

Colorado-based Business and Economic Research

July 28, 2013

Overview

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

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

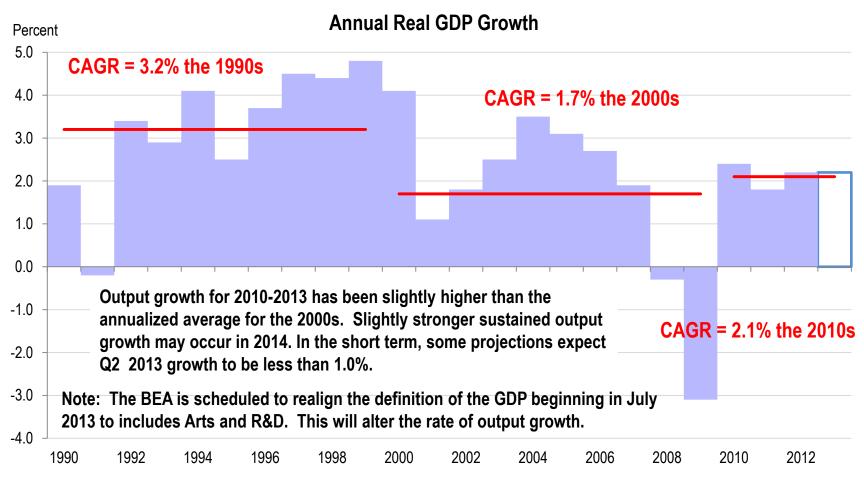
This brief analysis is divided into the following sections.

- U.S. Economy
- Colorado Economy/Performance to Forecast
- 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

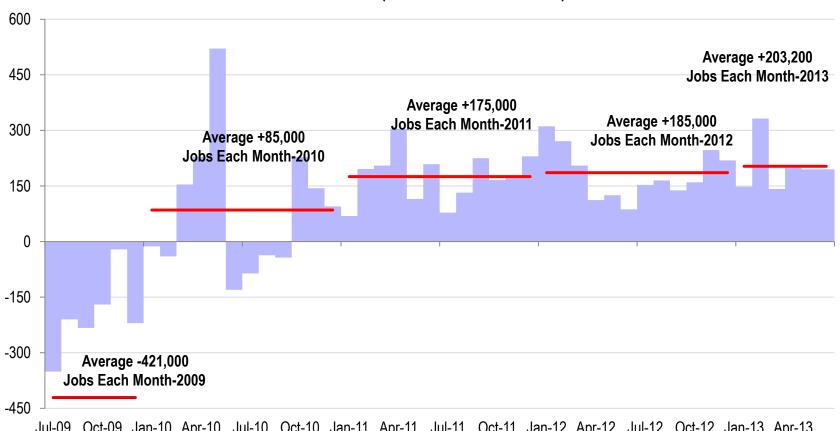


Source: Bureau of Economic Analysis, HIS, The Conference Board, CBER.

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

(000s)

Jobs Added (Month Over Prior Month)



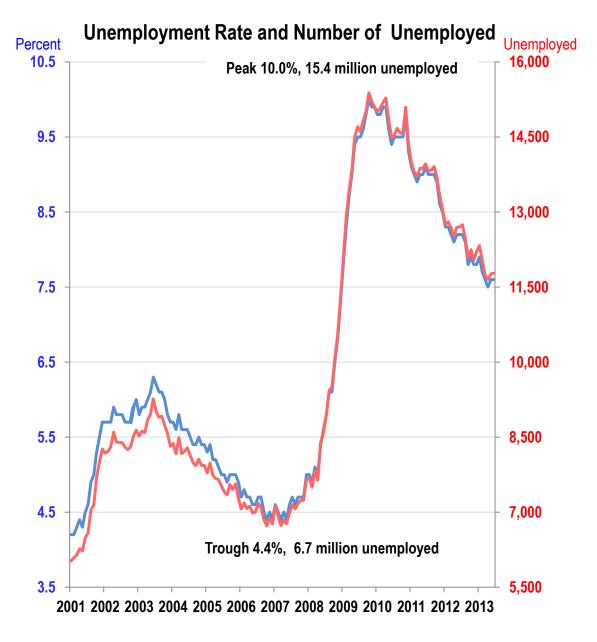
Jul-09 Oct-09 Jan-10 Apr-10 Jul-10 Oct-10 Jan-11 Apr-11 Jul-11 Oct-11 Jan-12 Apr-12 Jul-12 Oct-12 Jan-13 Apr-13

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 June 2013, the unemployment rate (blue) was at 7.6%.

The total number of unemployed (red) remained at 11.8 million. This is 5.0 million above the low point in 2007, but only 3.6 million below the high point in 2010.



http://cber.co

Summary of U.S. Economy

Good News

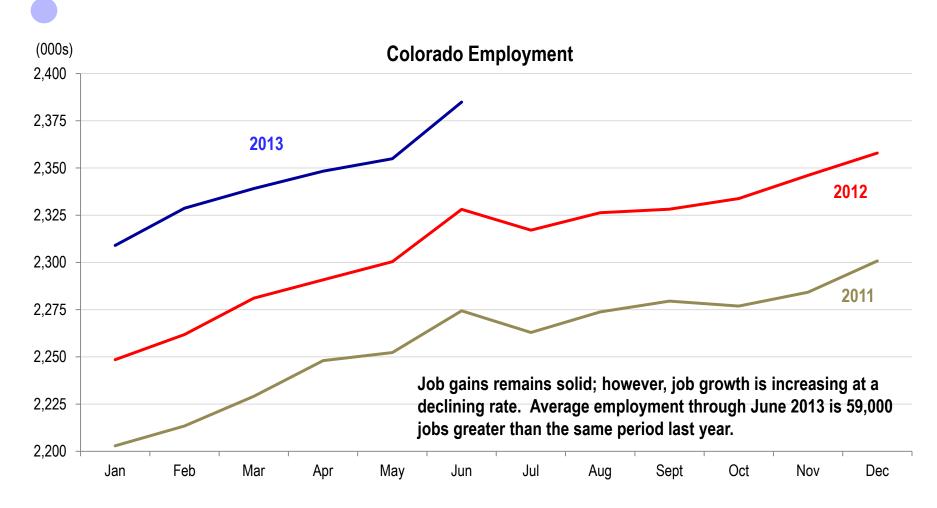
- U.S. employment situation continues to show solid growth; however, the rate of job growth has leveled off which will prevent a sharp decline in the unemployment rate.
- Wage increases will support stronger personal gains.
- The housing and equities markets have improved confidence and increased "wealth".
- Slight improvement in manufacturing, particularly strength in the automotive industry.
- Reduction in federal government spending, in part due to sequestration, has been offset by strength in the private sector.

Challenges

- U.S. output (GDP) will remain weak. Projections for Q2 are much weaker than Q1 based on diminished consumer spending and increased imports; however output growth in 2014 may exceed 2.5%.
- Uncertainty about the Fed's ability to unwind the Quantitative Easing stimulus, although it appears they won't cut back on bond purchases until 2014.
- Despite positive housing data, Robert Shiller has expressed uncertainty about the future strength of the housing market and housing prices.
- New firm creation will continue to be disappointing.
- Level of public and private debt.
- Impact of Affordable Care Act.
- Perception of political leadership partisanship and "scandals".
- Uneven recovery and weaknesses in Europe.
- The situation in the Middle East will remain tenuous.

Colorado Economy/Performance to Forecast

Colorado Employment



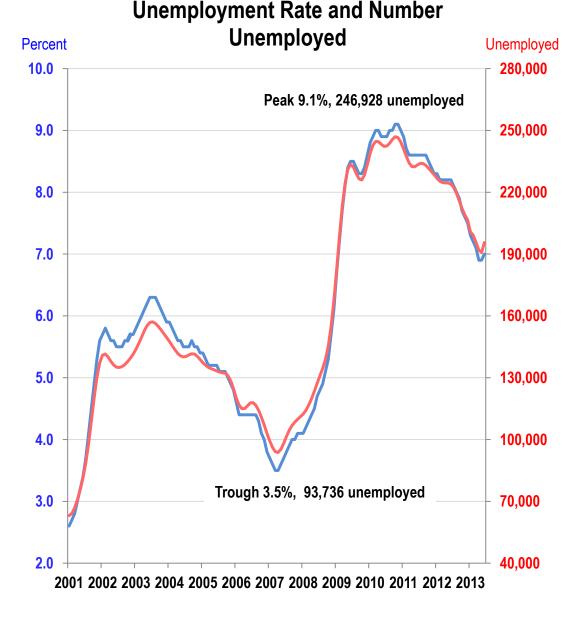
Colorado Unemployment Rate and Number of Unemployed

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

At the end of June 2013, the unemployment rate (blue) was 7.0%.

In June, the total number of unemployed workers (red) rose dramatically to 195,592. This is an increase of 4,875. This is the first increase since July 2011. The total number of unemployed 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 33 months since unemployment peaked in 2010, the number of unemployed workers has declined by only 51,336.



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.

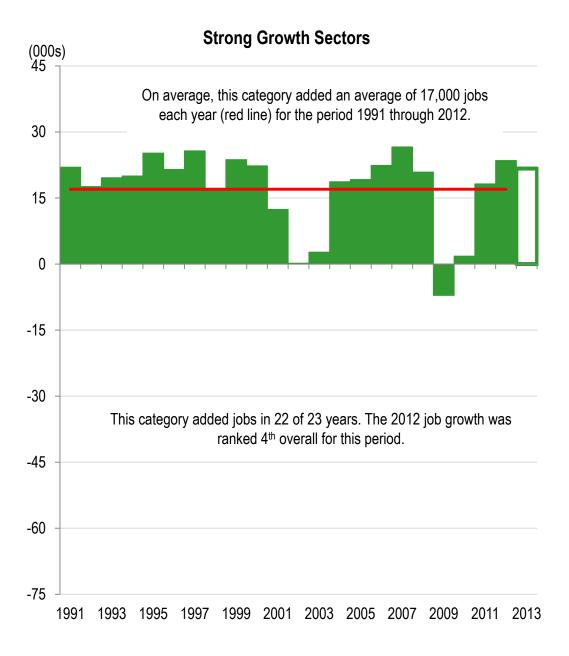
Total employment for this category was: 1992 404,900 workers, 25.4% of total employment 2002 592,400 workers, 27.1% of total employment 2012 739,300 workers, 32.0% of total employment.

Growth of this category in 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.

Source: Bureau of Labor Statistics, CBER.

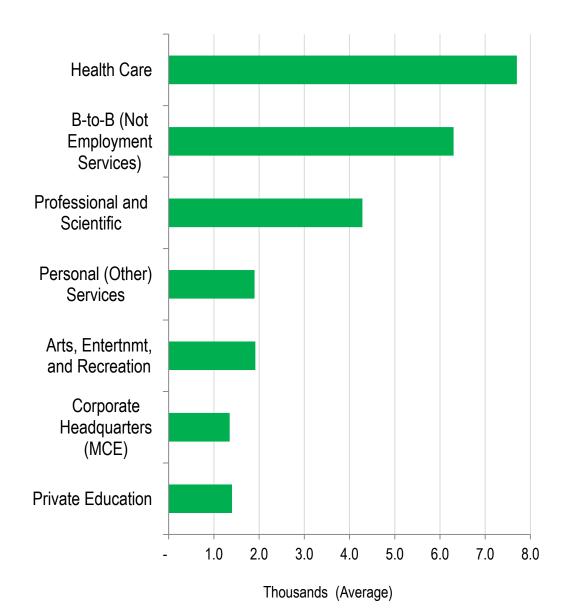
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Job Change in 2013

Solid Growth Sectors

- •Average employment for the solid growth sectors through six months is 24,900 greater than the same period in 2012.
- •These sectors account for 32.2% of total employment. They have accounted for 42.1% of job growth in 2013.
- •These sectors were forecasted to add 19,000 to 25,000 jobs in 2013.



Performance to Forecast Strong Growth Sectors

The forecast - Between 19,000 and 25,000 workers will be added in 2013, most likely at the higher end of that range. **Through six months** – On average 24,900 jobs have been added compared to the same period last year. About 42.1% of jobs added have been in this category.

The number of jobs added in the following sector is *weaker* than anticipated:

Professional, Scientific, and Technical Services.

Comment: Stronger growth in this area is necessary for a sustained recovery.

The number of jobs added in the following sectors are *on target*:

- Private Education
- Health Care.

The performance of the following sectors are slightly stronger than anticipated:

- Corporate Headquarters (MCE)
- Arts Entertainment and Recreation (AER combines with AFS to be part of the Tourism sector).

The number of jobs added in the following sectors *are stronger* than anticipated:

- Personal (Other) Services
- B-to-B, excluding Employment Services (Administrative and Waste Management).

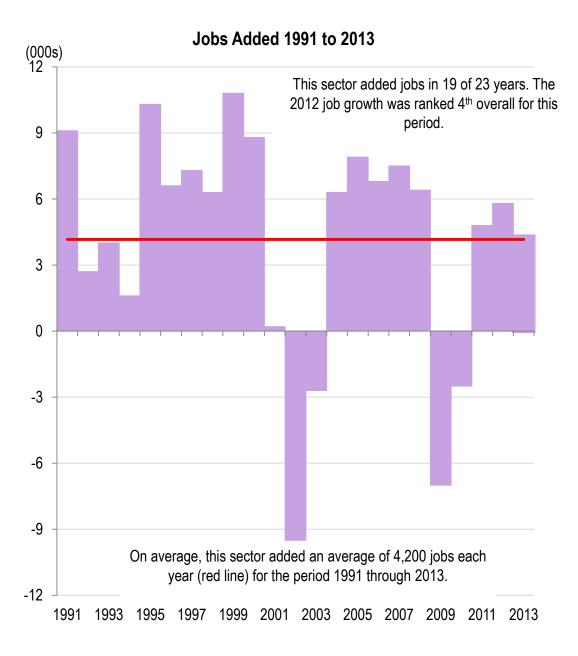
<u>Comment</u>: Increased consumption and business spending has driven stronger employment in personal services and B-to-B Services.

Annual Employment Situation for PST Sector

The Professional, Scientific, and Technical Services sector played a major role in the growth of Colorado's Advanced Technology cluster during the 1990s and the recovery from the 2001 recession. The sector is important because its average annual wages are significantly greater than the state average and many of the companies are part of the state's high tech cluster.

The sector experienced a greater downturn during the 2001 recession than the Great Recession. Unfortunately, the recovery from the latter has been much weaker. Increased efficiencies and limited demand reduced the need to add employees.

Reduced demand for workers is a concern in the continuing evolution of the state economy.



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.

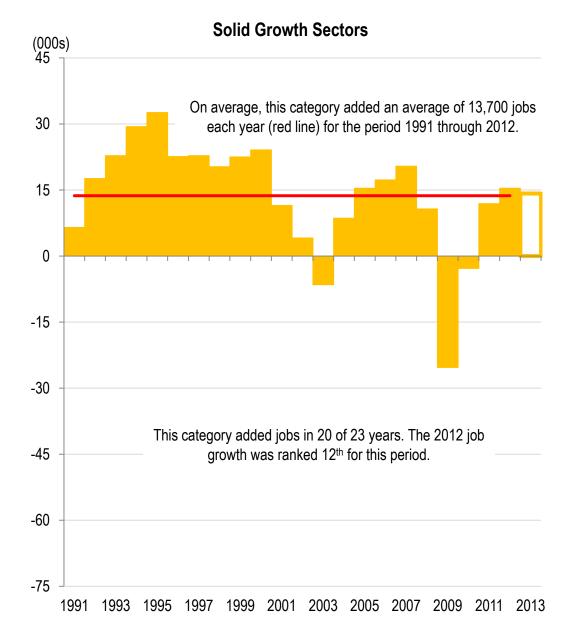
- •Wholesale Trade
- •Retail Trade
- State (Not Higher Education)
- Higher Education
- Local (Not K-12 Education)
- •K-12 Education
- Accommodations and Food Services

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

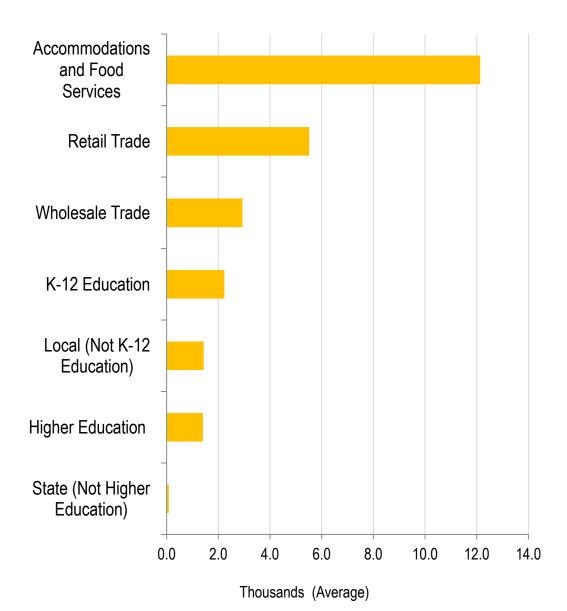
Growth of this category in 2013 will be about average for the past two decades. Between 12,000 and 16,000 jobs will be added.



Job Change in 2013

Limited Growth Sectors

- •Average employment for the limited growth sectors through six 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.



Performance to Forecast Solid Growth Sectors

The forecast - Between 12,000 and 16,000 workers will be added in 2013.

Through six months – On average 24,900 jobs have been added compared to the same period last year. About 43.6% of jobs added have been in this category.

Overall, this category has been much stronger than anticipated.

The number of jobs added in the following sectors are *weaker* than anticipated:

- State Government, excluding Higher Education
- Higher Education

<u>Comment</u>: Growth in state government has been flat while higher education continues to add jobs. Despite improvement in sales tax revenue and income taxes, the shortfall in revenues during the Great Recession will be problematic for State Government in the near term.

The performance of the following sectors are *stronger* than anticipated:

- Local Government, excluding K-12 education.
- K-12 Education
- Wholesale Trade
- Retail Trade
- Arts Entertainment and Recreation (AER combines with AFS to be part of the Tourism sector).

<u>Comment</u>: The increase in property and sales tax collections has benefitted K-12 and local government. There is concern that many of the retail jobs are in reaction to the Affordable Care Act, as part-time workers are added to avoid health care costs.

The number of jobs added in the following sector is *much stronger* than anticipated:

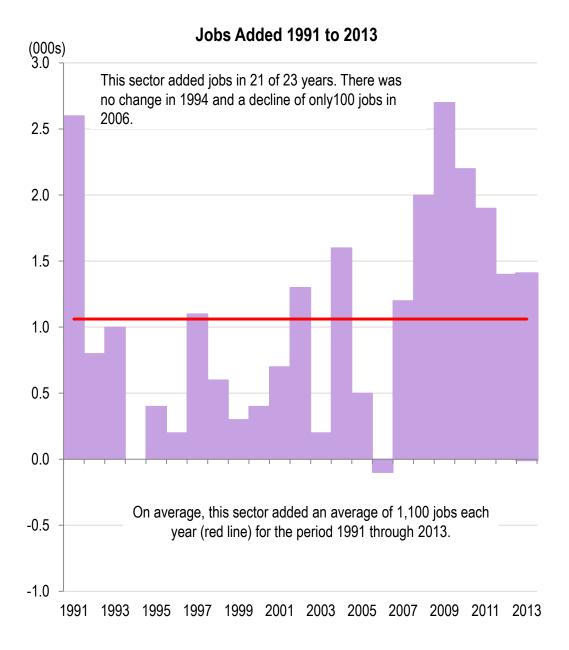
Accommodations and Food Services

<u>Comment</u>: The significant increase is thought to be either a flaw in survey process used by BLS to produce the data or businesses are hiring part-time workers to avoid health care costs associated with the Affordable Care Act.

Annual Employment Situation for Higher Education

Higher Education has consistently added jobs since 1991. Only once did the sector post a decline; in 2006.there was a decrease of only 100 jobs.

Higher education's strongest job growth occurred during and after the Great Recession. Clearly higher education has not had to make some of the tough choices that the private sector has had to make.

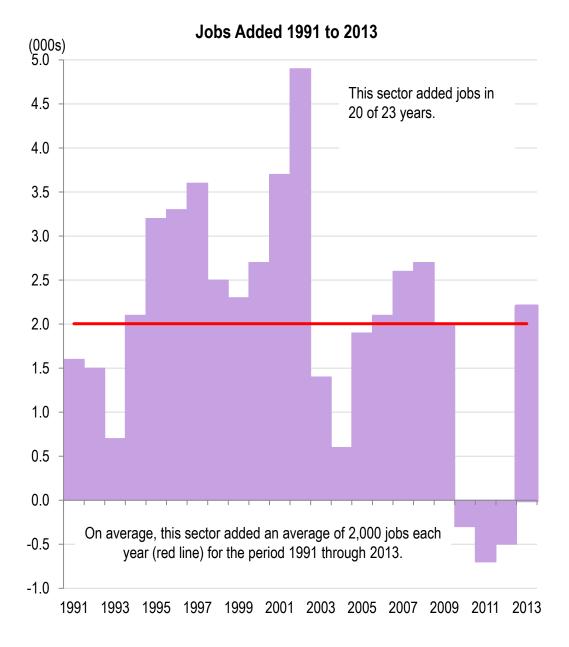


Annual Employment Situation for K-12 Education

On average, K-12 Higher Education added 2,700 jobs per year between 1991 and 2002. Since then, job growth has been much more modest, as the state added 1,300 jobs per year between 2003 and 2013.

The K-12 workforce was reduced for three consecutive years 2010-2012.

In 2003 there were 113,200 employees in the K-12 workforce and higher education had 50,200. Between then and 2012, the higher education workforce increased by 13,400 employees, or an annualized rate of 2.7%. During that period K-12 education gained 10,400 workers, an annualized rate of increase of 1.0%. Private sector employment expanded at a compound rate of 0.7%.

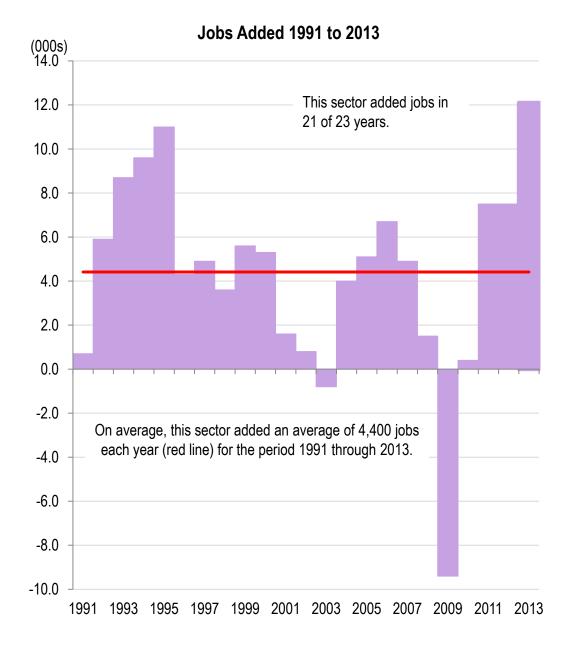


Annual Employment Situation for AFS

Through six months of 2013, the average number of jobs added in the Accommodations and Foods Sector is 12,100 compared to last year. The AFS and AER (Arts, Entertainment, and Recreation) sectors combine to form the Leisure and Hospitality sector. The L&H sector has added 14,000 jobs this year.

Possible explanations for this strong level of growth include:

- Increased tourism promotion.
- •Pent-up demand or increased consumption.
- Flaws in the data projections by the Bureau of Labor Statistics?
- •AFS businesses hiring more part-time workers in anticipation of the Affordable Care Act .



Annual Employment Situation for Volatile Growth Sectors

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

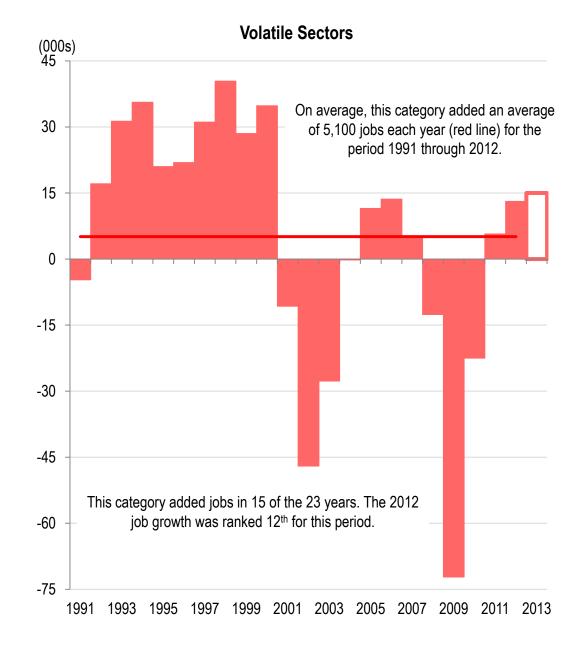
The sectors are:

- 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.

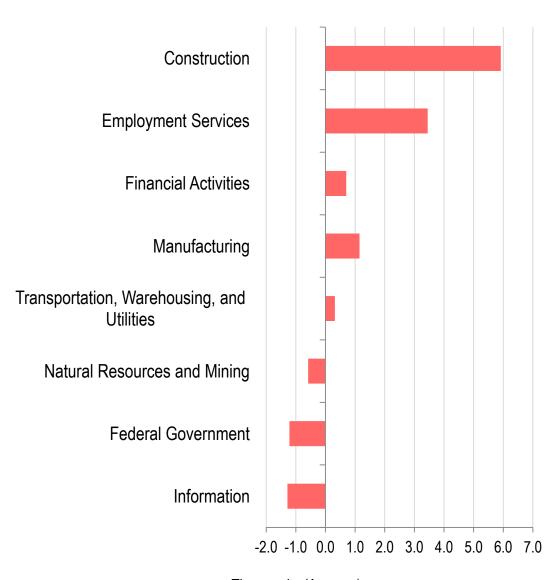
In 2013 this category will add between 13,000 and 17,000 jobs . Growth in this category will be above the annual average.



Job Change in 2013

Volatile Sectors

- •Average employment for the limited growth sectors through five months is 8,400 greater than the same period in 2012.
- •These sectors are 28.2% of total employment. They have accounted for 14.3% of job growth in 2013.
- •These sectors were forecasted to add 13,000 to 17,000 jobs in 2013.



Source: Bureau of Labor Statistics.

Thousands (Average)

Performance to Forecast Volatile Growth Sectors

The forecast - Between 13,000 and 17,000 workers will be added in 2013.

Through six months – On average 8,400 jobs have been added compared to the same period last year. About 14.3% of jobs added have been in this category.

Overall, this category has been much weaker than anticipated.

The number of jobs added in the following sectors are *weaker* than anticipated:

- Information
- Federal Government
- Extractive Industries
- Manufacturing
- Financial Activities

Comment: It is disconcerting that both Information and Manufacturing are in this category, since both are the source of primary jobs.

Declines in the extractive industries are likely to continue given the efforts of special interest groups and policy decisions that are detrimental to the industry.

The performance of the following sector is *on target*:

Employment Services.

The performance of the following sector is *stronger* than anticipated:

Construction.

<u>Comment</u>: Solid growth is occurring in the Specialty Trades sector, with weak gains in Construction of Buildings. Job losses occurred in the Heavy Construction sector.

Annual Employment Situation for Extractive Industries

The Extractive Industries are a volatile sector for a number of reasons – international supply and demand, prices, energy policy, etc.

Out-of-state companies are having second thoughts about doing business in Colorado because of the anti-fracking efforts and tight regulation.

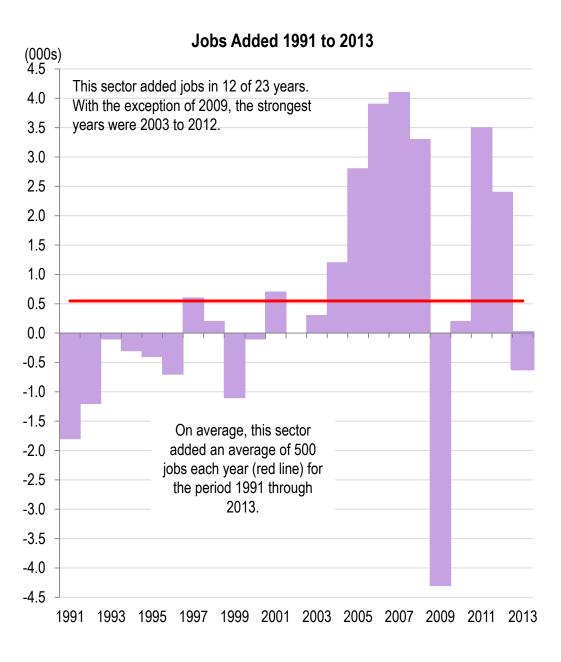


In 2011, the Extractive Industries accounted for 4.1% of the state's Private Sector GDP.

Real GDP in 2011 was \$9.6 billion.

Source: Bureau of Labor Statistics, CBER.

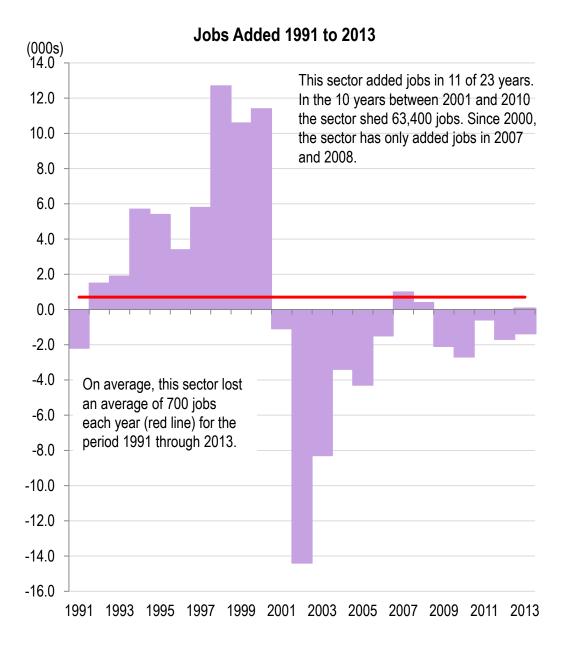
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Annual Employment Situation for Information

The Information Sector includes companies in printed media, software publishers, motion pictures and sound recording, broadcasting, telecommunications, and data processing and hosting services.

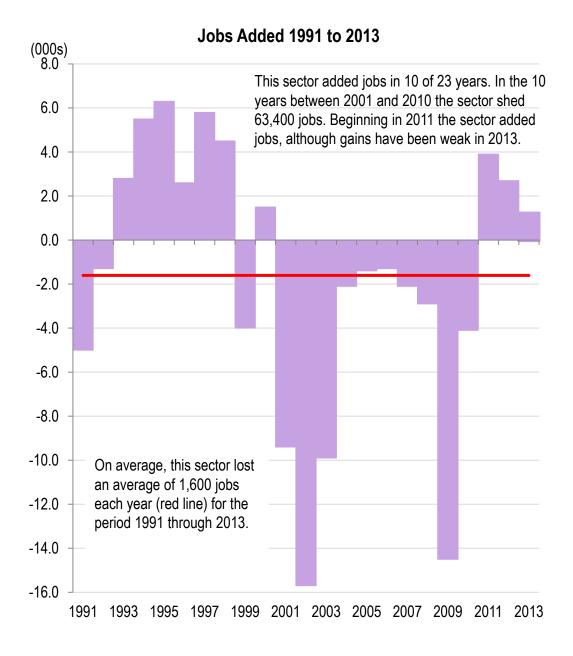
This group of companies has gone through significant changes as a result of advances in technology. Since 2000 the sector has shed 40,000 employees. Jobs losses that occurred during the 2001 recession were greater than losses during the Great Recession.



Annual Employment Situation for Manufacturing

Colorado has a low concentration of manufacturers. Unfortunately, that concentration, particularly high tech manufacturers, declined as the sector was hit hard by the 2001 and 2007 recessions.

Since 2011 the sector has added jobs; however, the recovery has been weak and it appears to be tapering off.



Annual Employment Situation for Primary Jobs

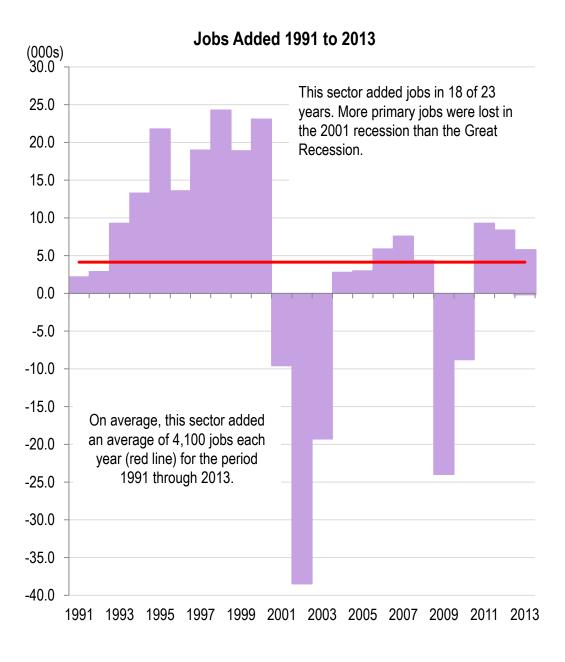
All jobs are important to the economy in different ways. Companies that have primary jobs are important because they produce goods and services that are consumed outside the region. These companies bring in money from the outside (new money), which adds wealth to the region. In turn, additional jobs are created to support the 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.

Primary jobs include two of the sectors in the Volatile Growth category - the Information and Manufacturing sectors. Other sectors that can be considered as primary jobs include MCE and PST, both in the Solid Growth category. The chart on the right is the total of job changes for these four sectors.

The lack of new primary jobs will prevent robust growth in other job sectors.

Source: Bureau of Labor Statistics, CBER.

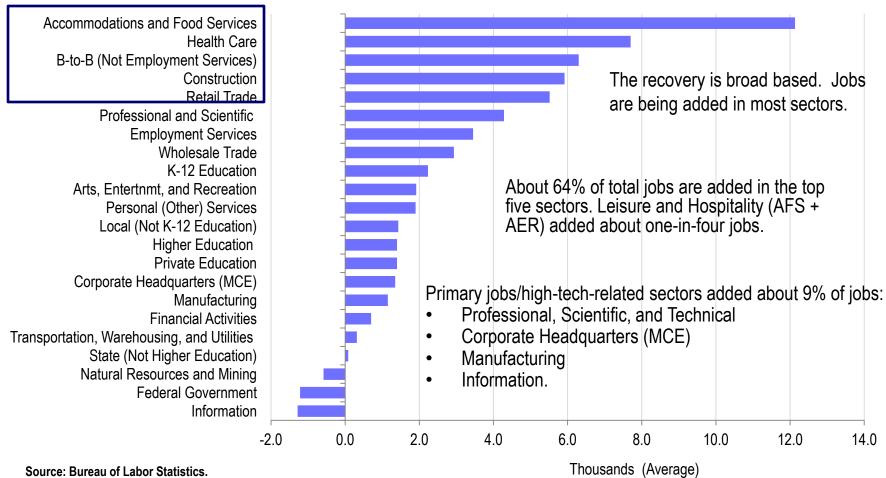
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Summary and Challenges

Job Change All Sectors First Six Months 2013

Job Change All Sectors



U.S. and Colorado Jobs Added by Quarter (Year over Year)

This chart shows the change in jobs on a quarter-over-same-quarter-prior-year basis. The data begins in Q3 2009, the first quarter after the end of the recession. For the first five quarters there was improvement in the Colorado and U.S. employment situation; however, jobs were lost each quarter.

Beginning in Q4 2010, jobs were added each quarter. Beginning in Q2 2012, the number of jobs added at the national level appears to have reached a plateau (blue).

Q2 2012 2,158,000

Q3 2012 2,217,000

Q4 2012 2,188,000

Q1 2013 2,086,700

Q2 2013 2,177,300.

In Colorado, the number of jobs also appears to have leveled out, Q4 2012-Q2 2013 (red).

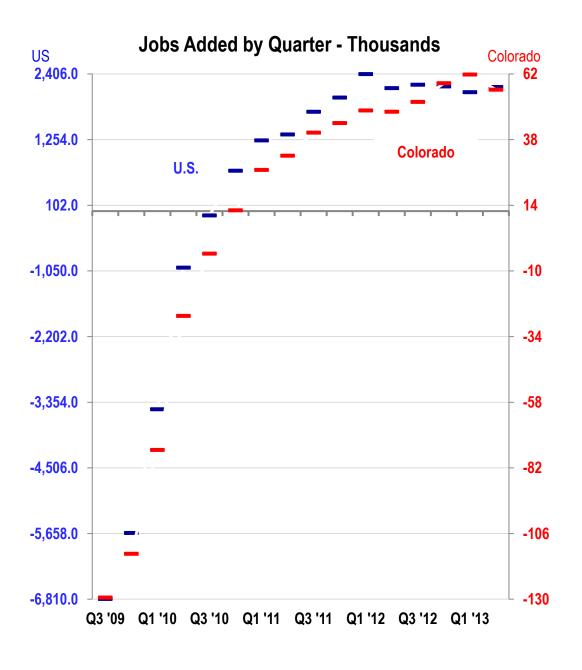
Q4 2012 58,600

Q1 2013 61,800

Q2 2013 56,300.

Source: Bureau of Labor Statistics, NSA, CBER.

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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:

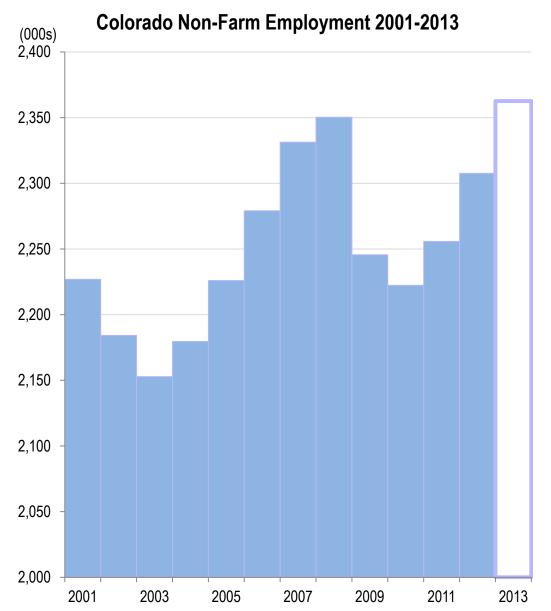
- •2004 +26,800 jobs, 1.2%
- •2005 +46,400 jobs, 2.1%
- •2006 +53,100 jobs, 2.4%.
- •On average 42,100 jobs were added each year.

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! According to BLS, seasonally adjusted employment <u>finally</u> exceeded 2008 peak employment. This took five years.





Source: Bureau of Labor Statistics, CBER.

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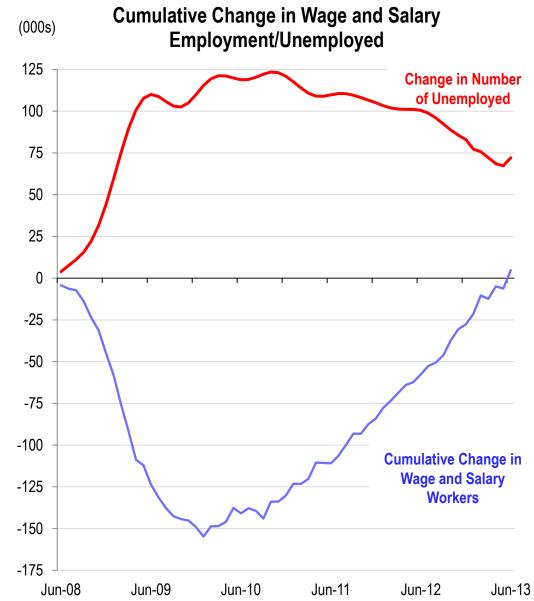
Cumulative Change in Nonfarm Payroll and Number of Unemployed

The chart to the right shows the cumulative change in wage and salary employment and the number of unemployed workers in the state. The chart begins in June 2008 because that was the period of peak employment.

From June 2008 to <u>January 2010</u>, the state lost jobs. Beginning in February 2010 jobs were slowly added (blue). In June of 2013 wage and salary employment finally returned to the 2008 peak.

Beginning in <u>December 2010</u>, the number of unemployed workers began to decline (red). Currently, the number of unemployed workers is 72,000 greater than it was in June 2008.

Clearly, there are many in the state who have not benefitted from the recovery!



Summary of the Colorado Economy

Good News

- The state continues to add jobs, although the rate at which they are being added declined in Q2.
- There has been continued improvement in real estate markets which is mixed news.
- Overall the impact of sequestration has been offset by growth in the private sector; however, some industries and geographic areas will be affected.
- Revenue streams have improved for state and local governments.
- The state's universities have reported record levels of donations and they have added jobs steadily since 1991.
- Legislation has been approved for support of the Advanced Industries (Aerospace, photonics, biosciences, etc.). These are critical sectors for the creation of primary jobs.

Challenges

- There should be greater concern about the limited number of primary jobs that are being added.
- Various reports cite significant 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.
- The state must identify a "proper" level of state funding for PK-12 and higher education. The preliminary response to the Governor's billion dollar plan to restructure K-12 education is being met with resistance.
- Higher education and PK-12 must be held accountable for providing quality education in an efficient manner.
- Mother Nature Fire, water/drought, tornadoes, hail, and snow/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.
- Opposition to fracking and extractive industries that will cause energy companies to work in other states.
- Other legislation that has been perceived as not friendly to business (gun control and Senate Bill 252).
- Increased dissatisfaction with state leadership.

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

Review of Colorado Economy First Half of 2013

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