



Colorado Economic Forecast 2017

Just the Facts!

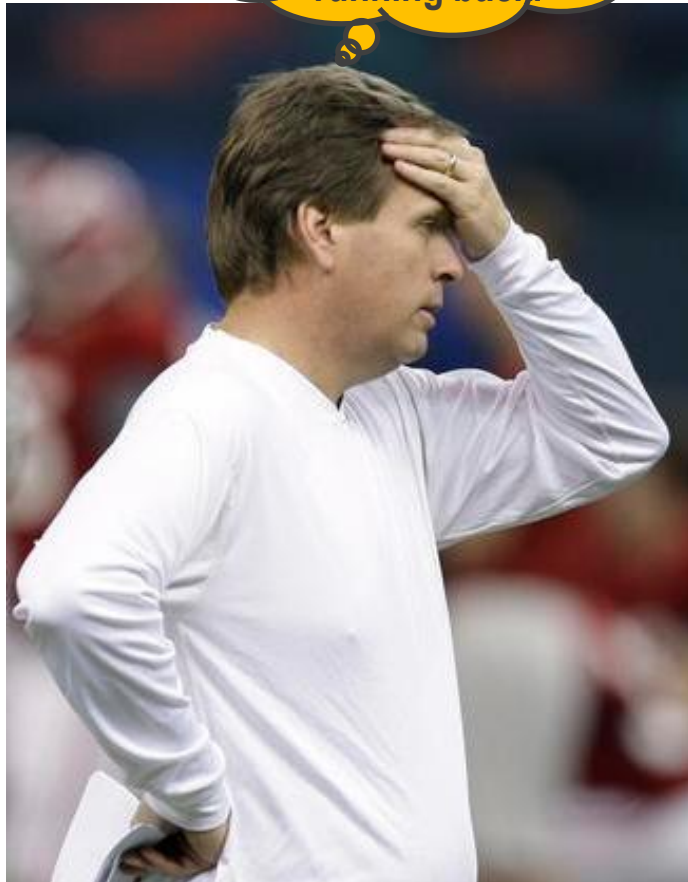
Larimer County Workforce Development Board
February 8, 2017
Gary Horvath

- If the Recession is Over “Where is the Talent?”

- February 2012 Presentation– 222,831 Unemployed Coloradans

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She's got talent,
but I need a
running back.



Put me in Coach!
I can help you beat
CU!

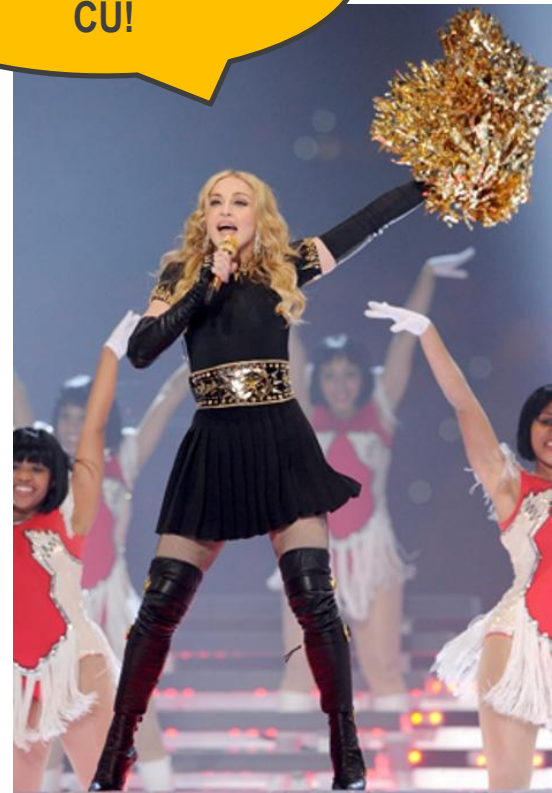


- If the Recovery is Over “Where is the Talent?”
- February 2017 Presentation– 85,831 Unemployed Coloradans
-

I got a new stadium, but I still need a running back.



Put me in Coach!
I can help you beat CU!



“Where is the Talent?”

During the past five years the rate of unemployment in Colorado has dropped from 8.1% to 3.0% and the number of unemployed has fallen by 137,000 people. There are about 86,000 unemployed people in Colorado – total employment in 2017 will be almost 2.7 million people.

There are many reasons more people aren't working:

- Mismatched skills.
- People don't want to get trained or don't have the knowledge to get trained.
- Men don't want to work in women dominated professions.
- Lack of family-friendly policies for women.
- People are content working part-time.
- Bad shifts are a no-no.
- Some industries aren't sexy.
- I deserve higher wages.
- I'm entitled to a better job because....
- Underground economy/virtual workplace.
- People can't pass drug test.

This is the world you run your businesses in.

Jobs = People

The pool of potential workers is much smaller



Presentation Overview

This discussion will highlight the changes that will drive the global, national, and state economy in 2017 and how those factors might impact Larimer County and Northern Colorado in the coming months.

- The Global
- United States
- Colorado and Northern Colorado



The Global Economy

Real GDP

Global Real GDP Growth

Real GDP Growth 2016 vs. 2017

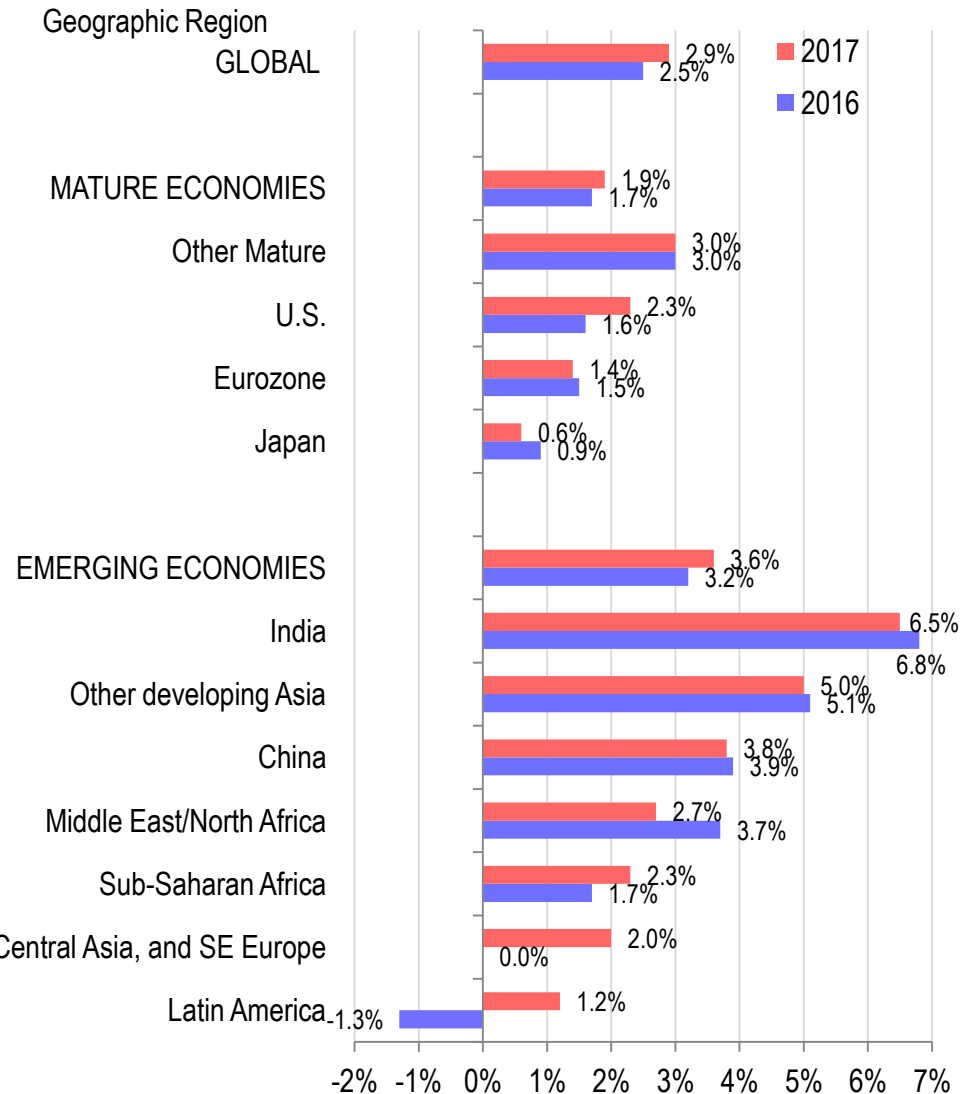
The global real GDP forecast is based on information provided by The Conference Board. Their outlook is often more conservative than the IMF forecast.

The 2017 forecast projects real GDP growth to be 1.9% for the mature economies. The U.S. will continue to expand at a rate of about 2.3%. Japan and the Eurozone will experience slightly weaker growth.

In 2017, the Chinese economy is expected to grow at 3.8%. India will lead the region with a 6.5% rate of growth.

The Latin America economy will turn positive in 2017.

Overall, global real GDP growth will be 2.9% in 2017. This is a slight improvement over 2016.





The U.S. Economy

Real GDP

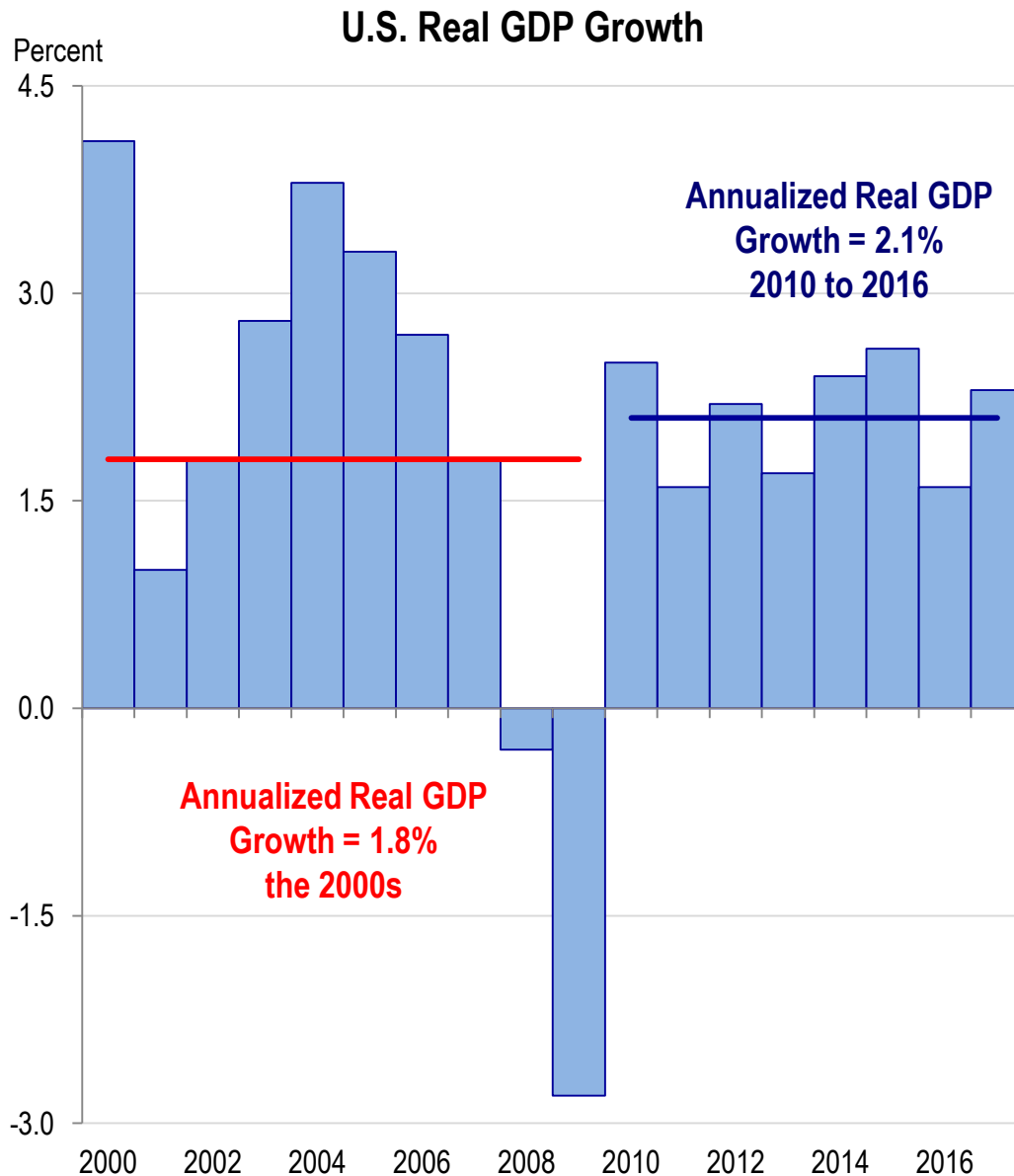
U.S. Real GDP Growth

C+I+G+X

Real GDP will grow at a rate between 2.1% to 2.5% in 2017.

- As is usually the case, personal consumption will drive real GDP growth in 2017. It will increase at a rate slightly greater than the rate of growth for the GDP.
- Business investment will increase if corporate tax rates are lowered. Stronger investment will benefit the economy in many ways.
- Government spending will see a slight increase.
- The trade deficit will increase as a result of the lack of demand caused by a strong dollar.

GDP = Consumption + Private Investment + Government Spending + Net Exports



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

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

U.S. Real Personal Consumption and GDP Growth

In 1990 personal consumption (red lines) accounted for about 64% of the GDP (blue bars). In 2015, real personal consumption was 68.4% of total GDP.

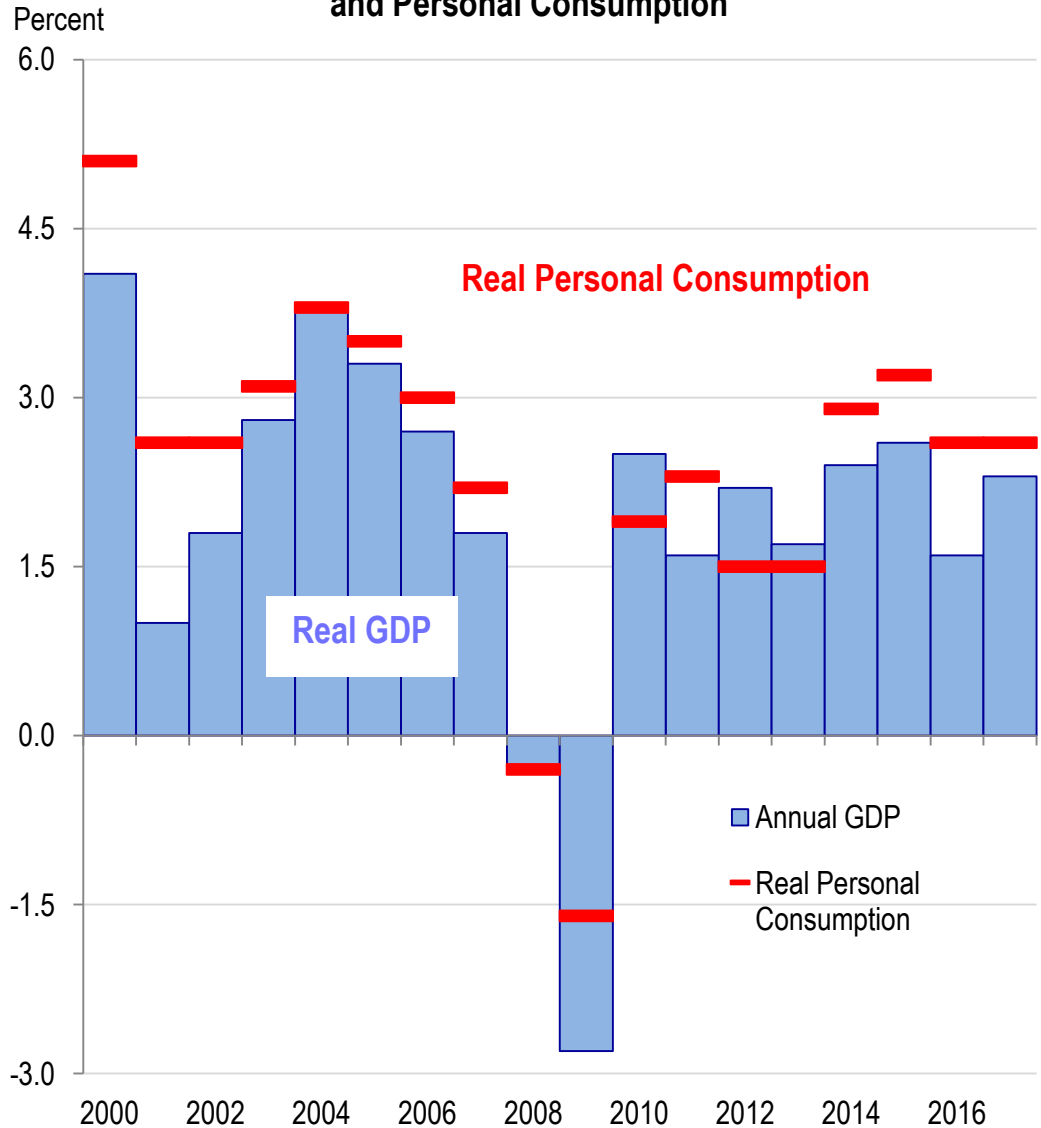
Consumers drive the economy!

Because consumption is such a high percentage of real GDP there is a strong correlation between the growth rates of these two variables.

Real personal consumption will grow at a rate of 2.4% to 2.8% in 2017.

GDP = Consumption + Private Investment + Government Spending + Net Exports

U.S. Growth Rate for Real GDP and Personal Consumption



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

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



The U.S. Economy

Employment

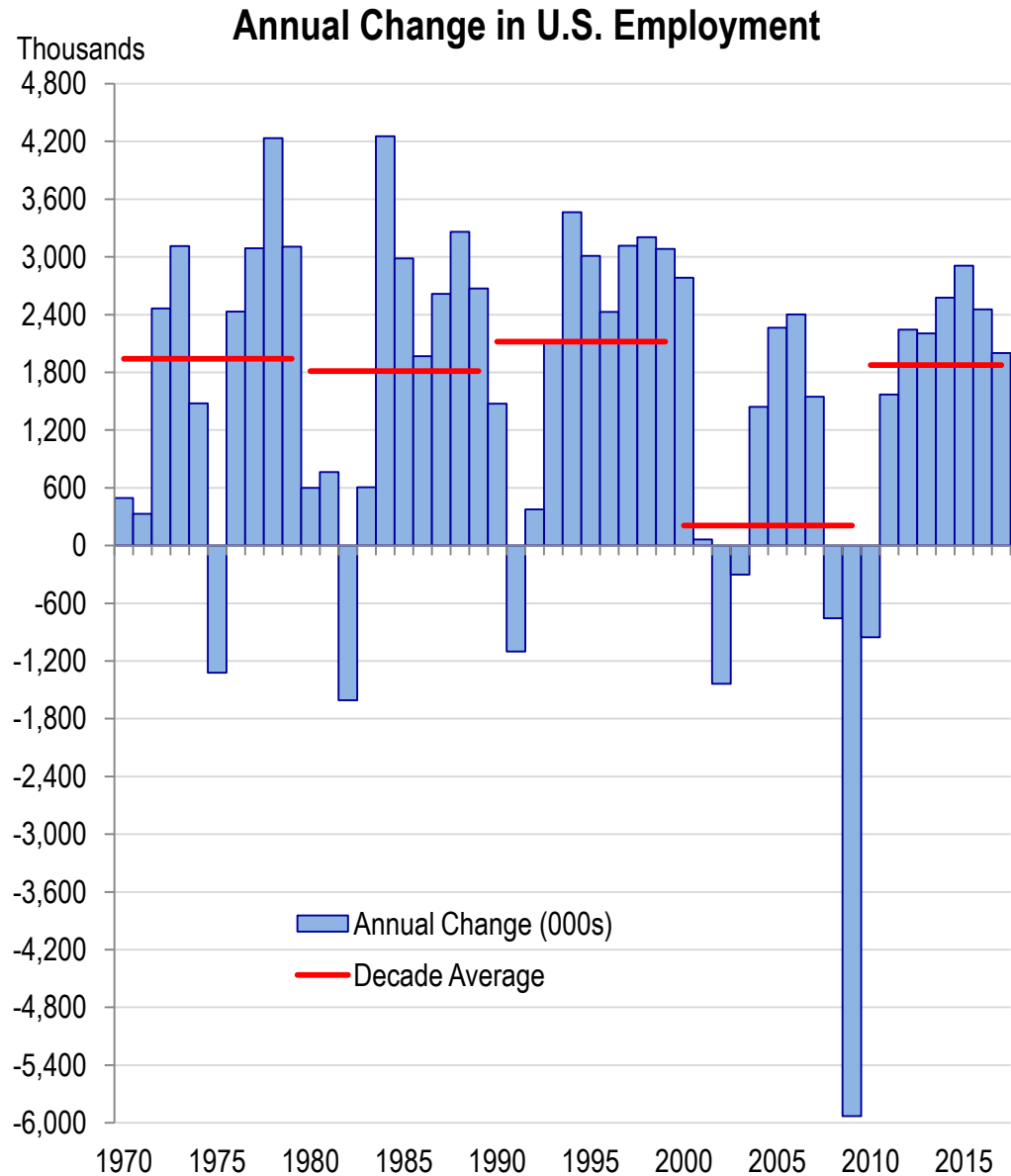
Annual Change in U.S. Employment

The 2017 average absolute change in employment (for a decade) is similar to the 1970s and 1980s. It is much greater than the 2000s.

The average annual change (red lines) by decade follows:

- 1.9 from 1970 to 1979.
- 1.8 from 1980 to 1989.
- 2.1 million from 1990 to 1999.
- 0.2 million from 2000 to 2009.
- 1.9 million from 2010 to 2017.

The U.S. added slightly less than 2.5 million jobs in 2016. Between 1.9 million and 2.1 million jobs will be added in 2017.



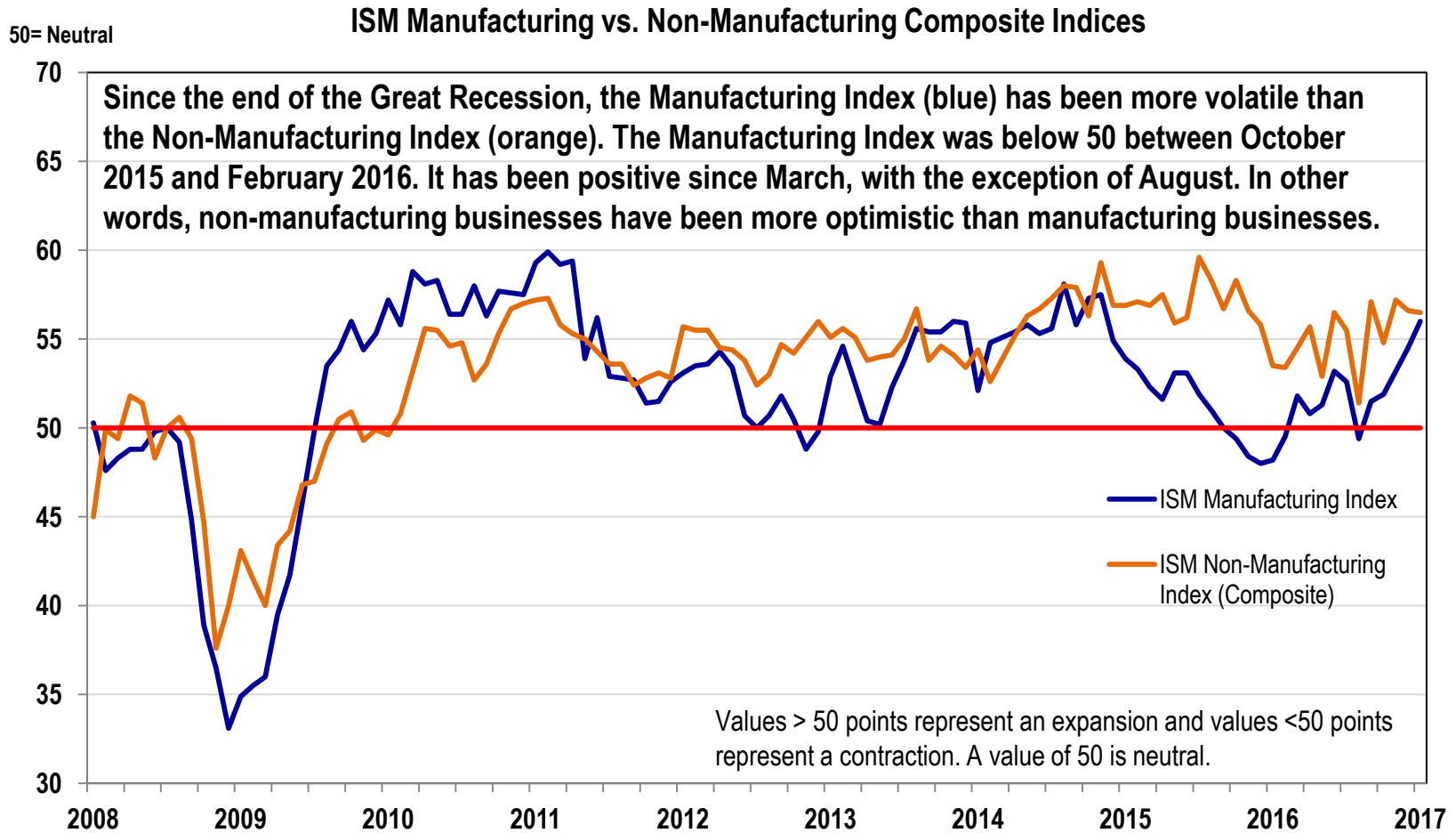


The U.S. Economy

Services and Manufacturing

ISM PMI Composite Indices

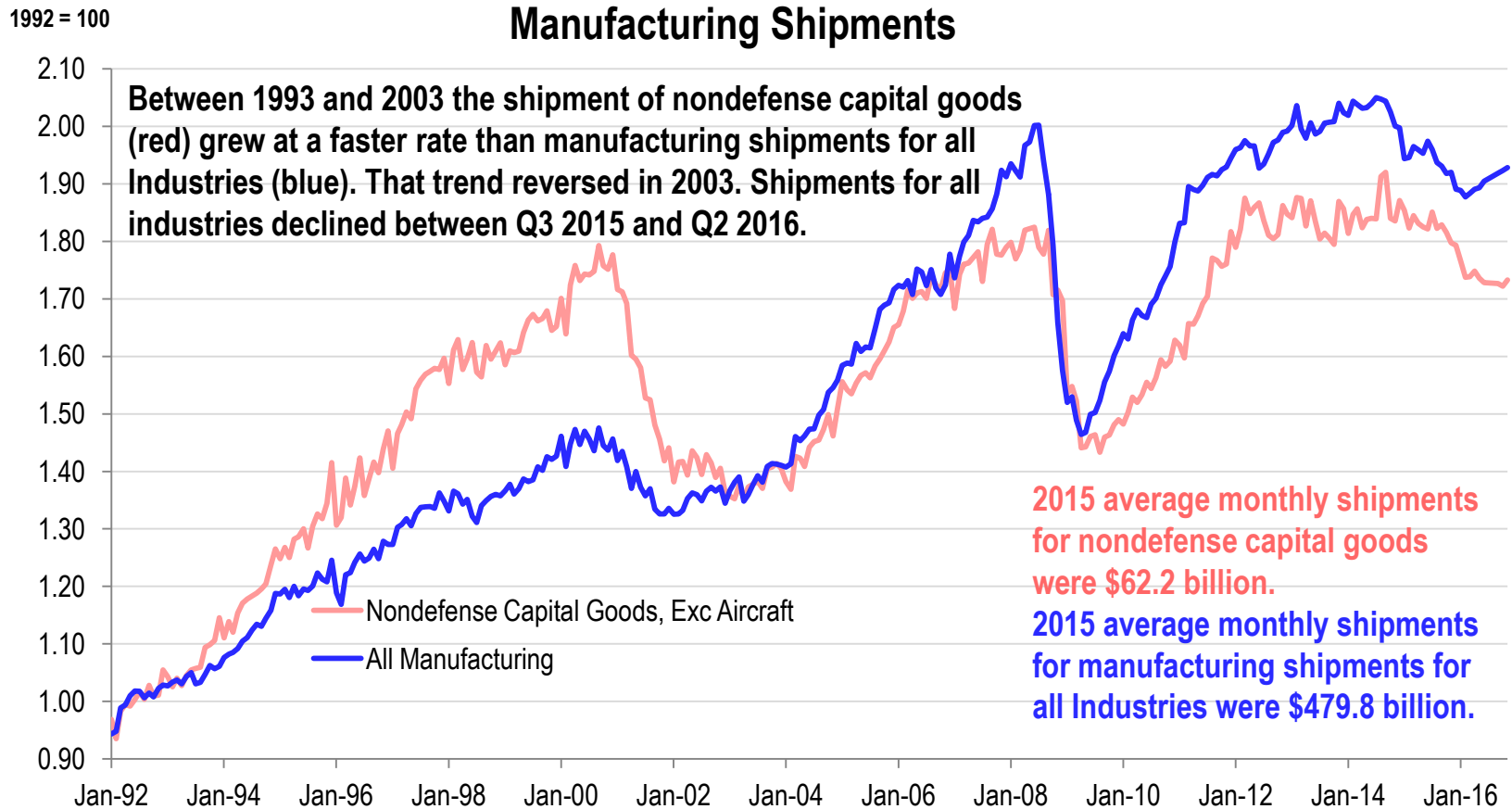
Manufacturing vs. Non-manufacturing



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

United States Manufacturing Shipments

All Industries vs. Nondefense Capital, Excluding Aircraft



Source: FRED, SA. U.S. Bureau of the Census, cber.co. Note: Not adjusted for inflation.



The Colorado Economy



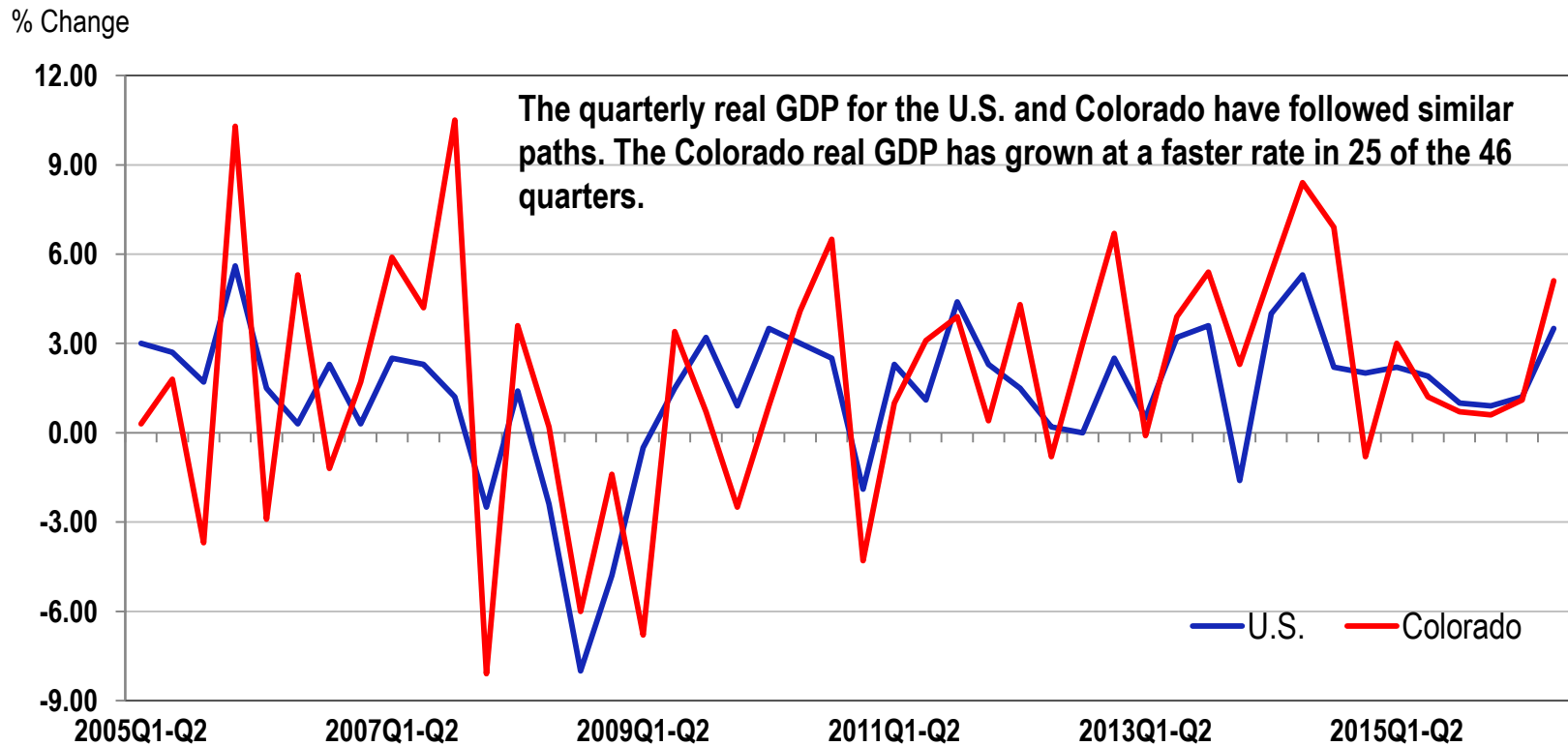
The Colorado Economy

GDP and GDP per Capita

● Change in Quarterly Real GDP (Prior Period)

● Colorado vs. U.S.

Percentage Change Over Previous Period in Real GDP Colorado vs. U.S.

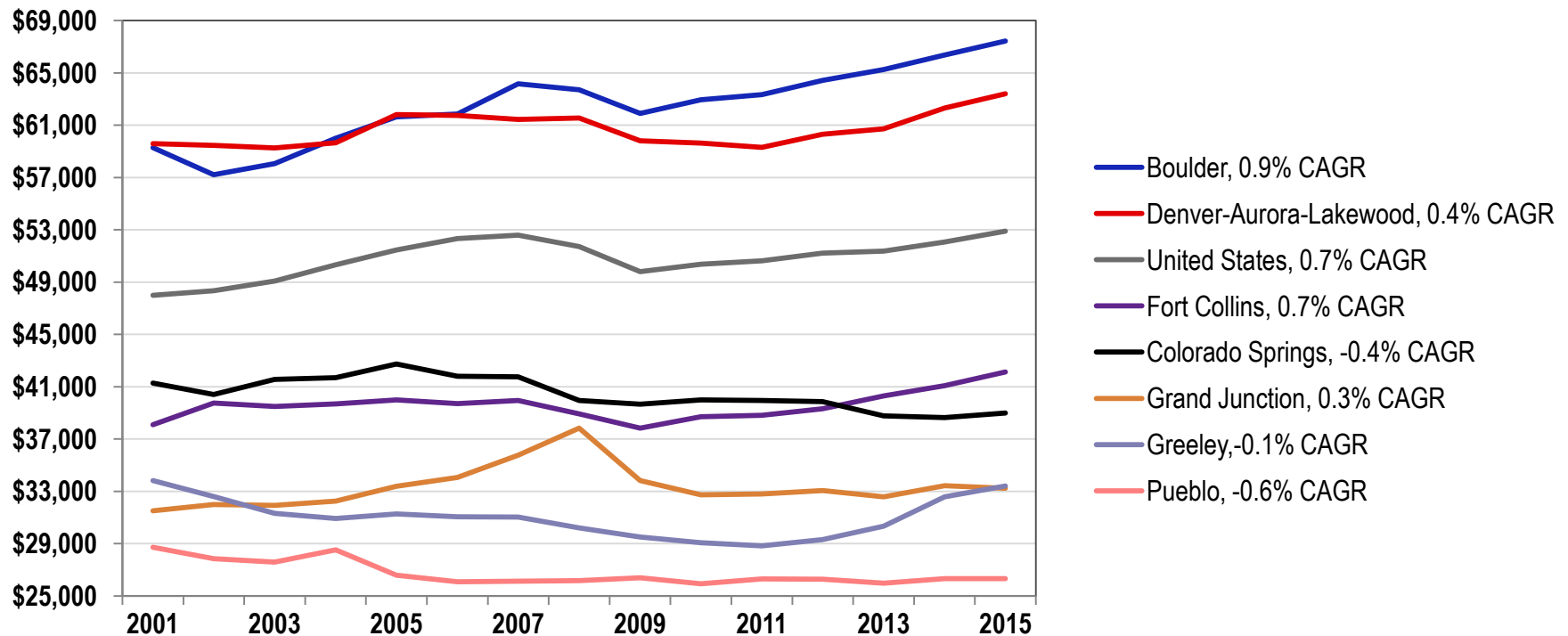


Source: Bureau of Economic Analysis. Note: U.S. real GDP is summary of states GDP.

● Real Per Capita GDP by MSA and Annualized Growth Rates

● Growth Rates

Per Capita GDP and Annualized Growth Rates (2001-2015)



Source: Bureau of Economic Analysis, cber.co.



The Colorado Economy

Population and Components of Change

Colorado Population

Components of Change

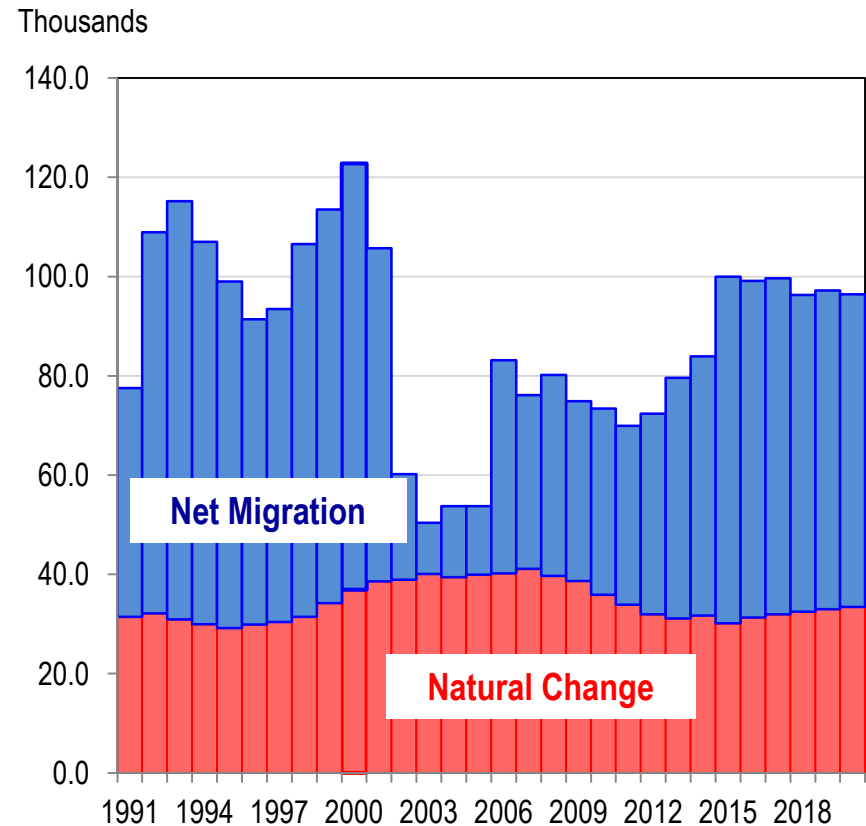
The population increases and decreases are a result of the natural rate of change (births minus deaths) and the change in net migration (people moving into the state minus people moving out of the state).

Over the past 2½ decades the natural rate of change (red bars) varied from a low of 29,145 in 1995 to a peak of 41,124 in 2007. For the past 10 years it has been slightly above 30,000.

Changes resulting from net migration (blue bars) are closely tied to the strength of the economy and the change in state employment. For example, there were five years, from 1986 to 1990, when net migration was negative (not shown on this chart). 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 did not turn negative. It was difficult for people to move anywhere to escape the downturn.

The Colorado population will increase by about 100,000 in 2015, 2016, and 2017. In 2017 the state's population will increase by 1.8% to 5.655,405.

Change in Colorado Population 1991 - 2016





People = Jobs

People who move to Colorado fill jobs

People who move to Colorado buy goods and services that support
or create other jobs.

People who move to Colorado pay taxes that support the
maintenance and growth of the infrastructure.



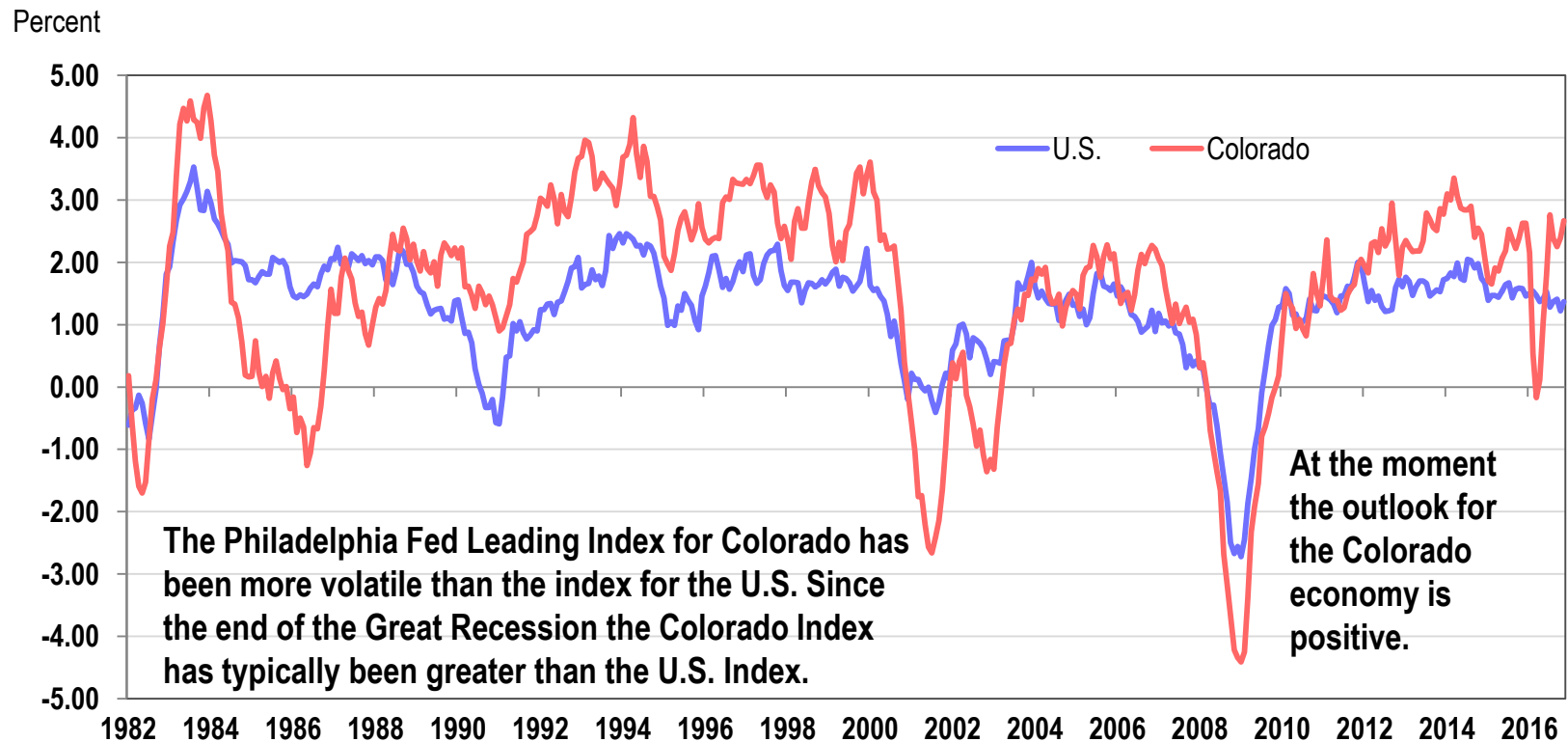
The Colorado Economy

Leading Index, Employment, Unemployment

Leading Index

Colorado vs. United States

Leading Index Colorado vs. U.S.



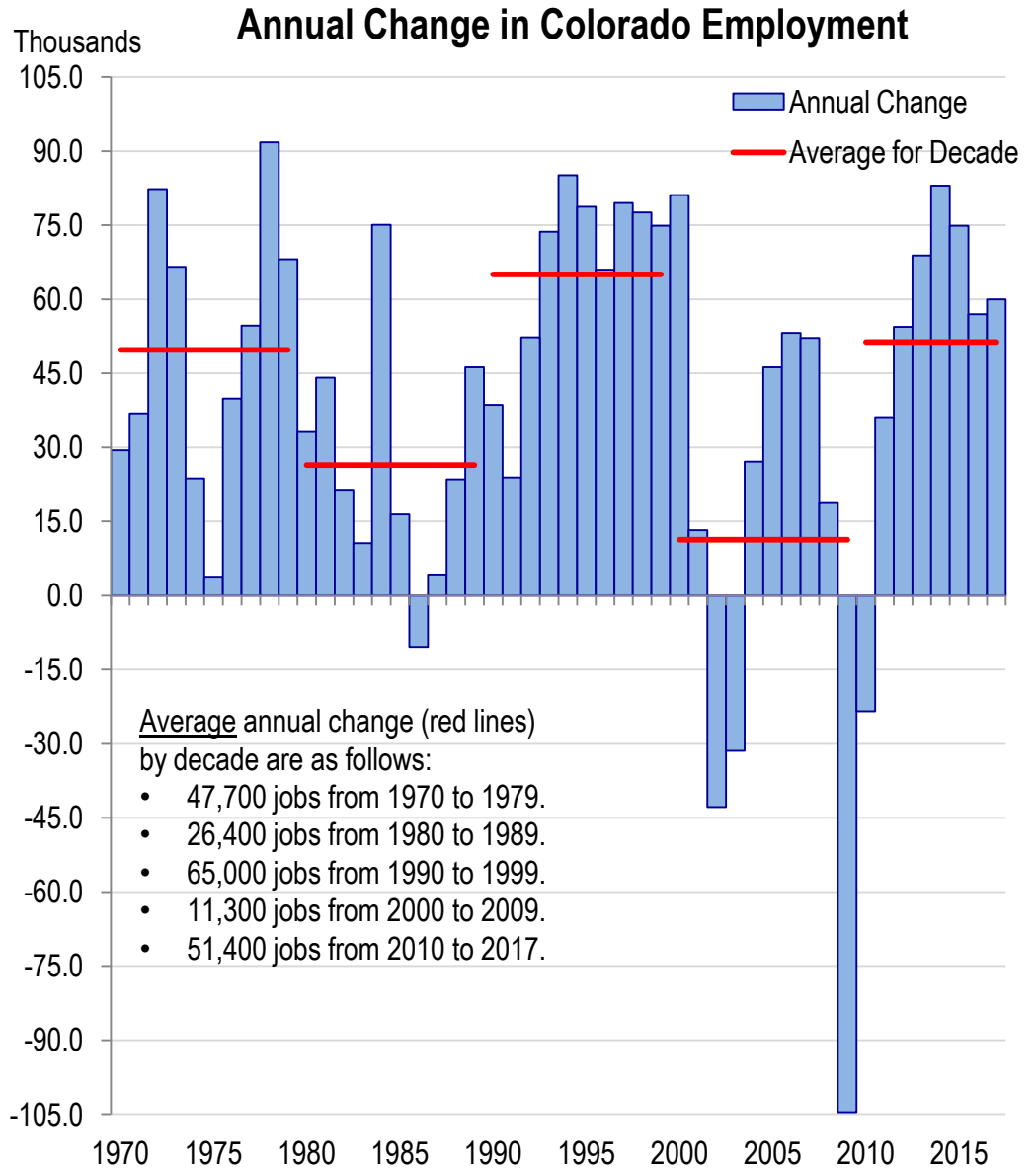
Source: Philadelphia Federal Reserve, cber.co. Note: The leading index predicts the six-month growth rate of the state's coincident index.

Annual Employment Change in Colorado

The 2017 forecast assumes that Colorado added 74,900 jobs in 2015 and 57,000 jobs in 2016.

For the first 8 years of this decade, Colorado has added an average of 51,400 jobs.

The state will add 57,000 to 63,000 jobs in 2017. Colorado employment will increase by 2.2% to 2.4%.



Source: Bureau of Labor Statistics, cber.co.



Number of Employees



Colorado, Larimer, Weld, Boulder



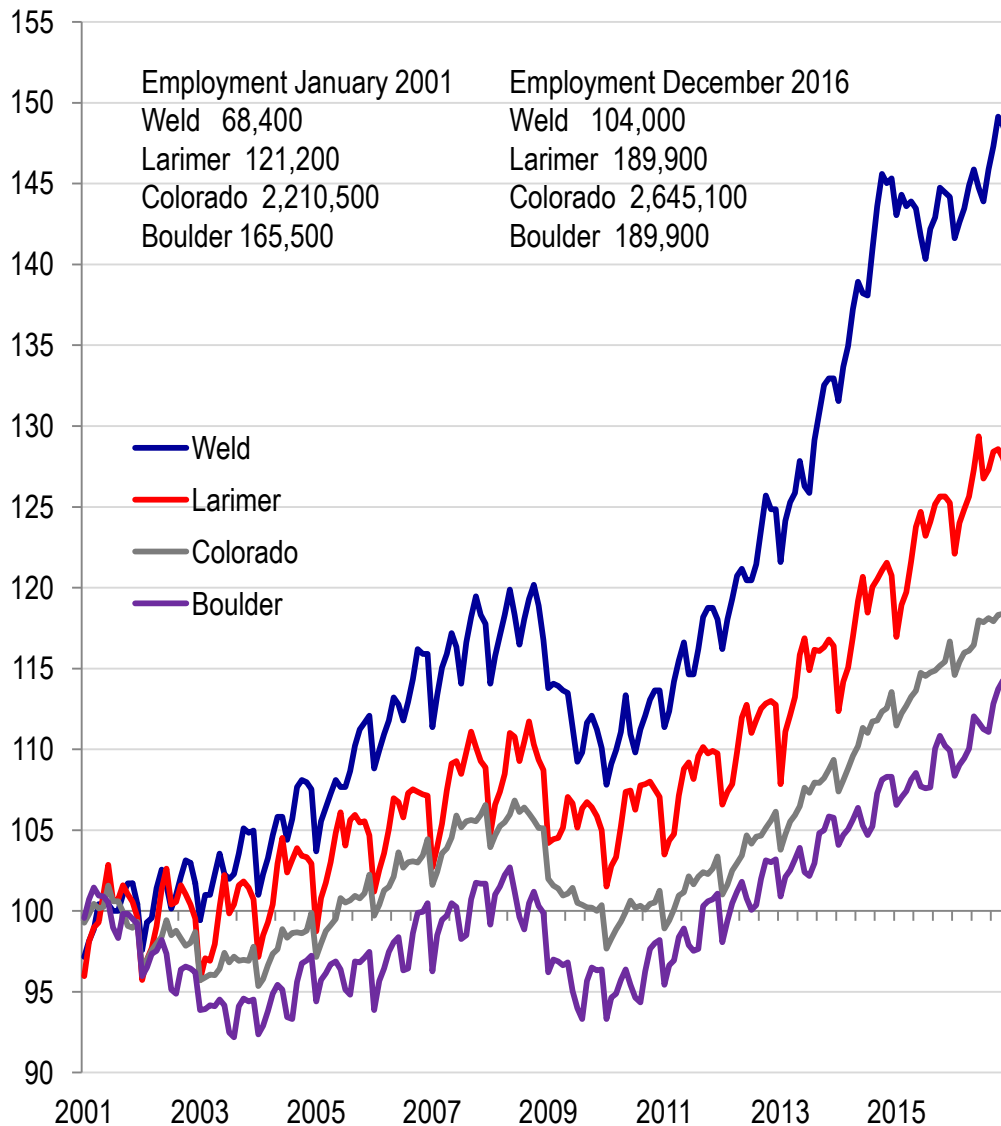
Weld County had the fastest rate of growth in the number of employees.

Of the three counties, Larimer added the greater number of employees, followed by Weld.

Larimer County was least impacted by the Great Recession.

2001=100

Number of Employees



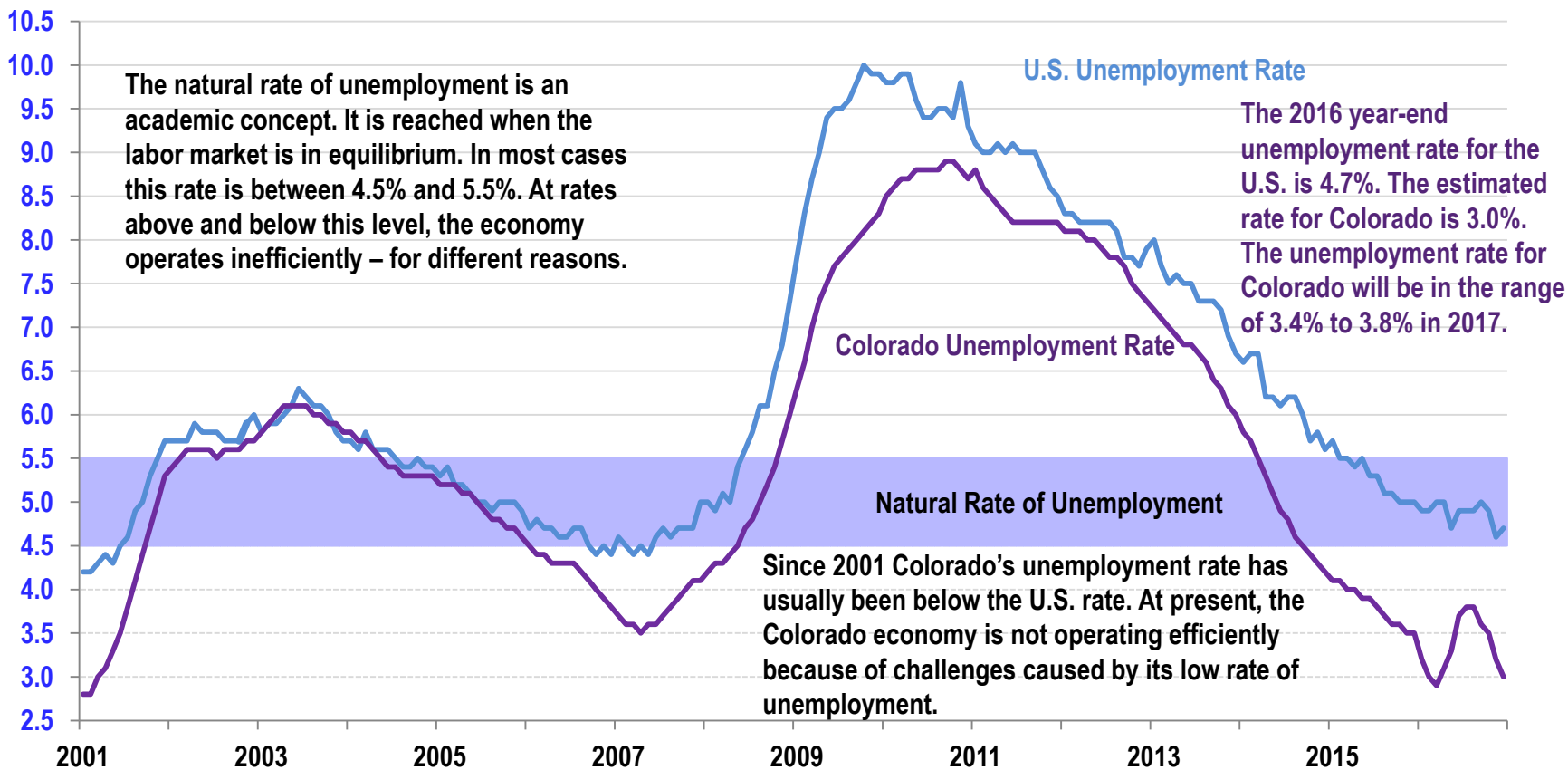
Source: Bureau of Labor Statistics, cber.co.

Unemployment Rate

United States vs. Colorado

Percent

United States vs. Colorado Unemployment Rate



Source: Bureau of Labor Statistics, SA, cber.co.

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



Low Unemployment

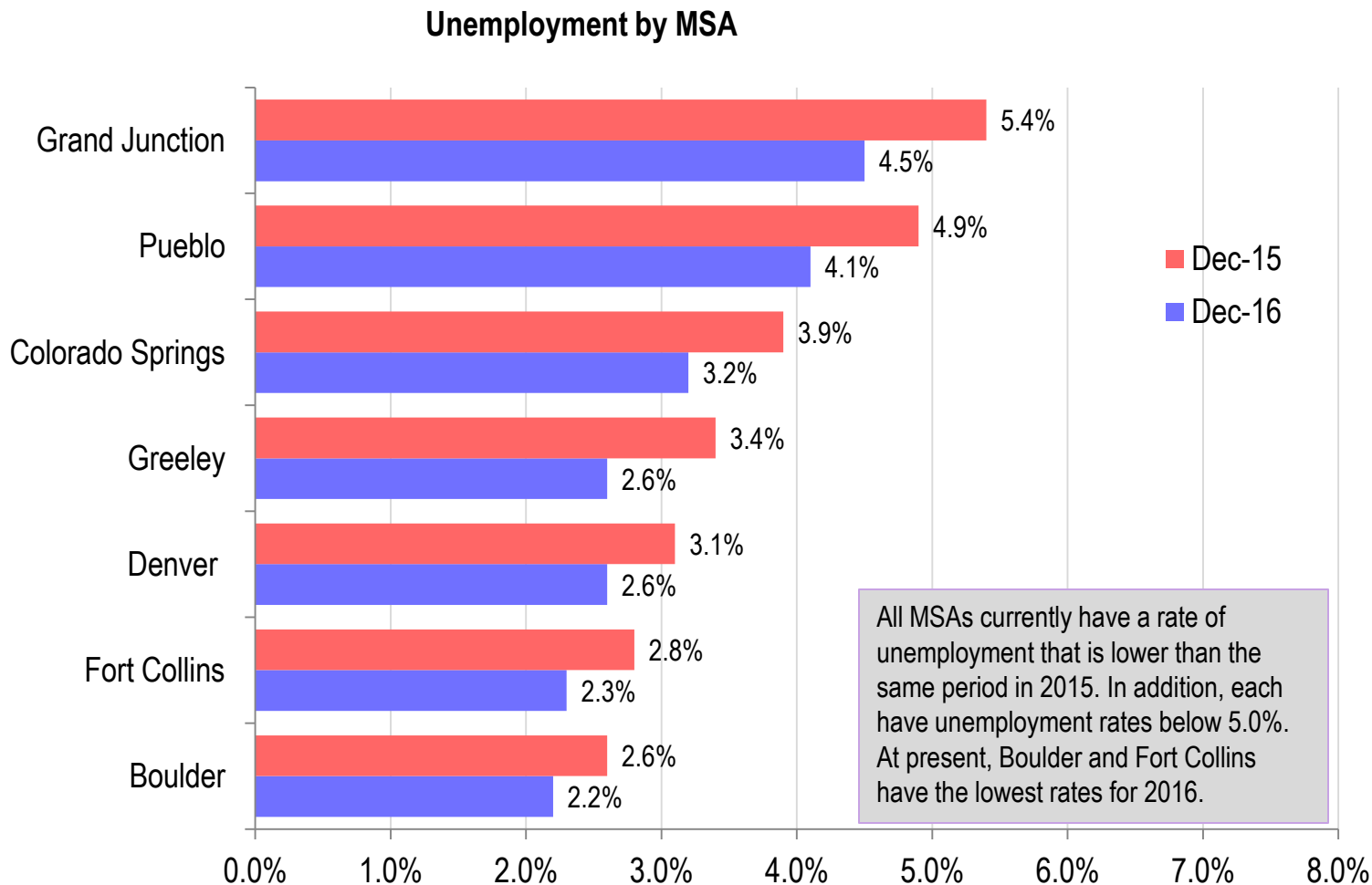
“Where is the Talent?”

Jobs = People

During times of low unemployment, the pool of potential workers is much smaller in the U.S. and Colorado

Unemployment by MSA

2015 vs. 2016



Source: Bureau of Labor Statistics, NSA, cber.co. Note: MSA unemployment lags by two months and is reported only on a non-seasonally adjusted basis.



The Colorado Economy

Establishments, Real Median Household Income, Inflation



There is Good News and Bad News

The Good News First...

Number of Colorado Private Establishments

The number of Colorado private sector establishments peaked at 177,657 in Q3 2007.

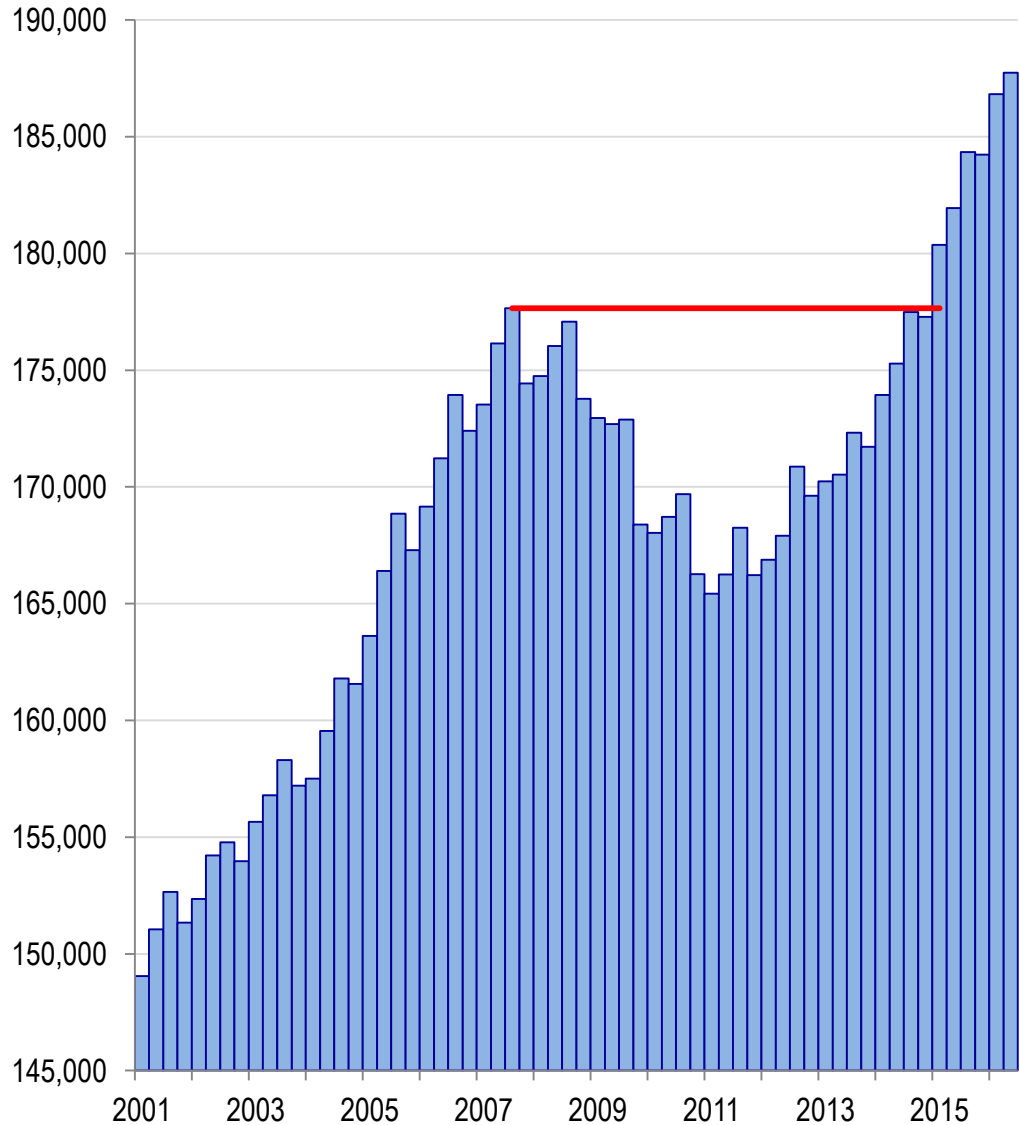
The number of Colorado business establishments declined to 165,249 in Q1 2011 as a result of the Great Recession.

After that, there was steady growth in the number of establishments. In Q1 2015 the state returned to the previous 2007 peak (Almost 8 years).

The total number of establishments in Q2 2016 is 187,744.

The creation of new establishments will be a source of job growth in 2017 and beyond.

Number of Private Establishments



Source: Bureau of Labor Statistics, cber.co.

● Number of Private Establishments
 ● Colorado, Larimer, Weld, Boulder

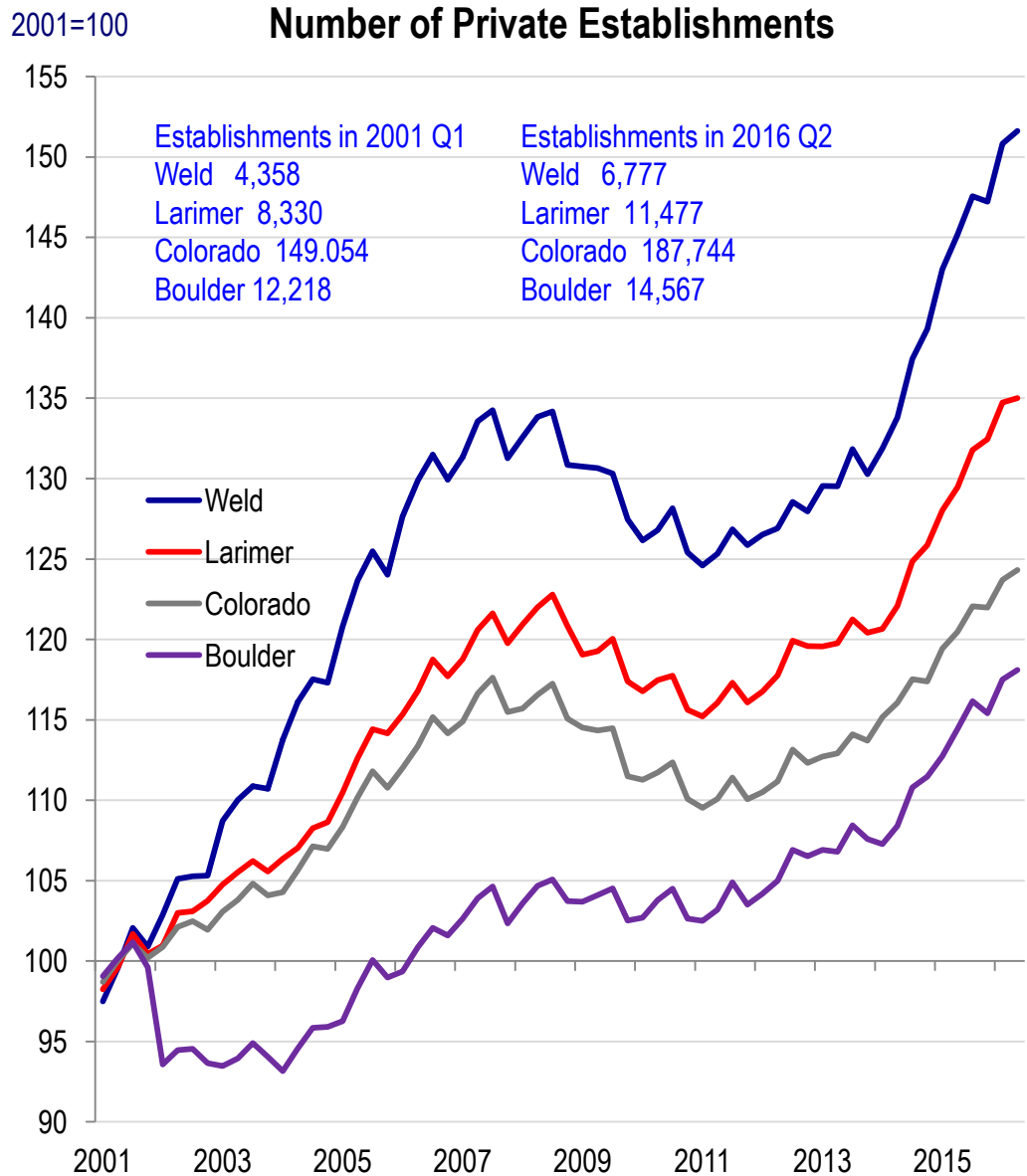
Weld County had the fastest rate of growth in the number of establishments.

Of the three counties, Larimer added the greater number of establishments, followed by Weld.

The number of establishments began declining in 2001 in Boulder County and bottomed out in 2004.

The number of establishments in Boulder County was flat during the Great Recession.

The number of establishments in all three counties has grown at a faster rate than the state since 2014.



Source: Bureau of Labor Statistics, cber.co.



There is Good News and Bad News
Ugh...

● **Real Median Household
Income 2015** (CPI-U-RS
Adjusted Dollars,
● Not Seasonally Adjusted)

In 2015, the most current data, real median household income was:

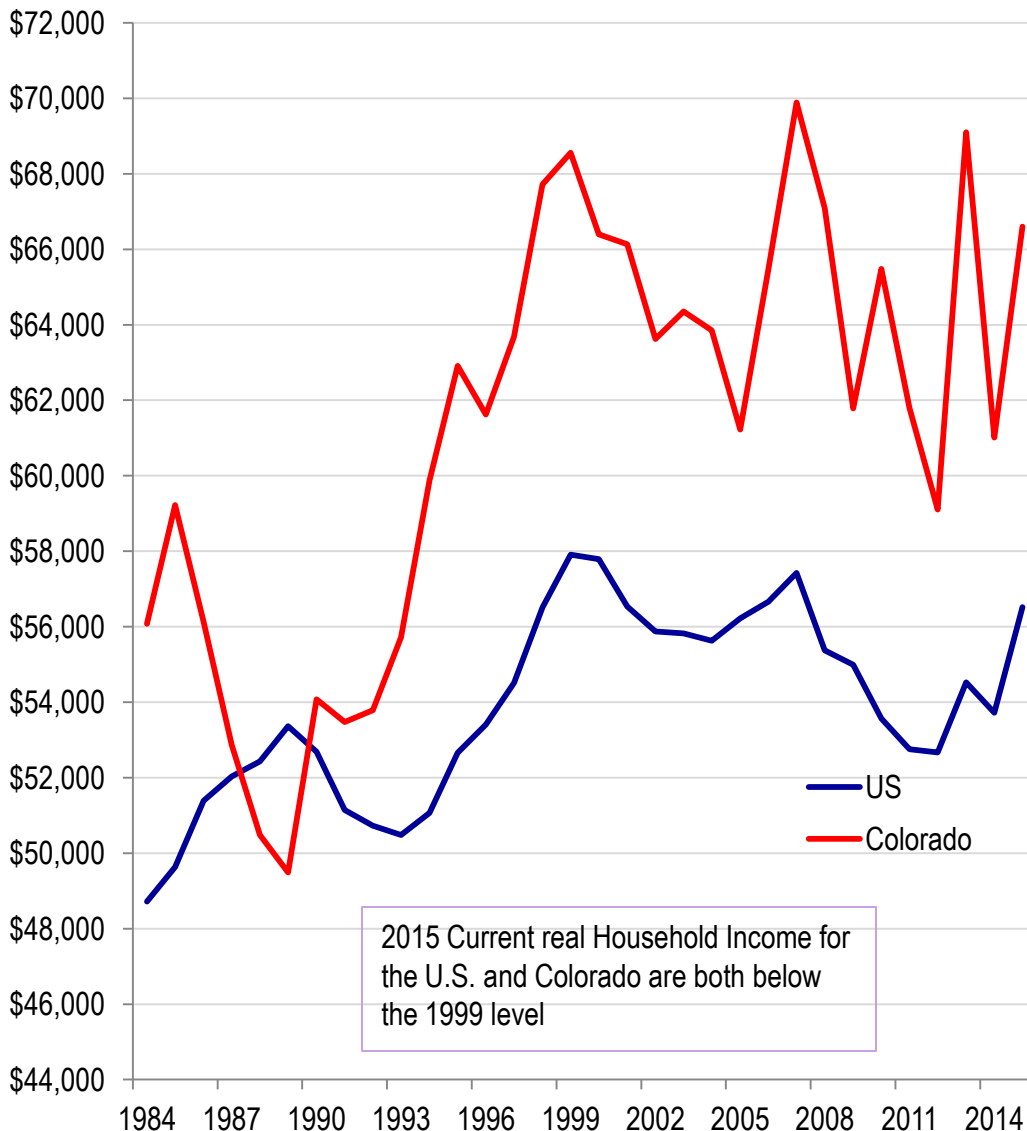
- Less than the 1999 value for the U.S. (\$56,516 vs. \$57,909).
- Less than the 1999 value for Colorado (\$66,596 vs. \$68,554).

In the 31 years between 1984 and 2015, the value of the real median household income for:

- The U.S. increased at an annualized rate of 0.48%.
- Colorado increased at an annualized rate of 0.56%.

In 29 of the 31 years, the value for Colorado was greater than the U.S.

Real Median Household Income U.S. vs. Colorado



Source: Federal Reserve, cber.co

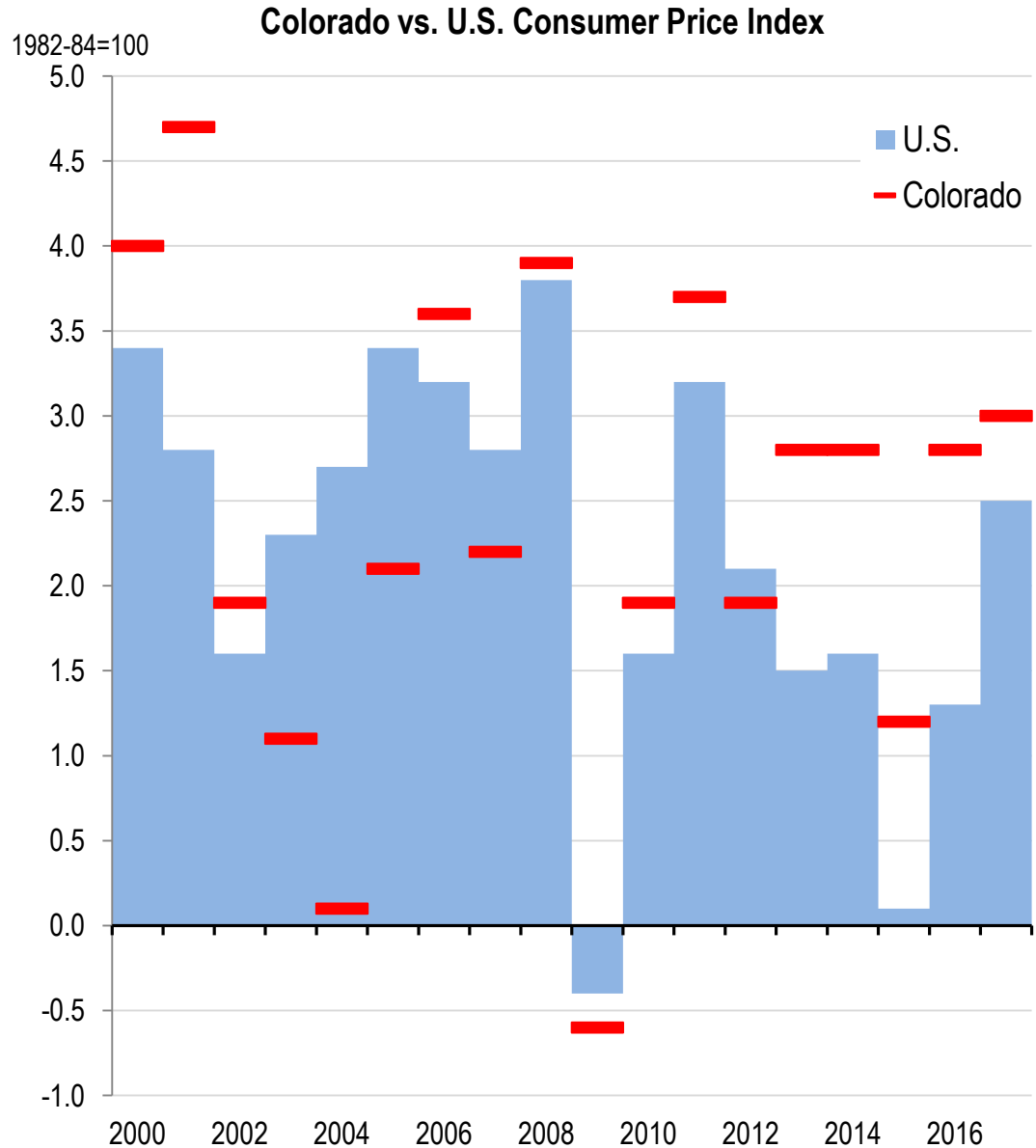
Consumer Price Index (CPI)

The Denver-Boulder-Greeley CPI (red bars) is sometimes used as a proxy for Colorado inflation.

It has been greater than the U.S. CPI 12 of 18 times between 2000 and 2017. Five of the six years that Colorado inflation was lower were between 2003 and 2009.

Recently, higher housing prices and medical costs have caused Colorado to be a more expensive place to live.

The Denver-Boulder-Greeley CPI is expected to rise by 2.8% in 2016 and 3.0% in 2017.



Source: Bureau of Labor Statistics, cber.co.

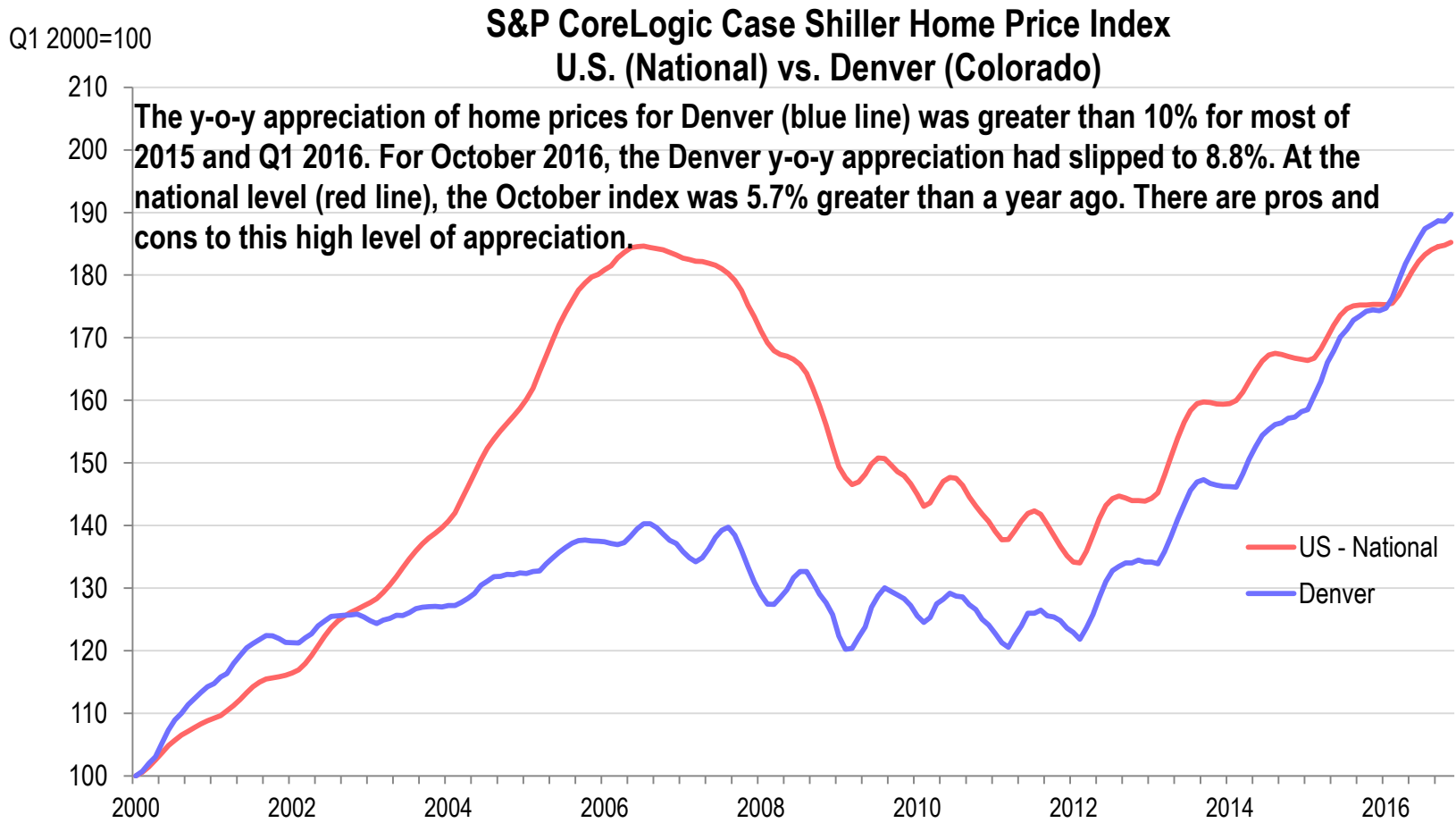


The Colorado Economy

Housing Prices and Construction

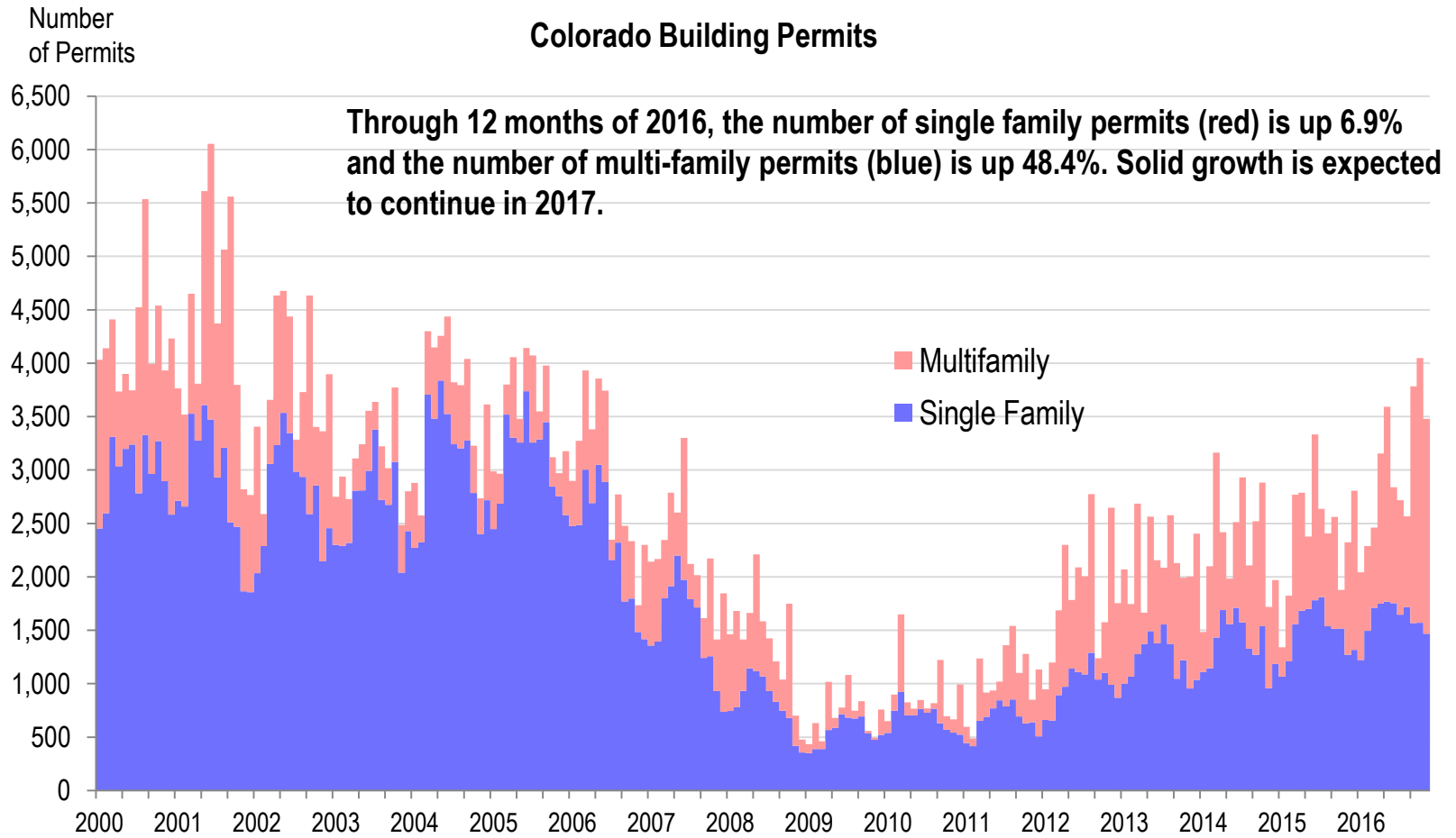
Case Shiller Home Price Index

National vs. Denver (Colorado)



Source: S&P Core-Logic Case-Shiller, cber.co.

Colorado Residential Building Permits - Units



Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co.

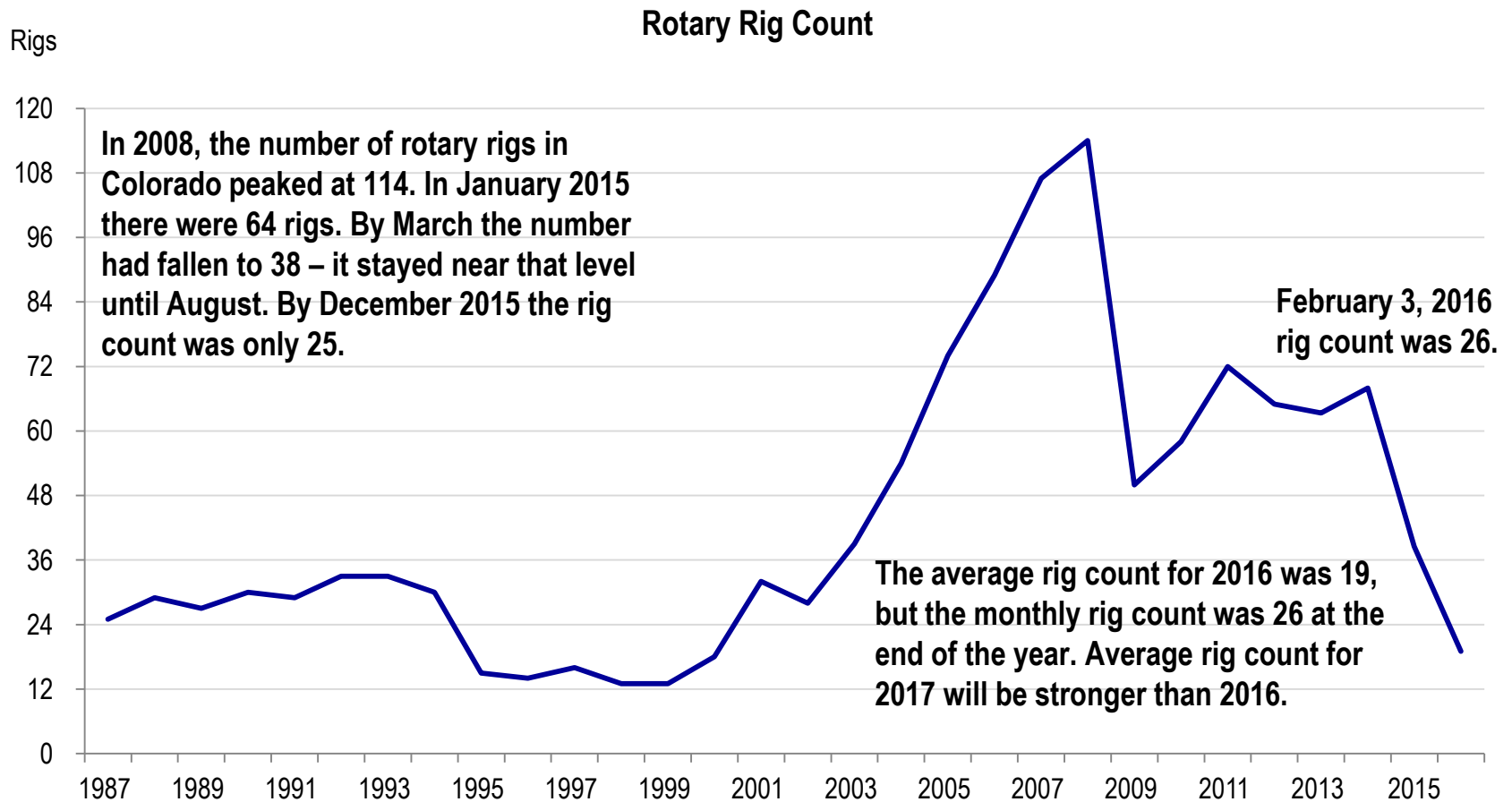


The Colorado Economy

Extractive Industries – Oil and Gas

Colorado Annual Rotary Rig Count

1987 to 2016

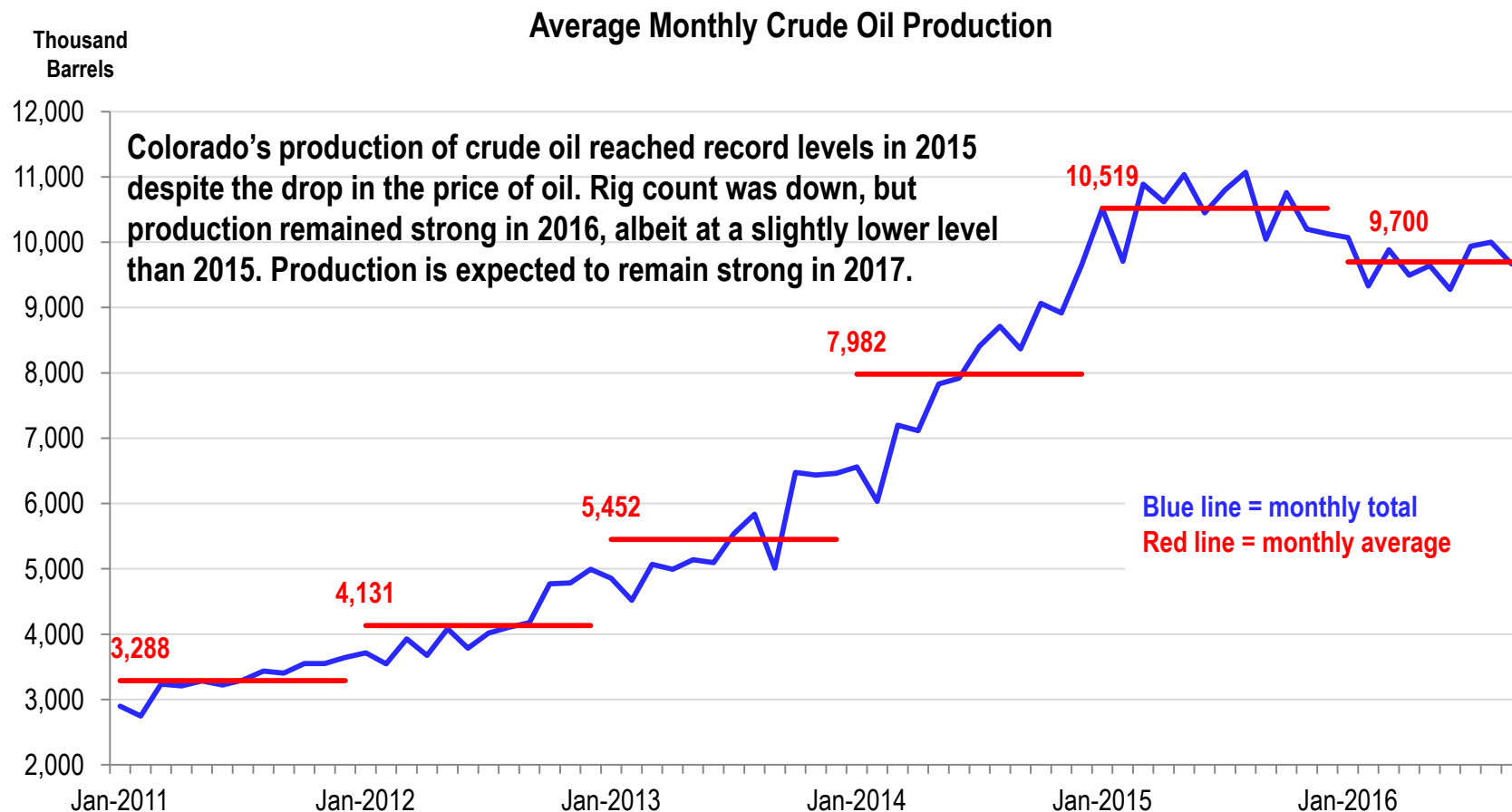


Source: Baker-Hughes, cber.co.

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

Average Monthly Colorado Crude Oil Production

2011 to 2016 (Thousand Barrels)

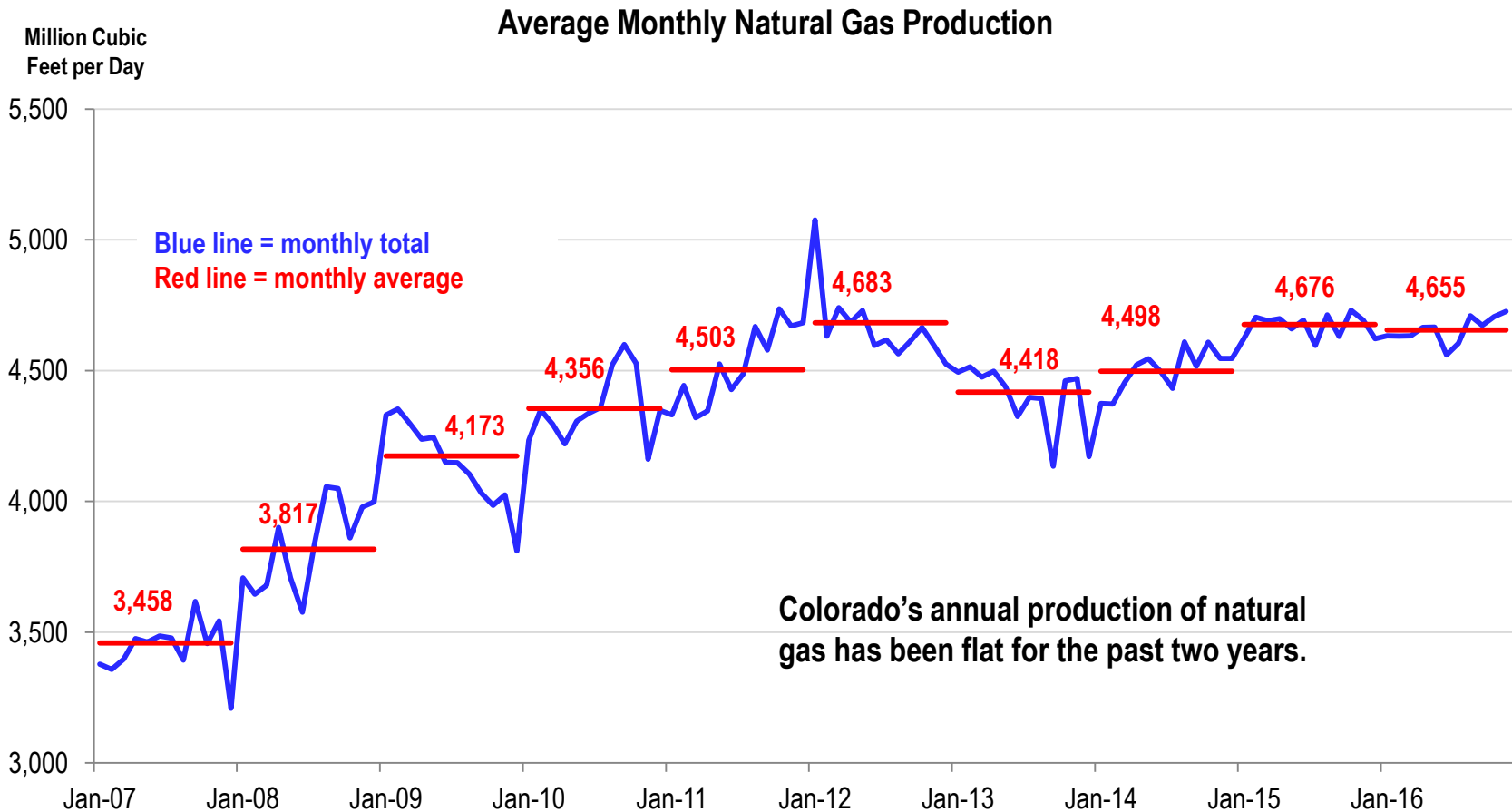


Source: EIA, cber.co.

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

Average Monthly Colorado Natural Production

2007 to 2016 (Thousand Barrels)



Source: EIA, cber.co.

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

The Colorado Economy in 2017

Factors that Will Affect Larimer County

Watch for the following in 2017...

1. Where is the talent? Jobs = People, the pool of potential workers is smaller.
2. Improved global economy (real GDP growth), 2.9%.
3. Stronger real GDP growth for the U.S., 2.2% to 2.4%.
4. Nationally, 1.9 million to 2.1 million jobs added.
5. Interest rates will continue to rise in 2017.
6. Increased inflation 2.5% in the U.S. and 3.0% in CO.
7. The Colorado population will increase by 100,000.
8. Job growth will be diverse, manufacturing will continue to struggle.
9. Colorado will add 57,000 to 63,000 jobs.
10. 2017 will be a year of extremes – both good and bad.

There is more upside potential than downside risk.

Three Weeks into The First 100 Days...

Not enough time and information to analyze the policies



Northern Colorado Assets, February 2012

The More Things Change, The More They Stay the Same

LARIMER COUNTY

- % of bachelor's degrees.
- USDA - APHIS; USDA-NCGRP; USDA-RMRS, USGS-Fort Collins Science Center; CDC-DVBD
- Colorado State University; FRCC (branch); Ames Community College (branch)
- I- 25
- Natural Resources.
- Rocky Mountain National Park, Poudre Canyon, Welcome Center, Budweiser Event Center

BOULDER COUNTY

- Above average earnings
- % of bachelor's degrees
- NIST, NOAA, NCAR, and other federally-funded facilities.
- University of Colorado, Naropa University, FRCC (branch)
- Denver beltway
- Natural Resources
- Eldora Ski Area

NORTHERN COLORADO

- Air transportation
- Ground transportation/highways
- Federal facilities
- Quality higher education
- Diversified regional economy
- Natural resources
- Tourism
- Value-added Agriculture
- Advanced Technology
- Above average earnings
- Highly educated workforce
- Mobile workforce

BROOMFIELD COUNTY

- Rocky Mountain Metropolitan Airport
- Above average earnings
- % of bachelor's degrees
- National Archives
- FRCC (across the street)
- I-25, Denver Beltway; close to I-70; close to I-76
- Regional retail center
- First Bank Event Center

WELD COUNTY

- 137th Space Warning Squadron
- University of Northern Colorado; Aims Community College
- I-25 and I-76
- Natural Resources
- Pawnee National Grasslands

ADAMS COUNTY

- DIA and Front Range Airport
- Denver Women's Correctional Facility and Denver Reception and Diagnostic Center
- University of Colorado Denver, FRCC
- I-25, I-70, and Denver Beltway
- Natural Resources
- Dick's Sporting Goods Park, Rocky Mountain Arsenal Wildlife Refuge



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ABOUT THE AUTHOR

Gary Horvath has produce annual employment forecasts of the state economy for over 25 years. They have been supplemented by monthly economic updates and indices that track economic performance over the short term. In addition he has directed three statewide analyses that included reviews of all 64 county economies.

In addition, Horvath was the principal investigator for a state and federally funded project to prepare a nanotechnology roadmap for Colorado. As well, he was a co-founder of the Colorado Photonics Industry Association, a trade group for Colorado’s Photonics cluster. Horvath has been an active board member of the group since its inception.

Horvath has also served on the Board of Directors for the Economic Development Council of Colorado, Northwest Denver Business Partnership, Adams County Economic Development, and Broomfield Economic Development Corporation. Horvath has also been the lead for the photonics/electronics cluster in OEDIT’s early stage and proof of concept grant programs.