The Colorado Economy: Today and 100 Years Ago

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The views expressed are those of the presenter and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.
Employment has been increasing in Colorado and the nation over the past eight years, with Colorado gains outpacing the nation.

**PAYROLL EMPLOYMENT GROWTH**

*Index 100 = December, 2007, Seasonally Adjusted*

<table>
<thead>
<tr>
<th>Percent Change</th>
<th>Past 10 Years</th>
<th>Past Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. (Dec. ‘17)</td>
<td>6.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Colorado (Nov. ’17)</td>
<td>13.4%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Denver (Nov. ‘17)</td>
<td>17.2%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics
The majority of industries in Colorado have added jobs over the past year.

**Change in Payroll Employment, November 2017**

*Seasonally Adjusted*

<table>
<thead>
<tr>
<th>Industry</th>
<th>Colorado</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>3.9%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Information</td>
<td>3.3%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>2.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>State Government</td>
<td>1.8%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Transportation &amp; Utilities</td>
<td>1.4%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>1.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>-0.7%</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>-1.8%</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Other Services</td>
<td>-3.7%</td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Resources &amp; Mining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Educational Services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Bureau of Labor Statistics*
Employment has increased from about 366,000 in 1920 to more than 2.8 million today.

**Employment**

*1920 - 2016*

**Thousands**

- United States (right axis)
- Colorado (left axis)

**Note:** Employment data is shown for each decade from 1920 to 2005, and then annually for 2005 to 2016. Source: United States Census Bureau and author's calculations.
Employment trends in the U.S. and Colorado were similar between 1920 and 1940. Since then, employment growth in Colorado has generally outpaced the nation.

**Employment**

*Index 100 = 1920*

*Note: Employment data is shown for each decade from 1920 to 2005, and then annually for 2005 to 2016. Source: United States Census Bureau and author's calculations.*
The industry composition has shifted dramatically over time with a smaller share of workers in agriculture and manufacturing and more in service-oriented industries.

**Share of Total Employment by Industry**

1920 - 2016

Agriculture, Forestry and Animal Husbandry
Extraction of Minerals
Manufacturing and Mechanical Industries
Transportation
Trade
Public Service
Professional Service
Finance

United States - 1920
United States - 2016
Colorado - 1920
Colorado - 2016

Note: The “Professional Service” industry includes the information, professional and technical services, management of companies and enterprises, administrative and waste services, private educational services, health care and social assistance, accommodation and food services, and other services sectors. The “Trade” industry includes the construction, wholesale trade, and retail trade sectors.

Source: United States Census Bureau, Bureau of Economic Analysis, Haver Analytics, and author’s calculations.
Unemployment rates are below national rates across most of Colorado.

### Unemployment Rates
November 2017, Seasonally Adjusted

<table>
<thead>
<tr>
<th>Unemployment Rate</th>
<th>U-3</th>
<th>U-5*</th>
<th>U-6*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States (Dec. ‘17)</td>
<td>4.1%</td>
<td>5.1%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Colorado (Nov. ‘17)</td>
<td>2.9%</td>
<td>3.3%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Denver (Nov. ‘17)</td>
<td>3.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*U-5 and U-6 values are 12-month moving averages as of Q3 2017 for Colorado and are for December, 2017 for the United States.

Less than 2%
2 to 3%
3 to 4%
4 to 5%
Greater than 5%

Source: Bureau of Labor Statistics and Haver Analytics
Along with growth in employment, Colorado and the U.S. have experienced rising real per capita personal income over the past century.

**REAL PER CAPITA PERSONAL INCOME**

*2016 Dollars*

Source: United States Census Bureau, Bureau of Economic Analysis, and Haver Analytics.
Colorado’s population has increased from 906,000 in 1918 to more than 5.5 million.

Population
1918 - 2016

United States (right axis)

Colorado (left axis)

Source: United States Census Bureau and Haver Analytics.
Colorado has been an attractive place to relocate for decades, and Colorado’s population growth has outpaced national gains since the mid-1950s.

**Population**

*Index 100 = 1918*

Source: United States Census Bureau and Haver Analytics.
Colorado continues to experience net in-migration, but the pace of growth has slowed over the past year.

**NET MIGRATION**

*Total 2016 Net Migration as a Percentage of 2016 Population*

<table>
<thead>
<tr>
<th>Annual Percent Change</th>
<th>2017*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>0.3%</td>
</tr>
<tr>
<td>Colorado</td>
<td>0.8%</td>
</tr>
<tr>
<td>Denver County (2016)</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

*Note: 2017 numbers have currently only been released by state.*
Over time, the population has been increasingly concentrated in urban areas in Colorado.

**Share of Total Population by County**

<table>
<thead>
<tr>
<th>Year</th>
<th>Greater than 10%</th>
<th>5% to 10%</th>
<th>2% to 5%</th>
<th>1% to 2%</th>
<th>0 to 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Source: United States Census Bureau, Bureau of Economic Analysis, and Haver Analytics.
Residential construction activity has been increasing for eight years, led by strong gains in multifamily building.

Residential Permits
Seasonally Adjusted, Year-to-Date Through November

Source: Census Bureau/Haver Analytics
Low inventories have led to strong home price appreciation in recent years in Colorado.

Source: Federal Housing Finance Agency
Tourism activity has been strong in Colorado over the past few years.

**HOTEL OCCUPANCY RATES**  
*Colorado*

**HOTEL ROOM RATES**  
*Colorado, 1999 Dollars*

**Source:** Colorado Hotel and Lodging Association
Oil prices have increased over the past month and are currently above average breakeven prices in the region.

**ENERGY PRICES**

Source: Bloomberg Energy Services
Energy activity has picked up in response to higher oil prices, and regional energy contacts expect additional gains in the coming months.

Source: Baker Hughes, Energy Information Administration and Haver Analytics
The agriculture sector has shown some signs of stabilizing, but farm incomes remain weak.

**U.S. Real Net Farm Income**

*Billions, 2016 Dollars*

*Forecast for 2017*
For additional information on the regional economy: