



# The Colorado Economy Ten Years After September 11, 2001

Prepared by Colorado-based Business and Economic Research

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# Colorado Economy

Most Americans agree that September 11, 2001 was tragic, whether they experienced it directly or indirectly. Measuring its impact on the country is difficult because of the magnitude of the event and the many unintended consequences.

There have been analyses conducted that show how Osama bin Laden inflicted extended damage on the U.S. economy, while others argue the long-term impact was minimal. Others have calculated the cost of fighting two wars and tracking OBL, and other al Qaeda, over the past 10 years.

The purpose of this document is much more simplistic. It's intent is to provide a quick review of the Colorado economy 10 years later and the possible impact that 9/11 may have had on the state economy.



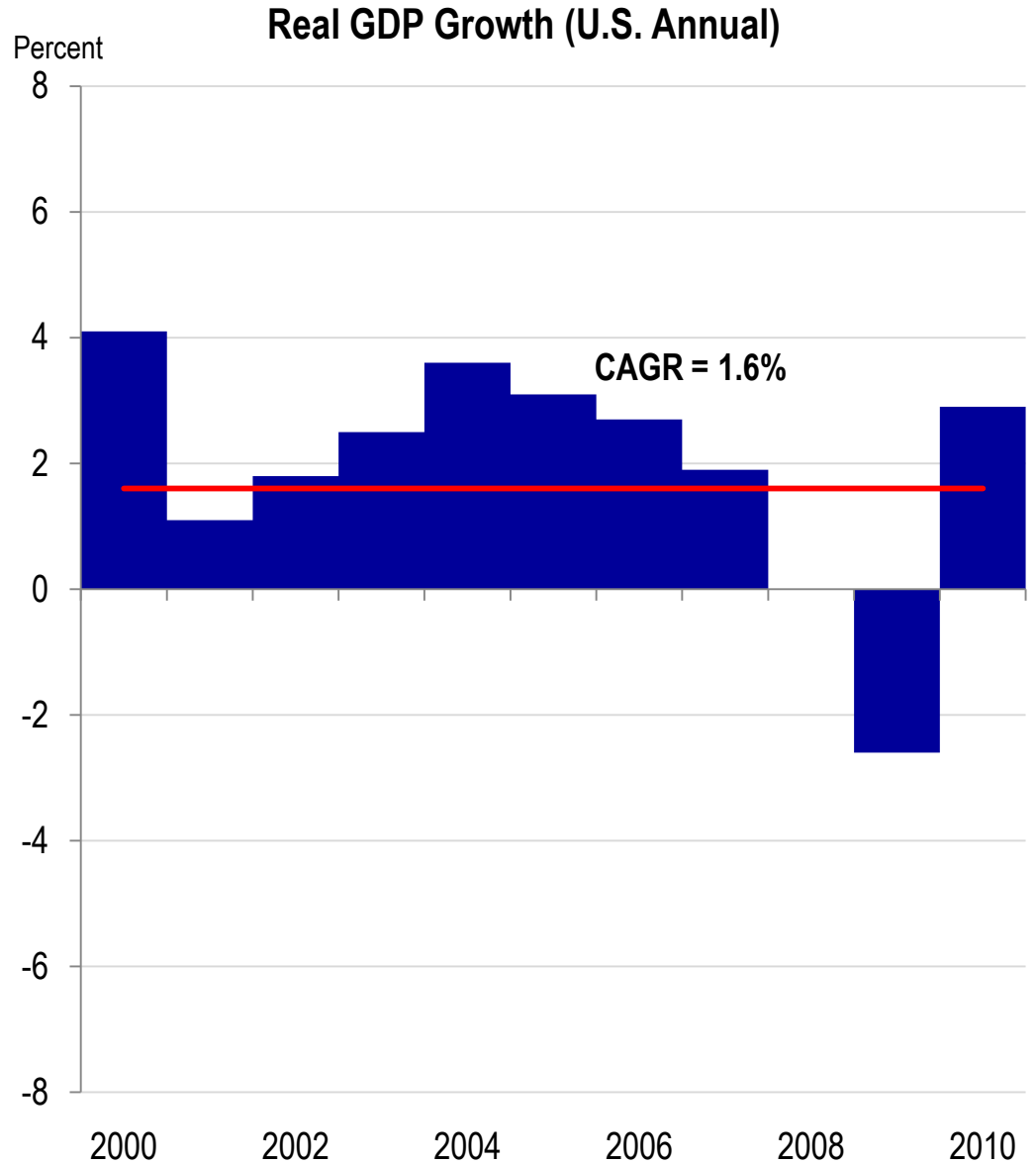
# U.S. Output

● Real GDP Growth  
● Annual

•2000 was the last year of strong output growth that did not rely on federal stimulus.

•2001 and 2002 posted real GDP growth of 1.1% and 1.8%.

•Annualized real GDP growth for 2000 to 2010 1.6% (red line). By comparison real output growth during the prior decade was about 3.2%



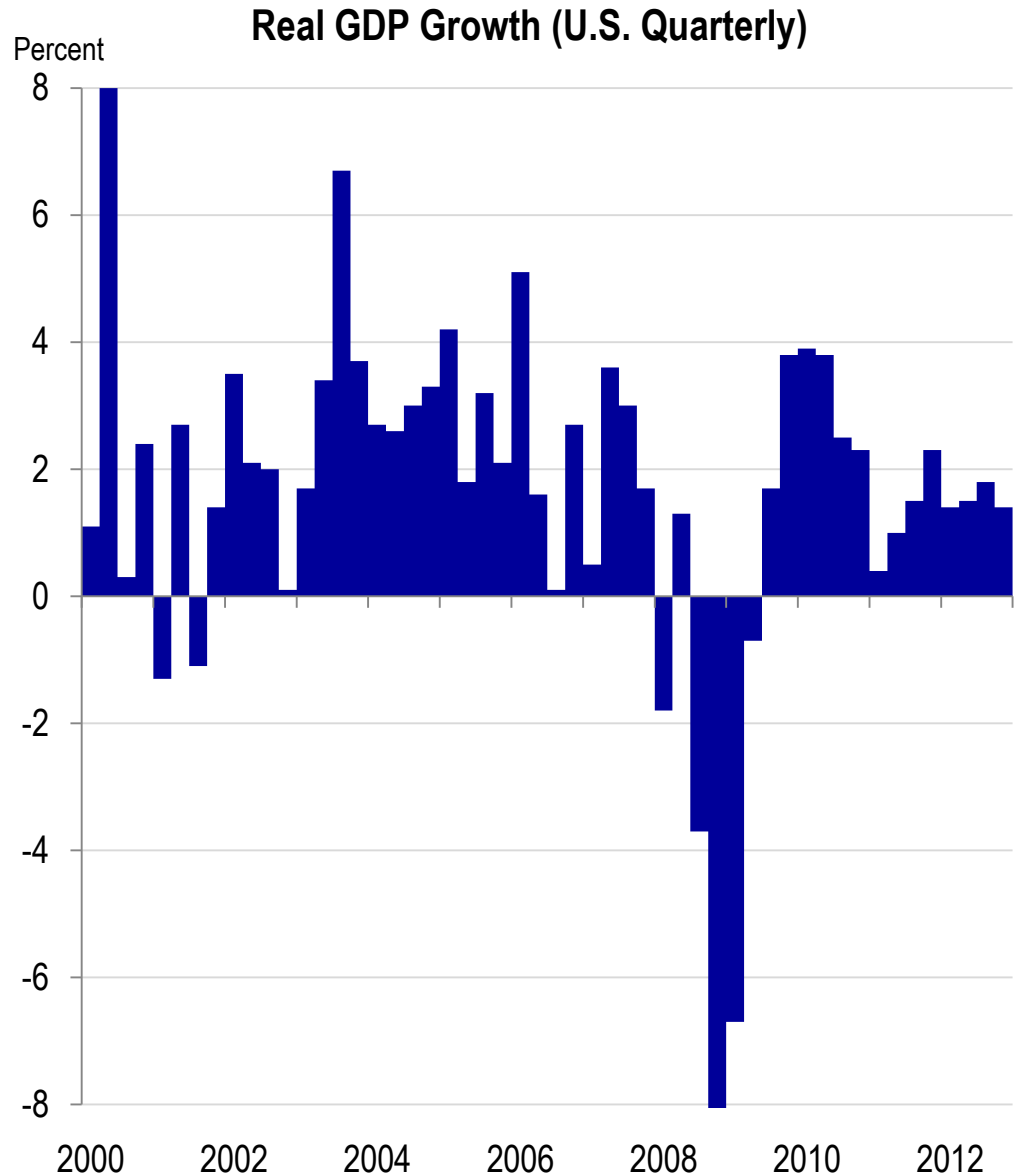
# Real US GDP Growth

## Quarterly

•In 2000, quarterly Real GDP growth varied from 0.3% to 8.0%. Clearly, the go-go 90s had come to an end.

•Negative output growth occurred in both the 1st and 3rd quarter of 2001, while the other two quarters were below potential.

•Much of the quarterly growth, i.e. the spikes, in 2002 and beyond was a result of stimulus efforts, creative financing, or pent-up demand. One such effort, zero percent auto financing pulled sales forward from future years.





# Colorado Output

This section includes output data for key Colorado industries.

● Real GDP Change  
 ● Accommodations and Air  
 ● Transportation

The tourism industry felt an immediate impact from 9/11. Initially, the closure of airports and increased security measures reduced travel spending. As well, some business travel was replaced with alternate means of communications (teleconferencing).

Air transportation posted output declines in 2001 and 2003. Because the industry has a limited number of major carriers, industry activity (pricing, increased competition, regulation) significantly altered the structure of the industry.

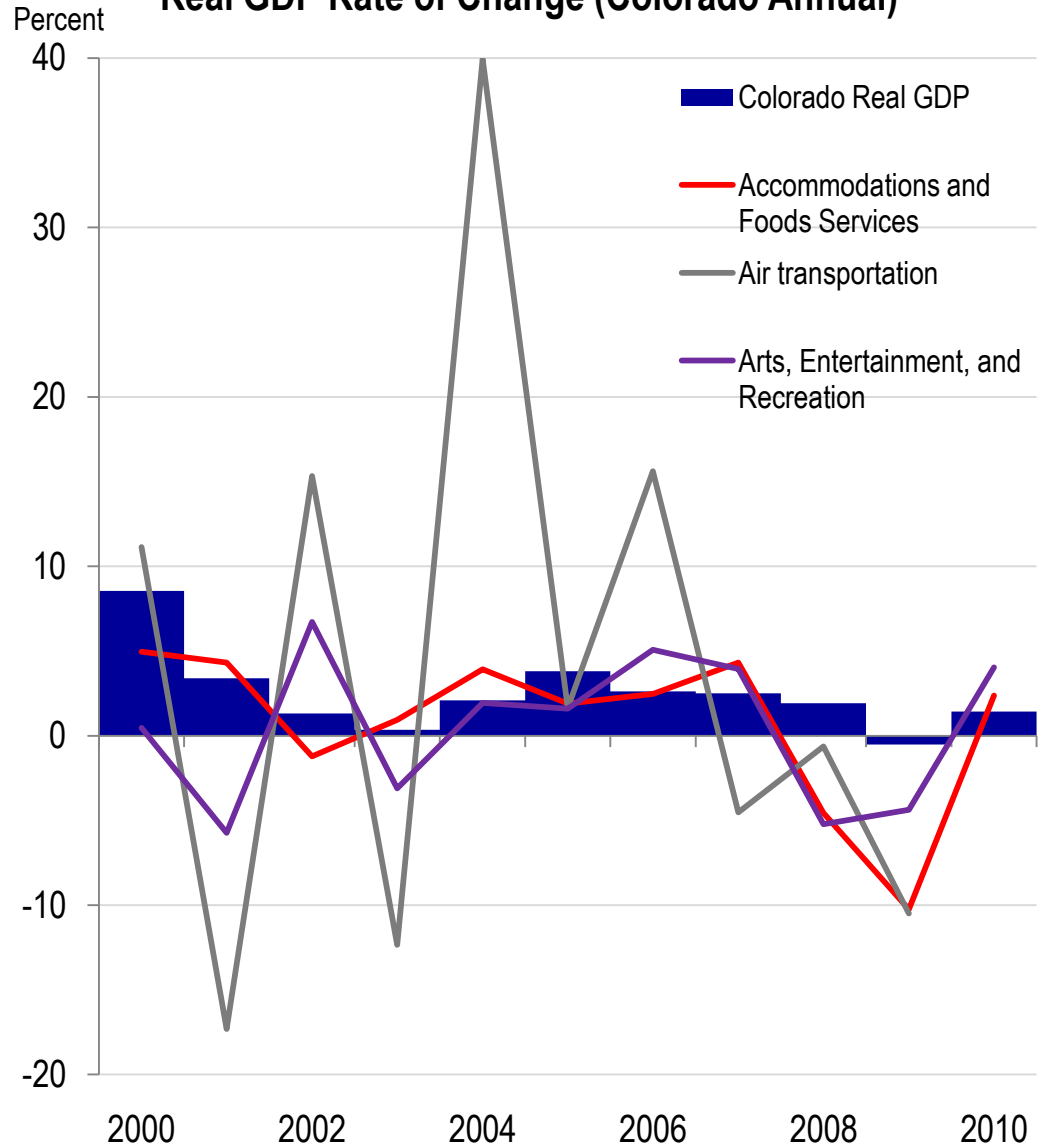
The Accommodations and Food Service sector recorded growth at a declining rate in 2001. Negative growth occurred in 2002.

Output in the Arts, Entertainment and Recreation sector showed negative growth in 2001 and 2003.

Annualized rate of growth (2000-2009)

- Real GDP 1.9%
- Accommodations and Food 0.1%
- Air Transportation 1.7%
- Arts, Entertainment, Recreation 0.0%.

Real GDP Rate of Change (Colorado Annual)



## Real GDP Change Retail and Personal Services

There appears to be a correlation between decreased retail and personal services output and the events of 9/11. This raises the question, "Did 9/11 and the 2001 recession bring about a change in consumption patterns?"

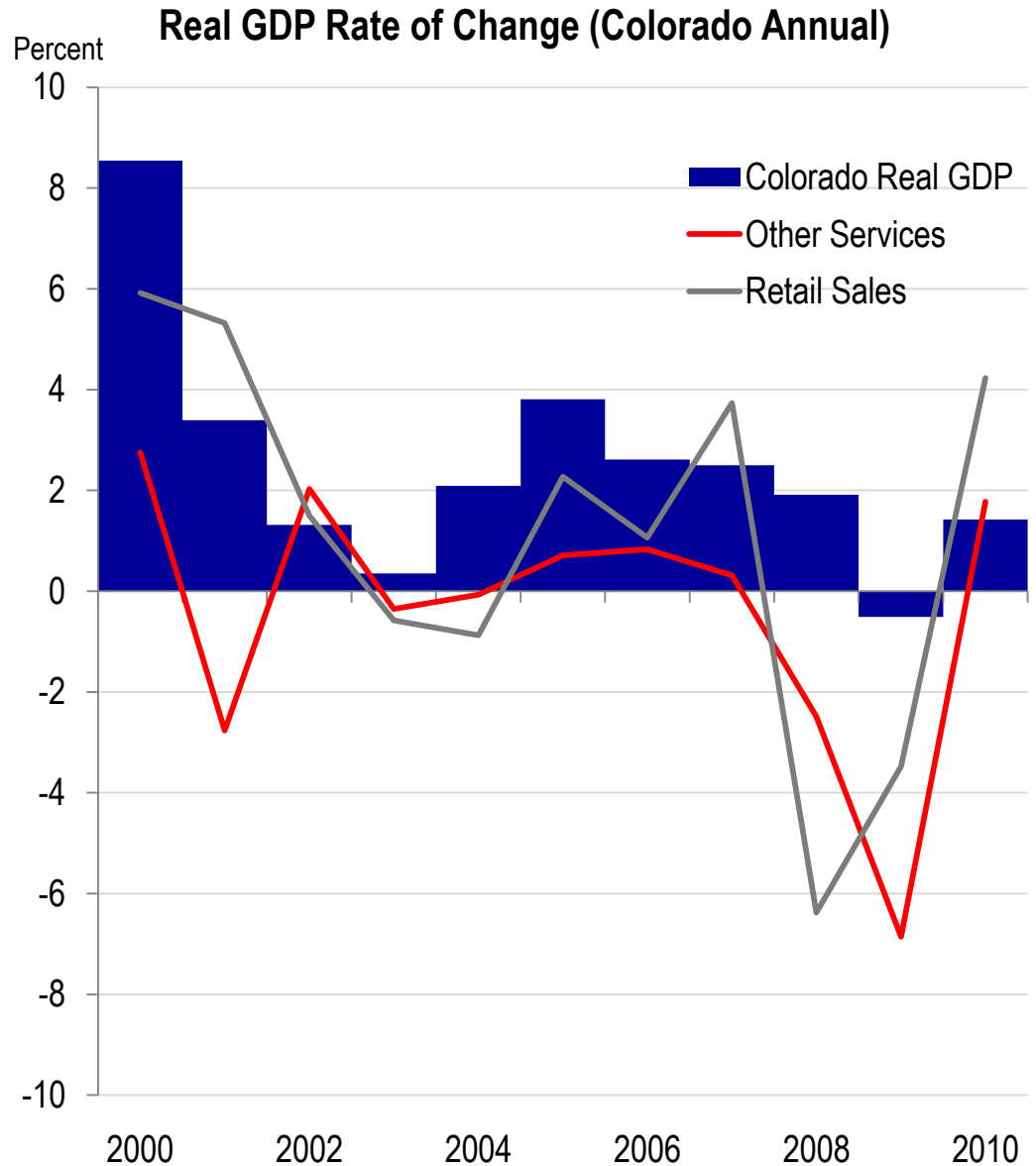
Personal services (auto repair, hair salons, nonprofits, etc.) output posted declines in 2001 and 2003, following by minimal growth through 2007 and sharp declines in 2008 and 2009.

Retail sales increased at a declining rate in 2001 and 2002. Declines were recorded in 2003 and 2004. Retail output exceeded the state rate of growth in 2007 and 2010.

There was a greater percentage decrease in output during the Great Recession than during the 2001 recession.

Annualized rate of growth (2000-2010)

- Real GDP 1.9%
- Other (Personal) Services -0.7%
- Retail Sales 0.6%.





● Real GDP Change  
● Construction, Finance, and  
● Real Estate

Construction sector output peaked in 2000, while valuation and the number of permits issued topped out in the second half of the decade.

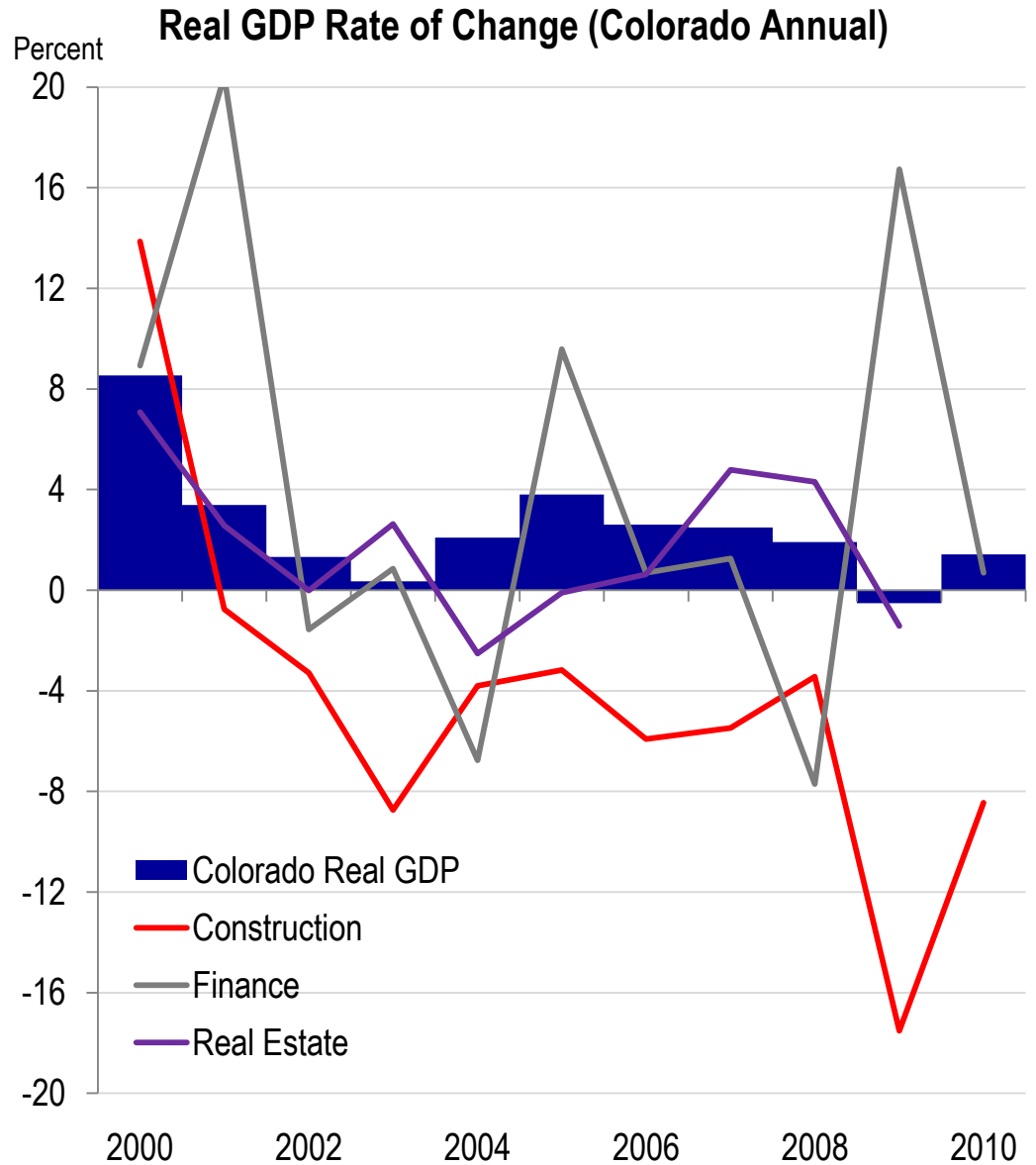
While 9/11 and the 2001 recession may have weakened the industry, they are not totally responsible for sharp decline that followed.

Financial sector output increased significantly in 2001. In part, this may be attributed to creative financing designed to maintain or increase consumption.

Because Colorado housing did not experience the sharp appreciation during the 1990s as other parts of the country, property valuations did not experience significant downturns (Housing prices not shown on graph) during the 2000s. Nevertheless, the decline in housing prices along with the loss of jobs contributed to recent housing/mortgage problems.

Annualized rate of growth (2000-2009)

- Real GDP 1.9%
- Construction -5.9%
- Finance 3.3%
- Real Estate 1.1%.



# Real GDP Change Colorado High Technology

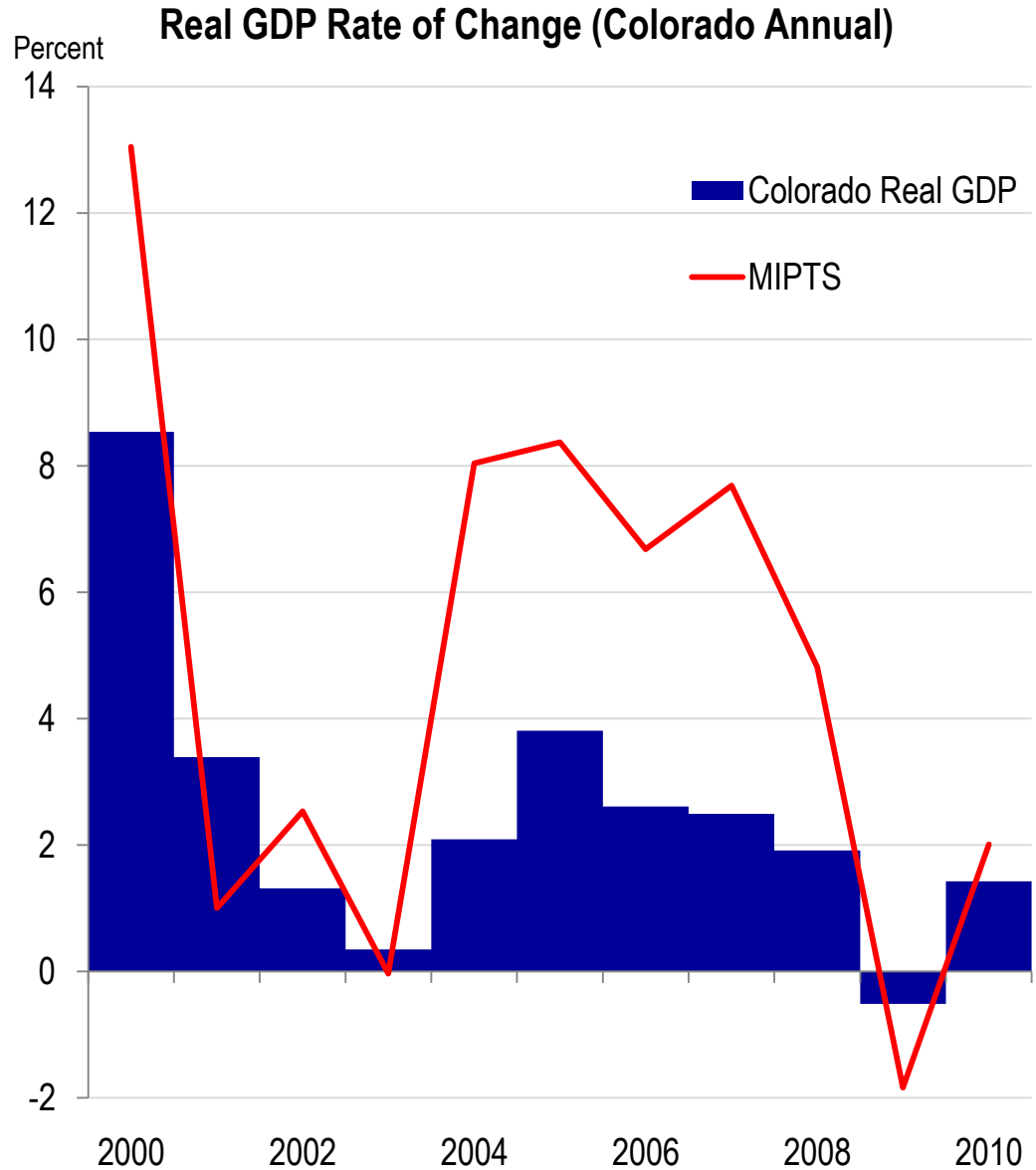
The Manufacturing; Information; and Professional, Technical Services sectors (MIPTS) are a proxy for Colorado's high tech cluster.

MIPTS increased at a declining rate in 2001 and 2003. High tech showed strong growth for 2004 through 2008.

The Great Recession had a greater impact on output for MIPTS than the 2001 recession.

Annualized rate of growth (2000-2010)

- Real GDP 1.9%
- MIPTS 4.1%.



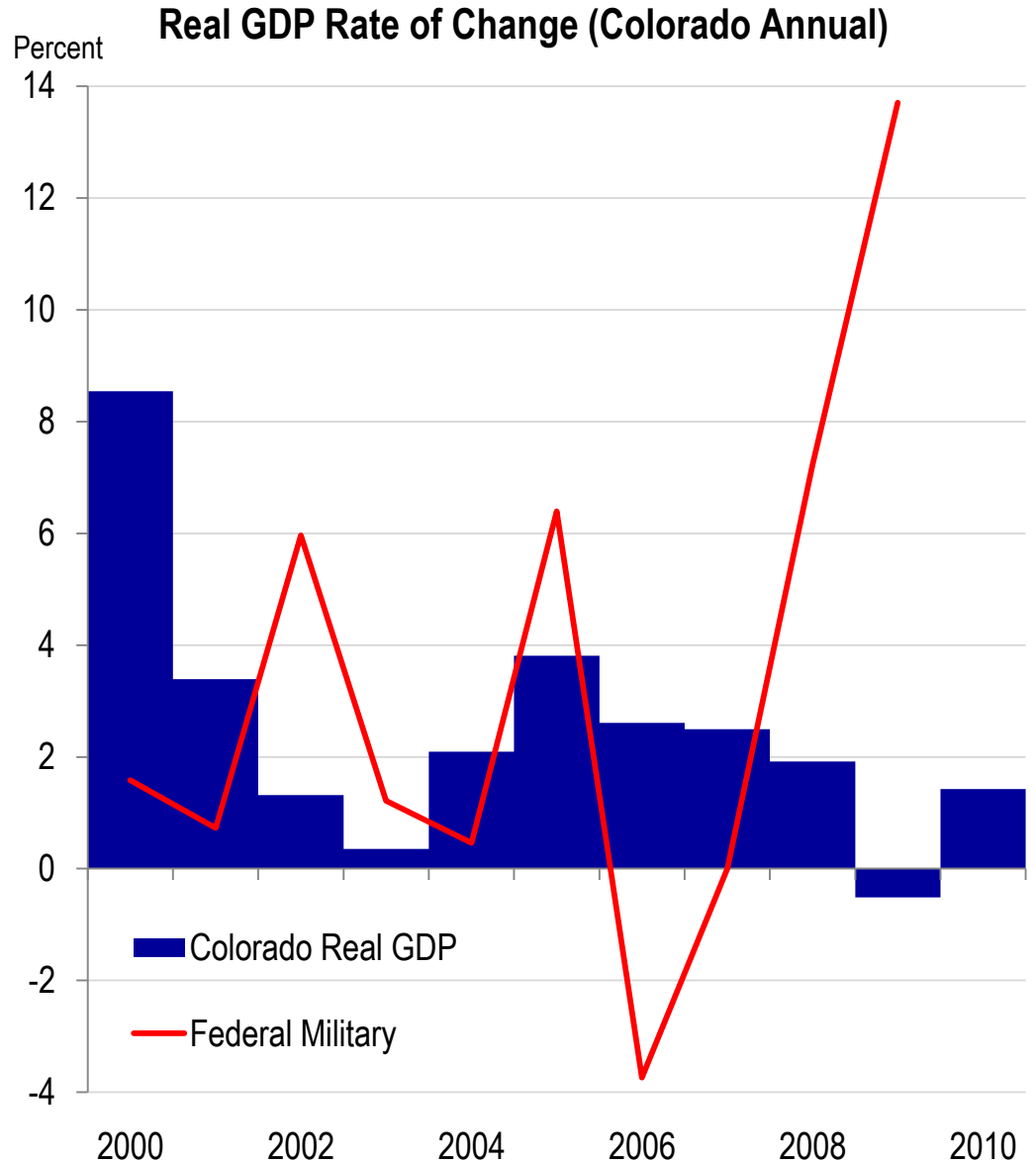


## Real GDP Change Federal Military

The military had a greater presence in Colorado over the past decade, in part, because of Fort Carson's role in the various wars around the globe.

Annualized rate of growth (2000-2009)

- Real GDP 1.9%
- Federal Military 3.4%.





# Colorado Employment

This section includes employment and other information about industries whose employment has seen significant change since 2001.



# Tourism Employment Data

## Colorado Total Employment

2000 employment 2,213,800  
2010 employment 2,220,100  
Change in net jobs +6,200  
Annualized rate of change 0.0%

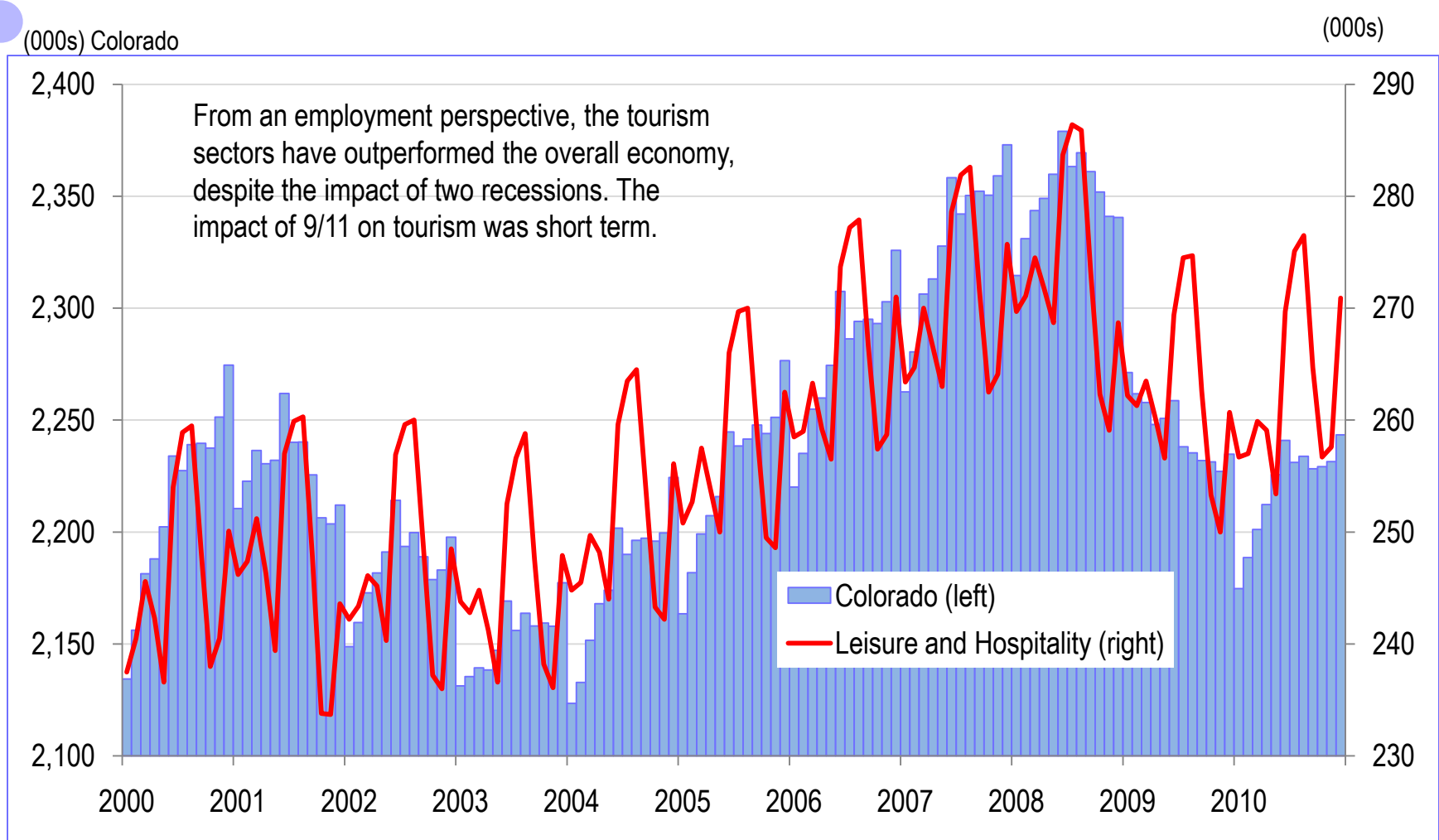
## Colorado Leisure and Hospitality Employment

2000 employment 246,000  
2010 employment 263,100  
Change in net jobs +17,100  
Annualized rate of change .7%  
Percent of 2010 employment 11.9%

## Colorado Air Transportation Employment

2000 employment 17,000  
2010 employment 12,400  
Change in net jobs -4,600  
Annualized rate of change -3.1%  
Percent of 2010 employment 0.6%

# Colorado Employment vs. Tourism Employment (Leisure and Hospitality)



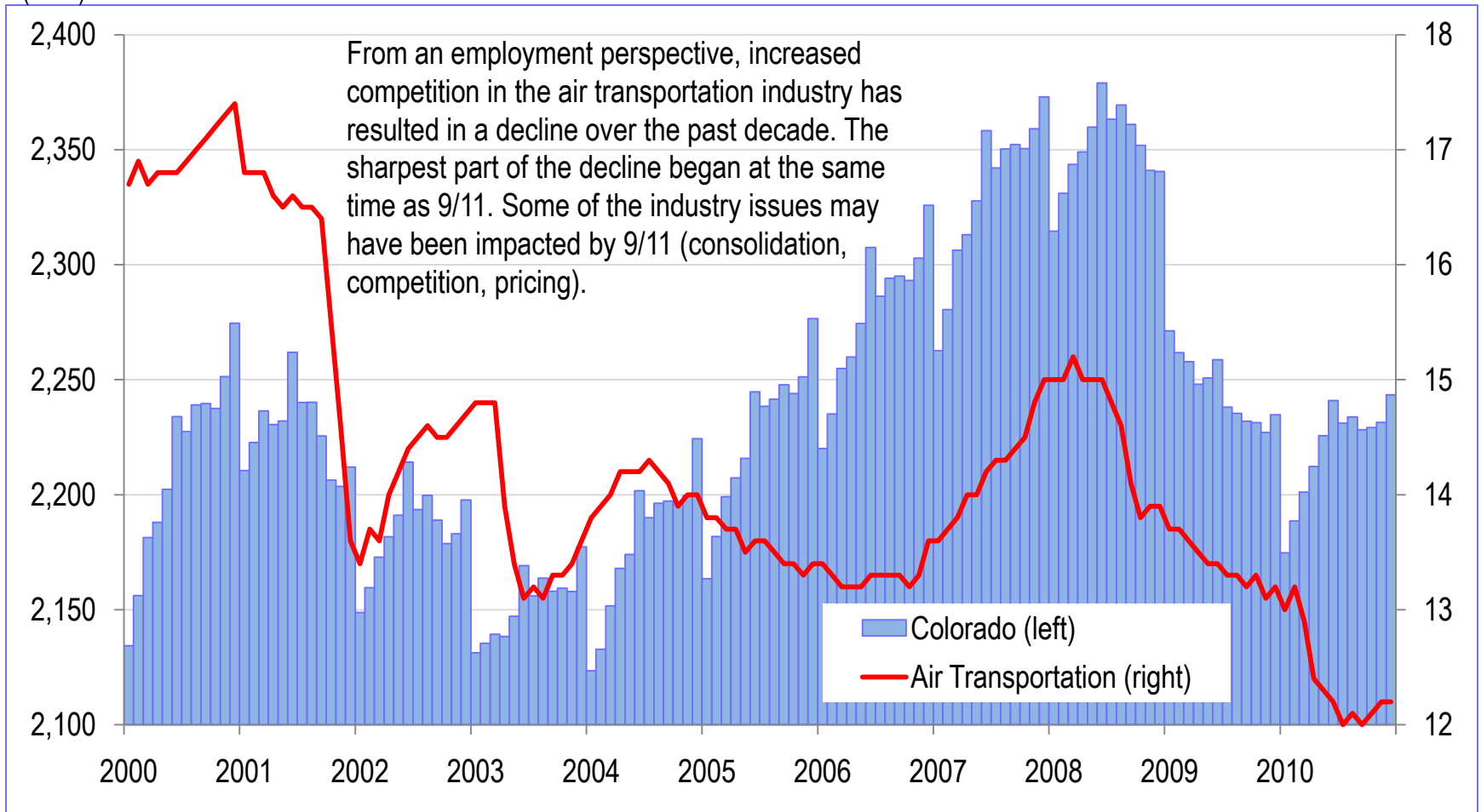
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Source: Bureau of Labor Statistics.

# Colorado Employment vs. Tourism Employment (Air Transportation)

(000s) Colorado

(000s)



Colorado-based Business and Economic Research

Source: Bureau of Labor Statistics.



# Construction and Finance Data

## Colorado Total Employment

2000 employment 2,213,800  
2010 employment 2,220,100  
Change in net jobs +6,200  
Annualized rate of change 0.0%

## Colorado Construction Employment

2000 employment 163,600  
2010 employment 114,900  
Change in net jobs -48,700  
Annualized rate of change -3.5%  
Percent of 2010 employment 5.2%

## Colorado Finance Employment

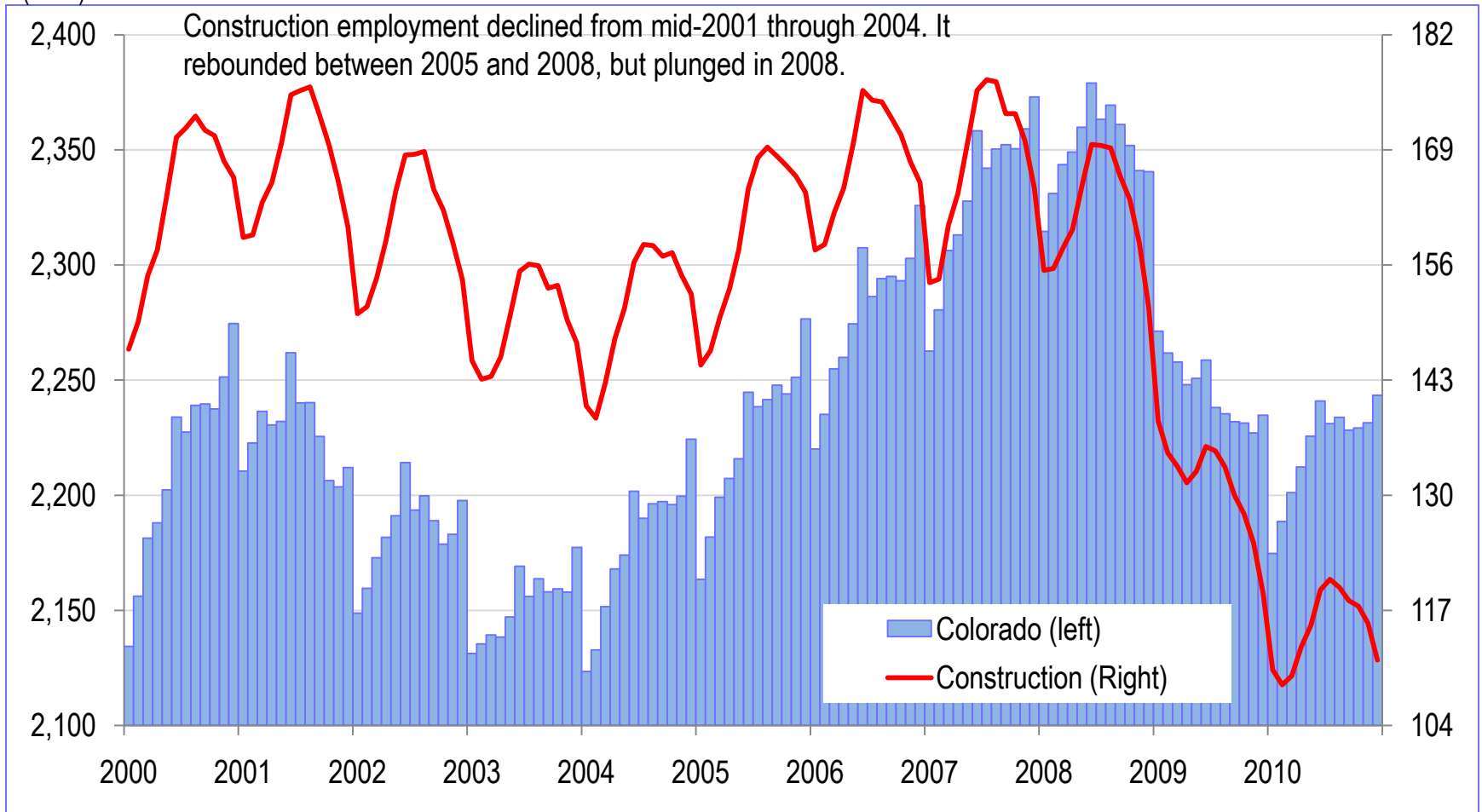
2000 employment 147,000  
2010 employment 143,700  
Change in net jobs -3,300  
Annualized rate of change -0.2%  
Percent of 2010 employment 6.5%



# Colorado Employment vs. Construction Employment

(000s) Colorado

(000s)



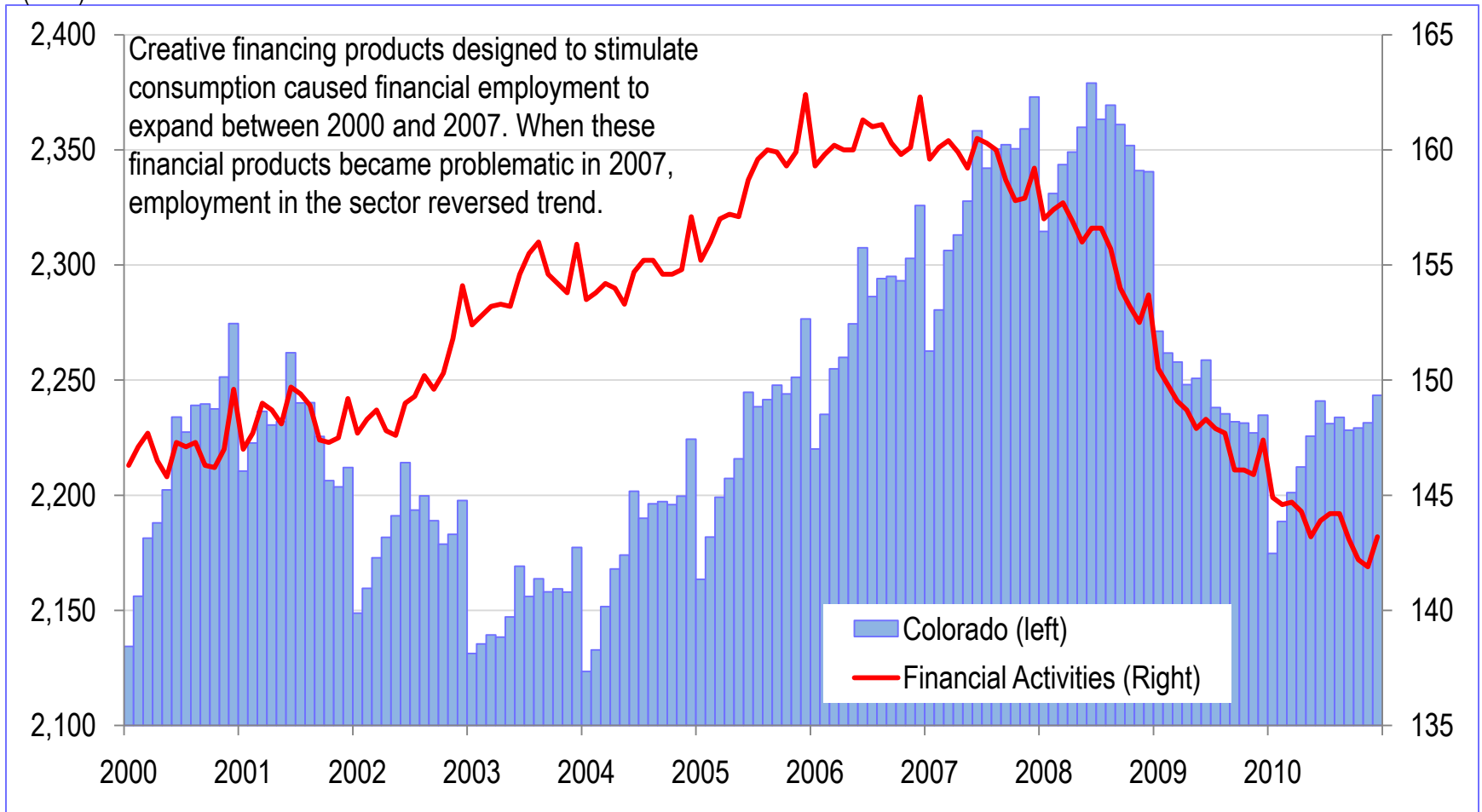
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Source: Bureau of Labor Statistics.

# Colorado Employment vs. Financial Activities Employment

(000s) Colorado

(000s)



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Source: Bureau of Labor Statistics.



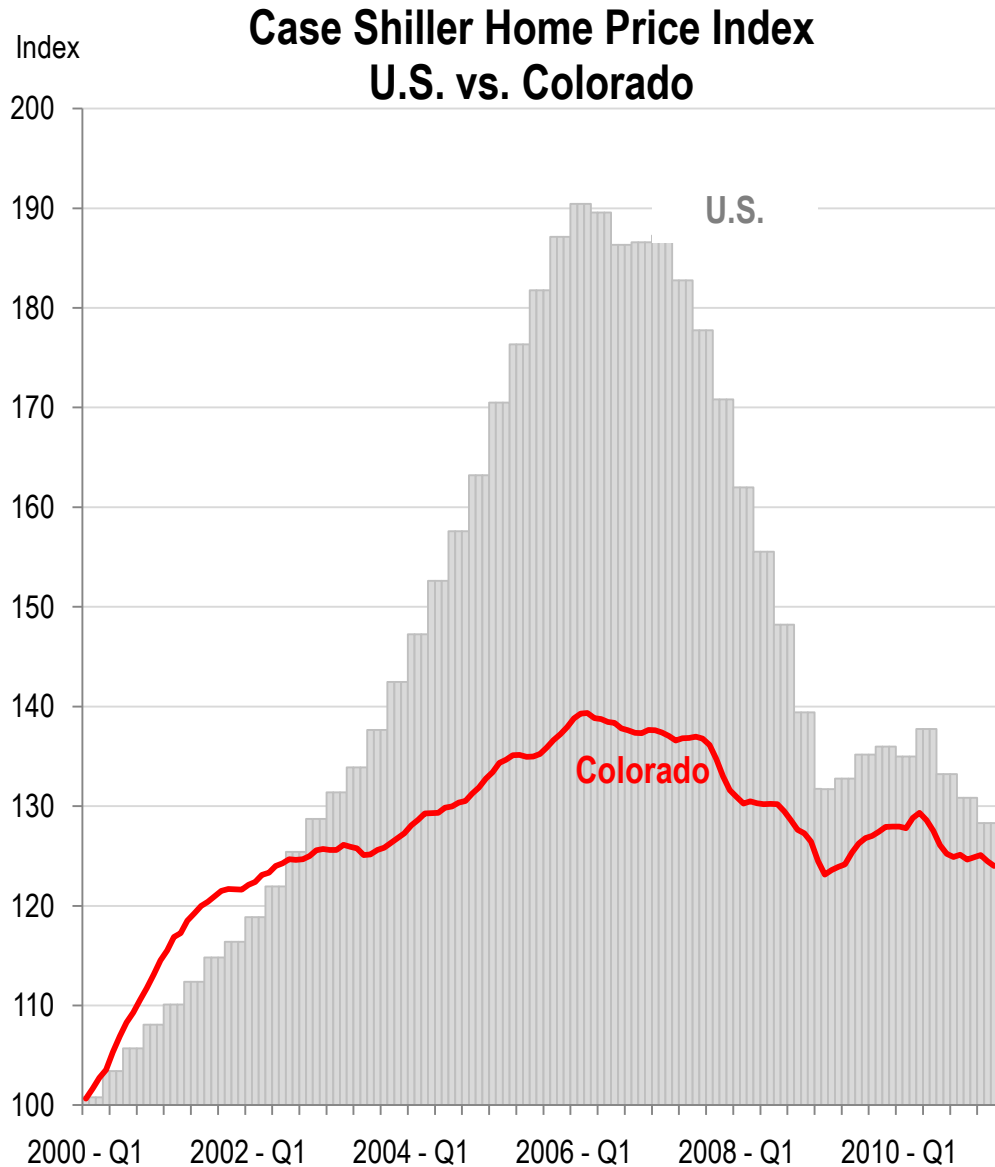
## Colorado Housing Prices Remain Flat




Over the past decade Colorado housing prices did not accelerate at the same rate as the nation.

The lack of steep appreciation during the first half of the decade has been to the state's benefit during and after the recession.

Colorado housing prices have been less volatile than other parts of the country.





# Finance Data

## Rates and Equity Markets

### Rates

#### Fed Funds Rate

- Dec 2000 month-end 6.40%
- Dec 2010 month-end .18%

#### 30-year Fixed Rate Mortgage Fannie Mae

- Dec 2000 month-end 7.41%
- Dec 2010 month-end 4.47%

#### 30-year FRM Fannie Mae FHA/VA

- Dec 2000 month-end 7.20%
- Dec 2010 month-end 5.06%

### Equity Markets

#### S&P 500 Composite

- Dec 2000 month-end 1,320.28
- Dec 2010 month-end 1,257.64

#### DJIA (30 industrials)

- Dec 2000 month-end 10,786.85
- Dec 2010 month-end 11,577.51

#### Nasdaq Composite

- Dec 2000 month-end 2,657.81
- Dec 2010 month-end 2,631.56

# Retail and Personal Services Employment Data

## Colorado Total Employment

2000 employment 2,213,800  
2010 employment 2,220,100  
Change in net jobs 6,200  
Annualized rate of change 0.0%

## Colorado Retail Employment

2000 employment 245,200  
2010 employment 235,900  
Change in net jobs -9,400  
Annualized rate of change -0.4%  
Percent of 2010 employment 10.6%

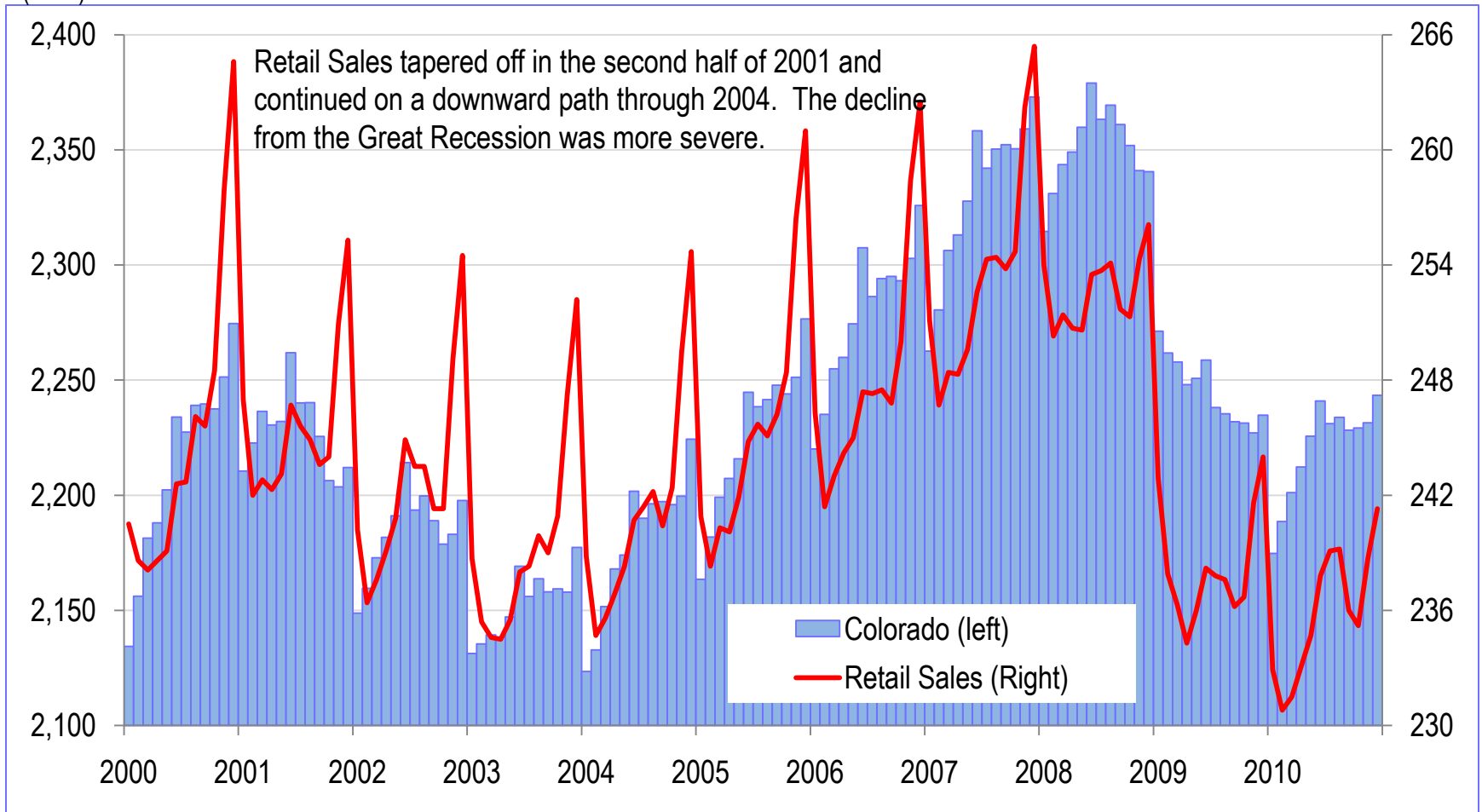
## Colorado Other Services Employment (not charted)

2000 employment 80,200  
2010 employment 92,900  
Change in net jobs +12,700  
Annualized rate of change 1.5%  
Percent of 2010 employment 4.2%

# Colorado Employment vs. Retail Sales Employment


(000s) Colorado

(000s)



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Source: Bureau of Labor Statistics.



# High Tech Cluster Employment Data

## Colorado Total Employment

2000 employment 2,213,800  
2010 employment 2,220,100  
Change in net jobs +6,200  
Annualized rate of change 0.0%

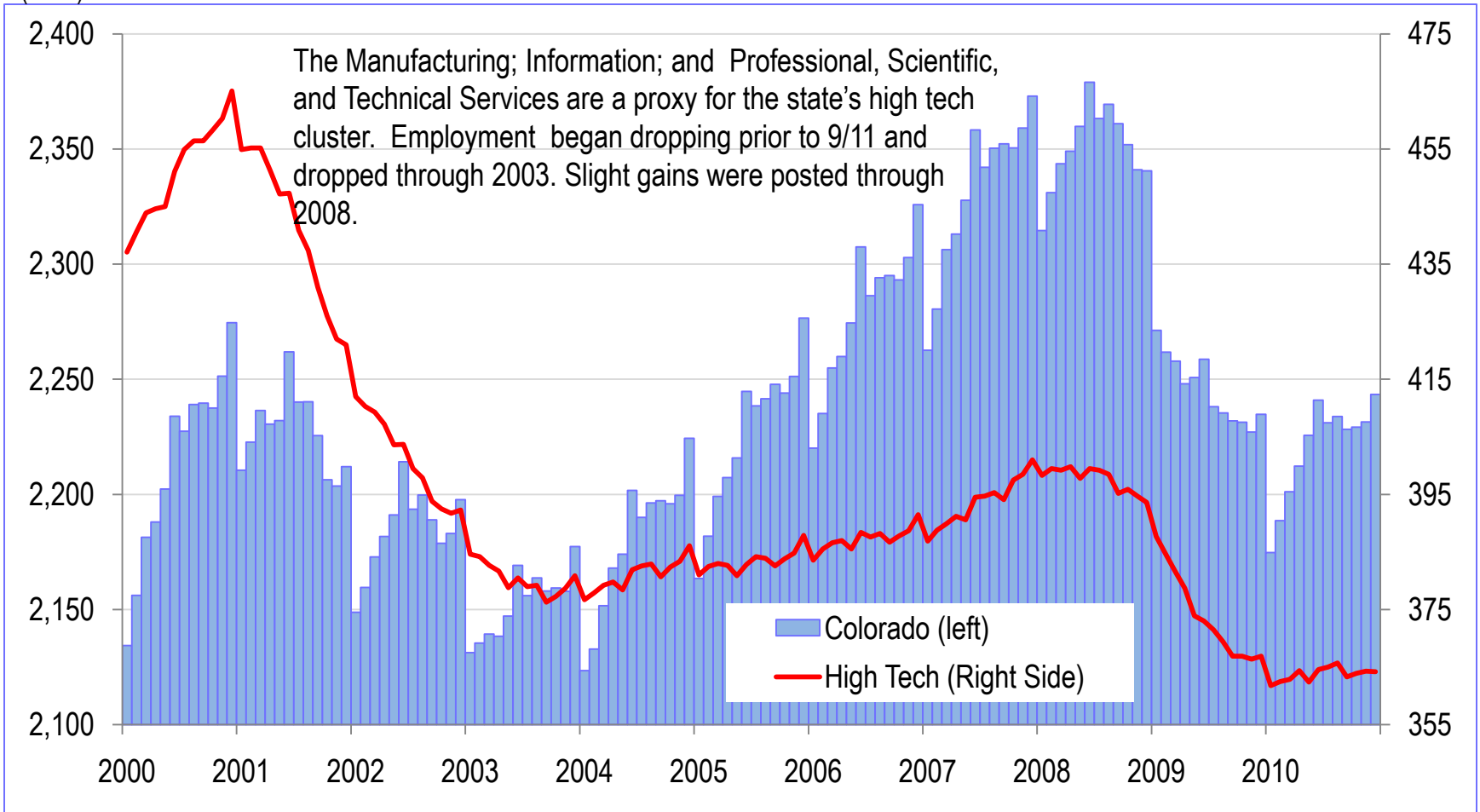
## Colorado Manufacturing; Information; and Professional, Scientific, and Technical Services (MIPTS)

2000 employment 451,100  
2010 employment 363,800  
Change in net jobs -87,400  
Annualized rate of change -2.1%  
Percent of 2010 employment 16.4%

# Colorado Employment vs. High Tech Employment

(000s) Colorado

(000s)



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Source: Bureau of Labor Statistics.





# Summary

Possible long-term impacts of 9/11 on the Colorado economy

# Thoughts About the Impact on Economy

## Tourism

- From an employment perspective, tourism (accommodations and food services) has expanded in Colorado since 2001. Competitiveness within the industry has increased, as evidenced by the flat growth in output.
- In Colorado, the airline industry was “restructured” after 2001.
- The impact of 9/11 was short term. Short-term declines may have been offset by gains in emerging industries, such as teleconferencing and other means of communications.

## Construction, Housing, and Finance

- Construction, housing (prices and foreclosures), and finance are all interrelated. A portion of today’s problems can be tied to 9/11 and the 2001 recession. There was a mindset that the country could “spend” its way back to prosperity. That mindset created problems as consumers became overextended and lost their jobs.
- Construction output peaked in 2000 and has dropped-off since. From an employment standpoint, there was a slight decline during the 2001 recession. A much more severe drop-off began in 2008.
- Creative financing allowed financial employment to grow throughout the 2001 recession. Some of the products that spurred that growth were problematic in the second half of the decade. In turn, layoffs in the financial sector began in 2007 and have continued since.
- Year-end equity market values are about the same in 2010 and 2000.

## Retail Sales and Personal Services

- Sales of retail goods and personal services has become more competitive during the past decade, yet employment has remained relatively flat. Increased savings in recent years may be an indicator that consumers learned from the 2001 and 2008 recessions that they have limited resources that can be allocated to the consumption of goods and services.

## High Tech (Manufacturing; Information; and Professional Technical Services)

- Employment has dropped significantly as a result of increased efficiencies, outsourcing, and offshoring. At the same time output has risen dramatically. MIPTS is the driver of the state economy. 9/11 played a role in the adoption of high technology goods and services (surveillance, security, teleconferencing, etc.)

## Military

- The increased reliance of Fort Carson and the movement of troops in and out of the base have had a noticeable impact on the state economy. The dependence on Fort Carson by the U.S. military has increased since 9/11.

The “Lost Decade” was a turning point in the structure of the U.S. and Colorado economies. While 9/11 did not cause this transformation, it played a role in accelerating the change that occurred in some industries.



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