Economic & Revenue Forecast

Presentation to the Joint Budget Committee
March 16, 2023
Economic Outlook
Positive, but slower, economic growth anticipated

Real U.S. Gross Domestic Product

Dollars in Trillions

- Great Recession
  - 2008: -0.1%
  - 2009: -2.5%

- 2020: -2.8%
- 2021: +5.9%
- 2022: +2.1%
- 2023 Forecast: +1.1%
- 2024 Forecast: +2.1%

Source: U.S. Bureau of Economic Analysis and Legislative Council Staff March 2023 projections.
Real GDP is inflation-adjusted to chained 2012 levels and shown at seasonally adjusted annualized rates.
Colorado employment gains led by leisure & hospitality

### Colorado Job Gains and Losses by Industry, January 2023

**Year-over-Year Change**

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Thousands of Jobs</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>20.0</td>
<td>6.1%</td>
</tr>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>19.4</td>
<td>7.1%</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>18.4</td>
<td>3.9%</td>
</tr>
<tr>
<td>Professional, Scientific &amp; Technical Services</td>
<td>17.7</td>
<td>6.6%</td>
</tr>
<tr>
<td>Trade, Transportation &amp; Utilities</td>
<td>6.2</td>
<td>1.3%</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>6.0</td>
<td>1.7%</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>5.3</td>
<td>1.7%</td>
</tr>
<tr>
<td>Management of Companies &amp; Enterprises</td>
<td>4.8</td>
<td>1.5%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>4.2</td>
<td>1.6%</td>
</tr>
<tr>
<td>Government</td>
<td>4.1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Real Estate &amp; Leasing</td>
<td>3.3</td>
<td>5.6%</td>
</tr>
<tr>
<td>Local Government</td>
<td>2.3</td>
<td>0.9%</td>
</tr>
<tr>
<td>Other Services</td>
<td>1.9</td>
<td>1.6%</td>
</tr>
<tr>
<td>State Government</td>
<td>1.9</td>
<td>1.5%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>1.8</td>
<td>1.6%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1.7</td>
<td>1.1%</td>
</tr>
<tr>
<td>Mining &amp; Logging</td>
<td>1.5</td>
<td>7.4%</td>
</tr>
<tr>
<td>Construction</td>
<td>0.8</td>
<td>0.4%</td>
</tr>
<tr>
<td>Educational Services</td>
<td>0.7</td>
<td>1.6%</td>
</tr>
<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td>0.6</td>
<td>1.1%</td>
</tr>
<tr>
<td>Transportation &amp; Utilities</td>
<td>0.2</td>
<td>0.2%</td>
</tr>
<tr>
<td>Federal Government</td>
<td>(0.1)</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Information</td>
<td>(0.9)</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>(2.7)</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Administrative &amp; Support Services</td>
<td>(4.1)</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>(6.0)</td>
<td>-4.9%</td>
</tr>
</tbody>
</table>

Colorado’s unemployment rate returned to pre-pandemic levels in 2022

Unemployment rates

Colorado personal income rose 8.5 percent in the third quarter of 2022, boosted by TABOR checks

Year over Year Percent Change

-10% -5% 0% 5% 10% 15%

Personal Income

Wages & Salaries

Transfer Payments

Dividends, Interest & Rent

Proprietors' Income

Employer Contributions

Social Insurance Contributions


Source: U.S. Bureau of Economic Analysis with Legislative Council Staff calculations. Data are seasonally adjusted through 2022Q3.
Excess savings from pandemic-related programs spent down quickly

Personal Savings Rate

Source: U.S. Bureau of Economic Analysis.
*The personal savings rate is calculated as the ratio of personal saving as a percentage of disposable personal income. Data are shown as seasonally adjusted annual rates.
Business activity remained strong in 2022

Business Investment, Income and Profits

*Trillions of Dollars*

- Corporate Profits after Tax
- Equipment & Intellectual Property Investment
- Proprietors’ Income

Source: U.S. Bureau of Economic Analysis. Data are not adjusted for inflation. Data are through 2022Q3.

Industrial Production Index

*Index 2017 = 100*

Source: Federal Reserve Board of Governors. Data are through January 2023.
Nation’s inflationary pressures abating, forecast to average 4.8 percent in 2023

U.S. City Average CPI-U Inflation

Year-over-Year Change in Prices

Inflation is calculated as the growth in urban area prices in a given period relative to the same period in the prior year.

*Headline inflation includes all products and services. **Core inflation excludes food and energy prices.
Energy and transportation prices easing, housing continues to exert upward pressure

Contributions to U.S. CPI-U, Selected Components, February 2023

Year-over-Year Change in Prices

Inflation is calculated as the growth in urban area prices in a given period relative to the same period in the prior year.
Smaller rate increases ahead, with higher terminal peak

Effective Federal Funds Rate

Source: Board of Governors of the Federal Reserve System, H.15 Selected Interest Rates
Risks to the forecast remain weighted to the downside

- Risks to the forecast remain elevated amid rapid monetary tightening, a housing market correction, and declining household balance sheets

- **Downside:** inflation and more aggressive monetary policy response, steeper housing market correction, geopolitical uncertainty, trade disruptions, and small bank failures

- **Upside:** sustained drop in energy prices and faster resolution to inflationary pressures, resolution to war in Ukraine, and stabilized supply chains

- Risk of near-term recession remains elevated but the forecast anticipates a continued, yet slowing expansion
Supplemental Economic Outlook Slides
Competition for workers remains high with job openings and quits well above pre-pandemic levels

Job Openings
Index 100 = February 2020

Workers ages 25 to 54 lead labor force recovery, older workers exiting again

U.S. Labor Force by Age

Index 0.0 = January 2020

Colorado’s wage gains outperforming the nation

Nominal wage growth and inflation

Source: Federal Reserve Bank of Atlanta. Data are 12-month moving averages of median wage growth, hourly data, through January 2023.
Home prices falling nationally, Denver homes down 15.7% from peak

Case-Shiller Home Price Indices

*Index 100 = July 2012*

Source: S&P Dow Jones Indices, LLC. Data are seasonally adjusted and through December 2022.
Energy market dynamics

**Crude Oil Production**
*Millions of Barrels per Month*

**Crude Oil Price, West Texas Intermediate**
*Dollars per Barrel*

Source: U.S. Energy Information Administration. Data are shown as three-month moving averages and are not seasonally adjusted. Data are through November 2022.

General Fund Budget Outlook
General Fund revenue growth slowing, mostly tracking in line with December forecast expectations

Monthly General Fund Collections from Selected Sources
Dollars in Millions

Source: Colorado Office of the State Controller with Legislative Council Staff seasonal adjustments. Data shown as three-month moving averages through February 2023. February 2023 data are preliminary.
General Fund revenue growth is expected to slow on a slowing economy and reduced income tax rates

Gross General Fund Revenue
Billions of Dollars
Percentages show year-over-year changes

Change Relative to December 2022
FY 2022-23: +$296 million
FY 2023-24: +$391 million
FY 2024-25: +$250 million

March 2023 Expectations

Source: Colorado Office of the State Controller and Legislative Council Staff March 2023 forecast.
How much do we know about FY 2022-23?

Available General Fund Collections Data as a Share of Total Fiscal Year Collections*

<table>
<thead>
<tr>
<th></th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Period 13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7%</td>
<td>14%</td>
<td>23%</td>
<td>31%</td>
<td>37%</td>
<td>46%</td>
<td>56%</td>
<td>68%</td>
<td>83%</td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

FY 2021-22 income tax forecast:
- revised up by $1.32 billion between March 2022 and June 2022
- actual was $1.56 billion above March forecast

TABOR Outlook

Revenue Subject to TABOR
Dollars in Billions

Source: Colorado Office of the State Controller and Legislative Council Staff March 2023 forecast.

Revenue Above the Ref C Cap
FY 2021-22: $3.73 billion
FY 2022-23: $2.75 billion
FY 2023-24: $2.02 billion
FY 2024-25: $1.75 billion

CY 2022 inflation determines FY 2023-24 growth rates

Referendum C Cap

TABOR Surpluses

TABOR Limit Base

Referendum C Five-Year Timeout Period

Source: Colorado Office of the State Controller and Legislative Council Staff March 2023 forecast.
TABOR Refunds are refunded from General Funds

In a TABOR surplus situation...

General Fund dollars in = General Fund dollars out

Diagram:
- General Funds
- Cash Funds
- TABOR Refunds
- TABOR Limit
- Amount available for the General Fund Budget

General Fund dollars in = General Fund dollars out
TABOR Refunds are refunded from General Funds

In a TABOR surplus situation...

Cash Fund dollars in = General Fund dollars out
Current Year | FY 2022-23 General Fund Reserve

<table>
<thead>
<tr>
<th>December 2022 Forecast</th>
<th>March 2023 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2.5</td>
<td>$2.5</td>
</tr>
<tr>
<td>($56 Million)</td>
<td>$213 Million</td>
</tr>
<tr>
<td>$2.0</td>
<td>14.6% Reserve</td>
</tr>
<tr>
<td>$2.0</td>
<td>16.6% Reserve</td>
</tr>
<tr>
<td>$2.0</td>
<td>Reserve</td>
</tr>
<tr>
<td>$2.0</td>
<td>Reserve</td>
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<td>Reserve</td>
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<tr>
<td>$2.0</td>
<td>Reserve</td>
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Changes since the December 2022 forecast:

- $1.3 million higher beginning balance (+)
- Revenue and TABOR refund expectations both increased; on net, $10.8 million less in adjusted TABOR refund obligation (+)
- GF appropriations decreased by $189.7 million, with $28.5 million lower required reserve (++)
- $42.3 million less in statutory rebates and expenditures (+)
- Net transfers from the GF increased by $3.6 million (-)

Source: Legislative Council Staff forecasts based on current law.
Budget Year | FY 2023-24 Budget Outlook

Scenario A: Additional revenue available to spend or save above current FY 2022-23 spending levels. Amounts hold FY 2022-23 appropriations constant and incorporate the revenue forecast, current law transfers, rebates and expenditures, and the 15% reserve requirement.

Scenario B Assumptions

- $628.3 million available to spend or save
  - Up to $628.3 million in transfers OR
  - Up to $546.4 million in appropriations
  - Capital transfers deduct from this amount

- Increased reserve requirement: $161 million
- JBC-approved placeholders total $130 million
- Budget package bills total $131 million
- Budget actions to date increase appropriations by $928 million (relative to Scenario A)
- FY 2022-23 adjustments increase beginning balance by additional $189 million

Source: Legislative Council Staff March 2023 forecast and staff overview of JBC actions through March 10, 2023 (https://leg.colorado.gov/sites/default/files/overview-03-14-23.pdf). See Table 2 for additional discussion.
**Out Year | FY 2024-25 Budget Outlook**

<table>
<thead>
<tr>
<th>Scenario B</th>
<th>Scenario C</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1.01 Billion (+5.8%)</td>
<td>$383 Million (+2.1%)</td>
</tr>
</tbody>
</table>

Scenario B carries forward entire unobligated FY 2023-24 amount, $628.3 million, to FY 2024-25

Scenario C carries forward $0 excess reserve

Source: Legislative Council Staff March 2023 forecast and staff overview of JBC actions through March 10, 2023

[https://leg.colorado.gov/sites/default/files/overview-03-14-23.pdf](https://leg.colorado.gov/sites/default/files/overview-03-14-23.pdf)
Risks to the Forecast

New sources of uncertainty, elevated recession risk

• Near-term recession risk from suppressed demand easing
• Near-term recession risk from financial instability rising — and little information at the time of this forecast
• Taxpayer behavior in response to these conditions has a major impact on revenue

Risks to the budget outlook

• Revenue will be constrained by the Referendum C cap through the forecast period, capping General Fund budget growth
• Regular forecast error can be absorbed by TABOR refunds; a recession would constrain revenue available for the budget
• Higher (or lower) cash funds revenue subject to TABOR means more (or less) budget pressure
Questions?

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