Emerging Trends in the Colorado Economy

Alison Felix
Economist and Branch Executive
Federal Reserve Bank of Kansas City
Denver Branch

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.
The Structure of the Federal Reserve System

- The Federal Reserve System was created by Congress in 1913.

- It is a public-private, decentralized institution consisting of the Board of Governors in Washington, D.C. and 12 regional Reserve Banks.
  - Board of Governors
    - Consists of seven members who are appointed by the President and confirmed by the Senate to serve 14-year terms.
    - There are currently five members of the Board of Governors: Jerome Powell, Michelle Bowman, Lael Brainard, Richard Clarida and Randal Quarles.
  
  - Regional Federal Reserve Banks
    - There are 12 Regional Reserve Banks, each serving a unique district. These are semi-independent by design.
    - The Reserve Banks are governed by their Board of Directors, and the Directors (excluding Banking Directors) select the President of the Bank.

  - Federal Open Market Committee (FOMC)
    - Comprised of the 7 members of the Board of Governors and the 12 Reserve Bank Presidents (only 5 presidents are voting members on a rotating basis).
    - Charged with conducting monetary policy.
Regional Federal Reserve Banks and Branch Locations
The Primary Functions of the Federal Reserve System

• Conduct the Nation’s Monetary Policy
  – The Federal Open Market Committee is the group charged with conducting monetary policy within the U.S.
  – The Committee has a statutory mandate from Congress to promote maximum employment, stable prices and moderate long-term interest rates.

• Provide and Maintain an Effective and Efficient Payments System
  – The Federal Reserve supplies payments services to the public through depository institutions including banks, credit unions and savings and loans.
  – We also serve as a banking and fiscal agent for the United States government.
  – Payment services includes cash processing, processing and clearing checks, transferring funds and issuing, transferring and redeeming U.S. government securities.

• Supervise and Regulate Banking Operations
  – The Federal Reserve ensures the safety and soundness of banks and ensures that banks provide fair and equitable services to consumers.
  – The Federal Reserve also monitors and promotes the stability of the financial system as a whole.
Employment has been increasing in Colorado and the nation for more than 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>Dec. ‘07 to Present</th>
<th>Past Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. (Apr. ‘19)</td>
<td>9.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Colorado (Mar. ’19)</td>
<td>17.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Grand Junction (Mar. ’19)</td>
<td>1.1%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Sources: Bureau of Labor Statistics / Haver Analytics and author’s calculations.
The majority of industries in Colorado have added jobs over the past year.

**Change in Payroll Employment, March 2019**

*Seasonally Adjusted*

- Transportation & Utilities: 5.3%
- Professional & Business Services: 4.2%
- Other Services: 4.1%
- Private Educational Services: 2.6%
- Natural Resources & Mining: 2.5%
- Health Care & Social Assistance: 1.9%
- Leisure & Hospitality: 1.6%
- Local Government: 1.4%
- Construction: 1.3%
- Manufacturing: 1.2%
- Wholesale Trade: 1.0%
- Retail Trade: 0.4%
- Information: 0.1%
- Federal Government: -0.2%
- State Government: -0.5%
- Financial Activities: -2.3%

**Colorado**

**United States**

Source: Bureau of Labor Statistics / Haver Analytics
Unemployment rates are low across most of Colorado.

**Unemployment Rates**  
*March 2019, 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 (Apr. ‘19)</td>
<td>3.6%</td>
<td>4.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Colorado (Mar. ‘19)</td>
<td>3.5%</td>
<td>3.8%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Grand Junction (Mar. ‘19)</td>
<td>4.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*U-5 and U-6 values are 12-month moving averages as of Q1 2019 for Colorado and are for April, 2019 for the United States.*
Labor force participation rates have increased substantially in Colorado over the past three years.

**Labor Force Participation Rates**

*Seasonally Adjusted*

- **Colorado**: 69.3%
- **United States**: 63.0%

Note: Gray bars indicate recession.
Sources: Bureau of Labor Statistics and National Bureau of Economic Research / Haver Analytics
Colorado continues to experience net in-migration, but the pace of growth has slowed somewhat over the past couple of years.

**Net Migration**

*Total 2018 Net Migration as a Percentage of 2018 Population*

<table>
<thead>
<tr>
<th>Annual Percent Change</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>0.3%</td>
</tr>
<tr>
<td>Colorado</td>
<td>0.9%</td>
</tr>
<tr>
<td>Mesa County</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

More than 2%  
1% to 2%  
0% to 1%  
-1% to 0%  
-2% to -1%  
Less than -2%

Source: Census Bureau
Residential construction activity has increased significantly since 2009 in Colorado, but permitting is down so far this year.

**Residential Permits**

*Seasonally Adjusted, Year-to-Date through March*

### Colorado

**Multifamily**

**Single Family**

### Grand Junction

**Multifamily**

**Single Family**

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

Source: Federal Housing Finance Agency / Haver Analytics
The services sector continues to expand at a solid pace.
Manufacturing activity has been strong the past two years, but recent surveys suggest the pace of expansion may be slowing.

MANUFACTURING ACTIVITY

Diffusion Index, Seasonally Adjusted, Month-over-Month

U.S. 52.8
April 2019
Kansas City 52.6
District
April 2019

Sources: Kansas City Federal Reserve Bank and ISM / Haver Analytics
Despite ongoing trade and tariff concerns, exports from Colorado increased last year.

**COLORADO EXPORTS BY TRADING PARTNER**

**Billions**

**DECEMBER 2018 YEAR-TO-DATE**

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent Change</th>
<th>SHARE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Trade</td>
<td>3.3%</td>
<td>100%</td>
</tr>
<tr>
<td>All Other</td>
<td>7.6</td>
<td>31.5%</td>
</tr>
<tr>
<td>Japan</td>
<td>1.8</td>
<td>5.4</td>
</tr>
<tr>
<td>Mexico</td>
<td>-4.8</td>
<td>15.1%</td>
</tr>
<tr>
<td>Canada</td>
<td>3.2</td>
<td>17.3%</td>
</tr>
<tr>
<td>China</td>
<td>1.5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Eurozone</td>
<td>5.1</td>
<td>18.2%</td>
</tr>
</tbody>
</table>

*Shares are for 2018

Sources: WISERTrade and Census Bureau
Energy activity rose substantially over the past two years in response to higher oil prices.

**Crude Oil Production**
*Millions of Barrels, Monthly, Seasonally Adjusted*

**United States (left)**

**Colorado (right)**

Sources: Baker Hughes and Energy Information Administration / Haver Analytics
After declining in the fourth quarter, oil prices have increased in recent months.

Source: Energy Information Administration / Haver Analytics
Oil prices are expected to remain above profitable levels over the next two years.

**Energy Survey Special Question**

*Q1:2019*

<table>
<thead>
<tr>
<th>$ / barrel</th>
<th>Oil (WTI)</th>
<th>Natural Gas (Henry Hub)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$0</strong></td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td><strong>$20</strong></td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td><strong>$40</strong></td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td><strong>$60</strong></td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td><strong>$80</strong></td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td><strong>$100</strong></td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td><strong>$120</strong></td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
</tbody>
</table>

**Notes:** Blue bars represent range for survey respondents. Numbers above bars indicate average of the range (the black line in the middle of the blue bars).

Source: Kansas City Federal Reserve Bank Energy Survey
The agriculture sector continues to struggle as commodity prices remain low.

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

*Billions, 2018 Dollars*

*Forecasts for 2018 and 2019*  
Source: USDA
For additional information on the regional economy: