



# Colorado Economic Forecast 2012

Colorado-based Business and Economic Research

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# Forecast Purpose – The Forecast Story

"It is far better to foresee even without certainty than not to foresee at all."  
--Henri Poincare, French mathematician.



# The Forecast Story

The purpose of this forecast is to discuss changes that are occurring in the Colorado economy. This “story” about those changes can be used for purposes such as economic development, workforce training, and decision making in business.

The forecast story includes a set of numbers that measure change, for example, growth or declines in GDP, population, employment, or wages. There are numbers of metrics that could be used to tell this story, but the primary focus is employment. From a practical standpoint, wage and salary data is available in the public domain, it is easily understood, and it can be secured on a timely basis. From an economic 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.

Every effort has been made to prepare a story that is based on reliable information and accurate analysis. It cannot fully account for major shocks to the system, such as policy decisions, natural disasters, war or terrorism attacks that cannot be predicted. At best a series of scenarios can be presented to account for such impacts.

In the end the only certainty is that the forecast will either be wrong or lucky. Either way, the value of the forecast is not in the numbers, but in the forecast story.

The 2012 story for Colorado begins with a brief discussion of the national economy.



# U.S. Output

The global and U.S. economy is fragile. Uncertainty in advanced and emerging economies is driven by the European debt crisis. The impact of this crisis will be determined, in part by the orderliness of its resolution. About 22% of U.S. exports go to Europe. As well, Europe provides about half of the income earned abroad for U.S. multinational companies. A decrease in European demand could lower the rate of U.S. GDP growth and the strength of our economy.

Improved U.S. output will occur only if a positive cycle returns - jobs are added, income improves, demand increases, and good and services are consumed.

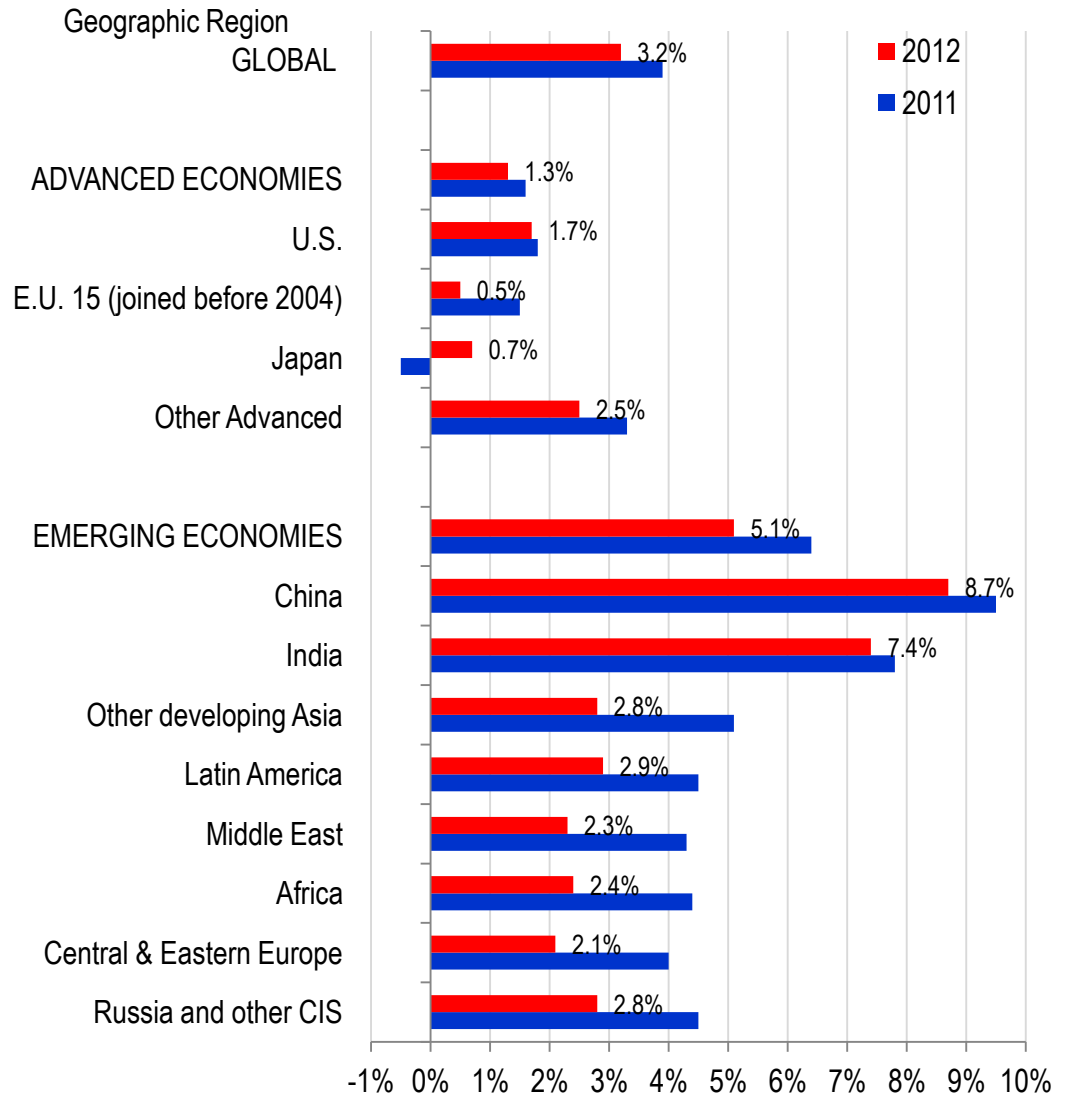
## Global GDP 2011 vs. 2012

### Global GDP (TCB)

Over the past year, The Conference Board (TCB) has provided a fairly accurate comprehension of the performance of the economy during the Great Recession.

Overall TCB points to slower growth in the world economy next year, 3.2% vs. 3.6%. In 2012 the Advanced Economies, which account for 50.3% of global output, will expand by 1.1%. The Emerging Economies, which are responsible for 49.7% of global output, will post a much stronger gain, 5.1%.

Japan is the only region that is showing an increase in the rate of output for 2012. TCB feels that parts of Europe are in a recession. It remains to be seen how deep that recession will be.



# Real US GDP Growth

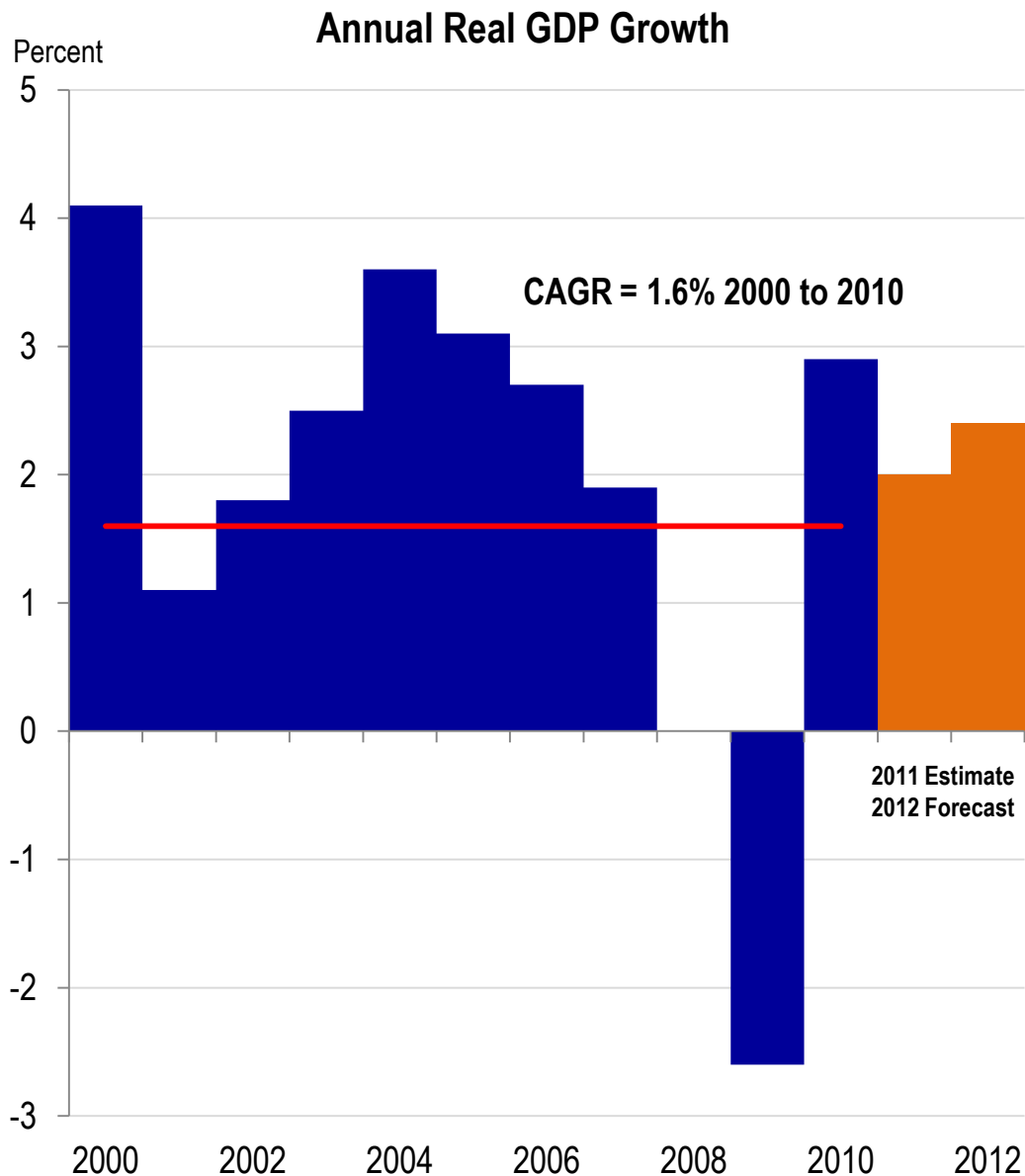
## Annual

- Annualized Real GDP growth for 2000 to 2010 was 1.6% (red line).

- Projected Real GDP for 2011 will be about 2.0% with slightly higher growth in 2012. Nevertheless, output growth will remain subpar.

- Consumption is likely to remain weak.
- Government spending will be at lower rates.
- Business investment will continue to be erratic.

- At the earliest, sustained output growth will occur in 2013.



# Annual Change in U.S. Real GDP and Real Personal Consumption

• In 1990 Real Personal Consumption (PC) accounted for about 66% of Real GDP; today it is 70%. It is no surprise that quarterly growth rates for both are similar.

• The chart on the right is based on TCB's December 2011 projections for 2011 and 2012. Their projections illustrate how the lack of growth in Real PC has prevented stronger output growth and a more rapid recovery.

It is clear to see that Real GDP and Real PC posted weaker growth during the period 2000-2012.

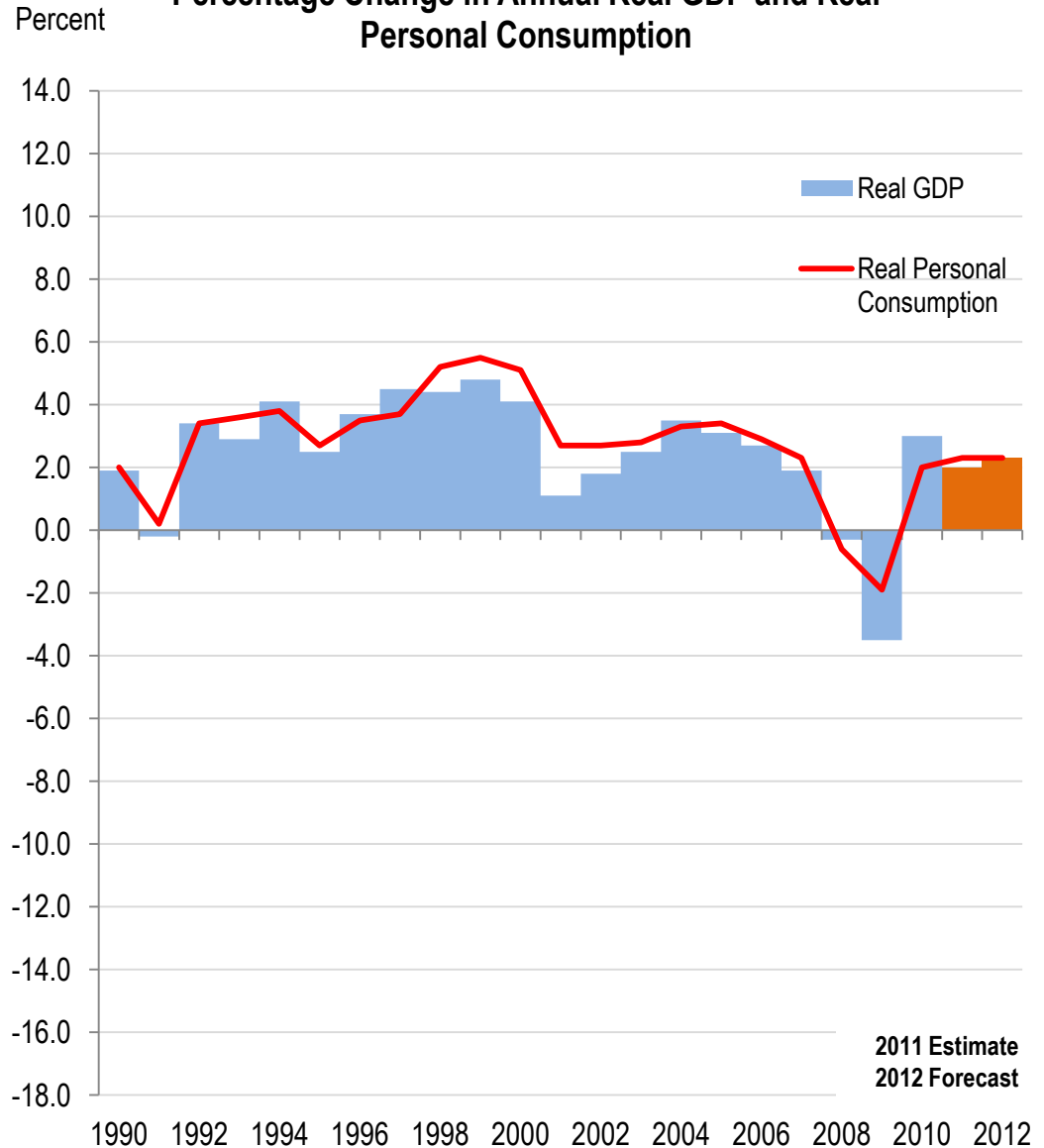
## Range of Real GDP

1990-1999    -0.2 to 4.8%  
 2000-2012    -3.5 to 4.1%

## Range of Real PC

1990-1999    0.2 to 5.5%  
 2000-2012    -1.9 to 5.1%.

Percentage Change in Annual Real GDP and Real Personal Consumption





# Annual Change in U.S. Real GDP and Real Capital Spending

- Real Capital Spending (CS) accounts for about 10% of Real GDP.

- While the movement of Real CS parallels that of Real GDP growth, it is much more volatile.

Real GDP and Real CS have greater dispersion during the period 2000-2012 than during the 1990s.

## Range of Real GDP

1990-1999 -0.2 to 4.8%

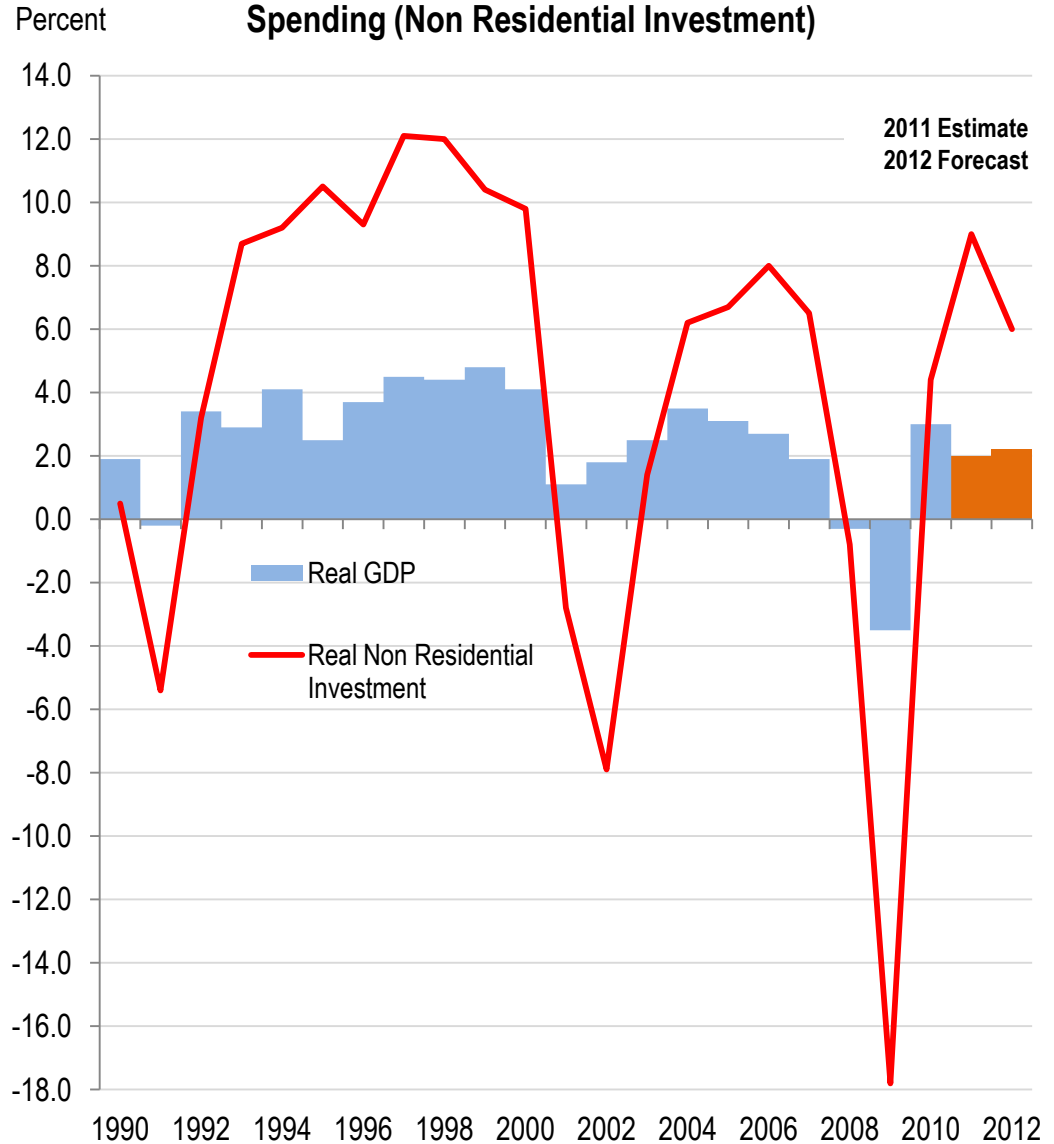
2000-2012 -3.5 to 4.1%

## Range of Real CS

1990-1999 -5.4 to 12.1%

2000-2012 -17.8 to 9.8%.

Percentage Change in Annual Real GDP and Real Capital Spending (Non Residential Investment)



## Annual Change in U.S. Real GDP and Real Government Consumption Expenditures

- Real Government Spending GS accounts for about 20% of Real GDP.

- The rate of growth for Real GS increases at a faster rate during recessions and decreases after the downturn.

The ranges of growth for Real GDP and Real CS show greater dispersion and weaker growth during the period 2000-2012 for both data sets.

### Real GDP

1990-1999 -0.2 to 4.8%

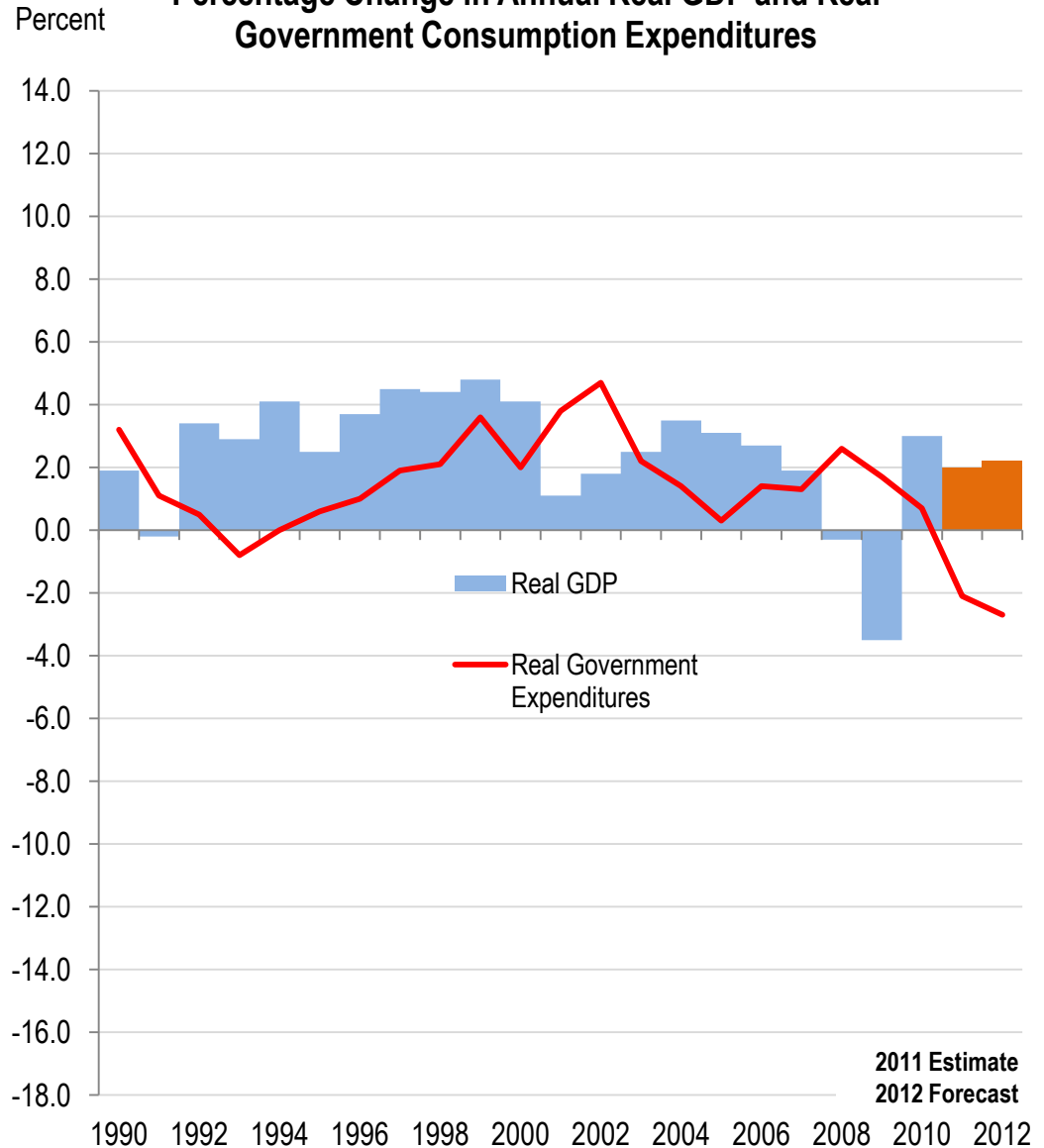
2000-2012 -3.5 to 4.1%

### Real CS

1990-1999 -0.8 to 3.6%

2000-2012 -2.7 to 4.7%.

Percentage Change in Annual Real GDP and Real Government Consumption Expenditures



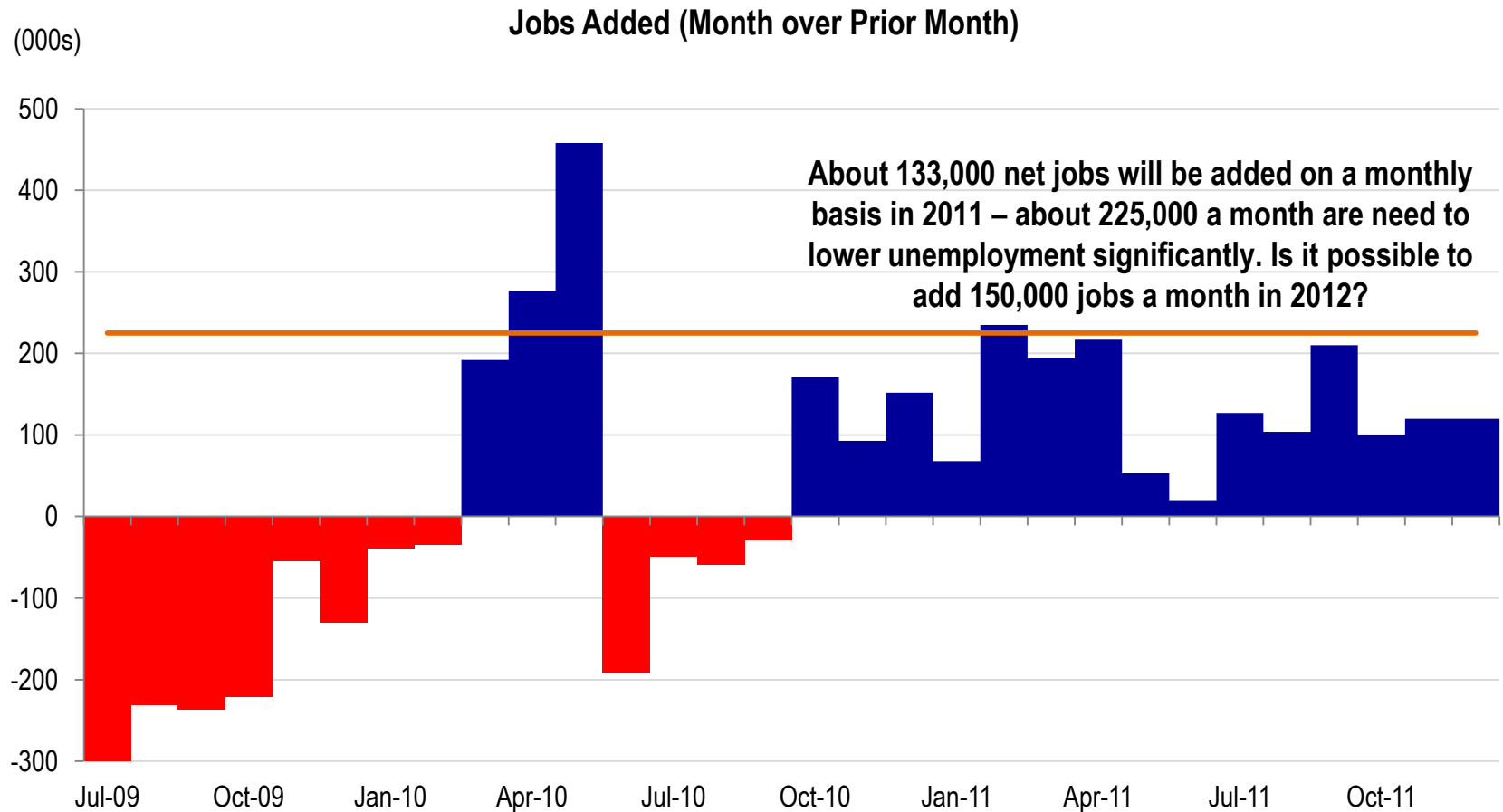


# U.S. Employment and Unemployment

The Great Recession ended in mid-2009; however sustained month-over-month jobs did not occur until more than a year later, October 2010. Jobs have been added every month since, albeit at a slower than desired rate.

The unemployment rate is one of the most visible measures of the health of the economy; however, it is overrated as a measure of economic performance and the strength of labor markets. The rate has a high margin of error and it does not capture workers who have stopped hunting for a job or who choose not to apply for benefits because they did not want to deal with the hassles of the system. Evaluating unemployment trends over several months or quarters is a more appropriate use of the metric than looking at month-to-month changes. To that point, unemployment is trending downwards.

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



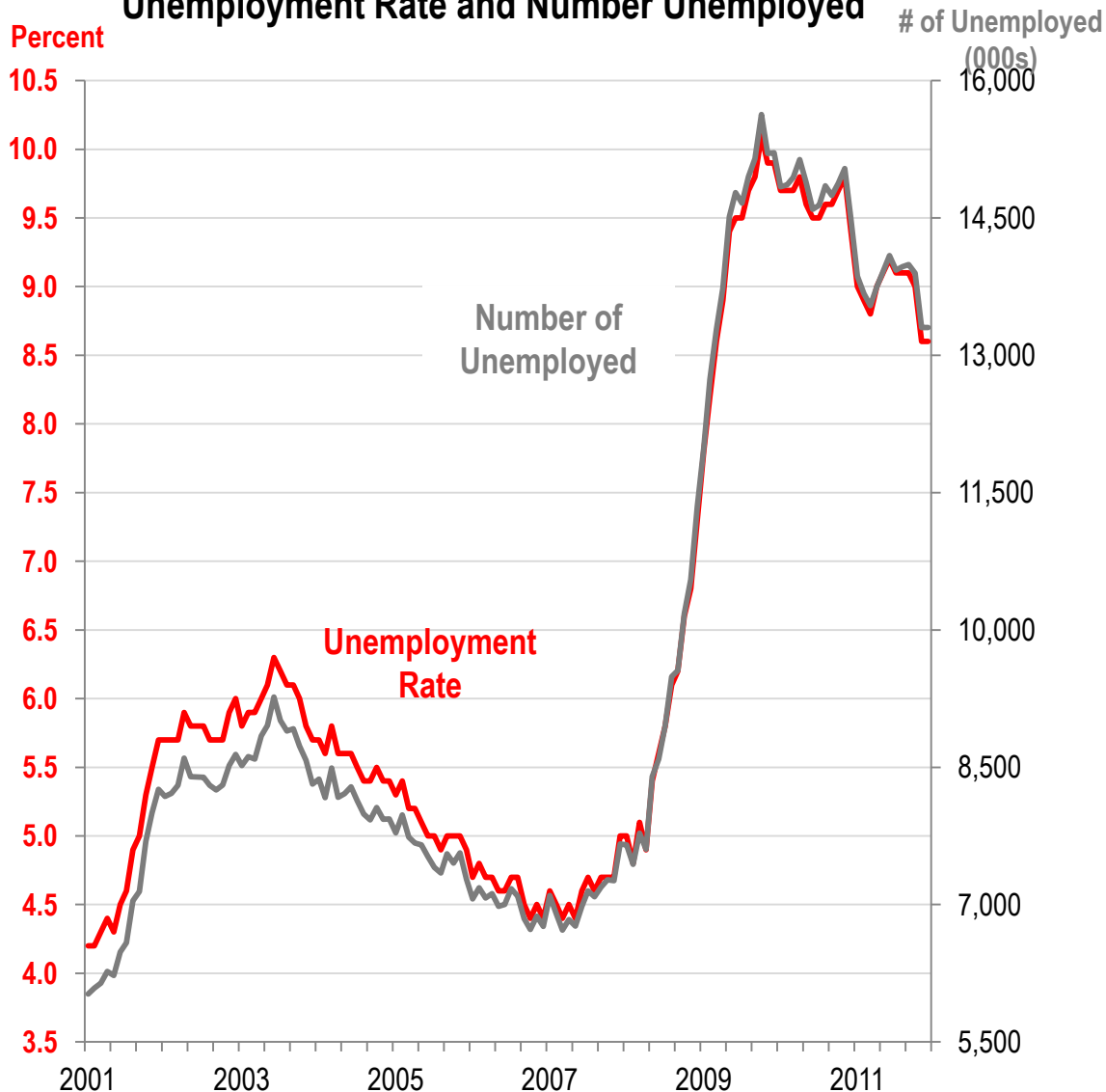
# U.S. Unemployment Rate and Number of Unemployed

As would be expected, the change in the number of unemployed workers parallels variation in the unemployment rate.

In January of 2001 there were about 6 million unemployed workers in the U.S. In March 2009, that number exceeded 13 million. It peaked at 15.6+ million in Q4 2009 and slipped back to 13 million at the end of 2011.

U.S. unemployment is expected to be in the range of 8.3% to 8.8% in 2012.

## Unemployment Rate and Number Unemployed



Source: Bureau of Labor Statistics, SA.

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# The Upcoming Recession?

The National Bureau of Economic Research ([www.nber.org](http://www.nber.org)) has not indicated that we are technically in a recession, although it feels that way to many.

Over the past couple of months, the Conference Board has tracked the chances of a recession in the next quarter.

- July 17%
- August 33%
- September 45%
- October 52%
- November 32%
- December 9%

There is good news and there is bad news.

- The bad news is that the economy has been weak for a long time. The good news is that there is little room for further decline. Barring major shocks, if a recession occurs, it will most likely be short and shallow.
- At the moment it appears that the U.S. has avoided a recession. That is good news. However, that does not mean the economy is healthy. Patience will continue to be a virtue in the recovery.



# Forecast Methodology

“The most reliable way to forecast the future is to try to understand the present.”  
--John Naisbitt, author

# Forecast Methodology

The methodology for this forecast is based on 20+ years of research conducted on the Colorado economy and analysis of projection errors in the Colorado Business Economic Outlook forecast. As well, it is based on trend analysis and expert opinion – thanks to business and government leaders and economists who provided input.

1. The first step is to look at 2011 forecasts and evaluate the factors that caused errors. Given the volatility and risk in the economy, most forecasts were reasonably close, yet they tended to understate the growth in 2011. The factors that caused error were evaluated to see which might continue to have an impact in 2012. That summary is included in this presentation.
2. The sectors of the economy were divided into three groups based on their employment trends over the past two decades. The groups are:
  - Sectors that have historically added jobs. In 1990 this group of sectors accounted for 35% of total employment. That percentage has since increased to almost 41%.
  - Sectors that have decreased their share of total employment. In 1990, these sectors accounted for about 33% of total employment; today they account for about 26%.
  - Sectors that have historically been volatile; as a group they have had periods of strong gains and strong losses. Over the past two decades this group has accounted for 32% to 35% of total employment.
3. Within each of the 3 groups, trends were evaluated for each sector and discussions were held with experts in various areas. A range of projected employment was established for each sector and each group.
4. Given the special risk involved in the global economy, three scenarios were established – most likely, pessimistic, and optimistic. Probabilities were assigned to each of the three scenarios.
5. The forecast was formalized, reviewed by a small group of experts, and published.





# Review of 2011 Forecasts

This section provides a summary of the CBER/BBER 2011 forecast and the forecasts of others. The intent is to learn from their wisdom and mistakes.

This section also includes a list of the factors that impacted the economy in ways that we didn't imagine a year ago. Our understanding of the economy is much more clear when we look in the rear view mirror.

# Review of CBER/BBER 2011 Forecast

In October 2010, the CBER/BBER forecast for 2011 was released. At that time the economy was extremely volatile and economists GDP projections covered a wide range. As a result, that forecast presented four scenarios, including a most likely scenario was identified.

- Optimistic scenario  
Real GDP 3.0% to 3.5%  
25,000 to 35,000 jobs or 1.1 to 1.6%.
- **Most likely scenario**  
**Real GDP 2.4% to 2.9%**  
**15,000 to 24,999 jobs or 0.7% to 1.0%.**
- Pessimistic scenario  
Real GDP 1.9% to 2.3%  
Flat to 14,999 jobs.
- Hell will freeze over scenario  
Real GDP less than 1.9%  
Job losses for the third consecutive year.

Source: BBER/CBER.

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# Where Others Thought We Would Go in 2011

## Review of Various Colorado Forecasts

“There are two types of forecasts – lucky and wrong!”

- Anonymous

The above statement is particularly true during volatile economic times. As can be seen, most of the state’s forecasters were relatively lucky in their 2011 Colorado forecasts and several were wrong.

The 2011 employment data will not be finalized until March 2013; however, preliminary data suggests that the state will add 25,000 to 30,000 jobs. For the sake of discussion, this analysis presumes that the 2011 employment will be 27,500.

Despite dismal economic conditions, eight of the ten 2011 forecasts underestimated job growth. In other words, most forecasters were conservative in their projections.

Seven of the ten forecasts had an error less than 10,000.

The two state agencies responsible for the state’s finances, OSPB and the Legislative Council, were near the top in terms of accuracy.

### Accuracy of 2011 Colorado Economic Forecasts 2011

<b>1. The Forum (UCCS)</b> 25,000 jobs (10/2/2010).	<b>error -2,500</b>
<b>2. OSPB</b> 24,300 jobs (12/2010).	<b>error -3,200</b>
<b>3. BBVA Compass</b> 22,000 jobs	<b>error -5,500</b>
<b>4. (tie). Legislative Council</b> 19,900 jobs (12/2010).	<b>error -7,500</b>
<b>4. (tie). BBER</b> (15,000 to 24,999) (10/2010).	<b>error -7,500</b>
<b>4. (tie) Jeff Thredgold’s SB Index</b> (33,000+) (Autumn 2010).	<b>error +7,500</b>
<b>7. CSU Economics</b> 19,000 jobs (11/16/2010).	<b>error - 8,500</b>
<b>8. CU Colorado BEOF</b> 10,100 jobs (12/6/2010).	<b>error -17,400</b>
<b>9. Demographer’s Office</b> No growth (11/5/2010).	<b>error -27,500</b>
<b>10. Moody’s/Dismal.com</b> 56,000 jobs (3/2011).	<b>error +28,500</b>

Note: Because BBER and Jeff Thredgold provided ranges, their absolute error was estimated to be 7,500.

Source: BBER/CBER.

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# ● Factors that had a Greater Impact on the 2011 National and Global Economies than Anticipated

## ●

“Forecasting is the art of saying what will happen, and then explaining why it didn't.” - Anonymous

The following factors are much more evident today than they were 12 months ago, when the 2011 forecast was put together.

- U.S. Real GDP for 2011 will be about 2.0%, well below most projections. There were signs that the economy would improve, but it could not break out of the vicious cycle of weak job and wage growth, lack of consumer and business leader confidence, and ultimately limited demand for goods and services.
- There is an adage that it takes seven years to recover from a financial recession. While this statement may be true, **nobody** wants to wait that long. It is difficult to factor intangibles such as sentiment and patience into any forecasting model.
- The construction market continued to disappoint in 2011. On a positive note, there are at least signs that it bottomed out. The rebound will continue to be slow and with improvement, construction-related jobs will be added in 2012.
- The housing market continues its slide in many geographic areas. The jury is still out for 2012.
- The lack of consumer and business leader confidence did not ease up, although there were moments when both groups wanted to be optimistic. There has been an uptick at the end of 2011. Will that carry over into 2012?
- Political leaders in both parties failed to address and resolve important budgetary and financial issues in a meaningful and timely manner. To make matters worse, the 2012 election season was kicked off early. It started ugly and will go downhill from there.
- Financial markets are feeling the impact of the revocation of the Glass Steagall Act. The elimination of the firewall between commercial banks, which take deposits and make loans, and investment banks, which underwrite securities is believed to be a contributor to the collapse of the financial system.
- The European debt crisis. (While this is at the bottom of the list it may be the most relevant). At the time of this publication, it appears the issue will be resolved, but over a period of time. And don't forget the private debt crisis.

# Factors that had a Greater Impact on the 2011 Colorado Economy than Anticipated

It appears that 25,000 to 30,000 Colorado workers will be added in 2011, with U.S. Real GDP growth of about 2.0%. Factors associated with this higher than anticipated job growth were:

- The increase in population meant that a certain level of essential jobs had to be added.
- During these turbulent times, there was a high level of churn within some sectors and subsectors. In some instances, it was difficult to identify what type of companies were adding jobs and which were shedding workers.
- At the time net jobs were starting to be added, it was difficult to understand the reason they were being added. It now appears that the gain in net jobs was largely a function of a decline in job losses rather than a significant increase in the number of new jobs.
- A portion of the economy was performing as well as it has performed for the better part of the past 20 years.
- Job losses were so great in the prior two years that it was mathematically impossible for there to be a continued decrease in net jobs.

In Q3 2011 it was obvious that the economy had grown faster than anticipated. Historically, the BLS projection model tends to understate the level of employment change during periods of moderate growth or decline. Such was the case in 2011.

A higher than anticipated increase in retail trade sales is a reflection of higher than anticipated employment and increasing spending.

At a time when the state economy was at its worst and the private sector was shedding jobs, state government and higher education added jobs.

Some economists were counting on Colorado's high tech cluster to lead the state out of the recession. Instead, private education and health care, tourism, and the extractive industries led the way. High tech did not deliver as expected on the employment side, but it has more than met expectations on the output side of the equation.

The renewable energy cluster created jobs, but it has not been the panacea for job growth that some expected. It will likely play an important part in the future growth of the state.

The state unemployment rate is below the national level and trending downward. That is good news. However, many unemployed workers have given up on the system or chosen to avoid it because it is too much of a hassle. They are not being accounted for in the data.



# Colorado Population, Employment, and Unemployment Overview

Colorado's population will increase by about 82,000 in 2012, with slightly more than half the gain coming from the natural increase.

The preliminary employment data produced by the Bureau of Labor Statistics shows that the recovery has been very uneven. Job losses occurred for the first seven months after the end of the Great Recession in mid-2009. Net job gains in early 2010 occurred as a result of temporary workers hired to conduct the U.S. Census. On a positive note, jobs were added in the last 9 months of 2011.

Unemployment is trending downward, but at least 200,000 Coloradans remain out of work. This is more than 3 times the number of unemployed in early 2001.

# Change in Population

It is essential to look at the change in population, and the composition of that change when preparing an employment forecast. Population changes and employment changes are related.

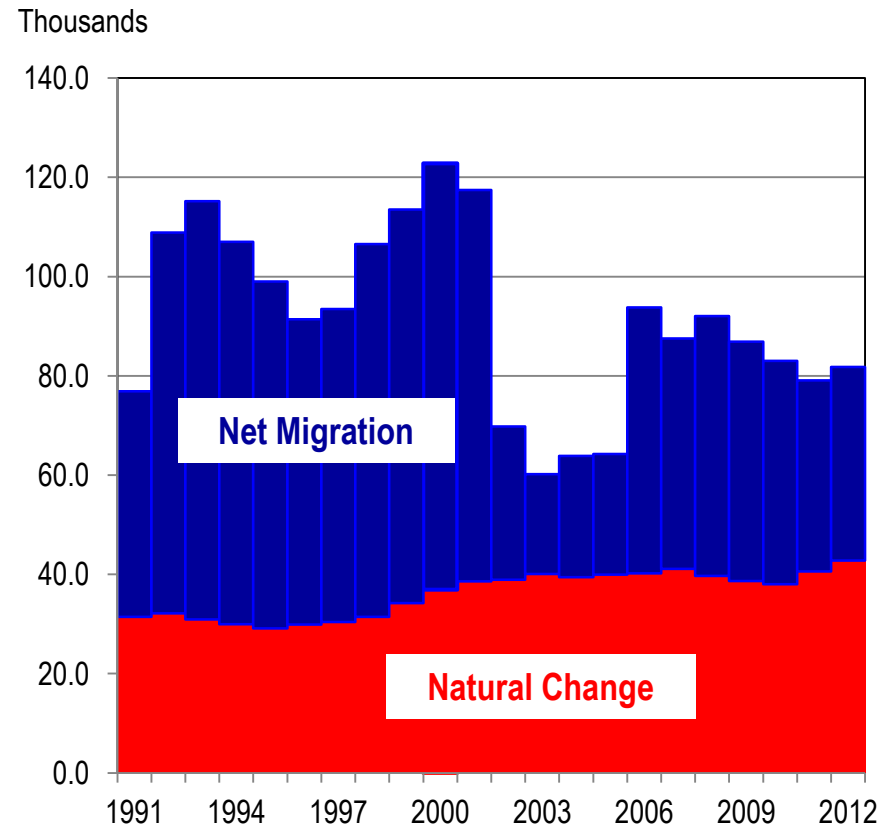
The population increases and decreases based on the natural rate of change (births – deaths) and the change in net migration (people moving in the state – people moving out of the state).

Over the past two decades that natural change has gradually increased from 31,400 in 1991 to 42,800 in 2012(f).

Changes resulting from net migration 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, but unlike during the 1980s, it remained positive. In 2012, net migration will be about 39,000.

The Colorado population will increase by about 82,000 in 2012.

Change in Colorado Population 1991 - 2012



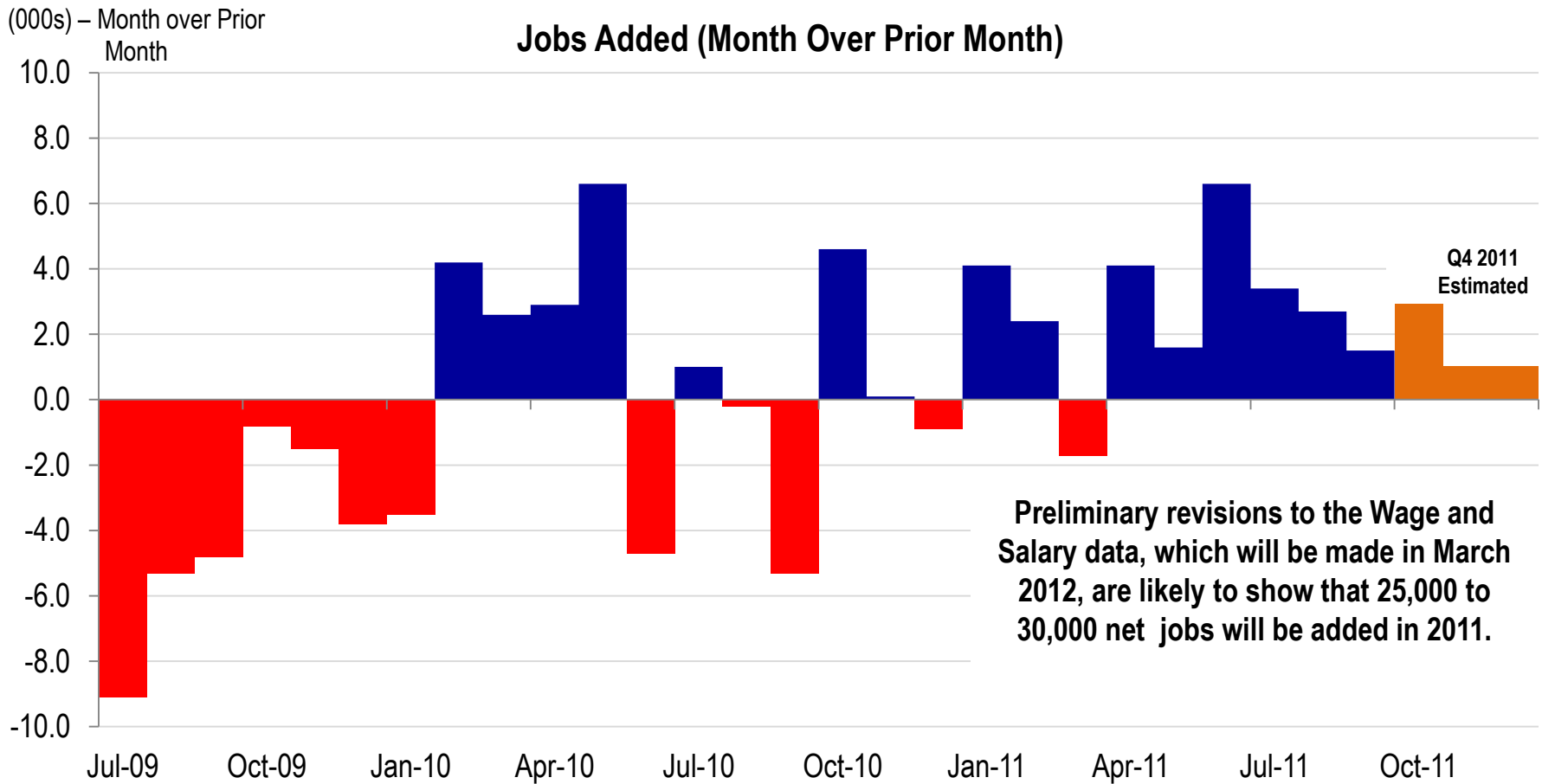
Sources: State Demography Office and CBER.

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# Colorado Employment Situation

## From End of Recession to Current





# Colorado Unemployment Rate and Number of Unemployed

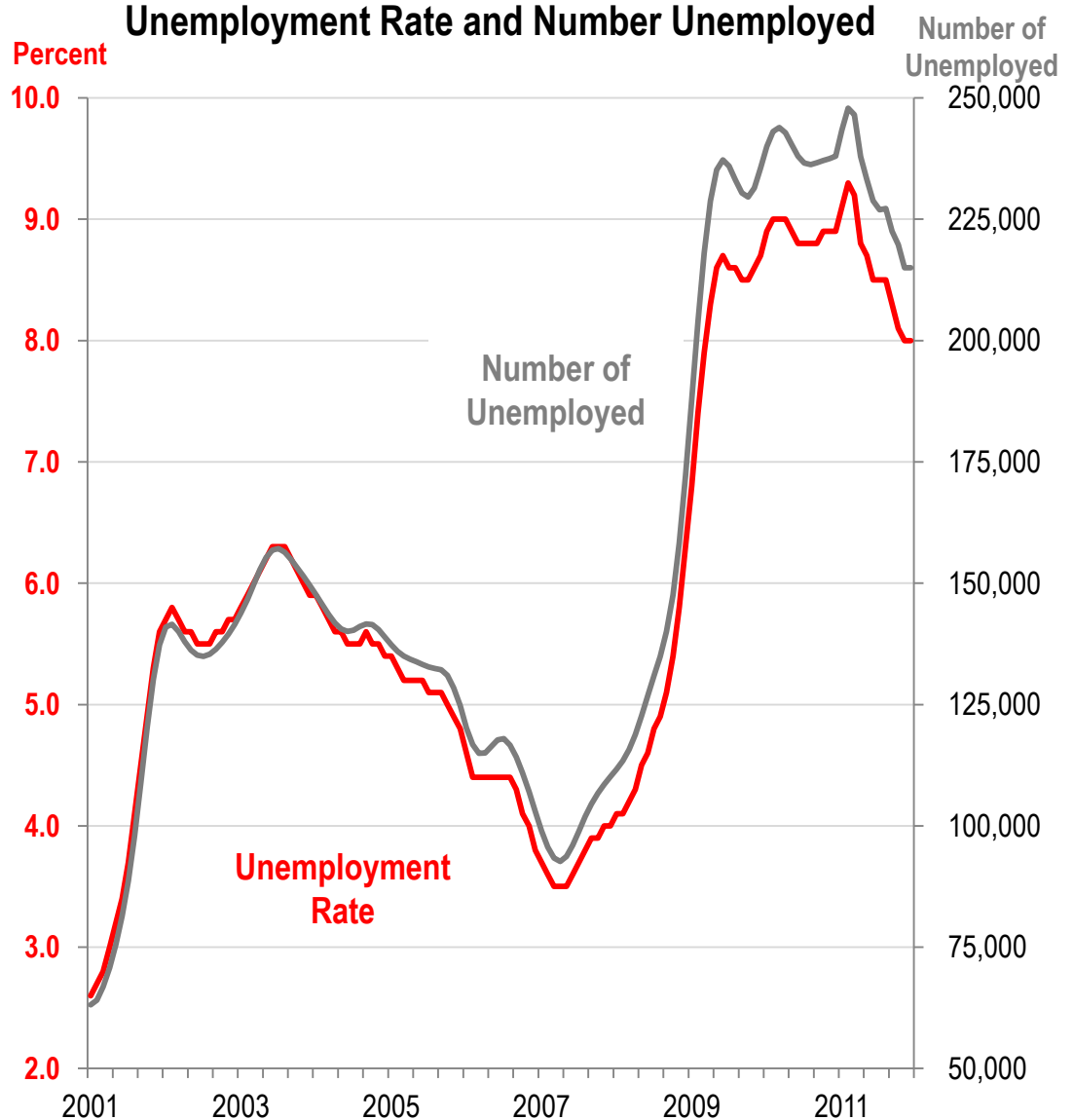
In January of 2001 there were about 63,000 unemployed workers in Colorado. In February 2009, that number exceeded 200,000. It rose to nearly 250,000 in Q1 2011, but has since dropped below 220,000.

Colorado unemployment is expected to be in the range of 7.6% to 8.1% in 2012 or .5% to 1.0% below the national rate.

The unemployment rate understates the number of unemployed workers. Many have given up looking, while others do not want to deal with the inefficiencies of the Unemployment Insurance system (it is not uncommon for those in the system to have to wait for up to two hours to receive basic telephone assistance).

Companies are finding that the trained workers they laid off months ago have taken jobs elsewhere. While there is an ample supply of workers, in some cases there is a mismatch in skills. Some workers have skills that have become outdated or do not match the needs of the companies. As a result, some workers have found it necessary to receive training to upgrade their skills.

## Unemployment Rate and Number Unemployed



Source: Bureau of Labor Statistics, SA.

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# Colorado Employment Outlook

The forecast will evaluate solid growth sectors, limited growth sectors, and volatile growth sectors. From that analysis, it will present three scenarios for employment growth in 2012 and assign probabilities to each scenario.

The most likely scenario is for Colorado to add 27,500 to 37,500 jobs in 2012.

“Forecasting future events is often like searching for a black cat in an unlit room, that may not even be there.”  
--Steve Davidson in *The Crystal Ball*.

# 2011 Employment Estimate

## Growth Sectors

+ 35,000 to 40,000 Employees

Tourism  
Private Education and Health Care  
Professional and Scientific  
Extractive Industries  
Wholesale Trade  
Employment Services  
Higher Education

## Limited Growth Sectors +7,000 to 9,000 Employees

Personal (Other) Services  
Utilities  
Retail Trade  
Corporate Headquarters (MCE)  
State (Not Higher Education)  
Manufacturing  
Transportation & Warehousing

## Volatile Growth Sectors -15,000 to -19,000 Employees

Construction  
Financial Activities  
Information  
Federal Government  
B-to-B (Not Employment Services)  
Local Government (Not K-12)  
K-12 Education

**+ 25,000 to 30,000 total jobs in 2011**

*Key sectors of the economy are placed into three groups based on the number of workers they have added. It is estimated that the March 2012 employment revisions will show that Colorado added 25,000 to 30,000 jobs in 2011. Estimates for each of the three groups is provided.*

# ● Employment Situation (1991 to 2011) for Sectors ● With Strong Employment ● Growth in 2011

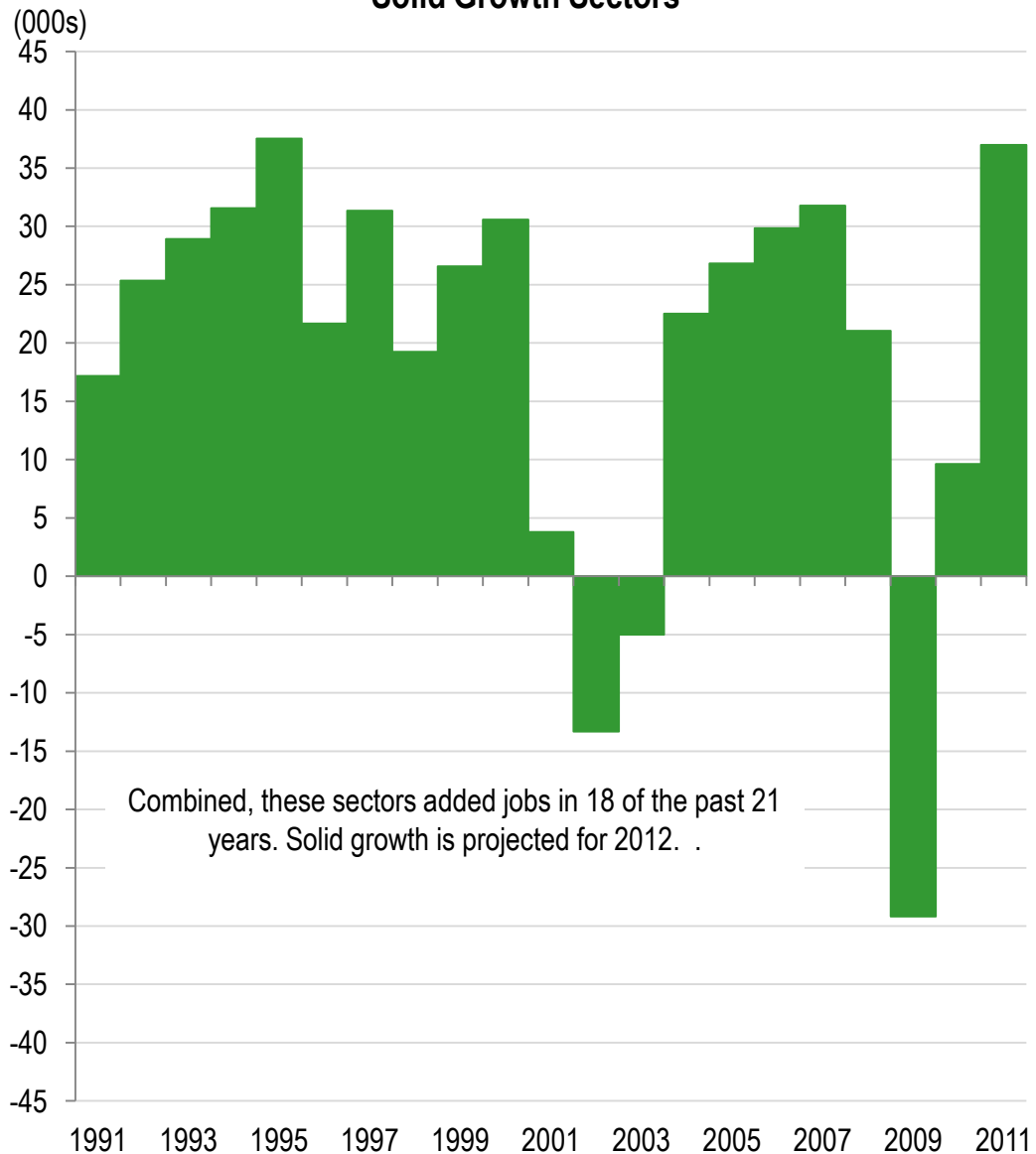
Over the past two decades the following sectors have been the foundation for consistent growth in Colorado employment.

- Employment Services
- Extractive Industries
- Higher Education
- Private Education and Health Care
- Professional and Scientific
- Tourism
- Wholesale Trade.

Total employment for these combined sectors was:  
 1990 536,700 workers, 35.3% of total employment  
 2000 806,600 workers, 36.4% of total employment  
 2010 904,500 workers, 40.7% of total employment.

Growth of these sectors in 2011 was as strong as it was at any point during the past two decades.

### Solid Growth Sectors





# 2012 Outlook for Growth Sectors

Most sectors will add at least 2,000 jobs in 2012.

Private Education and Health Care - Private education of all types will continue to be in demand as unemployed and incumbent workers seek to be retrained. Health care will be in demand, particularly with an aging population. The Health Care sector has added jobs every year since 1990. Continued growth may be constrained by a lack of trained workers. Will the health care bubble burst in 2012? Probably not!

Professional, Scientific and Technical – Many companies in this sector are part of the state's high tech cluster. Improvement in the construction sector will bode well for engineering and architecture firms.

Tourism - Tourism will continue to be an integral part of the state economy. High gasoline prices did not hurt the industry as much as originally feared. Early snows bode well for another solid ski season. Christo's Over the River project, The USA Pro Cycling Challenge and Tim Tebow will draw attention to Colorado as a place to live, work, and play.

Extractive Industries - The extractive industries have shown a resurgence over the past year that will carry into 2012, although there is concern about where the coal industry is headed. The Niobrara shale fields may be the source of job creation in this and related industries.

Employment Services – Given the economic environment, companies will remain cautious about adding permanent workers. They will continue to contract with employment services when they need extra workers until the economy gets on more solid footing.

Wholesale Trade – Moderate growth will continue in 2012. Colorado has a small manufacturing base and retail sales will post moderate gains.

Higher Education – Over the past decade higher education has lobbied for greater funding, yet sector jobs increased at a steady rate and wages grew faster than the private sector. The jury is out whether the returns justify this investment.

# ● Employment Situation (1991 to 2011) for Sectors with Limited Job Gains in 2011

Over the past two decades the following sectors posted gains during the 1990s, but collective losses have been greater than gains during the past decade.

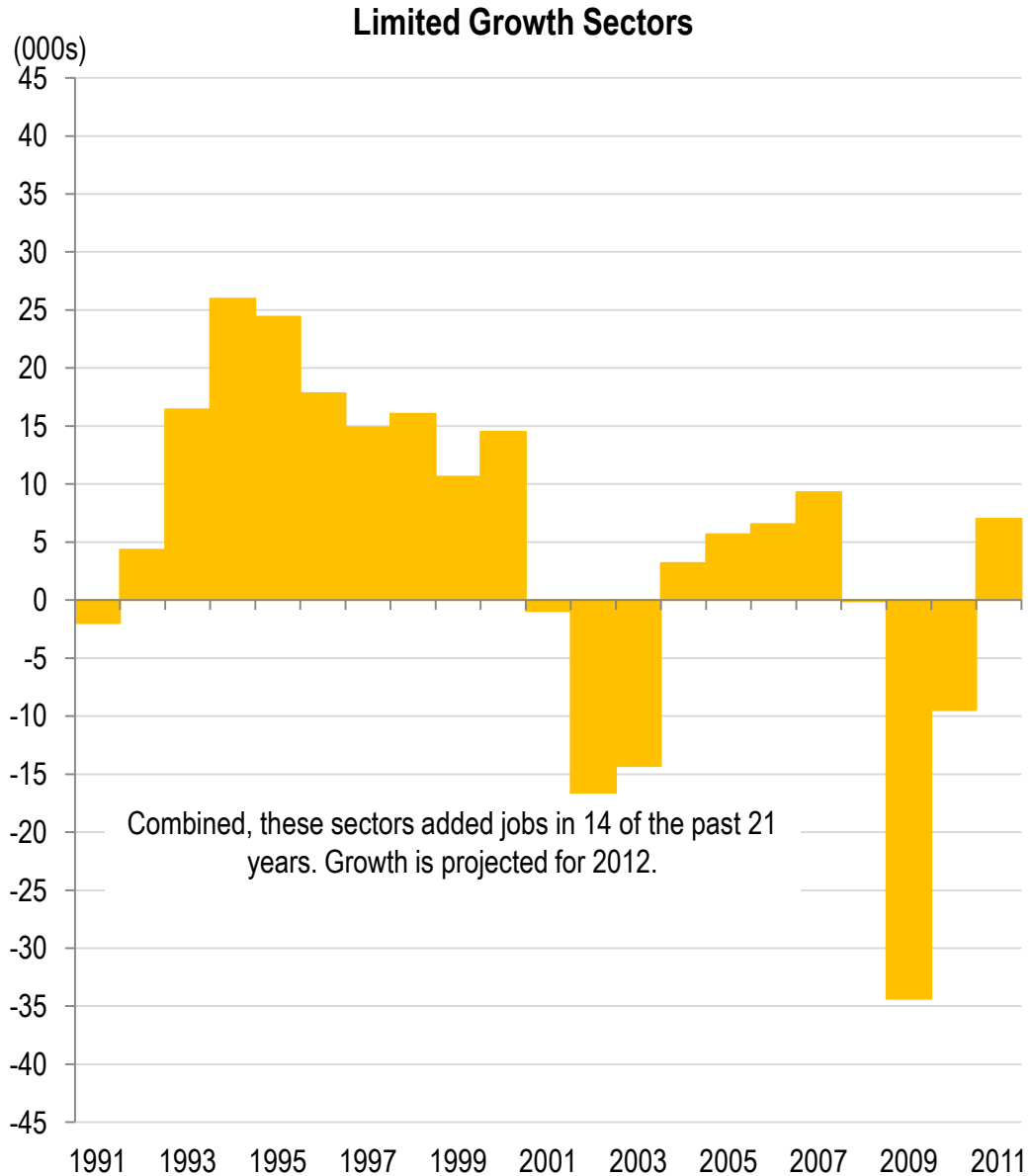
- Corporate Headquarters (MCE)
- Manufacturing
- Personal (Other) Services
- Retail Trade
- State (Not Higher Education)
- Transportation & Warehousing
- Utilities

Combined, these sectors posted minimal job gains in 2011.

Individually, some of these sectors have remained relatively flat during the past decade. With the exception of 2009, the annual change has been minimal.

Total employment for these combined sectors was:  
 1990 495,400 workers, 32.6% of total employment  
 2000 638,500 workers, 28.8% of total employment  
 2010 585,600 workers, 26.4% of total employment

Beginning in 1996, the growth of these sectors tapered off, reflecting a restructuring of the state economy.





# 2012 Outlook for Limited Growth Sectors

Most of the following sectors are likely to see changes in the range of ± 2,000 jobs in 2012.

Corporate Headquarters (MCE) – Colorado will continue to add smaller corporate headquarters in the Denver Tech and Interlocken areas.

State (Not Higher Education) – State government will continue to grow at a slow rate despite budget constraints.

Retail Trade – Lower unemployment rates, modest gains in net migration, and increased activity in the grocery market sales point to greater spending and employment. After a robust beginning to the Christmas season, it appears the Grinch will be visiting elsewhere in 2011. Consumer sentiment at the end of is higher than earlier in the year. In fact the gap between sentiment and metrics has narrowed; however, it remains to be seen if consumers will keep their pocketbooks open after the holiday season.

Personal (Other) Services – Historically, the sector has not been a source of significant job gains. Technological improvement has stifled employment gains, but population growth has increased demand for basic services. Minimal increases are possible.

Utilities – This is a small sector that typically shows little fluctuation in employment. Such will be the case in 2012.

Transportation & Warehousing - Transportation employment is likely to remain flat with slight gains in warehousing.

Manufacturing – Colorado trade associations and government leaders have pushed to reinvigorate the manufacturing sector. Increased productivity have allowed manufacturers to remain competitive and maintain high levels of output. Companies will benefit; the work force may not. Growth of Colorado's renewable energy cluster has offset declines in all areas over in the past three years; however, growth of the cluster will continue to be volatile. At best, weak job gains are possible for manufacturers in 2012.

# Employment Situation for Sectors with Job Losses in 2011

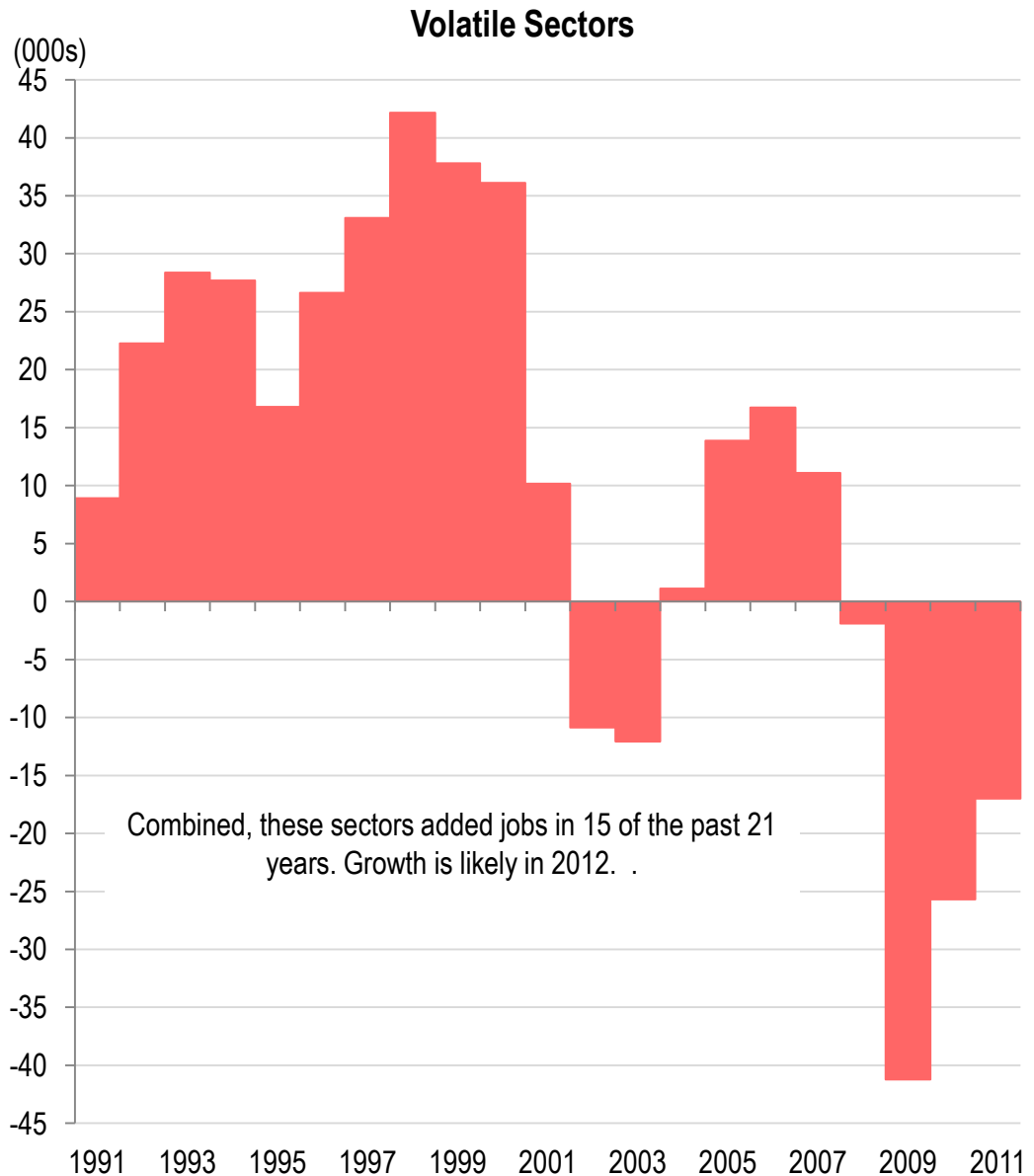
Over the past two decades the sectors listed below have maintained a fairly consistent percentage of total employment. Individually and collectively, they have experienced volatility in recent years.

Total employment for these combined sectors was:  
 1990 488,900 workers, 32.1% of total employment  
 2000 768,700 workers, 34.7% of total employment  
 2010 730,000 workers, 32.9% of total employment.

The sectors are:

- B-to-B (Not Employment Services)
- Construction
- Federal Government
- Financial Activities
- Information
- K-12 Education
- Local Government (Not K-12)

Net job losses in these sectors extended well beyond the end of the recession. Continued job losses are likely in 2012.







# 2012 Outlook for Volatile Growth Sectors

Most of these sectors will post slight gains or diminished job losses in 2012.

**Construction** – After reaching employment levels last seen in the 1990s, Construction employment has bottomed out. Slight gains are projected for residential permits and valuation as construction and housing begin to turn the corner. As well there are a limited number of non-residential and non-building projects on tap that will increase demand for construction workers. Improvement in Construction will have a positive ripple affect across other industries. Slight gains in employment are possible.

**Federal Government** – Jobs losses in 2011 were an anomaly. The sector remains fairly small and has recorded minimal variation. Slight job losses are possible given decreased funding for some federal facilities and the USPS.

**Financial Activities** – At best, non-banking activities will post minimal gains in 2012. Losses in the credit intermediation sector will more than offset these gains. Continued blood letting is on tap for the sector in 2012.

**Information** – Consolidation in the telecommunications and publishing sectors will result in fewer jobs in 2012.

**K-12 Education** – Despite tight budgets, there will be a slight increase in 2012 employment.

**Local Government (Not K-12)** – Budget constraints will result in small job losses again in 2012.

**B-to-B (Not Employment Services)** – Limited job losses will continue in 2012. Demand for non-essential support services will remain low.

# 2012 Employment Outlook

## **Solid Growth Sectors +26,500 to 32,500 Employees**

Tourism  
Private Education and Health Care  
Professional and Scientific  
Extractive Industries  
Wholesale Trade  
Employment Services  
Higher Education

## **Limited Growth Sectors +3,000 to 9,000 Employees**

Personal (Other) Services  
Utilities  
Retail Trade  
Corporate Headquarters (MCE)  
State (Not Higher Education)  
Manufacturing  
Transportation & Warehousing

## **Volatile Growth Sectors -6,000 to 0 Employees**

Construction  
Financial Activities  
Information  
Federal Government  
B-to-B (Not Employment Services)  
Local Government (Not K-12)  
K-12 Education

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

## **2012 Employment Outlook**

### **Optimistic Scenario**

U.S. Real GDP 2.6%+  
More than 37,500 Colorado Workers or More

### **Most Likely Scenario**

U.S. Real GDP 2.1 % to 2.5%  
+ 27,500 to 37,500 Colorado Workers

### **Pessimistic Scenario**

U.S. Real GDP 1.6% to 2.0%  
Less than 27,500 Colorado Workers



# Summary and Challenges

Colorado will add 27,500 to 37,500 jobs in 2012. It will take until 2014 before state employment returns to the 2008 peak.

Factors that could alter the performance of the economy are demand for goods and services, debt, the financial system, politics, education, and work force skills.

# Summary of Outlook

"I have seen the future, and it is very much like the present, only longer."

-Various sources

The economy is fragile and there are a number of variables that could alter any forecast. At the risk of sounding like a broken record, 2012 will look a lot like 2011.

## **Solid Growth Sectors ( About 41% of total employment)**

These sectors posted stronger growth in 2011 than any time in the past two decades. Similar growth should occur in 2012, even if there is a mild recession.

## **Limited Growth Sectors (about 26% of total employment)**

In 2011 these sectors individually recorded minimal change in their number of employees. Significant change is unlikely in a slow economy.

## **Volatile Growth Sectors (33% of total employment)**

These sectors have either bottomed out, are near the bottom, or have turned the corner. Combined they will shed fewer jobs than in 2011.

Source: CBER.

**Colorado-based Business and Economic Research**

<http://cber.co>

## **2012 Employment Outlook**

### **Optimistic Scenario**

**U.S. Real GDP 2.6%+**

**More than 37,500 Colorado Workers or More**

### **Most Likely Scenario**

**U.S. Real GDP 2.1 % to 2.5%**

**+ 27,500 to 37,500 Colorado Workers**

### **Pessimistic Scenario**

**U.S. Real GDP 1.6% to 2.0%**

**Less than 27,500 Colorado Workers**

If probabilities were to be assigned to each of these scenarios, they would be as follows:

Most Likely	55%
Pessimistic	25%
Optimistic	20%.

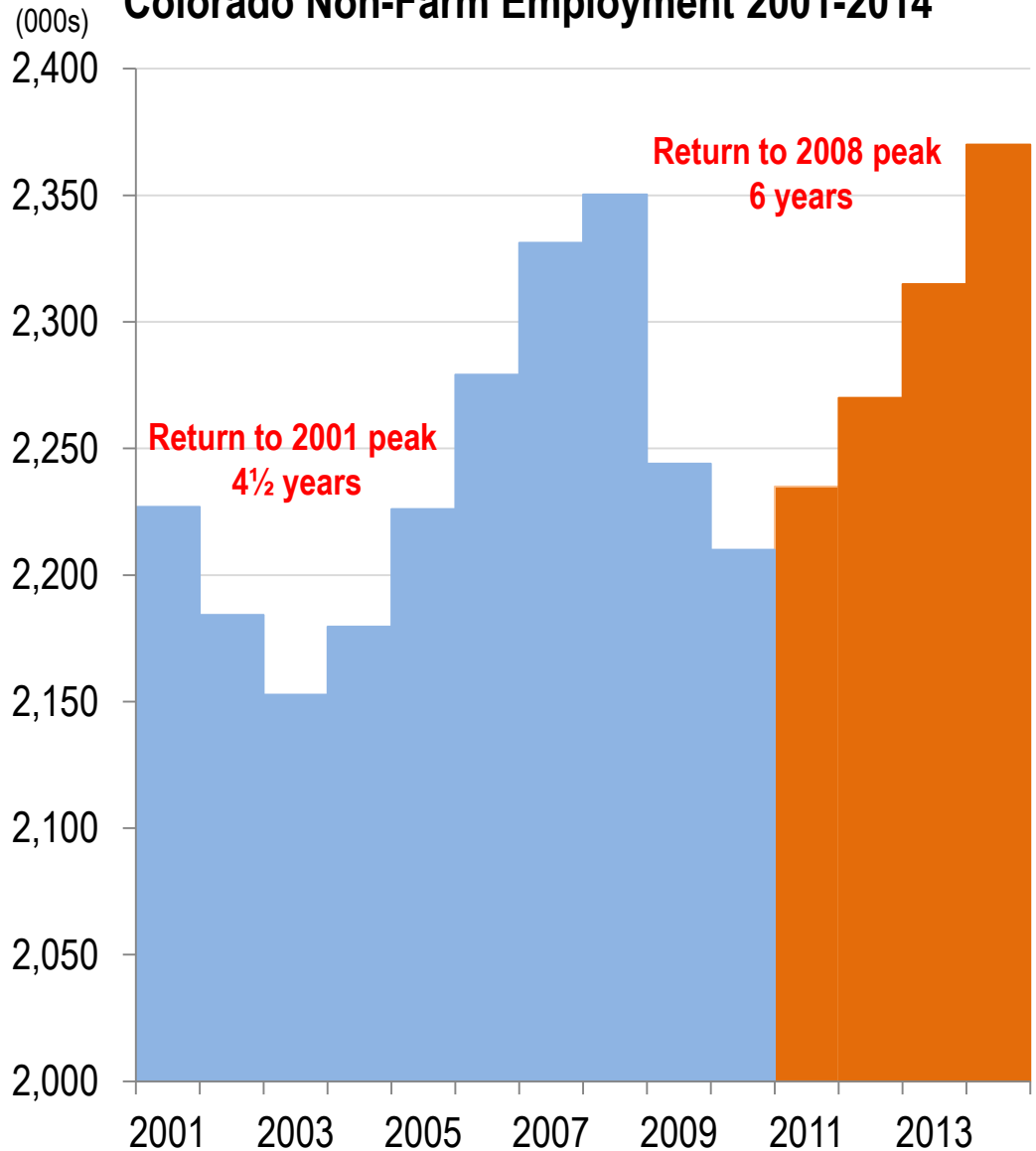
There is slightly more downside risk.



## Colorado Employment The Lost Decade

- It took 4½ years for employment to return to the 2001 peak after the 2001 recession.
- Colorado employment posted moderate gains from 2004 through 2008.
- After peaking in 2008, approximately 150,000 jobs were shed in 2009 and 2010.
- Employment declines were so severe, they dropped below the 2001 peak. Today, Colorado employment is near the high point in 2001.
- If Colorado employment increases by about 1.2% in 2011, 1.4% in 2012, and 1.5% - 2.0% for the 2 years after that, it will reach 2008 peak employment in 2014.

### Colorado Non-Farm Employment 2001-2014



# Challenges for the Colorado Economy

## Demand and Debt

### Demand for Goods and Services

- Will there be sufficient demand for goods and services given the high unemployment rate and minimal wage increases?
- Will companies be able to pass on increased input costs to customers and maintain demand?
- How much longer can manufacturing shipments and output increase without adding to their workforce?
- There is an apparent lack of new firm creation. Is this caused by a lack of demand or insufficient innovation?
- For the most part, companies have adequate access to capital. Do they know how to access it? When will there be enough demand for them to need additional capital?

### Debt, the Financial System, and Politics

- Europe is a major trading partner for Colorado. How will the EU debt crisis impact the U.S. and the state?
- Worldwide there are countries other than Greece and Italy with public and private debt issues. Is anyone paying attention?
- Are our leaders paying attention to both the public and private debt crisis in the United States?
- Is the U.S. financial system sufficiently stable?
- How much uncertainty will be caused by the upcoming elections?
- Will politicians be able to instill confidence in the government after the elections?

# Challenges for the Colorado Economy

## Education and Industry Issues

### Education and the Workforce

- When will the higher education bubble burst?
- How will higher education improve their performance in the classroom?
- How will the state fund PK-12 education, particularly given the outcome of the Lobato education adequacy lawsuit?
- Are high school and college students learning skills that can be transferred between professions?
- What is being done to address the mismatch between the skills that companies need and the skills of job applicants?
- What is the role of the older worker in the workforce? How are companies addressing their impending retirement?
- Has Colorado lost its pool of trained workers as a result of the Lost Decade?

### Industry Issues

- How has Colorado's high tech cluster weathered the Lost Decade?
- Has Colorado lost its critical mass of manufacturers?
- Has Colorado lost the supply chain associated with the decline in its manufacturers?
- Is Colorado saturated with retail stores?
- How will second and third generation businesses transition into the future?
- How much longer can the Health Care sector continue to add jobs?

And last, but not least, the most pressing question for Coloradans is, "Will Tim Tebow lead the Broncos to a Super Bowl?"



## Colorado Economic Forecast 2012

This analysis is for informational purposes only. Any opinions or interpretations of data are those of the presenter. As such, they do not represent the viewpoints of any group or particular organization.

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