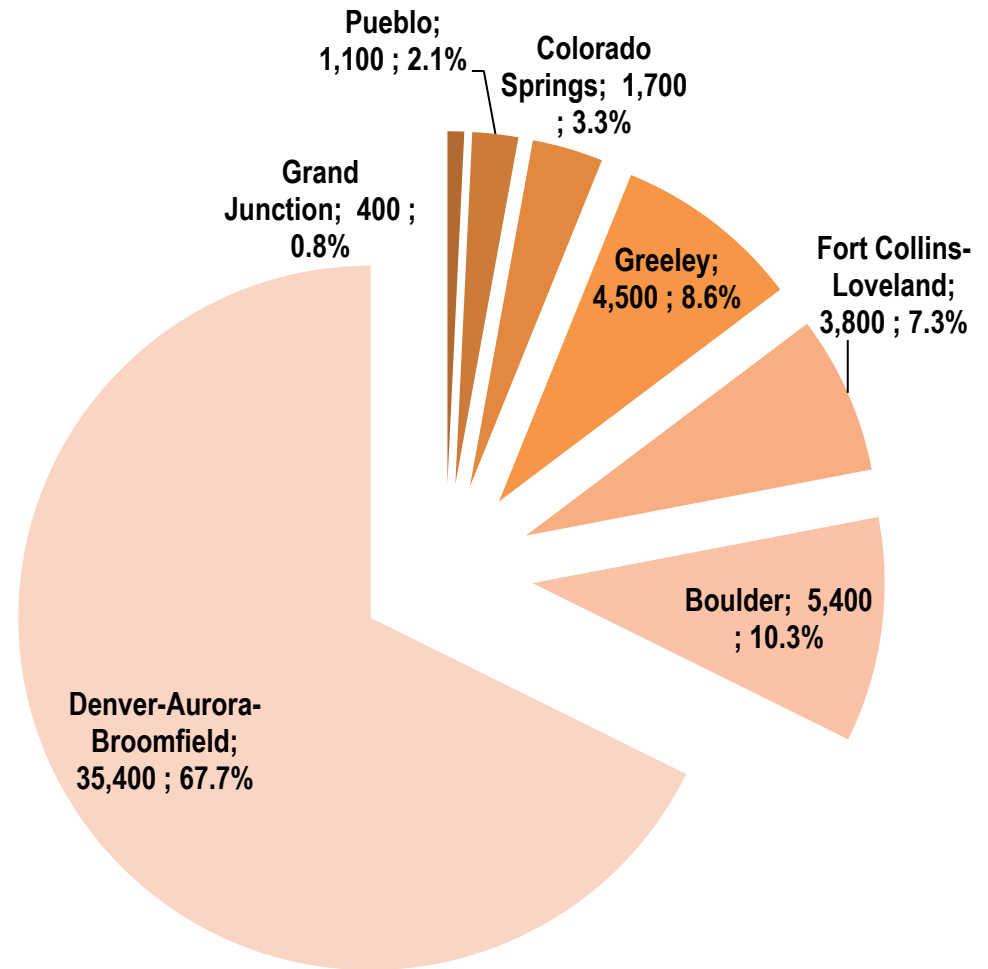
- Greeley 5.0%
- Boulder 3.1%
- Fort Collins 2.7%
- Denver 2.7%
- Pueblo 1.8%
- Grand Junction 0.7%
- Colorado Springs 0.7%

The rate of job growth for the state was 2.7%.

Denver added 67.7% of the jobs in MSAs, followed by Boulder, at 10.3%. Combined, the Northern Colorado MSAs added 15.8% of all jobs for the metro areas.

Note: This chart includes Colorado's seven MSAs. They accounted for about 81.5% of total job growth in the state for this period. About 87.1% of the jobs are in the seven MSAs.

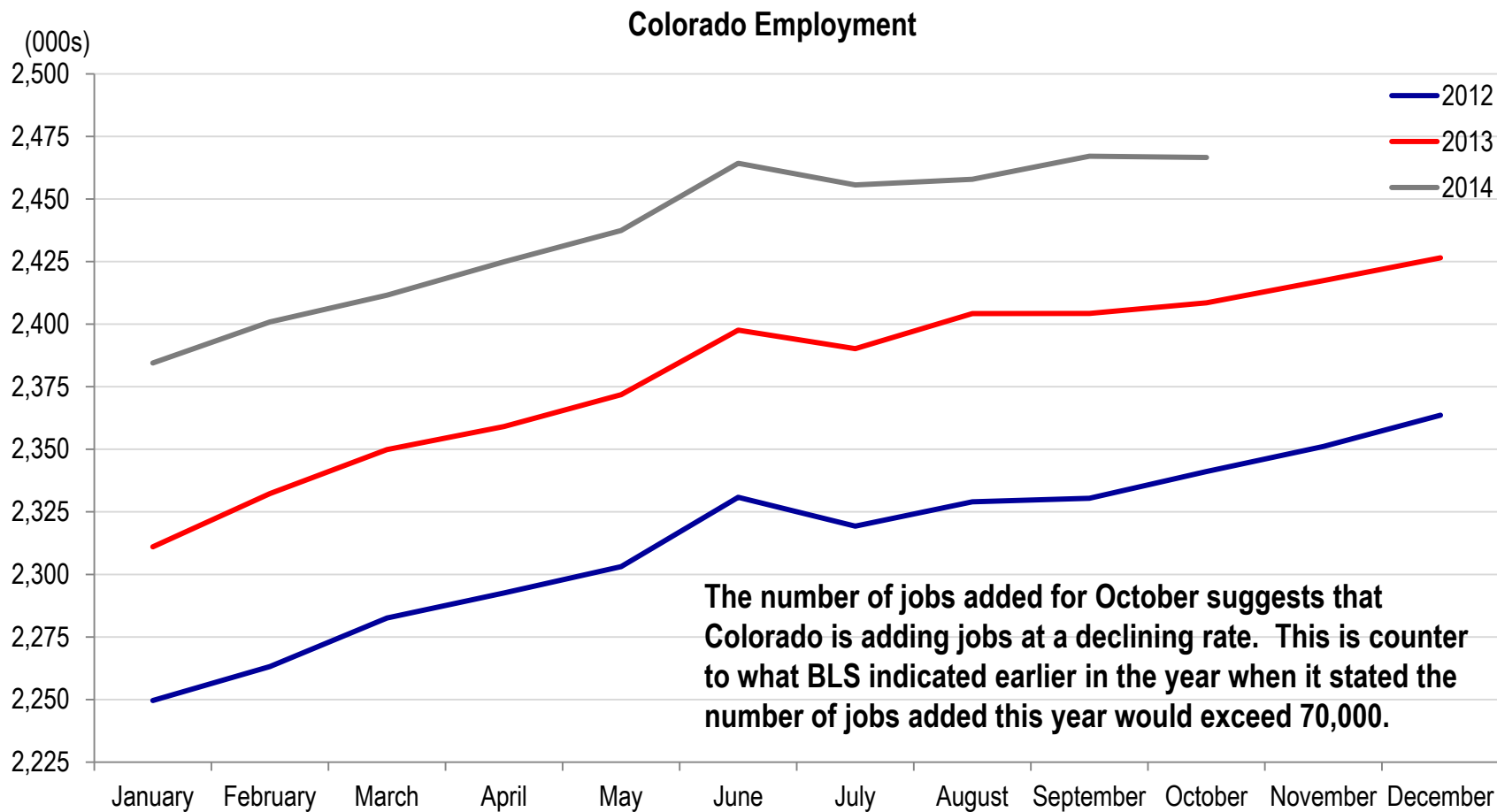
## MSA Job Growth and Percent Growth



**Key**  
MSA, Jobs added, % of MSA jobs added.

Source: Bureau of Labor Statistics.

# Colorado Employment 2012 to 2014



Source: Bureau of Labor Statistics, NSA.

# Colorado Employment The Lost Decade and Beyond

Colorado employment declined in 2009 and 2010. The changes for 2011 to 2013 follows:

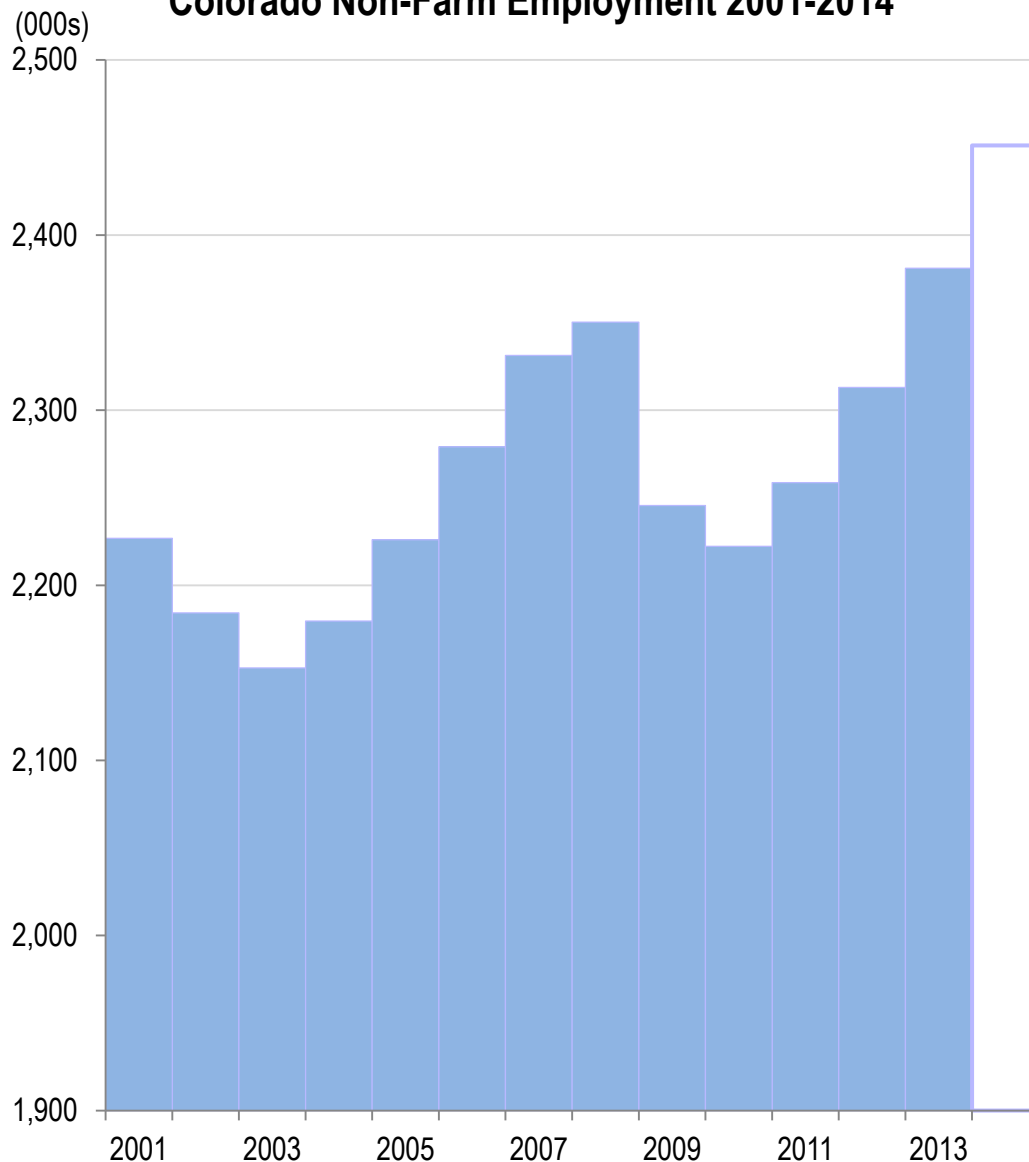
- + 36,300 jobs in 2011
- +54,400 jobs in 2012
- +68,100 jobs in 2013.

The number of jobs added has increased at an accelerating rate in each of these 3 years.

Between 68,000 and 74,000 jobs will be added in 2014.

Earlier this year, the Colorado Labor Market Information group issued a press release suggesting the BLS March 2015 data revision for 2014 will show that Colorado will add more than 70,000 jobs this year. Recent data suggests that might not be the case.

## Colorado Non-Farm Employment 2001-2014



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

# Summary of Colorado Economy Through October 2014

## On One Hand...

- Through the first ten months of 2014, wage and salary employment is 64,900 greater than the same period in 2013. Having said that, job growth in three of the last four months has been anemic.
- When the BLS makes its annual revisions in March 2015, they are expected to revise 2014 job growth higher and employment will exceed 70,000.
- Job growth is occurring in most sectors, although about 80% of job growth is in six sectors.
- About 82% of the state's job growth is in the state's seven MSAs.
- Northern Colorado and Boulder continue to be hot spots for job and output growth. The majority of job growth occurs in the Denver MSA.

## On the Other Hand...

- Given the level of job growth and the reduction in unemployment there should be strong growth in wages. The strongest wage growth has occurred in the Construction and Financial Activities sectors. Since the end of the recession, overall wage increases have not kept up with inflation.
- Job growth in Denver is solid, but significantly less than last year.
- The following sectors are underperforming: Information, Manufacturing, Financial Activities, and Transportation. There is concern that primary jobs are not being added at a fast enough rate.
- It will be a challenge for some companies to find trained workers in key occupations.



# Looking Ahead to 2015

## Colorado is Faced with Some Significant Challenges

As the year comes to an end, there are concerns that Colorado may not sustain its current level of growth. The state will have another solid year in 2015; however, it will face a number of challenges along the way. A few of those challenges are listed below.

- In 2014, the Denver MSA has added workers at a rate slower than 2013. Solid job growth is expected to continue. Is this a sign of an impending slowdown?
- Fracking is an issue that will not go away. How many years will the extractive industries be a significant driver in the state economy? Will lower global prices for oil cause a reduction in production in Colorado?
- How long can the state continue to have solid job growth with the addition of so few primary jobs?
- When will wage growth outpace the rate of inflation?
- There is a need to repair infrastructure, such as roads and bridges. When will this become a priority that receives greater funding?
- How much will job growth be constrained by the shortage of trained workers in key high-tech positions? Will there be an adequate supply of workers who can pass company drug tests?
- The election was contentious. Will that carry over into the way the legislature functions in 2015?
- Will Colorado's rising housing prices prevent outsiders from coming to the state? Will there be a shortage of affordable housing for families with lower incomes?
- Will the weak Japanese and European economy negatively impact export sales for Colorado manufacturers?
- What impact will increased healthcare costs and lower subsidies for Obamacare have on the economy?



# Appendix



# BLS/LMI Data Revision Process

## BLS and LMI Data Projections

In recent years, data-producing federal agencies have been asked to deliver more accurate data, in a shorter time frame, using fewer staff, with lower research budgets. The data used for most short-term forecasts is the Current Employment Survey, also called Nonfarm or Wage and Salary data. It is possible for the CES data to be revised up to four times. Revisions to the CES data are based on changes in the Quarterly Census of Employment and Wages (QCEW) data set.

## BLS and LMI Data Revision Process

The CES projection process is outlined below:

1. Around the 20<sup>th</sup> of a month, preliminary data for the prior month will be published and the month prior to that will be updated (For example, around June 20<sup>th</sup> preliminary data for May will be produced and April will be updated.) These revisions are usually minor.
2. In March of the following year, the previous two years will be revised. (For example, the 2013 employment data will be revised in March 2014 and finalized in March 2015).
3. The initial March update is usually the most significant revision, and the two-year update is often minor (In the case of 2013, some of the monthly totals will see significant upward revisions when revised in March 2014.)
4. Periodically, BLS updates the entire data series back to 1990. This usually occurs when they recalibrate their projection models or redefine NAICS codes.



# North American Industry Classification System

For purposes of analysis, the Bureau of Labor Statistics classifies companies using the North American Industry Classification Systems (NAICS), a two-through-six digit hierarchical classification system. Companies are classified into categories based on their primary processes. BLS has further aggregated NAICS sectors into groupings called "Supersectors." The aggregations include Goods-Producing and Service-Providing industries.

## Goods-Producing Industries

### **10 - Natural Resources and Mining**

NAICS 1133—Logging

Sector 21—Mining

### **20 - Construction**

Sector 23—Construction

### **30 - Manufacturing**

Sectors 31, 32, 33—Manufacturing

## Service-Providing Industries

### **40 - Trade, Transportation, and Utilities**

Sector 42—Wholesale Trade Sectors 44, 45—Retail Trade Sectors 48, 49—Transportation and Warehousing Sector 22—Utilities

### **50 - Information**

Sector 51—Information

### **55 - Financial Activities**

Sector 52—Finance and Insurance Sector 53—Real Estate and Rental and Leasing

### **60 - Professional and Business Services**

Sector 54—Professional, Scientific, and Technical Services Sector 55—Management of Companies and Enterprises Sector 56—Administrative and Support and Waste Management and Remediation Services

### **65 - Education and Health Services**

Sector 61—Educational Services Sector 62—Health Care and Social Assistance

### **70 - Leisure and Hospitality**

Sector 71—Arts, Entertainment, and Recreation Sector 72—Accommodation and Food Services

### **80 - Other Services**

Sector 81—Other Services, except Public Administration

### **90 - Government\***

Sector 91—Federal Government

Sector 92—State Government

Sector 93—Local Government



## Review of the Colorado Economy Analysis of First Ten Months of 2014

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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