UNIVERSITY OF COLORADO BOULDER LEEDS SCHOOL OF BUSINESS

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Colorado 2017 Midyear Economic Update

Richard Wobbekind

Overview

The United States is currently experiencing the longest economic expansion following a major economic contraction in its history. At a meeting held in late June to provide sector updates, a number of Colorado Business Economic Outlook Forum committee chairs noted that the prospects of a contraction occurring in the next couple of years were low. They also concluded that the economic expansion would most likely continue and may break the record for the longest economic expansion. This expectation is based on a number of economic factors, including both cautious and stable monetary policies instituted by the government and a strong housing sector that still has room for growth. The United States is at full employment with an unemployment rate of 4.3%. Personal income grew 3.4% in 2016, and asset values are up. The GDP rate is slowing due to a decline in the productivity of workers. Real GDP growth stood at 1.7% in Q1 2017. Consensus Forecasts predicts the rate will increase in 2017 by 2.2% followed by 2.3% in 2018.

Colorado's economy outperformed the nation's economy in 2016. Advanced 2016 GDP estimates released by the Bureau of Economic Analysis (BEA) show that in 2016 Colorado's real GDP grew by 2% compared to the nation's GDP growth of 1.6%. Colorado also recorded higher increases than the nation in terms of home prices, employment, and personal income in 2016. According to the Leeds Business Confidence Index (LBCI), a measure of Colorado business leaders' confidence and expectations for the state and national economies, business leaders have more confidence in the Colorado economy than they do in the national economy.

Colorado currently has the lowest unemployment rate in the nation, with an unemployment rate of 2.3% in June. This represents the lowest unemployment rate in Colorado since data were recorded in 1976. San Miguel County has the highest unemployment rate in the state, at 5.8%. Fort Collins experienced year-over-year employment growth of 6.8% in June 2017 followed by Greeley with 3.1%. In

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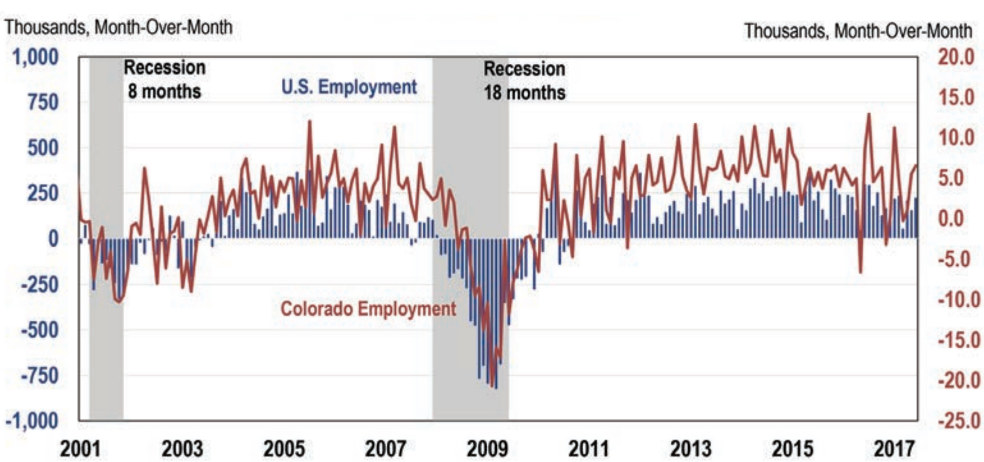
EMPLOYMENT SITUATION UNITED STATES VS. COLORADO



Source: Bureau of Labor Statistics Current Employment Statistics (Seasonally Adjusted).

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BUSINESS RESEARCH DIVISION

Overview, *contd.*

Colorado 2017 Midyear Economic Update

FROM THE EDITOR

This issue presents a midyear review of the Colorado economy. The information presented is compiled from remarks made Colorado Business Economic Outlook Estimating Group chairs at a roundtable meeting held in June. Industry sector summaries include comparisons of the current economic situation to the forecast presented last December. Key factors influencing recent economic trends are also noted.

We greatly appreciate the time and input from the individuals who contributed to this update; their names are listed on the back page. I also acknowledge the BRD research staff who collected data and conducted additional analysis for this issue.

FIFTY-THIRD ANNUAL COLORADO FORECAST

2018 Colorado Business Economic Outlook Forum

SAVE THE DATE

Mark your calendar to attend the 2018 Colorado Business Economic Outlook Forum on December 11 at the Grand Hyatt Denver. Check colorado.edu/business/brd for event updates.

We are interested in your suggestions for topics of upcoming issues. Please contact me directly at 303-492-1147

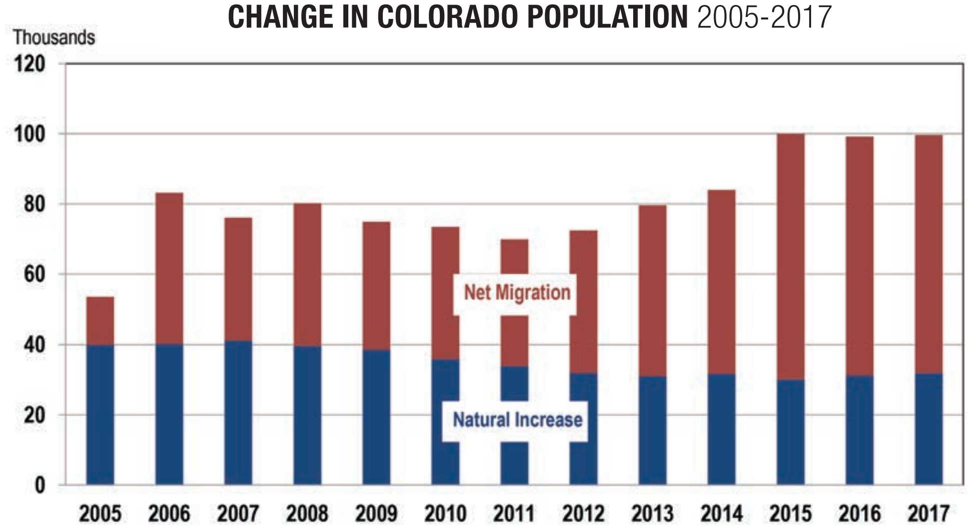
—Richard Wobbekind

December 2016, year-over-year employment growth was 2%. Half of the job growth in 2016 in Colorado can be attributed to growth in technology-related sectors.

In December 2016, the Colorado Business Economic Outlook presented economic indicators for each sector of Colorado's economy. Job growth in Colorado was forecasted at 2.4%, or 63,400 jobs, in 2017. The forecast presented in December 2016 projected employment growth in 2017 for all sectors except Natural Resources and Mining. As of mid-2017, the forecast of overall employment growth for the state was revised down to 55,800, or growth of 2.2%. Some sectors are outperforming expectations while others are underperforming.

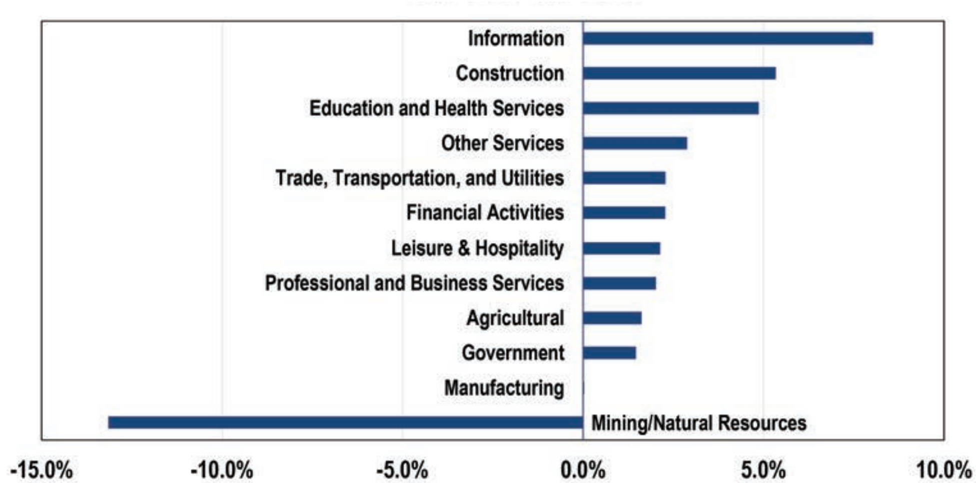
At the June meeting, committee members stated that new business growth was posting solid gains throughout the year, indicating confidence in the economy, and economic and business opportunities. Nearly all meeting attendees mentioned the challenge of finding skilled workers. Many firms want to hire more employees but struggle to find candidates with the necessary skills in the state's tight labor market. This was also noted as the number one challenge facing the economy in the Q3 2017 Leeds Business Confidence Index survey.

CHANGE IN COLORADO POPULATION 2005-2017



Source: State Demography Office. Data through 2015 are estimates, 2016 data and 2017 data are forecasts.

COLORADO PERCENTAGE REAL GDP GROWTH BY SECTOR
YEAR-OVER-YEAR 2016



Source: Bureau of Economic Analysis.

Sector highlights are presented on the pages that follow. Data are from the Colorado Department of Labor and Employment, Current Employment Statistics (CES). The June 2017 figures are seasonally adjusted except where indicated. Sector information and data are current as of July.

Population and Employment

According to the State Demography Office, Colorado's population is projected to reach 5.6 million in 2017. With an expected net gain of 94,600, Colorado's population growth continues to increase at slower rates. This deceleration is due to several factors, including a drop in the total birthrate and an increased death rate due to the aging of Colorado. Natural increase (births minus deaths) is expected to account for 30,600 people while net migration is expected to remain relatively stable with 64,000 new residents. With later births, women and families have time to receive an education and a stable job before taking on the financial responsibilities of child bearing. Deaths continue to increase, totaling 36,500 in 2017.

The fastest-growing counties for absolute growth between 2015 and 2016 were El Paso, Denver, Weld, Arapahoe, and Adams. In percent change, the five fastest-growing counties were Ouray, Archuleta, Costilla, Custer, and Weld. In 2016, only 13 counties experienced net out-migration, following a similar pattern since 2015. In 2016, Denver was the 13th-fastest growing city in the United States and 19th largest in the nation. According to the State Demography Office, 87% of population growth in Colorado in 2016 was along the Front Range. Population growth rates in the Grand Junction MSA and in the Pueblo MSA have been only 1.1% and 1.2%, respectively—the two slowest growing metropolitan areas.

In 2016, Colorado was the 7th fastest-growing state in terms of percent change, at 1.7%, and 8th in total growth. Colorado was 21st in total population overall.

In 2016, Colorado's population experienced the 6th-highest net migration in the United States, at 60,773. Natural increase in 2016 also ranked high—11th place—with an increase of 30,332 people. The population growth estimate for 2016 is slightly lower than the increase recorded in 2015.

Colorado gained 33,206 households and 28,895 housing units between 2015 and 2016. A household represents an occupied housing unit. The total number of housing units per household is down to 1.08 from a high of 1.15 in 2007 (including second homes), indicating a drop in the number of vacant housing units in Colorado.

Colorado total nonfarm employment in June 2017 was 2.6 million, a year-over-year increase of 2.1%. Other Services had the greatest employment growth of 3.8%, followed by Leisure and Hospitality (3.4%); Trade, Transportation, and Utilities (3%); Professional and Business Services (2.9%); and Education and Health Services (2.9%). Financial Activities increased by 1.9% year-over-year in June. Government, Information, and Manufacturing all experienced relatively flat growth—0.8%, 0.4%, and 0.1%, respectively. Both Construction, and Natural Resources and Mining experienced year-over-year declines of 0.4% and 4.3%, respectively.

Fort Collins-Loveland recorded the greatest year-over-year employment growth in June 2017, with 6.8%, followed by Greeley (3.1%) and Denver-Aurora-Broomfield (2.3%). Colorado Springs was close behind, with 2.2% year-over-year growth, and Pueblo rose 1.5%. Boulder experienced a deceleration of employment growth in June, with 1.3% year-over-year growth compared to May's year-over-year growth of 4.6%. Finally, Grand Junction remained constant, experiencing no year-over-year growth or decline.

The Colorado unemployment rate remained low, at 2.3%, in June 2017. Colorado had the lowest unemployment rate in the nation, tied with North Dakota. Fort Collins-Loveland had the lowest unemployment rate in the state, with 2.1%, followed closely by Boulder (2.3%), Greeley (2.5%), and Denver-Aurora-Broomfield (2.5%). Colorado Springs had 3.1% unemployment, and Grand Junction had a 3.6% unemployment rate. Pueblo had the highest unemployment rate in the state, at 4%.

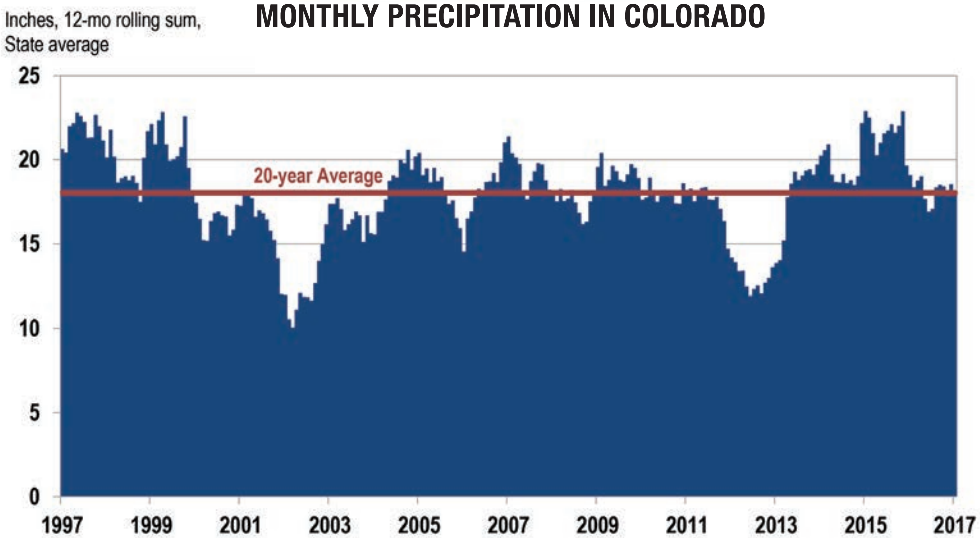
Colorado's nominal GDP was $323 billion in 2016. For real GDP, Colorado was the 10th fastest-growing state and the 18th largest overall. In 2016, Colorado's annual real GDP growth rate was 2%. The three largest industries for GDP were Financial Activities (19.1%); Trade, Transportation, and Utilities (15.7%); and Professional and Business Services (2.3%). The three fastest-growing industries were Information (8%), Construction (5.3%), and Education and Health Services (4.9%). Real GDP decreased for Natural Resources and Mining.

Agriculture

According to the BEA, agriculture contributed about $2.5 billion to the Colorado economy in 2015. In 2016, this contribution had declined to about $2.1 billion, a decrease of approximately 15.3%. Colorado growers have been struggling in 2017 due to suppressed commodity prices. Both wheat and corn prices are below their five-year averages, while beef prices are almost unchanged from their five-year average. As of late June 2017, corn prices declined 47.3% compared to their respective value five years ago and dropped 6.8% year-over-year. Corn prices have remained steady, ranging from $3.43 to $3.83 a bushel in 2017 as prices remain near their long-term average. Wheat prices have declined 39.6% from their value five years ago but have been improving in 2017, posting a 12.6% year-over-year gain. Beef prices have been volatile in the past five years. Some farmers and ranchers are operating in an environment where revenues do not exceed the cost of production.

These suppressed commodity prices are contributing to increased financial stress for many farmers and ranchers. Agricultural lenders are

MONTHLY PRECIPITATION IN COLORADO



Source: NOAA, US Climate Division.

reporting an increase in the number of underperforming loans and an associated slowdown in economic activity in rural communities tied heavily to agriculture. In order to deal with the psychological stress farmers are experiencing, a hotline is being set up in Colorado.

Growers also remain concerned about the political atmosphere as of late June 2017. The rejection of the proposed Trans-Pacific Partnership (TPP) trade agreement by the Trump administration was a setback for the agricultural sector. The import tariff on U.S. beef entering Japan would have been lowered from around 38.5% to 9%, which would have led to an increase in demand for Colorado beef (one of the state's top exports). The North American Free Trade Agreement (NAFTA) has been a major talking point of the Trump administration. NAFTA removed and reduced many tariffs imposed on U.S. agricultural imports to the point where many agricultural goods are exported to both Canada and Mexico duty free. Actions leading to a reduction or withdrawal from NAFTA could hurt U.S. farmers. Any increase or implementation of foreign import tariffs would reduce demand for U.S. and Colorado agricultural exports. The administration appears to favor the Transatlantic Trade and Investment Partnership (TTIP), which would reduce trade barriers between the United States and the European Union. This agreement is expected to benefit numerous domestic industries, including the dairy industry. The U.S. dairy producers would be granted access to European markets similar to the access that Canadian producers currently enjoy. Negotiations ended after the proposed deal faced public backlash in 2016. However, numerous government leaders have indicated as of late June 2017 that they would be willing to reopen negotiations on the proposed trade agreement.

Other U.S. export factors have also been affecting Colorado growers. The U.S. dollar has a strong value relative to other currencies, which makes U.S. agricultural goods cost more for foreign consumers relative to other countries' agricultural goods. One bright spot is the new agreement by China to resume imports of U.S. beef that had been banned since 2003.

Drought conditions have diminished throughout the state, leading to good growing conditions and opportunities for Colorado farmers. As of July 19, 2017, the U.S. Drought Monitor reported that 66.8% of Colorado was experiencing no drought conditions, while 33.2% of the state was suffering from abnormally dry conditions. No area of the state is currently experiencing conditions that are described as a drought.

Growers have also been adding new agricultural products to their portfolios, including quinoa; melons of a small, "personal" size; and industrial hemp. Many growers are taking advantage of the healthy food trend in the state, with its epicenter in the Boulder area. Among these trends are locally grown produce and locally raised livestock.

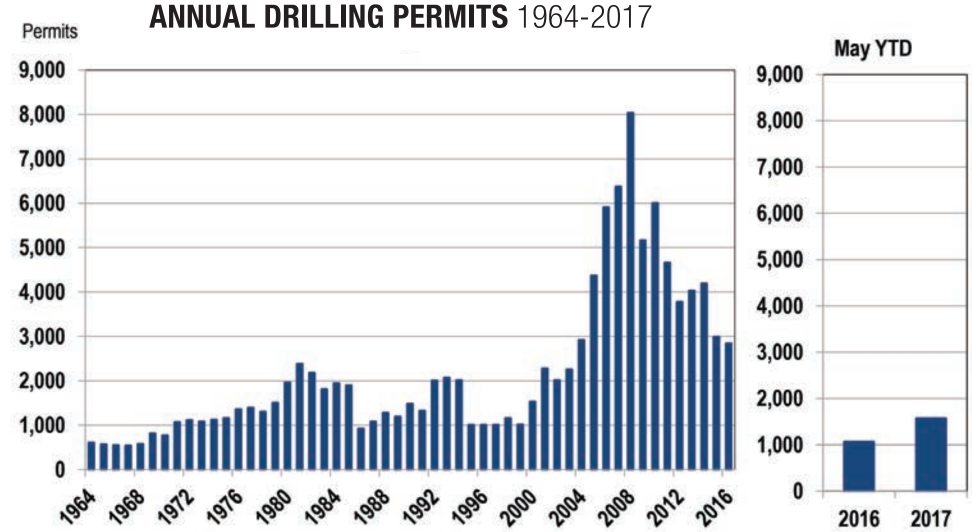
In 2016, Colorado had 312 registered hemp growers who grew at 424 separate locations. In total, about 6,000 acres and 1.36 million square feet of indoor production was devoted to hemp cultivation. More space is devoted to hemp production in Colorado than is devoted to the production of cantaloupe (600 acres), grapes (800 acres), peaches (2,600 acres), and sweet corn (3,500 acres). Colorado accounts for about half of the industrial hemp production in the nation and ranks as the number one state for hemp production in the nation. While traditional commodities struggle, new opportunities are emerging with the rise of the healthy foods trend and hemp production.

Natural Resources and Mining

The Natural Resources and Mining Sector comprises the subsectors of agriculture, forestry, fishing and hunting; and mining, quarrying, and oil and gas extraction. This includes mineral solids coal, petroleum extraction, and all natural gases. The Natural Resources and Mining industry makes up 0.8% of the Colorado covered nonfarm employment and accounts for only 0.5% of the national covered nonfarm employment. The June 2017 year-over-year seasonally adjusted employment growth rate in Colorado experienced a decline of 4.3%. The decline has continued for 27 consecutive months. Employment is expected to be revised up for the first half of 2017. Based on the revised series, the midyear revised outlook for industry employment growth is down 300 jobs or 1.3%. In 2016, annual wages in the national Natural Resources and Mining Sector were almost 50% greater than the Colorado average. In Colorado, according to the BLS, the average annual pay for a Natural Resources and Mining job was $81,868 compared to Colorado's $54,669 average annual pay for all industries.

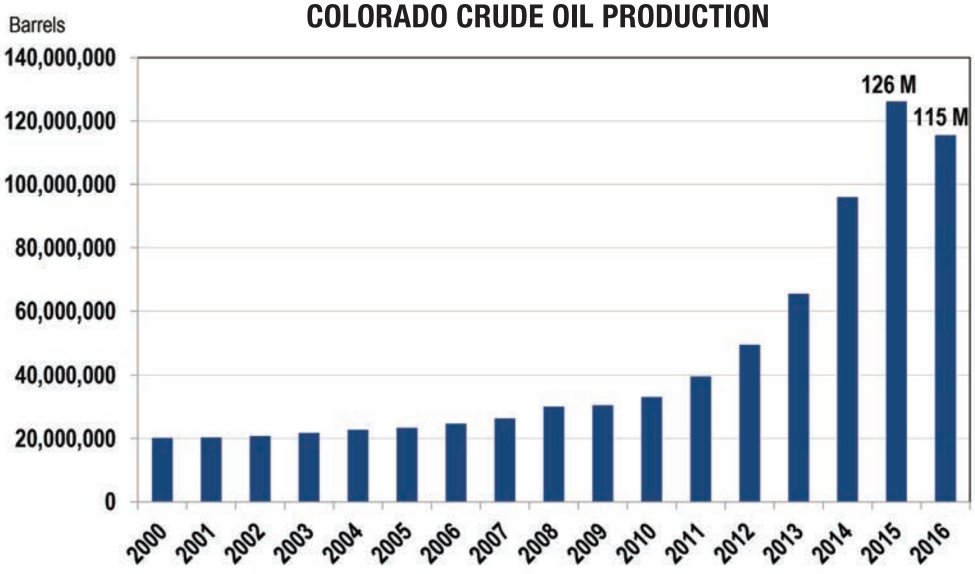
The drop in employment can be accounted for by low oil and gas prices.

ANNUAL DRILLING PERMITS 1964-2017



Source: Colorado Oil and Gas Conservation Commission.

COLORADO CRUDE OIL PRODUCTION



Source: Colorado Oil and Gas Conservation Commission.

These low prices lead to unprofitable production, causing drilling to slow. In Q4 2016, the Colorado mining industry accounted for $14.2 billion in real GDP, a year-over-year decrease of 3.2%. For nominal GDP in Q4 2016, year-over-year growth reached 9.2%. This difference of 12.4 percentage points can be accounted for by a 59.9% increase in WTI prices since the low point in February 2016.

Colorado produced 137,000 (MMcf) of natural gas in April 2017, a slowdown in production. In April 2016, production was 2.3% higher than in April 2017. Prices for natural gas are starting to rebound from the early 2017 slump. As of May, the Henry Hub price was $3.15 per million Btu, a year-over-year increase of 64.1%. However, prices are still 50.3% down from the peak in February 2014.

For WTI oil, in May 2017, the price was $48.48 per bbl, a gain of 3.8% year-over-year. Compared to the past peak, in June 2014, WTI oil prices are still down 54.2%. In April 2017, Colorado produced 9.5 million barrels of crude oil. This marked a year-over-year 0.4% decrease from 2016. From January to June 2017, a total of 1,565 drill permits were received. At this same time the prior year, only 1,261 drilling permits were received. Colorado has an annual average rig count of 30 (January 6, 2017, to July 7, 2017), well above Colorado's average of 18 rigs in the same time period in 2016.

In coal, employment dropped 12.8% year-over-year in April 2017, leading to the loss of 162 industrial coal jobs. Despite the closure of Bowie #2 Mine, coal production in Colorado rose in January 2017 through April 2017. With eight mines currently operating, from January to April 2017 a total of 4.9 million tons of coal were produced for a 26% year-over-year increase since April 2016. For prices in Q1 2017, metallurgical export coal was $152.96 per short ton, a year-over-year increase of 123.8%. For steam export coal, in Q1 2017 prices sat at $59.39 per short ton, with a year-over-year increase of 35.7%.

The future of the Natural Resources and Mining industry is fairly uncertain. Due to federal policy, federal land is opening up to allow drilling for natural gas. Many companies are willing to lease the land; however, production will not increase until prices reach a level where revenue outweighs the cost of production.

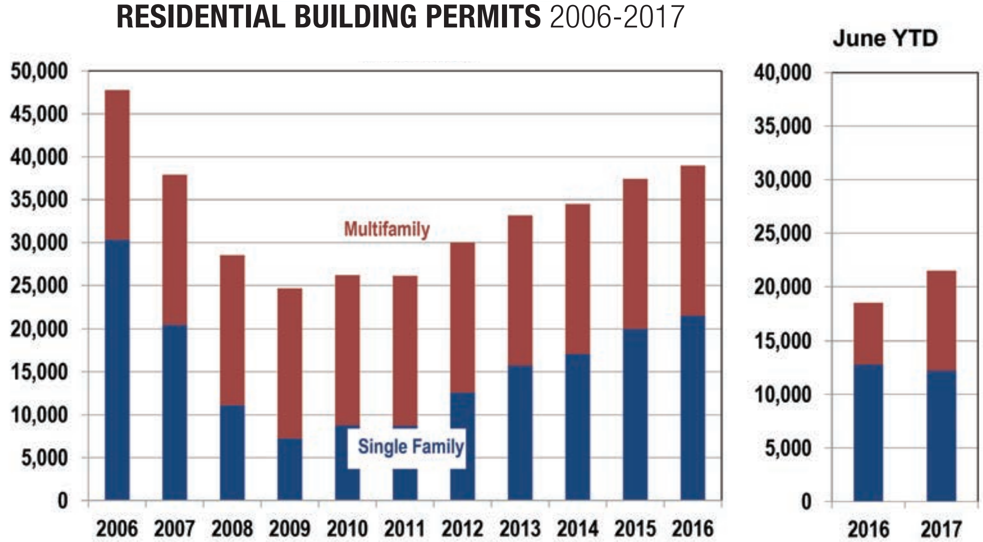
Safety is another factor looming over the industry. After the Firestone accident, when a severed gas line led to a deadly house explosion, state regulators may add new restrictions on the industry. More state regulation could hinder production and potentially add costs to production.

Construction

The Construction industry is composed of firms that engage in the construction of new buildings and engineering projects, as well as subdividing land for sale. This industry comprises three sectors: residential (e.g., houses, apartments), nonresidential (e.g., retail, medical), and nonbuilding (e.g., water treatment, highway work, infrastructure).

According to the Bureau of Labor Statistics (BLS), total employment in the Construction industry in Colorado was 154,000 as of June 2017, a 0.4% year-over-year decrease. Employment is still down 10.5% from the July 2007 peak of 170,100. The average weekly wage stands at $1,068.92, a 1.9% decline from June 2016's average weekly wage of $1,090.00. After accounting for expected revisions in the first half of 2017, the

RESIDENTIAL BUILDING PERMITS 2006-2017



Source: U.S. Census Bureau.

midyear revised outlook for industry employment growth in 2017 is 2,900 jobs or 1.9%.

In 2016, nominal GDP for the Construction industry totaled almost $18.7 billion, accounting for roughly 5.8% of Colorado's total nominal GDP. The year-over-year real GDP growth rate for construction was 5.3%. As of May 2017, the year-to-date value of total Construction fell 7% compared to May 2016—nonresidential construction rose 7%, residential fell 5%, and nonbuilding slid 52%.

The committee noted that while the data suggest that the Construction industry is slowing, this is an issue of timing rather than one of weakness. The industry in Colorado remains healthy and continues to grow.

The decline in residential construction can be explained by a number of factors. Lending for multifamily homes is tightening. There are also concerns that the multifamily housing market is oversaturated, especially high-end multifamily properties. In 2016, permits issued for multifamily totaled about 17,000. Of these new permits, 40% were issued in Q4 2016 and approximately 88% of these new permits were issued in the greater Denver-Boulder area. The Construction Committee noted that fewer units are being planned than are currently in production, leading to a decrease in residential construction in the future. The slowdown will begin in early summer 2018. Another factor affecting residential construction is that millennials are starting to look for properties to purchase rather than to rent.

Property values have decreased as construction moves from prime downtown locations to the edges of the city where property values are less. Total construction activity, as measured by dollar value of projects, will not increase in the next few years.

The data available from Dodge Data & Analytics suggest there has been a slowdown in single-family home construction as of June 2017. The committee noted that this is an issue of timing as well, as closed contracts on future permits increased by 8% as of April 2017. Future permits will lead to an increase in the construction of single-family properties in the future.

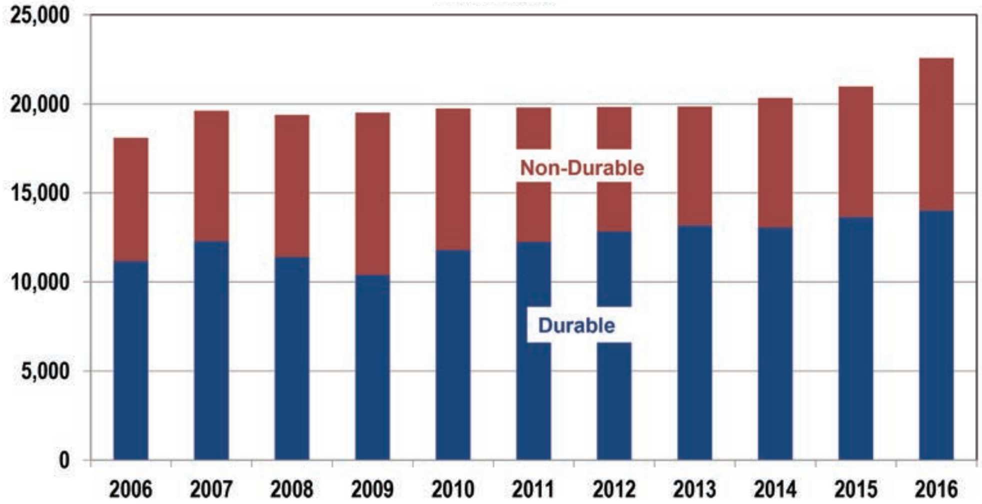
According to data released by Dodge Data & Analytics, nonbuilding construction has declined 40.1% year-to-date as of June 2017. The committee noted that this data point, too, is also an issue of timing. A number of so-called "mega projects," which are accounted for in the first year of construction but take several years to complete, are causing the discrepancy in the data. Firms and their work crews are still working on these projects but the work is not showing up in the data because of the point-in-time issuance of the permit. The Construction Committee members whose firms specialize in nonbuilding construction are not describing current conditions as "slow." The committee notes that the data will improve in the months following May 2017 as a number of major projects are expected to start later in the year. Such projects include a Colorado Department of Transportation project on I-25 in northern Colorado and the Central 70 project, as well as increases in municipal work. These projects will boost nonbuilding numbers later in the year.

According to Dodge Data & Analytics, nonresidential construction has plateaued but again this is an issue of timing and not one of industry weakness. More activity is expected later in calendar year 2017. In the 2016 fall election, voters in the state approved $2.6 billion in new school bonds that will result in new construction projects during the summer and fall of 2017, and will carry into future years. According to the committee, other nonresidential projects may include an aerospace center at the University of Colorado. In June 2017, the University of Colorado Board of Regents approved six new construction projects that will have a total value of $303.8 million. Other projects that may see fruition are a stock show venue, a convention center, and a new Denver International Airport (DIA) terminal.

The main factor restricting growth in the Construction Sector is labor constraints. Due to the lack of available labor, the committee expects wage inflation to occur in the future as firms raise wages to attract and compete for workers. Firms are not able to complete projects as quickly as they would like to due to the lack of labor. The committee noted that activity is concentrated along the metropolitan Front Range, and firms outside this area are not sharing in the prosperity.

Annual data provided to the Business Research Division by the Colorado State Demography Office showed that in 2016 growth in households in the state exceeded growth in housing units. One solution to this may be an increase in the use of prefabricated housing units. These units are made in a manufacturing facility then shipped to the construction location and installed, requiring significantly less labor for the construction firm installing the unit. As of July 2017, prefabricated housing units have not made a significant impact on the Construction industry. However, the committee noted that in the coming years prefabricated units will account for an increasing share of the sector. One of the largest firms constructing prefabricated units is Prescient. According to the Manufacturing Committee, the firm is based in Denver, has recently received a large infusion of capital, and is planning a major expansion of its manufacturing facility in Denver.

MANUFACTURING REAL GDP 2006-2016



Source: Bureau of Economic Analysis.

Manufacturing

Manufacturing includes the subsectors of durable and nondurable goods. Durable goods are goods that are not intended for immediate consumption and also have a long lifespan. Industries within durable goods include wood product manufacturing, primary metal manufacturing, fabricated metal product manufacturing, machinery manufacturing, computer and electronic product manufacturing, electrical equipment, appliance, and component manufacturing, transportation equipment manufacturing, and furniture and related product manufacturing. Nondurable goods are goods that are used immediately or have a short lifespan. Industries within nondurable goods include, food manufacturing, animal slaughtering and processing, textile mills, textile product mills, apparel manufacturing, paper manufacturing, and plastics and rubber products manufacturing. Colorado manufacturing has a substantial presence within aerospace/electronics, food and beverage, bioscience/medical, brewing/distilling, consumer/lifestyle, built environment, industrial/equipment, energy/environmental, and supply chain clusters. Manufacturing continues to grow, driven by strong domestic manufacturing trends, including increased automation. Colorado continues to thrive as it has a strong industry mix. In June 2017, manufacturing employment totaled 142,400 in the state. As of June 2017, year-over-year employment increased 0.1%, a gain of 100 jobs. Manufacturing employment is expected to be revised upward in the coming months. The revised midyear outlook for industry employment growth in 2017 is 800 jobs, or 0.6% growth.

Manufacturing in Colorado continues to experience increased per capita real GDP. From 1997 to 2008, per capita GDP increased by 18.6%. After a drop caused by the recession, per capita GDP has gained momentum. In 2016, per capita GDP was $52,795 with a year-over-year increase of 0.3%. With increased automation and technological advancements, manufacturing companies are able to produce goods with fewer employees. This creates a trend of an increase in GDP with a smaller workforce. In 2017, only one month has produced positive year-over-year employment growth.

In the durable goods subsector, employment fell 1.3% year-over-year—1,200 jobs—in June 2017. Nondurable goods added 1,300 jobs, a 2.5% year-over-year employment growth. In 2016, Manufacturing accounted for $20.3 billion of Colorado's real GDP. However, Manufacturing accounted for 6.9% of Colorado's total GDP. In 2016, real annual GDP year-over-year growth for Manufacturing was flat. Durable goods manufacturing accounted for $13.5 billion of GDP, and nondurable goods manufacturing produced a total of $7 billion. GDP for both nondurable goods and durable goods has not increased nor decreased by large margins since 2015.

Two areas that are experiencing large employment growth include aerospace/electronics, and food and beverage. Employment in aerospace/electronics increased for both small and large companies. A total of 650 jobs may be added for the Lockheed Martin Fleet Ballistic Missile program. Other small firms have benefited from the burgeoning aerospace industry in the state. The one challenge facing the industry is establishing a more operational middle market.

Food and beverage also continues to experience fast growth in employment, with 10.3% year-over-year growth in June 2017. Boulder and other cities around the area are attracting funding and anchor companies. As described by a committee member, "Boulder is creating a gravity of its own." Colorado's market is based on the increasingly popular trends of sustainability and food that is not ecologically harmful.

Trade, Transportation, and Utilities

Trade, Transportation, and Utilities (TTU) is one of the services-providing supersectors and consists of three subsectors: Trade, Transportation and Warehousing, and Utilities. TTU is a diverse industry that covers everything from air transportation, truck transportation, warehousing and storage, and couriers and messengers to food and beverage stores, and general merchandise stores. The TTU Sector added 13,800 jobs year-over-year in June 2017, an increase of 3%. This sector currently employs 467,600 people and accounts for 17.7% of statewide employment. The revised midyear outlook for industry employment growth is 12,900 jobs, or 2.8%. Tax revenue in Colorado continues to increase. As of May 2017, state retail tax collections increased by $6 million year-over-year to a total of $242 million.

The Retail Trade Sector saw growth in 2016, with real GDP increasing at an annual rate of 3.2%. The retail sector accounts for 5.6% of Colorado's real GDP. Employment within retail trade grew 3.2% year-over-year in June 2017, with total employment at 277,400. Marijuana sales continue to help drive retail sales growth in Colorado. Because Colorado does not collect marijuana retail sales statistics, marijuana retail sales taxes are used to illustrate growth. In May 2017, year-over-year marijuana taxes increased by 9.8%. From January 2017 to May 2017 compared to the same period in 2016, marijuana taxes increased by 40.1%. Marijuana sales growth is beginning to decelerate but industry leaders are not concerned as initial growth rates were not sustainable. Growth in e-commerce has been outperforming sales at brick-and-mortar stores. With increased competition from online vendors, many stores are being forced to reduce employment. Colorado Mills shopping center also took a significant hit after severe hail damage caused the temporary loss of 2,000 to 3,000 jobs. Colorado Mills is not expected to re-open until November. Lakewood is preparing to lose $2.1 million in sales tax collections.

The Wholesale Trade Sector consists of two subsectors: durable goods and nondurable goods. Employment in this sector has steadily increased since November 2010. In June 2017, the year-over-year employment growth rate was 1.5%. Durable goods employment, accounting for 59.1% of Wholesale Trade, rose 4% year-over-year in June 2017. Nondurable goods saw a year-over-year decrease of 2.5% in employment.

In June 2017, employment in Transportation and Warehousing added 4,000 jobs year-over-year for a 5.6% increase. According to DIA, in May 2017, the airport saw an increase of 1.6 million travelers year-to-date compared to 2016, a 7% increase. However, the airport faced labor strikes in July. Employees at AirServ, PrimeFlight, and G2 protested health and safety issues, as well as low pay. Construction work will begin in 2018 on CDOT's $1.2 billion Central 70 project. The contractor will be required to hire 20% of the workforce from local communities. General transportation GDP is up, with a 6.4% increase in cargo.

Employment in the Utilities Sector, which accounts for 1.8% of TTU, decreased 1.2% year-over-year in June 2017, shedding 100 jobs. Black Hills Energy recently issued a request for up to 60 megawatts of renewable energy as part of the Renewable Energy Standard Compliance Plan. The Colorado Public Utilities Commission also approved Xcel Energy's Advanced Grid Intelligence and Security plan to invest over $600 million to improve power reliability, reduce power outages, make service smarter, integrate increasing clean energy onto the grid, and empower customers with more information to control and track their energy use.

Information

The Information Sector has grown extensively in Colorado in terms of output over the past decade. Real GDP growth for the sector rose 8% in 2016, marking the fastest growth among 20 industries. Industry GDP grew 15.2% over the past decade, with the recession having a disproportionate negative impact on industry output. Sector data through 2015 (most recent data available at the sector level) indicate real growth is coming from the publishing (including software) sector and the data processing, internet publishing, and other information services sector. However, GDP per employee pulled back modestly in both 2014 and 2015, 0.4% and 0.5%, respectively.

The impact on employment has been less pronounced. Information employment peaked at 113,300 jobs in January 2001 and has declined in 10 of the last 16 years. Total employment in June 2017 was 71,900 jobs, or 36.5% below peak, but up 0.4% year-over-year. The industry recorded year-over-year job growth for 49 of the last 50 months. Year-end 2016 marked three consecutive years of annual industry employment growth—accelerating in 2016. The committee initially estimated 600 jobs would be added in 2016, but job growth totaled 1,000. Year-over-year growth was recorded in both small and large firms. The midyear revised outlook for industry employment growth is 400 jobs or 0.6%. Nationally, in June 2017, the Information Sector lost jobs following a 2.2% year-over-year decrease.

Generally, both small and large firms are growing. Zayo and Level 3 remain large industry competitors, but questions remain about the impact of the CenturyLink–Level 3 merger.

The publishing industry has recorded 16 years of annual employment declines, standing 47.3% below the peak recorded in 2000—the last year the sector added jobs. The Software Publishing Sector added 300 jobs in 2016, while Telecommunications added 300 jobs during the year.

Internet often attracts the largest share of venture capital (VC) funding in the state. A PricewaterhouseCoopers (PWC) Money Tree report indicated that the internet sector received $99 million in VC investment in Q1 2017—nearly 29% of the total. Over the past four quarters, internet garnered $376 million in investment, or 45% of the $836 million reported by PWC. More broadly, when the software sector and the mobile and telecommunications sector are included, a majority of VC activity is targeting information-related sectors in Colorado (52% over the past year).

Financial Activities

The Financial Activities Sector includes establishments primarily engaged in financial transactions, as well as establishments engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets. In 2016, annual employment increased by 4,300 jobs and experienced an annual growth rate of 2.7%. The sector continued to post modest employment increases, growing by 3,100 jobs year-over-year in June 2017 and increasing by 1.9%. After expected revisions to employment growth, the revised midyear outlook for industry employment growth is 4,500 jobs or 2.8%. Financial Activities' contribution to the Colorado economy has also been modestly increasing. In 2016, the sector produced 19.7% of Colorado's GDP; in 2017, this share increased to 20.1%. In 2016, Financial Activities' real GDP increased 5.7%—the fifth fastest-growing sector in Colorado. A large portion of this increase can be attributed to the real estate sector in the state, making up 74% of the industry and experiencing 2.5% annual growth in 2016.

The major U.S. indices—the NASDAQ, the Dow Jones Industrial Average (Dow), and the S&P 500—are posting gains in 2017. On July 18, 2017, S&P 500 posted a 9.9% year-to-date increase compared to a 6% year-to-date increase in July 2016. The NASDAQ gained 17.9% year-to-date compared to the 2016 year-to-date increase of 0.1%; the Dow increased 9.2% year-to-date compared to 6.4% in 2016. The performance of these indices may be viewed as a reflection of investors' confidence in the economy. The growth shows that investors see the economy improving in the future.

Capital markets are changing and the way people are investing their savings in financial markets is changing, too. The Financial Activities Sector has been adapting and evolving in order to stay competitive in an increasingly cost-competitive climate. With management fees declining, many sector firms are merging to achieve economies of scale and remain competitive. Employment in the industry is usually correlated with the activity of the various financial markets. Periods of volatility require financial activity firms to acquire more labor while calmer, less volatile periods require fewer employees in the sector.

While rates have improved in the past year, as of late June 2017, interest rates for 10-year government bonds around the world remain low. The United States currently maintains one of the highest yields in the world, with 2.35% rate. Germany maintains a 0.47% yield, the United Kingdom maintains a yield of 1.25%, and Japan maintains a 0.08% yield. These low interest rates make it difficult for investors to make income. As yields rise, the banking industry can expect to see an increase in profits and growth.

In Q1 2017, almost 60% of insured U.S. institutions reported year-over-year growth in net income and net operating revenue of 12.7% and 6.3%, respectively.

With record employment and income, banks are seeing deposits grow. Total assets held in Colorado banks increased by 3.9% year-over-year in Q1 2017. The number of institutions decreased by 3, from 91 to 88, in Q1 2017.

Real Estate, Rental and Leasing Employment grew 3.4% year-over-year in June 2017 compared to year-over-year growth of 3.7% in June 2016. According to Dodge Data & Analytics data, the value of residential construction year-to-date in May 2017 is 5% less than the value of construction year-to-date in May 2016. According to the Federal Housing Finance Agency (FHFA) house price index, Colorado housing prices have been increasing. In Q1 2017, Colorado's house price index grew 9.9% year-over-year; the house price index for the nation recorded 5.5% year-over-year growth. Colorado ranks first in the nation in terms of year-over-year FHFA house price index growth. In Denver, rent prices continue to increase. The average monthly rent in Q2 2017 was $1,419.74, increasing by $36.98 from Q1 2017. The median rent rose by $31.21, to $1,376.79. In Q2 2017, 4,348 apartments were filled, outpacing the 2,152 new units built. In Denver, high demand is causing prices to increase as Colorado continues to be a desirable place to live (July 18, 2017. "Denver renters may not like how the renting market did in the second quarter," *The Denver Post*).

Professional and Business Services

The Professional and Business Services Sector (PBS) is one of the services-providing supersectors. PBS consists of three subsectors: Professional, Scientific, and Technical Services; Administrative and Support and Waste Management and Remediation Services; and Management of Companies and Enterprises. In Colorado, as of June 2017, the PBS Sector had 416,200 jobs, making it the third-largest industry, employing 15.7% of Colorado workers. The sector added 11,700 jobs since June 2016 for a 2.9% year-over-year growth rate. The revised midyear outlook for industry employment growth is 7,600 jobs, or 1.9%. Real GDP in 2016 for PBS increased 2% annually, to $43.1 million.

Professional, Scientific, and Technical Services (PST) includes establishments that engage in activities where human capital is the major input. Industry groups such as legal services, accounting, and tax preparation fall within PST. As of June 2017, PST employed 217,200 workers and added 7,600 jobs year-over-year. Year-over-year employment growth in June 2017 was 3.6%. PST accounted for 52.2% of total PBS employment in June 2017 and 63.6% of real GDP within the industry. In terms of GDP, PST increased 4.1%, to a total of $27.4 million. PST not only posted the strongest job growth of all the subsectors but also the fastest GDP growth.

Computer Systems Design and Related Services increased 5% in nonseasonally adjusted year-over-year employment growth as of June 2017. The sector added 2,800 jobs year-over-year in June 2017. This may be caused by the increasing presence of large tech companies in the region.

Employment in Legal Services also increased, with year-over-year growth of 1.1%, or 200 jobs. Automation and globalization within the legal industry may be contributing to this slow growth.

Administrative and Support and Waste Management and Remediation Services accounted for 38.9% of PBS employment as of June 2017 and 21.8% of real GDP. In the past year, the sector experienced 2.3% year-over-year growth, or 3,600 jobs. GDP rose 2% in May 2017. Job growth in this industry includes office clerks, security jobs, janitors and cleaners, and laborers and freight movers. Certified information systems security positions and security certification jobs have both seen large spikes. The increase in these security professionals can be accounted for by the increase of cyberattacks around the world. More companies are spending money to protect consumer information. In 2013, Target was involved in a 40 million individual records breach, and in 2014, Home Depot suffered the loss of 56 million customers' information.

Management of Companies and Enterprises (MCE) made up 14.6% of real GDP. MCE GDP decreased 6.3% year-over-year to a total of $6.3 million. As of June 2017, MCE gained 500 jobs for a 1.4% growth rate year-over-year. MCE is difficult to estimate because it is generally composed of holding companies operating in a vast array of areas. Examples of Colorado-based firms in this sector include Vail Resorts, Comcast, MDC Holdings, DaVita, and DISH Network. Growth within this sector depends on the success of the components held by each individual company.

Education and Health Services

The Education and Health Services (EHS) Sector includes establishments that provide instruction and training by private schools and universities, as well as establishments that provide health care and social assistance to individuals. EHS employment has steadily increased year-over-year for the entire 21st century. In June 2017, year-over-year job growth increased 2.9%, adding 9,671 jobs. A total of 12.7% of Colorado's workforce is employed in the EHS Sector; the national average is 15.8%. After accounting for expected revisions in the first half of 2016, the midyear revised outlook for industry employment growth in 2017 is 7,000 jobs or 2.1%. In May 2017, EHS real GDP totaled $20.6 billion, a year-over-year increase of 4.9%. EHS was the third fastest-growing industry in the state in May. The sector accounts for 6.1% of Colorado's real GDP.

Health Care and Social Assistance recorded year-over-year employment growth in June 2017 of 3.2%. Educational Services experienced a scant 0.3% employment increase year-over-year. In terms of 2016 annual real GDP growth, Educational Services slid 0.4%, while Health Care and Social Assistance increased 5.5%.

According to the Colorado Department of Higher Education, Colorado has 103 private education and seminary institutions totaling 122,994 students. Public education institutions total 31, and 14 are four-year schools. Both public and private schools across Colorado are waiting to see what the Trump administration will do concerning a number of Department of Education regulations. As of early July 2017, the Regulatory Reform Task Force has been looking at the Department of Education regulations to determine which regulations should be eliminated and which should be continued. The task force is reviewing more than 150 individual regulations and over 1,700 pieces of policy guidance. As the new presidential administration starts rolling back Obama era restrictions on private for profit education, companies like DeVry Education Group and Grand Canyon Education have seen stock jumps as high as 40% in 2017. With less regulation, this industry is poised to grow.

Health care is another sector that may see revisions and changes under the new administration. As of 2017, four individual insurance markets existed in the state. An estimated 92,000 individual insurance purchasers were disrupted as Anthem PPO and Rocky Mountain Health Plans left the mountain communities, and Humana and United exited the market. A new firm, Bright Health, has entered the market. As of early July 2017, Colorado saw significant increases in the cost of premiums. Kaiser, which offered the lowest cost plans across most markets and tiers in Colorado in 2016, raised premiums 18% in 2017.

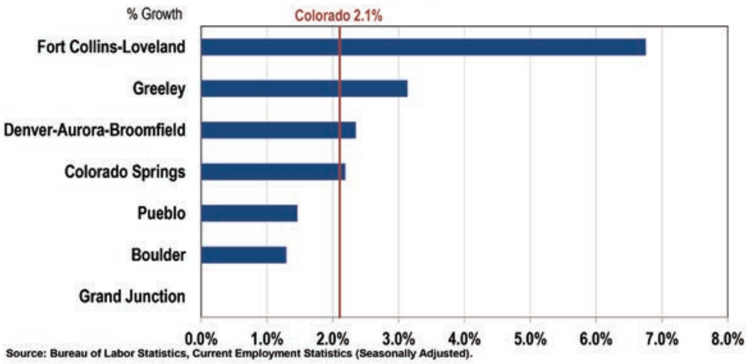
The number of people currently enrolled in Medicaid is growing in Colorado. As of May 2017, this population has grown 1.9% year-over-year. Generally, patients enrolled in Medicaid have conditions that are more complicated and costly to treat than non-Medicaid patients. They require more care and resources. If the proposed American Health Care Act (AHCA) were to become law, the population of Medicaid enrollees could expand and cause a major shift in this health care segment.

The House of Representatives and the Senate AHCA bills are similar but have key differences. Both versions roll back Medicaid expansions, have significant cuts to Medicaid spending, and suggest a per capita or block grant for funds. They both adjust for inflation in block and per capita grants, eliminate individual tax penalties, eliminate cost-sharing subsidies by 2020, prevent the use of federal funds for abortion, and defund Planned Parenthood for one year. Both bills repeal taxes identified in the Affordable Care Act (ACA). Both versions also adjust the differences in premiums for younger versus older Americans from 3:1 under the ACA to 5:1. If passed, AHCA could influence individuals' retirement decisions for those not yet eligible for Medicare. The two proposed bills differ in how they address the tax credit system. The Senate version would reduce the upper limit to 350% from 400% and calculate this value based on age and income. The House bill calculation is based primarily on age.

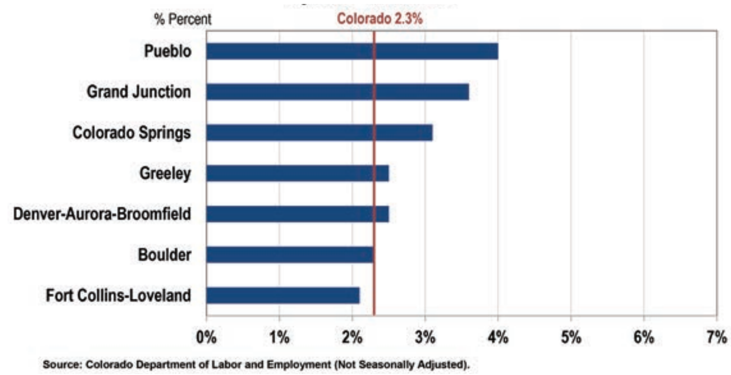
As of June 26, 2017, the Congressional Budget Office estimated 22 million people would be uninsured in the nation by 2018 if the Better Care Reconciliation Act of 2017 were to become law. The Colorado Health Institute estimated the impact on Colorado of the AHCA would be a loss of $14 billion in revenue for the state

Colorado MSA Metrics

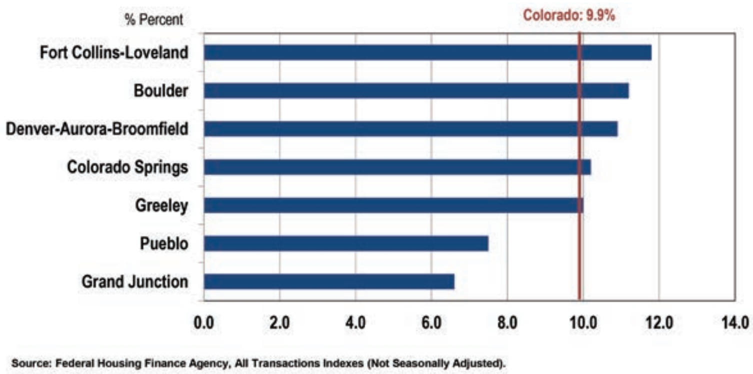
EMPLOYMENT GROWTH YOY CHANGE BY MSA JUNE 2017



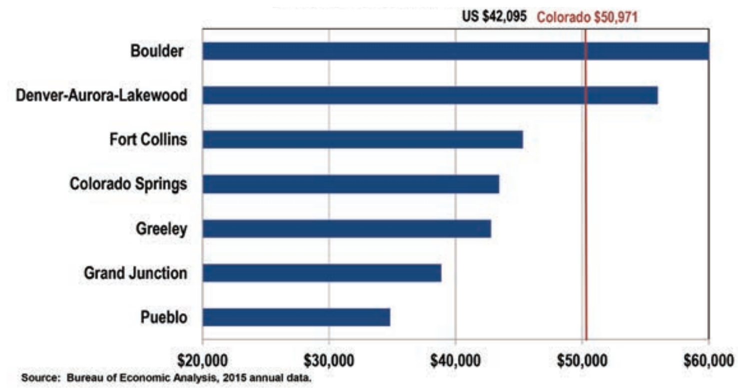
UNEMPLOYMENT RATE BY MSA JUNE 2017



FHFA HOME PRICES Q1 2016-Q1 2017



COLORADO PER CAPITA PERSONAL INCOME 2015



government and 600,000 Coloradans would lose Medicaid eligibility by 2030. The decline in federal government spending on Medicaid is projected to decrease employment in the health care sector, which is expected to trigger a number of economic multiplier effects, including reducing employment in construction, real estate, retail trade, finance and insurance, and other services. When the impacts of AHCA are allocated between coverage-related changes and tax repeal changes, declines are expected to occur across all earlier identified sectors. Decreases in sectors like financial services will be offset by gains resulting from the tax repeal changes, which would result in the bill having a net positive impact on the category.

The Commonwealth Fund at the Milken Institute School of Public Health at George Washington University provides a projection of the potential economic and employment effects of AHCA for all states. Colorado is one of only three states expected to see a net increase in employment by 2026. The rollbacks would affect the state's rural communities more than the urban centers. According to the Colorado Health Institute projection, Medicaid expansions would have the largest net increase in these counties: San Juan, Saguache, Rio Grande, Conejos, Alamosa, Costilla, Pueblo, Huerfano, Las Animas, Otero, and Prowers.

Leisure and Hospitality

The Leisure and Hospitality Sector covers establishments in the tourism, travel, and recreational industries. Employment in this sector increased by 10,800 jobs, or 3.4% year-over-year, in June 2017. The midyear revised outlook for industry employment growth is 10,100 jobs, or 3.1%. In 2016, Leisure and Hospitality accounted for 4.9% of Colorado's nominal GDP. The sector's real GDP output increased 6.5% in 2016.

Colorado Tourism

According to data from VISIT DENVER and an article in the *Denver Business Journal,* 2016 was another record year for tourism in Colorado (June 28, 2017. "Colorado bursts into top 10 tourist-attracting states with record year," *Denver Business Journal*). The year 2016 marked the sixth consecutive year Colorado set a new record for the number of tourist visits to the state while also setting a record in total tourist spending. It moved back into the top 10 tourist-drawing states for the first time in 22 years. The Colorado Tourism Office (CTO) reported that in 2016 the state garnered 82.4 million visitors who collectively spent $19.7 billion. This represents an

Photo courtesy of VISIT DENVER.

increase of 6% in the number of visitors compared to 2015 and a 2.7% increase in spending. This increase in visits boosted the state from 13th to 9th in terms of total annual visitors. Committee members expect 2017 tourism numbers to either match or exceed 2016's record number of visits and spending.

According to the CTO, in 2016 Colorado attracted 9.3% more marketable leisure travelers (these visitors could vacation anywhere but chose Colorado). They also spent 65% more than those who visited friends and relatives. The national average for the increase of visits by marketable leisure travelers was 4%. The number of marketable leisure travelers who visited Colorado was 18.7 million. The per person expenditures for these travelers was $513, which is more than the $435 spent by business travelers and the $311 spent by those visiting friends and relatives.

Colorado state parks had a record year with 13.98 million visitors. Eight of the nine national monuments and parks saw increased tourism. Great Sand Dunes National Park recorded an annual visitation increase of 29.6%, followed by Bent's Old Fort National Historic Site (21.9%) and Sand Creek Massacre National Historic Site (16.3%).

According to the *Denver Business Journal,* Colorado experienced a 6% decrease in the number of business travelers, to 4.2 million, in 2016 (June 28, 2017. "Colorado bursts into top-10 tourist-attracting states with record year," *Denver Business Journal)*. The national average during this period remained relatively stable.

Denver Tourism

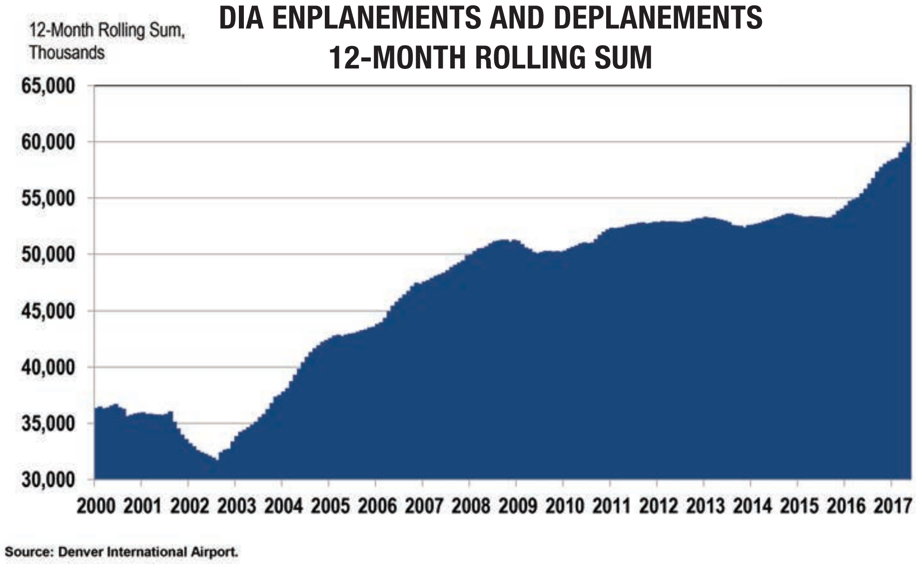
According to VISIT DENVER, the average number of nights overnight visitors spent in Denver decreased from 3.3 to 3.0 in 2016. This number has been steadily declining from its peak in 2010, at 3.7 nights.

In 2016, the city welcomed 14.7 million overnight leisure travelers who collectively spent $5.3 billion during their stay, according to VISIT DENVER. These figures represent a 6% year-over-year increase in overnight visits to the city and a 5% increase in total spending by overnight visitors. A total of $1.6 billion was spent on accommodation, almost $1.1 billion was spent on eating/drinking, $1.5 billion was spent on transportation, $660 million was spent on retail, and $476 million was spent on recreation. Denver also saw an 18% increase in day trips for a total of 14.2 million visitors.

The committee noted that Denver will host the International Pow Wow (IPW) tourism trade show in May 2018. Host cities often see a 5–10% increase in tourism for several years following the show. The committee also noted that Denver is attracting an increasing number of trade shows. According to *The Denver Post,* Denver will host the prestigious Outdoor Retailer trade shows for the next five years (July 7, 2017. "It's official: massive Outdoor Retailer trade shows coming to Denver starting in 2018," *The Denver Post)*. In early July 2017, officials announced that the Mile High City will host three Outdoor Retailer trade shows that will attract approximately 85,000 visitors for an estimated economic impact of $110 million. Overall, the committee described the future of the Colorado Leisure and Hospitality Sector as extremely positive.

Air Transportation

According to the FAA, DIA ranked as the sixth busiest airport in the nation in 2016. In April 2017, the airport recorded a 9.9% year-over-year increase in total



passengers compared to April 2016. Due to the presence of three hub airlines and a number of rival airlines, DIA is known for its competitive airfare pricing. United currently holds the largest market share at DIA, with 42% of total passengers. Southwest Airlines and Frontier Airlines follow, with market shares of 30% and 11%, respectively. As of April 2017, United recorded the largest increase in total passengers among major airlines, with year-over-year growth of 13.6%. Southwest, Delta, and Frontier had year-over-year increases in total passengers of 9.9%, 8.2%, and 3.4%, respectively. American Airlines was the only major carrier with a year-over-year decrease in total passengers, 6.6%. The other airlines collectively saw growth of 16.7% in total passengers. According to 9NEWS, DIA was expected to record its busiest day on June 30, 2017, as an estimated 197,000 passengers were anticipated to travel through the airport. The Colorado Springs Airport recorded a 13.4% year-over-year increase in total passengers in May 2017.

Colorado Ski Industry

According to Colorado Ski Country USA, Colorado hosted 7.3 million skier visits in the 2016–17 ski season, the second busiest season ever. According to *The Denver Post,* the state received between 12.7 million and 13 million total visits. Visits to Vail Resorts mountains—Vail, Breckenridge, Beaver Creek, and Keystone—are not included in the Colorado Ski Country USA figure. This marks the state's second-best season on record and the fourth consecutive season that the state outperformed its five-year average. Snowstorms in January and December brought deep snow to the high country. In terms of ski pass sales, Vail Resorts noted that sales of its Epic Pass for the 2017–18 season were up by 10%; company revenue climbed 16%.

A few notable events that occurred this season include the hosting of the International Ski Federation World Cup Finals at Aspen Snowmass in March and the return of the Winter Park Express, a train that transports skiers and snowboarders from Union Station in Denver to the Winter Park Resort. As of July 2017, the ski industry is experiencing some consolidation. Larger firms such as Vail and Aspen Resorts are purchasing independent resorts. According to Forbes, Aspen Resorts has partnered with KSL Capital to purchase Intrawest and its six resorts that include the Colorado ski areas of Winter Park and Steamboat.

Other Services

Establishments in the Other Services Supersector are services not specifically categorized elsewhere in the classification system. As a result, the three subsectors in this supersector are highly fragmented and diverse. Car washes, beauty salons, religious organizations, funeral homes, grantmaking foundations, and labor unions are examples of the type of industries in this sector. Population demographics and disposable income are the main influencers of industry growth.

According to the committee, establishments within the Other Services Sector tend to be small, averaging about five employees per business. In 2016, more than 16,000 businesses were classified in the Other Services Sector. This represents an increase of just over 1,000 businesses from the previous year.

Other Services make up 4.1% of total state employment. As of June 2017, the sector recorded 4,000 new jobs, a year-over-year increase of 3.8%. In total, the sector employed 190,300 in June 2017, according to the BLS. The Repair and Maintenance subsector recorded 6% growth year-over-year. Personal and Laundry Services (3.2%); and Religious, Grantmaking, Civic, Professional, and Similar Organizations each grew 2.6%. The revised midyear outlook for industry employment growth is 2,800 jobs, or 2.6% growth. The industry statistics will be impacted by a classification change that moves some home health care workers from the Education and Health Services Supersector to Other Services. Increases in Repair and Maintenance can be explained by the longer life of vehicles. Today, the average car lasts eight years. Other subsectors are increasing steadily due to Colorado's population increase of 10% from 2010 to 2016.

According to the BEA, in 2016 the nominal GDP for the Other Services Sector in Colorado was almost $7.7 billion. This accounts for a healthy 5.8% year-over-year growth rate for the sector. In 2016, Other Services made up about 2.4% of Colorado's total nominal GDP.

Government

The Government Supersector comprises federal, state, and local government, including higher education institutions and public schools. In June

2017, the Government Sector employed 428,200 individuals, a year-over-year increase of 0.8%. The industry accounted for 16.2% of total Colorado employment. After expected revisions to industry employment in the first half of the year, the revised midyear outlook for industry employment growth in 2017 is 8,700 jobs or 2.1%. Sector employment has surpassed pre-recession levels, and moderate tax revenue growth should lead to increased employment in the future. In 2016, the Government Sector made up 12.3% of Colorado's nominal GDP and increased 3.3% year-over-year.

The local government subsector comprises city, county, school, and special district employees. Local government was the only government subsector to experience a year-over-year decrease in total employment, declining 0.2% in June 2017. Total employment in local government now stands at 256,700 as of June 2017. The number of local government employees who work in the educational services sector has increased by 200 year-over-year in June 2017, representing growth of almost 0.1%.

The federal government subsector includes such agencies as the Department of Defense, the National Park Foundation, federal courts, federal laboratories, and other institutions managed and funded by the federal government. Federal government employment totaled 54,800, recording a year-over-year increase of 1.5% in June 2017.

The state government subsector includes agencies and departments run by the state such as CDOT and the Colorado Department of Regulatory Agencies. State agency and department employees include a vast array of individuals, such as state patrol officers, state university professors, and fishery supervisors for the Colorado Department of Corrections. As of June 2017, state government employed 116,500 individuals, year-over-year growth of 2.6%. The total number of state government employees working in the educational services sector increased 9.5%—a gain of 5,700 workers—year-over-year in June 2017.

Declines in natural resource prices and production are weighing on the revenue state and local governments receive through severance taxes and property taxes. Rising residential and commercial property values will help government entities in many areas offset the losses accrued through the reduction in natural resource production.

A state-level fee underwent revision in 2017 in order to prevent the TABOR limit from being exceeded. According to *The Denver Post,* the hospital provider fee charges hospitals for inpatient days and outpatient days (April 23, 2017. "How Colorado's hospital provider fee works," *The Denver Post)*. The fees are then redistributed among the hospitals along with additional federal funds using a method that distributes more money to hospitals serving rural communities and hospitals that serve a larger number of Medicaid and uninsured patients. Sometimes hospitals do not receive as much money as they put into the system through fees. This program came under scrutiny in 2017 when the revenue it generated threatened to surpass the TABOR revenue limit. One of the provisions of Senate Bill 267 passed in June 2017 is the reclassification of the fees assessed on hospitals so that they will not count toward Colorado's TABOR limit. The fees are now classified as enterprise according to *The Pueblo Chieftain* (June 10, 2017. "Hospitals thankful for provider fee deal," *The Pueblo Chieftain)*. According to an article that appeared in *The Journal* before this bill was implemented, $264 million of program cuts were scheduled to ensure the TABOR limit was not exceeded (July 5, 2017. "Legislature mammoth compromise bill goes into effect," The Journal). These cuts would have led many rural hospitals into a dismal budget situation that would have resulted in some closings.

The Gallagher Amendment is another measure that may affect government's revenue at the local level. In accordance with this amendment, property taxes for homeowners and commercial property owners are determined based on an assessment ratio. The amendment mandates that residential properties account for 45% of property taxes collected, while commercial properties account for the remaining 55%. Certain areas of the state, such as Boulder, are seeing significant housing price growth according to data from the Federal Housing Finance Agency (FHFA). The appreciation in the value of these residential properties increases state and local government property tax revenue. Residential property taxes must be lowered in order to prevent the share of these property taxes eclipsing the 45% limit set forth by the Gallagher Amendment. This will be achieved by reducing the property tax assessment ratio from 7.96% to 7.2%. Communities such as Boulder will not see a large reduction in revenue as the continued appreciation of property values will mitigate the effects of the tax cut. However, communities that are not experiencing residential property value appreciation will see a reduction in their local government's tax revenue, which can strain everything from fire services to education.

The committee noted that local government employment is stable. Due to an increase in K–12 educational spending, employment will increase as more teachers and educational professionals are hired. The committee also noted that state government employment is expected to increase in the second half of 2017.

The June 2017 report released by the Colorado Office of State Planning and Budgeting estimated that general fund revenue will increase every year through 2019. Deferred income taxes due to stock market gains are expected to increase revenue. Corporate income tax revenue is declining for the third consecutive quarter in FY2016–17 mostly due to weak earnings in much of the fiscal year.

International Trade

According to data from the BEA, U.S. net exports rose at a seasonally adjusted annual rate of 7% in Q1 2017. Exports of goods rose 10.5%, and exports of services grew 0.7%. Imports increased 4%—imports of goods climbed 4.4%, and imports of services rose 2.4%. While exports rebounded in Q1 2017 after declining in Q4, imports in Q1 2017 grew for the fourth consecutive quarter. The United States' top five trading partners include China, Canada, Mexico, Japan, and Germany according to the United States Census Bureau.

In 2016, exports of goods from Colorado declined from $8.4 billion to about $8 billion, a year-over-year drop of 4.7% and down 9.4% from the 2014 peak. Year-to-date through May 2017 exports from Colorado rose 7.3% compared to the same period the prior year.

According to WISERTrade, as of May 2017 year-to-date values Colorado's top five export markets were (in order): Canada, Mexico, China, Japan, and the Republic of Korea. Trade with Canada declined in 2015 and 2016; the 2016 year-over-year decline was 3.6% and from 2014 it slid 17.5%. A key factor in the decrease in trade was attributed to the declining value of the Canadian dollar. With a weak currency, many Canadian customers could no longer afford U.S products. As of May 2017, the year-to-date value of exports to Canada increased 7.3% compared to the previous year's value. Oil and gas prices have a significant impact on the value and amount of Colorado exports to Canada. Exports and imports with Mexico were slightly down in 2015 and 2016, and increased year-to-date through May 2017. The year-over-year change in exports to Mexico increased 0.8% in 2015 and decreased 0.7% in 2016. The May 2017 year-to-date value increased 37.1% compared to May 2016. Exports to China were down in 2016 and down 1.8% year-to-date through May 2017. The value of Colorado exports to Japan declined 8.3% and 4.8% in 2015 and 2016, respectively, but through May 2017 year-to-date, the value of exports increased 7.6% compared to the value in May 2016. Trade with the Republic of Korea has increased significantly and is now one of Colorado's top five trading partners. In 2015, the year-over-year value of exports declined modestly, 0.6%, and was followed by an increase of 20.2% in 2016 and 13.5% year-to-date through May 2017.

The value of goods that Colorado imports has been declining, down 5.3% and 9.5% in 2015 and 2016, respectively. The top three countries for Colorado imports are (in order): Canada, China, and Mexico.

Imports from Canada and Mexico are declining, while China remains volatile. The 2015 year-over-year decline in imports from Canada was 25.6%, followed by a decrease of 13.9% in 2016. Imports from China increased in 2015, gaining 6.8%, then fell 6.9% in 2016. The value of imports originating from Mexico has also declined. In 2015, the year-over-year value of exports slid 1%, which was followed by a steeper decline in 2016 of 8.5%.

Colorado's top four exports in May 2017 were (in order): Meat and Edible Meat Offal; Optical, Photographical, Medic or Surgical Instruments; Industrial Machinery, Including Computers; and Electric Machinery, Sound Equipment, Television Equipment, Parts exports. Meat and Edible Meat Offal exports fell 15.7% in 2015 year-over-year, followed by a 21.7% increase in 2016. The May 2017 year-to-date value of exports of Meat and Edible Meat Offal was 40% greater than the previous year's value. The value of exports of Optical, Photographical, Medic or Surgical Instruments decreased year-over-year by 3.8% in 2015 and by 2.2% in 2016. Industrial Machinery, Including Computers, exports have fallen in recent years, declining 0.1% year-over-year in 2015 and 14.6% in 2016. Electric Machinery; Sound Equipment; Television Equipment; Parts exports increased 1.9% year-over-year in 2015 and decreased 3.4% the following year.

As previously discussed in the Agriculture section, the rejection of the proposed Trans-Pacific Partnership Agreement (TPP) and the strong dollar are hurting Colorado exporters. The strong dollar is causing Colorado exports to cost more relative to other currencies in foreign markets. The rejection of the TPP also hurt Colorado agricultural exporters as the agreement was slated to lower foreign tariffs on domestically produced products. For instance, beef tariffs in Japan were set to decrease from 32.5% to 9%, which would have led to an increase in beef exports from Colorado.

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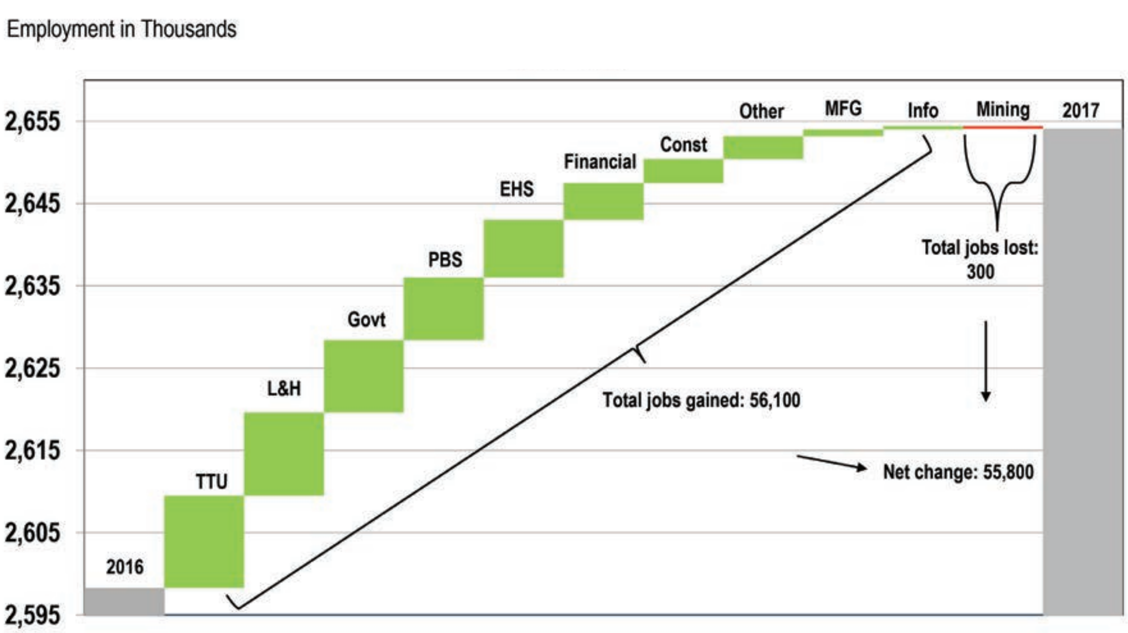
COLORADO BUSINESS REVIEW

Leeds School of Business
UNIVERSITY OF COLORADO **BOULDER**
BUSINESS RESEARCH DIVISION

COLORADO EMPLOYMENT CHANGE FORECAST 2016-2017



Source: Bureau of Labor Statistics, Current Employment Statistics (SA).

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