



Review of Colorado Economy Five Months Through May 2013

Colorado-based Business and Economic Research

June 25, 2013



Overview

This analysis looks at the U.S. and Colorado economies through the first five months of 2013.

Employment has improved, but it appears to be increasing at a declining rate. It is unlikely that the current level of job growth can be sustained without greater creation of primary jobs.

This brief analysis is divided into the following sections.

- U.S. Economy
- Colorado Economy
- Questions and Answers
- Summary and Challenges (U.S. and Colorado)

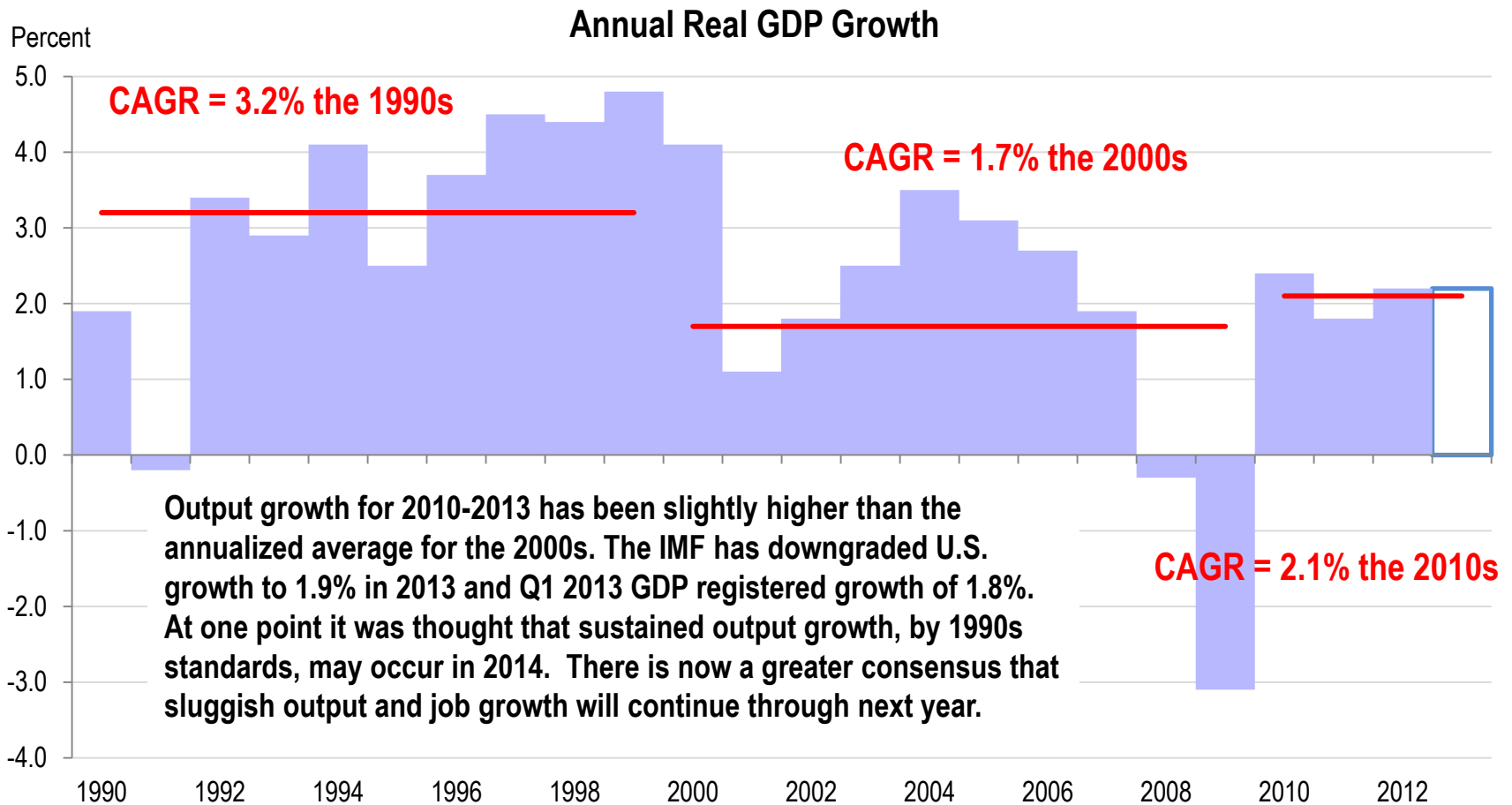
The 2013 CBER forecast can be found at <http://cber.co/CBEReconomy.html>.



United States Economy

Real US GDP Growth

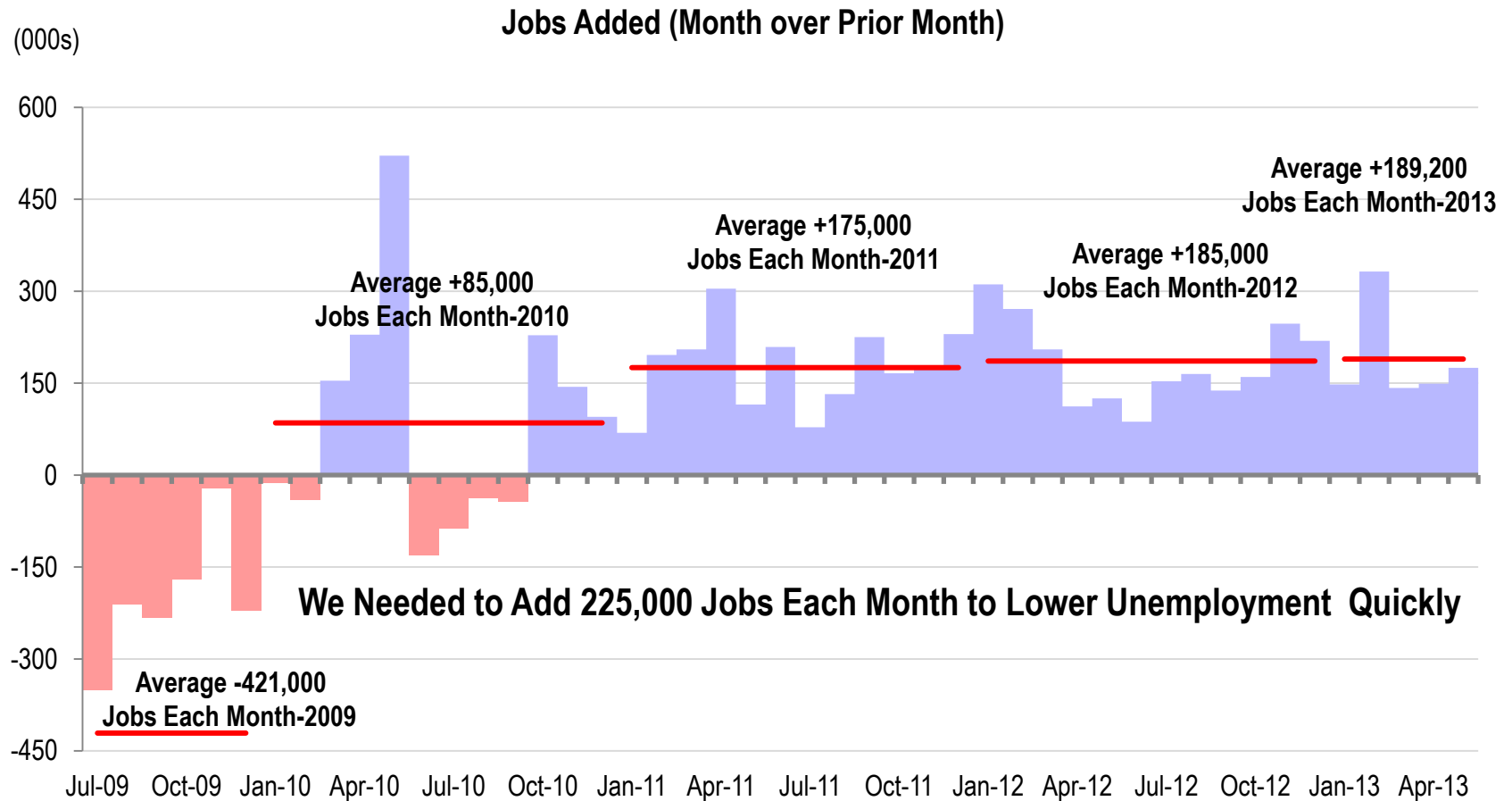
Annual



Source: Bureau of Economic Analysis, IMF, CBER.

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U.S. Employment Situation From End of Recession to Current



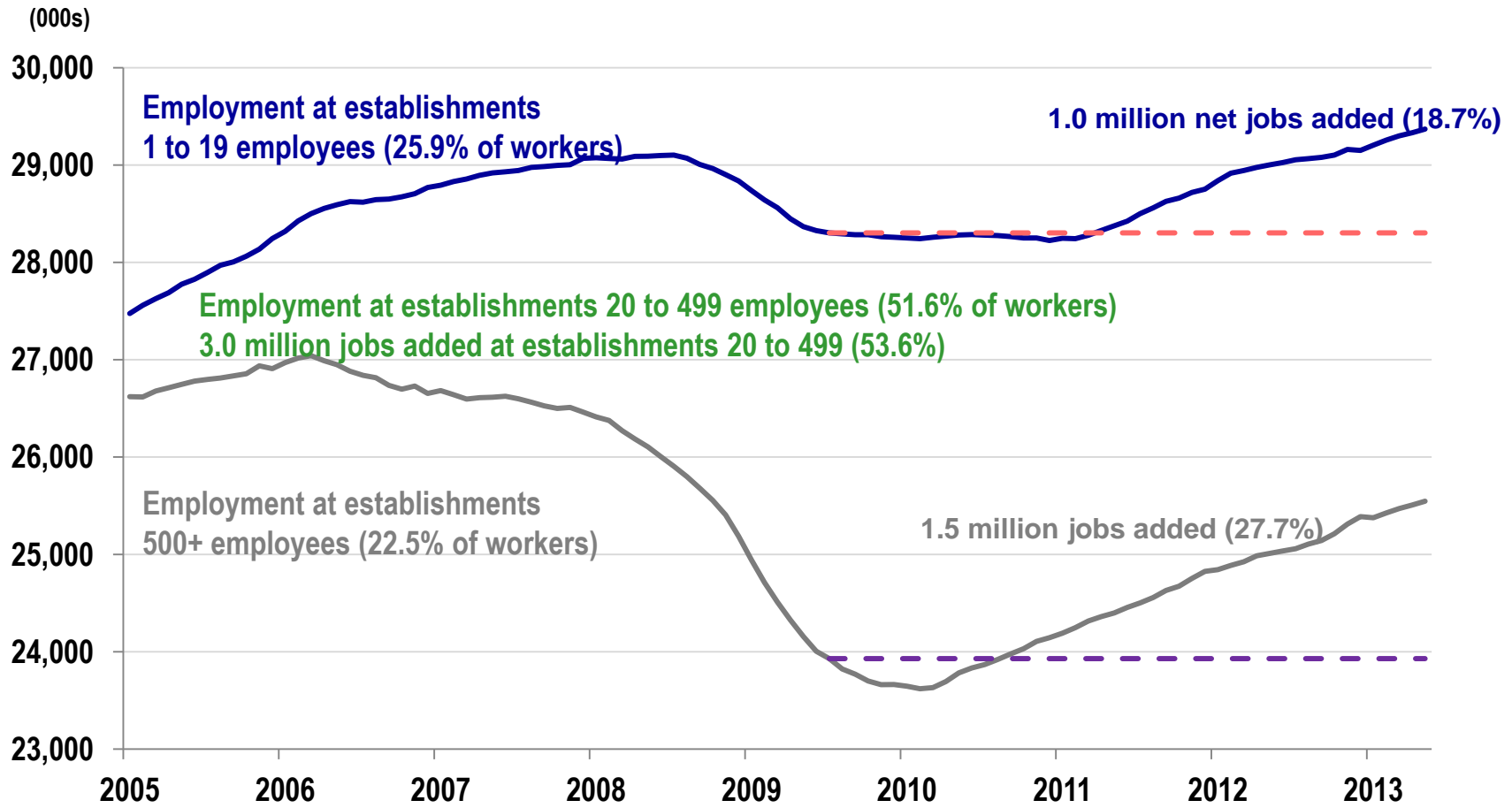
Source: Bureau of Labor Statistics, SA.

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ADP U.S. Private Sector Employment

5.5 Million Jobs Added Since End of Recession



U.S. Unemployment Rate and Number of Unemployed

Both the unemployment rate and number of unemployed have declined at a painfully slow rate since peaking in late 2010.

At the end of May 2013, the unemployment rate (blue) had dipped to 7.6%.

The total number of unemployed (red) fell to 11.8 million. This is 5.0 million above the low point in 2007 and only 3.6 million below the high point in 2010.

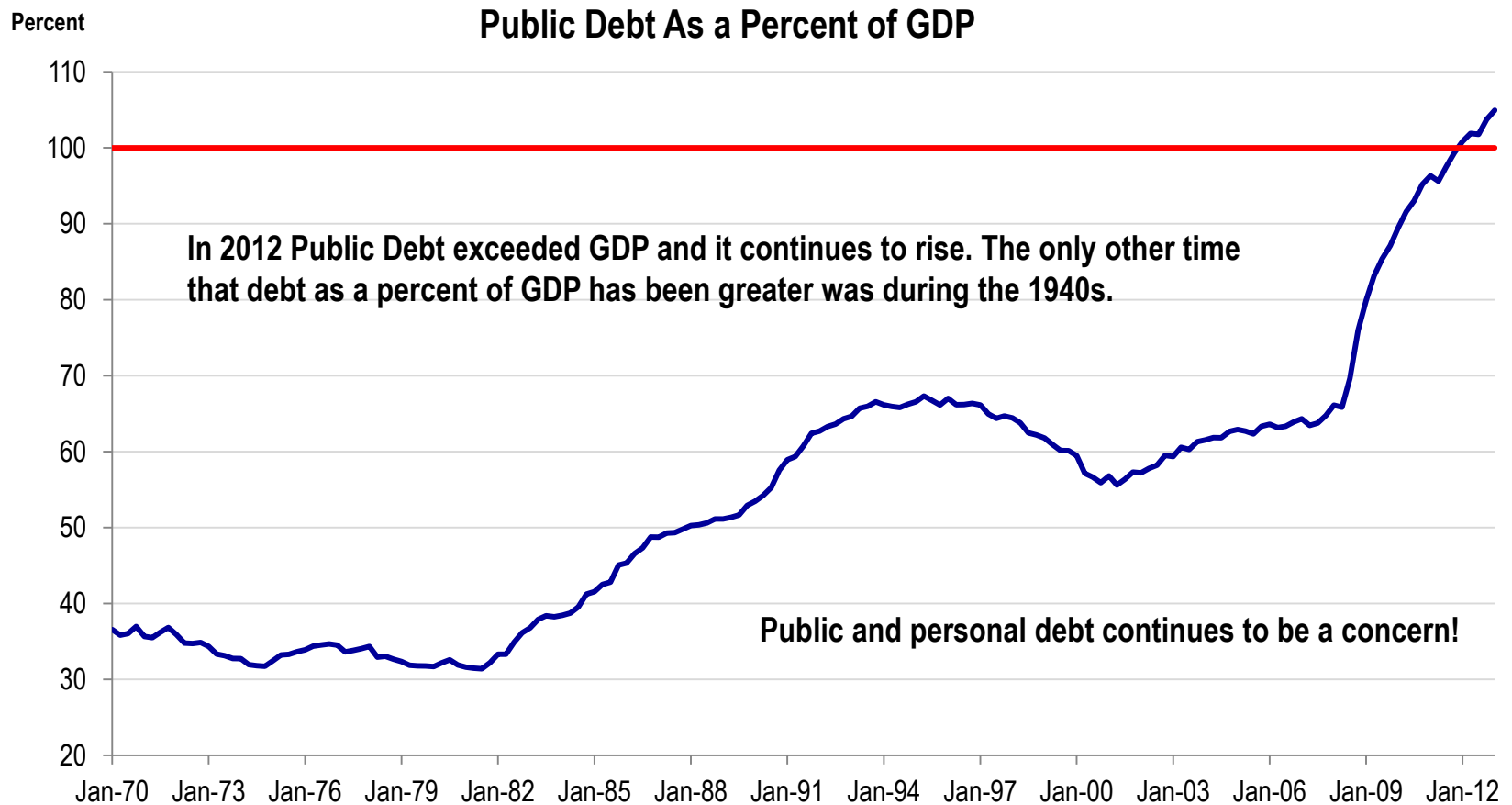


Source: Bureau of Labor Statistics, SA, CBER.

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Public Debt as a Percent of GDP

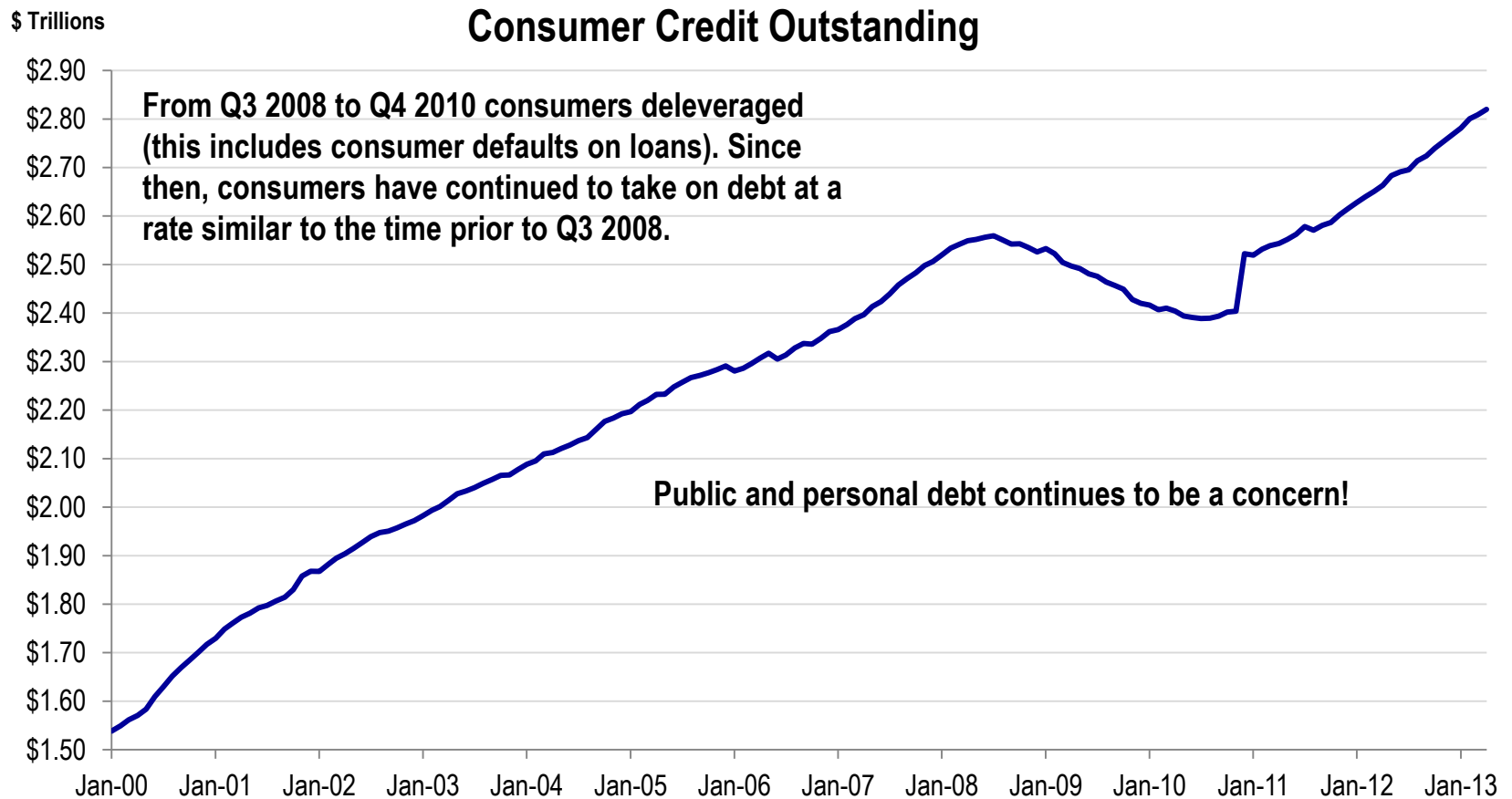


Source: FRED.

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Consumer Credit Outstanding

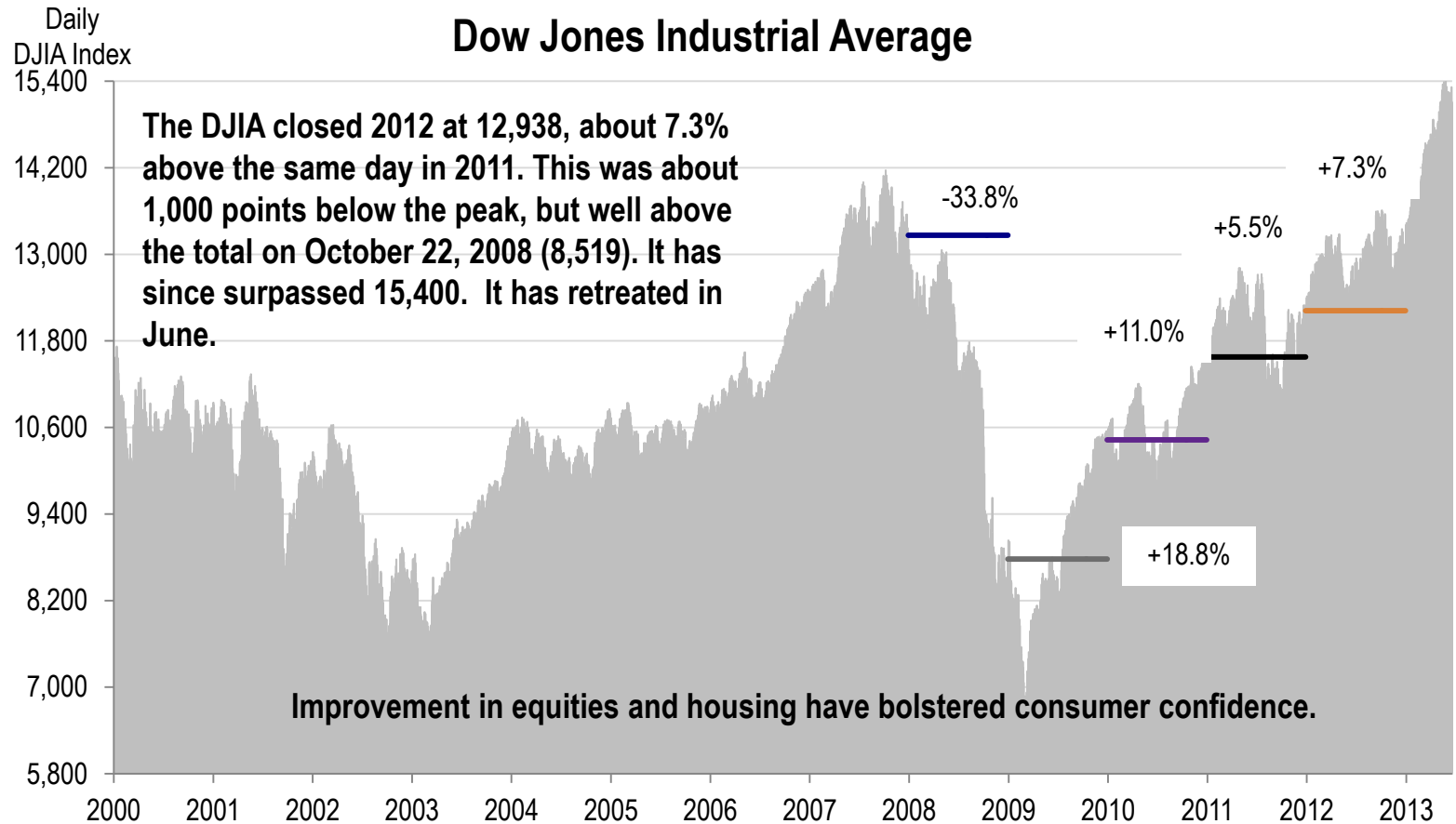


Source: Federal Reserve, G.19.

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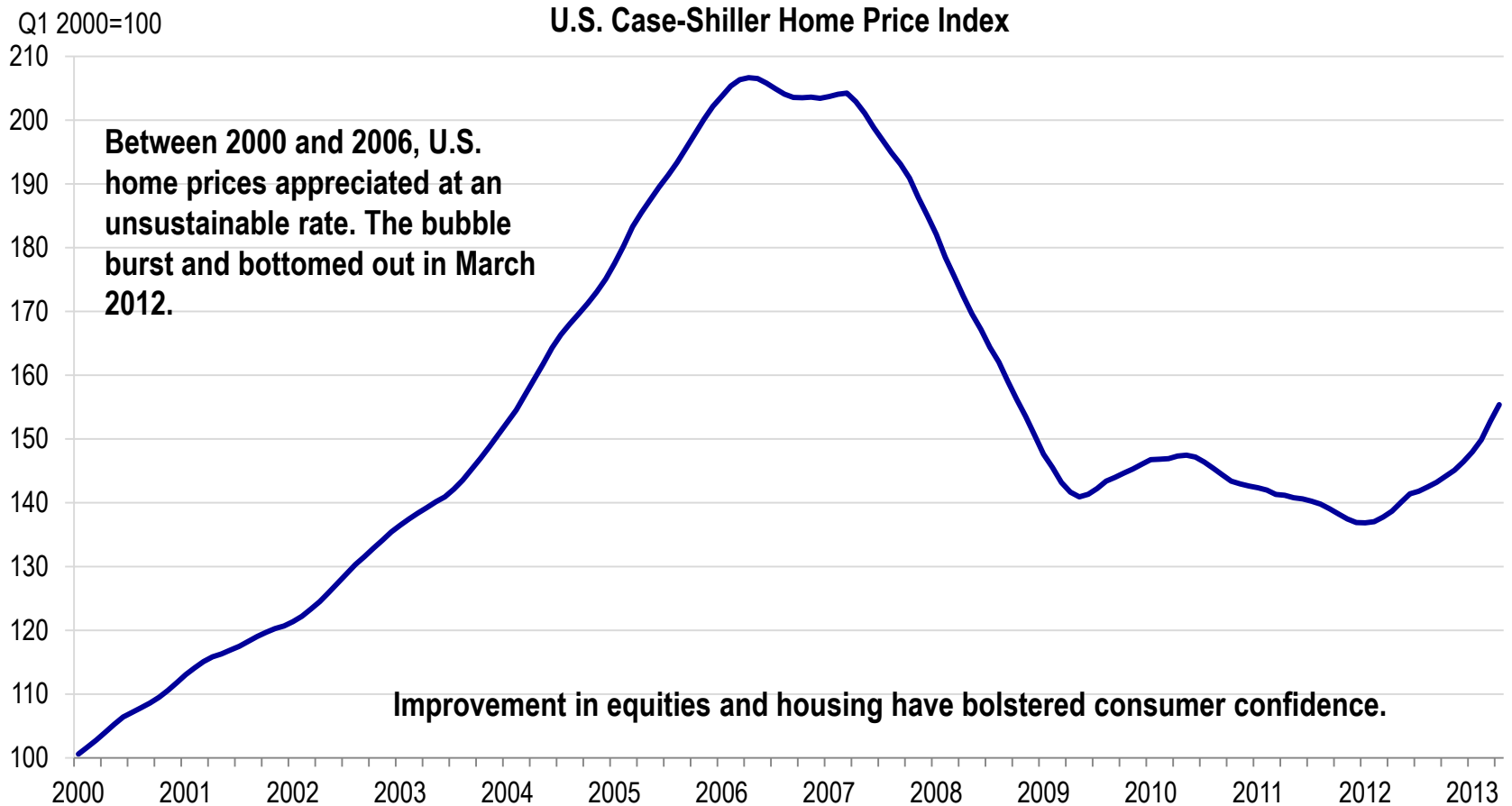
Equities Dow Jones Industrial Average



Source: FRED, DJIA.

Housing Prices

Case-Shiller



Source: Case-Shiller, SA.



Summary of U.S. Economy

Good News

- U.S. employment situation continues to show steady growth.
- All sizes of companies are adding jobs, but large and mid-size companies are leading the recovery.
- Increased hiring may point to increased personal and business expenditures.
- The housing and equities markets have improved confidence and increased “wealth.”

Challenges

- U.S. output (GDP) will remain weak.
- Continued uneasiness among consumers will prevent consumption from being stronger.
- Uncertainty about the Fed’s decision on interest rates and their ability to unwind the Quantitative Easing stimulus.
- New firm creation will continue to be disappointing.
- Public and private debt.
- Impact of Affordable Care Act.
- Impact of Sequestration.
- Perception of leadership – partisanship and “scandals”.
- Uneven recovery and weaknesses in Europe.
- The situation in the Middle East will remain tenuous.

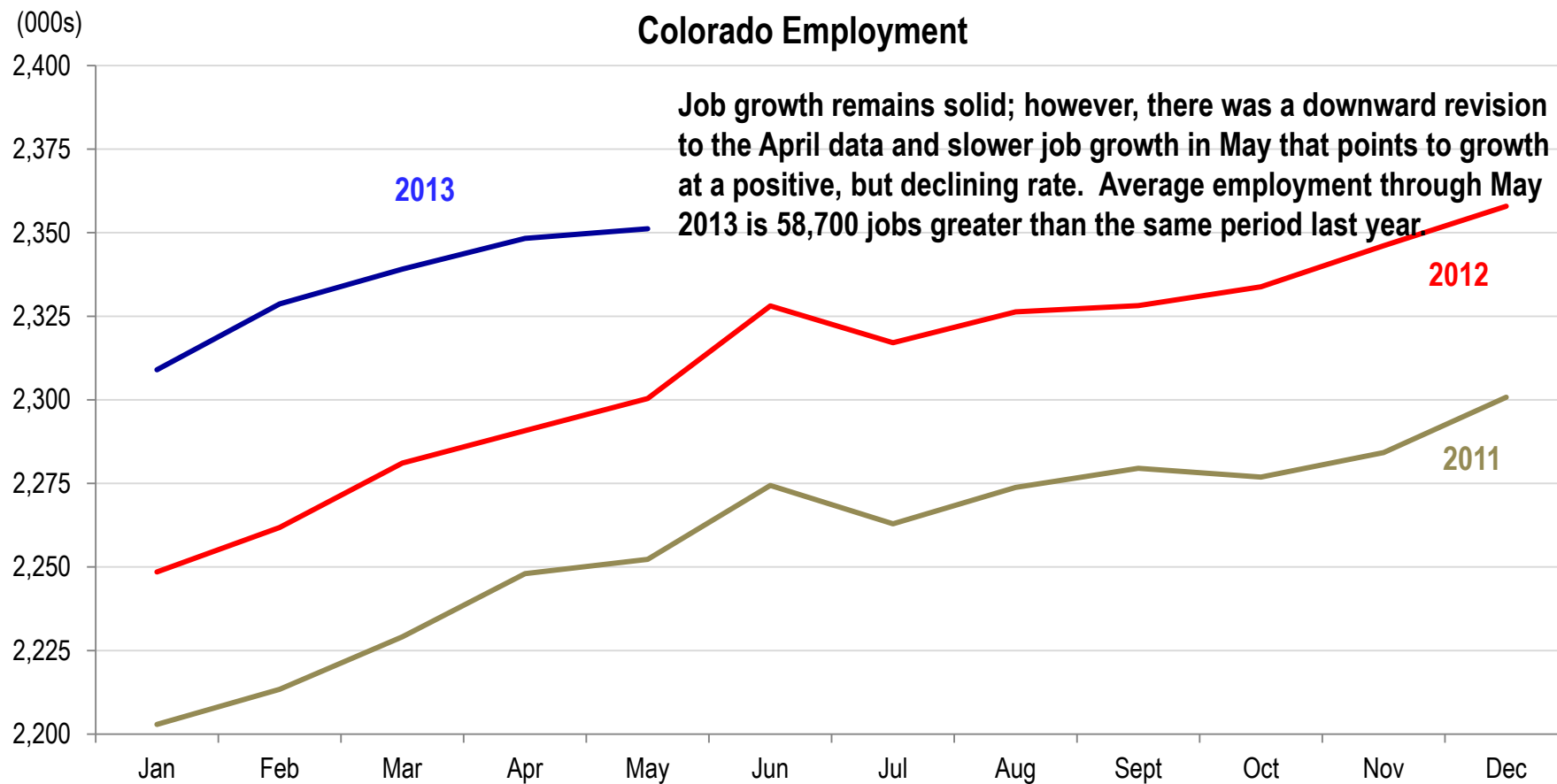
On the Lighter Side

- Twinkies will return to shelves in mid-July!



Colorado Economy

Colorado Employment



Source: Bureau of Labor Statistics, NSA.

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Colorado Unemployment Rate and Number of Unemployed

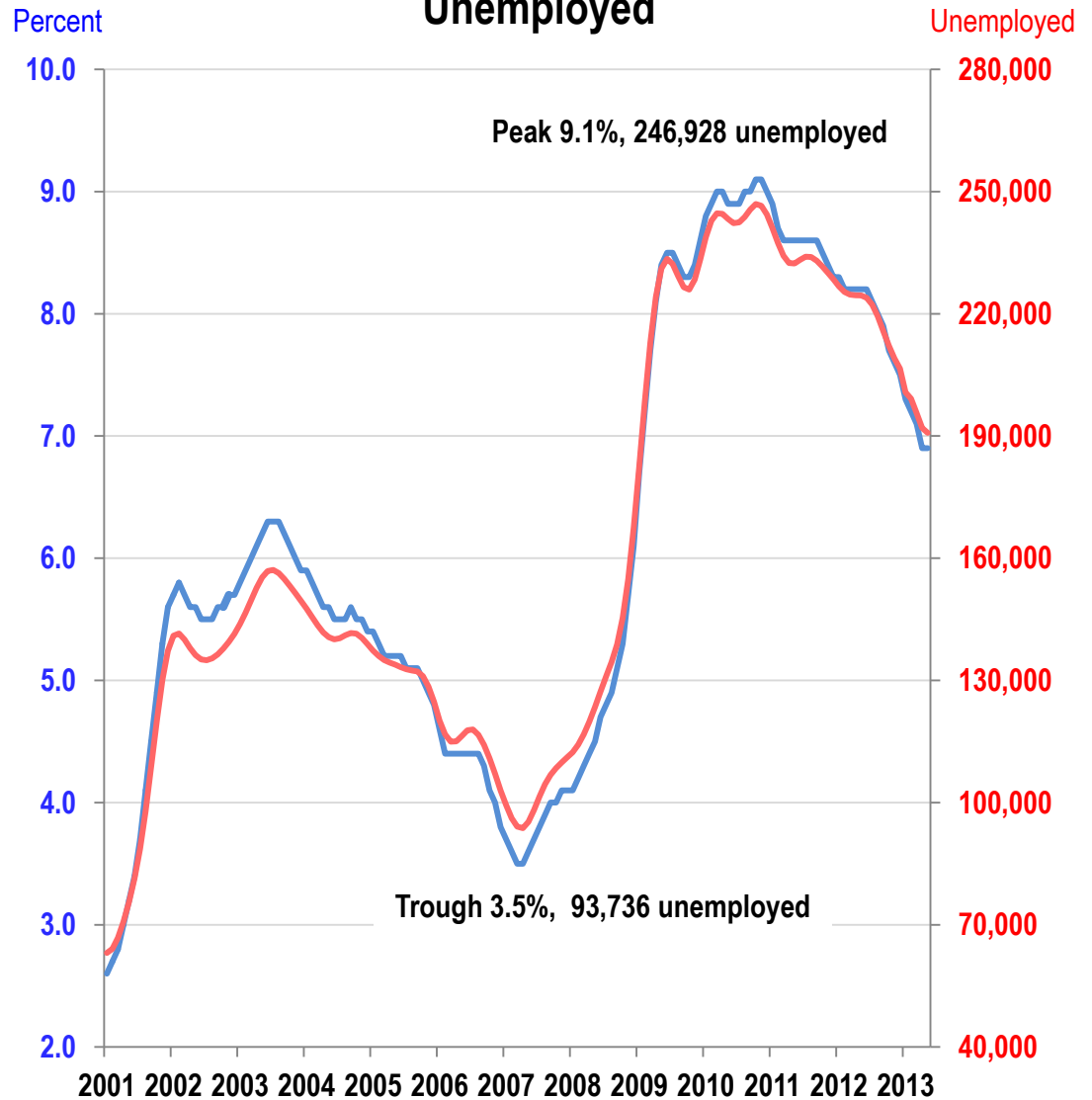
Both the unemployment rate and number of unemployed workers have declined since peaking in late 2010.

At the end of May 2013, the unemployment rate (blue) was 6.9%.

In May, the total number of unemployed workers (red) declined slightly to 190,773. This is about twice as many as the low point in 2007.

Between the low point in 2007 and the peak in 2010, the number of unemployed workers increased by 153,192. In the 32 months since unemployment peaked in 2010, the number of unemployed workers has declined by only 56,155.

Unemployment Rate and Number Unemployed



Source: Bureau of Labor Statistics, CBER.

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Annual Employment Situation for Strong Growth Sectors

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

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

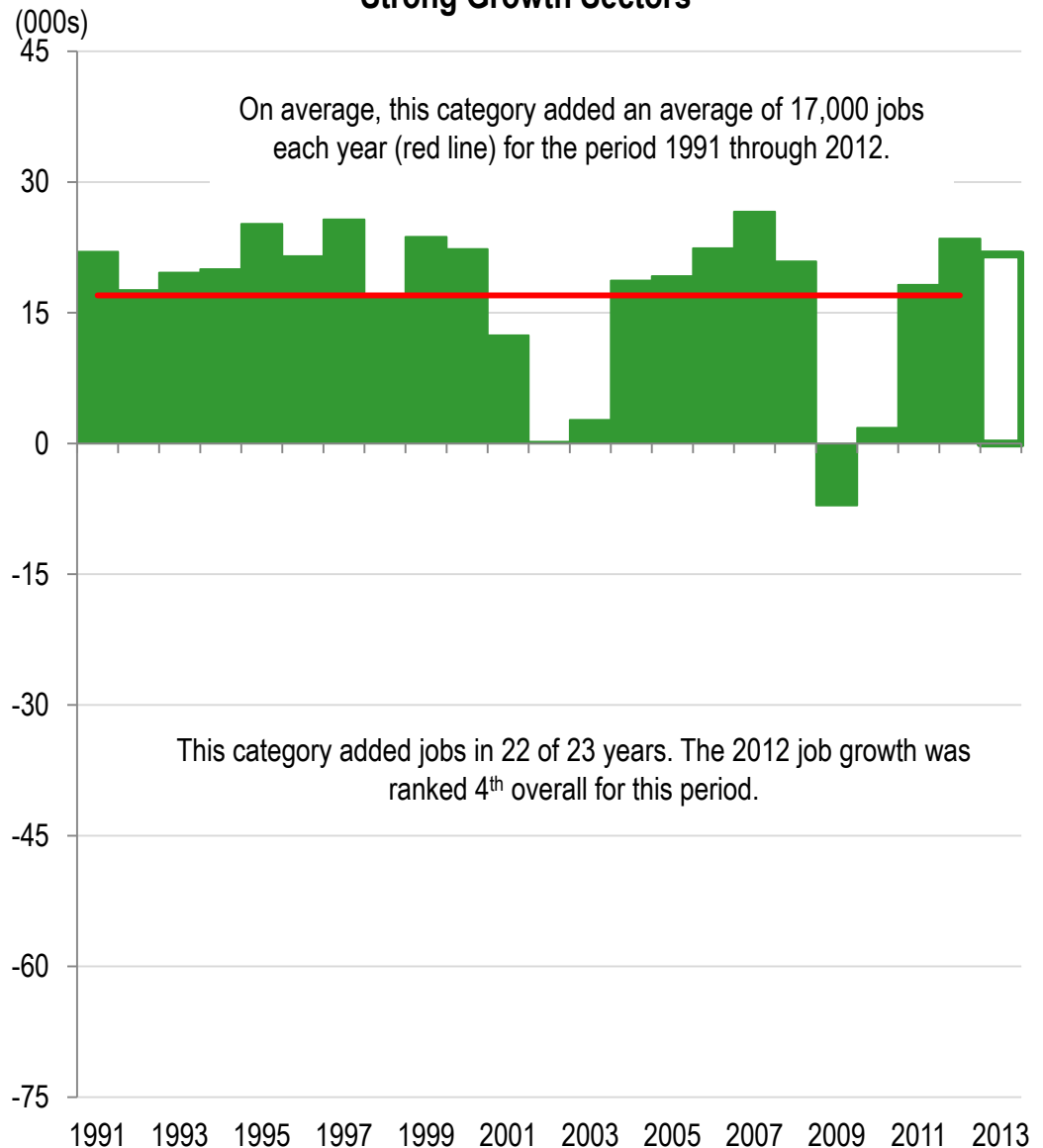
Total employment for this category was:

1992 404,900 workers, 25.4% of total employment
 2002 592,400 workers, 27.1% of total employment
 2012 739,300 workers, 32.0% of total employment.

Growth of this category in 2012 and 2013 will be comparable to most years during the past two decades.

Between 19,000 and 25,000 workers will be added in 2013, most likely at the higher end of that range.

Strong Growth Sectors



Source: Bureau of Labor Statistics, CBER.

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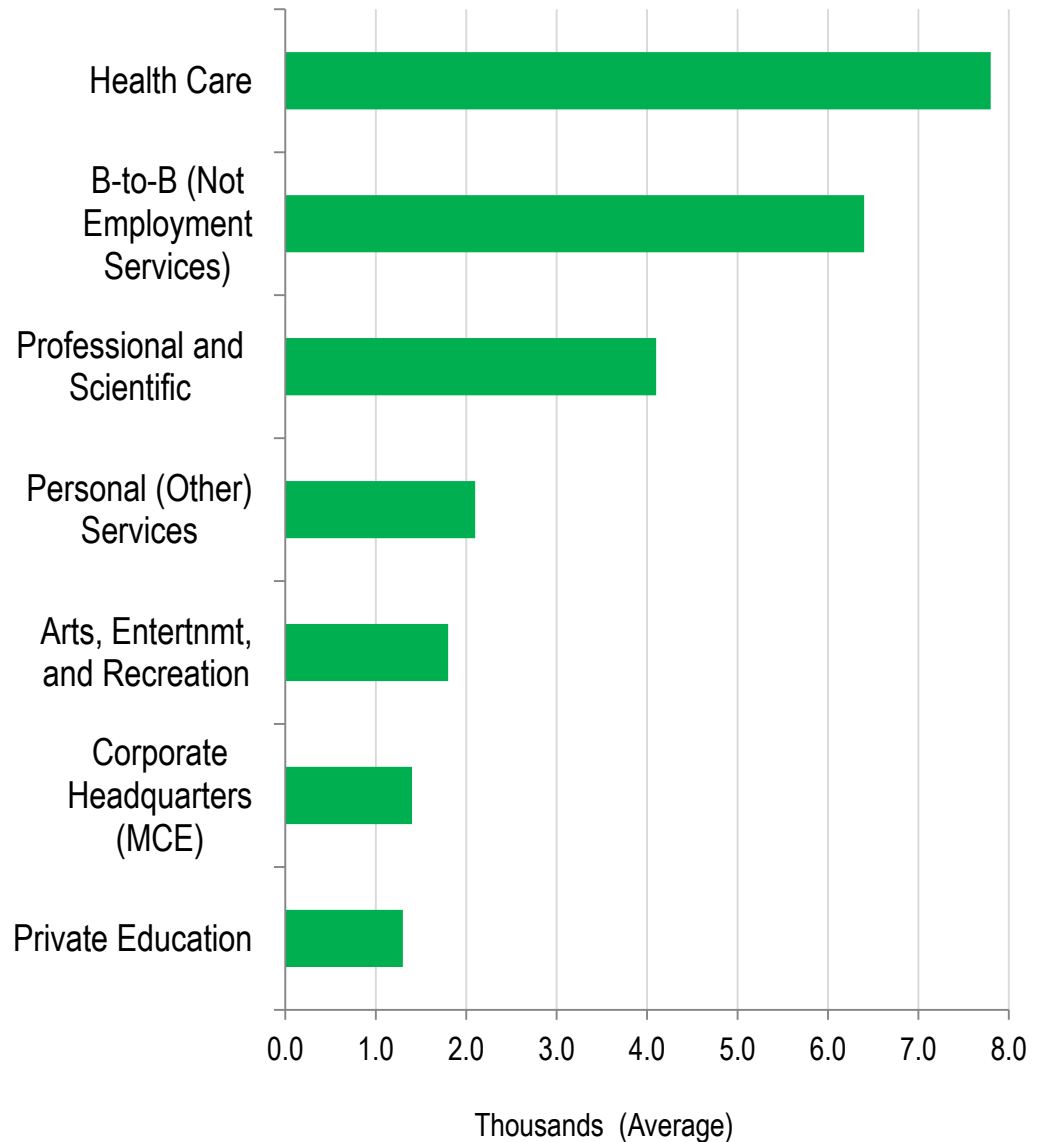
Job Change in 2013

Solid Growth Sectors

- Average employment for the solid growth sectors through five months is 24,900 greater than the same period in 2012.

- These sectors account for 32.2% of total employment. They have accounted for 42.3% of job growth in 2013.

- These sectors were forecasted to add 19,000 to 25,000 jobs in 2013.



Source: Bureau of Labor Statistics.

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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.

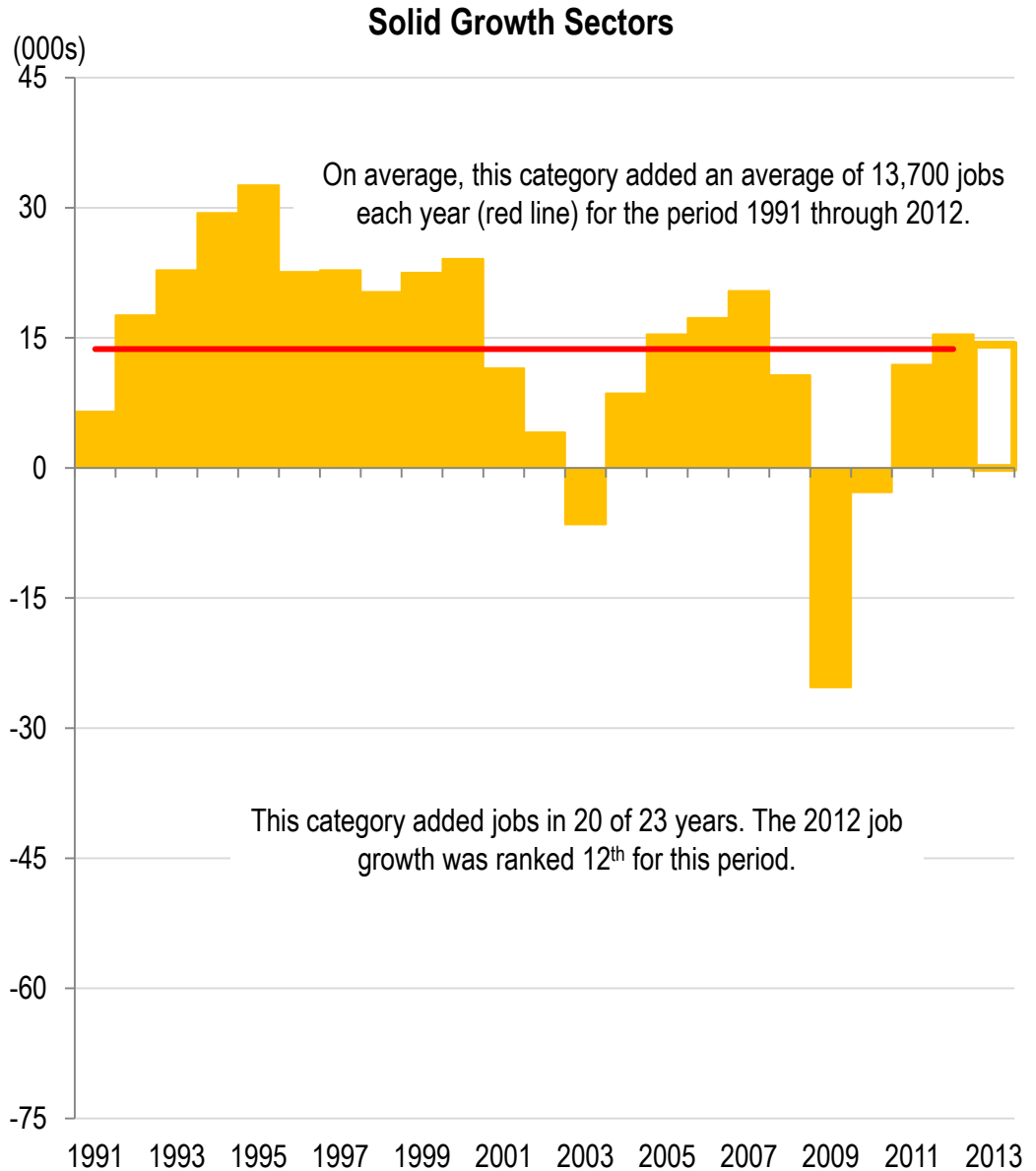
- Wholesale Trade
- Retail Trade
- State (Not Higher Education)
- Higher Education
- Local (Not K-12 Education)
- K-12 Education
- Accommodations and Food Services

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

Total employment for this category was:

1992 633,200 workers, 39.6% of total employment
 2002 845,900 workers, 38.7% of total employment
 2012 911,000 workers, 39.4% of total employment

Growth of this category in 2012 and 2013 will be about average for the past two decades. Between 12,000 and 16,000 jobs will be added.



Source: Bureau of Labor Statistics, CBER.

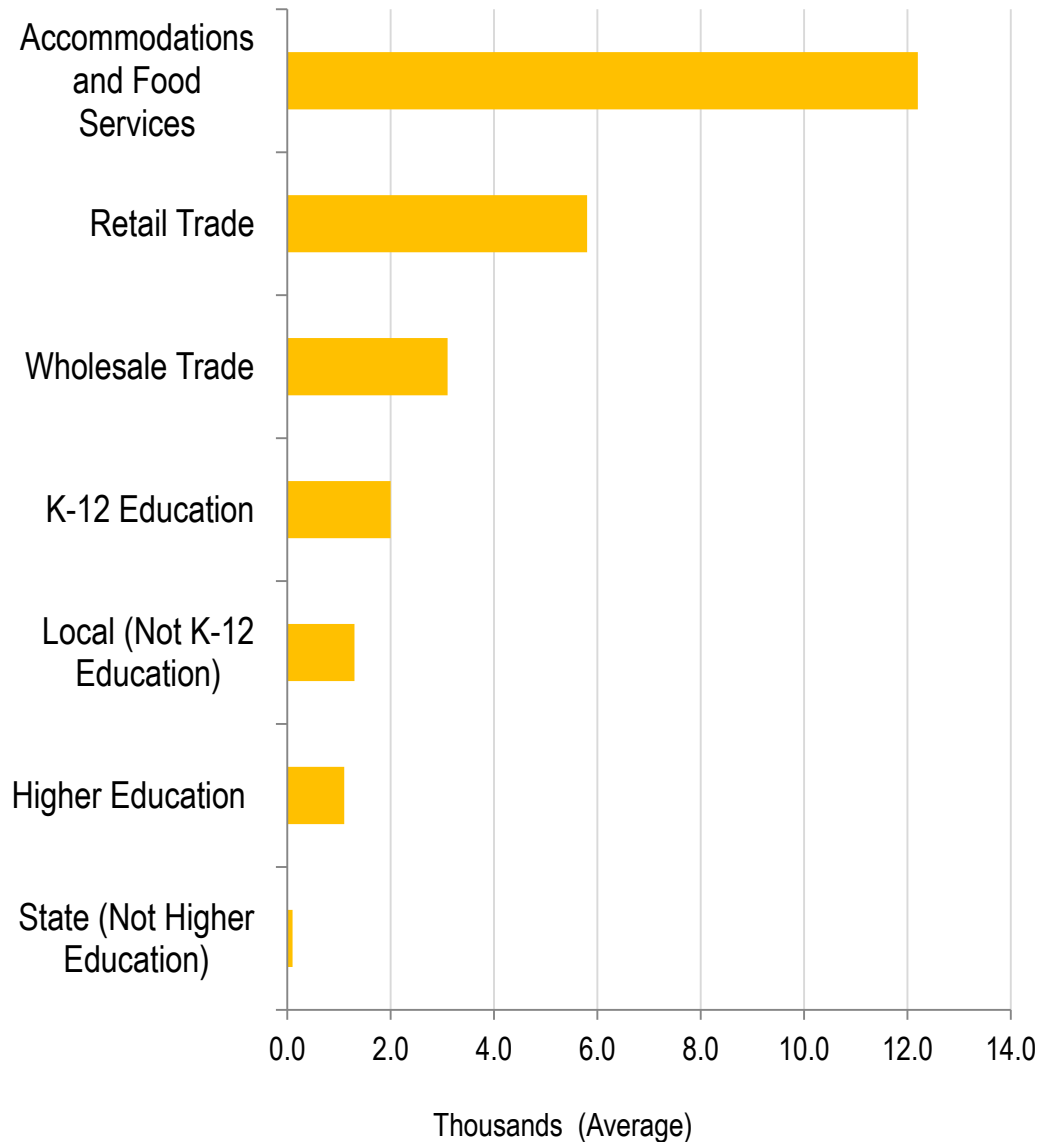
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Limited Growth Sectors

- Average employment for the limited growth sectors through five months is 25,600 greater than the same period in 2012.
- These sectors are 39.7% of total employment. They have accounted for 43.6% of job growth in 2013.
- These sectors were forecasted to add 12,000 to 16,000 jobs in 2013.

Job Change in 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:

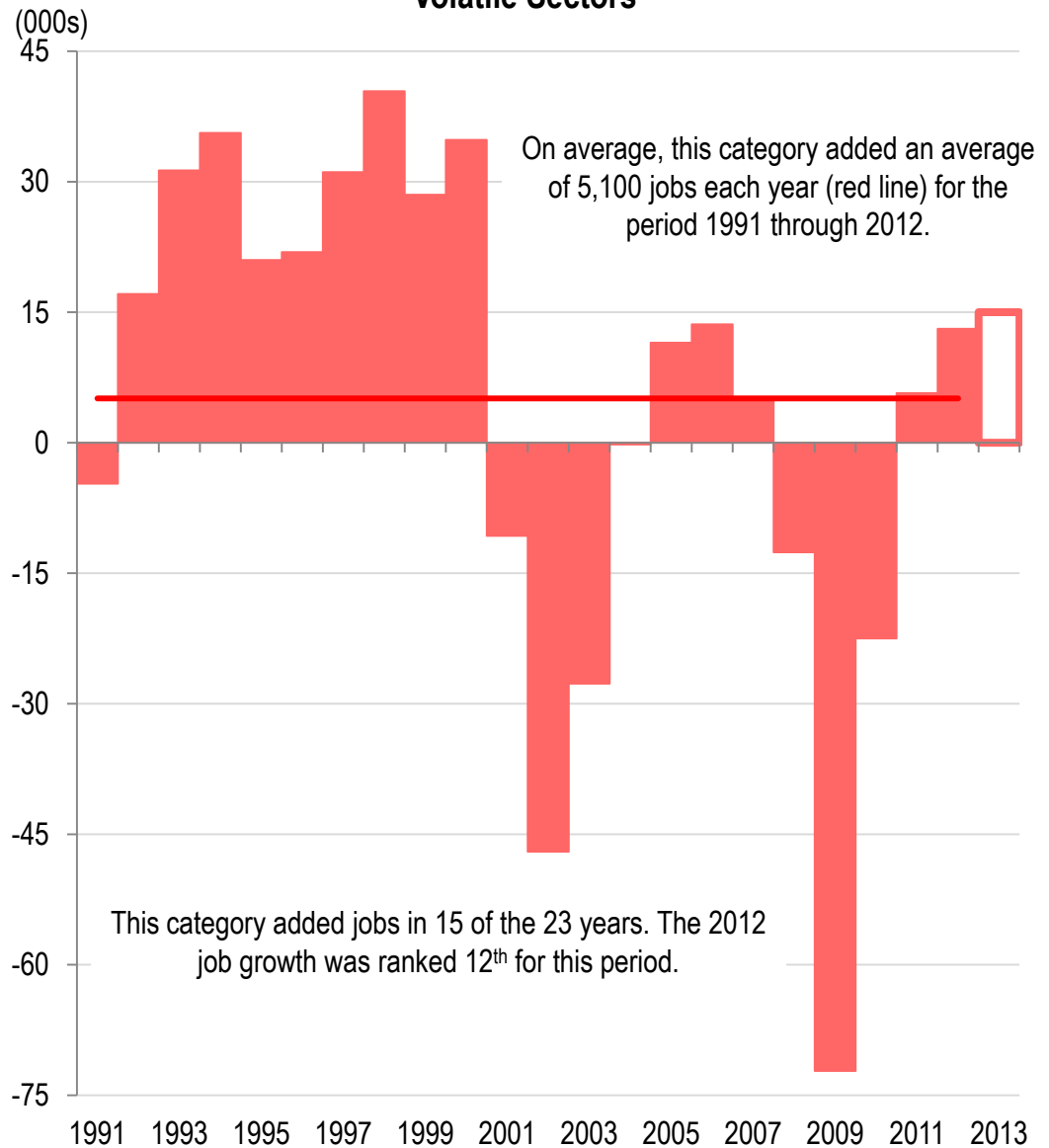
- Natural Resources and Mining
- Construction
- Manufacturing
- Transportation, Warehousing, and Utilities
- Employment Services
- Financial Activities
- Information
- Federal Government

Total employment for this category was:

1992 559,100 workers, 35.0% of total employment
 2002 746,000 workers, 34.2% of total employment
 2012 659,900 workers, 28.6% of total employment.

In 2012 and 2013 this category will add between 13,000 and 17,000 jobs . Growth in this category will be above the annual average.

Volatile Sectors



Source: Bureau of Labor Statistics, CBER.

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Job Change in 2013

Volatile Sectors

- Average employment for the limited growth sectors through five months is 8,200 greater than the same period in 2012.
- These sectors are 28.2% of total employment. They have accounted for 14.1% of job growth in 2013.
- These sectors were forecasted to add 13,000 to 17,000 jobs in 2013.



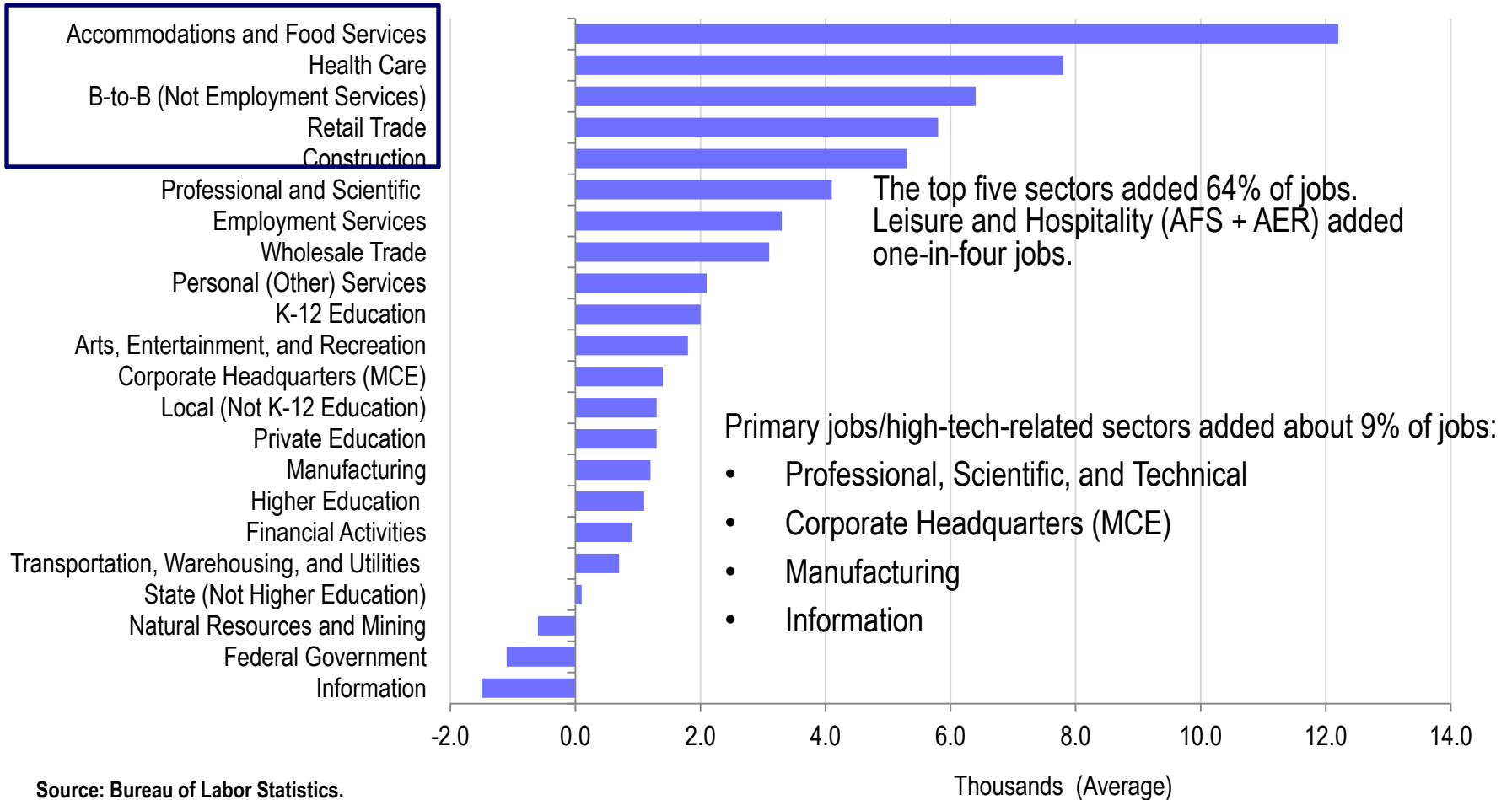
Source: Bureau of Labor Statistics.

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Job Change All Sectors

First Five Months 2013

Job Change All Sectors



Source: Bureau of Labor Statistics.



Questions and Answers

Question and Answers

The next series of slides address the following questions:

- Is the Colorado housing market improving?
- What is the fuss about primary jobs?
- How do changes in the state GDP compare to the U.S.?

Questions and Answers

Is the Colorado Housing Market Improving?

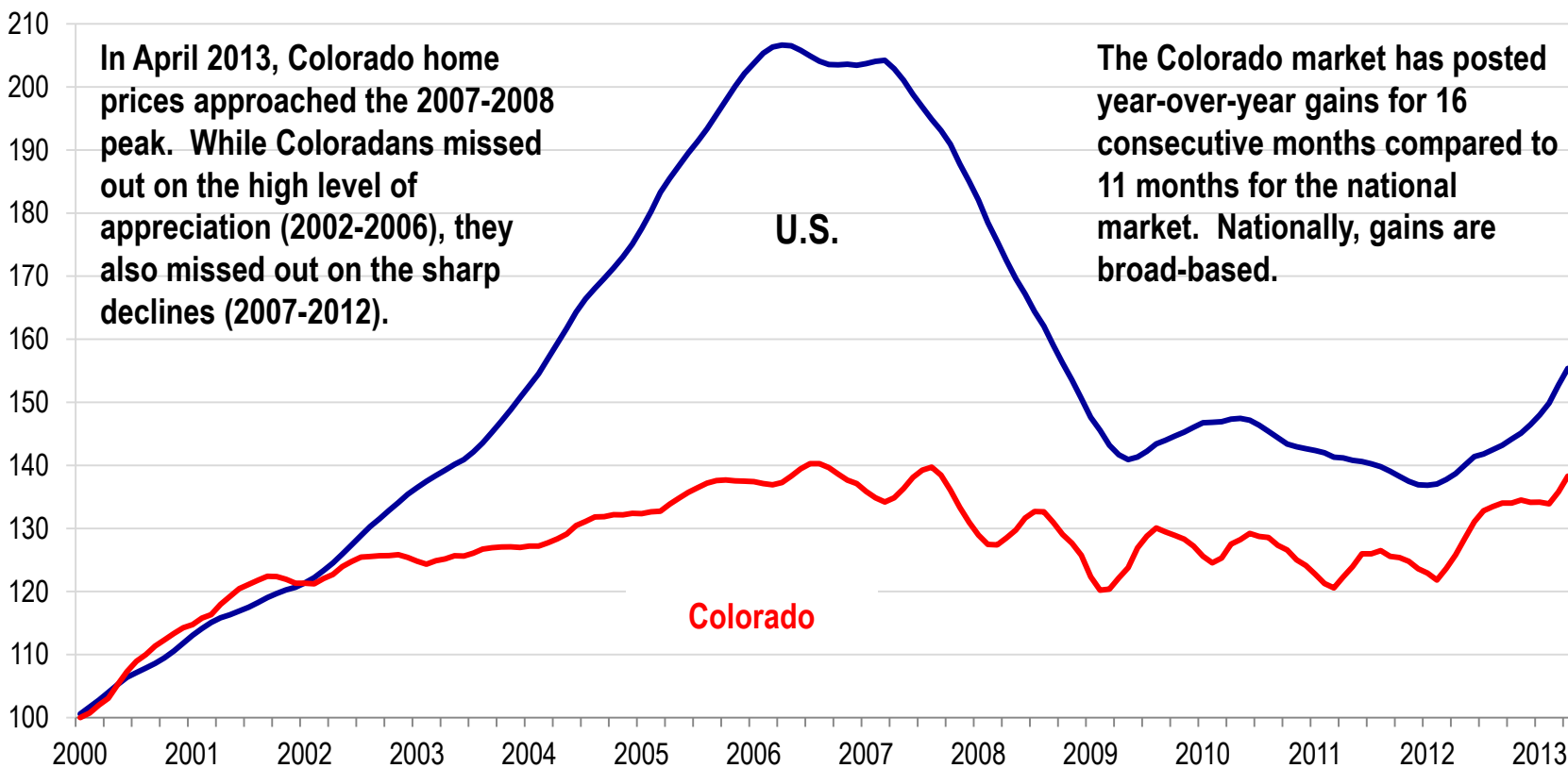
Anecdotal evidence suggests that prices and turn-around time have improved. Has the real estate market improved? How do changes in Colorado home prices compare to the U.S.?

Housing Prices

Case-Shiller

Case-Shiller Home Price Index
U.S. vs. Colorado

Q1 2000=100



Source: Case-Shiller, SA.

● Questions and Answers

● What is the Fuss About Primary Jobs?

What is a primary job? Why are they important to the economy?



Key Sectors

Source of Primary Jobs

Manufacturing

• 2011 Average Annual Wages	\$61,668
• 2012 Employment	132,100
• 2012 Percent of Total Private Sector Employment	6.9%

Management of Corporation and Enterprises

• 2011 Average Annual Wages	\$130,515
• 2012 Employment	31,800
• 2012 Percent of Total Private Sector Employment	1.7%

Information

• 2011 Average Annual Wages	\$84,138
• 2012 Employment	69,700
• 2012 Percent of Total Private Sector Employment	3.6%

Professional, Scientific, and Technical Services

• 2011 Average Annual Wages	\$81,381
• 2012 Employment	177,800
• 2012 Percent of Total Private Sector Employment	9.3%

Private Sector

• 2011 Average Annual Wages	\$49,245
• 2012 Employment	1,915,500
• 2012 Percent of Total Employment	82.9%

In 2013, these four sectors account for 21.5% of private sector jobs. So far this year, only 9.3% of private sector jobs have been added in these sectors.

Source: Bureau of Labor Statistics.

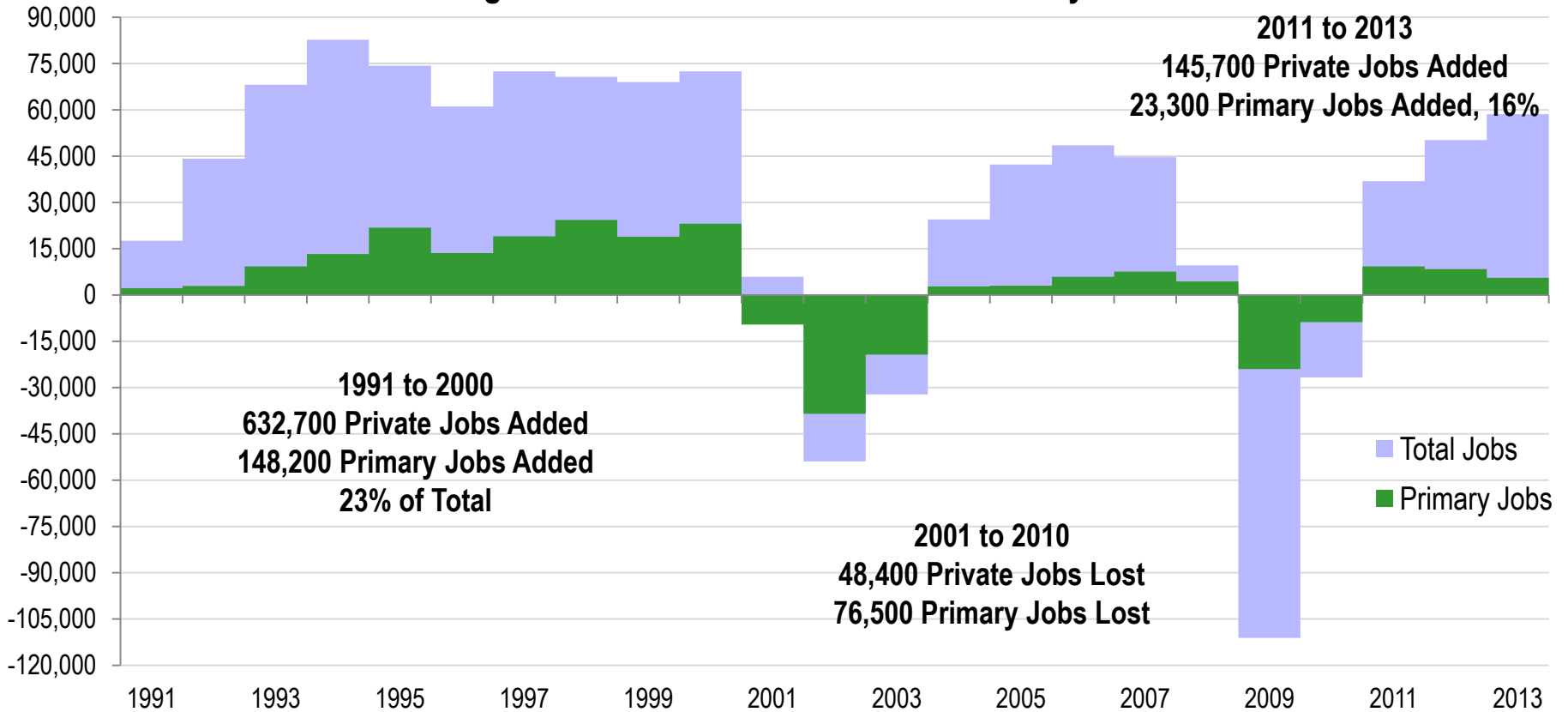
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Change in Colorado Employment

Private Sector Jobs vs. Primary Jobs

Annual Change

Change in Colorado Private Sector and Primary Jobs



Source: Bureau of Labor Statistics, NSA, CBER.

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<http://cber.co>

What is a Primary Job?

All jobs are important to the economy in different ways.

Many economic developers focus on the recruitment and retention of primary jobs because they produce goods and services that are consumed outside the region where the jobs exist. That means these jobs (companies) bring in money from the outside (new money). This new money adds wealth to the region. In turn, additional jobs are created to support primary jobs. As a result, primary jobs have a higher “multiplier effect” than most other jobs. As well, primary jobs often pay higher than average wages.

Historically, the Manufacturing sector has been the source of many primary jobs. Other sources include the Information; Professional, Scientific, and Technical Services; and Management of Corporations and Enterprises sectors.

More specifically, primary jobs can be found at Colorado companies such as Ball Aerospace, Seagate, Starz, Dish Networks, CH2M Hill, Noodles and Company (corporate headquarters). For the sake of this discussion, primary jobs will include the above mentioned four sectors.

Questions and Answers

How do changes in the state GDP compare to the U.S.?

The Bureau of Economic Analysis recently released state Gross Domestic Product data. What do the numbers mean for Colorado? Colorado's employment has grown at a faster rate than the nation. Is the same true for the state's GDP?

State Real GDP and Employment

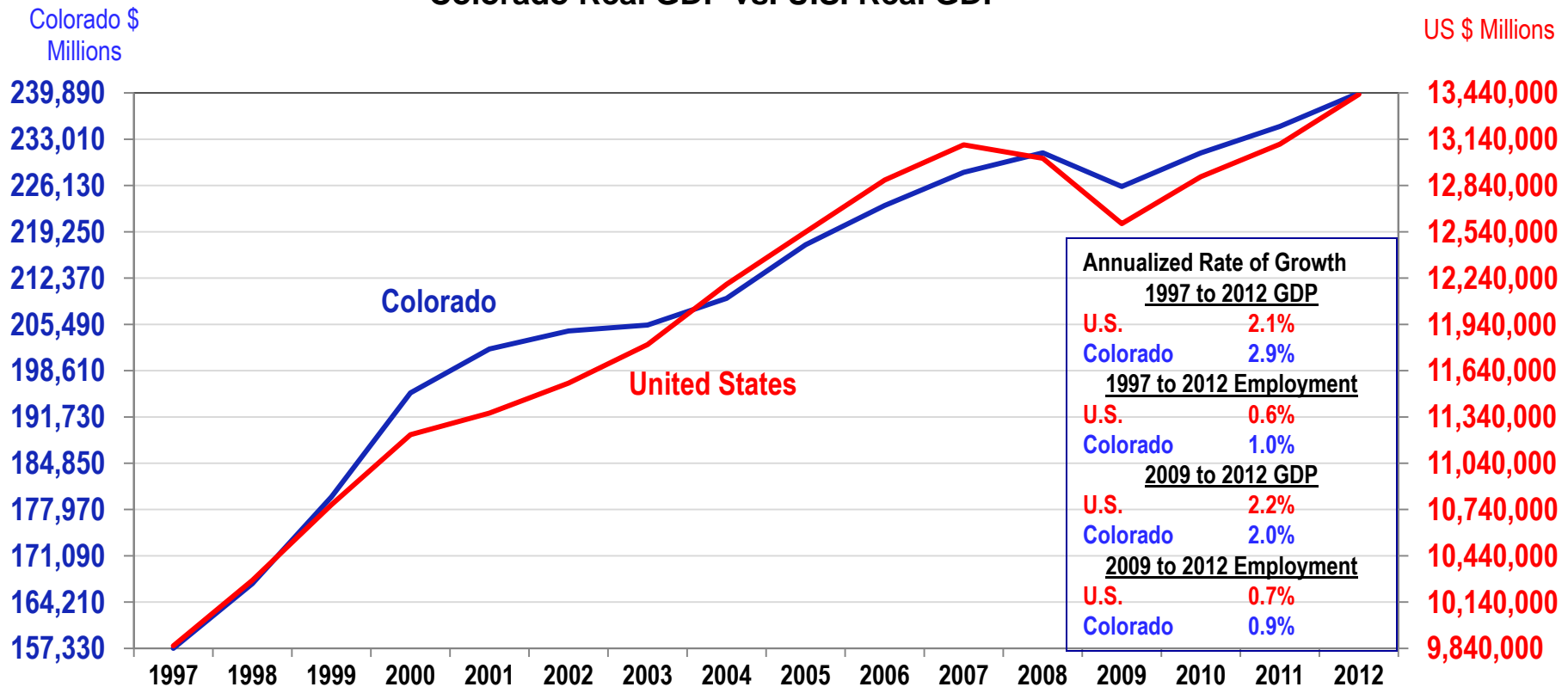
From 1997 to 2012 Colorado's GDP and employment grew at a greater annualized rate than the U.S.

From 2009 to 2012 Colorado's GDP grew at a slower annualized rate than the U.S., but Colorado's employment grew at a faster rate than the U.S.

There is reason to be concerned that Colorado's output has grown at a slower rate than the U.S. during the recovery.

- Total Real Gross Domestic Product
- Colorado vs. U.S. (Sum of States)
-

Colorado Real GDP vs. U.S. Real GDP



Source: Bureau of Economic Analysis.

State Private Sector Real GDP and Private Sector Employment

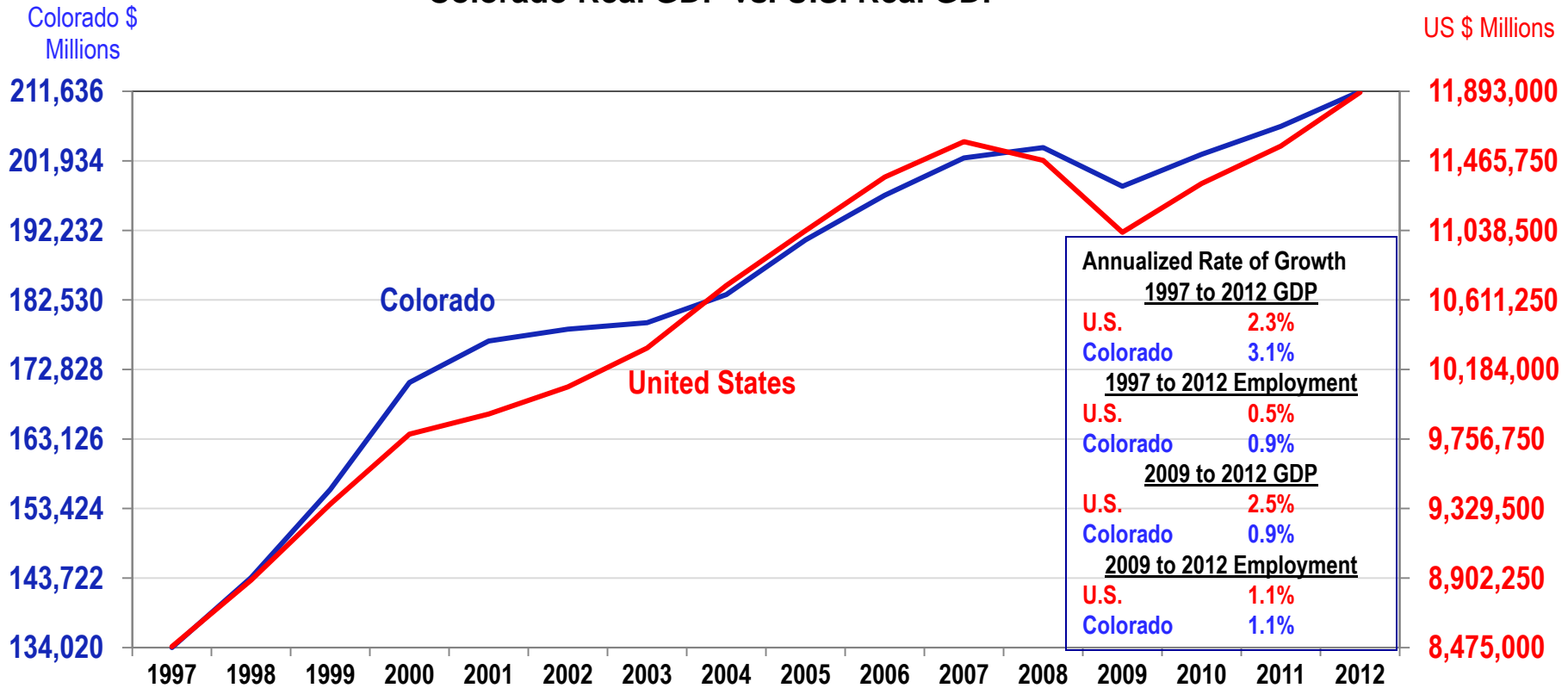
From 1997 to 2012 Colorado's State Private Sector Real GDP and Private Sector employment grew at a faster annualized rate than the U.S.

From 2009 to 2012 Colorado's State Private Sector Real GDP grew at a slower annualized rate than the U.S., but Colorado's Private Sector employment grew at a similar rate to the U.S.

There is reason to be concerned that the state's rate of output growth for the private sector is lagging the rate of private sector output growth for the U.S.

- Total Real Gross Domestic Product – Private Sector
- Colorado vs. U.S. (Sum of States)
-

Colorado Real GDP vs. U.S. Real GDP



Source: Bureau of Economic Analysis.

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Annualized Rate of Change Real GDP

1997 to 2012 vs. 2009 to 2012

Colorado Industries Above Private Sector Growth Rate

This slide contains the sectors of the economy that grew at a faster rate than the overall private sector for 1997 to 2012 and 2009 to 2012. The subsequent two charts contain the same data; however, they are sorted by different periods for easing in understanding the data. Many of the sectors that led the recovery in terms of output are not the sectors that led output growth between 1997 and 2012, specifically Utilities; Arts, Entertainment/Recreation; Accommodations/Food; Admin/Wage Mgmt Services, Retail Trade; and Transportation/Warehousing (right column/purple). Absent from the list for the recovery are Management of Companies/Enterprises; Mining; and Finance/Insurance (left column/purple). At some point, the lack of strong job and output growth in key sectors will ultimately cause a slowdown in the growth of the Colorado economy.

Sectors Above Private Sector Annualized Rate of Growth (1997 to 2012)

- Information 7.2%
- **Mgmt of Companies/Enterprises 6.3%**
- Manufacturing 4.6%
- Prof/Scientific/Technical 4.3%
- **Mining 3.6%**
- Wholesale Trade 3.6%
- **Finance/Insurance 3.4%**
- **Private Sector 3.1%**

Sectors in purple had a higher rate of growth than the private sector for 1997 to 2012, but their rate of growth for 2009 to 2012 was below the private sector rate.

Sectors Above Private Sector Annualized Rate of Growth (2009 to 2012)

- **Utilities 8.7%**
- **Arts/Entertainment/Recreation 7.2%**
- **Accommodations/Food 6.2%**
- Manufacturing 4.9%
- **Admin/Waste Mgmt Services 4.2%**
- Information 4.1%
- **Retail Trade 3.7%**
- Wholesale Trade 3.3%
- Prof/Scientific/Technical 3.1%
- **Transportation/Warehousing 2.6%**
- **Private Sector 2.2%**

Sectors in purple had a lower rate of growth than the private sector for 1997 to 2012, but their rate of growth for 2009 to 2012 was higher than the private sector rate.

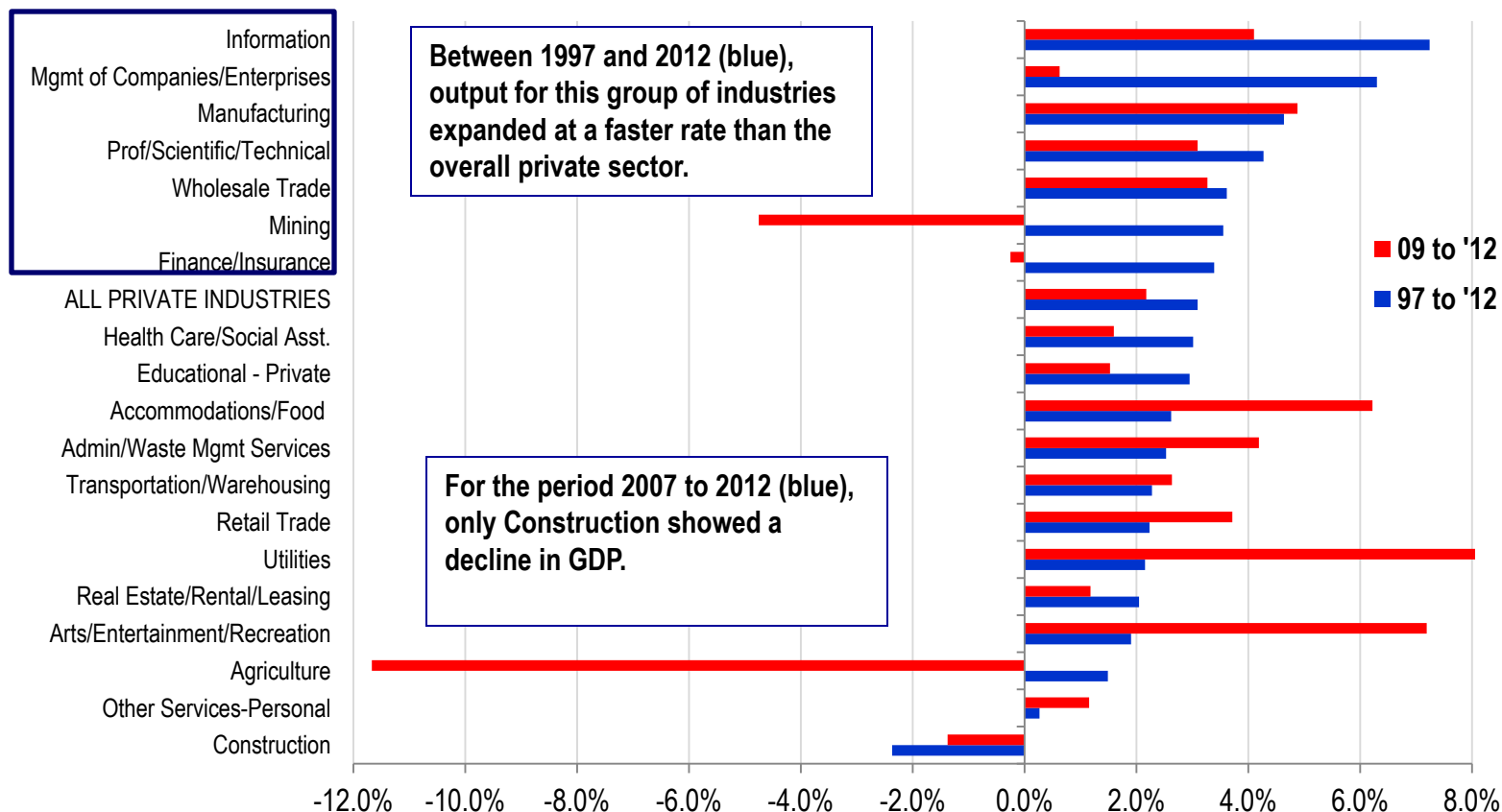
Source: Bureau of Economic Analysis, CBER.

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- Annualized Rate of Change Real GDP
- 1997 to 2012 and 2009 to 2012 – Colorado
- Note: Chart is Sorted by 1997 to 2012 (blue)

Annualized Rate of Change

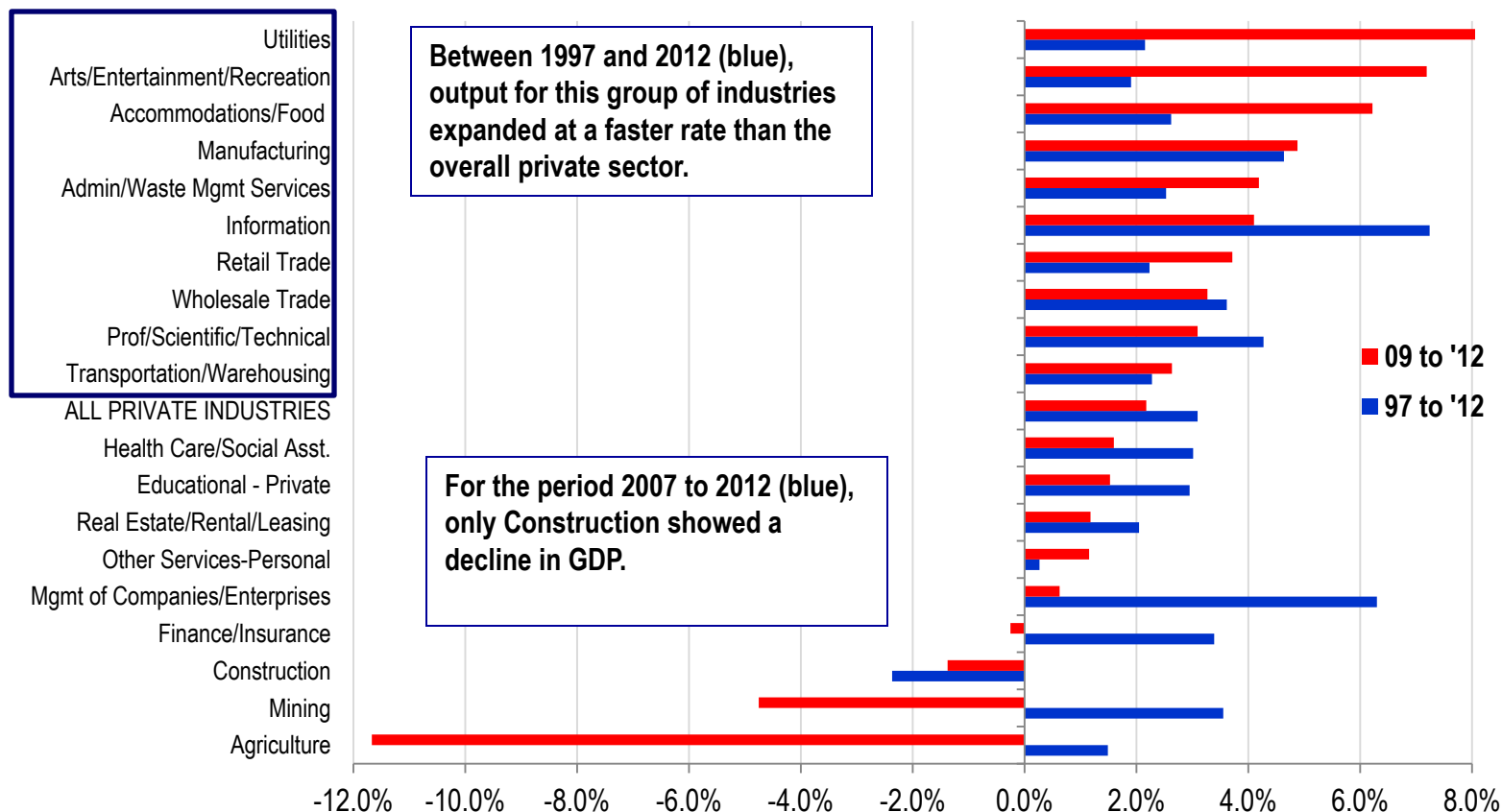


Source: Bureau of Economic Analysis.

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- Annualized Rate of Change Real GDP
- 1997 to 2012 and 2009 to 2012 – Colorado
- Note: Chart is Sorted by 2009 to 2012 (red)

Annualized Rate of Change



Source: Bureau of Economic Analysis.

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● Annualized Rate of Change Real GDP – Declining Industries

● 1997 to 2012 and 2009 to 2012

● United States (Sum of States) and Colorado

Colorado's output grew at a greater annualized rate than the U.S., 2.9% vs. 2.1% for the period 1997 to 2012. For the shorter period, 2009 to 2012, the U.S. outperformed the state 2.2% to 2.0%. The following industries showed negative growth during these two periods.

U.S. Declining Industries 1997 to 2012

- Mining
- Other Services-Personal
- Construction

U.S. Declining Industries 2009 to 2012

- Agriculture
- Mining
- Mgmt of Companies/Enterprises
- Private Education
- Government

Colorado Declining Industries 1997 to 2012

- Construction

Colorado Declining Industries 2009 to 2012

- Agriculture
- Mining
- Construction
- Finance and Insurance

Source: Bureau of Economic Analysis, CBER.

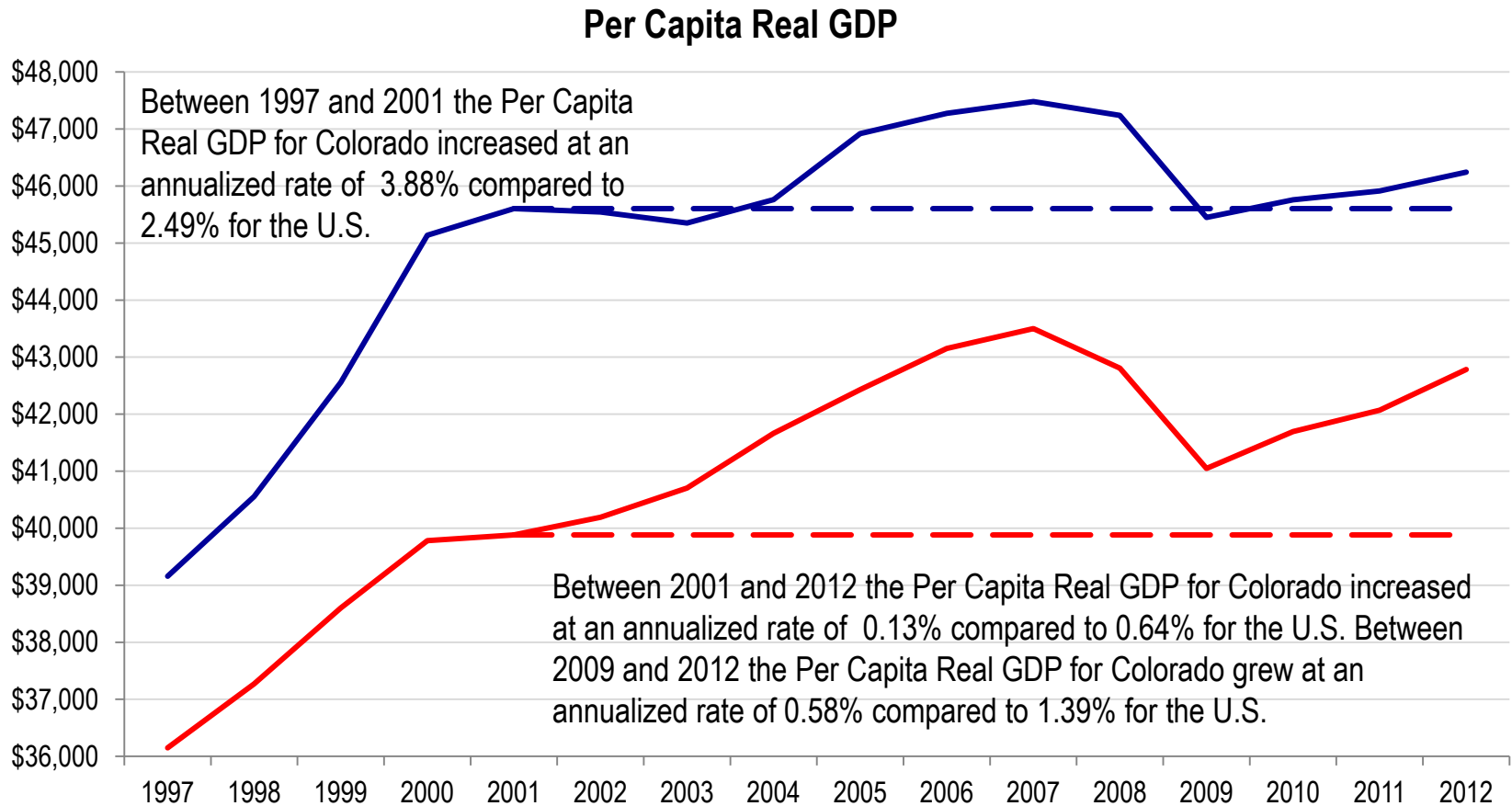
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● Per Capita Real GDP

● Since 2001 Colorado's Per Capita Real GDP has grown at an annualized rate less than the U.S. This should be a source of concern for state leaders.

Per Capita Real GDP U.S. vs. Colorado



Source: Bureau of Economic Analysis. Per Capita GDP is based on population.

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Summary and Challenges

Colorado Employment The Lost Decade and Beyond

The three years of recovery after the 2001 and Great Recession have similar job growth patterns.

The job growth after the 2001 recession was:

- 2004 +26,800 jobs, 1.2%
- 2005 +46,400 jobs, 2.1%
- 2006 +53,100 jobs, 2.4%.
- On average 42,100 jobs were added each year.

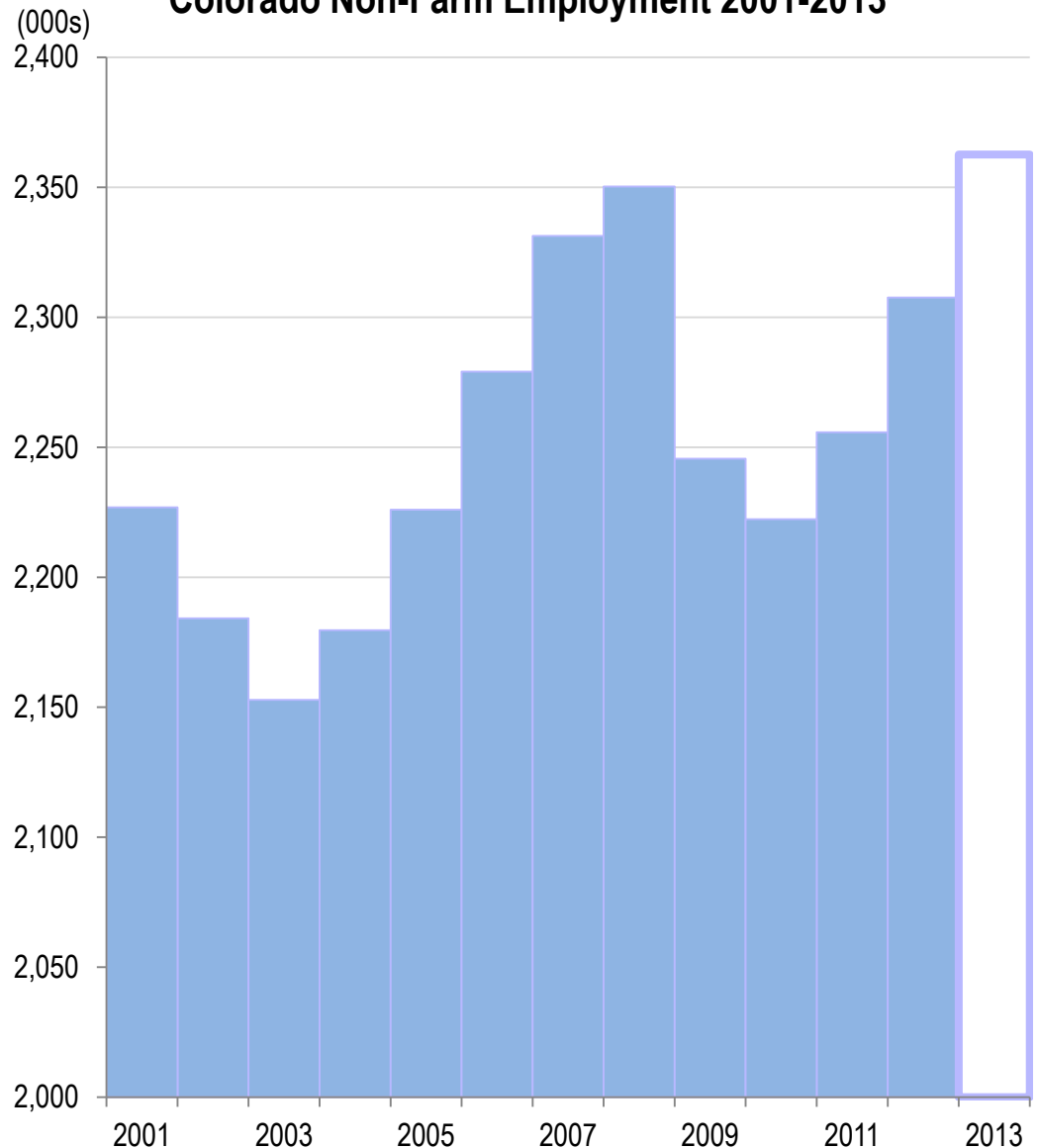
Projected growth after the 2007 recession will be:

- 2011 +33,500 jobs, 1.5%
- 2012 +51,800 jobs, 2.3%
- 2013 up to 55,000 jobs will be added, 2.4%.
- On average, about 46,700 jobs will be added each year.

Break out the champagne! Employment in 2013 will finally exceed 2008 peak employment. This took five years.



Colorado Non-Farm Employment 2001-2013



Source: Bureau of Labor Statistics, CBER.

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<http://cber.co>

Summary of the Colorado Economy

Good News

- The state continues to add jobs, although the rate they are being added is slowing.
- There has been continued improvement in the real estate markets.
- Overall the impact of sequestration has been offset by growth in other areas; however, some industries and geographic areas may feel some pain.
- Improved revenue streams for state and local governments.
- Support for Advanced Industries (Aerospace, photonics, biosciences, etc.) as a key to the creation of primary jobs.

Challenges

- There should be concern about the limited number of primary jobs that are being added.
- Dissatisfaction and lack of engagement within the workforce.
- Even though the overall unemployment rate is high, it is reportedly low in some advanced technology positions.
- “Proper” level of funding for PK-12 and higher education and proposed legislation that will address it.
- Holding PK-12 and higher education accountable for providing quality education in an efficient manner.
- Mother Nature – Fire, Water, and Snow (or lack of snow).
- Growth of Colorado industries that rely on natural resources (Tourism, Extractive Industries, Agriculture).
- The unforeseen and unintended implications resulting from the implementation of Amendment 64.
- Increased dissatisfaction with state leadership.

The 2013 CBER forecast and monthly updates can be found at <http://cber.co/>



Review of Colorado Economy Five Months Through May 2013

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