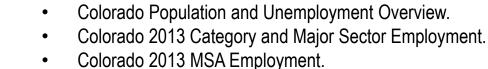
Review of Colorado Economy Analysis of 2013 Employment Data

Colorado-based Business and Economic Research

March 22, 2014



Total Jobs Added.

U.S. and Global Economy.

Appendix.

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The 2014 CBER forecast can be found at http://cber.co/CBEReconomy.html.

government and health care employment to state government.

This brief analysis is divided into the following sections.

A reclassification of NAICS codes for several health care facilities caused a break in the data series. The total

Professional, Scientific, and Technical Services. ٠

number of jobs in the state was not altered. As a result of the re-classification, jobs were moved from local

In 2013 Colorado's employment picture was brighter than originally projected as 68,100 jobs were added. The following sectors were the top contributors to job growth: Construction. Accommodations and Food Services. ٠

Overview

U.S. and Global Economy

Real GDP (Global)

2013.

regions.

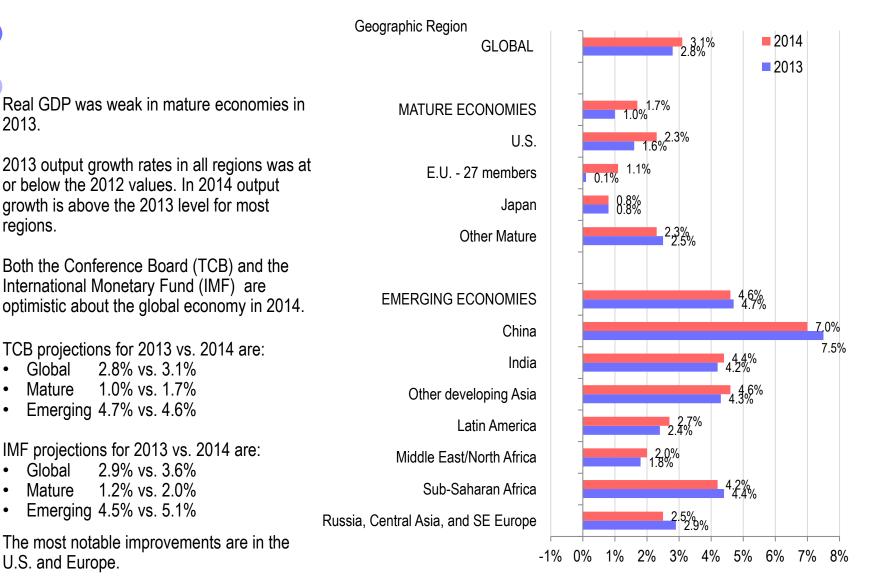
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Global Real GDP 2013 vs. 2014

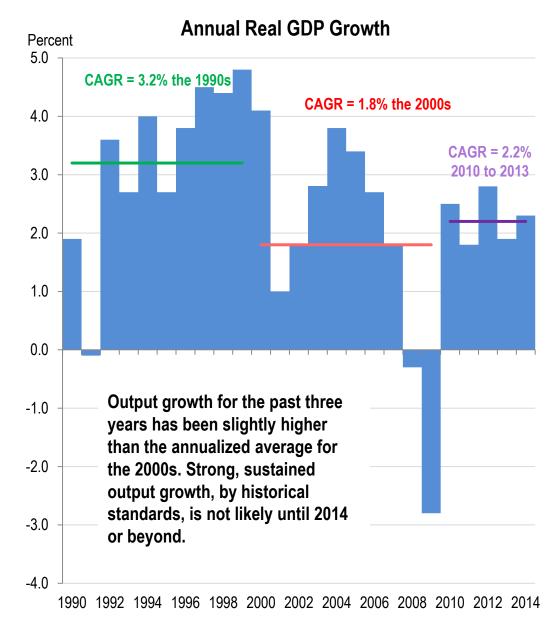


Source: The Conference Board (November, 2013), IMF (October 2013), CBER. Colorado-based Business and Economic Research http://cber.co

Real US GDP Growth Annual

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

After posting annualized growth of 1.9% in 2013, Real GDP for 2014 will be at least 2.3%.



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

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



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 Jul-13 Oct-13

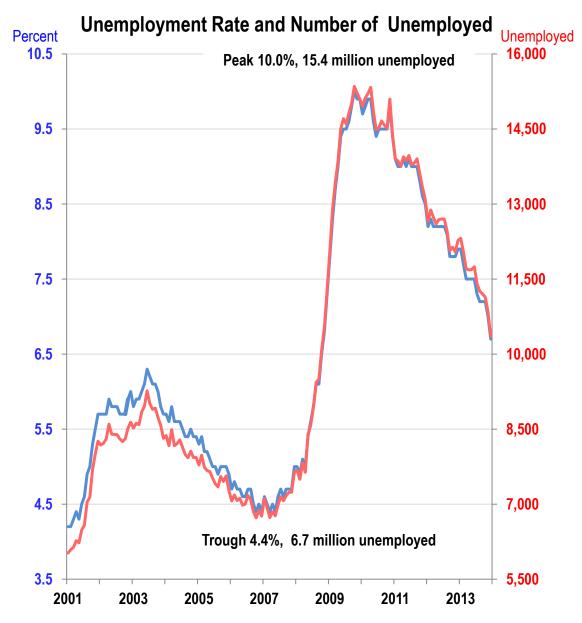
Source: Bureau of Labor Statistics, SA, CBER. Colorado-based Business and Economic Research http://cber.co

OU.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) was 6.7%.

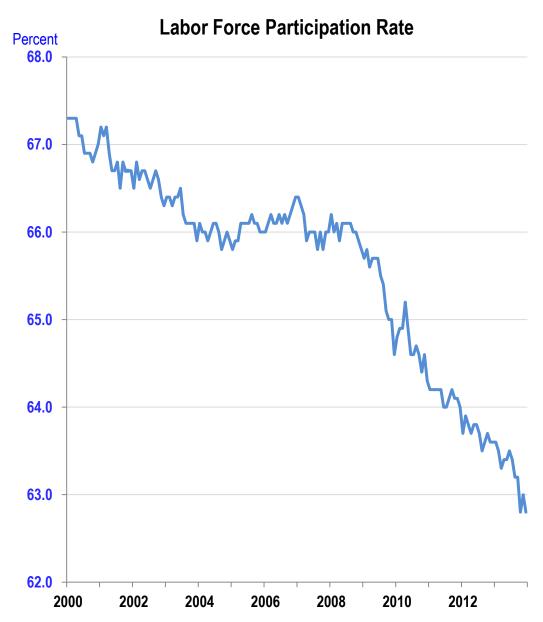
The 2013 year-end total number of unemployed (red) was below 10.4 million. This is 3.7 million above the low point in 2007, but only 5.0 million below the high point in 2009.



Labor Force Participation Rate

After peaking in 2000, the labor force participation rate (LPR) has declined steadily. The rate is the number of people who are either employed or actively looking for work.

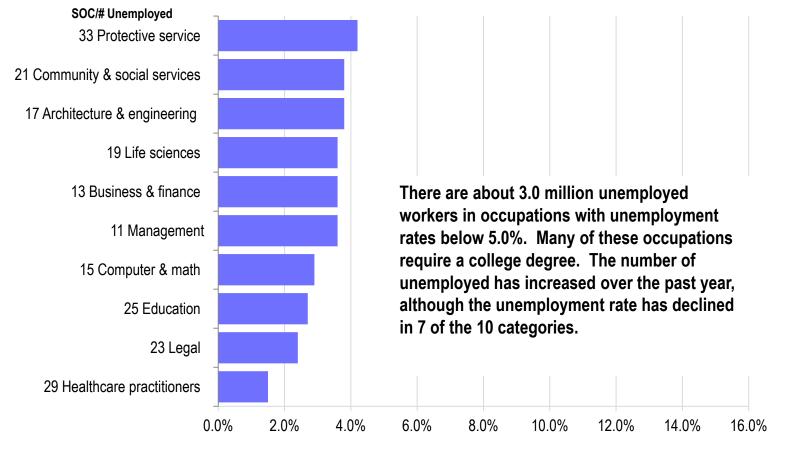
Since 2000 the LPR has declined from 67.3% to 62.8% at the end of 2013. While there is debate about the reason for the decrease, the primary factor is an increase in discouraged workers (a weak recovery) and a change in demographics (more baby boomers retiring).



Source: Bureau of Labor Statistics, SA.

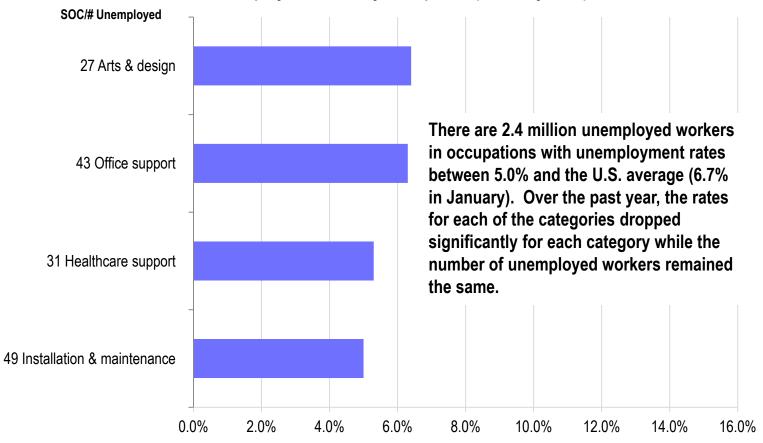
U.S. Occupations with Unemployment Rates Below the Natural Rate (5.0%)

U.S. Unemployment Rate by Occupation (February 2014)



Source: Bureau of Labor Statistics, A-30.

U.S. Occupations with Unemployment Rates Between 5.0% and 6.7% (January 2014)



U.S. Unemployment Rate by Occupation (February 2014)

Source: Bureau of Labor Statistics, A-30.

U.S. Occupations with Unemployment Rates above 6.7% (January, 2014)

SOC/# Unemployed 47 Construction & extraction 45 Farming, fishing, & forestry 37 Building maintenance 53 Transportation There are 5.9 million unemployed workers in occupations with 35 Food preparation unemployment rates above the U.S. average. This number has decreased by 1.0 million over the 51 Production past year. The unemployment rates for all categories declined over the 39 Personal care & service past year. Most of these occupations don't require higher education. 41 Sales & related 0.0% 2.0% 4.0% 6.0% 8.0% 10.0% 12.0% 14.0% 16.0%

U.S. Unemployment Rate by Occupation (February 2014)

Source: Bureau of Labor Statistics. A-30.

Summary of U.S. Economy in 2013

From an employment standpoint, the U.S. economy improved, but it continued to face significant headwinds in 2013.

- The rate of real global output growth in 2012 was weak, particularly in mature economies. It was slower in 2013.
- U.S. Real GDP growth was also slower in 2013 than 2012. Consumer spending remained weak.
- Job growth continued to increase at a slightly higher rate.
- The unemployment rate continued to decline and ended the year at 6.7%.
- The number of unemployed workers remained painfully high.
- The Labor Force Participation Rate continued to decline in 2013, a sign of an economy that is performing below potential.
- The unemployment rate declined in most occupations. Most occupations that required a higher education degree had unemployment rates lower than 6.7%.

Colorado Population and Unemployment

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).

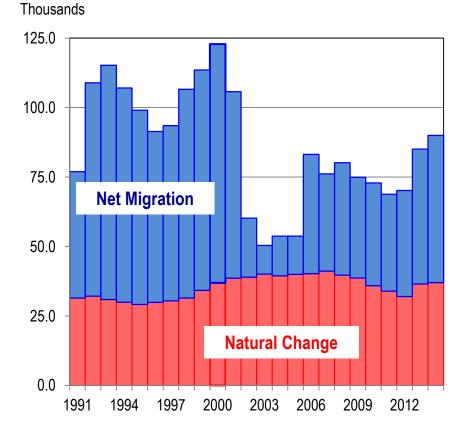
Over the past two decades the natural change (red bars) gradually increased from 31,400 in 1991 to a peak of 40,230 in 2006.

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 remained positive, but declined because it was difficult for people to move.

The Colorado population increased by 85,000 in 2013 and will increase by about 90,000 in 2014. The natural rate of change will rise to 37,000. Net migration will increase to 53,000, the largest change since 2001.

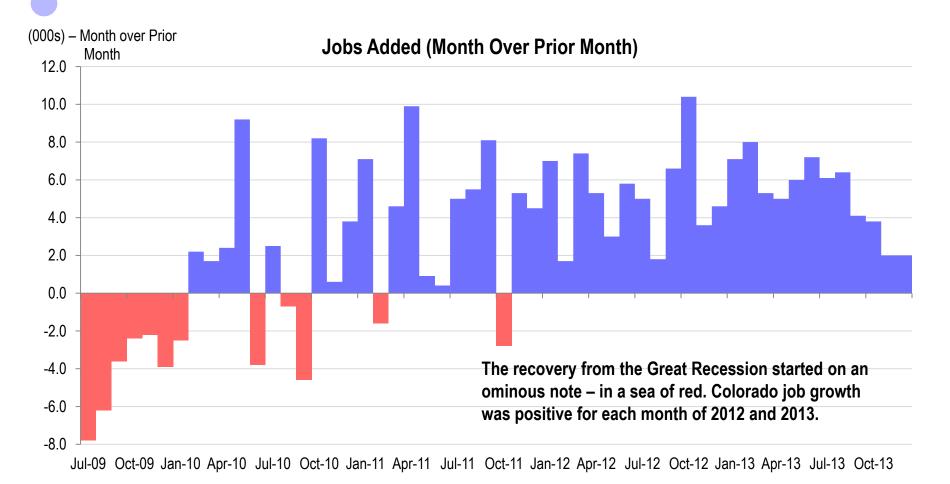
Sources: State Demography Office and CBER.

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



Change in Colorado Population 1991 - 2014

Colorado Employment Situation From End of Great Recession to End of 2013



Source: Bureau of Labor Statistics, SA.

Colorado Unemployment Rate and Number of Unemployed

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

Between June 2007 and the peak in October 2010, the number of unemployed workers increased by 152,947. Since then, the number of unemployed workers has declined by about 76,000.

At the end of December 2013, the unemployment rate (blue) was 6.2%, down from 7.3% in December 2012. The state year-end rate was lower than the U.S. year-end rate of 6.7%.

In December 2013, the total number of unemployed workers (red) declined to about 170,600. The total number of unemployed is almost 77,000 greater than the trough in June 2007.

Source: Bureau of Labor Statistics, CBER.

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

Unemployment Rate and Number



Year-End County Unemployment Rates

Lowest Rates

- Yuma 3.2%
- Cheyenne 3.2%
- Kiowa 3.3%

Lowest Metro Rates

- •Boulder 4.4%
- •Larimer 4.8%
- •Broomfield 5.3%

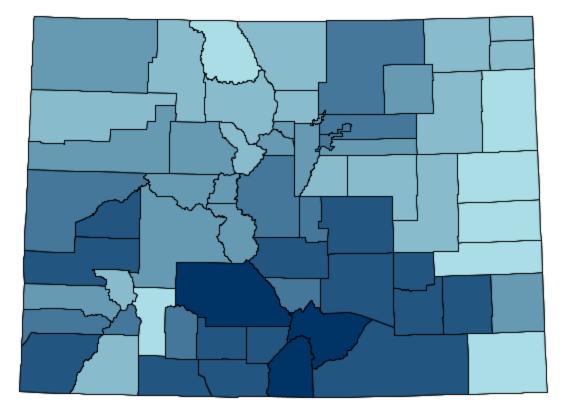
Highest Rates

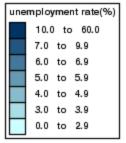
- Costilla 12.3%
- Saguache 10.3%
- •Huerfano 10.2%

Highest Metro Rates

- Pueblo 8.6%
- •El Paso 7.2%
- Mesa 6.9%







Data for all counties is included in the Appendix.

Source: Bureau of Labor Statistics, NSA. Colorado-based Business and Economic Research http://cber.co

Colorado 2013 Category and Major Sector Employment

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.

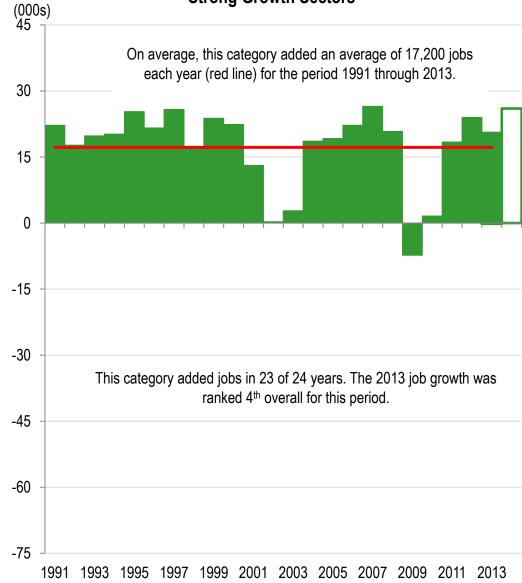
Total employment for this category was:

1993 425,000 workers, 25.4% of total employment2003 597,300 workers, 27.7% of total employment2013 761,600 workers, 32.0% of total employment.

Growth of this category in 2014 will be comparable to the stronger years during the past two decades. Between 24,000 and 28,000 workers will be added at a rate of 3.3% to 3.5%.

Source: Bureau of Labor Statistics, CBER.

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



Strong Growth Sectors

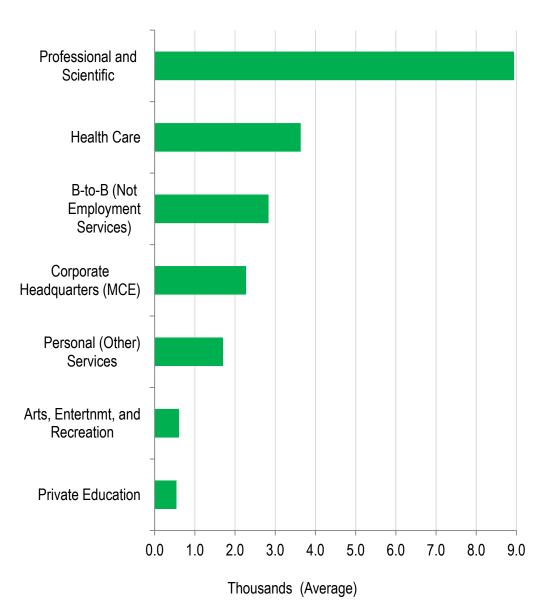
Solid Growth Sectors

Job Change in 2013

•This group of industries added 20,400 jobs in 2013 compared to the prior year.

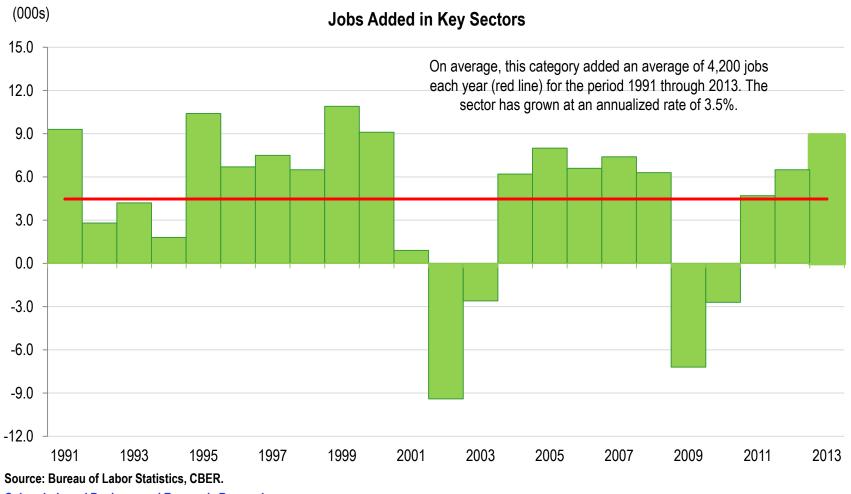
•In 2013, these sectors accounted for 43.9% of total job gains and 30.0% of total employees.

•The Professional and Scientific sector came in stronger than expected, while Health Care was much weaker than expected because it included a NAICS reclassification.

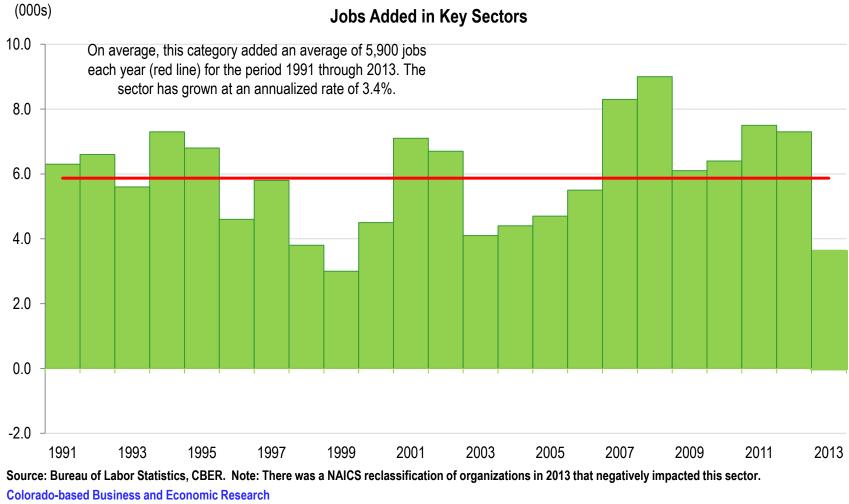


Source: Bureau of Labor Statistics. Colorado-based Business and Economic Research http://cber.co

Annual Employment Situation for Professional, Scientific, and Technical Services

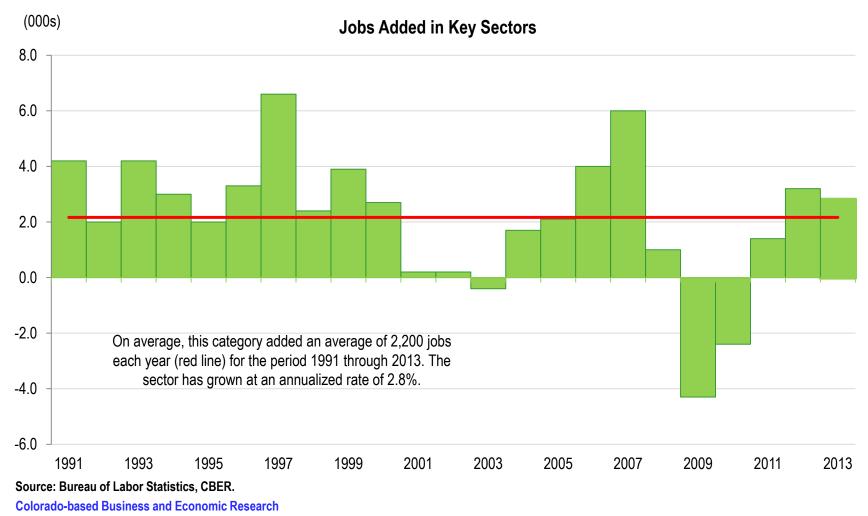


Annual Employment Situation for Health Care Services



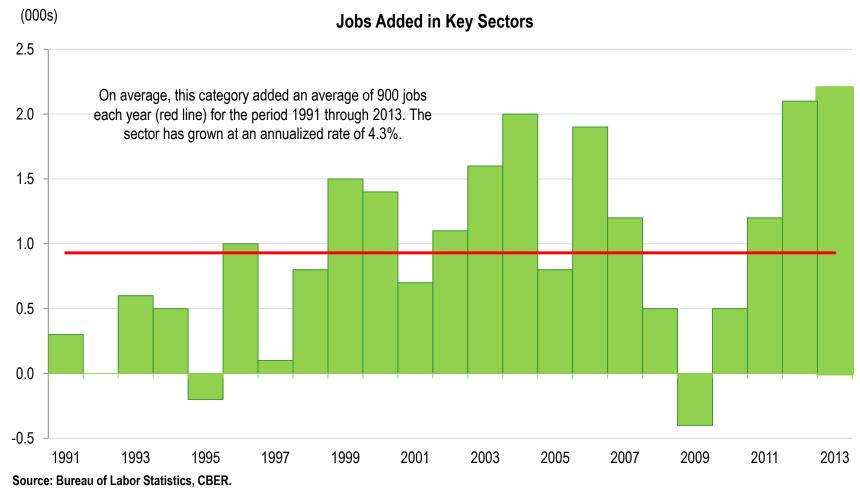
http://cber.co

Annual Employment Situation for Administrative Services, Excluding Employment Services (B-to-B)



http://cber.co

Annual Employment Situation for Management of Corporations and Enterprises



Key Points from Major Sectors Solid Growth Sectors

- The PST sector has historically added 4,200 jobs per year, an annualized rate of growth for the sector of 3.5%. In 2013, PST added 8,900 jobs making it the fifth strongest year of job growth for the period 1991 to 2014.
- Since 1991, the Health Care sector has added an average of 5,900 jobs per year for an annualized rate of 3.4%. In 2013 the sector added 3,600 jobs. The lower than average increase in jobs is a result of a NAICS reclassification.
- The Administrative Services, excluding Employment Services added 2,800 jobs in 2013. This is slightly above the annual average of 2,200 jobs. Since 1991 the sector has added jobs at an annualized rate of 2.8% per year.
- The MCE sector has historically added jobs at an annualized rate of 4.3%, or 900 jobs per year. In 2013 the sector added 2,200 jobs.
- The PST and MCE sectors are particularly important to the growth of the economy because their average wages are much higher than most other sectors.

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.

(000s)

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

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

Total employment for this category was: 1993 656,000 workers, 39.3% of total employment 2003 839,400 workers, 39.0% of total employment 2013 938,800 workers, 39.4% of total employment

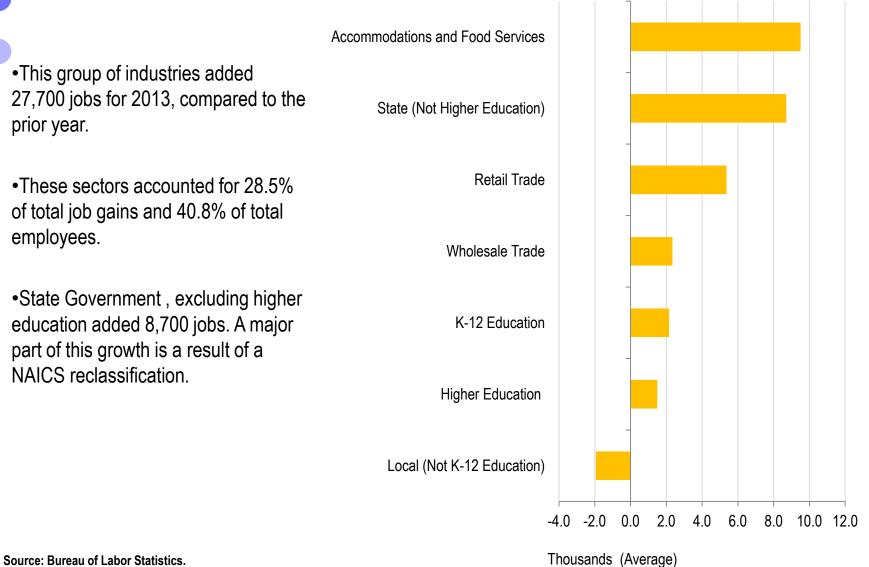
Growth of this category in 2014 will be slightly above average for the past two decades. Between 18,000 and 22,000 jobs will be added at a rate of 2.0% to 2.2%.



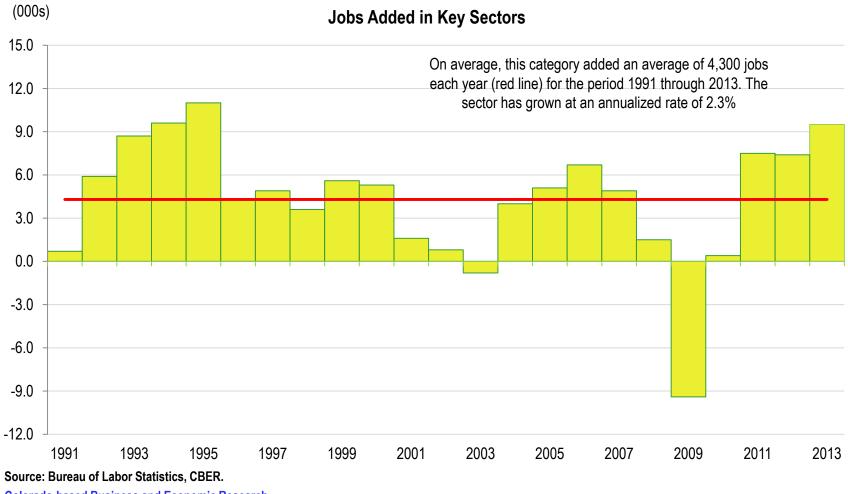


Source: Bureau of Labor Statistics, CBER.

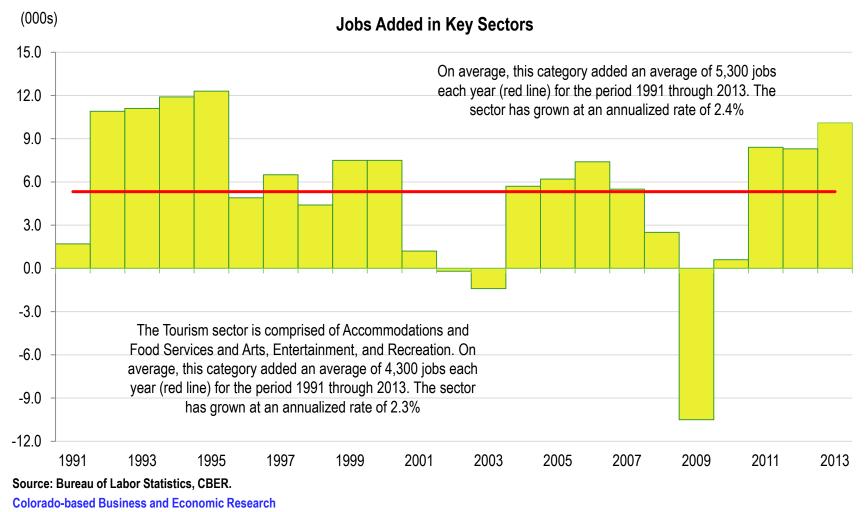
Limited Growth Sectors



Annual Employment Situation for Accommodations and Food Services

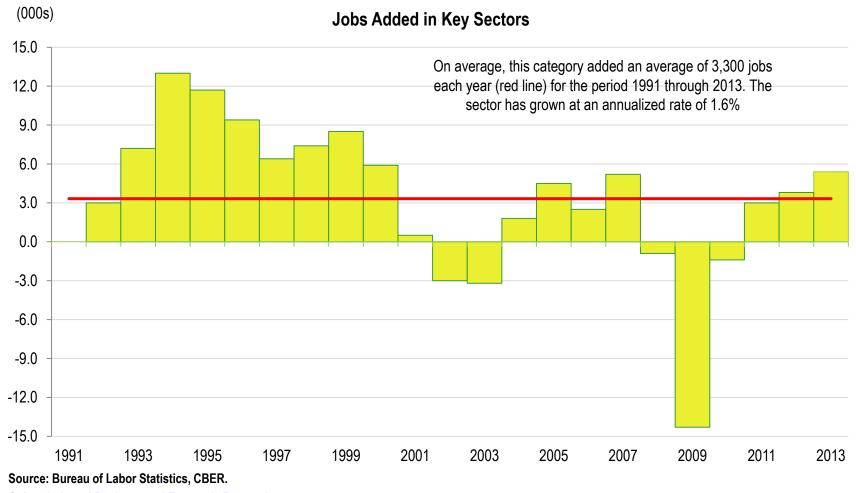


Annual Employment Situation for Tourism (Leisure and Hospitality)

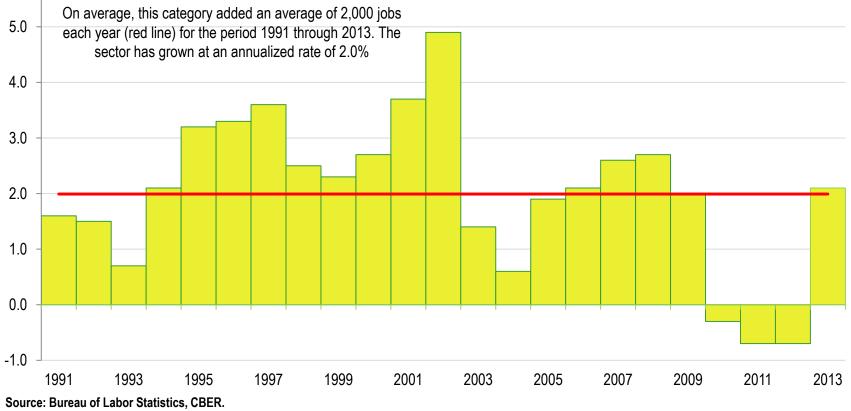


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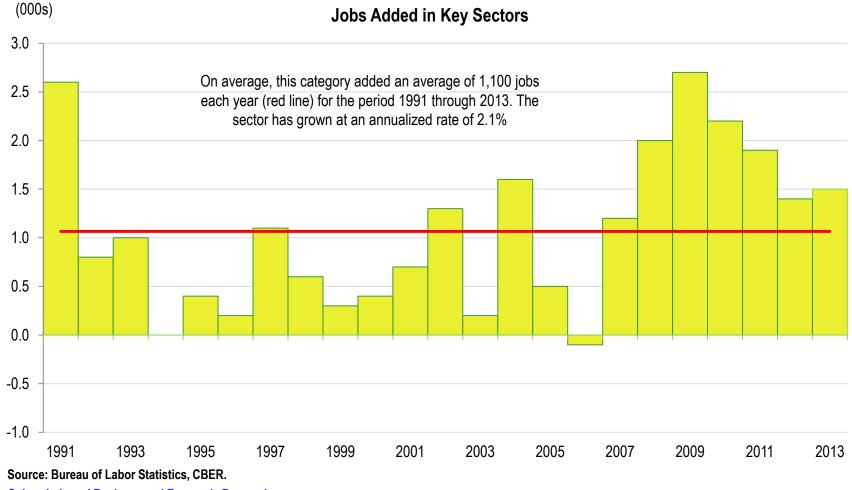
Annual Employment Situation for Retail Trade



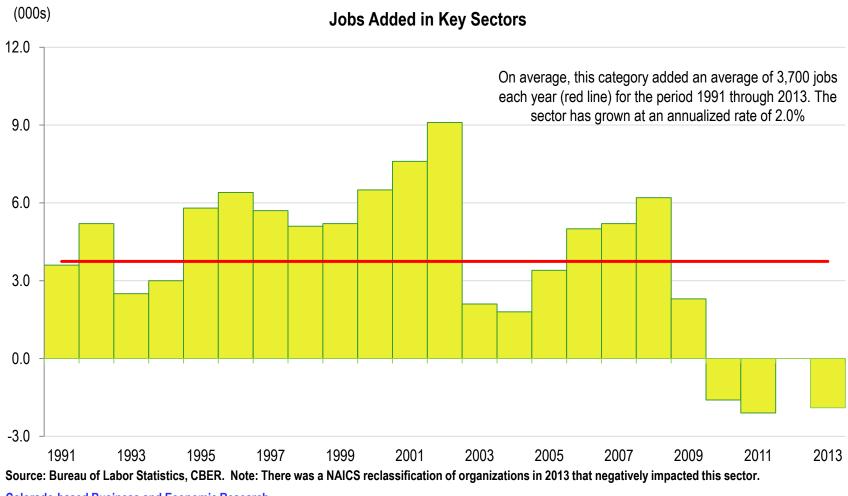
Annual Employment Situation for K-12 Education Jobs Added in Key Sectors On average, this category added an average of 2,000 jobs on average, this category added an average of 2,000 jobs



Annual Employment Situation for Higher Education



Annual Employment Situation for Local Government (Not K-12 Education)



Key Points from Major Sectors

- The Tourism sector had its fifth strongest year for the period 1991 to 2013, adding 10,100 jobs. These jobs are important because they are located in all 64 counties. On average, the sector has added jobs at an annualized rate of 2.4% since 1991, an average of 5,300 jobs per year.
- The Retail sector posted solid growth of 5,400 jobs. Since 1991 the sector has added jobs at an annualized rate of 1.6%, or 3,300 jobs per year.
- K-12 Education added 2,100 jobs in 2013. Since 1991 the sector has added jobs at an annualized rate of 2.0%, or 2,000 jobs per year.
- Higher Education added 1,500 jobs in 2013. Despite claims from university leaders that they are underfunded, the sector has only lost jobs once since 1991. The sector has grown at an annualized rate of 2.1%, or 1,100 jobs per year.
- Local Government data has been negatively impacted because of a NAICS reclassification. Since 1991 the sector has experienced annualized growth of 2.0%, or 3,700 jobs per year.

Annual Employment Situation for Volatile Growth Sectors

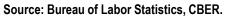
Over the past two decades the sectors listed below were the source of volatility.

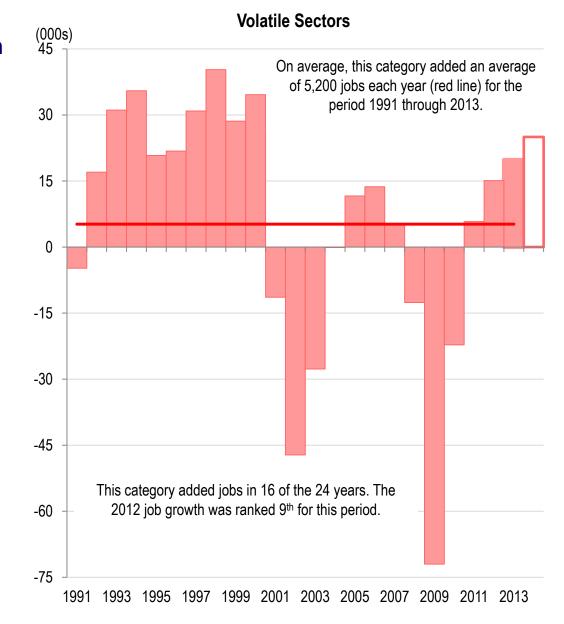
The sectors are:

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

Total employment for this category was: 1993 589,900 workers, 35.3% of total employment 2003 716,100 workers, 33.3% of total employment 2013 680,500 workers, 28.6% of total employment.

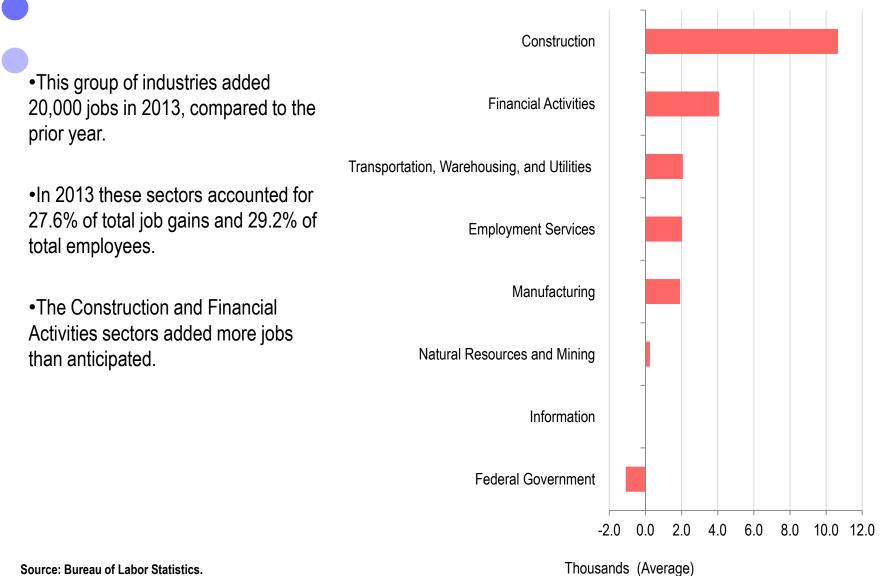
In 2014 this category will add between 23,000 and 27,000 jobs at a rate of 3.6% to 3.8%. Growth in this category will be the strongest since 1999.



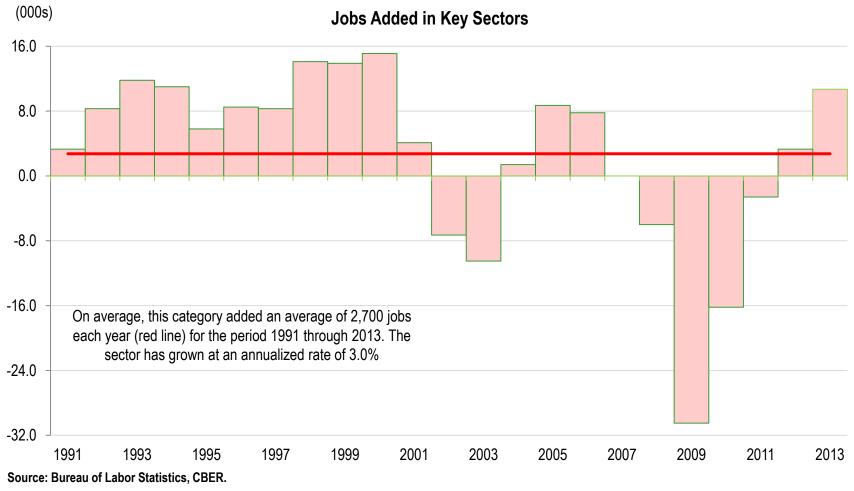


Volatile Sectors

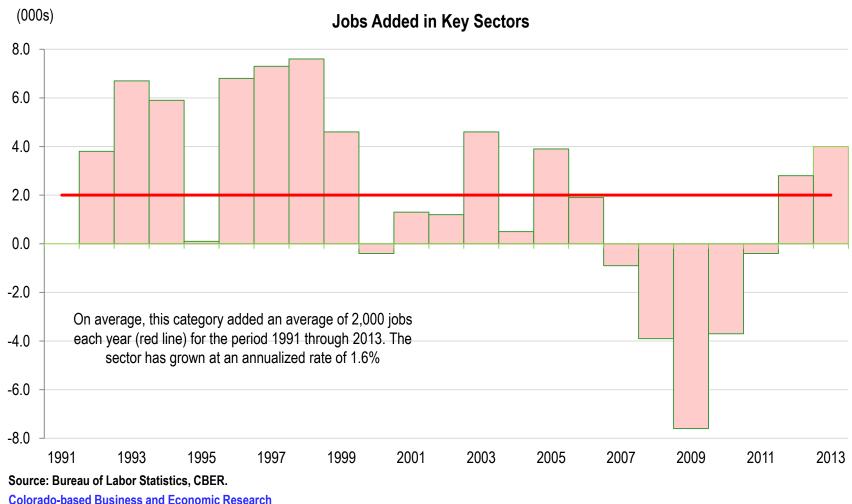
Job Change in 2013



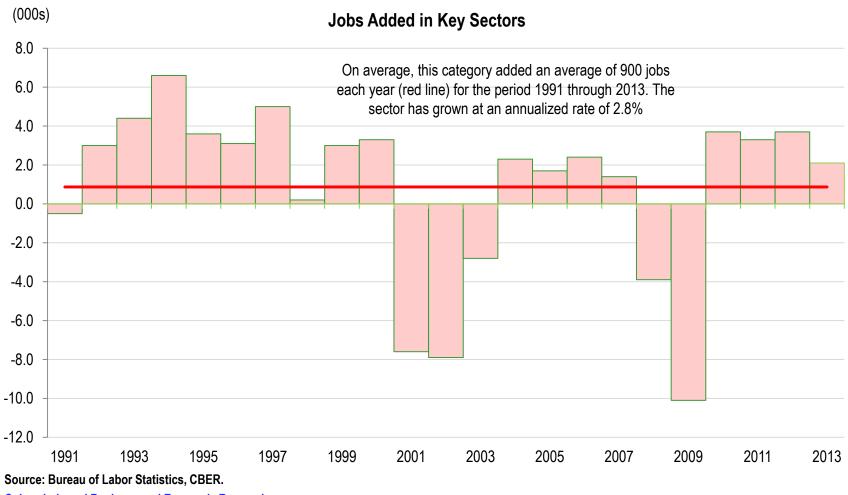
Annual Employment Situation for Construction



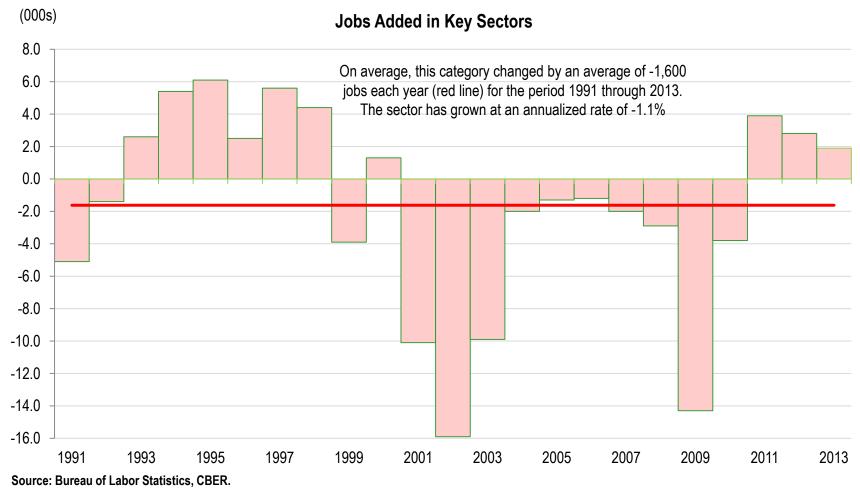
Annual Employment Situation for Financial Activities



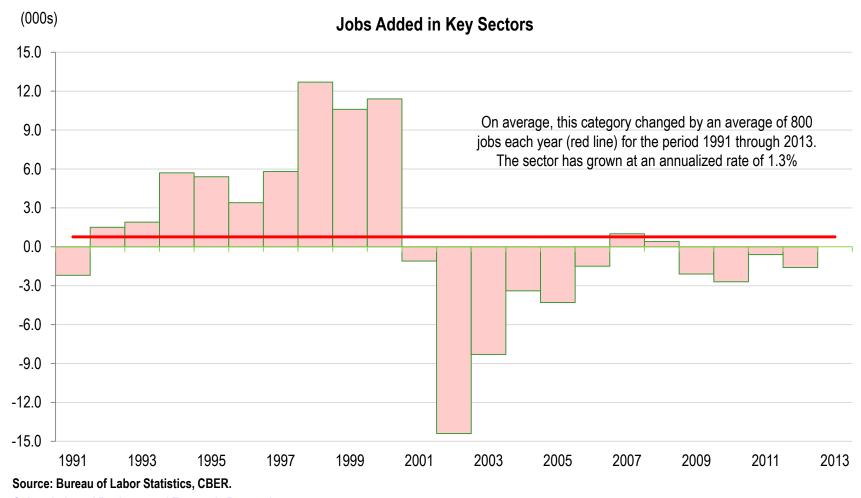
Annual Employment Situation for Employment Services



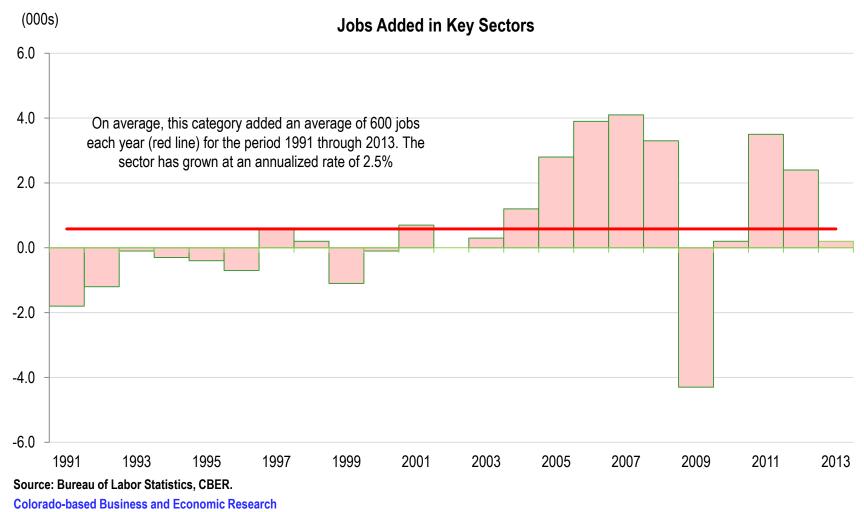
Annual Employment Situation for Manufacturing



Annual Employment Situation for Information



Annual Employment Situation for Natural Resources



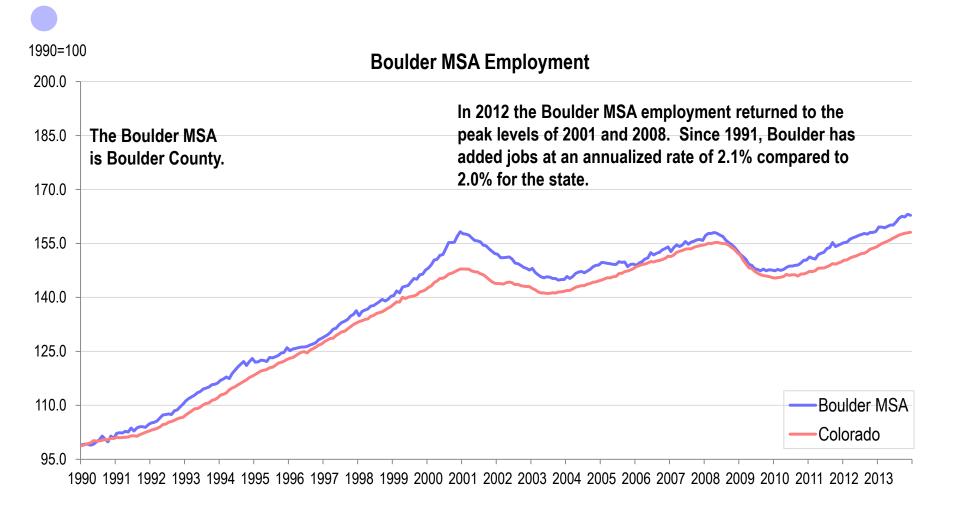
http://cber.co

Key Points from Major Sectors

- The Construction Sector was one of the top areas of growth in 2013, adding 10,100 jobs. This was the 6th strongest year for Construction since 1991. Since then the sector has been extremely volatile, ranging from -30,500 to 15,100. Since 1991 It has averaged 2,700 jobs per year, or an annualized growth rate of 3.0%.
- The Financial Activities Sector added 4,000 jobs in 2013. Since 1991 it has grown at an annualized rate of 1.6%, or 2,000 jobs per year. The sector has ranged from -7,600 jobs to 7,600 jobs between 1991 and 2013.
- The Employment Services Sector is volatile. Since 1991 it has ranged from -10,100 jobs to 6,600 jobs. It has averaged 900 jobs per year, or an annualized rate of growth of 2.8%. In 2013 the sector added 2,100 jobs, the 14th strongest year of growth since 1991.
- The Manufacturing Sector lost jobs for 10 consecutive years (2001 to 2010); however, 2013 was the third consecutive year for job growth, albeit only 1,600 jobs.
- From 1992 to 2000 the Information Sector added jobs. Since 2001 it lost jobs 10 years and added jobs twice. In 2013 the number of jobs remained flat.
- Between 1991 and 2002 the NRM Sector lost jobs 8 years, added jobs 3 times, and was flat on one occasion. Since 2003 it has added jobs in 10 of 11 years. In 2013 it added only 200 jobs.

Colorado 2013 Category and Metropolitan Statistical Area (MSA) Employment

Boulder MSA Employment



Source: Bureau of Labor Statistics, SA. Colorado-based Business and Economic Research

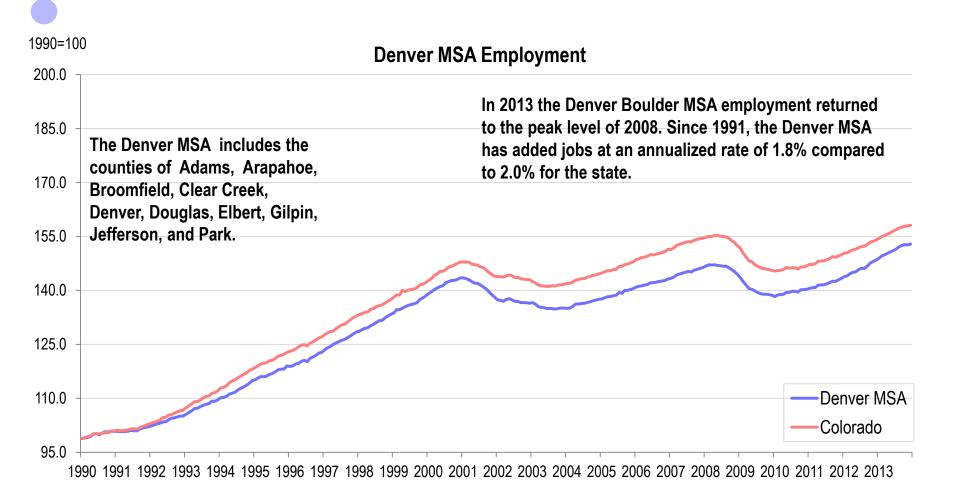
http://cber.co

Colorado Springs MSA Employment 1990=100 **Colorado Springs MSA Employment** 200.0 Colorado Springs MSA employment has not returned to the peak 185.0 level in 2008. Since 1991, the Colorado Springs MSA has added jobs at an annualized rate of 2.2% compared to 2.0% for the state. Despite growing faster than the state, current employment 170.0 is about the same as it was in 2001. 155.0 140.0 125.0 The Colorado Springs MSA includes the counties of El Paso 110.0 Colorado Springs MSA and Teller. Colorado 95.0

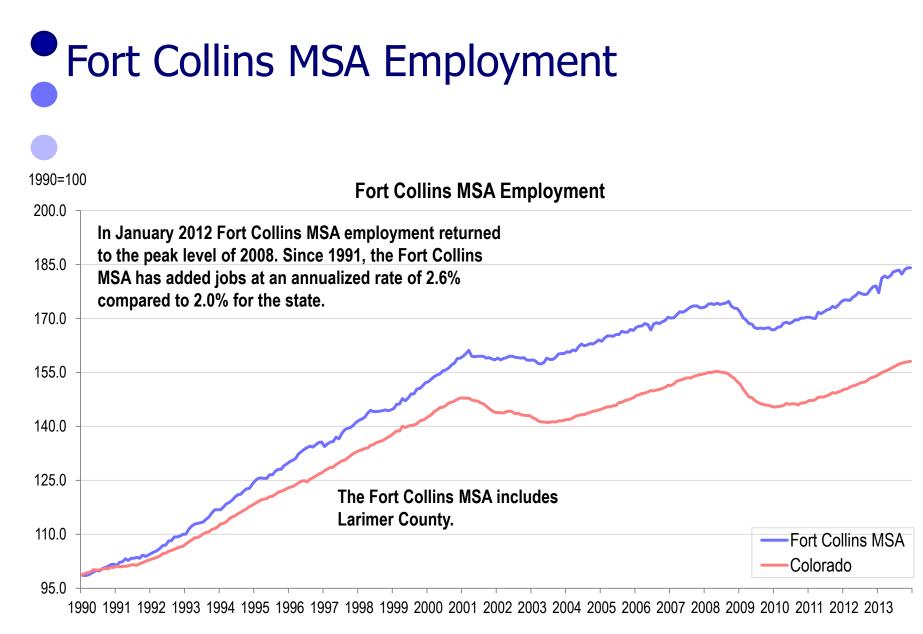
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Source: Bureau of Labor Statistics, SA.

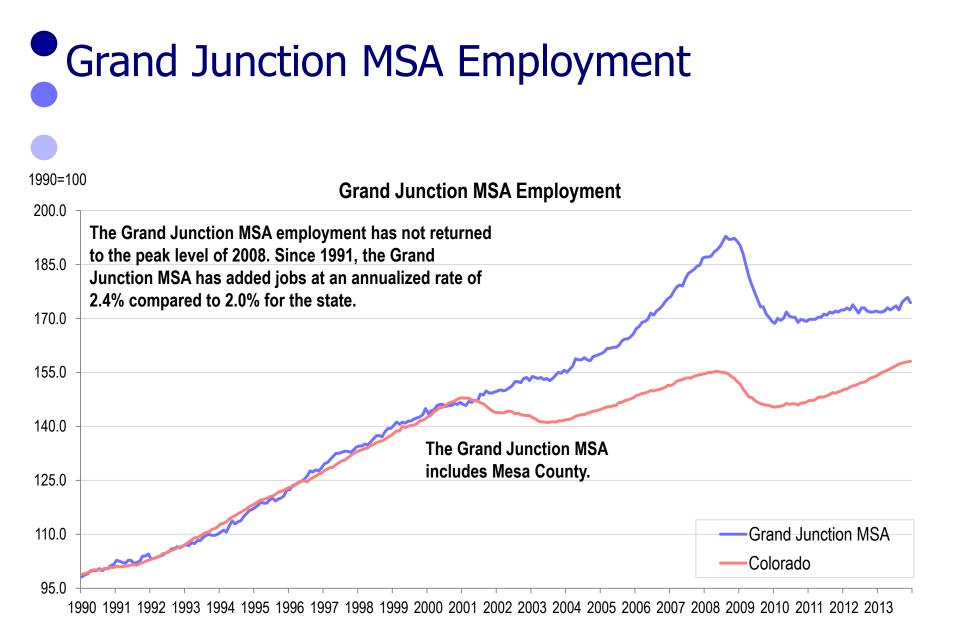
Denver-Aurora-Broomfield MSA Employment



Source: Bureau of Labor Statistics, SA.

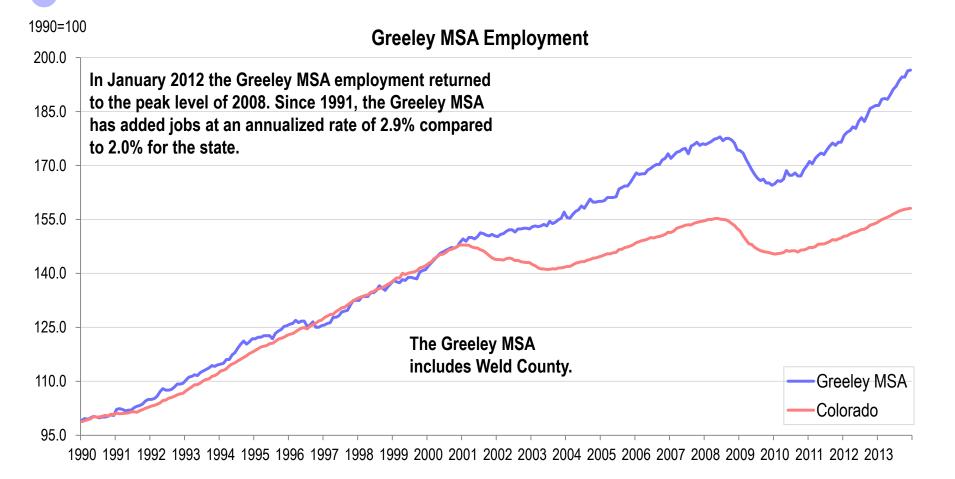


Source: Bureau of Labor Statistics, SA.



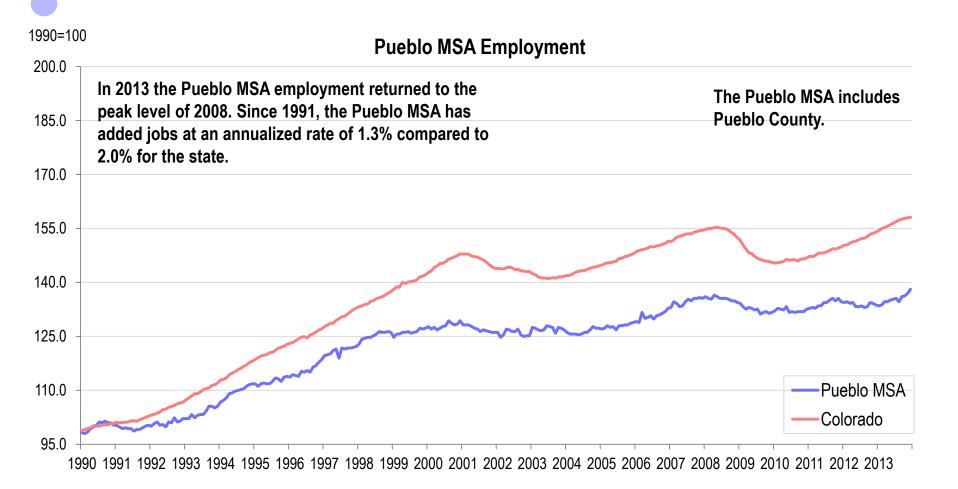
Source: Bureau of Labor Statistics, SA. Colorado-based Business and Economic Research http://cber.co

Greeley MSA Employment



Source: Bureau of Labor Statistics, SA.

Pueblo MSA Employment



Source: Bureau of Labor Statistics, SA.

Summary of 2013 Job Growth for Colorado MSAs

2013 Job Growth and Percent Growth

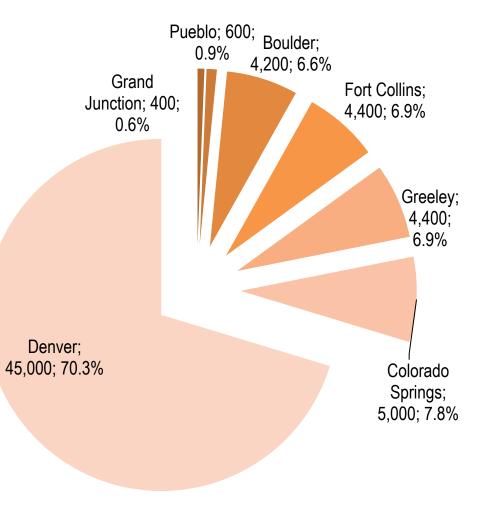
•From 1990 to 2013 the state added jobs at an annualized rate of 2.0%.

•Denver and Pueblo added jobs at annualized rates below the average for the state. The other five MSAs added jobs at faster rates than the state.

•The recovery from the Great Recession was led by Fort Collins and Greeley, followed by Boulder and Denver - then Pueblo. Grand Junction and Colorado Springs have not returned to 2008 peak employment.

•The mid-sized MSAs have the fastest rate of growth.

•The Denver MSA was the source of most job growth in 2013.

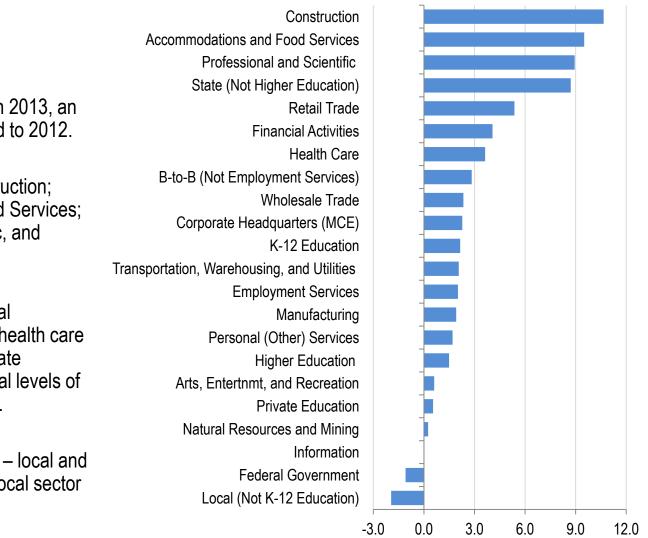




Total Jobs Added

Change in Employment for All Sectors in 2013.

Employment Change in 2013



•68,100 jobs were added in 2013, an increase of 2.9% compared to 2012.

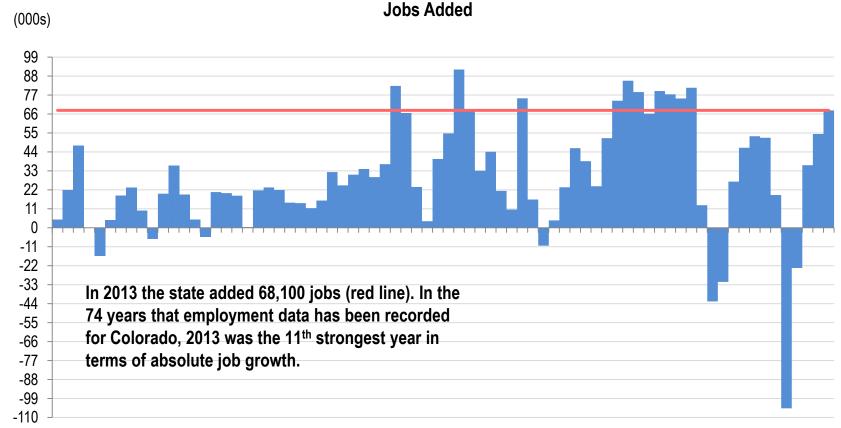
•Growth was led by Construction; Accommodations and Food Services; and Professional, Scientific, and Technical Services (PST).

•A reclassification of several organizations from private health care and local government to state government created artificial levels of change for these 3 sectors.

•Only two sectors lost jobs – local and federal government. (The local sector decline was artificial).

Thousands (Average)

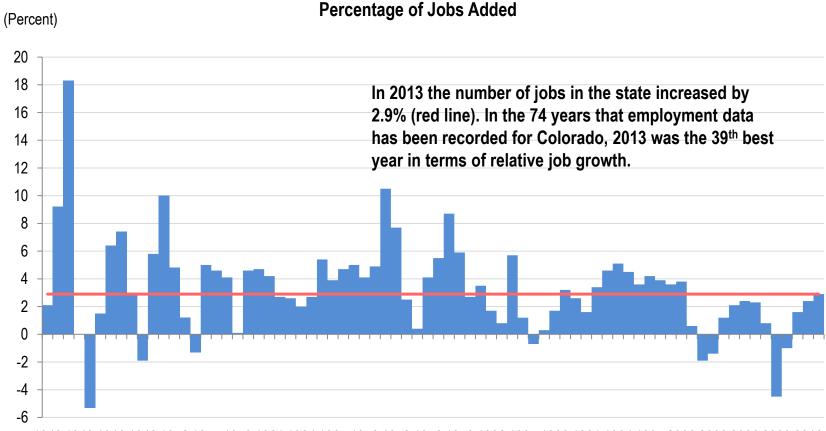
How Does 68,100 Jobs Compare to Previous Years?



1940 1943 1946 1949 1952 1955 1958 1961 1964 1967 1970 1973 1976 1979 1982 1985 1988 1991 1994 1997 2000 2003 2006 2009 2012

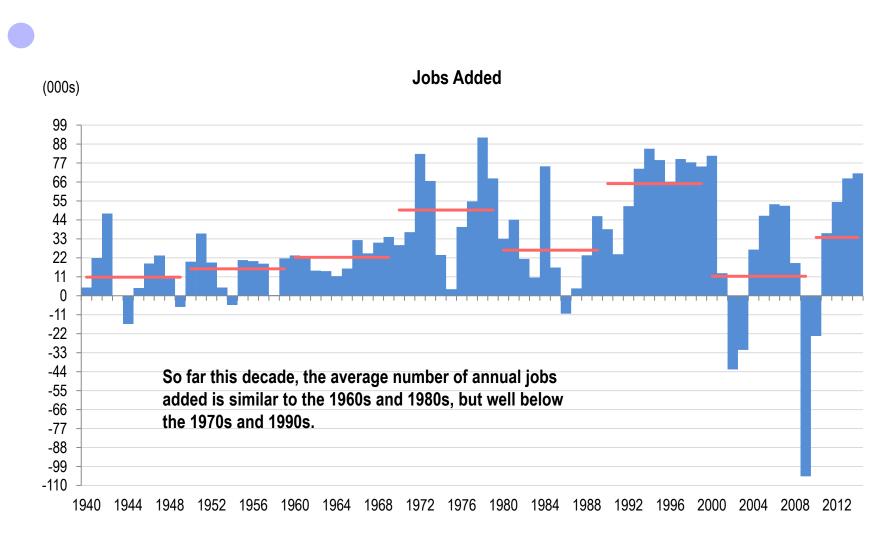
Source: Bureau of Labor Statistics, NSA.

How Does 2.9% Job Growth Compare to Previous Years?



1940 1943 1946 1949 1952 1955 1958 1961 1964 1967 1970 1973 1976 1979 1982 1985 1988 1991 1994 1997 2000 2003 2006 2009 2012

Source: Bureau of Labor Statistics, NSA.



Colorado Jobs Added by Decade

Source: Bureau of Labor Statistics, NSA.

Colorado Employment The Lost Decade and Beyond

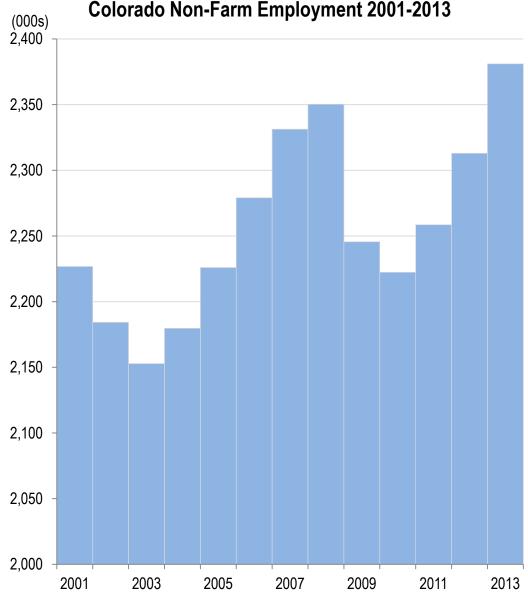
Colorado employment declined in 2009 and 2010. After that, the state added:

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

Not only have jobs been added, but the number of jobs added has increased in each of these 3 years.

None of the Supersectors lost jobs in 2013.

Of the 22 sectors tracked for this report, only federal and local government lost jobs in 2013.



Source: Bureau of Labor Statistics, CBER.



Appendix

Overview of BLS Employment Revision Process

Current Employment Survey (CES) or wage and salary data is based on a survey of companies.

Throughout the year monthly press releases announce wage and salary employment. Each announcement contains minor adjustments to previous months. In March of each year, the data for the prior year is benchmarked to the Quarterly Census of Employment and Wages (QCEW) employment series. This benchmarking process produces changes to the CES series that are more significant than the monthly changes. In March of the following year, the data is adjusted for the final time. Those revisions are usually minor.

Specifically, the most recent revisions, "finalized" the 2012 data. The "final" revision for 2013 will be released in March 2015. Occasionally BLS makes slight adjustments to the "final" data as they change their models and smooth out minor changes caused by reclassifications.

Every year, there is error in the data. This year the 2013 employment was revised upwards. The error in the data was significant and occurred for several reasons:

•The initial CES projections are based on a survey. Accuracy of the survey is contingent upon a representative sample of business. In 2013, the sampling process did not accurately reflect actual changes in employment.

•The BLS model is most accurate when there is "normal" growth. Like most models, it tends to understate the severity of downturns. As well, it underreports the rate of growth in periods of recovery. Such was the case in 2013.

•The BLS reduced its staff as part of cost cutting measures and has relied more heavily on modeling and sampling. These changes and revisions introduced greater fluctuation in the monthly totals, although the annual totals are thought to be reasonable.

The bottom line, Colorado had an upward revision. Originally, the data showed that about 55,000 jobs were added last year. The recent revisions show that growth was more significant – Colorado added 68,100 wage and salary positions in 2013.

Colorado Unemployment Rates by County (December 2013)

Adams County	6.5
Alamosa County	7.0
Arapahoe County	5.7
Archuleta County	7.0
Baca County	3.5
Bent County	7.5
Boulder County	4.4
Broomfield County	5.3
Chaffee County	5.6
Cheyenne County	3.2
Clear Creek County	5.3
Conejos County	9.3
Costilla County	12.3
Crowley County	9.6
Custer County	6.6
Delta County	7.3
Denver County	6.2
Dolores County	6.4
Douglas County	4.7
Eagle County	5.2
El Paso County	7.2
Elbert County	4.6
Fremont County	8.1
Garfield County	5.8
Gilpin County	5.4
Grand County	4.6
Gunnison County	5.5
Hinsdale County	3.4
Huerfano County	10.2
Jackson County	3.6
Jefferson County	5.4
Kiowa County	3.3

Kit Carson County	3.8
La Plata County	4.7
Lake County	5.5
Larimer County	4.8
Las Animas County	9.0
Lincoln County	4.0
Logan County	4.7
Mesa County	6.9
Mineral County	6.8
Moffat County	5.2
Montezuma County	7.0
Montrose County	8.5
Morgan County	5.2
Otero County	8.0
Ouray County	4.9
Park County	6.0
Phillips County	4.0
Pitkin County	5.8
Prowers County	5.0
Pueblo County	8.6
Rio Blanco County	4.7
Rio Grande County	8.6
Routt County	4.5
Saguache County	10.3
San Juan County	6.4
San Miguel County	5.0
Sedgwick County	4.1
Summit County	4.1
Teller County	6.9
Washington County	4.0
Weld County	6.1
Yuma County	3.2

Source: Bureau of Labor Statistics, NSA.

Review of Colorado Economy 2013 Analysis of Employment Data

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