CBER
Colorado Economic Forecast 2014

Colorado-based Business and Economic Research
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Overview

This chartbook is divided into the sections listed below.

- Summary of 2014 Forecast – The Short Version
- The CBER Forecast – A Review of the 2013 Forecast and Related Issues
- The Global Economy
- The U.S. Economy
- The Colorado Economy
- The Colorado Economy – Key Industries and the Competitive Advantage
- The Colorado Employment Forecast
- Summary, Opportunities, and Challenges
- Appendix

Summary of 2014 Economic Forecast The Short Version

While this summary is a little too long for Twitter, the basic forecast story is intended to be Twitter-short. In 2014 the global, U.S., and Colorado economies will be stronger in 2014.

Global and United States

- The rate of global output growth will be stronger for most countries in 2014 as output will increase to 3.1%.
- U.S. Real GDP growth will be in the range of 2.3% to 2.7%, up significantly from 2013. Job growth will be stronger and the unemployment rate will decline.

Colorado

- The most likely scenario is that Colorado job growth will be in the range of 68,000 to 74,000 in 2014. Growth will be broad based driven by the Construction; Healthcare, Professional, Scientific, and Technical Services, Accommodations and Food Services, and Retail Trade Sectors.

The CBER Forecast – A Review of the 2013 Forecast and Related Issues

The Purpose of the CBER Forecast

The purpose of this chartbook is to present an employment forecast for the state of Colorado based on factors that are driving change in Colorado and the United States. It can be used for economic development, workforce training, and decision making in business. In the end the only certainty is that the forecast will either be wrong or lucky. Either way, the value of the forecast is the "story" that explains the change in 2014 and beyond.

Changes in Gross Domestic Product

The foundation for the forecast is the factors that cause change and projected change in the global and U.S. GDP. As well, attention is paid to the four components of the GDP– consumption, business investment, government spending, and net exports. Because the Colorado economy is closely linked to the national economy, trends in these four components are relevant to Colorado.

Every effort has been made use reliable information and accurate analysis to describe changes in the Colorado economy. This and any other forecast cannot fully account for major shocks to the system, such as unexpected policy decisions, political unrest in other parts of the world, acts of terrorism, and natural disasters.

Wage and Salary Data

This forecast focuses on wage and salary data for the following reasons:

- Everyone understands jobs.
- Employment data is available in the public domain.
- Employment data is produced on a timely basis.
- From an economic development standpoint, employment is the metric of choice because "it all starts with a job" – demand for goods and services is created, workers are hired, wages are paid, goods and services are purchased and the cycle repeats.

Review of CBER 2013 Forecast

Review of 2013 Forecast

The first step in the preparation of the 2014 forecast was to review the causes of the variance for the 2013 forecast. As well, other forecasts were reviewed and an effort was made to understand why they missed the mark.

Preparations for the 2013 forecast began shortly after Thanksgiving in 2012. In Early January 2013, the CBER forecast for 2013 was released. At that time the economy was improving, but it remained volatile. Although 2013 has passed, final data revisions will not be completed for awhile. CBER estimates that 2013 data will be:

- *Real GDP growth rate will be lower than anticipated 1.7% to 2.0%.*
- *National employment will be slightly higher than anticipated, 2.1 to 2.3 million.*
- *Colorado's contribution to job growth will be slightly lower than projected, 2.8% to 3.1%*
- *Colorado will add 65,000+ jobs in 2013.*

Scenarios for 2013 CBER Forecast

Optimistic Scenario
- **U.S. Real GDP greater than 2.3%**
- **Colorado will add more than 55,000 workers**

Most Likely Scenario
- **U.S. Real GDP 1.9% to 2.3%**
- **The U.S. will add 1.9 to 2.1 million workers**
- **Colorado will account for 2.5% of U.S. jobs added**
- **Colorado will add 45,000 to 55,000 workers**

Pessimistic Scenario
- **U.S. Real GDP less than 1.9%**
- **Less that 45,000 Colorado workers**

Source: CBER.

What was Missed in 2013?
BLS Data Error and Forecast Bias Errors

A review of the CBER and other state forecasts shows that a major source of forecast error in the 2013 forecast was the underestimation of the job growth based on data provided by BLS.

BLS Data Error

Short-term employment forecasts are typically based on data provided by the Bureau of Labor Statistics. At the time a forecast is prepared the best available data is the monthly employment data, the CES series. Historically, the annual job changes provided on and monthly basis and the March revisions have at times been off by as much as ±25%. Typically, higher levels of errors have occurred during periods of sharp growth or decline. A description of the revision process is provided in the Appendix.

The 2013 Wage and Salary employment data (CES) showed that jobs were being added at a declining rate and that about 55,000 jobs would be added in 2013.

It now appears that BLS will revise the data to show that at least 65,000 jobs will be added in 2013.

Forecast Bias

It is a common practice for forecasters to understate job growth. This may occur for a variety of reasons:

- Many economic models understate growth during periods of expansion and overstate growth during periods of decline. This is called regression to the mean.
- Some economists make conservative forecasts because they believe greater harm may occur from overstating rates of growth than from understating it.
- Some forecasts are understated so the economist can later state that the economy performed better than expected. They feel this puts them and their sponsors in a better light than if they overstate a forecast..

The moral of the story is to look at the track record of employment forecasts to determine their tendencies for errors. The intent of this forecast is to eliminate all sources of bias, including intentional bias.

Other 2013 Economic Forecasts Forecast Accuracy

Other forecasts were reviewed as a means of understanding what happened in the economy during 2013 and errors made by other economists in their projections. At this time, there is reason to believe the BLS projection for 2013 will show that at least 65,000 jobs were added.

2013 Colorado Forecasts

CBER Economic Forecast

- *Real GDP will increase slightly. Colorado will add jobs by a greater amount than 2012 (45,000 to 55,000 jobs).*

CU Boulder Business Economic Outlook

- *Real GDP will decrease slightly. Colorado will add jobs by a significantly smaller amount than 2012 (+42,500 jobs).*

Colorado Legislative Council (CLC)

- *Real GDP will decrease significantly. Colorado will add jobs by a significantly smaller amount than 2012 (+ 23,000 jobs).*

Office of State Planning and Budgeting (OSPB)

- *Real GDP will decrease slightly. Colorado will add jobs by a significantly smaller amount than 2012 (+28,200 jobs).*

Accuracy of 2013 Colorado Forecasts

The 2013 BLS Wage and Salary (CES) employment data will not be finalized until March 2015; however, the preliminary update in March 2014 will likely show that Colorado added at least 65,000 jobs in 2013. The difference between the monthly data and the March revision was a source of error for all forecasts.

The December forecasts for CLC and OSPB were ultra-conservative. The intentional bias in those projections is justifiable given their role in the state government. Their March 2013 forecasts for 2013 were more reasonable.

The CU Boulder 2013 forecast was bearish. This marked the second consecutive year that CU projected job growth at a lower level than the prior year. The CU economists failed to recognize that Colorado job growth was improving at an increasing rate.

What was Missed in 2013? Other Factors

Every year there is economic activity that has an impact on the forecast that was different than expected. Some of those factors are listed below.

United States

- The relationship between output growth and job growth remained distorted.
- Job growth was stronger than expected.
- Manufacturing was stronger than anticipated, particularly the auto industry.
- Construction grew at a faster than anticipated level, despite rising mortgage rates.
- Housing prices improved at a faster rate than expected.
- Equity markets grew at a higher than expected rate.
- The impact of sequestration, the partial government shutdown, and fallout from the budget and debt ceiling debate had less of a short-term impact than anticipated.
- Throughout the year, consumers were nervous about when the Fed would announce an end to "tapering". Once plans were announced to begin tapering, consumer fears diminished.

Colorado

- Net migration was greater than expected.
- Job growth was stronger than anticipated, yet the state has been slow to add new business establishments.
- The concentration of key industries continued to decline.
- Construction activity picked up significantly over the year. It was clear the industry was starting to drive activity in other sectors.
- Job growth in the extractive industries fell off.
- Federal employment within Colorado declined, raising the question, "Is this the start of a long-term trend?"
- Mother Nature was not kind. The wildfires and floods had a tremendous negative impact on individuals and local economies; however, the overall impact on the state was minimal.
- Gasoline prices declined and remained at lower levels.

Self-Inflicted Activity that Diminished Economic Performance in 2013

Throughout 2013 positive activity within the U.S. and Colorado economy was often overshadowed by the growing displeasure with federal and state leaders, which in turn reduced confidence in the economy. Hopefully, 2014 will be better!

United States

Americans lost confidence in the leadership of President Obama and Congress for the following reasons:

- Benghazi "cover up".
- Relations with Syria, Egypt, North Korea, and Israel.
- NSA data gathering and Edward Snowden.
- Federal budget debate, partial government shutdown, mishandling of shutdown, and debt ceiling debate.
- Disastrous rollout of Obamacare website.
- Uncertainty over Ben Bernanke's replacement.
- Sequestration.
- Uncertainty about when tapering would begin.

Consumers are less likely to make purchases and businesses are less likely to invest in their organizations when they are uncertain about the leadership of the country. Sadly, ugly politics defined 2013.

Colorado

Coloradans lost confidence in the leadership of Governor Hickenlooper and the State Legislature for the following reasons:

- Inefficient and ineffective implementation of regulations relating to Amendment 64.
- Threat by northern counties to secede from Colorado.
- The overwhelming defeat of the Amendment 66 to raise taxes by $1 billion to support education.
- Decision by the governor to let a future leader address the death penalty for Nathan Dunlap.
- Adoption of SB 252, the alternative energy bill that negatively impacted energy costs in rural Colorado.
- Gun-control legislation was viewed by many as a knee-jerk reaction to an unfortunate situation.
- Passage of anti-fracking efforts in local communities.
- Recall of two Democrat state legislators and resignation of a third.

The state economy will perform better if the political leaders can operate in a manner that is less dysfunctional .

The Global Economy

Overview – The Global Economy 2014
Better Times Lie Ahead

In 2014, output for the global economy is expected to grow at a rate greater than 2013 for most countries.

On a Positive Note

- Emerging countries will continue to record stronger rates of growth than mature economies. Their economies will expand at a slightly lower rate than in 2013.
- Mature economies will see a higher rate of output growth than in 2013, most notably in the U.S., Eurozone, and Japan. The U.S. will have the highest rate of expansion, the Eurozone will continue to chug along, and Japan will be constrained by tight monetary policy.
- In 2014, both China and India will post growth rates similar to the past year. These rates are lower than previous highs for cyclical and structural reasons.

Challenges and Risks

- Mature economies will be challenged to stabilize their financial sectors and add jobs.
- Some emerging markets will face slower rates of growth and some will be challenged by tighter financial conditions.
- U.S. monetary policy, particularly the way QE is unwound may touch all countries.
- High level of debt in mature countries.
- Entitlement programs in the U.S. and Japan are considered a risk to the stability of the global economy.
- There are plenty of downside risks, but there is more upside potential than previous years. The upside potential outweighs the downside risk.

Global Real GDP

Both the Conference Board (TCB) and the International Monetary Fund (IMF) are optimistic about the global economy in 2014.

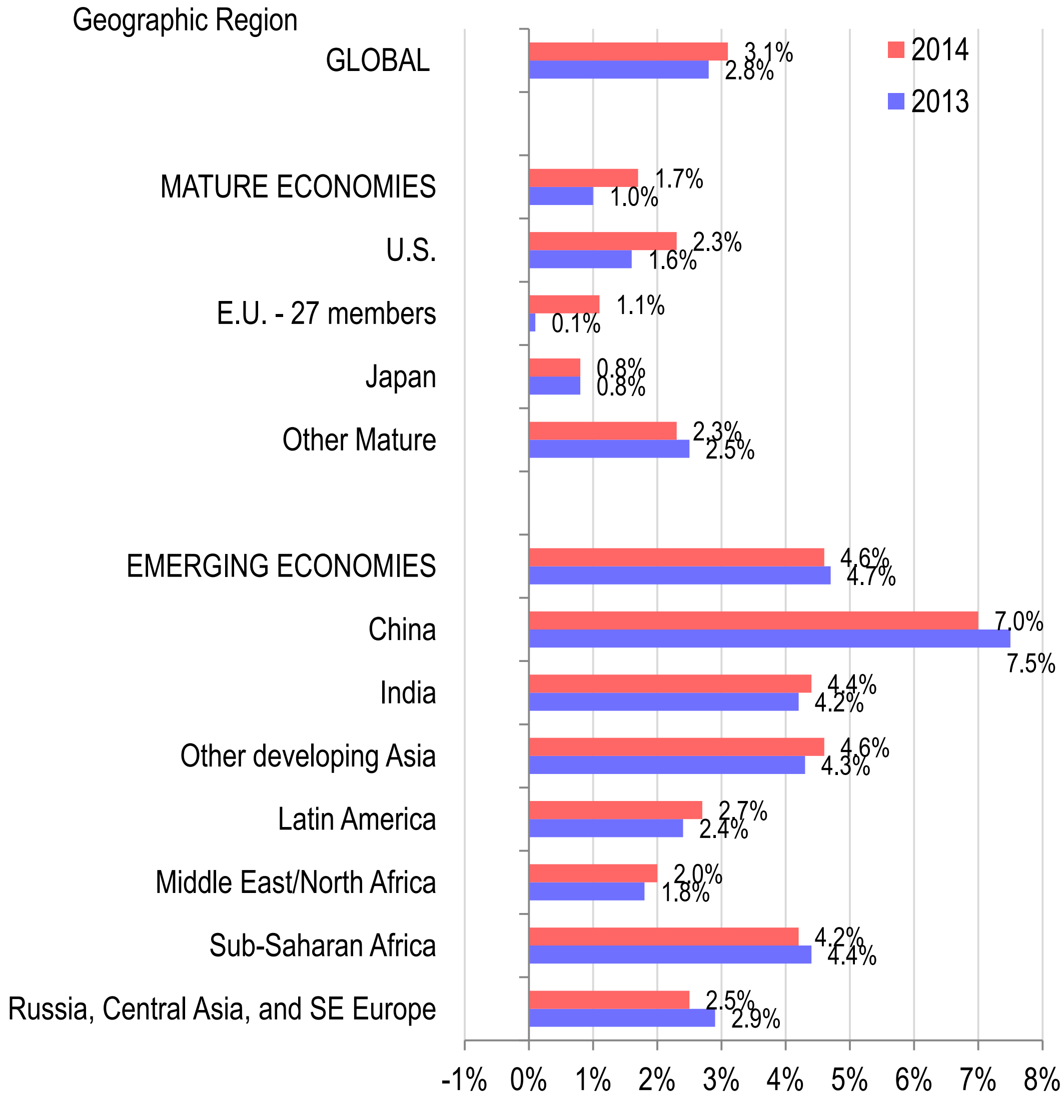
In last year's CBER forecast, 2013 output growth in all regions was at or below the 2012 values. In 2014 output growth is above the 2013 level for most regions.

TCB projections for 2013 vs. 2014 are:
- Global 2.8% vs. 3.1%
- Mature 1.0% vs. 1.7%
- Emerging 4.7% vs. 4.6%

IMF projections for 2013 vs. 2014 are:
- Global 2.9% vs. 3.6%
- Mature 1.2% vs. 2.0%
- Emerging 4.5% vs. 5.1%

The most notable improvements are in the U.S. and Europe.

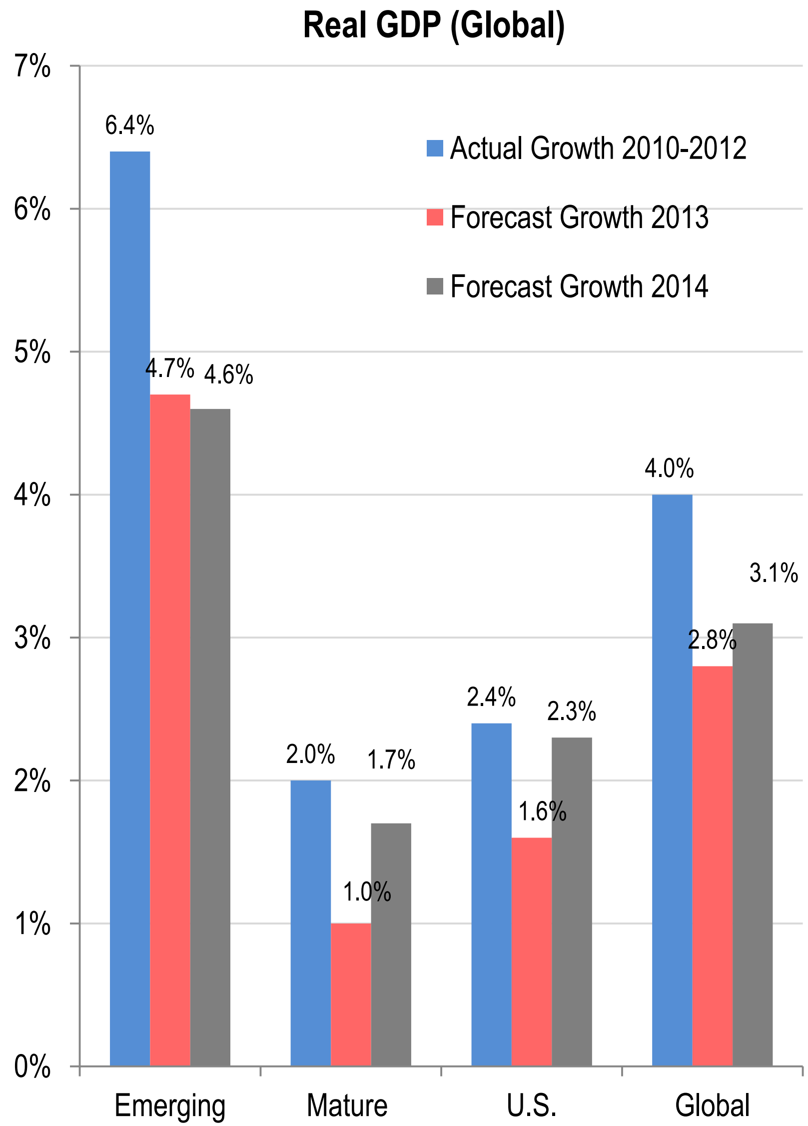
Global Real GDP 2013 vs. 2014



Source: The Conference Board (November, 2013), IMF (October 2013), CBER.

The Output Performance of U.S. Versus Mature and Emerging Economics

It is a welcome sight to see improvement in output for the global, mature, and U.S. markets; however, 2014 projections remain below the rate of growth for 2010 to 2012.



Source: The Conference Board (November, 2013), CBER.

The U.S. Economy

Overview – The U.S. Economy 2014
Better Times Lie Ahead

The following charts tell the story about the U.S. economy. In short, 2013 was ugly and 2014 brings hope that our country's leadership will be less dysfunctional and the economy will maintain the momentum that has been building.

On a Positive Note…

- The rate of Real GDP growth will remain below potential, but will be at a higher rate in 2013. It will be in the 2.3 to 2.7% range.
- Consumers will remain selective and purchase only goods that are necessary. Real personal consumption will expand at a slightly higher rate in 2014.
- Real Capital Spending will not be robust; it will increase at a rate of 4.0% to 4.5%.
- The U.S. added 2.2 million jobs in 2013 and will add 2.3 million in 2014.
- U.S. Unemployment will continue to decline and will approach 6.2% at the end of 2014.
- Per Capita Personal Income will increase by 3.9% in 2014.
- Next year inflation will remain in the vicinity of the Fed's target rate at 2.1%.
- Purchasing managers for both goods and services have been optimistic and should remain that way in 2014.

Some Mixed News…

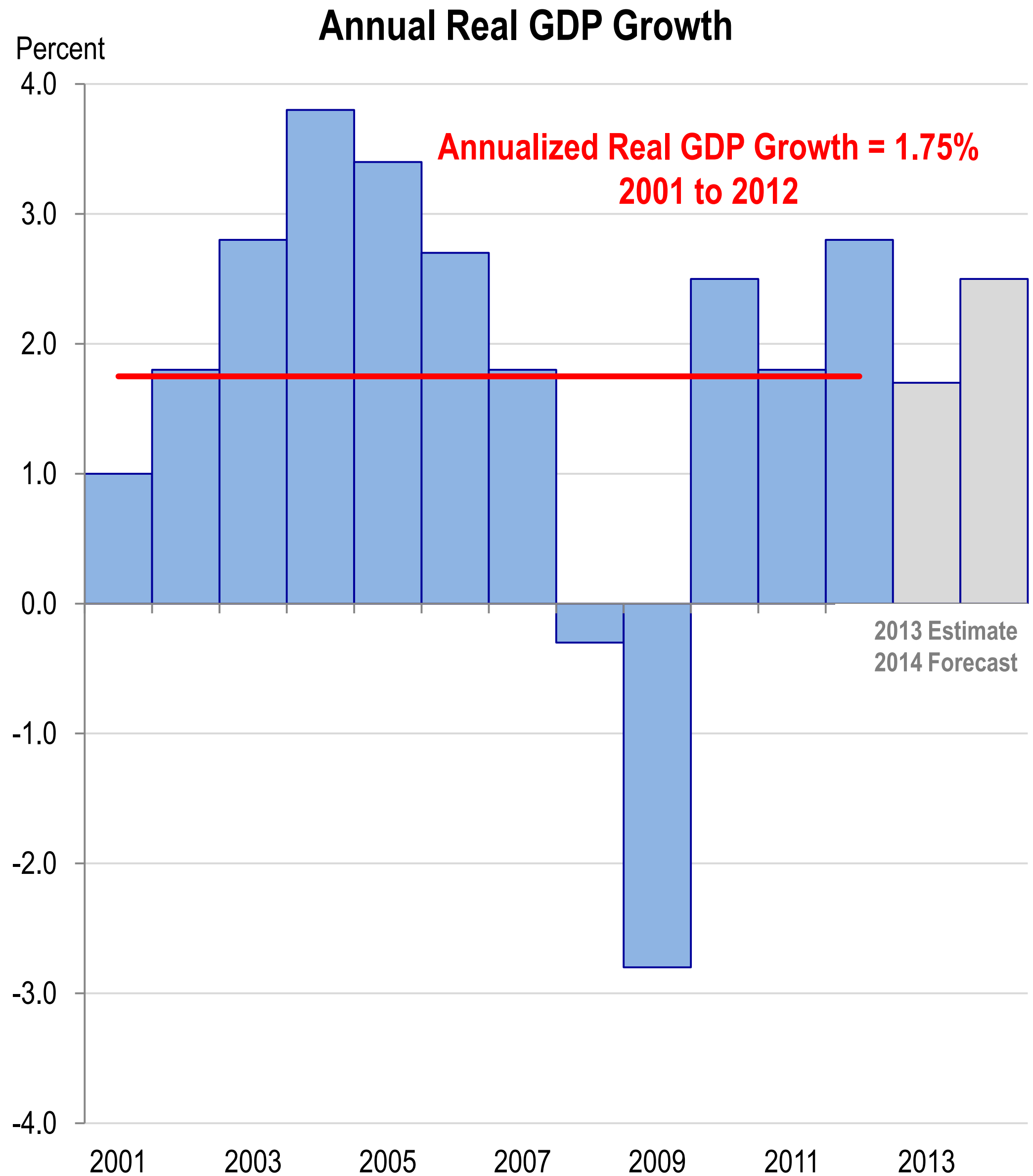
- Manufacturing shipments bottomed out in early 2009 and have improved since. More recently their rate of growth has flattened out. Auto sales have followed a similar pattern.
- Personal and public debt are both good and bad news. Debt supports consumption, but….
- Housing prices have increased, which increases wealth, but may make it more difficult for some to purchase a home. Increased construction may slow the rate of growth of housing prices.
- Construction has escalated, but interest rates have risen. Although rates remain below historical levels, higher rates will prevent some from purchasing homes.
- The equity markets grew at stronger than expected rates in 2013. That level of growth is unlikely in 2014. The volatility of the markets was minimal.
- This coming year the U.S. will return to 2008 peak employment .

Annual Real GDP Growth

Real GDP grew at an annualized rate of 1.75% for the period 2001 to 2012 (red line).

The rate of growth for 2013 will be at or below that level, but it will be higher in 2014. Output will grow at a rate between 2.3% to 2.7% in 2014.

- Consumption will remain weak.
- Business investment will pick up slightly.
- Government spending will remain weak.
- Net exports will not change drastically. If anything the trade imbalance may decline slightly.

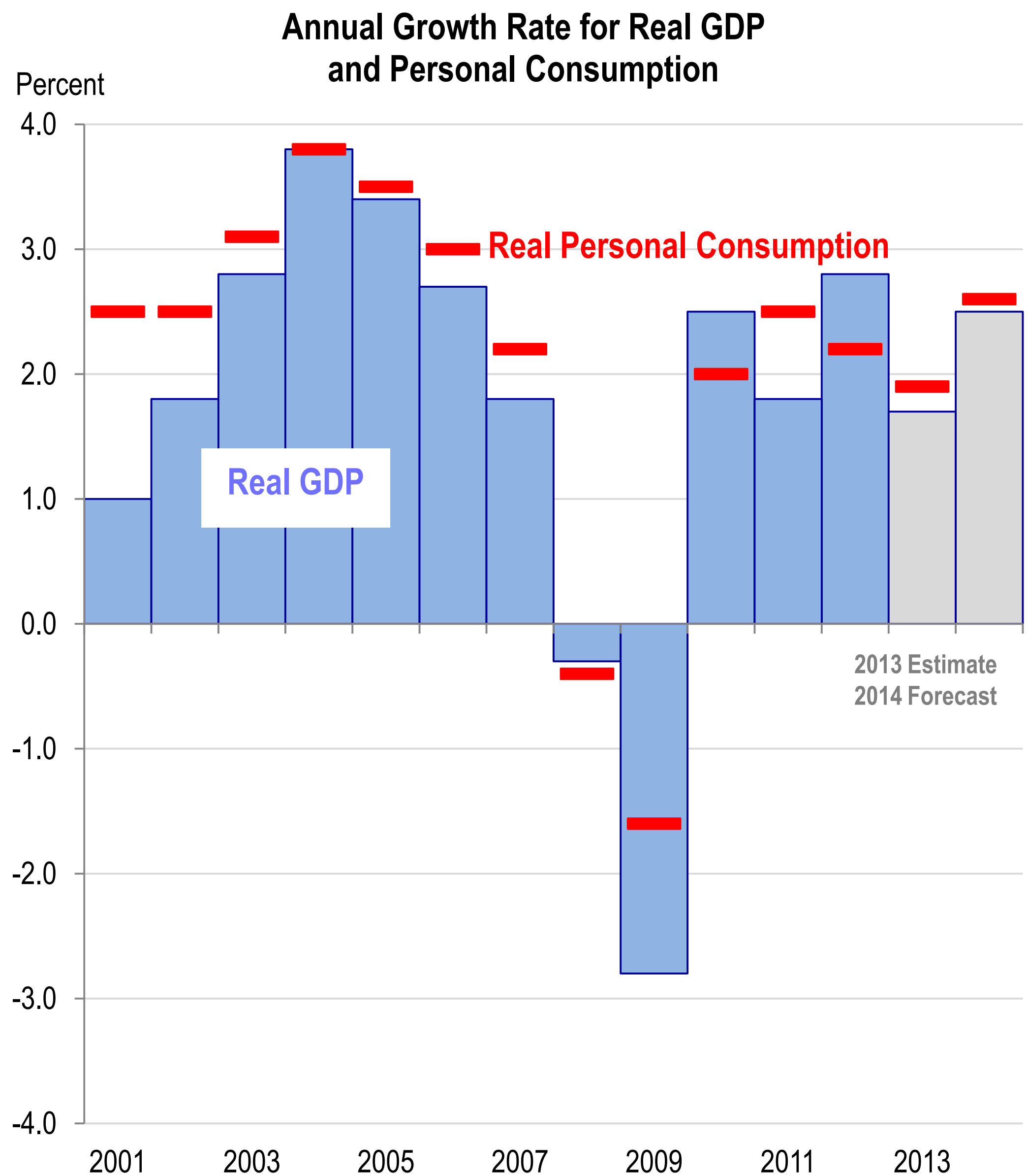


Source: Bureau of Economic Analysis, CBER, chained in 2009 dollars.

Annual Real Personal Consumption and GDP Growth

In 1990 Personal Consumption (red bars) accounted for about 64% of GDP (blue); today it is about 68%. Because consumption is such a high percentage of output there is a strong correlation between the growth rates of these two variables.

Real personal consumption will grow at an increasing rate in 2014; however, the rate of growth will be only 2.4% to 2.8%.



Source: Bureau of Economic Analysis, CBER, chained in 2009 dollars.

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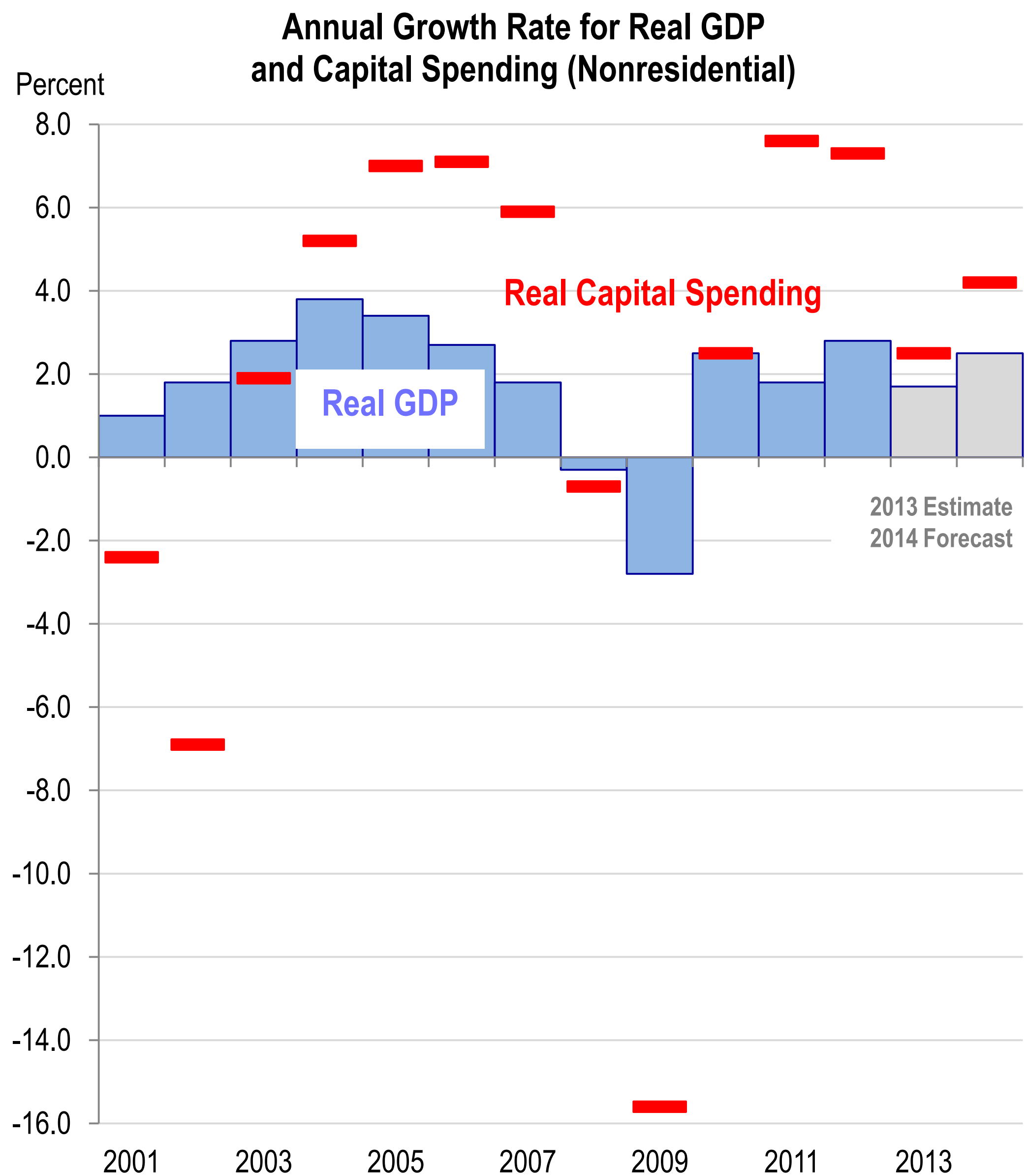
Annual Real Capital Spending and GDP Growth

In 1990 Capital Spending (red bars) accounted for about 12% of GDP (blue). Over the years it has remained near 12%.

There is a reasonably strong relationship between capital spending and output. While they typically tend to move in the same direction (grow or decline at the same time), the variance of capital spending is usually greater.

Real capital spending (red bars) will increase at a higher rate 2014; between 4.0 and 4.4%.



Source: Bureau of Economic Analysis, CBER, chained in 2009 dollars.

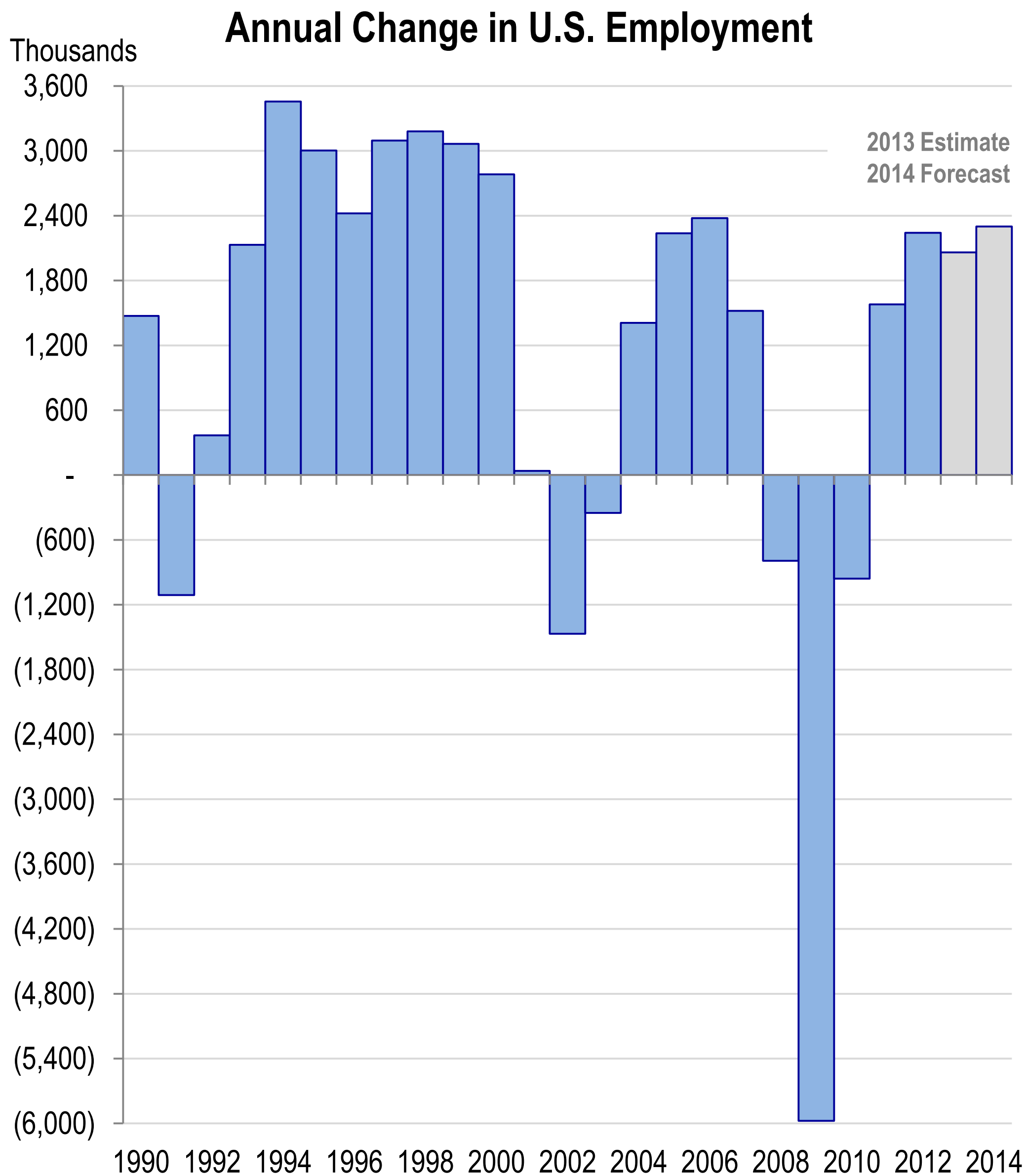
Annual Change in U.S. Employment

The U.S. has recovered from the Great Recession at a rate slightly greater than the 2001 recession.

The current level of change in employment is much less than the 1990s, but much greater than the 2000s. Average annual change by decade are as follows:

- 2.1 million from 1990 to 1999
- 0.2 million from 2000 to 2009
- 1.4 million from 2010 to 2014.

The U.S. will add approximately 2.3 million jobs in 2014 and return to 2008 peak employment.



Source: Bureau of Labor Statistics, CBER.

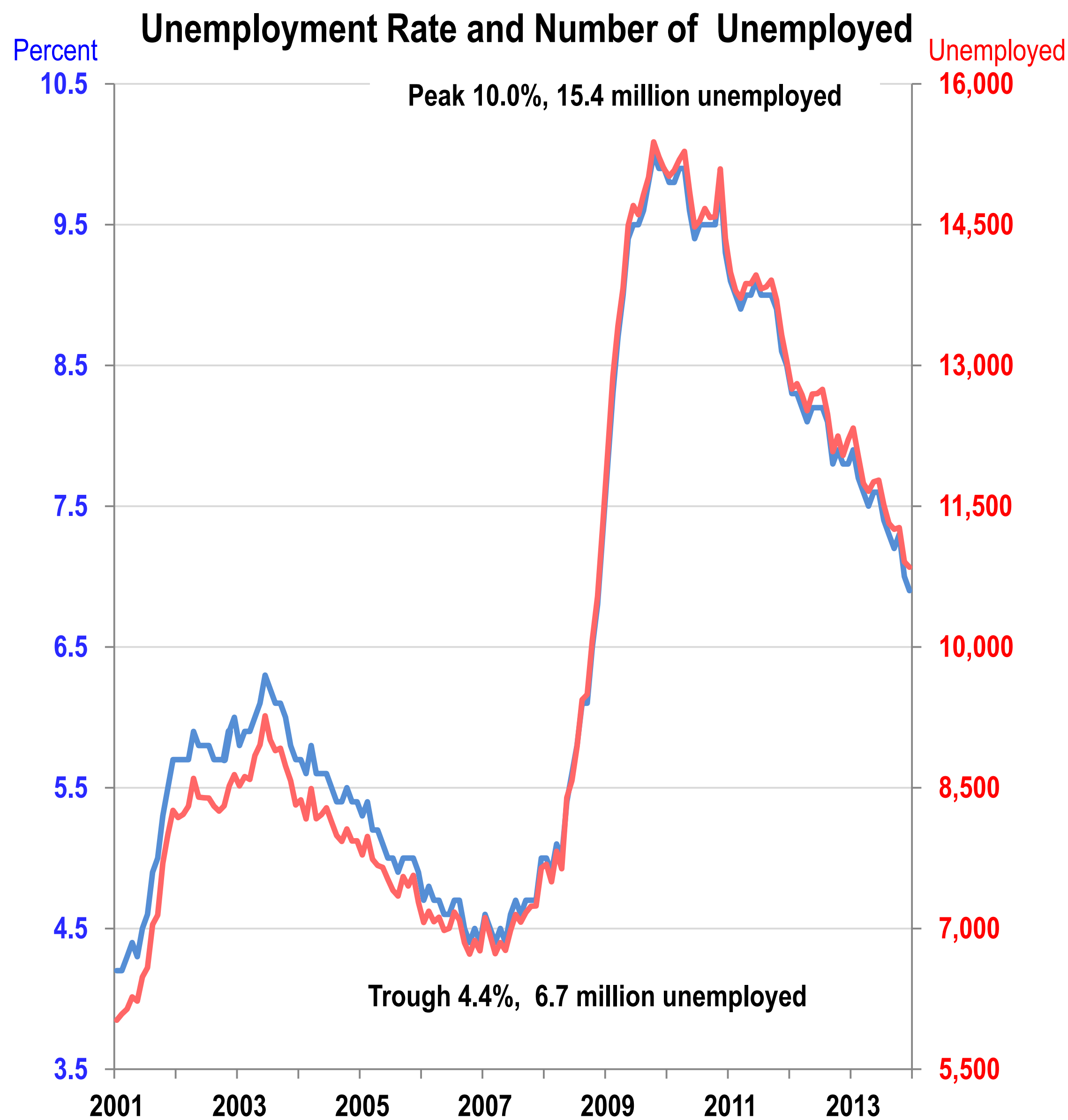
U.S. Unemployment Rate and Number of Unemployed

Both the unemployment rate and number of unemployed have slowly trended downward since peaking in late 2010.

At the end of 2013, the unemployment rate (blue) will be at or slightly below 7.0%.

The total number of unemployed (red) will drop below 10.9 million. This is 4.2 million above the low point in 2007, but only 4.5 million below the high point in 2009.

By the end of 2014 unemployment will approach 6.2%.

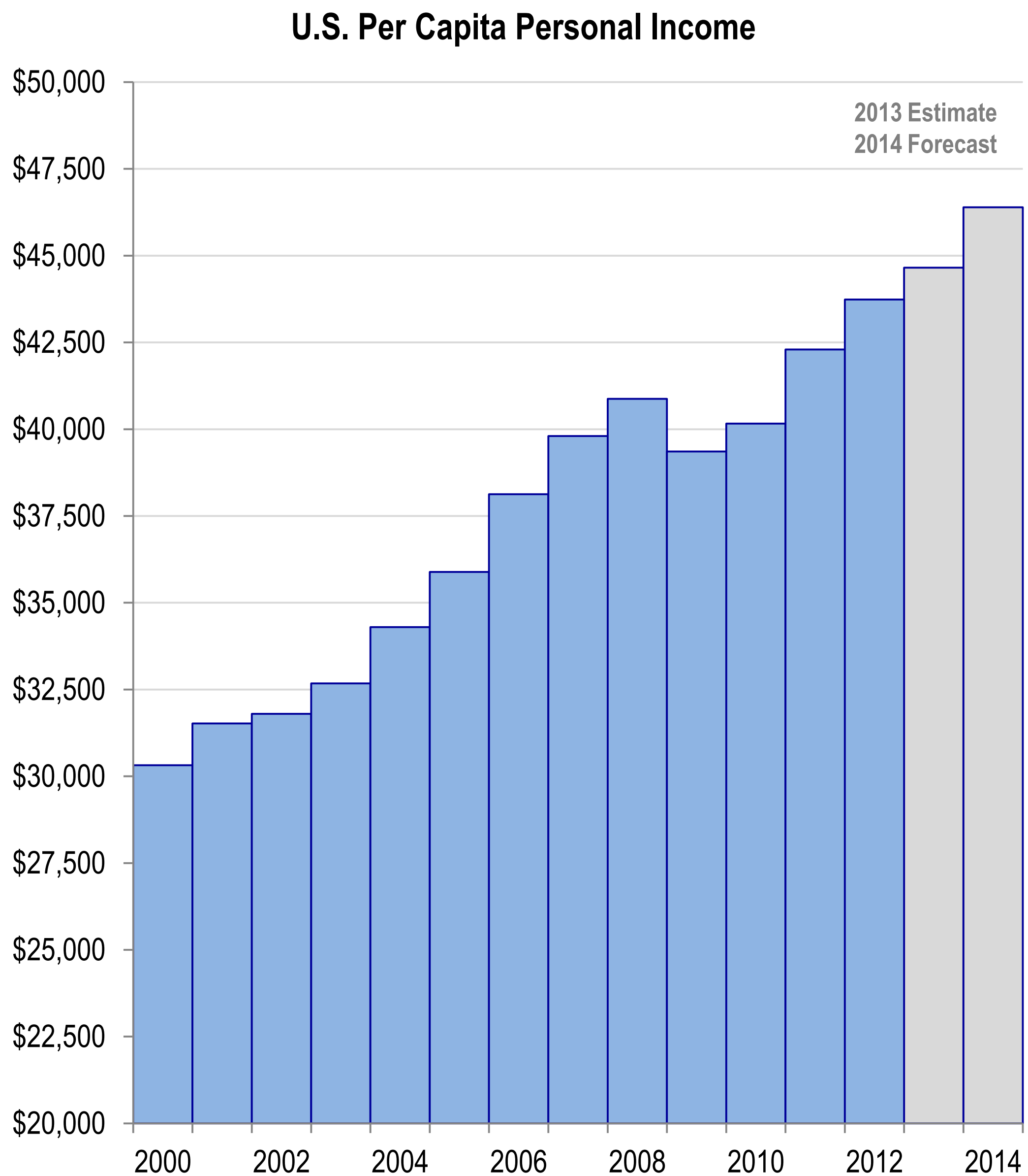


Source: Bureau of Labor Statistics, SA, CBER.

Per Capita Personal Income (PCPI)

After a decline in 2009, PCPI is again showing solid gains. The U.S. PCPI is expected to increase by 3.9% in 2014.

The U.S. PCPI showed negligible growth in 2002 and it declined in 2009. It posted gains in all other years.

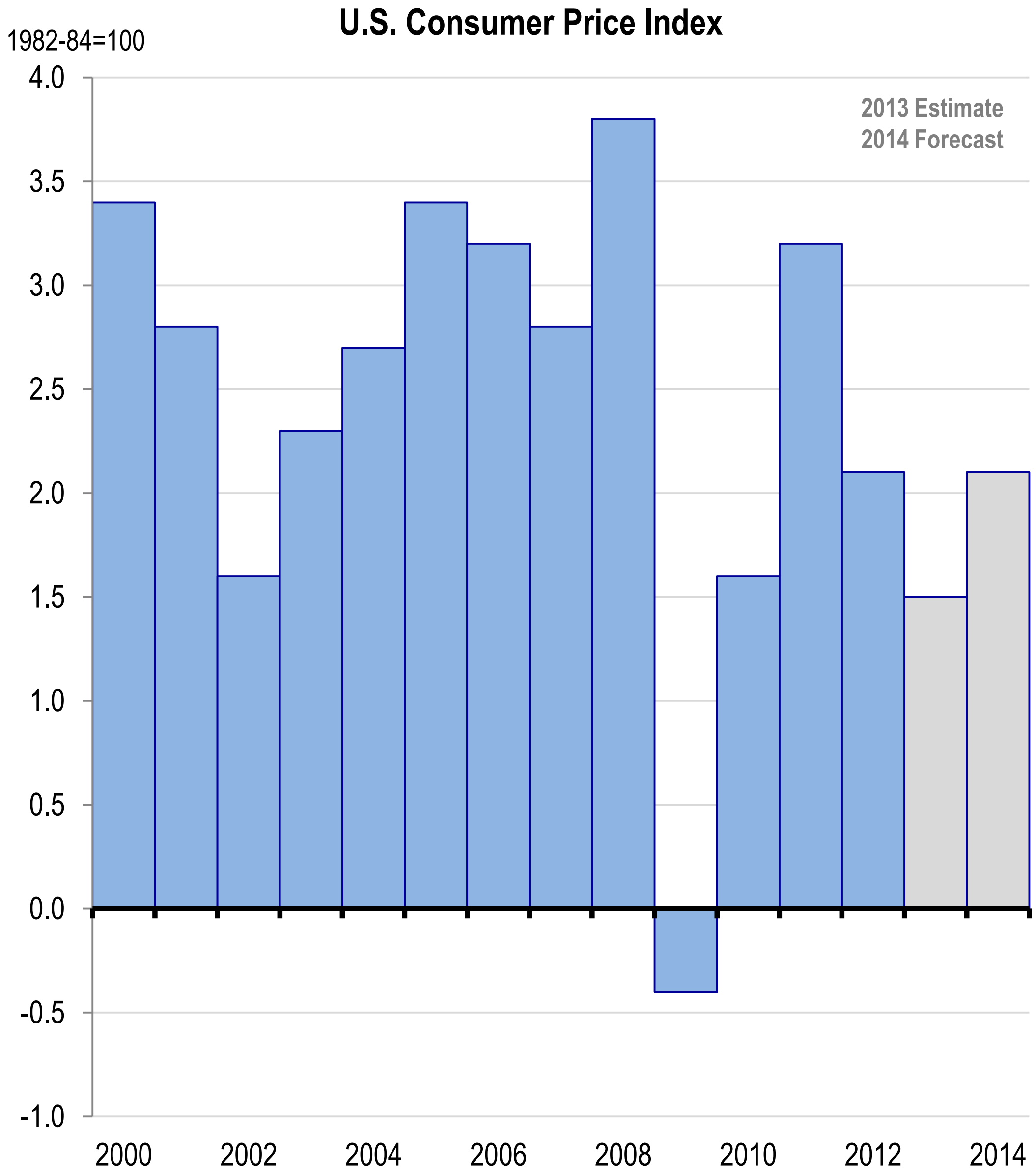


Source: Bureau of Economic Analysis, CBER.

Consumer Price Index (CPI)

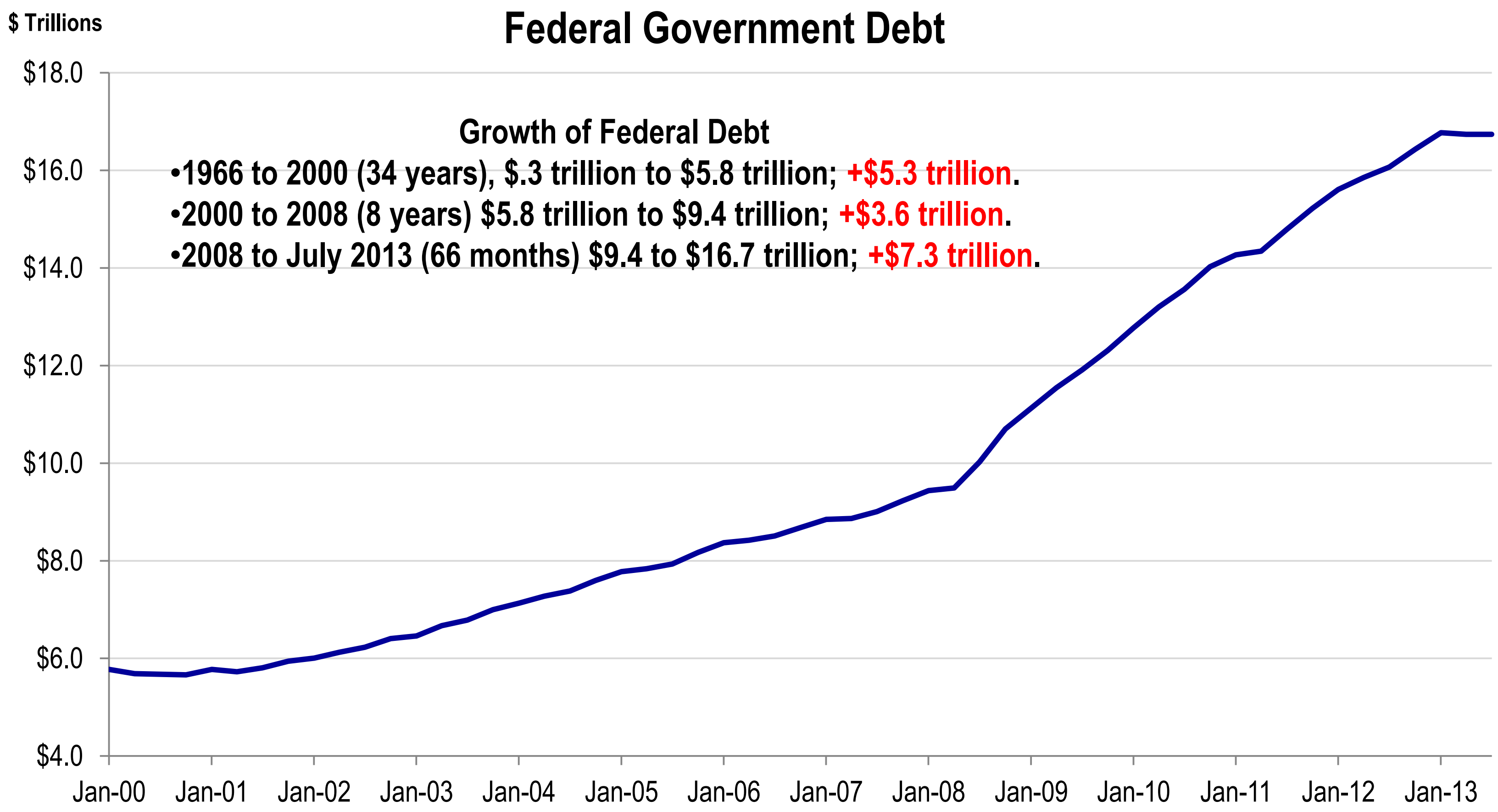
U.S. Inflation, as measured by the CPI, is expected to remain near the Fed's target rate in 2014.

The CPI will increase slightly in 2014 due to improvement in the housing market.



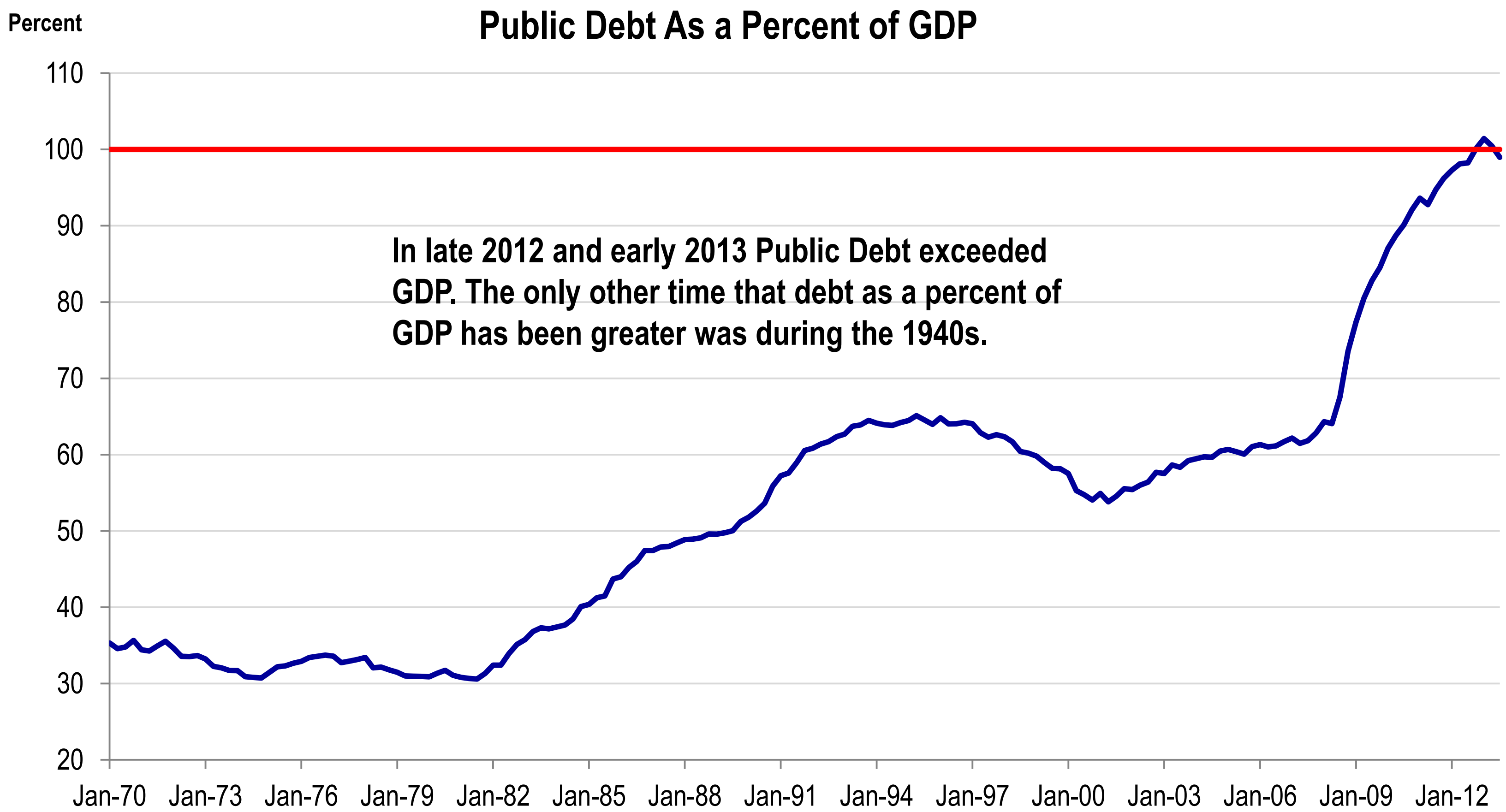
Source: Bureau of Labor Statistics, CBER.

Federal Government Debt



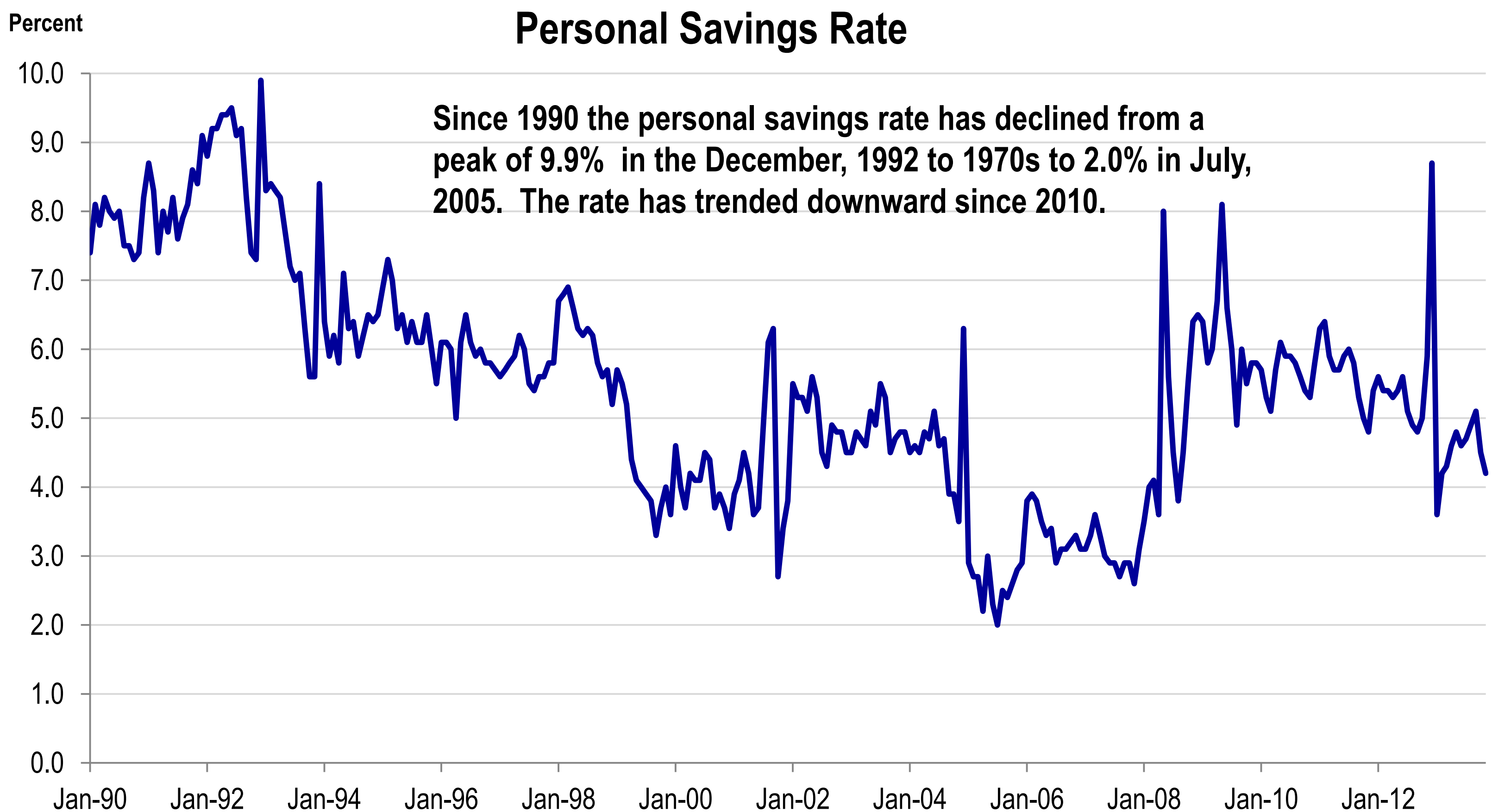
Source: FRED.

Public Debt as a Percent of GDP



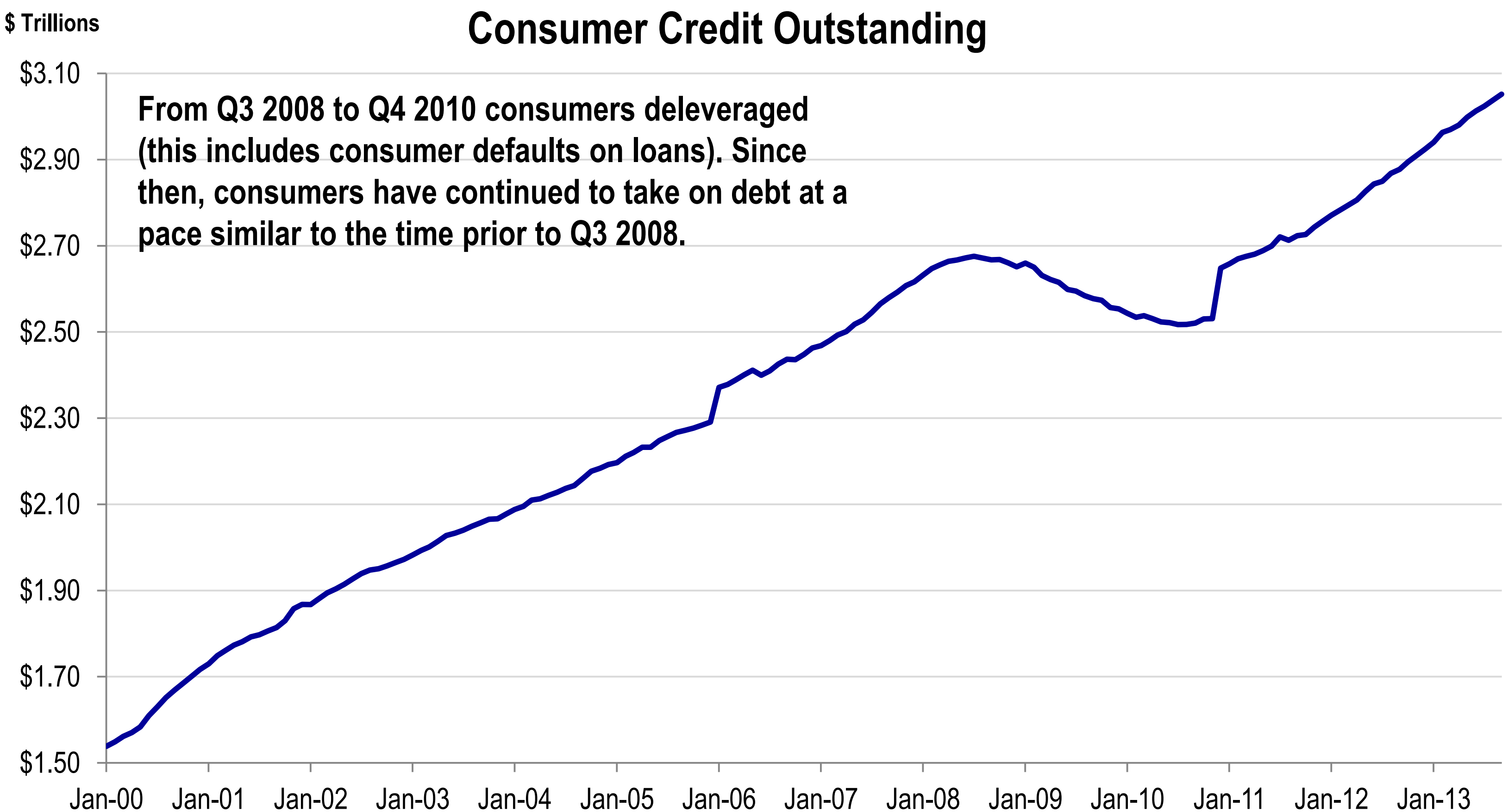
Source: FRED. Note: the Gross Domestic Product was redefined in 2013.

Personal Savings Rate
Percentage of Disposable Personal Income



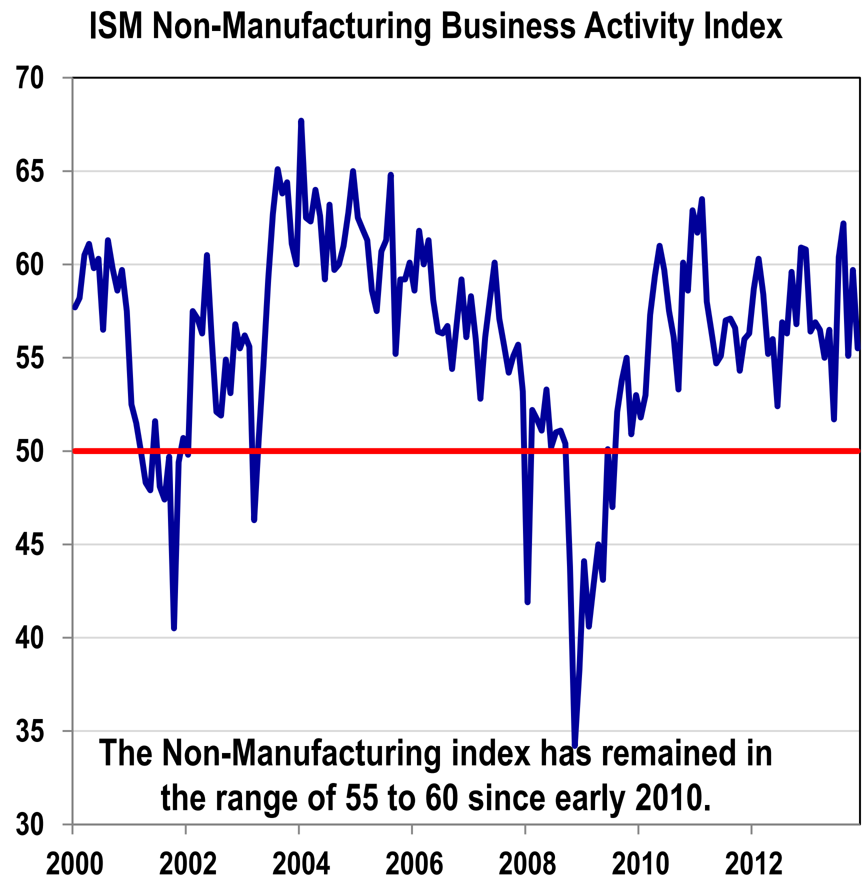
Source: FRED, SA.

Consumer Credit Outstanding



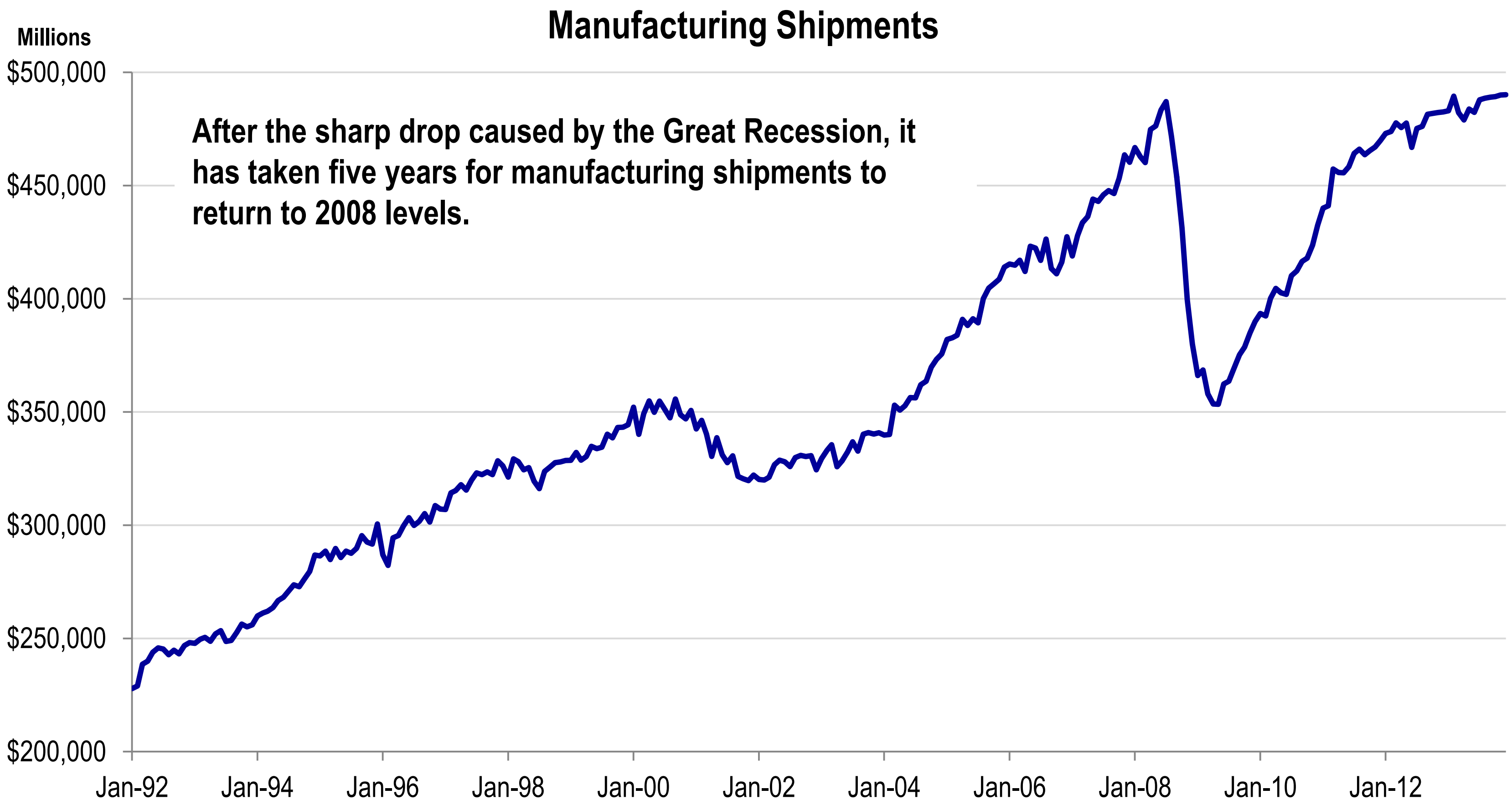
Source: Federal Reserve, G.19, SA.

ISM Indices



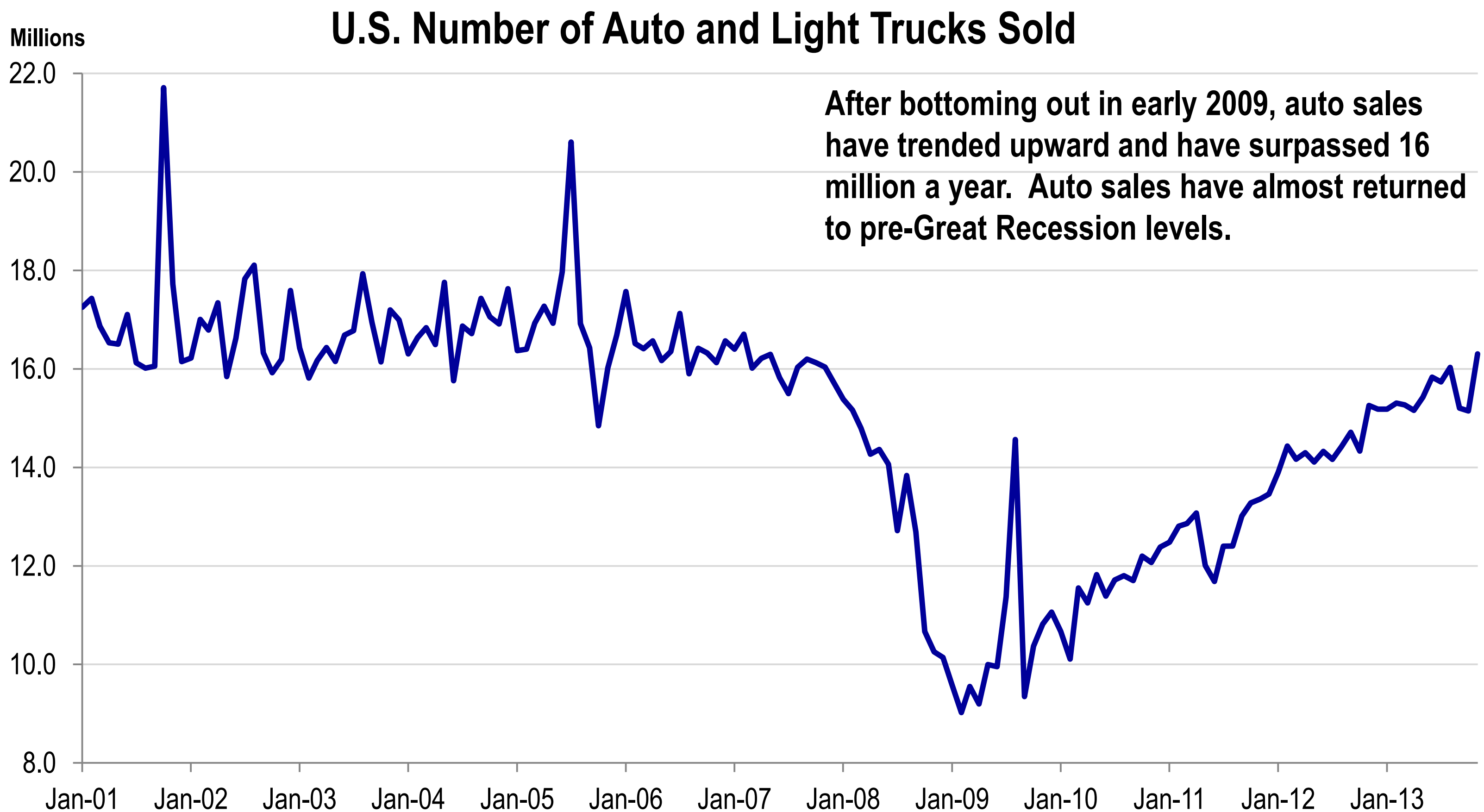
Sources: Institute for Supply Management (ISM), FRED.

U.S. Manufacturing Shipments



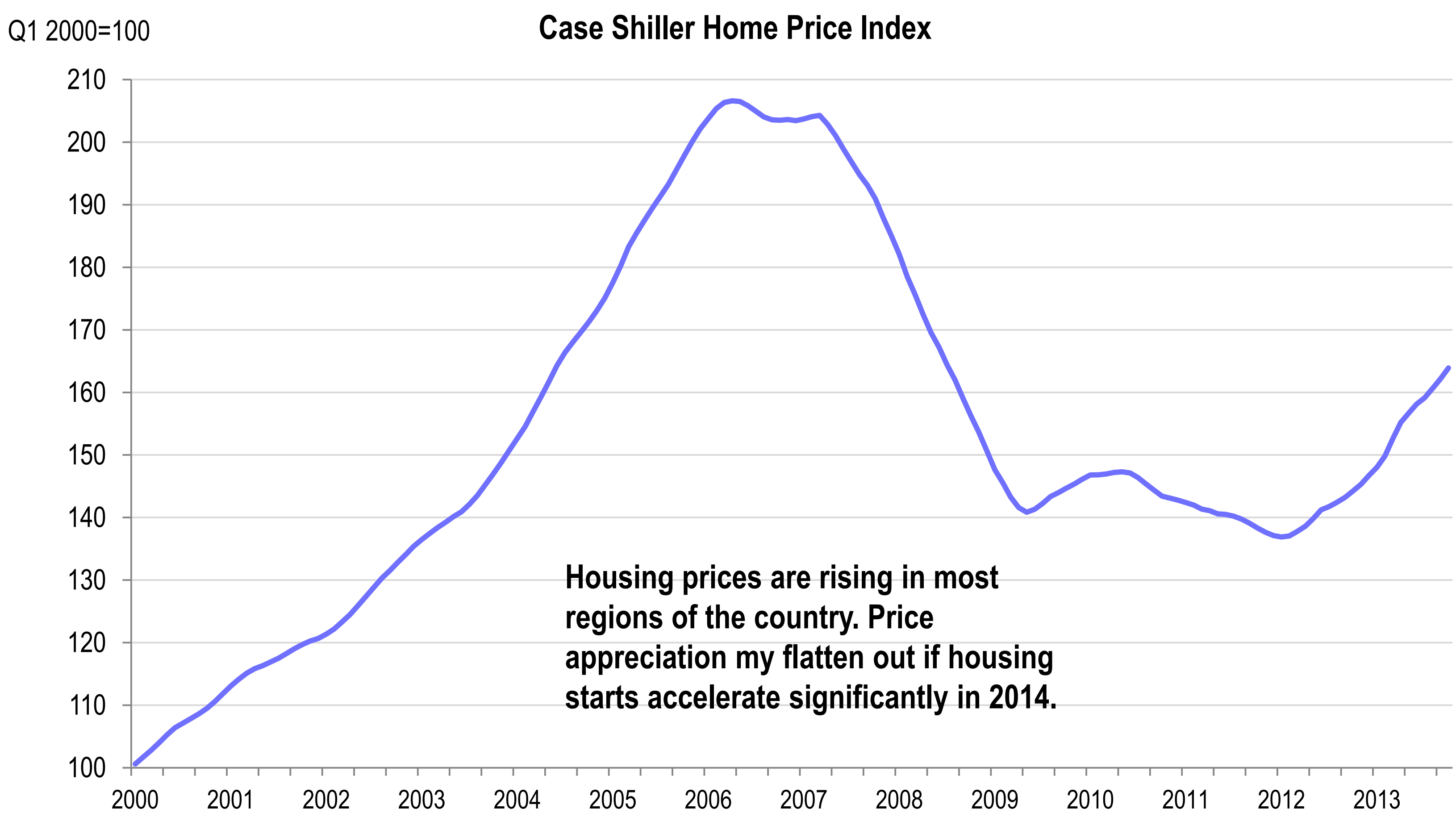
Source: FRED, Department of Commerce: Census.

Weekly Auto and Light Truck Sales



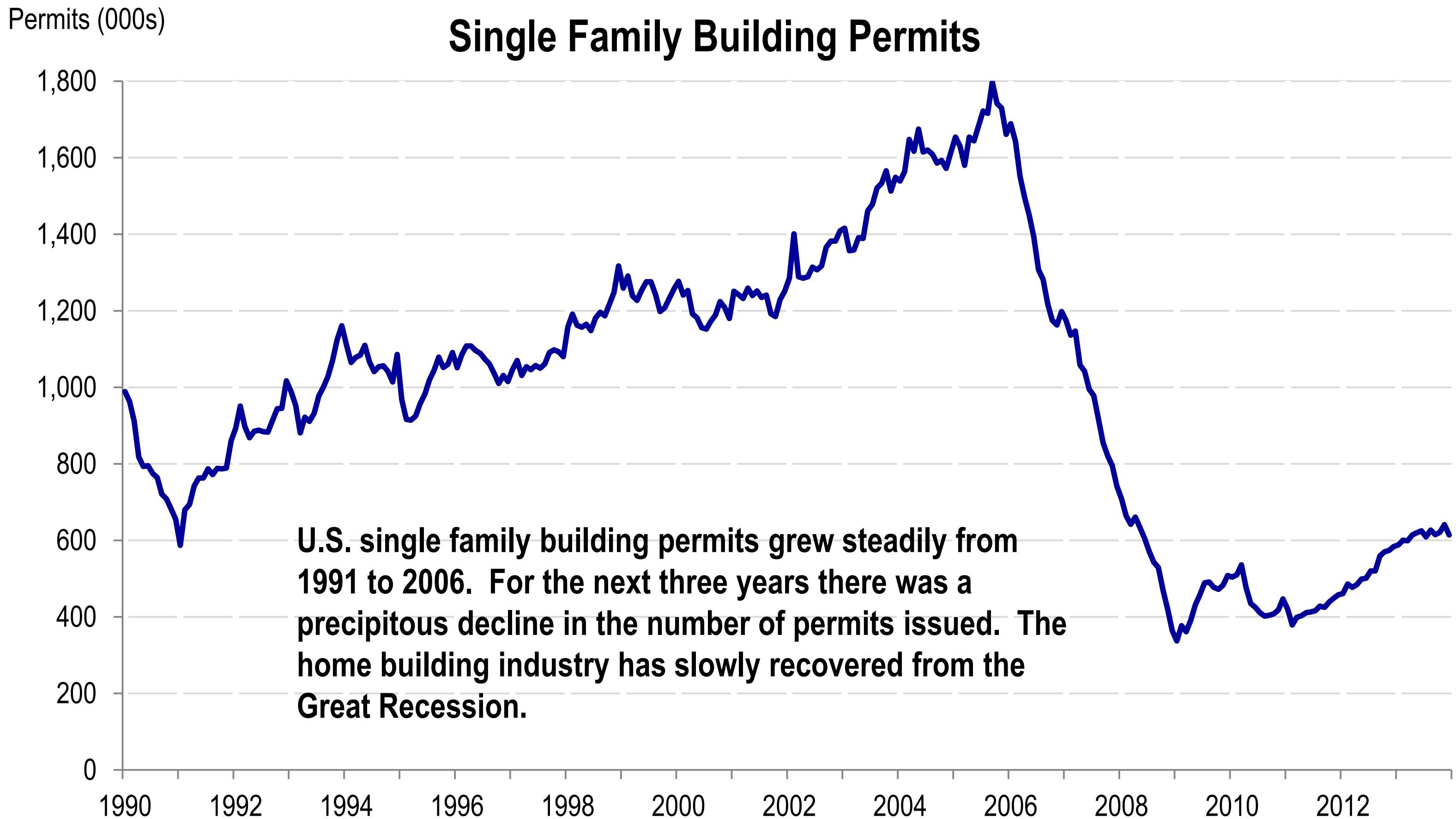
Source: FRED, BEA.

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



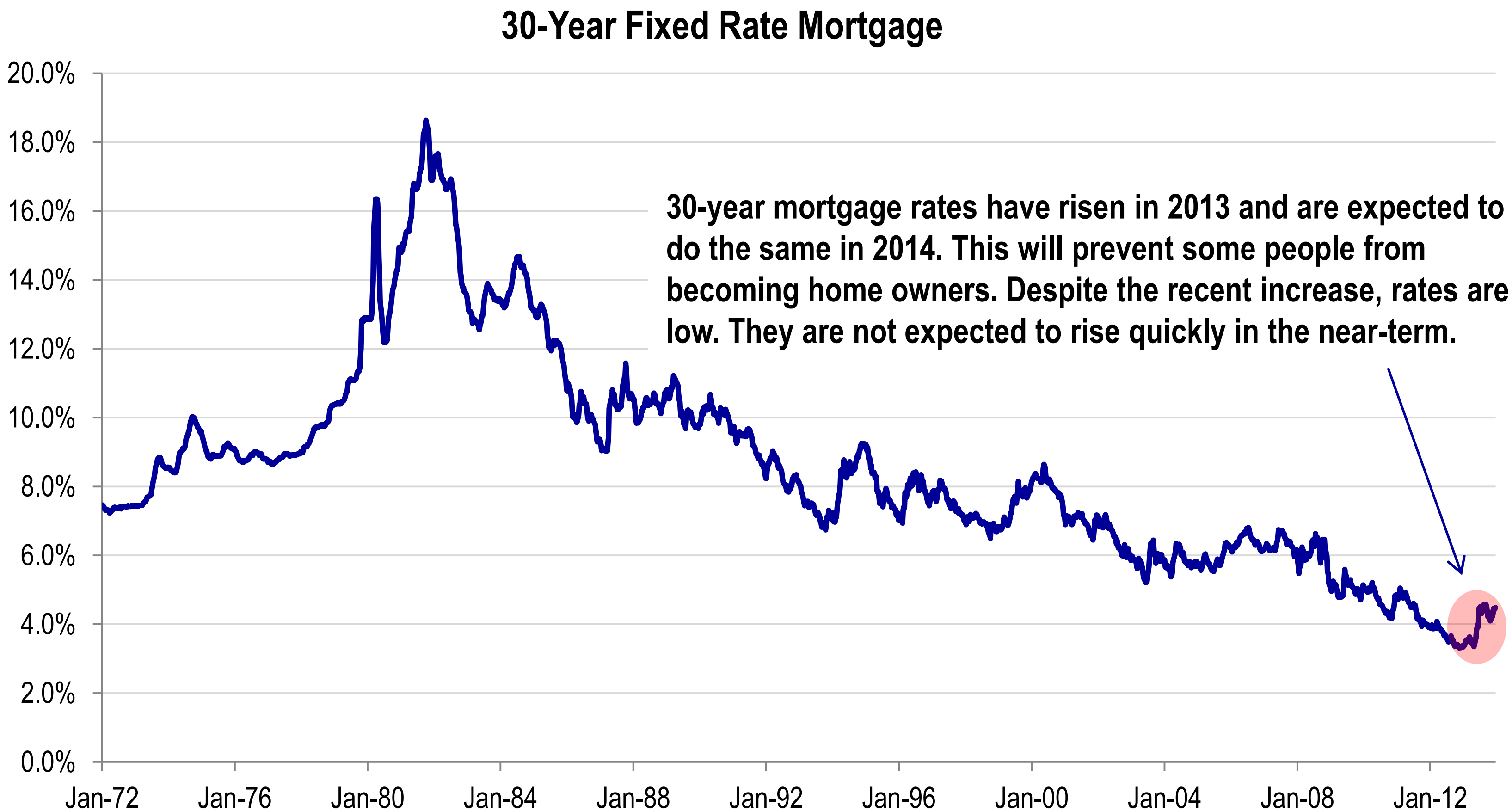
Source: S&P Case-Shiller.

New Single Family Building Permits – U.S.



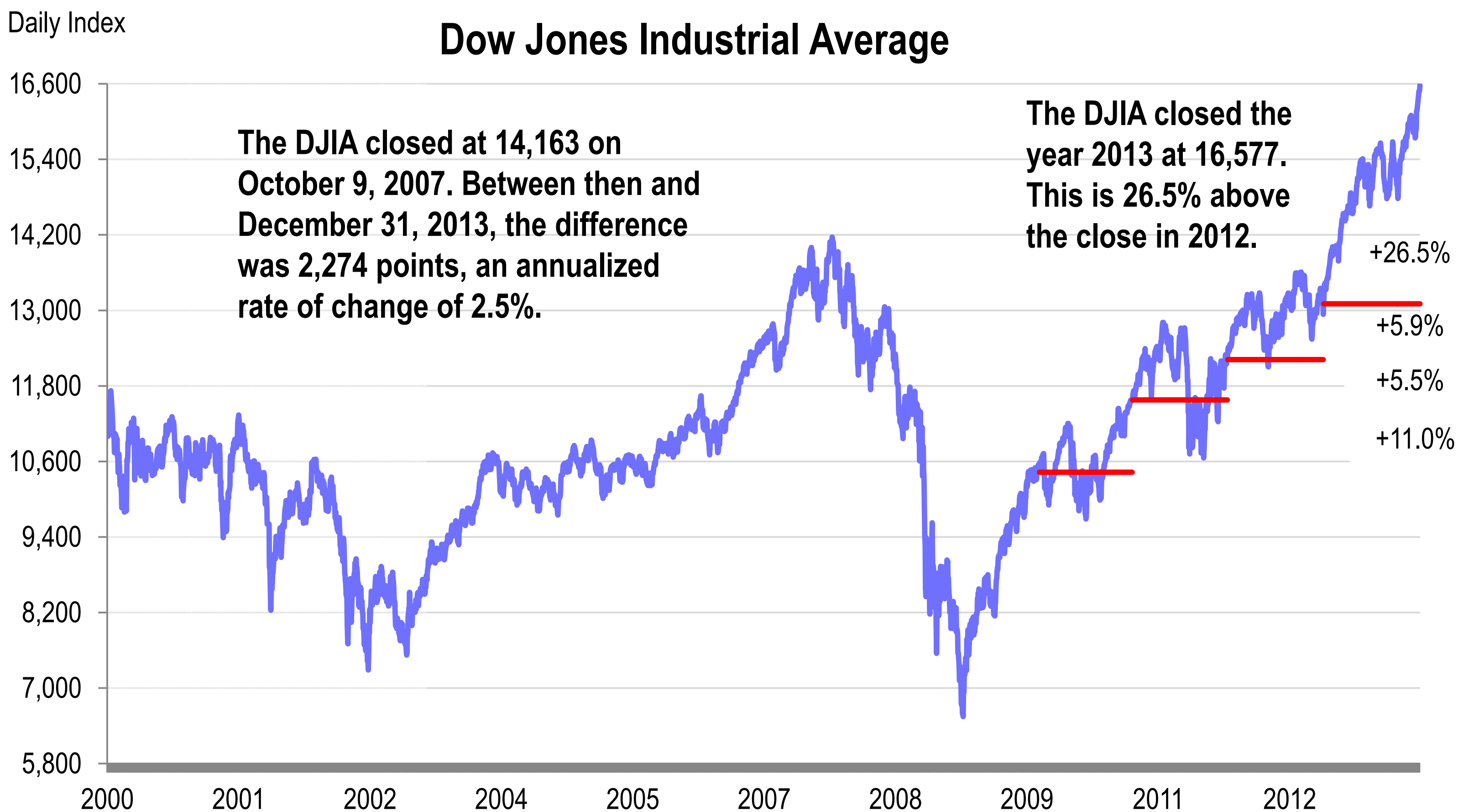
Source: FRED, U.S. Census Bureau.

30-Year Fixed Rate Mortgage



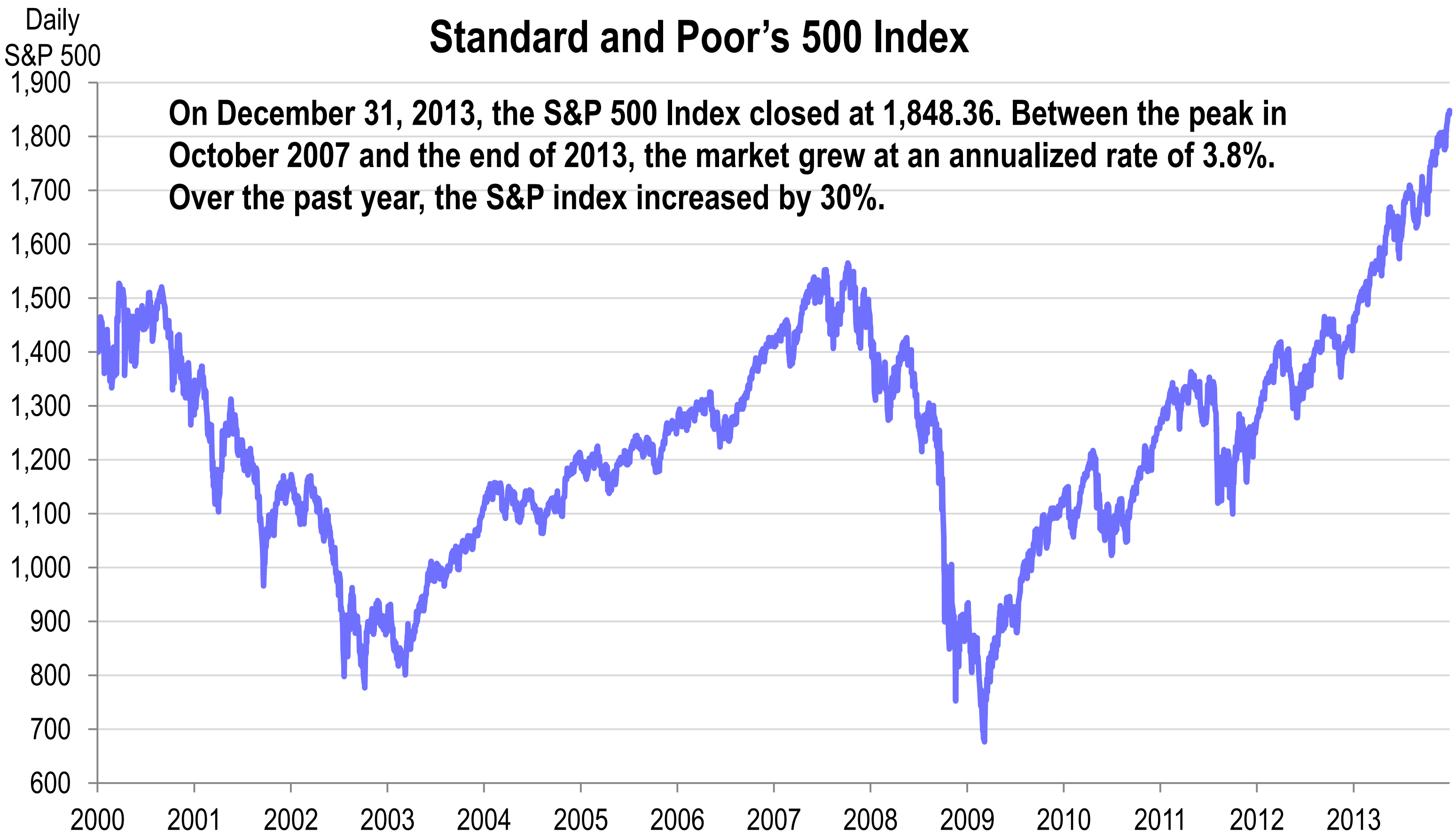
Source: FRED, Freddie MAC.

Dow Jones Industrial Average



Source: FRED, DJIA.

Standard and Poor's 500 Index

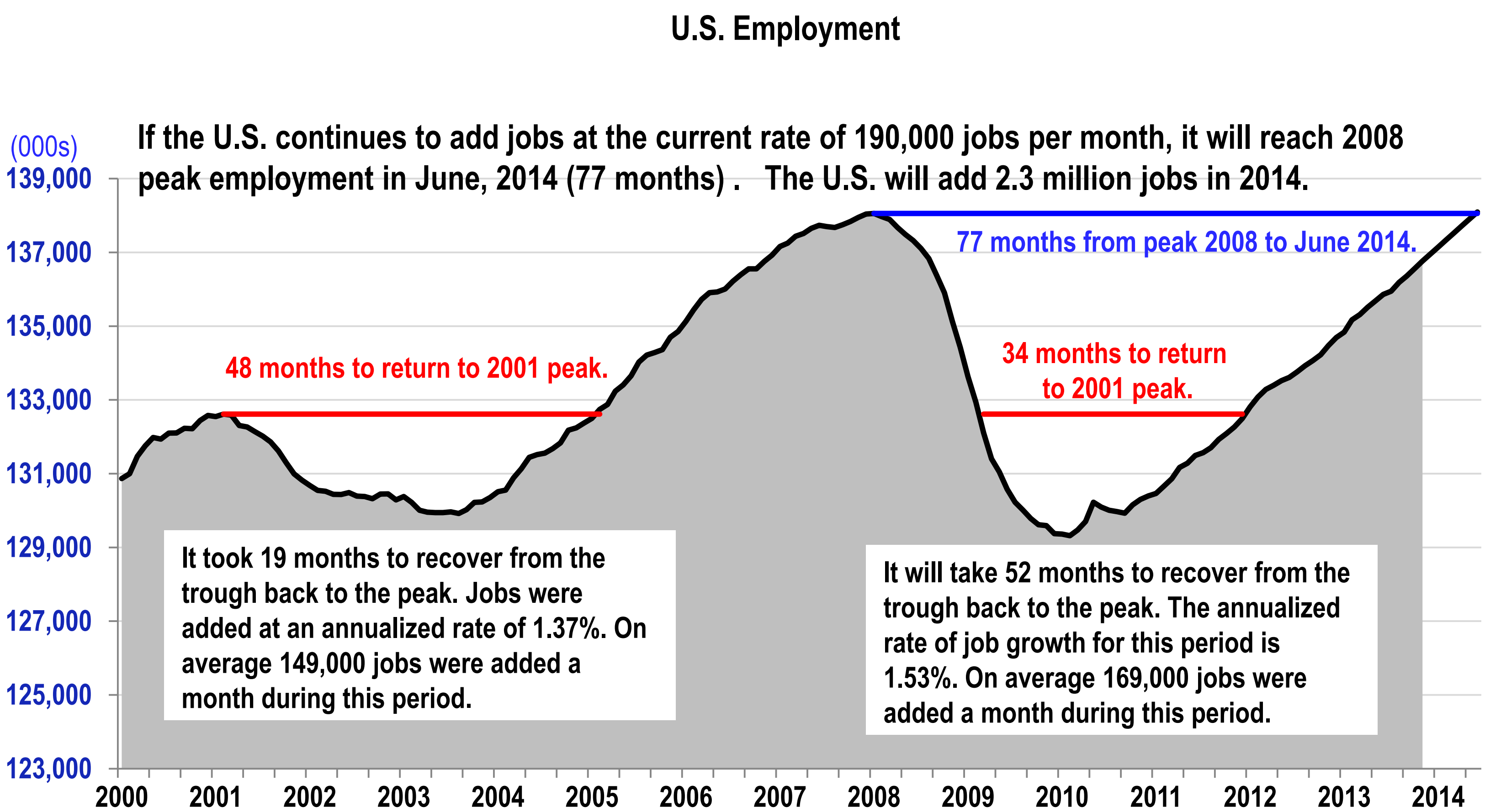


Source: FRED, S&P 500.

CBOE Volatility Index VIX (VIXCLS)

Source: FRED, CBOE.

CES (SA) United States Total Employment



Source: Bureau of Labor Statistics, SA, CBER.

The Colorado Economy

Overview – The Colorado Economy 2014
Better Times Lie Ahead

The following charts tell the story about the Colorado economy in 2013 and 2014. In 2013 the state experienced natural disasters and self-inflicted political wounds, yet Colorado employment grew at a faster than expected rate. Looking ahead, the economy will build on the foundation built in 2013. Hopefully the state's leadership will be less dysfunctional.

On a Positive Note…

- The state population grew at a higher rate than expected in 2013. Stronger growth is on tap for 2014.
- The story is the same for employment. Job growth in 2013 was better than expected and 2014 will be even better.
- Unemployment will continue to decline, and will be in the range of 5.5% to 5.8% at the end of 2014.
- Consumers are delighted that gasoline prices have declined.
- Colorado new car registrations have risen steadily for the period 2010 to 2013.
- Increased employment and wages have resulted in greater collection of sales and income taxes for the state's general fund.

Some Mixed News…

- Per Capita Personal Income will increase by 3.7% in 2014. This is slightly less than the rate of growth for the U.S. Over the past two decades the gap between the U.S. PCPI and the state PCPI has closed significantly.
- In 2014, Colorado inflation will be 3.0%, well above the rate for the U.S.
- Housing prices have increased at a faster rate than the nation. That is great news for home owners, but not so good news for people wanting to enter the housing market.
- The Construction Sector is slowly improving. Increased building activity supports growth in multiple sectors and causes greater congestion on the highways. For some, the latter is not desirable.
- Although the state returned to 2008 peak employment, it will be a long time before the state returns to the 2007 peak number of establishments.

Change in Population

Colorado is an Attractive Place to Live, Work, and Play

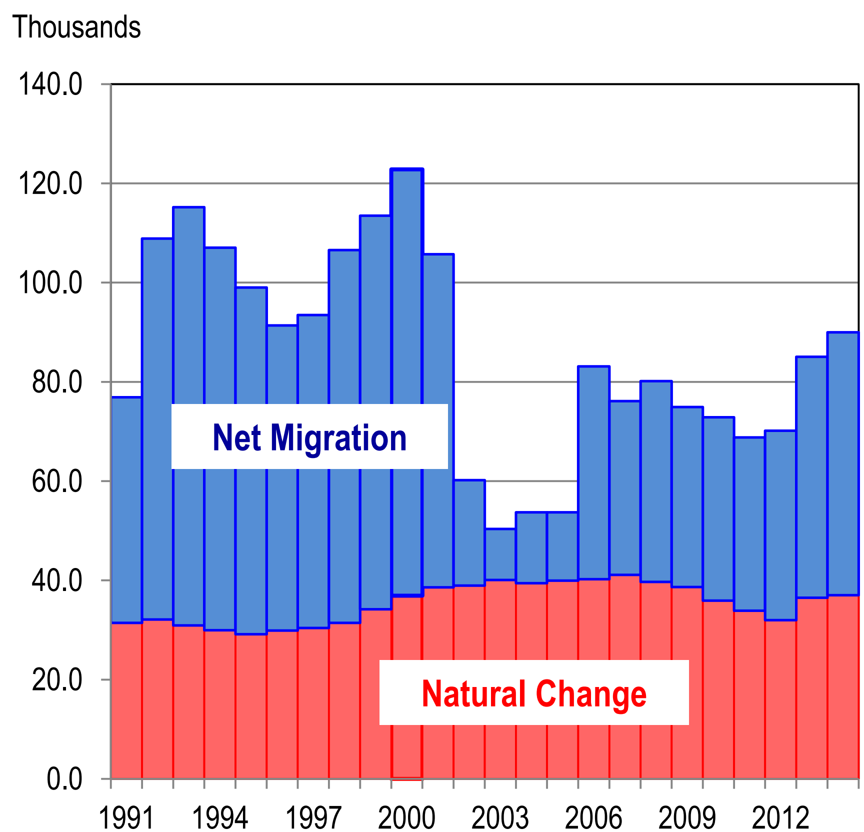
The population increases and decreases are a result of the natural rate of change (births minus deaths) and the change in net migration (people moving in the state minus people moving out of the state).

Over the past two decades the natural change (red bars) gradually increased from 31,400 in 1991 to a peak of 40,230 in 2006.

Changes resulting from net migration (blue bars) are closely tied to the strength of the economy. For example, there were five years, from 1986 to 1990, when net migration was negative. More people moved out of state than moved into the state to escape a regional recession. During the past two recessions, net migration declined because it was difficult for people to move and net migration remained positive.

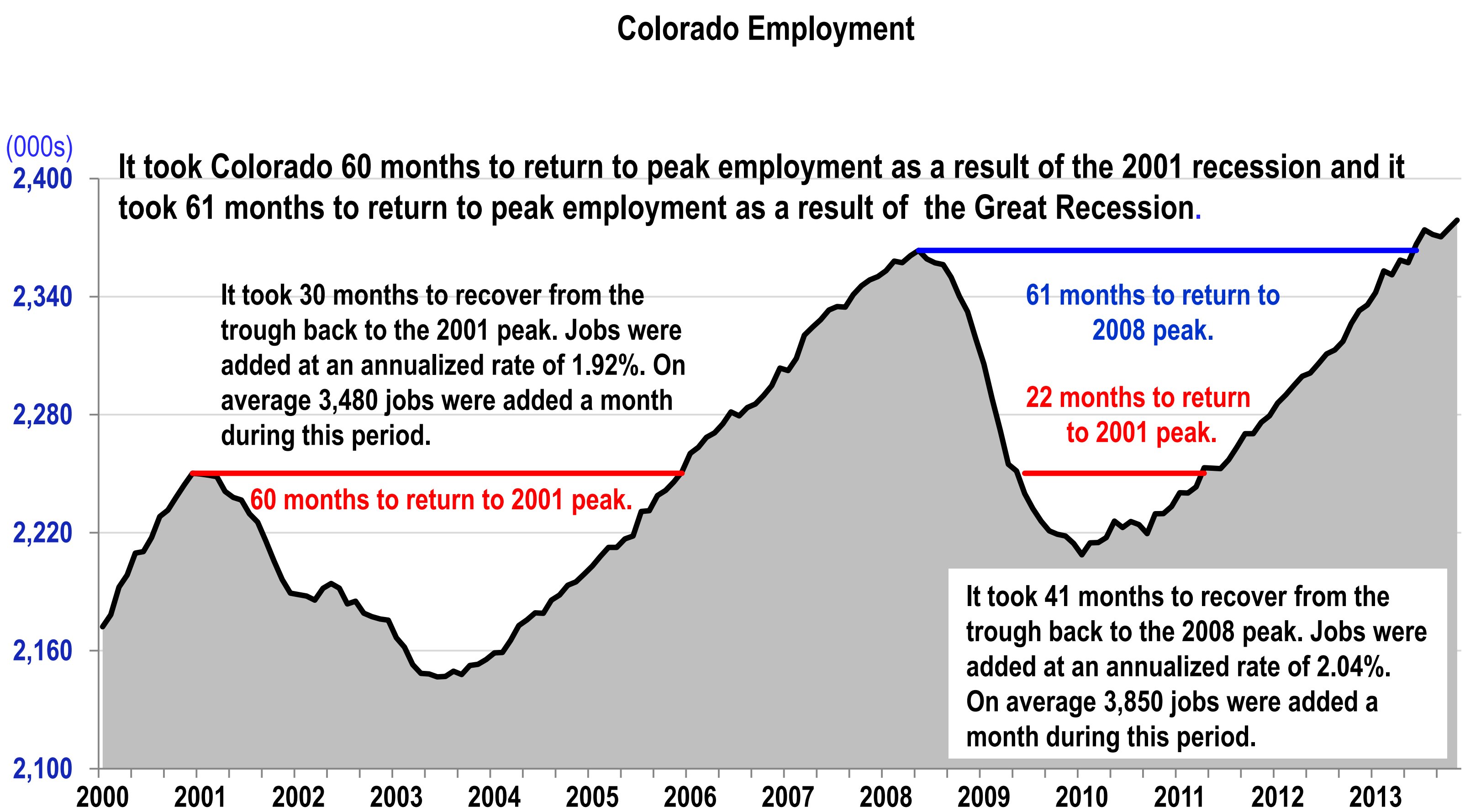
The Colorado population will increase by about 90,000 in 2014. The natural rate of change will rise to 37,000. Net migration will increase dramatically to 53,000, the highest level of change since 2001.

Change in Colorado Population 1991 - 2014



Sources: State Demography Office and CBER.

CES (SA) Colorado Total Employment



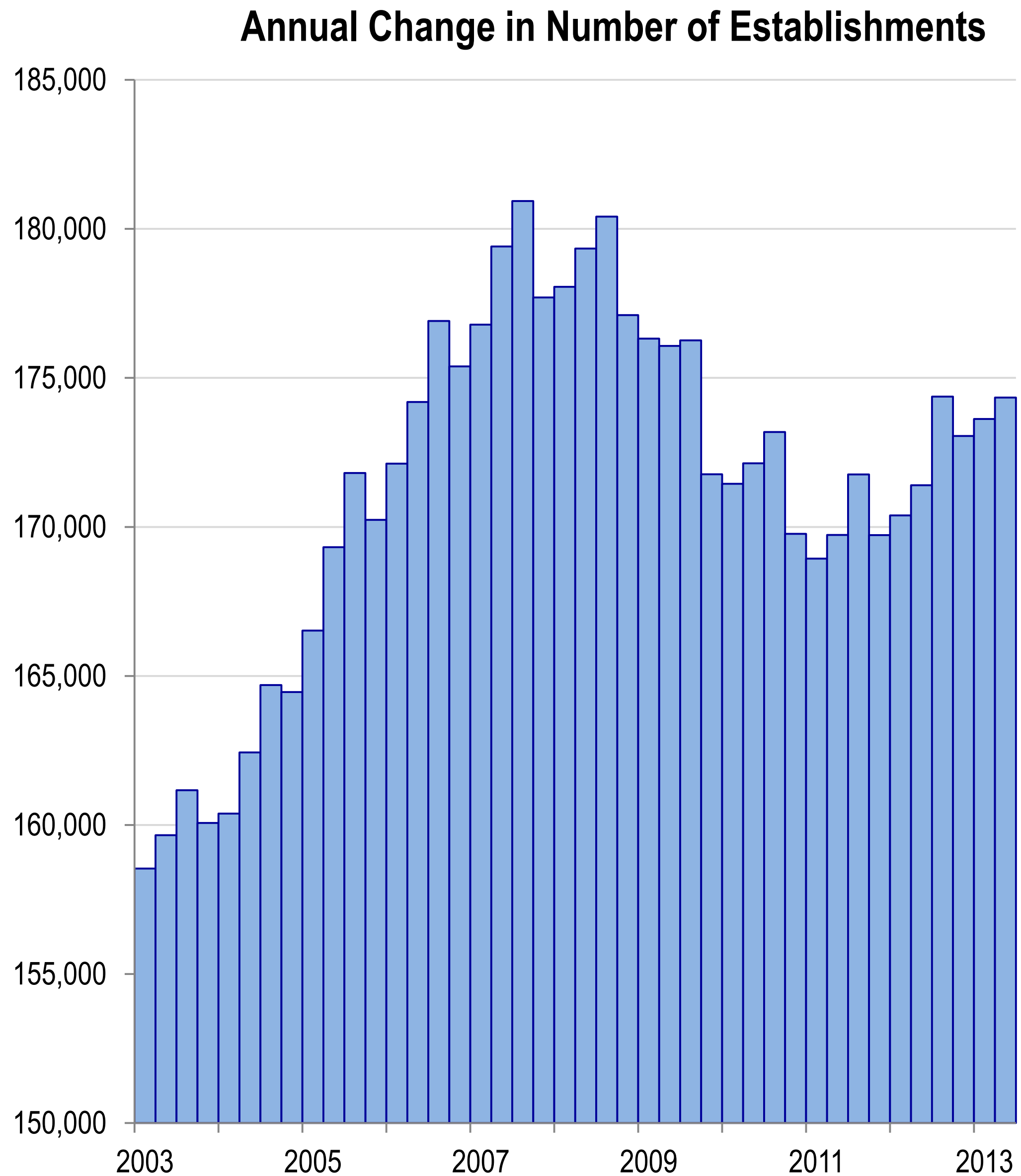
Source: Bureau of Labor Statistics, SA.

Annual Change in the Number of Colorado Establishments

The number of Colorado business establishments peaked at 180,934 in Q3 2007.

As a result of the Great Recession, the number of Colorado business establishments declined to 168,939 in Q1 2011.

There has been steady growth in the number of business establishments since bottoming out; however, it will be several more years before a return to the 2007 peak.



Source: Bureau of Labor Statistics, CBER.

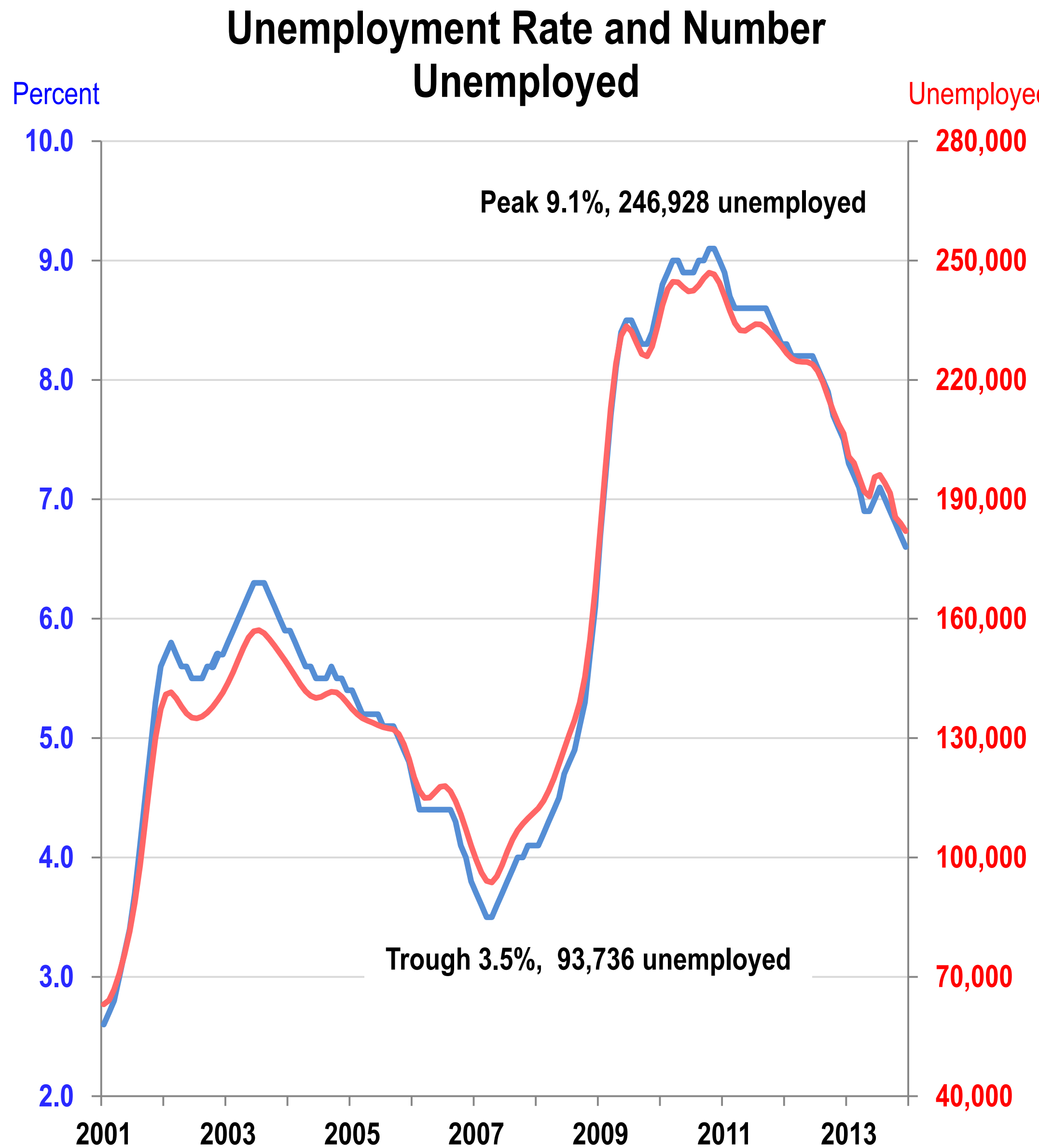
Colorado Unemployment Rate and Number of Unemployed

Both the unemployment rate and number of unemployed workers have trended downward since late 2010.

At the end of December 2013, the projected unemployment rate (blue) will be 6.6%, down from a high of 7.3% in January. The state year-end rate will be lower than the U.S. year-end rate of 7.0%.

In December 2013, the total number of unemployed workers (red) declined slightly to about 182,000. The total number of unemployed is almost twice as many as the trough in June 2007.

Between June 2007 and the peak in October 2010, the number of unemployed workers increased by 153,192. Since then, the number of unemployed workers has declined by about 65,000. The ending state rate of unemployment for 2014 will be between 5.5% and 5.8%.

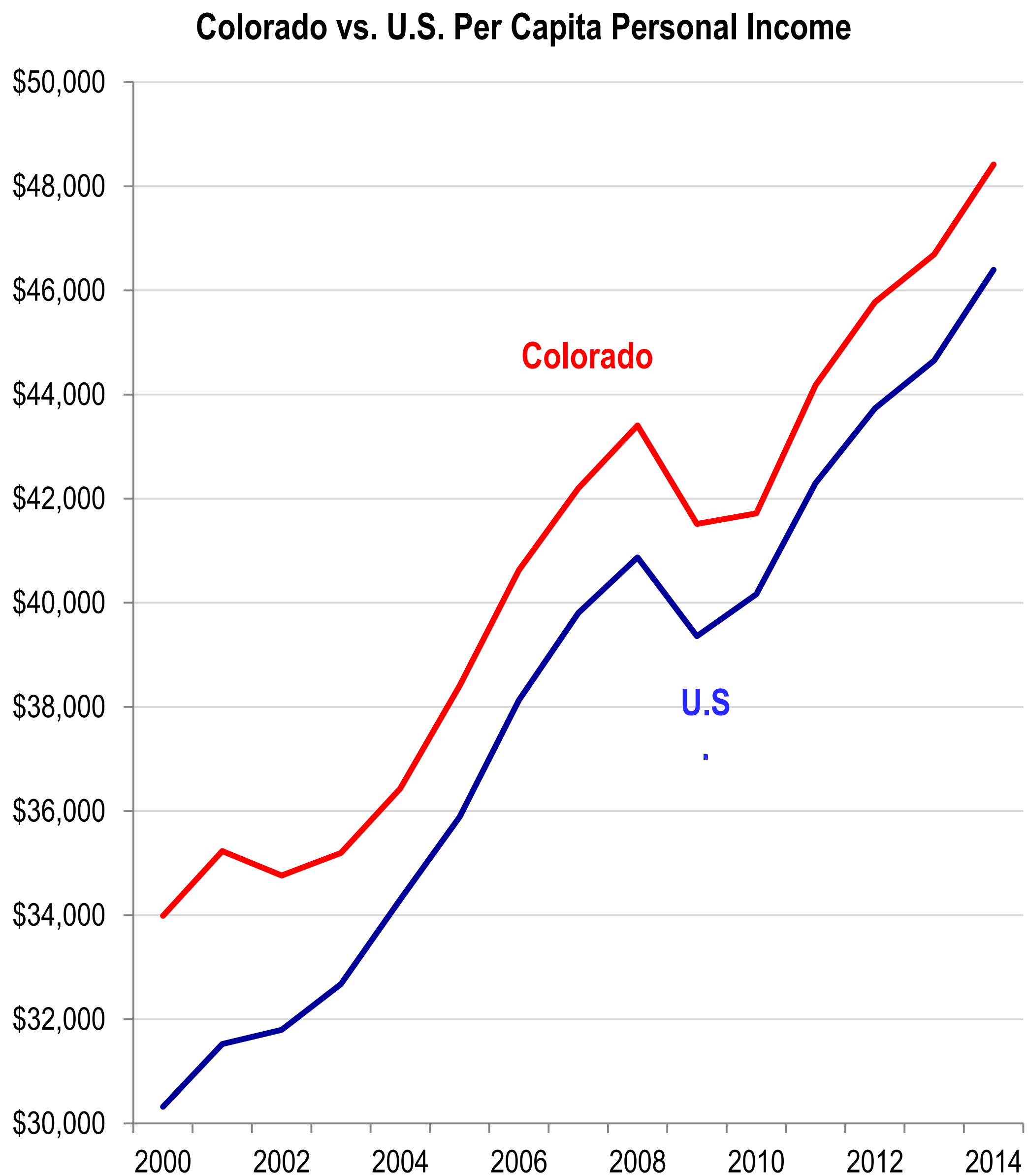


Source: Bureau of Labor Statistics, CBER.

Per Capita Personal Income (PCPI)

Both the Colorado and U.S. PCPI have posted gains every year since 2009. During that period the U.S. rate increased at a slightly faster rate than the rate for Colorado.

Since 2000, the gap between the state PCPI and the national PCPI has been closing. In 2000 and 2001 that gap was about $3,700. Today it is only about $2,000.

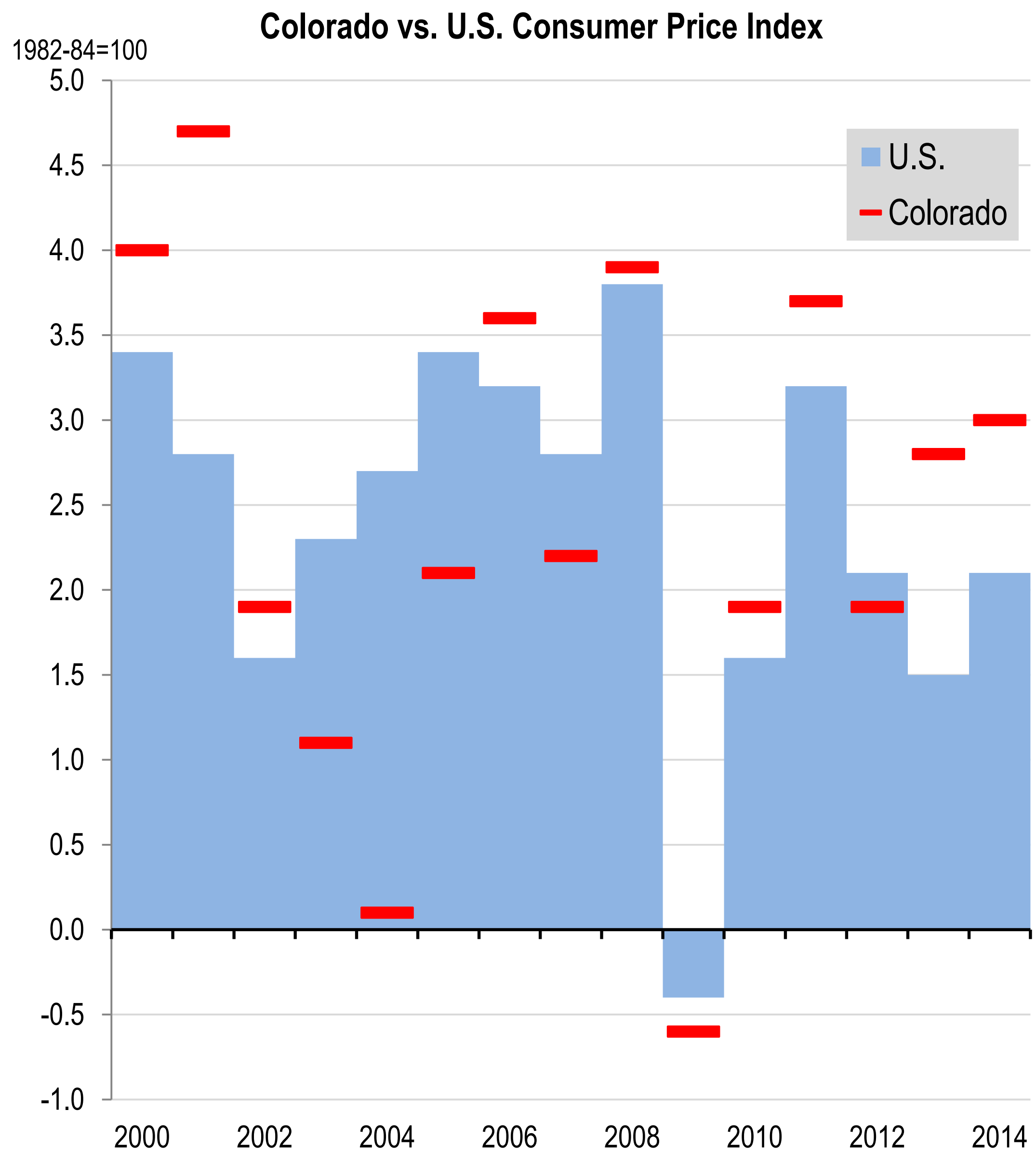


Source: Bureau of Economic Analysis, CBER.

Consumer Price Index (CPI)

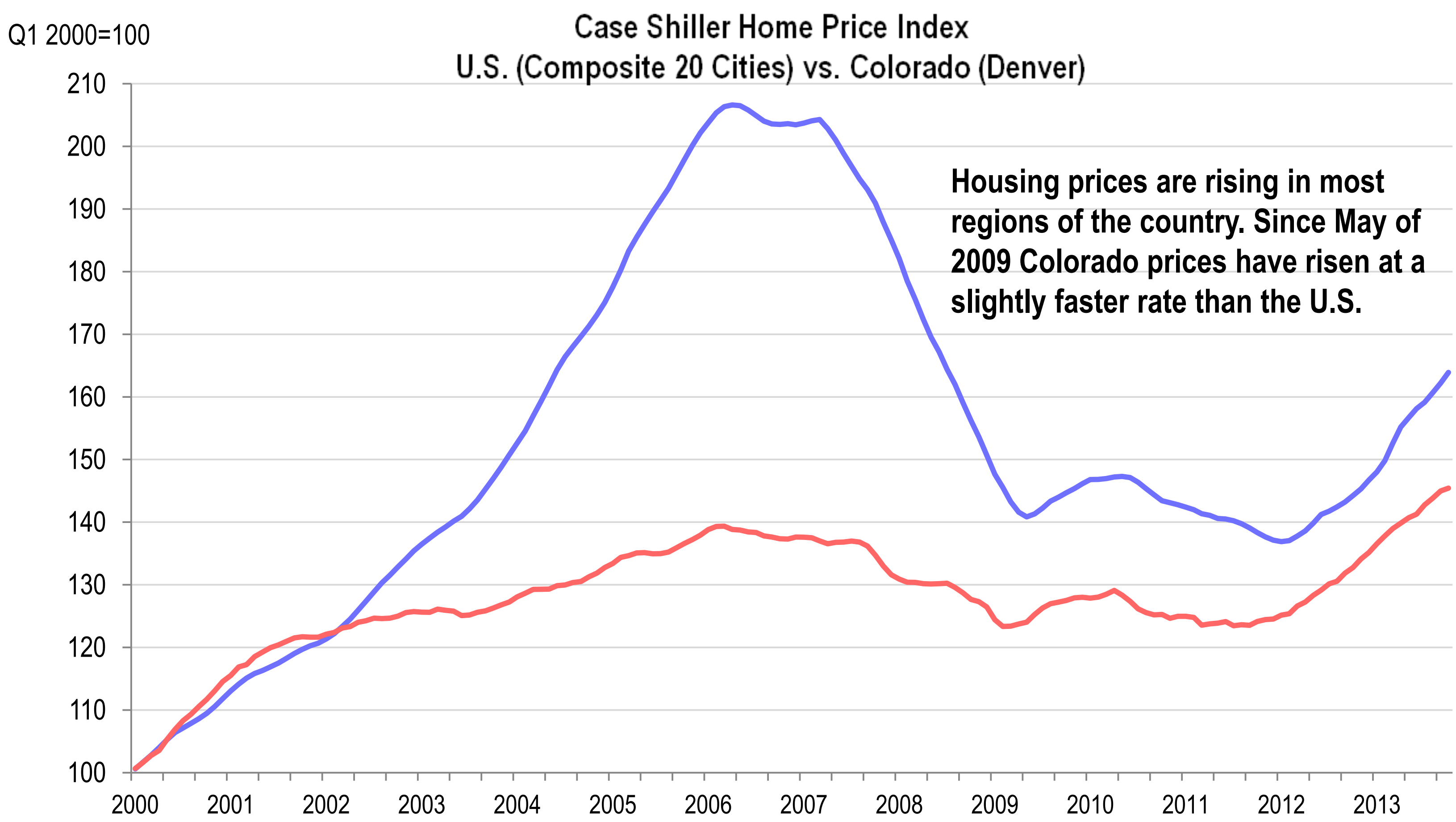
Colorado inflation, as measured by the Denver-Boulder-Greeley CPI (red bars), is expected to rise at a faster rate than the U.S. (blue) in 2014.

For the 15 years in this chart the Colorado annual CPI has been greater than the U.S. CPI about 60% of the time.



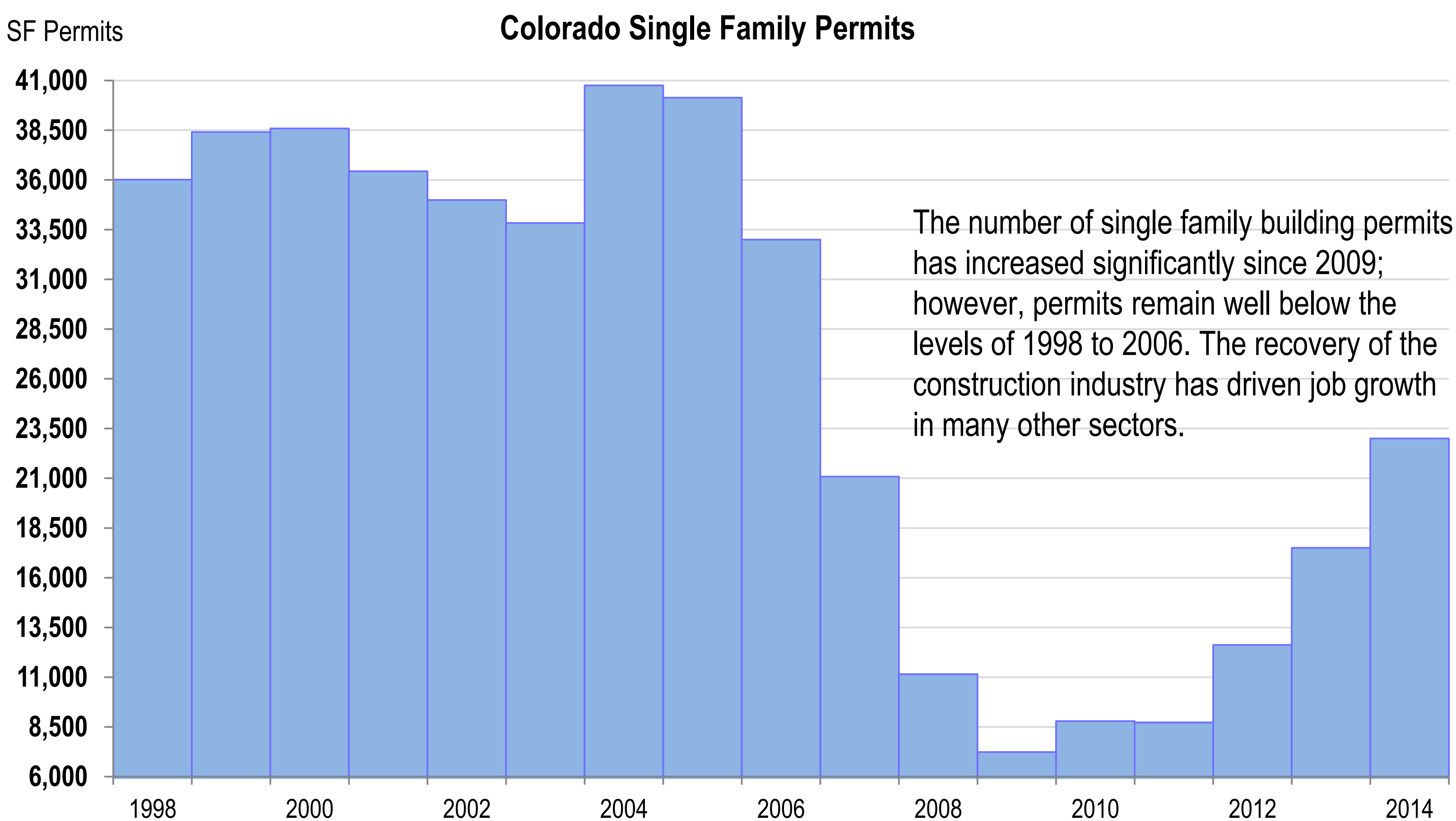
Source: Bureau of Labor Statistics, CBER.

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



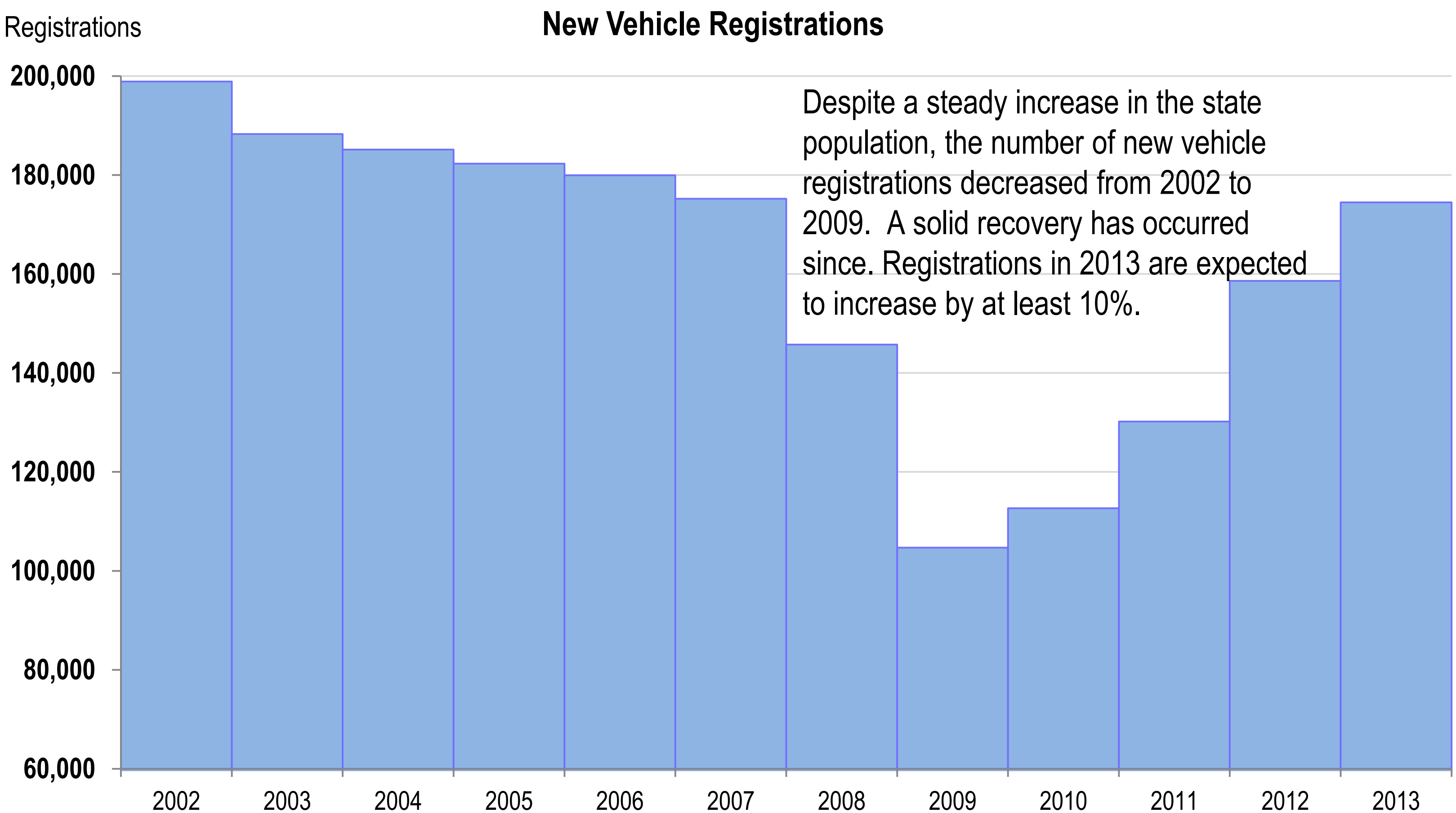
Source: S&P Case-Shiller.

Colorado Construction
Single Family Permits



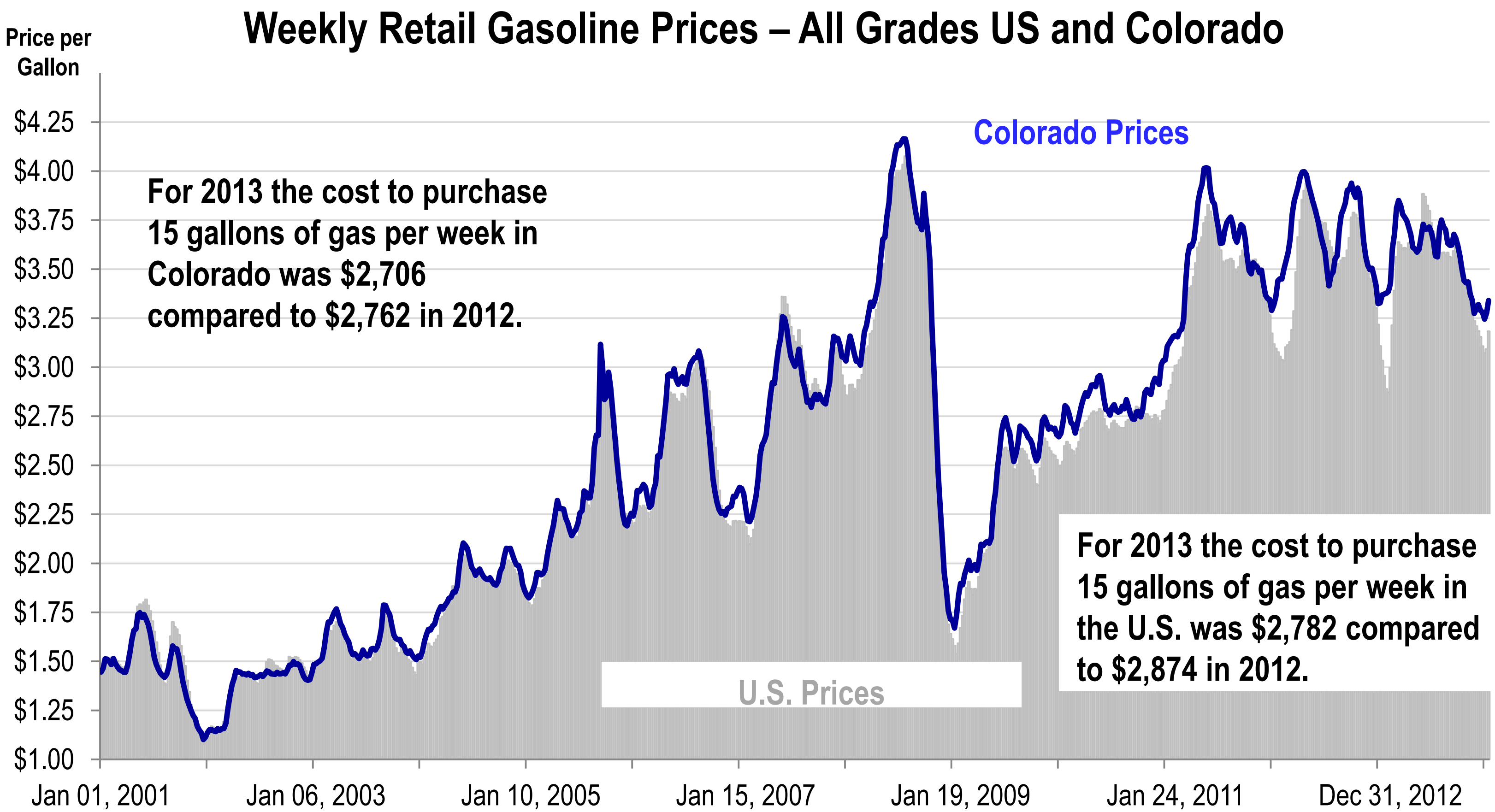
Source: U.S. Census Bureau, CBER.

New Vehicle Registrations Colorado



Source: Colorado Auto Dealers Association, CBER.

Weekly Gas Prices
Cost to Fill-up Slightly Lower in 2013



Source: EIA.

State Taxes and Revenue

The Great Recession played havoc with the budgets of state governments across the U.S. The following charts illustrate the fiscal challenges faced by the Colorado State Government and the state's recovery.

CLC and OSPB Projections

The Colorado state government felt the same pain in the pocketbook as many Colorado residents. Since 2008 individuals and organizations have dealt with wages or revenues that either declined or remained flat. At the same time, expenses have escalated every year.

The following charts show the revenue projections provided by the Colorado Legislative Council (CLC). The Governor's Office of State Planning and Budgeting (OSPB) is also optimistic about state revenues as CLC. Both CLC and OSPB provide quarterly updates discussing the state economy. They are recommended reading for those anxious to learn more about the Colorado economy.

Sales Tax, Individual Income Tax, and General Fund

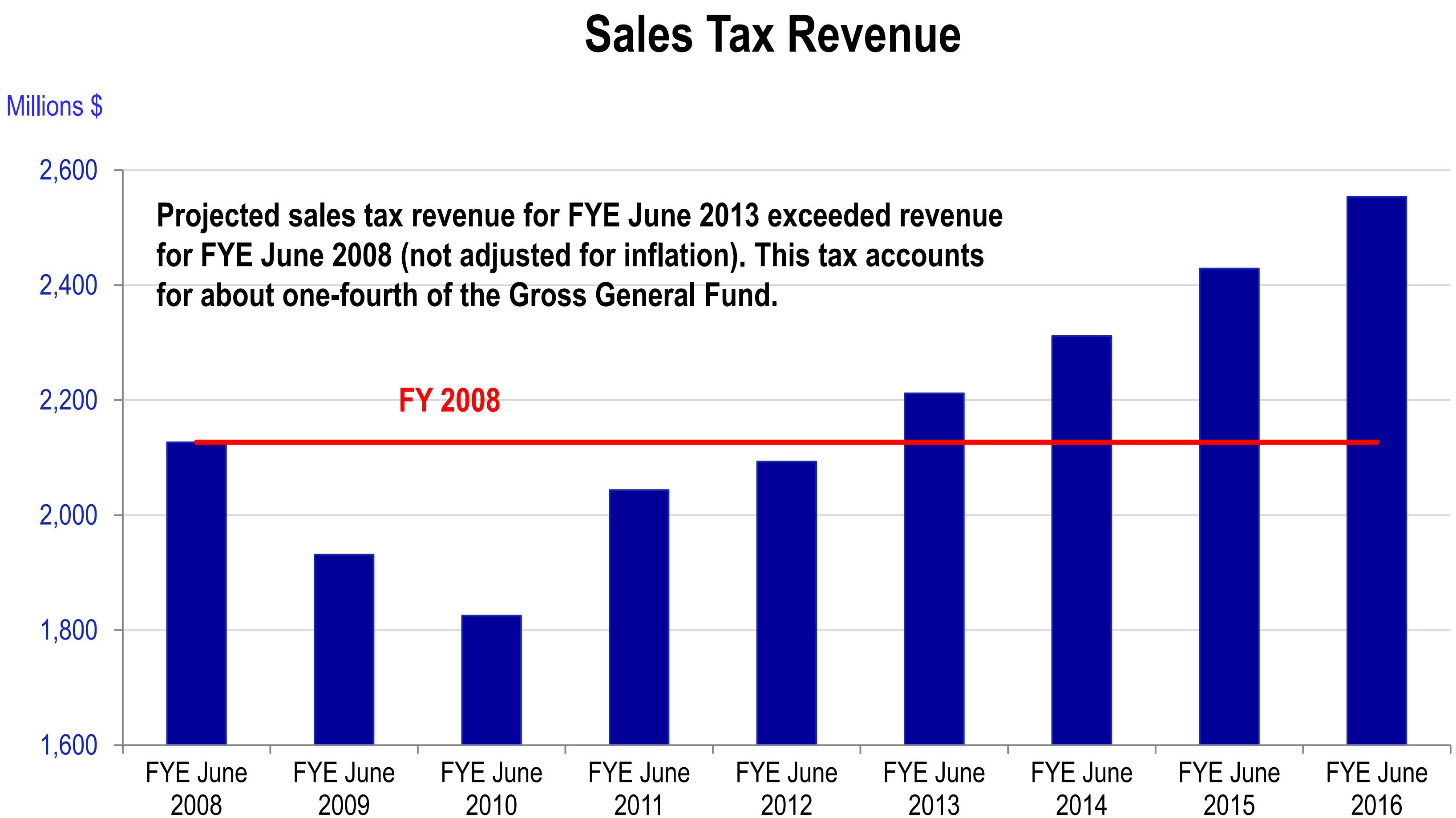
Sales Tax Revenue accounts for about one-fourth of the Gross General Fund. Sales Tax Revenue for FY 2013 is projected to exceed revenue for FY 2008.

Net Individual Income Tax for the FY 2012 will exceed FY 2008. This tax accounts for about two-thirds of Gross General Fund Revenue.

General Fund Revenue for FY 2012 will be similar to FY 2008.

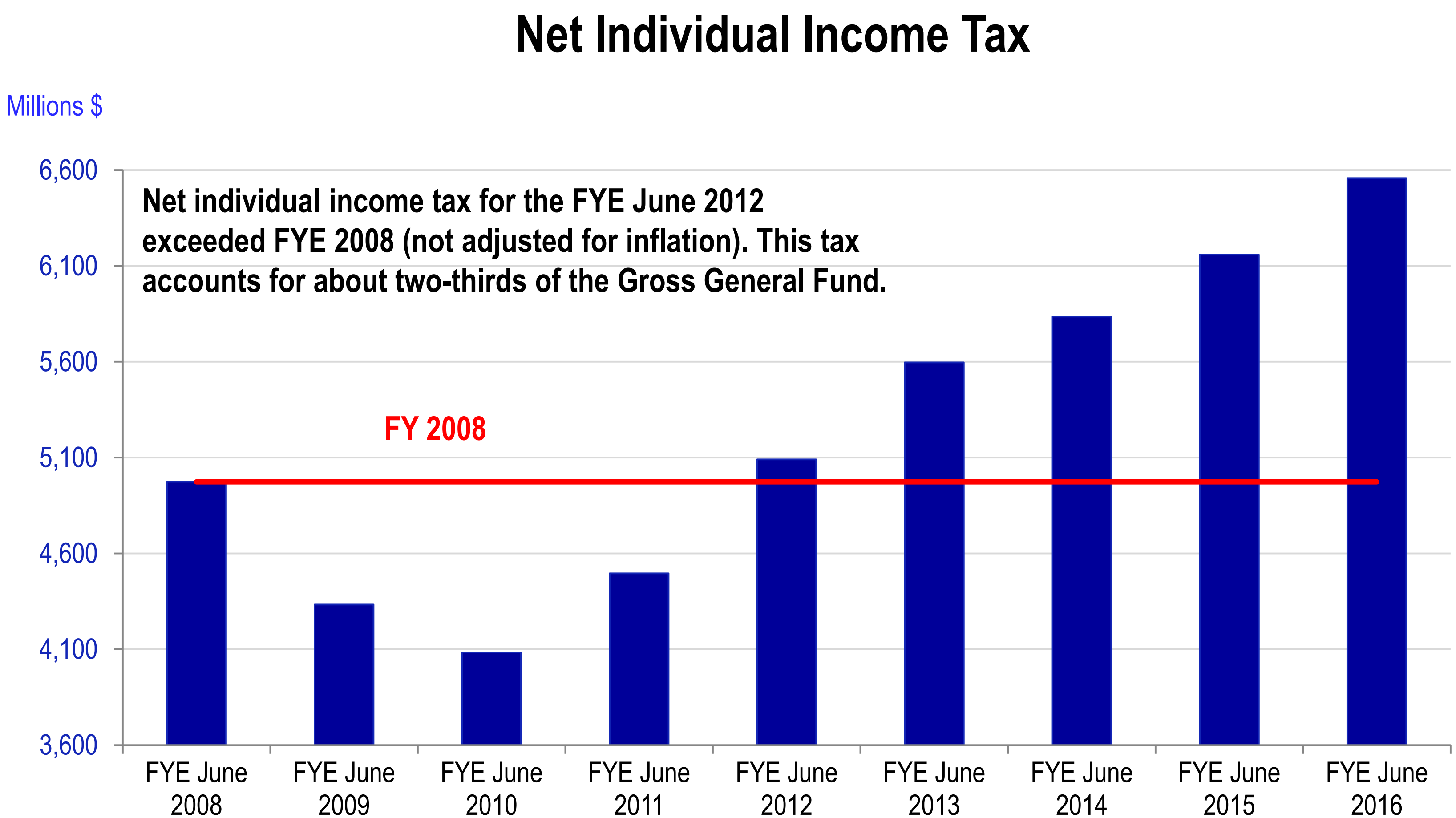
Note: The data in this discussion is not adjusted for inflation. The State Fiscal Year is July 1st through June 30th.

Colorado Sales Tax Revenue



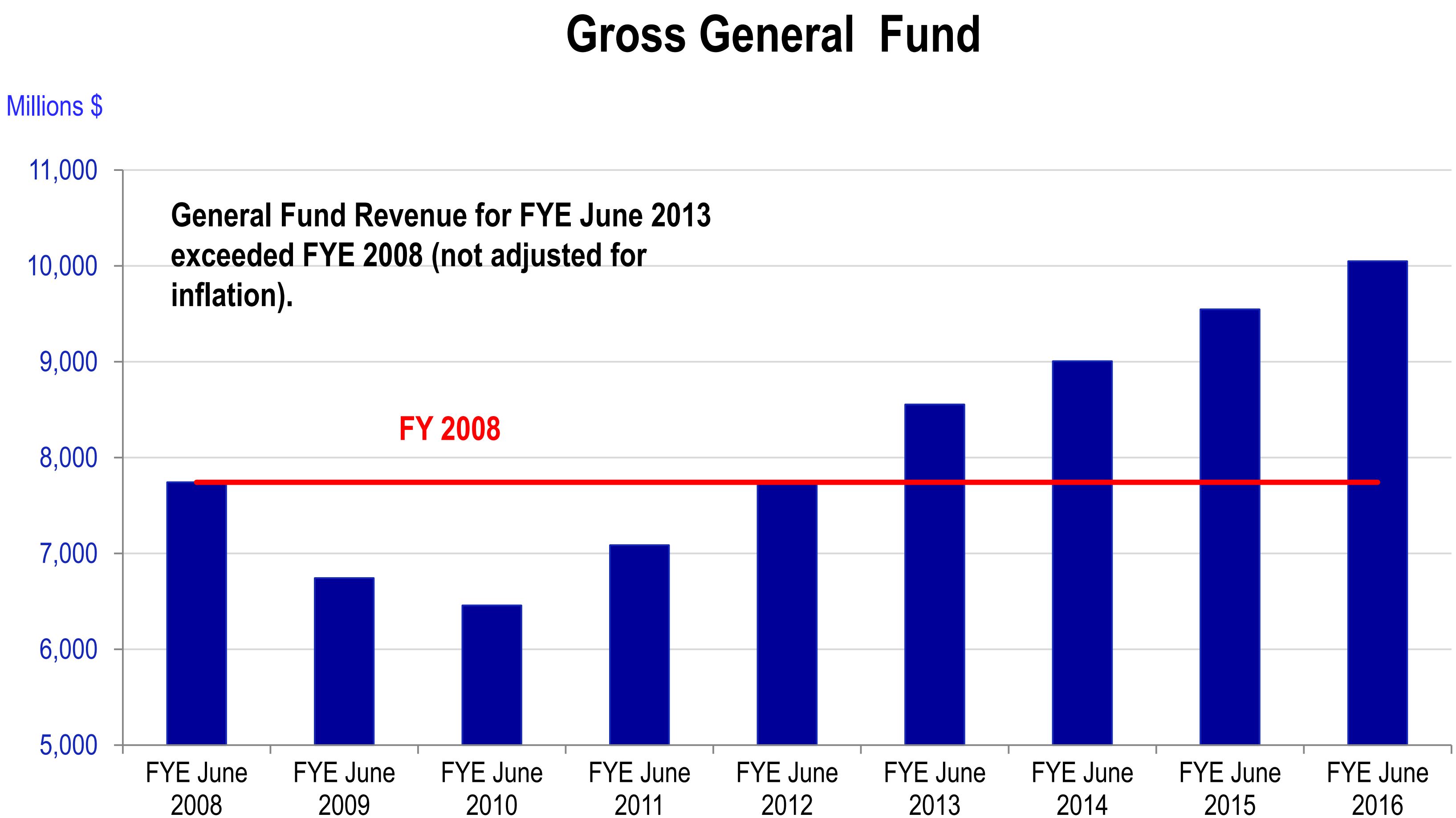
Source: Colorado Legislative Council, Dec. 2013.

Colorado Net Individual Income Tax



Source: Colorado Legislative Council, Dec. 2013.

Colorado Gross General Fund



Source: Colorado Legislative Council, December 2013.

The Colorado Economy
Key Industries and the Competitive Advantage

Comparative Job Growth in Key Industries

All industries are important to the economy for different reasons. Some generate sales tax revenue, contribute to the quality of life, or they are a source of goods and services that attract outside wealth to the state. The following charts show the change in location quotient (LQ), or ratio of employment compared to the U.S., for a select group of industries.

LQ greater than 1.0

The location quotient of the Construction, Extractive Industries; Information; Professional, Scientific, and Technical; and Tourism Sectors have LQs greater than 1.0. In other words, the concentration of those industries in Colorado is greater than the concentration of those industries for the U.S. Sectors with LQs greater than 1.25 are considered "export industries".

The LQ for the Construction sector is 1.21. In the short term it is the only sector with an LQ > 1.0 to trend upwards. The following sectors have high LQs, but they are trending downwards:

- Extractive Industries, LQ = 1.96
- Information, LQ = 1.46
- Professional, Scientific, and Technical, LQ = 1.31
- Leisure and Hospitality, LQ = 1.17.

LQ near 1.0

The location quotient of the Healthcare, Retail, and Finance and Insurance Sectors should be near 1.0. In other words, the concentration of those industries in Colorado is similar to the concentration of those industries for the U.S.

- The Finance and Insurance Sector LQ (1.0) is trending downward.
- At times it seems Colorado has too many retailers. The Retail LQ (.93) is trending downward.
- Despite strong job growth since 1990, the LQ for Healthcare (.86) has a slight upward trend.

LQ < 1.0

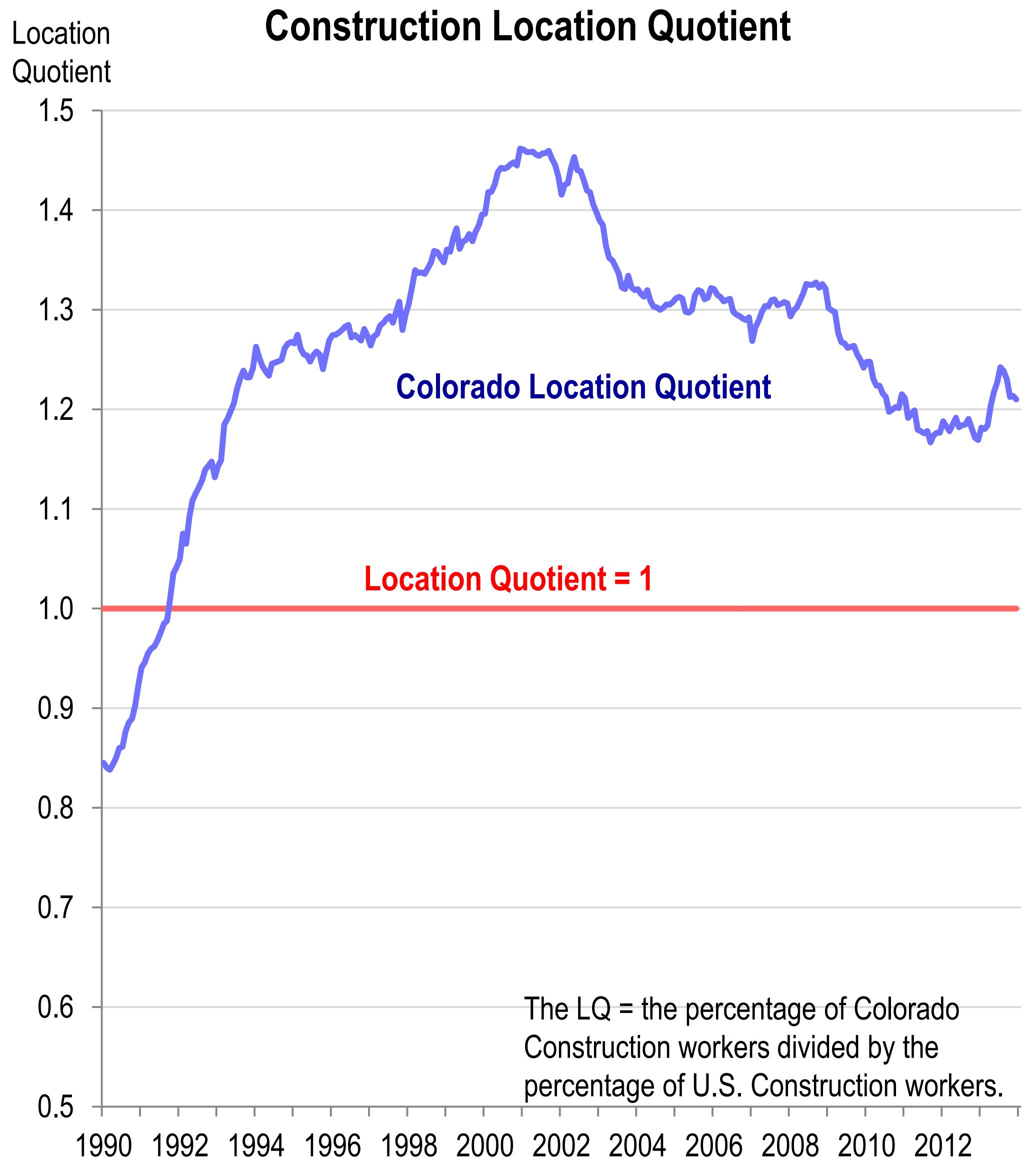
The location quotient of the Manufacturing Sector is < 1.0. In other words, the concentration in Colorado is less than the U.S. concentration. The current LQ for Manufacturing is .65 and the sector has a slight upward trend.

How Has the Construction Sector Performed Relative to the Nation?

It is difficult for geographically large states to develop distinctive competencies in construction. In other words, the location quotient (LQ), or concentration relative to other industries, should be near 1.0.

During the late1980s, the Colorado single family market was overbuilt. As a result, the industry LQ was below 1.0 through mid-1991. Over the next 10 years the LQ increased to about 1.5 in 2001.

In early 2001, the LQ began declining and dropped off sharply for three years (2004). It leveled off for five years, then plummeted again in 2009. It bottomed out in mid-2011 and was flat until 2013. A spike in construction jobs occurred this year.



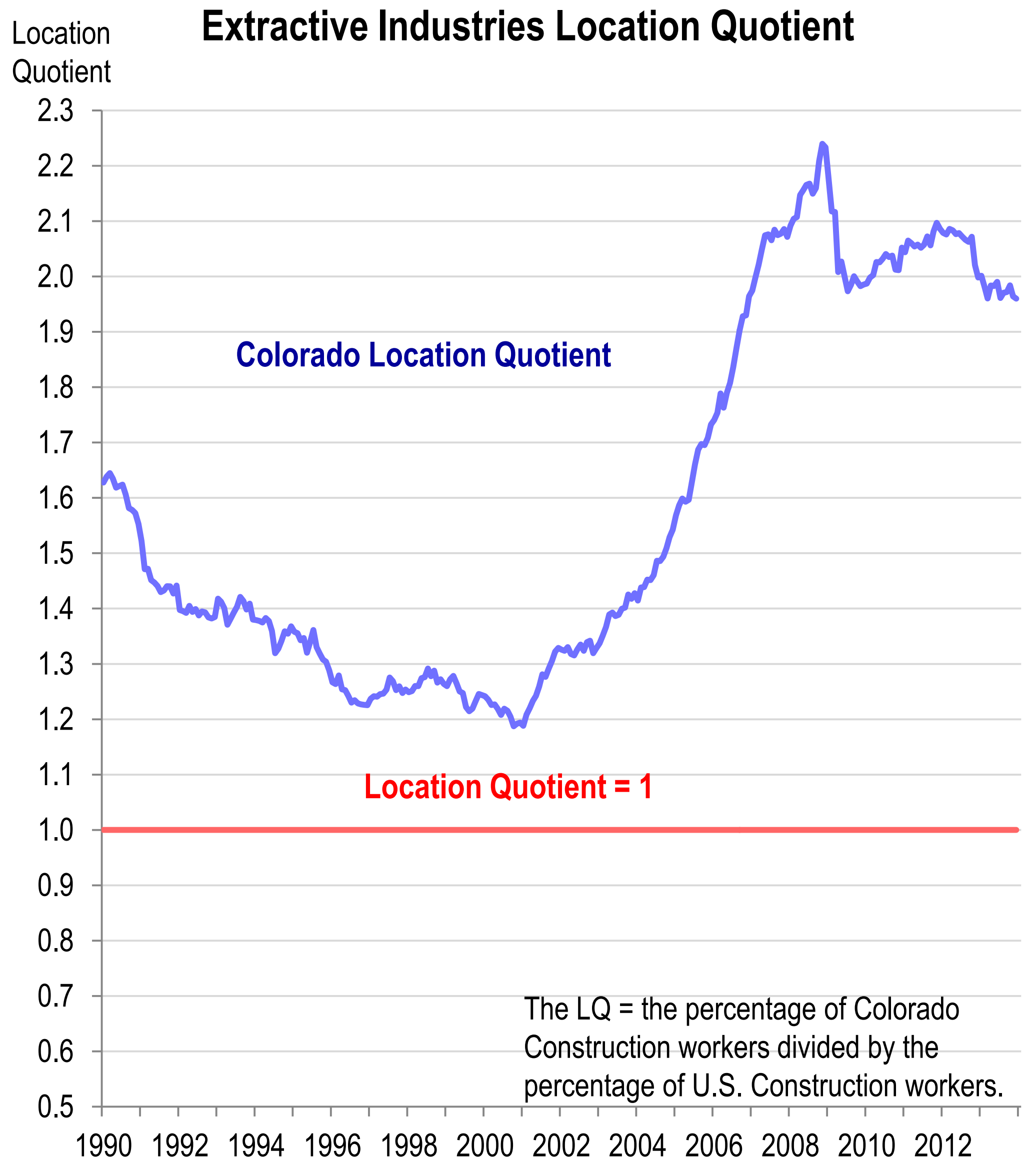
Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

How Has the Mining and Logging Sector Performed Relative to the Nation?

The extractive industries are a source of severance taxes, high paying jobs, and exports. Although the sector is small, it is important to the rural counties where the actual extraction occurs.

Colorado clearly has a higher concentration of workers in the sector. In 2013 the sector employed just over 30,000 workers, or about 1.3% of total wage and salary workers.

Unfortunately, the concentration of workers is trending downward. This is a result of better oil and gas fields in other parts of the country and a regulatory environment that is not as business-friendly as other states.

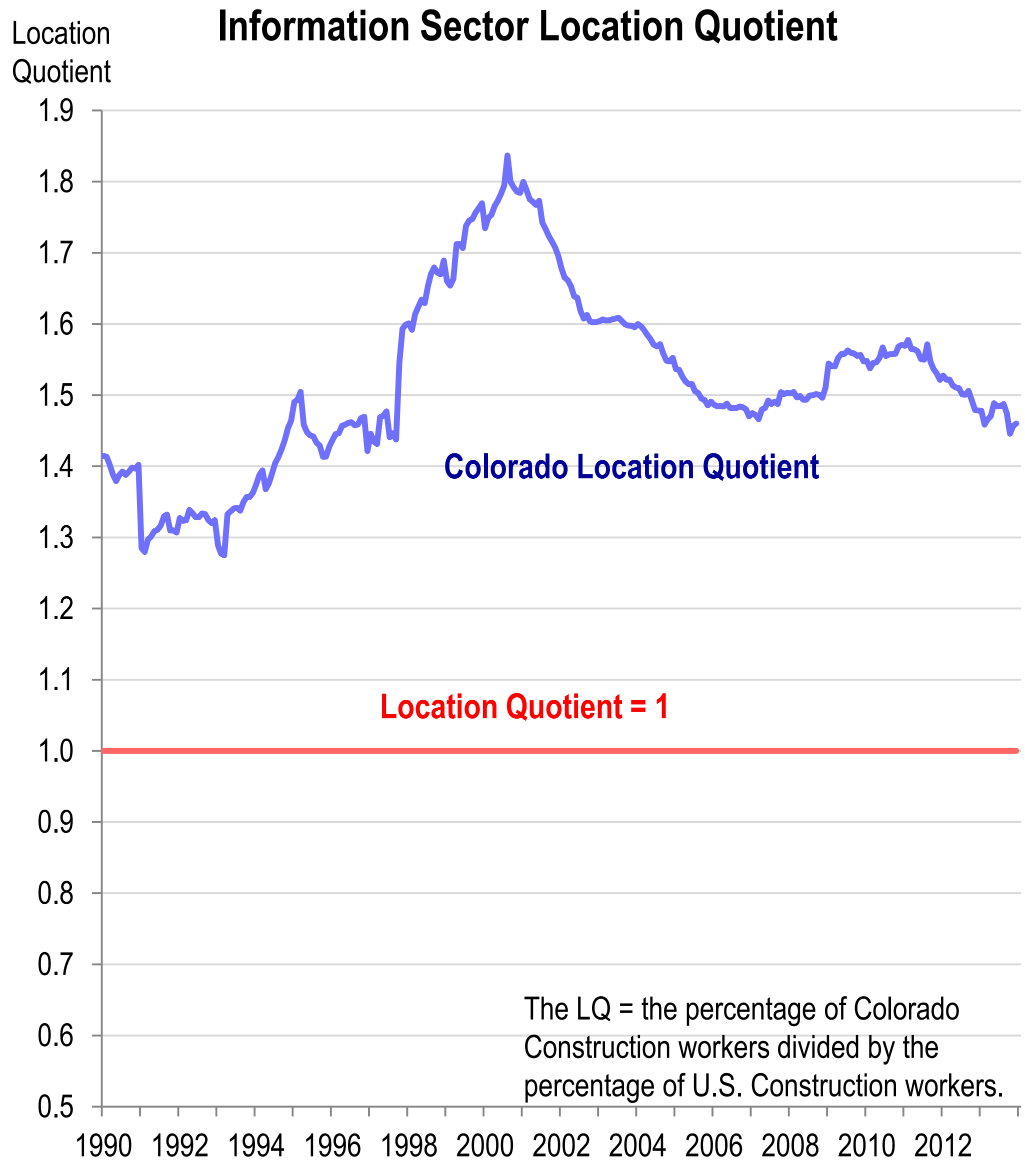


Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

How Has the Information Sector Performed Relative to the Nation?

Many Information companies pay higher than average wages and they are a source of primary jobs. In other words, they bring in revenue from outside the state that is spent in Colorado and they export services outside the region. The Information sector includes companies in the printed media, telecommunications, software publishing, Internet services, and film industry.

In 1990 the sector accounted for 3.5% of total state jobs. Today that percentage has declined to 2.9%. Since 2000, the LQ has trended downward as the state has lost jobs at a faster rate than other parts of the country.

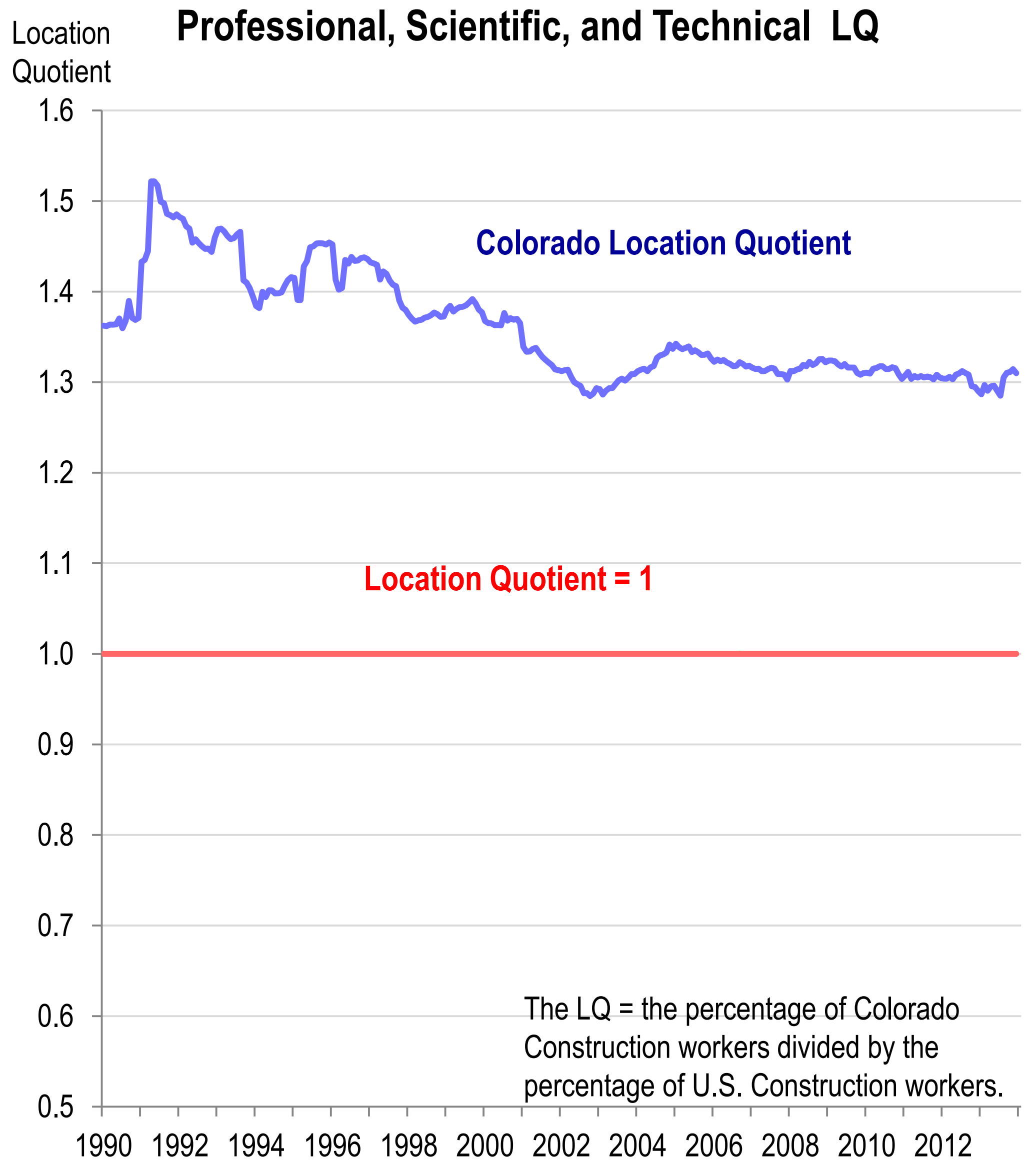


Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

How Has the Professional, Scientific, and Technical Services Sector Performed Relative to the Nation?

Many Professional, Scientific, and Technical Services (PST) companies pay higher than average wages and they are a source of primary jobs. In other words, they bring in revenue from outside the state that is spent in Colorado and they export services outside the region.

The sector has also been a source of solid job growth over the past 20+ years. Over that time the location quotient (LQ), or concentration relative to other industries, has trended downward.



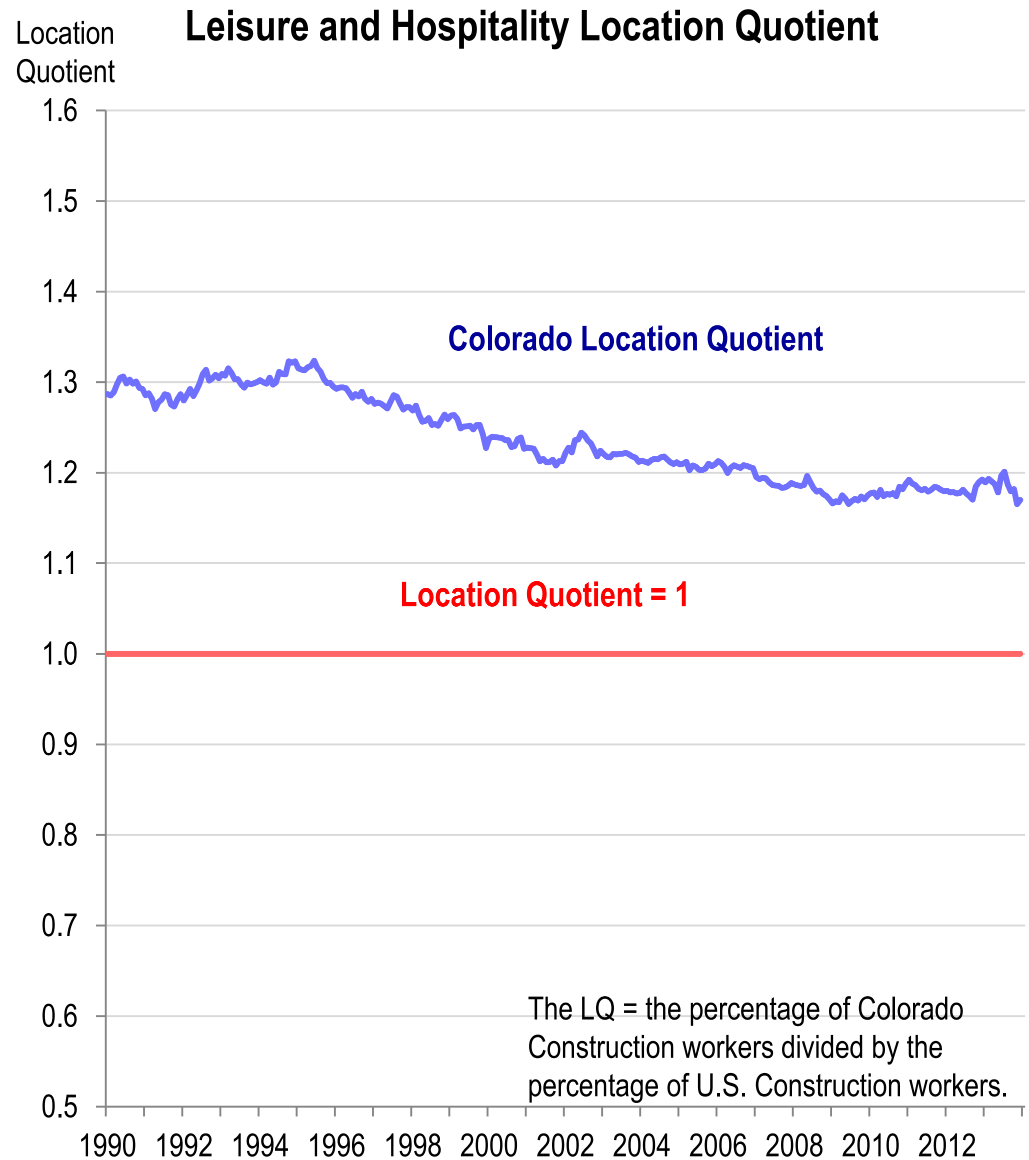
Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

How Has the Tourism Sector Performed Relative to the Nation?

For many rural counties, the tourism sector is a source of primary jobs because it attracts outside spending to the local areas.

The sector has also been a source of solid job growth over the past 20+ years. Over that time the location quotient (LQ), or concentration relative to other industries has trended downward.

In 1990 the sector was 11.0% of total state employment and is 12.2% today.



Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

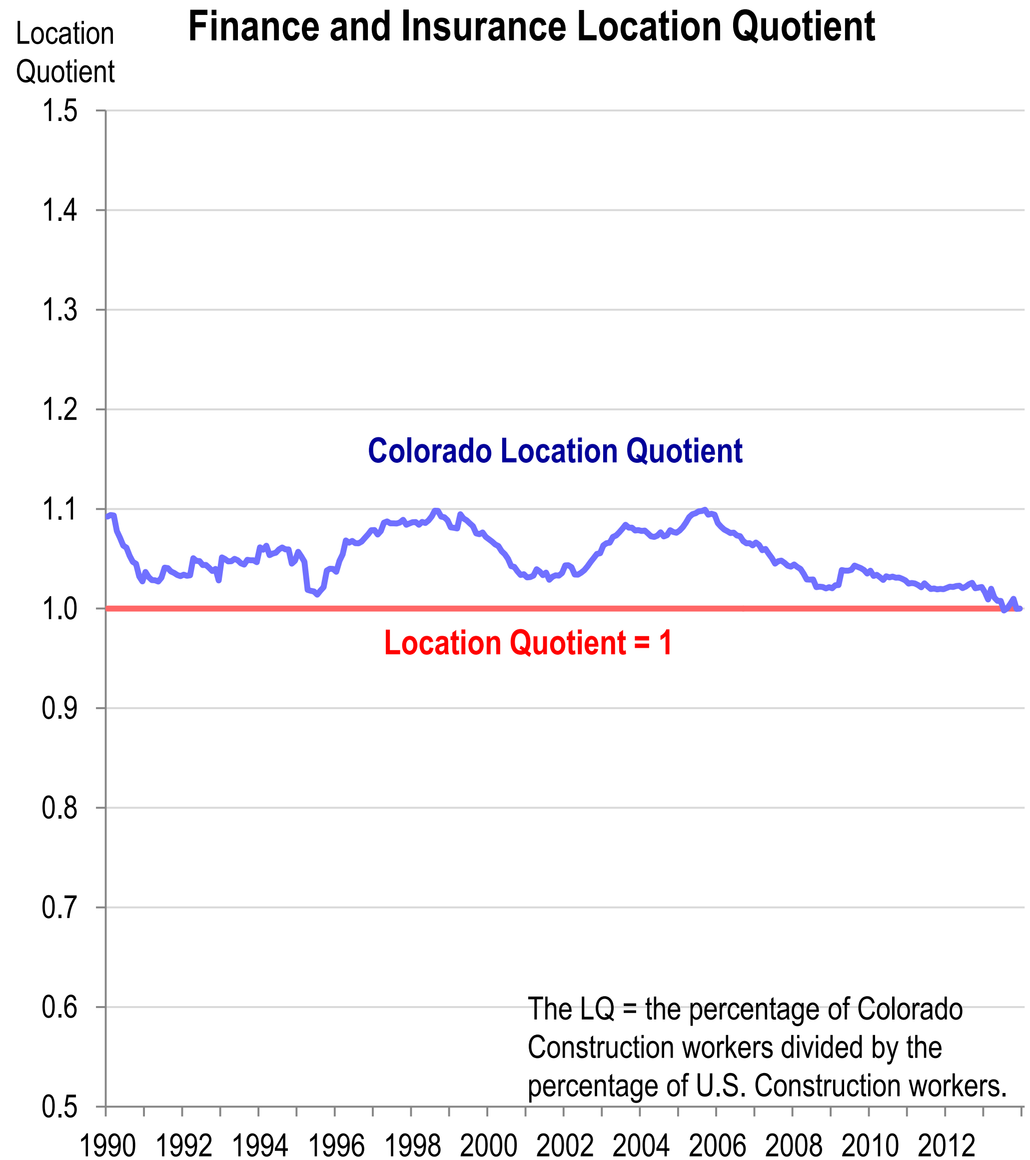
How Has the Finance and Insurance Sector Performed Relative to the Nation?

Centers of commerce, such as New York City, are able to develop distinctive competencies in finance and insurance.

Areas that do not have a distinctive competency are likely to have a location quotient (LQ), or concentration relative to other industries, that is near 1.0. Such is the case with Colorado.

In 1990 the sector accounted for 5.0% of total state employment. Today, approximately 4.3% of the state's workers are employed in the finance and insurance sector.

The state's LQ is trending downwards.



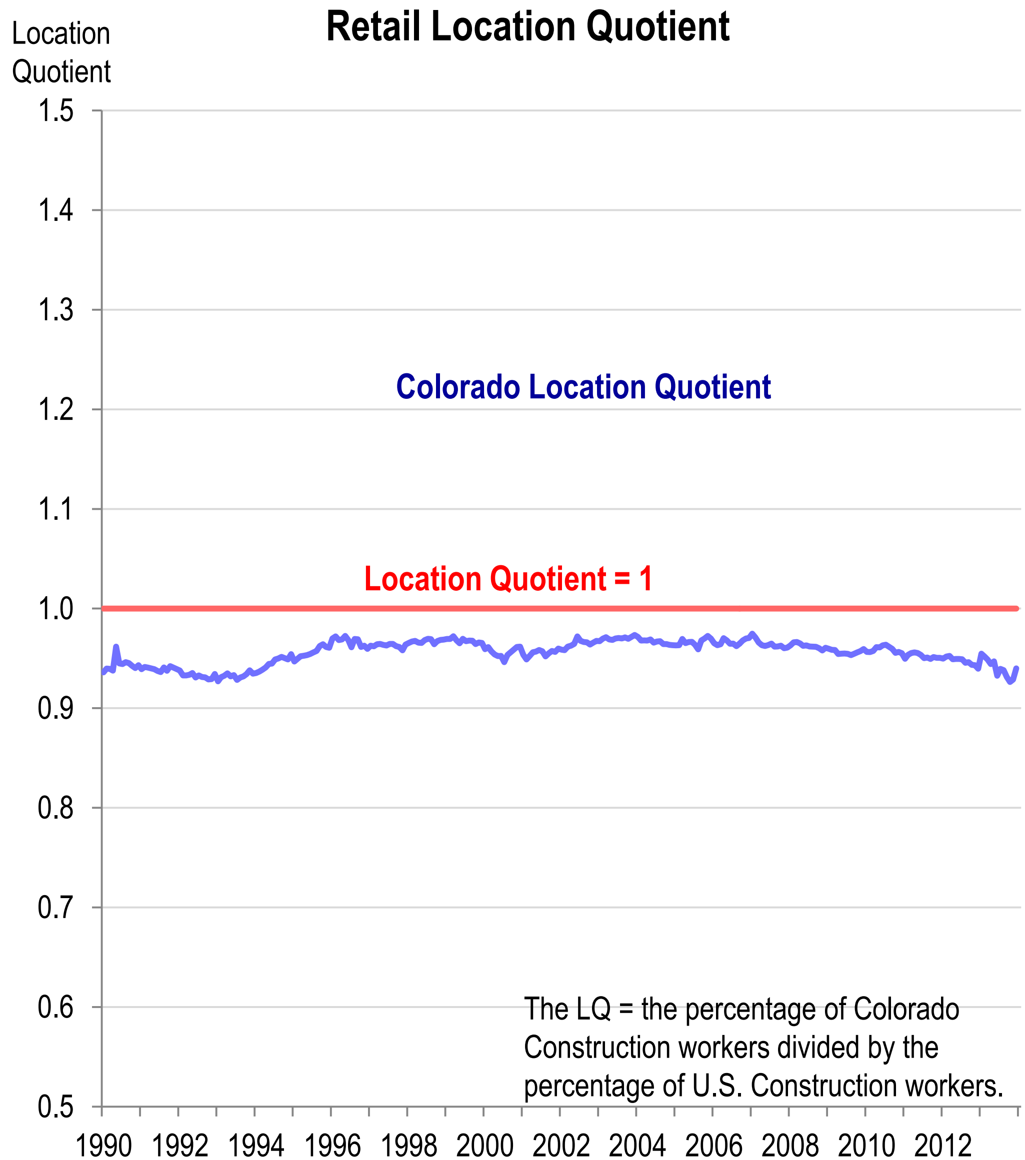
Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

How Has the Retail Sector Performed Relative to the Nation?

The Retail Sector is particularly important to the state and local governments. Many municipalities rely on retail sales tax for as much as two-thirds of their funding.

It is difficult for states to develop distinctive competencies in retail. In other words, the location quotient (LQ), or concentration relative to other industries should be near 1.0. Colorado has slightly fewer retail workers relative to other industries than the U.S.

In 1990 the sector accounted for 11.4% of total state employment. Today, approximately 10.4% of the state's workers are employed in the retail industry.



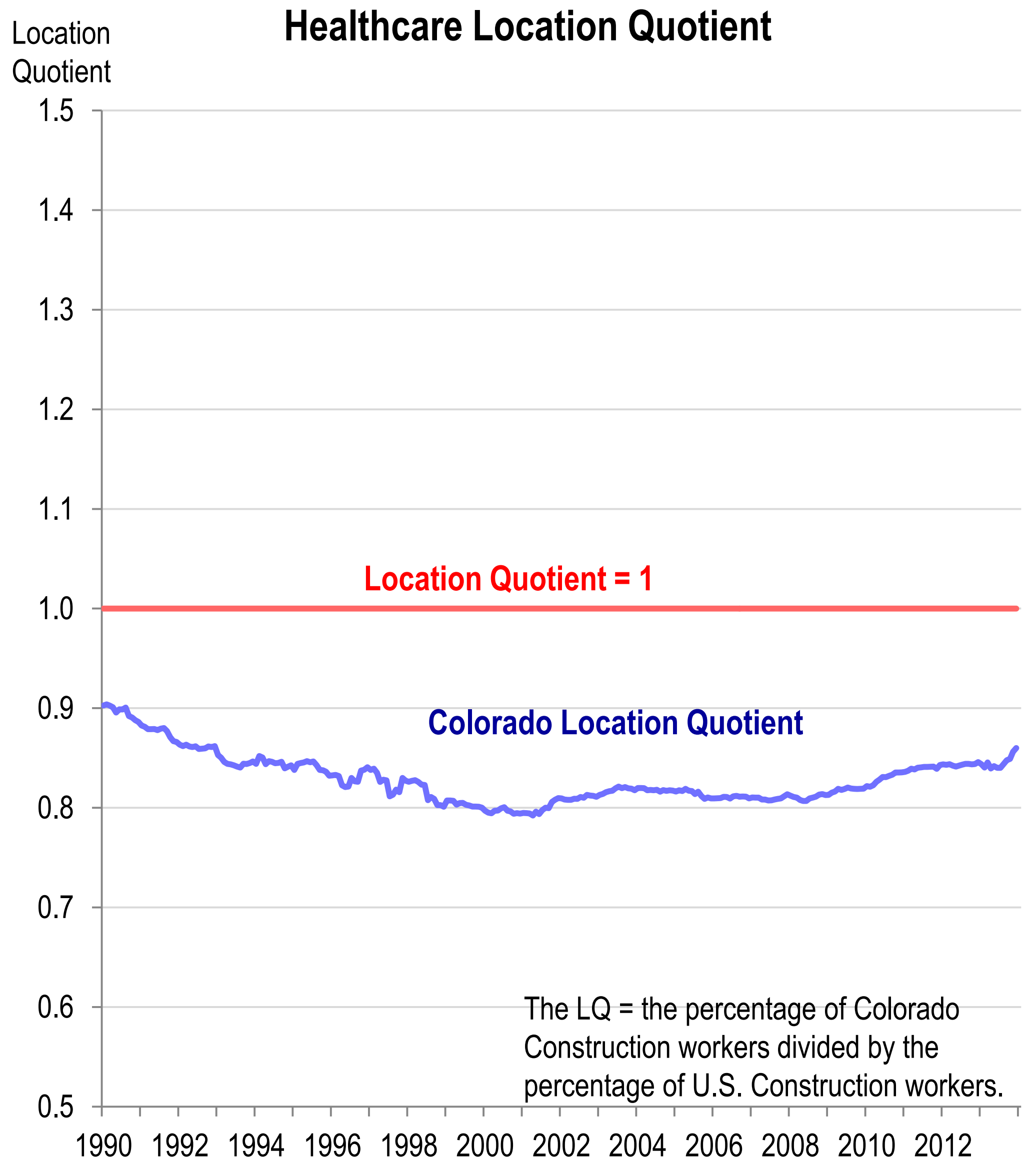
Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

How Has the Healthcare Sector Performed Relative to the Nation?

It is difficult for states to develop distinctive competencies in healthcare. In other words, the location quotient (LQ), or concentration relative to other industries should be near 1.0. Colorado has fewer healthcare workers relative to other industries.

The healthcare sector has experienced job growth every year since 1990; however, that level of growth has been at a pace less than other parts of the nation.

In 1990 the sector accounted for 7.5% of total state employment. Today, approximately 10.9% of the state's workers are employed in the healthcare sector.



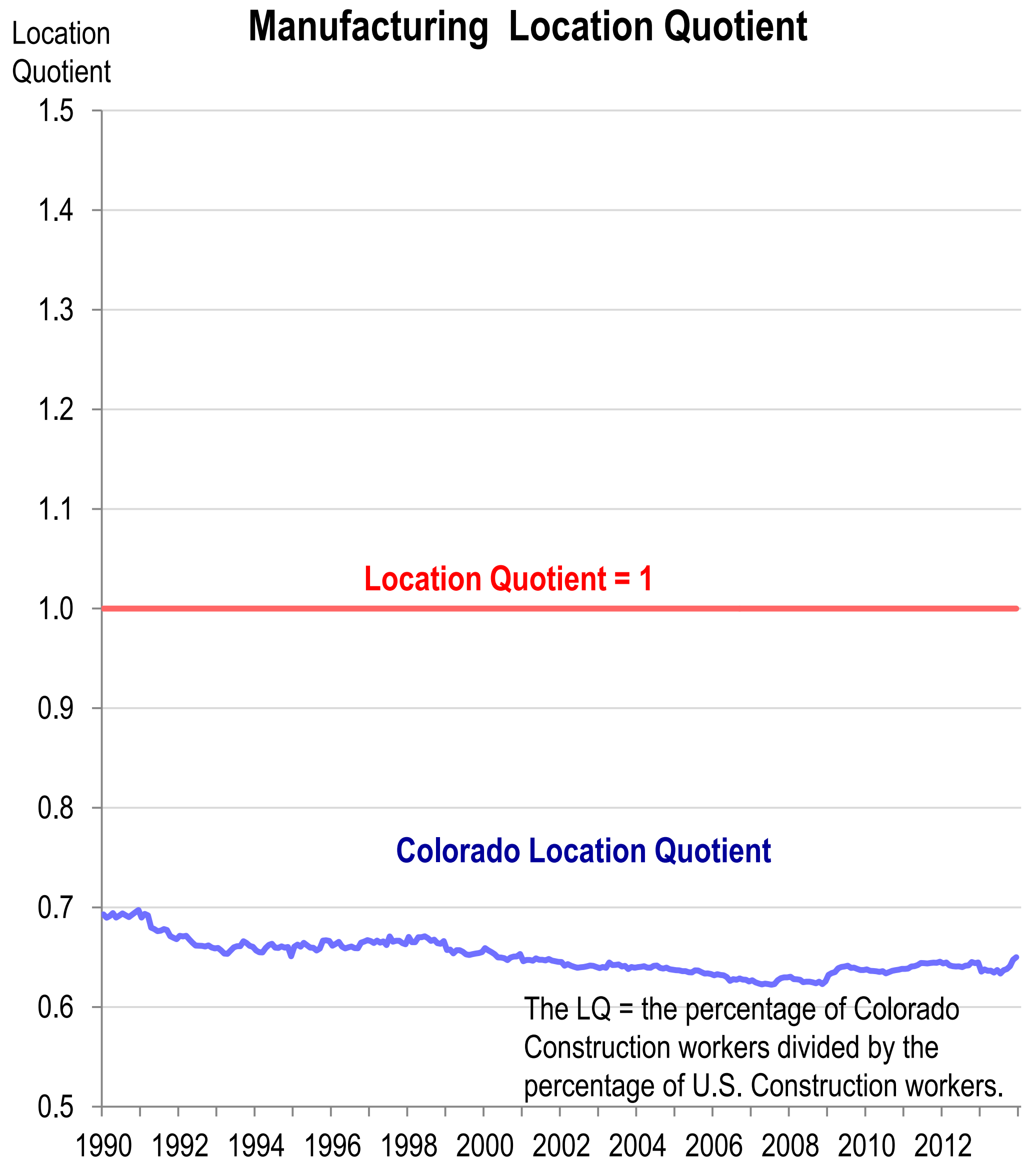
Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

How Has the Manufacturing Sector Performed Relative to the Nation?

Many manufacturing companies pay higher than average wages and they are a source of primary jobs. In other words, they bring in revenue from outside the state that is spent in Colorado and they export goods outside the region.

Although there are regions with strong manufacturing, such as Boulder County, Colorado has never been a strong manufacturing state. As a result, the location quotient (LQ), or concentration relative to other industries is well below 1.0 and trending downward.

In 1990, manufacturers accounted by 11.3% of total state employment. In 2013, only 5.7% of Colorado's employees were manufacturers.



Note: Location quotient based on all wage and salary workers.
Source: BLS ,SA.

Colorado Employment Forecast

Colorado Economic Forecast Sector Portfolio Analysis

Attempt to Improve Forecast Accuracy

Most state economic forecasts project total employment.

Some economists also produce sector forecasts. They usually add projections the sectors to derive the state total, an approach that introduces more variables for error.

CBER feels the most accurate forecast is achieved by projecting total employment and comparing it to projections for categories of sectors. Sectors are grouped into three categories based on their past performance.

Projections for the categories and overall employment are based on trends, feedback from business leaders, economic developers, and other economists. The sum of these categories are then compared to the projections for overall total employment . Usually minor adjustments are made and the final forecast is produced.

Consistent Strong Growth, Solid Growth, Volatile Sectors

This portfolio approach has made it easy to see that some sectors consistently create jobs at a higher rate of growth, some show solid growth, and others are more volatile. Ultimately, the volatile category tends to have a greater influence on the amount of change in <u>total</u> job growth than the sectors with steady growth.

In 2012 and 2013 CBER evaluated the performance of 22 sectors over the past two decades and refined the manner in which the sectors are grouped. The evaluation factors for grouping include the rate of growth, number of years with positive job growth, size of the sector, and volatility in job growth. The data used for classifying the sectors is available in the appendix. This process produced a high level of accuracy in the final forecast.

Summary of Colorado Employment Forecast Sector Portfolio Analysis

The Strong Growth, Solid Growth, and Volatile categories will each add significant jobs in 2014. In other words, that growth represents a broader base of growth than in 2012 or 2013. The following charts illustrate the growth in the three categories and their sectors.

Areas of Growth for 2014

The projected jobs added by category follow:

- Strong Growth 26,100
- Solid Growth 20,300
- Volatile 24,600

The top five areas of projected growth are:

- Construction
- Healthcare
- Professional, Scientific, and Technical Services
- Accommodations and Food Services
- Retail Trade.

The top five sectors will account for about 56.3% of job growth.

Primary/advanced technology jobs will account for about 18.5% of jobs added.

About 11.8% of jobs added will be in the Leisure and Hospitality Sector.

Areas of Decline for 2014

The only sector likely to lose jobs in 2014 is the Federal Government sector.

Annual Employment Situation for Strong Growth Sectors

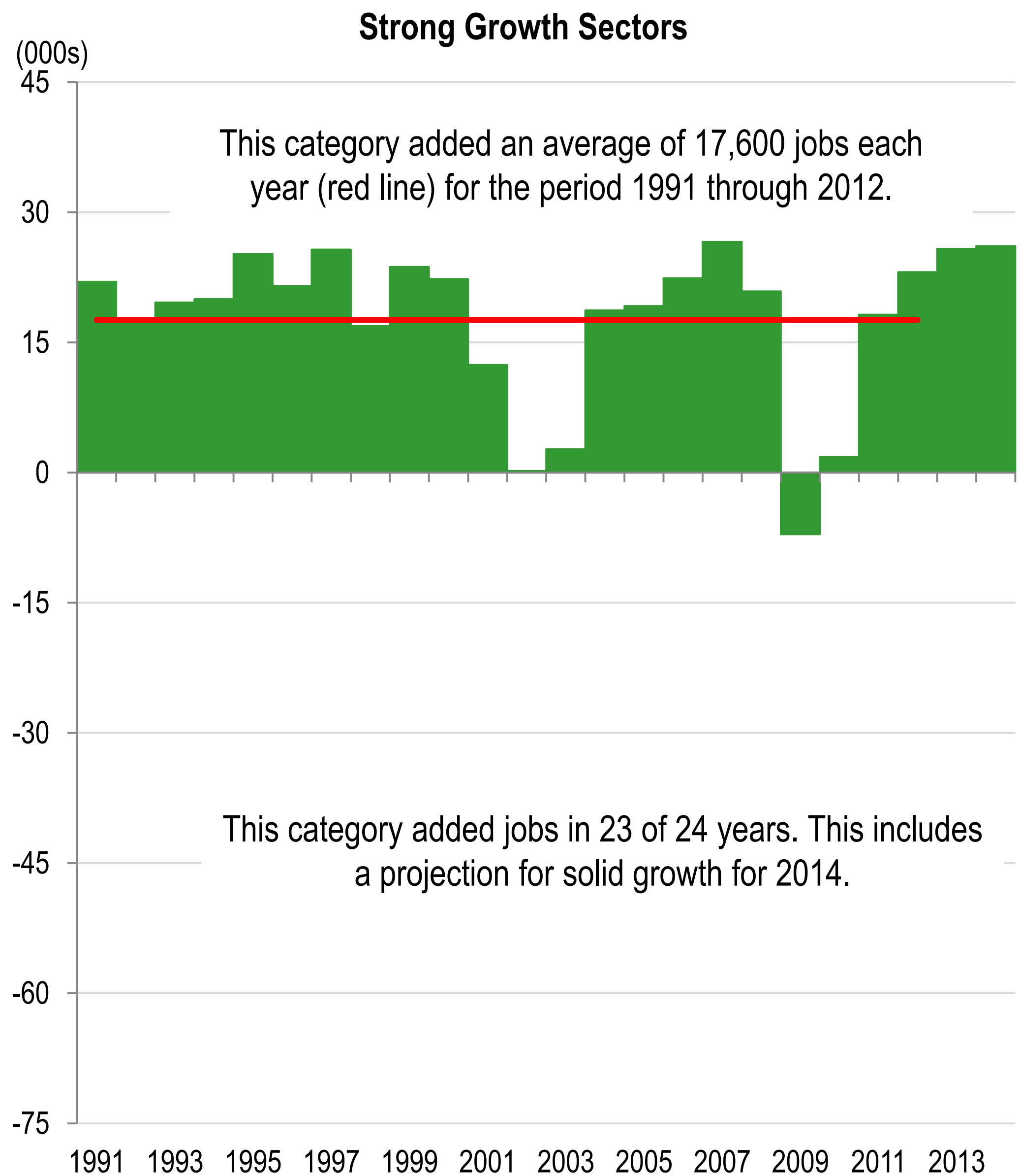
Over the past two decades the following sectors have been the foundation for consistent growth in Colorado employment.

- Professional, 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.

Growth of this category in 2013 and 2014 will be comparable to most 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.



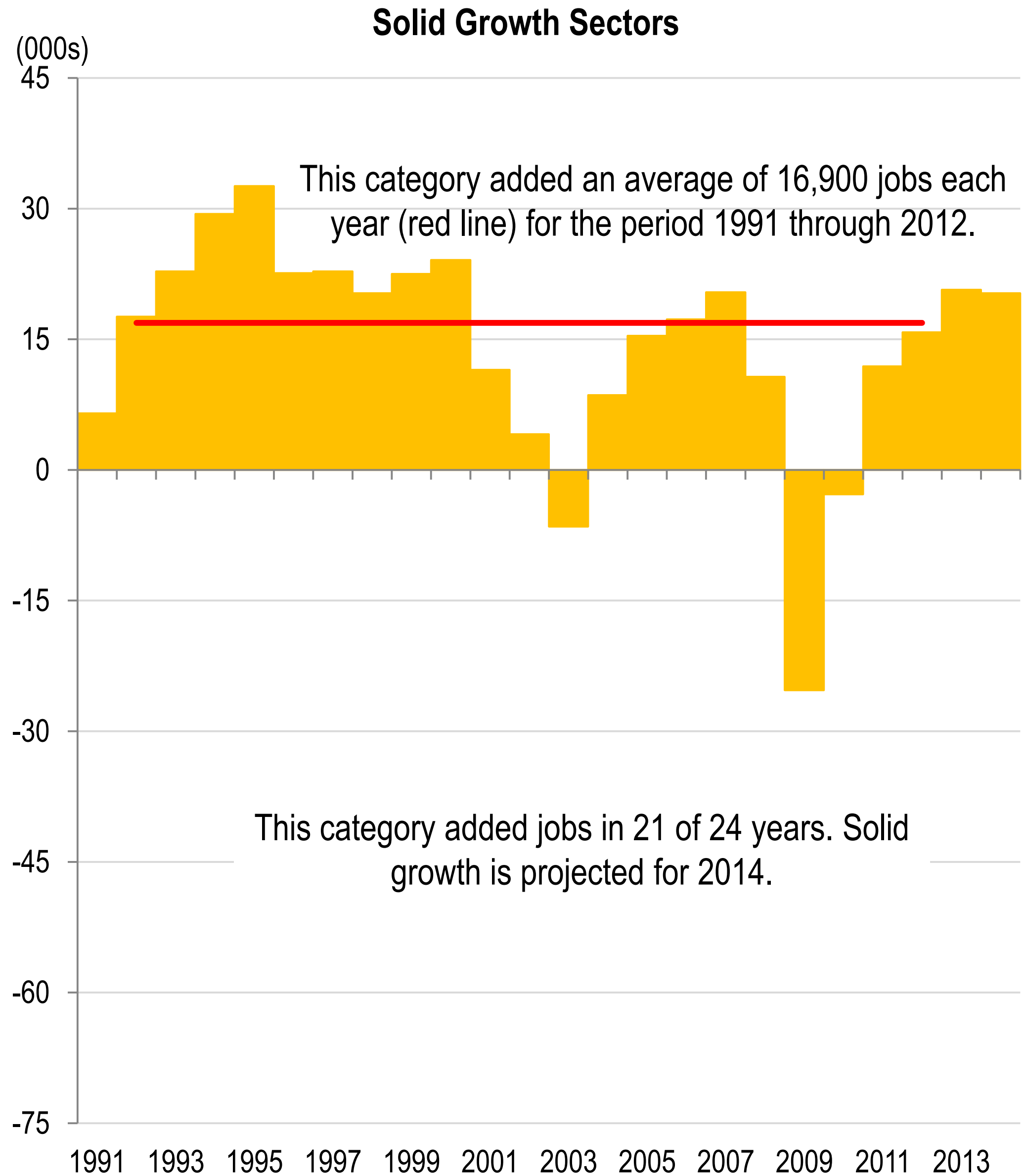
Annual Employment Situation for Solid Growth Sectors

Over the past two decades the following sectors generally posted gains. The category posted stronger jobs gains 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

Individually, some of these sectors have remained relatively flat during most of the past decade. Growth of this category in 2013 and 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 2.1% to 2.3%.



Source: Bureau of Labor Statistics, CBER.

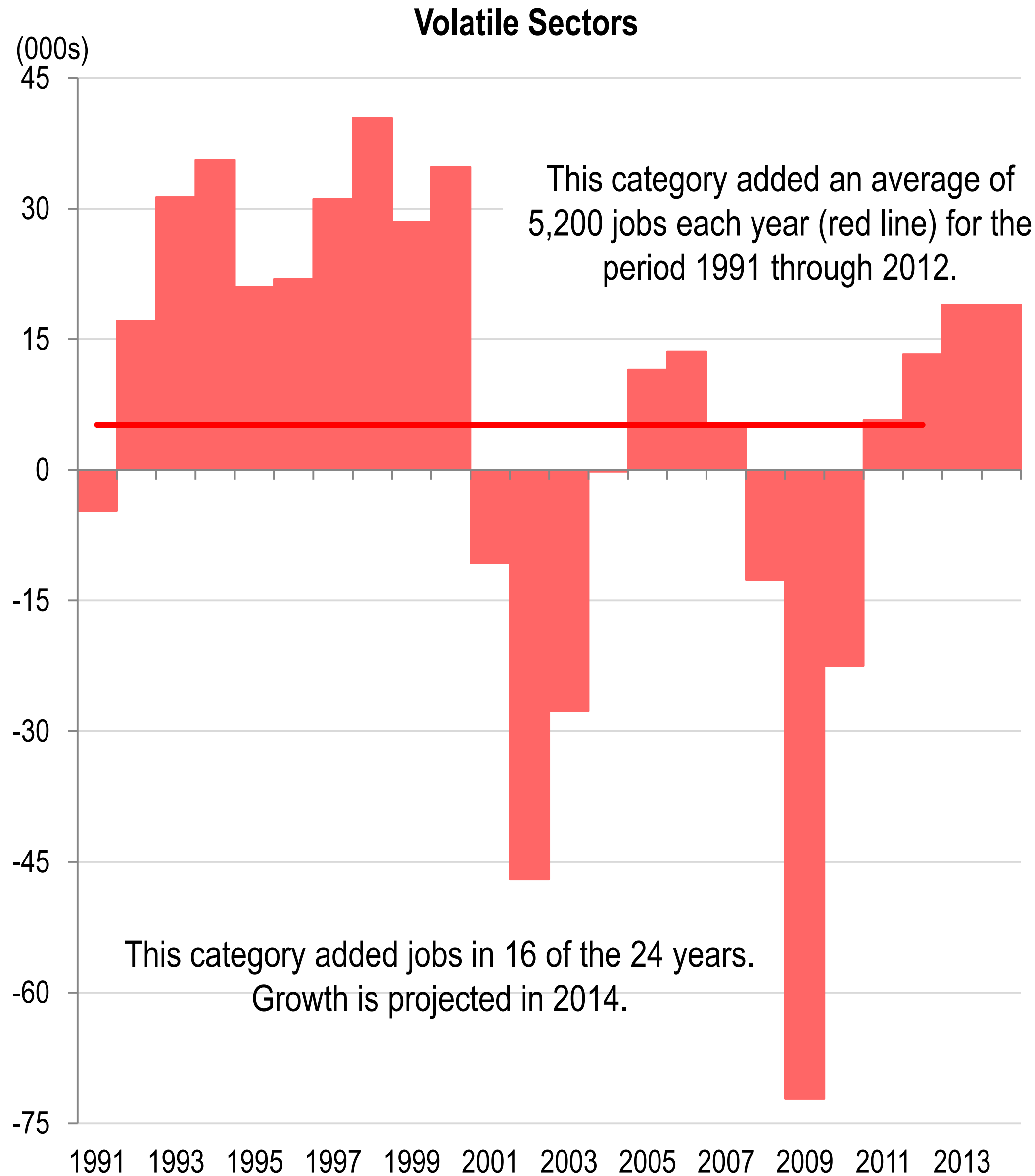
Annual Employment Situation for Volatile Growth Sectors

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

The sectors are:

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

In 2013 and 2014 this category will add between 23,000 and 27,000 jobs at a rate of 3.5% to 3.7%.



Source: Bureau of Labor Statistics, CBER.

About the Sectors Strong Growth-2014

In 2014 job growth in this category will be 3.3% to 3.5% and 24,000 to 28,000 workers will be added in 2014.

PST, MCE, Business to Business (Not Employment Services)

Professional, Scientific, and Technical Services (PST) – Job growth exceeded expectations in 2013. Expect growth of at least 4.0% in 2014. Unfortunately, the addition of Colorado PST jobs is occurring at a lower rate than the nation. In 2012 the sector accounted for 9.3% of state private sector GDP and 11.2% of private sector employment.

Management of Corporations and Enterprises (MCE) - This small sector has been a source of solid growth, particularly in the Denver Tech Center and along the 36 corridor and the City of Denver. Look for growth of at least 7.0% in 2014.

Business to Business (Not Employment Services) - This sector provides services used by other businesses. The BLS shows that Colorado had 178,731 businesses establishments in 2008. By 2011 that number had declined to 170,040, a decline of 8,691 firms, i.e. the market for this sector declined significantly over three years. About 2,200 establishments were added in 2012 and an additional 3,000 were added in 2013. This trend is expected to continue in 2014 and job growth will be in the range of 2.0% to 2.4%.

Private Education, Health Care, AER, and Other Services

Private Education – Private education increased every year from 1990 to 2012. Demand has increased with the growth in population and because higher education has not met the needs of industry in some areas. Job growth will be around 4.0%.

Health Care – Some economists have expressed concern about the "health care employment bubble“. The bubble did not burst in 2013 and it won't burst in 2014. Continued population growth, particularly among aging baby boomers will increase demand for medical care. In turn it will drive growth in the state. The state's community colleges have made a concerted effort to meet the demand for certain medical workers, especially in rural parts of the state. Job growth will be around 3.5% in 2014.

Arts, Entertainment, and Recreation (AER) – AER is small sector in the Leisure and Hospitality industry. Jobs will increase by about 1.5% in 2014.

Other Services. Over the past two decades the sector has grown at a rate slightly greater than the rate of population growth. It will increase by about 2.0% in 2014.

About the Sectors
Solid Growth-2014

This category will record job growth of 2.1% to 2.3% and add 18,000 to 22,000 workers in 2014.

Trade and AFS

Wholesale Trade
The sector posted stronger gains than anticipated in 2013. Job gains will be in the neighborhood of 2.7% to 2.9%. Jobs is this sector are ideal for lone eagles who want to work anywhere in Colorado.

Retail Trade
Retail Trade was stronger than anticipated in 2013. The state and local governments recorded stronger retail sale tax revenue. Retail competition will remain stiff in 2014. Sales are projected to increase 5.6% to 6.0% as more people move to the state. Retail employment will increase by 1.9% to 2.2% in 2014. In 2012 Retail employment accounted for 12.7% of private sector employment and the sector was 6.7% of state private sector GDP.

Accommodations and Food Services
Colorado continues to be a popular place to live and visit. AFS growth will occur as a result of effective promotion of the tourism industry, increased population, and good snow. In 2012 the sector employed 12.2% of private sector workers, yet it only accounted for 4.0% of state private sector GDP. Job gains in 2014 will exceed 3.0%.

State and Local Government

Local (Not K-12 Education)
Local governments will continue to see increased revenues as a result of improved retail sales and property prices. As a result, job growth will continue in 2014 at a rate of around 1.0%.

K-12 Education
The combination of a growing population, strong teacher's union, and Amendment 23 has caused steady growth in K-12 education jobs. Budgets will remain tight but job gains will be at least 1.2% in 2014.

State (Not Higher Education)
Improved revenue streams, population growth, and increased demand for services will drive growth in the sector. Implementation of regulations associated with Amendment 64 will prove to be a nightmare for the state. Employment will increase by 1.7% to 1.9%.

Higher Education
Since 1990, the higher education sector has been a job creation machine. A strong lobby and solid fundraising have allowed higher education to add jobs during the Lost Decade. The number of higher education jobs will increase by at least 2.0%.

About the Sectors Volatile Growth-2014

In 2014, this category will add 23,000 to 27,000 workers, i.e. there will be job growth of 3.5% to 3.7%. The high growth rate is a reflection of the volatility experienced by the sectors within the category.

Goods Producing and TWU

Natural Resources and Mining
Job growth was unexpectedly flat in 2013. Increased activity in Niobrara will drive job growth of at least 5.0% in 2014. In 2012, the extractive industries accounted for 4.3% of private sector GDP and 1.6% of the private sector employment. The anti-fracking movement could hurt the industry in 2014 and beyond.

Construction
Construction was a leading sector in job creation in 2013. Overall, job growth is projected to be about 8.0% in 2014.

Manufacturing
Colorado has a low concentration of manufacturers. In 2012 the sector accounted for 6.9% of private employment and 8.4% of private sector GDP. Job growth will be 1.5% to 2.0 % in 2014.

Transportation, Warehousing, and Utilities
TWU added more jobs than anticipated in 2013. Growth will occur as a result of increased activity at DIA and stronger net migration. Job growth will be in the range of 4.5% in 2014.

Employment Services, Finance, Information, Federal Government

Financial Activities
After declining for five years, the sector posted job gains in 2012 and 2013. Recent growth has occurred as a result of increased real estate activity. Job growth will be 2.6% to 2.8% in 2014.

Information
Sector employment has trended downward since 2001, yet output has steadily trended upward. In 2012, the sector was responsible for 3.6% of private sector employment and 9.4% of state GDP. Growth in some subsectors may be constrained by the number of trained workers along the Front Range. Job growth in the Information Sector will remain flat in 2014.

Federal Government
Federal employment decreased slightly in 2013 as a result of sequestration. A similar decrease is likely in 2014. Additional cutbacks may occur with reduction in Post Office workers.

Employment Services
Companies will continue to hire temporary workers until they are confident about their company's ability to react to changing economic conditions. Over the past decade sector employment has vacillated from 30,000 to 44,000. The sector will see job gains in excess of 8% in 2014.

Summary of 2014 Outlook

The recovery from the Great Recession has been less than robust. While there are many risks to future growth, there are fewer headwinds than in the past three years. At last, the state may have finally generate enough momentum to show solid, sustained job growth in 2014.

Overall Job Growth
Between 1990 and 2012 the state economy has expanded at an annualized rate of 1.9%.

Strong Growth Category (About 32% of total employment)
This category added jobs at an annualized rate of 3.3% between 1990 and 2012. In 2014, job growth will be **3.3% to 3.5%.**

Limited Growth Sectors (about 39% of total employment)
This category added jobs at an annualized rate of 1.8% between 1990 and 2012. In 2014, job growth will be **2.1% to 2.3%.**

Volatile Growth Sectors (29% of total employment)
This category added jobs at an annualized rate of 0.9% between 1990 and 2012. In 2014, job growth will be **3.5% to 3.7%.**

2014 Employment Outlook

Optimistic Scenario

- U.S. Real GDP greater than 2.7%.
- Colorado will add more than 74,000 workers.

Most Likely Scenario

- U.S. Real GDP 2.3% to 2.7%.
- The U.S. will add at least 2.3 million workers.
- Colorado will add 3.0% of total U.S. jobs added.
- Colorado will add 68,000 to 74,000 workers, job growth will be 2.9% to 3.1%.

Pessimistic Scenario

- U.S. Real GDP less than 2.3%.
- Less that 68,000 Colorado workers.

The probability of these scenarios follows:

- Most Likely 55%
- Optimistic 20%
- Pessimistic 25%.

There is slightly more downside risk than upside potential.

Source: CBER.

Summary, Opportunities, and Challenges

Summary of 2014 Economic Forecast

Based on growth in the global, U.S., and state economies Colorado will see job growth at a rate slightly greater than 2013.

Global and United States

- The rate of global output growth will be stronger for most countries in 2014 as rate of output growth will increase to 3.1%.

- The rate of U.S. output growth will be in the range of 2.3% to 2.7%, up significantly from 2013. Job growth will be stronger and the unemployment rate will decline.

Colorado

- Each of the categories (strong growth, solid growth, and volatile) will make significant contributions to 2014 job growth.

- The most likely scenario is that Colorado job growth will be in the range of 68,000 to 74,000 in 2014. Growth will be broad based driven by the Construction; Healthcare, Professional, Scientific, and Technical Services, Accommodations and Food Services, and Retail Trade Sectors.

- The top five sectors will account for about 56.3% of job growth.

- Primary/advanced technology jobs account for about 18.5% of jobs added.

- About 11.8% of jobs added will be in the Leisure and Hospitality Sector.

2014 Employment Forecast

Twenty-two sectors and subsectors have been placed into three categories based on their growth patterns over the past two decades. Projections for these categories are used in the development of the 2014 employment forecast.

Growth Sectors
+ 24,000 to 28,000 Employees

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

Limited Growth Sectors
+18,000 to 22,000 Employees

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

Volatile Growth Sectors
+23,000 to +27,000 Employees

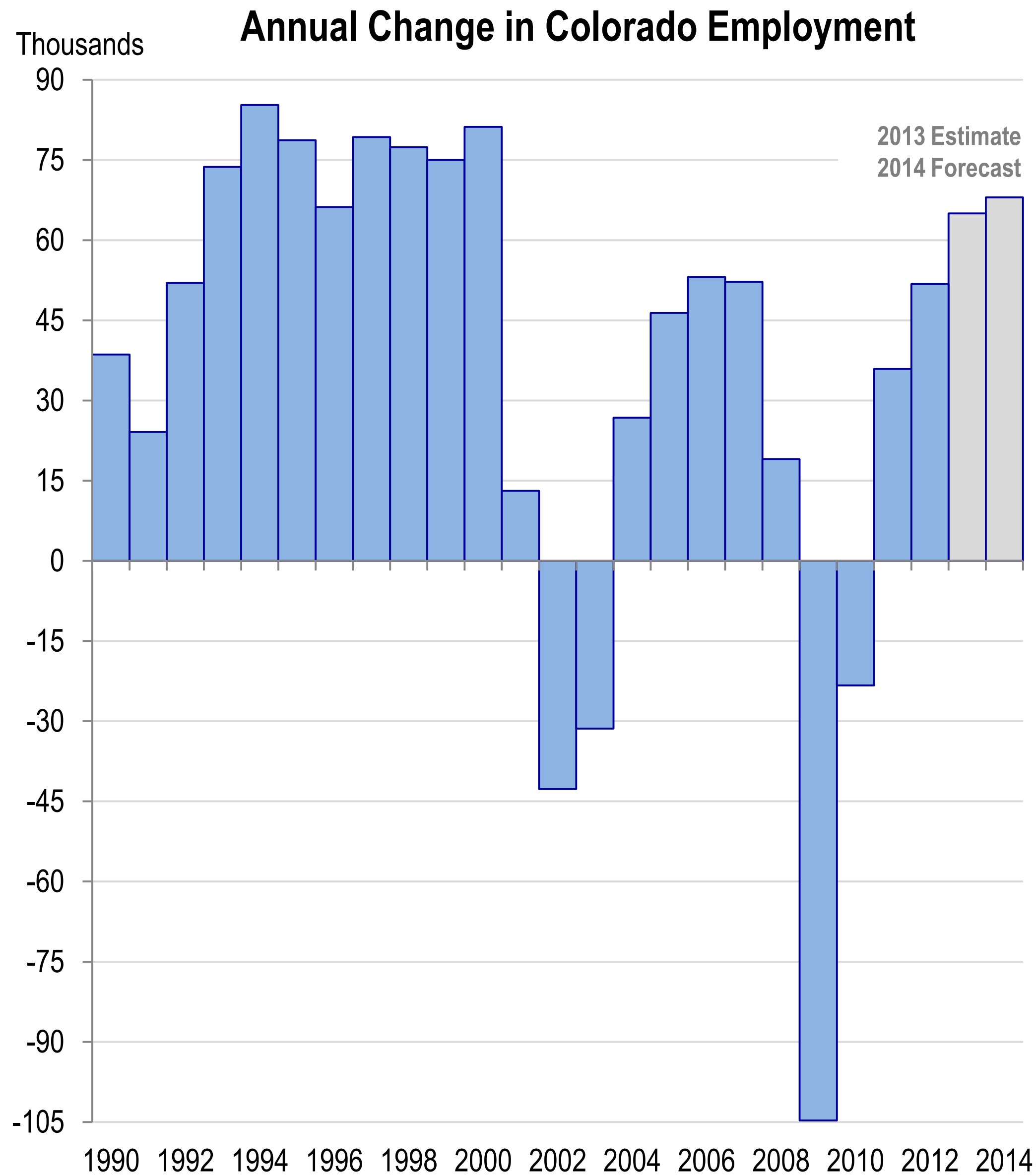
- Natural Resources and Mining
- Construction
- Manufacturing
- Transportation, Warehousing, and Utilities
- Employment Services
- Financial Activities
- Information
- Federal Government

In 2014 Colorado will add 68,000 to 74,000 jobs.

Source: CBER.

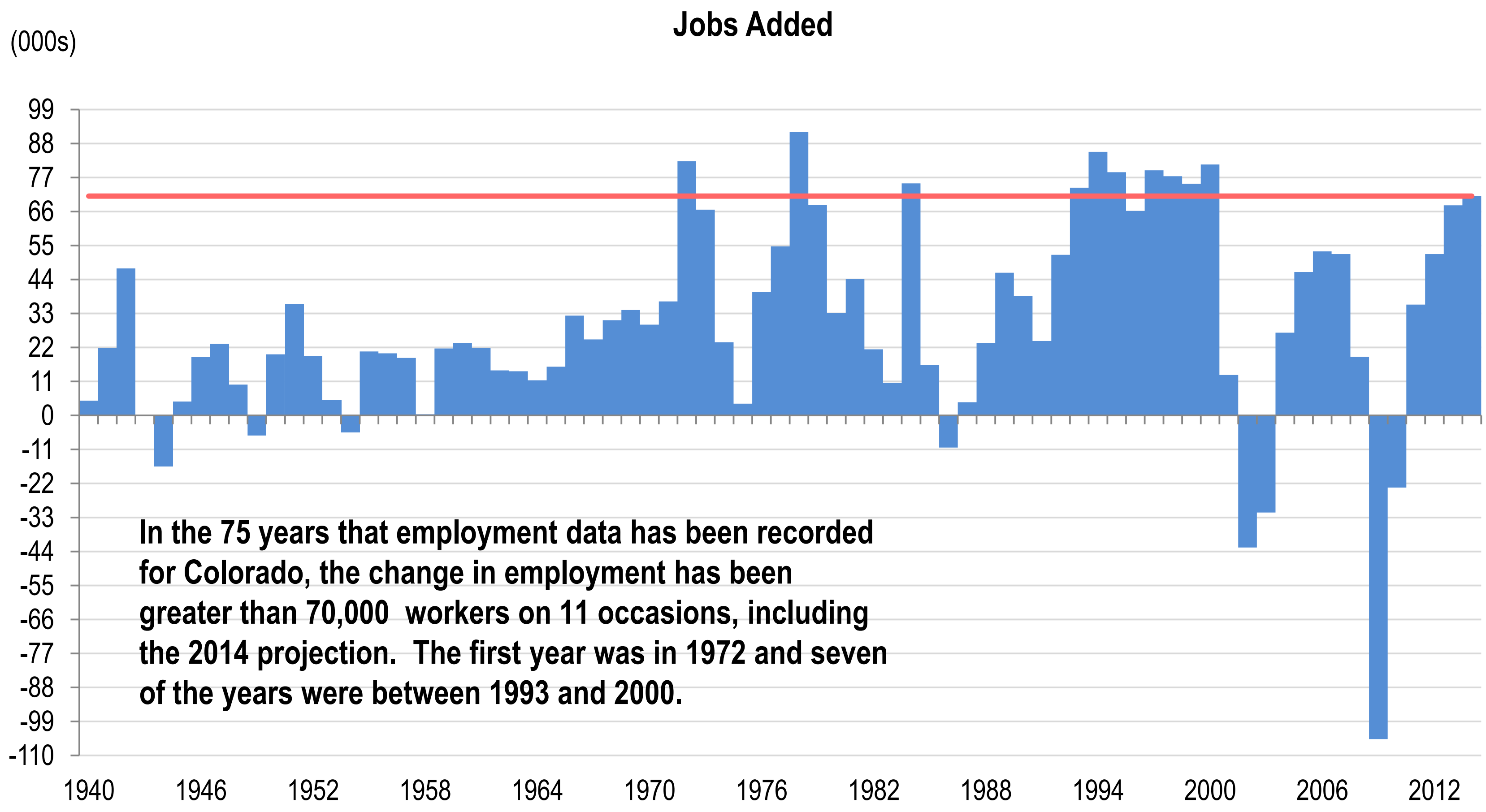
Annual Employment Change in Colorado

The state will add 68,000 to 74,000 jobs in 2014. Colorado employment will increase by 2.9% to 3.1%.



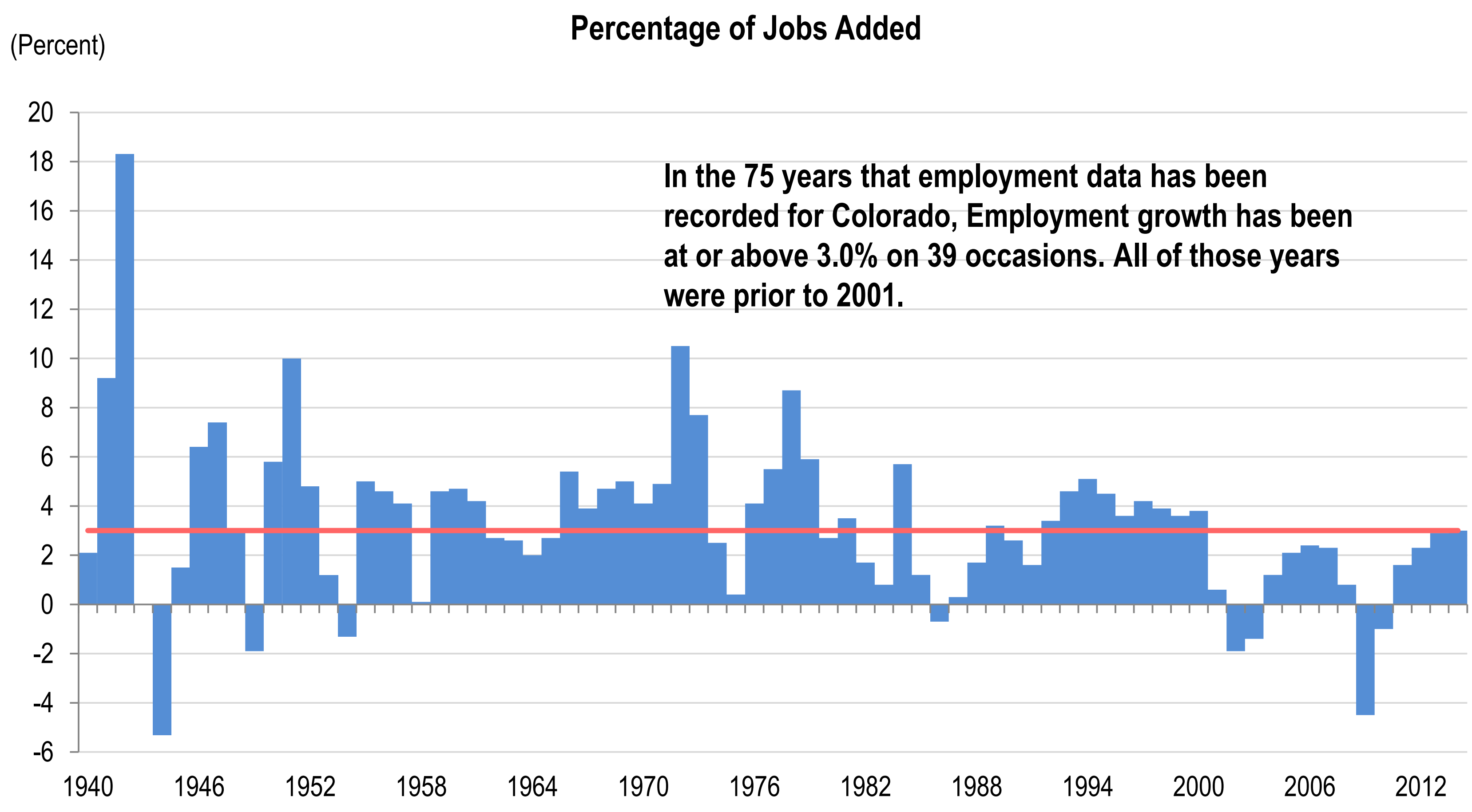
Source: Bureau of Labor Statistics, CBER.

How Does Projected 2014 Growth (Jobs Added) Compare to Previous Years?



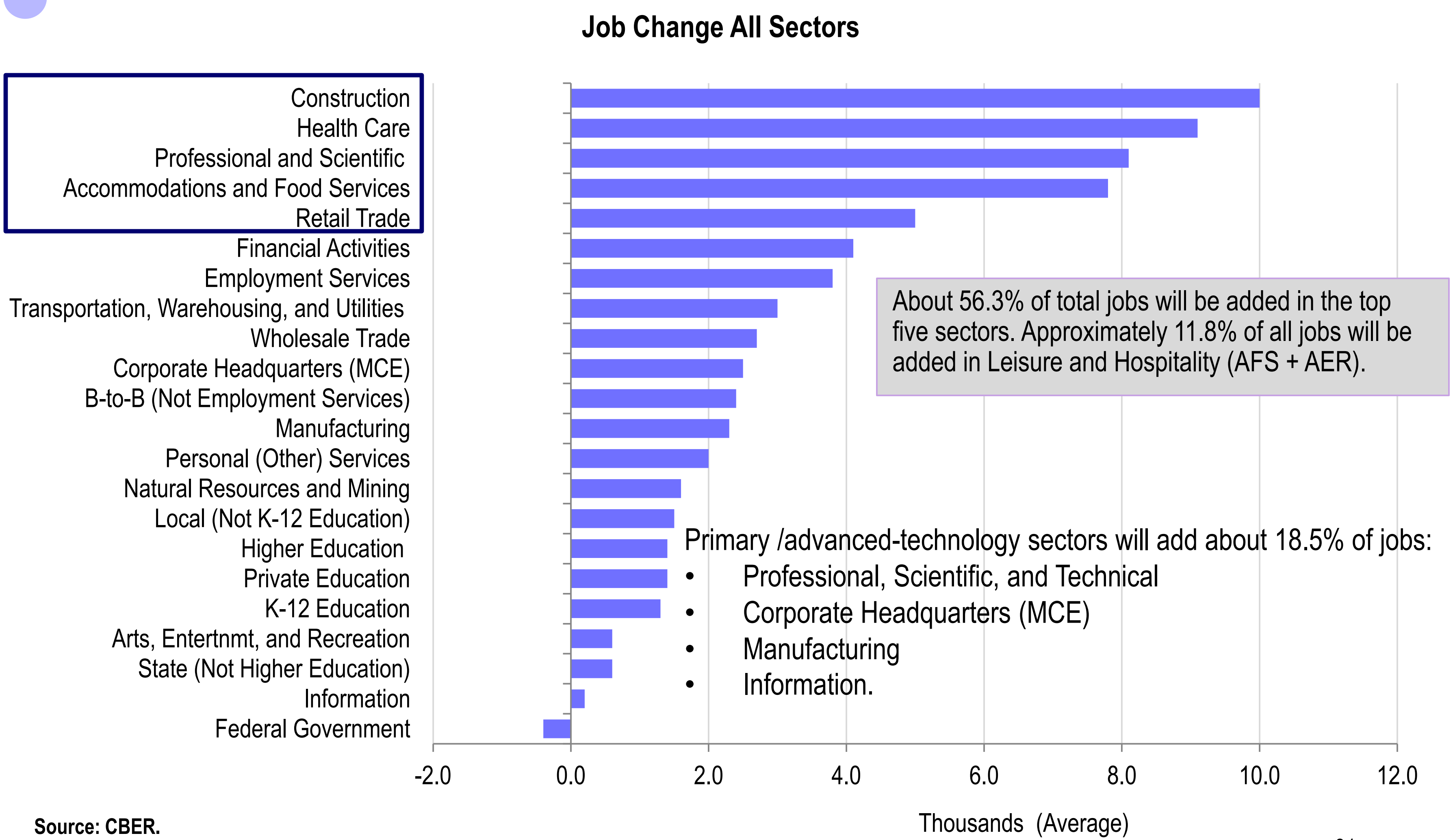
Source: Bureau of Labor Statistics, NSA.

How Does the 2014 Projected Rate of Job Growth Compare to Previous Years?



Source: Bureau of Labor Statistics, NSA.

Projected Job Changes 2014



Source: CBER.

Issues That Will Present Opportunities and Challenges in 2014

The improving global economy will support broad-based growth of the U.S. economy and vice versa. In turn, Colorado will enjoy its strongest job growth in over a decade. Some of the opportunities and challenges for 2014 are listed below.

Opportunities

1. Both Global and U.S. Real GDP are projected to increase at rates greater than 2013. Will that translate into a 4th consecutive year of rising job growth for the state?
2. After the dysfunctional 2013 Colorado legislative session, a threat by counties to secede from the state, and two successful recalls, are legislators ready to work *together* for the good of the state?
3. How much will the passage of Amendment 64 benefit the state fiscally? Will tax revenues exceed enforcement, social, and opportunity costs?
4. Primary jobs are essential to the economy because they create wealth and usually pay higher than average wages. Will 2014 be the year that there is a stronger increase in primary jobs?
5. Will Colorado's strategy to attract millenials prove to be an effective economic development strategy?

Challenges

1. Are global financial sectors in the mature economies stable? Are financial bubbles looming on the horizon?
2. Will U.S. monetary policy be conducive to growth of the global economy? Will Janet Yellen be able to unwind Quantitative Easing without drastically raising inflation or the causing a downturn in the equity markets?
3. Is U.S. public and personal public debt excessive? Will Americans manage their finances more responsibly?
4. Will the off-year elections bring about more conflict, change, or more of the same?
5. Will gun-control legislation, anti-fracking efforts, energy legislation that hurt rural Colorado, and other anti-business activity create the impression that Colorado is not business-friendly?
6. What does Mother Nature have in store for Colorado in 2014?
7. Will 2014 be the year Colorado begins adding establishments at a significant level?
8. **Will Peyton Manning bring a Super Bowl to Denver?**

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.

BLS and LMI Data Revision Process

The CES projection process is outlined below:

1. Around the 20th 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 20th preliminary data for May will be produced and April will be updated.) These revisions are usually minor. Most short-term forecasts use this data.

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.

Analysis for Determining Portfolio Categories
Strong Consistent Growth Sectors

STRONG CONSISTENT GROWTH SECTORS

Category	1990 Employment	2012 Employment	% of Jobs 1990	% of Jobs 2012	Yrs Jobs Added '91 to '12	Change in Jobs '91-'00	Change in Jobs '01-'10	Change in Jobs '11-'12	% Jobs Added '91 to '12	% Jobs Added '91 to '12	CAGR '91 to '12
Arts, Ent, Rec	23.4	47.0	1.5%	2.0%	18	19.1	2.2	2.3	23.6	3.0%	3.22%
Admin Not Em Sv	56.7	104.9	3.7%	4.5%	19	34.7	8.2	5.3	48.2	6.1%	2.84%
Health Care	115.8	247.1	7.6%	10.7%	22	54.3	62.3	14.7	131.3	16.6%	3.51%
Mgmt Corp Ent	13.1	31.8	0.9%	1.4%	19	6.0	9.9	2.8	18.7	2.4%	4.11%
Other Serv	56.0	95.5	3.7%	4.1%	20	24.2	12.2	3.1	39.5	5.0%	2.46%
Private Educ	14.0	35.2	0.9%	1.5%	22	8.7	9.6	2.9	21.2	2.7%	4.28%
Prof, Scien, Tech	86.3	177.8	5.7%	7.7%	18	67.5	13.4	10.6	91.5	11.6%	3.34%
Strong Growth	365.3	739.3	24.0%	32.0%	21	214.5	117.8	41.7	374.0	47.4%	3.26%
State	1,520.9	2,310.0			18	692.9	8.5	87.7	789.1	100.0%	1.92%

Source: Bureau of Labor Statistics, CBER.

Analysis for Determining Portfolio Categories
Solid Growth Sectors

SOLID GROWTH SECTORS

Category	1990 Employment	2012 Employment	% of Jobs 1990	% of Jobs 2012	Yrs Jobs Added '91 to '12	Change in Jobs '91-'00	Change in Jobs '01-'10	Change in Jobs '11-'12	% Jobs Added '91 to '12	% Jobs Added '91 to '12	CAGR '91 to '12
Acc Food Serv	143.9	233.3	9.5%	10.1%	20	59.6	14.8	15.0	89.4	11.3%	2.22%
St-Higher Ed	40.6	63.6	2.7%	2.8%	20	7.4	12.3	3.3	23.0	2.9%	2.06%
Local Ed	81.7	125.6	5.4%	5.4%	19	23.5	21.6	(1.2)	43.9	5.6%	1.97%
Local Not Ed	72.9	117.8	4.8%	5.1%	20	25.5	19.5	(0.1)	44.9	5.7%	2.21%
Retail Trade	172.7	243.5	11.4%	10.5%	16	72.5	(8.3)	6.6	70.8	9.0%	1.57%
St-Not Higher Ed	24.4	33.1	1.6%	1.4%	19	6.2	2.1	0.4	8.7	1.1%	1.40%
Whls Trade	72.9	94.1	4.8%	4.1%	16	26.5	(8.6)	3.3	21.2	2.7%	1.17%
Solid Growth	609.1	911.0	40.0%	39.4%	19	221.2	53.4	27.3	301.9	38.3%	1.85%
State	1,520.9	2,310.0			18	692.9	8.5	87.7	789.1	100.0%	1.92%

Source: Bureau of Labor Statistics, CBER.

Analysis for Determining Portfolio Categories
Volatile Sectors

VOLATILE SECTORS

Category	1990 Employment	2012 Employment	% of Jobs 1990	% of Jobs 2012	Yrs Jobs Added '91 to '12	Change in Jobs '91-'00	Change in Jobs '01-'10	Change in Jobs '11-'12	% Jobs Added '91 to '12	% Jobs Added '91 to '12	CAGR '91 to '12
Construction	63.5	115.1	4.2%	5.0%	15	100.1	(48.5)	-	51.6	6.5%	2.74%
Empl Srvcs	22.8	40.7	1.5%	1.8%	16	31.7	(20.8)	7.0	17.9	2.3%	2.67%
Fed Govt	57.3	54.5	3.8%	2.4%	9	(2.5)	1.4	(1.7)	(2.8)	-0.4%	-0.23%
Fin Activities	104.6	146.1	6.9%	6.3%	15	42.4	(2.7)	1.8	41.5	5.3%	1.53%
Information	52.2	69.7	3.4%	3.0%	11	56.2	(36.4)	(2.3)	17.5	2.2%	1.32%
Manufacturing	170.2	132.1	11.2%	5.7%	9	18.7	(63.4)	6.6	(38.1)	-4.8%	-1.15%
Extractive Ind	17.1	15.3	1.1%	1.3%	12	(4.9)	12.2	5.9	13.2	1.7%	2.63%
Trans,Whs,Util	59.0	60.5	3.9%	3.1%	16	15.3	(4.4)	1.5	12.4	1.6%	0.87%
Volatile	546.7	542.0	35.9%	28.6%	14	257.0	(162.6)	18.8	113.2	14.3%	0.86%
State	1,520.9	1,545.0	100.0%	100.0%	18	692.9	8.5	87.7	789.1	100.0%	1.92%

Colorado Economic Forecast 2014

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